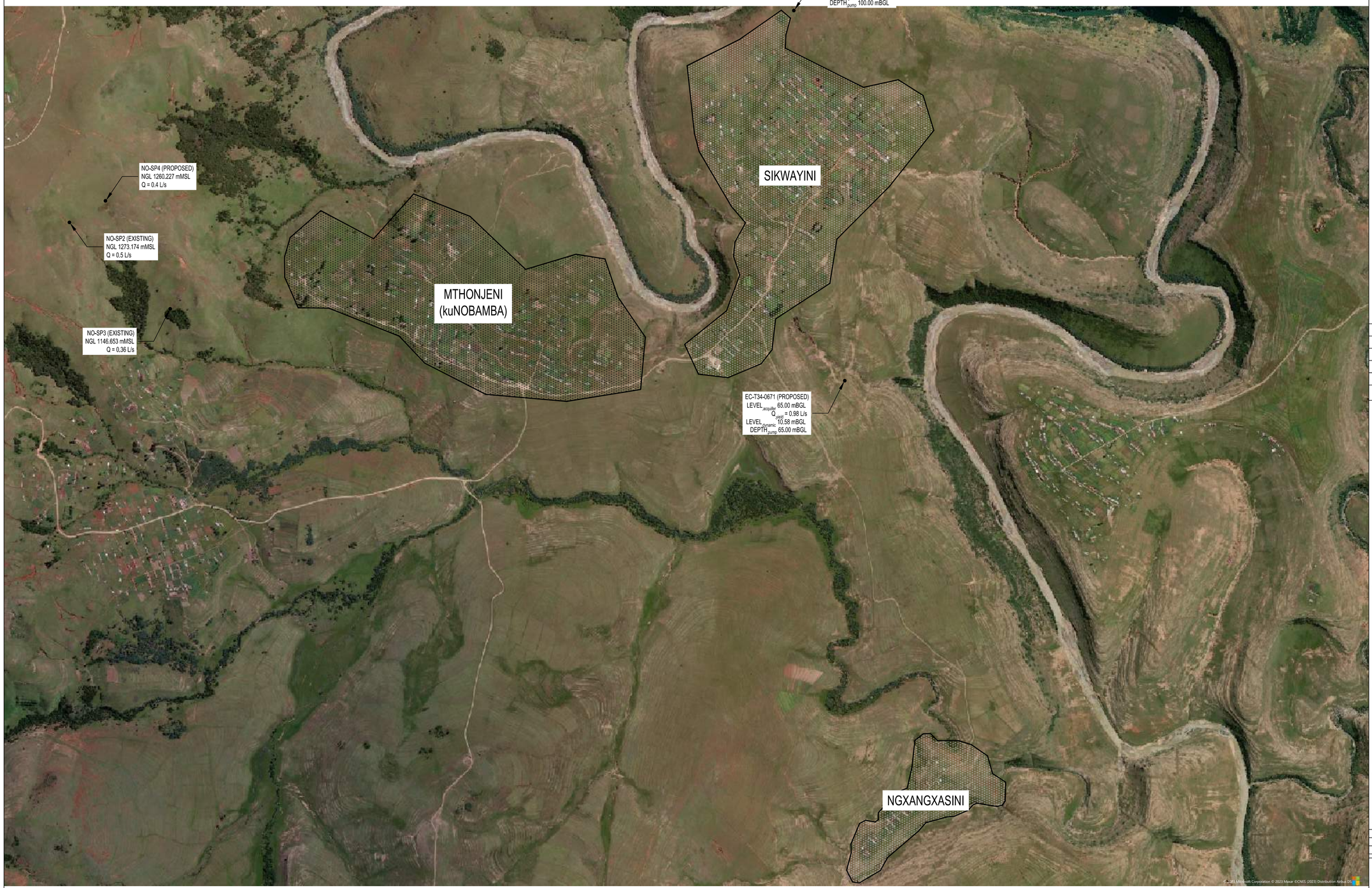


GENERAL NOTES

1. MTHONJENI IS A RURAL VILLAGE WITHIN WARD 19 OF THE MHLONTLO LOCAL MUNICIPALITY (MLM), ONE OF O.R. TAMBO DISTRICT MUNICIPALITY'S LOCAL MUNICIPALITIES.
2. MTHONJENI IS LOCATED APPROXIMATELY 30km NORTH OF QUMBU TOWN.
3. THE COMMUNITY OF MTHONJENI VILLAGE ARE SUPPLIED VIA AN EXISTING PROTECTED SPRING WEST OF THE VILLAGE.
4. THE POTABLE WATER TRAVERSES VIA AN EXISTING ND40mm GRAVITY PIPE TO FOUR (4) 5 KL PLASTIC TANKS NORTTH-WEST OF THE VILLAGE.
5. THE COMMUNITY THEN DRAWS THEIR POTABLE WATER FROM NINE (9) EXISTING STANDPIPES, OF WHICH ONLY ONE (1) IS OPERATIONAL.

No.	DATE	DESCRIPTION	CHECKED

CLIENT:

O.R. TAMBO DISTRICT MUNICIPALITY

O.R. TAMBO DISTRICT MUNICIPALITY
NELSON MANDELA DRIVE
MYEZO PARK
MTHATHA

Tel: (047) 501 6400
Email: ntombib@ortambodm.gov.za
Web: www.ortambodm.gov.za

CONSULTANT:

ROMH

ROMH CONSULTING (PTY) LTD
6 LEADWOOD HOUSE, CEDAR SQUARE
BONZA BAY ROAD
BEACON BAY
EAST LONDON

Tel: (043) 748 0018
Email: info@romh.co.za
Web: www.romh.co.za

PROJECT:

MTHONJENI / eNGXANGXASINI WATER SUPPLY:
CONTRACT 2

DRAWING TITLE:

LOCALITY PLAN

DESIGNED:	A. MAYEKISO	DRAWN:	Q. MABUSELA
DESIGNED CHECKED:	L. SENTI	DRAWING CHECKED:	A. MAYEKISO
SCALE:		NOT TO SCALE	

DESIGN COORDINATOR APPROVAL

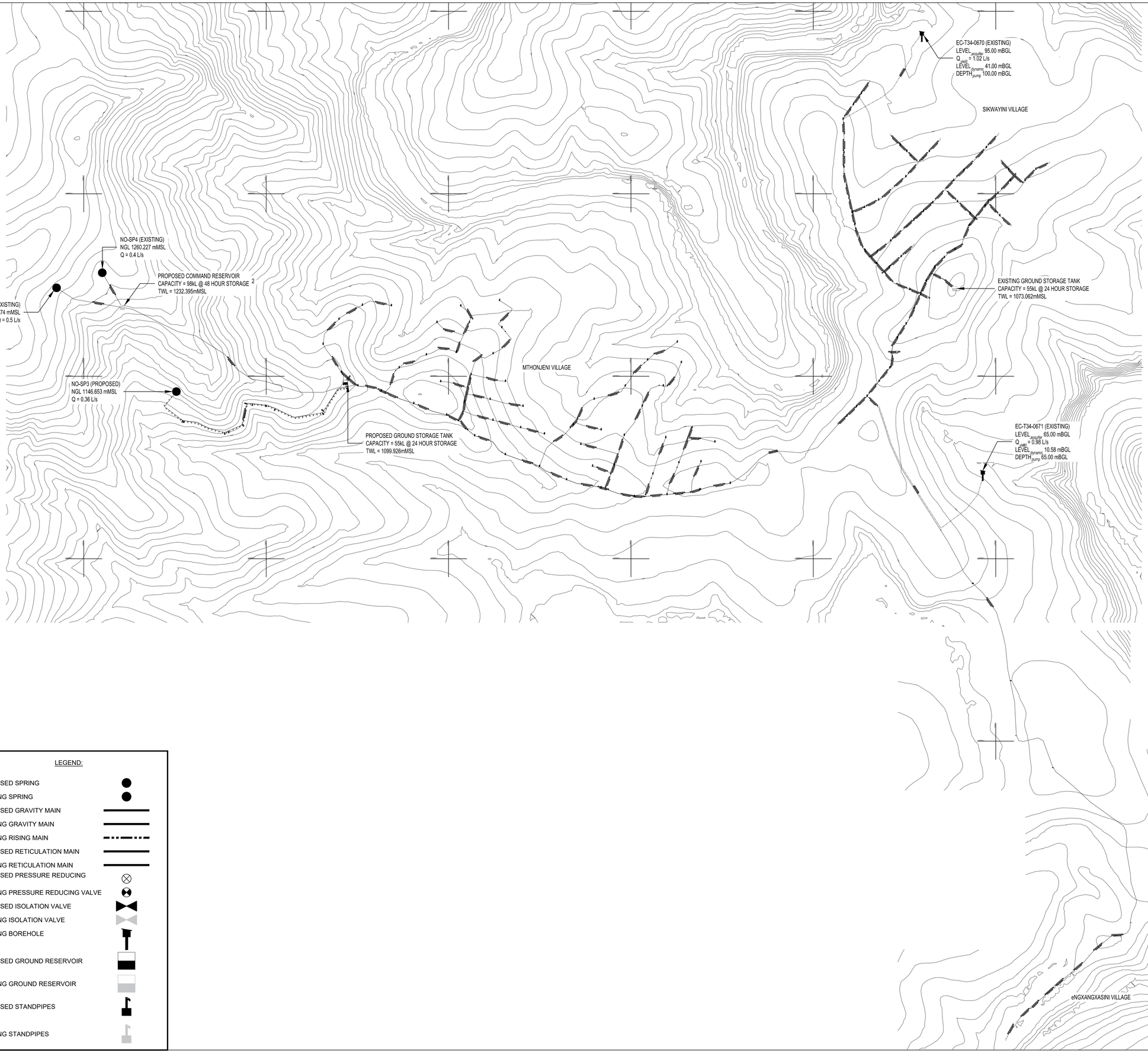
L. SENTI - PrTech(Eng) 201470402 — 23 MAY 2025

ROMH CONSULTING — DATE

CLIENT APPROVAL — DATE

CONTRACT No.	ORIGINAL DRAWING SIZE:
ORTDM SCMU 45-24/25	A1

DRAWING No.	PREPARED FOR:	REV No.
PRC-027-07-076-04-01	TENDER	0



LEGEND:

- PROPOSED SPRING
- EXISTING SPRING
- PROPOSED GRAVITY MAIN
- EXISTING GRAVITY MAIN
- EXISTING RISING MAIN
- PROPOSED RETICULATION MAIN
- EXISTING RETICULATION MAIN
- PROPOSED PRESSURE REDUCING VALVE
- EXISTING PRESSURE REDUCING VALVE
- PROPOSED ISOLATION VALVE
- EXISTING ISOLATION VALVE
- EXISTING BOREHOLE
- PROPOSED GROUND RESERVOIR
- EXISTING GROUND RESERVOIR
- PROPOSED STANDPIPES
- EXISTING STANDPIPES

GENERAL NOTES

1. ACCEPTABLE DESIGN OPTIONS TO BE DEVELOPED BY THE CONTRACTOR IN AREAS WHERE NORMAL EXCAVATION AND BACKFILL PROCEDURES CANNOT BE DONE.
2. ALL WEATHER ACCESS TO STRUCTURES TO BE PROVIDED AS PART OF THE DESIGN.
3. ALL WORK TO BE EXECUTED IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200 AND PROJECT SPECIFICATIONS.
4. THE CONTRACTOR SHALL CHECK THE POSITION AND LEVEL OF ANY EXISTING PIPE PRIOR TO COMMENCING ANY CONSTRUCTION WHICH MUST LINK UP. THE CONTRACTOR SHALL GIVE WRITTEN CONFIRMATION OF THE ACCURACY OR INACCURACY OF THE POSITIONS AND LEVELS OF THE EXISTING PIPES TO THE ENGINEER.
5. BULK- AND RETICULATION GRAVITY MAINS GREATER THAN ND50 mm TO BE uPVC CLASS 6 (MINIMUM) SABS 966 PART 1 WITH SPIGOT / SOCKET RUBBER JOINTS.
6. BULK- AND RETICULATION GRAVITY MAINS EQUAL AND LESS THAN ND50 mm TO BE HDPE CLASS 6 (MINIMUM) TO ISO 4427 USING COMPRESSION FITTINGS AND JOINTS.
7. TRENCHES DEEPER THAN 1.5 m TO BE AVOIDED.
8. PISTEK VALVES TO BE INSTALLED FOR INLET CONTROL.
9. A FLEXIBLE CONNECTION TO BE INSTALLED ON PIPEWORK WITHIN ALL VALVE CHAMBERS TO FACILITATE DISMANTLING.
10. ALL GATE VALVES TO BE CLOCKWISE CLOSING WITH CAPTOPS.

No.	DATE	DESCRIPTION	CHECKED

CLIENT:

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CONSULTANT:

ROMH

ROMH CONSULTING
LEADWOOD HOUSE, CEDAR SQUARE
BONZA BAY ROAD
BEACON BAY
EAST LONDON

Tel: (043) 748 0018
Email: malikk@romh.co.za
Web: www.romh.co.za

PROJECT:

MTHONJENI / eNGXANGXASINI WATER SUPPLY:
CONTRACT 2

DRAWING TITLE:

SITE DEVELOPMENT PLAN

DESIGNED:	A. MAYEKISO	DRAWN:	Q. MABUSELA
DESIGNED CHECKED:	L. SENTI	DRAWING CHECKED:	A. MAYEKISO
SCALE:		1:10 000	

DESIGN COORDINATOR APPROVAL

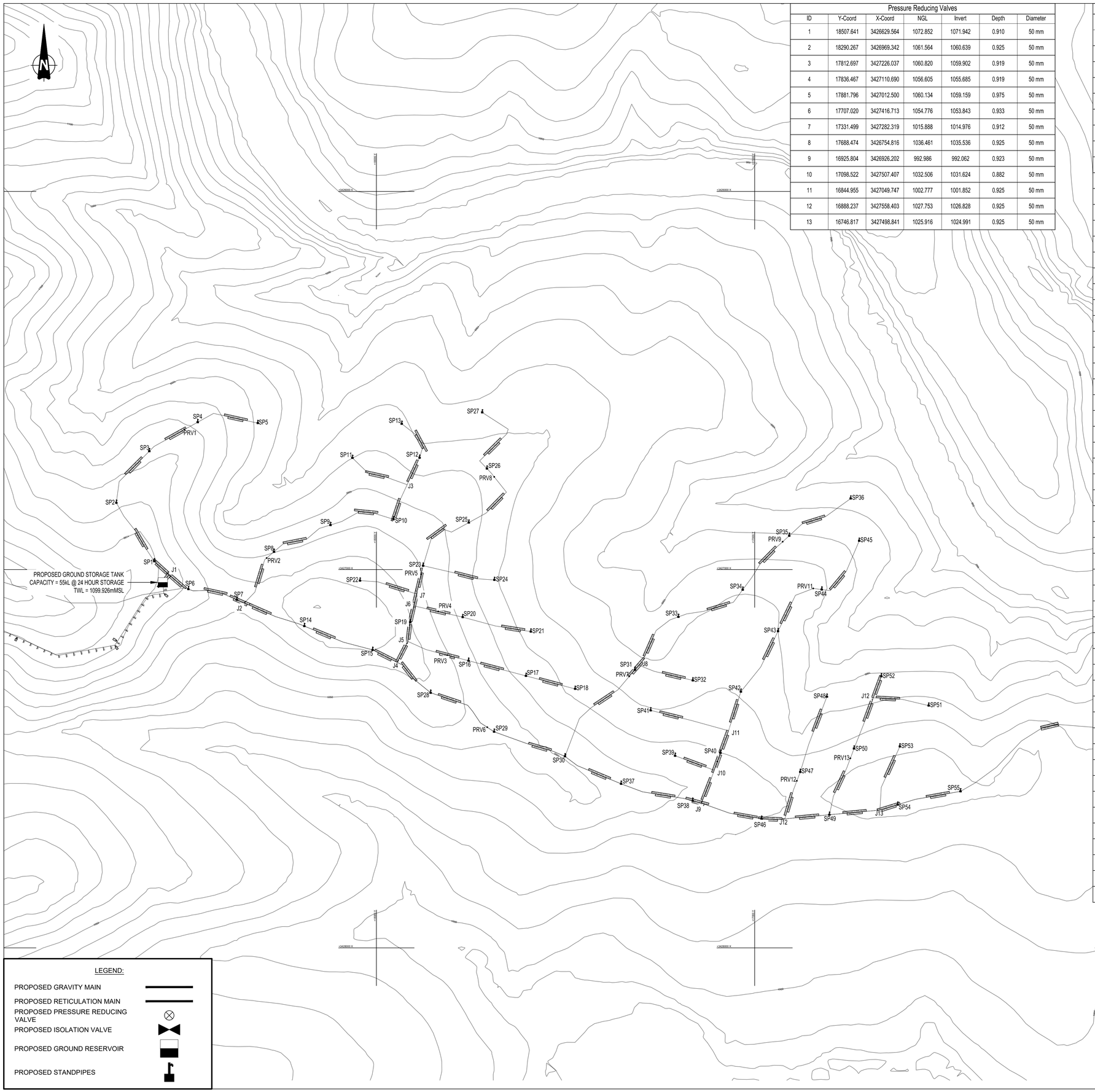
L. SENTI - 201470402 — 23 MAY 2025

ROMH CONSULTING — DATE

CLIENT APPROVAL — DATE

CONTRACT No.	ORIGINAL DRAWING SIZE:
ORTDM SCMU 45-24/25	A1

PROJECT No.	PREPARED FOR:	REV No.
PRC027-07-076-04-02	TENDER	0



LEGEND:

- PROPOSED GRAVITY MAIN
- PROPOSED RETICULATION MAIN
- PROPOSED PRESSURE REDUCING VALVE
- PROPOSED ISOLATION VALVE
- PROPOSED GROUND RESERVOIR
- PROPOSED STANDPIPES

Pressure Reducing Valves

ID	Y-Coord	X-Coord	NGL	Invert	Depth	Diameter
1	18507.641	3426629.564	1072.852	1071.942	0.910	50 mm
2	18290.267	3426969.342	1061.564	1060.639	0.925	50 mm
3	17812.697	3427226.037	1060.820	1059.902	0.919	50 mm
4	17836.467	3427110.690	1056.605	1055.685	0.919	50 mm
5	17881.796	3427012.500	1060.134	1059.159	0.975	50 mm
6	17707.020	3427416.713	1054.776	1053.843	0.933	50 mm
7	17331.499	3427282.319	1015.888	1014.976	0.912	50 mm
8	17688.474	3426754.816	1036.461	1035.536	0.925	50 mm
9	16925.804	3426926.202	992.986	992.062	0.923	50 mm
10	17098.522	3427507.407	1032.506	1031.624	0.882	50 mm
11	16844.955	3427049.747	1002.777	1001.852	0.925	50 mm
12	16888.237	3427558.403	1027.753	1026.828	0.925	50 mm
13	16746.817	3427498.841	1025.916	1024.991	0.925	50 mm

Water Street Taps

ID	Y-Coord	X-Coord	NGL	Offset NGL	Diameter
1	18587.348	3426977.913	1100.640	1.200	1 x 15 mm
2	18687.705	3426823.265	1087.588	1.200	1 x 15 mm
3	18600.610	3426686.886	1077.996	1.200	1 x 15 mm
4	18472.665	3426610.171	1067.298	1.200	1 x 15 mm
5	18313.740	3426612.616	1048.384	1.200	1 x 15 mm
6	18497.307	3427051.599	1087.582	1.200	1 x 15 mm
7	18369.183	3427079.615	1074.222	1.200	1 x 15 mm
8	18270.929	3426952.751	1059.572	1.200	1 x 15 mm
9	18121.564	3426882.028	1056.331	1.200	1 x 15 mm
10	17954.718	3426866.722	1055.141	1.200	1 x 15 mm
11	18063.455	3426704.628	1039.924	1.200	1 x 15 mm
12	17885.860	3426704.165	1034.606	1.200	1 x 15 mm
13	17933.113	3426614.370	1031.715	1.200	1 x 15 mm
14	18190.595	3427149.229	1082.497	1.200	1 x 15 mm
15	18010.065	3427212.115	1079.472	1.200	1 x 15 mm
16	17756.530	3427240.842	1053.022	1.200	1 x 15 mm
17	17604.602	3427280.907	1036.502	1.200	1 x 15 mm
18	17474.548	3427315.278	1027.803	1.200	1 x 15 mm
19	17910.999	3427138.987	1070.906	1.200	1 x 15 mm
20	17771.910	3427125.594	1047.900	1.200	1 x 15 mm
21	17591.718	3427163.811	1027.025	1.200	1 x 15 mm
22	18043.458	3427029.013	1077.536	1.200	1 x 15 mm
23	17876.519	3426989.641	1059.008	1.200	1 x 15 mm
24	17688.019	3427027.214	1031.407	1.200	1 x 15 mm
25	17755.886	3426875.589	1043.179	1.200	1 x 15 mm
26	17707.820	3426732.864	1036.769	1.200	1 x 15 mm
27	17720.192	3426584.323	1024.004	1.200	1 x 15 mm
28	17856.742	3427325.517	1067.822	1.200	1 x 15 mm
29	17688.797	3427428.592	1053.209	1.200	1 x 15 mm
30	17501.490	3427493.694	1049.382	1.200	1 x 15 mm
31	17316.521	3427264.637	1013.624	1.200	1 x 15 mm
32	17163.394	3427292.910	1016.744	1.200	1 x 15 mm
33	17201.604	3427124.900	1006.876	1.200	1 x 15 mm
34	17031.422	3427053.061	1008.968	1.200	1 x 15 mm
35	16908.391	3426910.410	990.670	1.200	1 x 15 mm
36	16745.964	3426811.966	976.087	1.200	1 x 15 mm
37	17353.138	3427566.209	1044.942	1.200	1 x 15 mm
38	17163.928	3427611.012	1038.585	1.200	1 x 15 mm
39	17210.253	3427492.073	1034.030	1.200	1 x 15 mm
40	17090.211	3427484.447	1030.237	1.200	1 x 15 mm
41	17274.902	3427372.078	1020.734	1.200	1 x 15 mm
42	17036.339	3427322.563	1019.119	1.200	1 x 15 mm
43	16938.079	3427162.687	1010.075	1.200	1 x 15 mm
44	16822.553	3427052.602	1001.295	1.200	1 x 15 mm
45	16723.515	3426923.776	986.871	1.200	1 x 15 mm
46	16981.663	3427658,662	1030.166	1.200	1 x 15 mm
47	16879.346	3427534.800	1025.791	1.200	1 x 15 mm
48	16808.926	3427335.928	1004.686	1.200	1 x 15 mm
49	16802.262	3427647.987	1028.212	1.200	1 x 15 mm
50	16737.119	3427473.021	1023.352	1.200	1 x 15 mm
51	16539.642	3427359.471	1013.276	1.200	1 x 15 mm
52	16664.940	3427281.933	1001.406	1.200	1 x 15 mm
53	16615,914	3427467.443	1027.680	1.200	1 x 15 mm
54	16621.699	3427621.367	1032.076	1.200	1 x 15 mm
55	16455.641	3427586.089	1031.507	1.200	1 x 15 mm

GENERAL NOTES

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10. ALL GATE VALVES TO BE CLOCKWISE CLOSING WITH CAPTOPS.

No.	DATE	DESCRIPTION	CHECKED

CLIENT:

O.R. TAMBO DISTRICT MUNICIPALITY

O.R. TAMBO DISTRICT MUNICIPALITY
NELSON MANDELA DRIVE
MYEZO PARK
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Tel: (047) 501 6400
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CONSULTANT:

ROMH CONSULTING
LEADWOOD HOUSE, CEDAR SQUARE
BONZA BAY ROAD
BEACON BAY
EAST LONDON

Tel: (043) 748 0018
Email: mallikk@romh.co.za
Web: www.romh.co.za

PROJECT:

MTHONJENI / eNGXANGXASINI WATER SUPPLY:
CONTRACT 2

DRAWING TITLE:

RETICULATION LAYOUT:
MTHONJENI VILLAGE

DESIGNED:	A. MAYEKISO	DRAWN:	Q. MABUSELA
DESIGNED CHECKED:	L. SENTI	DRAWING CHECKED:	A. MAYEKISO
SCALE:		1:5 000	

DESIGN COORDINATOR APPROVAL

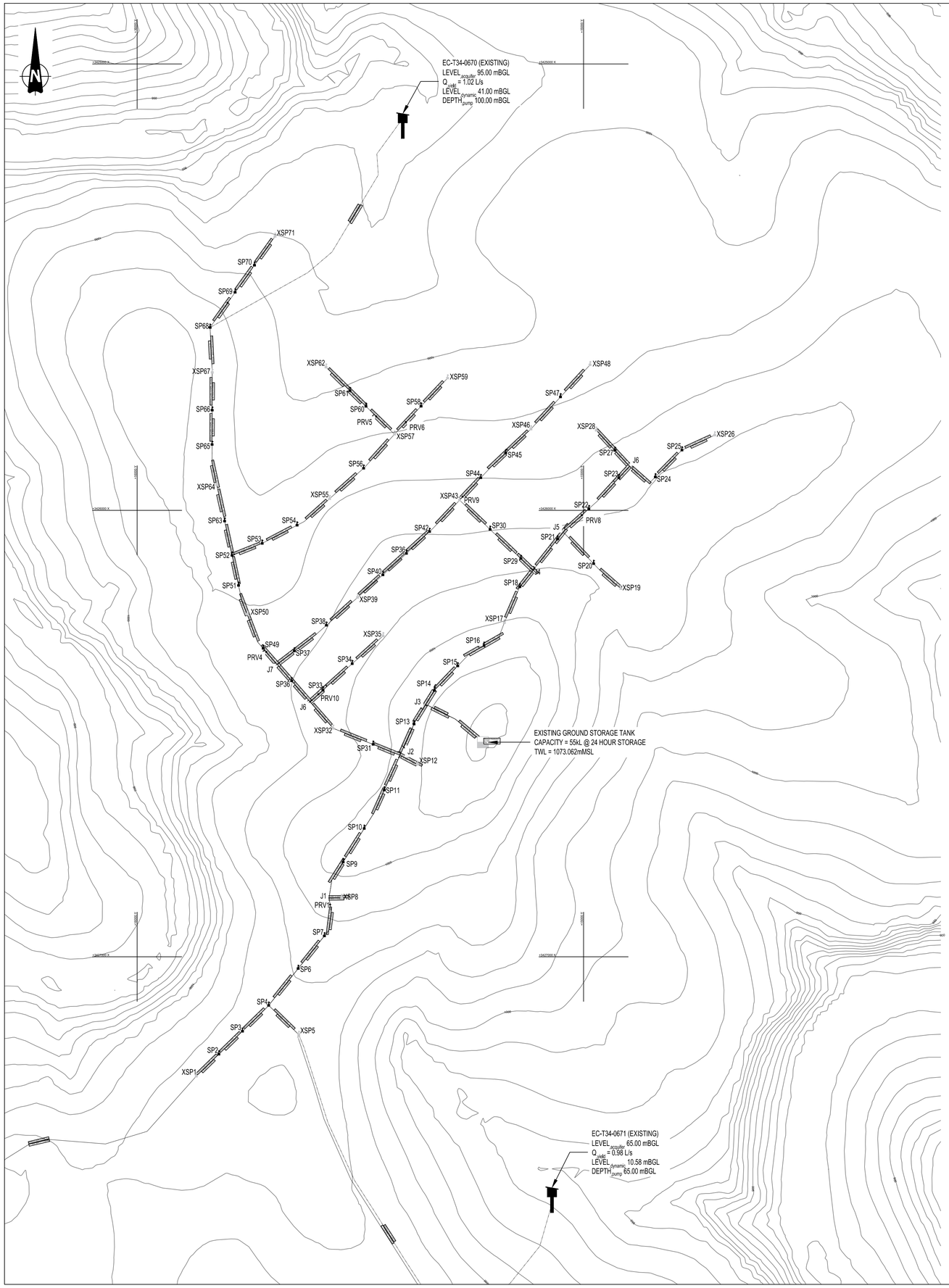
L. SENTI - 201470402 — 23 MAY 2025

ROMH CONSULTING — DATE

CLIENT APPROVAL — DATE

CONTRACT No.	ORIGINAL DRAWING SIZE:
ORTDM SCMU 45-24/25	A1

PROJECT No.	PREPARED FOR:	REV No.
PRC027-07-076-04-03	TENDER	0



Pressure Reducing Valves						
ID	Y-Coord	X-Coord	NGL	Invert	Depth	Diameter
1	15567.715	3426883.158	1043.624	1042.698	0.926	50 mm
4	15710.690	3426317.061	1024.761	1023.842	0.919	50 mm
5	15464.348	3425789.612	1006.132	1005.207	0.925	50 mm
6	15397.757	3425802.243	1008.906	1007.971	0.935	50 mm
7	15797.120	3425534.794	1007.436	1006.511	0.925	50 mm
8	15003.974	3426010.728	1028.963	1028.046	0.918	50 mm
9	15270.526	3425969.414	1023.181	1022.248	0.934	50 mm
10	15593.917	3426411.767	1034.236	1033.305	0.930	50 mm

Water Street Taps					
ID	Y-Coord	X-Coord	NGL	Offset NGL	Diameter
1	15867.511	3427267.480	1023.644	1.200	1 x 15 mm
2	15816.954	3427218.229	1024.085	1.200	1 x 15 mm
3	15764.246	3427166.883	1024.858	1.200	1 x 15 mm
4	15705.414	3427108.889	1026.057	1.200	1 x 15 mm
5	15637.969	3427174.223	1027.955	1.200	1 x 15 mm
6	15639.245	3427026.469	1030.508	1.200	1 x 15 mm
7	15580.567	3426953.379	1035.776	1.200	1 x 15 mm
8	15541.777	3426867.842	1045.391	1.200	1 x 15 mm
9	15538.656	3426787.791	1052.149	1.200	1 x 15 mm
10	15491.377	3426712.618	1053.401	1.200	1 x 15 mm
11	15446.255	3426626.467	1051.431	1.200	1 x 15 mm
12	15372.136	3426568.822	1058.959	1.200	1 x 15 mm
13	15379.780	3426478.690	1056.859	1.200	1 x 15 mm
14	15334.443	3426403.495	1057.903	1.200	1 x 15 mm
15	15282.047	3426348.670	1057.067	1.200	1 x 15 mm
16	15222.939	3426302.598	1054.582	1.200	1 x 15 mm
17	15177.458	3426251.723	1050.426	1.200	1 x 15 mm
18	15142.810	3426171.284	1043.298	1.200	1 x 15 mm
19	14916.453	3426175.197	1038.467	1.200	1 x 15 mm
20	14977.572	3426119.318	1038.215	1.200	1 x 15 mm
21	15058.211	3426064.286	1033.155	1.200	1 x 15 mm
22	14988.165	3425996.456	1028.119	1.200	1 x 15 mm
23	14920.951	3425926.901	1024.776	1.200	1 x 15 mm
24	14839.225	3425925.286	1029.693	1.200	1 x 15 mm
25	14779.697	3425865.039	1027.696	1.200	1 x 15 mm
26	14706.345	3425831.381	1027.767	1.200	1 x 15 mm
27	14929.892	3425865.618	1021.050	1.200	1 x 15 mm
28	14971.528	3425820.722	1016.761	1.200	1 x 15 mm
29	15140.329	3426107.947	1036.911	1.200	1 x 15 mm
30	15209.109	3426042.471	1029.713	1.200	1 x 15 mm
31	15471.389	3426524.288	1044.236	1.200	1 x 15 mm
32	15561.131	3426488.085	1036.868	1.200	1 x 15 mm
33	15583.765	3426402.605	1034.869	1.200	1 x 15 mm
34	15518.344	3426343.565	1037.789	1.200	1 x 15 mm
35	15449.110	3426281.083	1039.499	1.200	1 x 15 mm
36	15653.918	3426381.981	1029.861	1.200	1 x 15 mm
37	15647.723	3426315.179	1027.649	1.200	1 x 15 mm
38	15576.328	3426257.218	1029.670	1.200	1 x 15 mm
39	15507.031	3426194.234	1031.954	1.200	1 x 15 mm
40	15450.829	3426143.151	1032.907	1.200	1 x 15 mm
41	15398.097	3426095.222	1032.479	1.200	1 x 15 mm
42	15345.336	3426047.267	1029.511	1.200	1 x 15 mm
43	15277.783	3425977.096	1023.797	1.200	1 x 15 mm
44	15230.410	3425926.946	1019.932	1.200	1 x 15 mm
45	15174.453	3425871.219	1015.256	1.200	1 x 15 mm
46	15117.981	3425817.847	1011.855	1.200	1 x 15 mm
47	15051.714	3425745.889	1009.097	1.200	1 x 15 mm
48	14985.447	3425673.931	1005.448	1.200	1 x 15 mm
49	15717.633	3426309.122	1024.337	1.200	1 x 15 mm
50	15753.611	3426232.771	1021.025	1.200	1 x 15 mm
51	15772.892	3426168.170	1018.634	1.200	1 x 15 mm
52	15787.448	3426100.927	1017.328	1.200	1 x 15 mm
53	15719.992	3426073.966	1014.918	1.200	1 x 15 mm
54	15641.901	3426033.282	1016.434	1.200	1 x 15 mm
55	15568.890	3425973.899	1018.380	1.200	1 x 15 mm
56	15492.772	3425905.717	1015.865	1.200	1 x 15 mm
57	15423.500	3425829.449	1010.424	1.200	1 x 15 mm
58	15364.070	3425766.640	1007.215	1.200	1 x 15 mm
59	15304.639	3425703.830	1003.866	1.200	1 x 15 mm
60	15487.551	3425766.983	1004.616	1.200	1 x 15 mm
61	15523.242	3425731.967	1001.198	1.200	1 x 15 mm
62	15576.919	3425679.176	995.840	1.200	1 x 15 mm
63	15804.086	3426024.061	1015.431	1.200	1 x 15 mm
64	15821.702	3425942.675	1014.516	1.200	1 x 15 mm
65	15832.162	3425852.450	1015.154	1.200	1 x 15 mm
66	15832.007	3425775.547	1014.816	1.200	1 x 15 mm
67	15831.836	3425690.823	1015.828	1.200	1 x 15 mm
68	15836.674	3425590.213	1014.285	1.200	1 x 15 mm
69	15780.530	3425511.551	1004.372	1.200	1 x 15 mm
70	15737.265	3425450.933	996.643	1.200	1 x 15 mm
71	15691.114	3425386.272	990.330	1.200	1 x 15 mm

LEGEND:

- EXISTING GRAVITY MAIN
- EXISTING RISING MAIN
- EXISTING RETICULATION MAIN
- PROPOSED PRESSURE REDUCING VALVE
- PROPOSED ISOLATION VALVE
- EXISTING ISOLATION VALVE
- EXISTING BOREHOLE
- EXISTING GROUND RESERVOIR
- PROPOSED STANDPIPES
- EXISTING STANDPIPES

GENERAL NOTES

1. ACCEPTABLE DESIGN OPTIONS TO BE DEVELOPED BY THE CONTRACTOR IN AREAS WHERE NORMAL EXCAVATION AND BACKFILL PROCEDURES CANNOT BE DONE.
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5. BULK- AND RETICULATION GRAVITY MAINS GREATER THAN ND50 mm TO BE uPVC CLASS 6 (MINIMUM) SABS 966 PART 1 WITH SPIGOT / SOCKET RUBBER JOINTS.
6. BULK- AND RETICULATION GRAVITY MAINS EQUAL AND LESS THAN ND50 mm TO BE HDPE CLASS 6 (MINIMUM) TO ISO 4427 USING COMPRESSION FITTINGS AND JOINTS.
7. TRENCHES DEEPER THAN 1.5 m TO BE AVOIDED.
8. PISTEK VALVES TO BE INSTALLED FOR INLET CONTROL.
9. A FLEXIBLE CONNECTION TO BE INSTALLED ON PIPEWORK WITHIN ALL VALVE CHAMBERS TO FACILITATE DISMANTLING.
10. ALL GATE VALVES TO BE CLOCKWISE CLOSING WITH CAPTOPS.

No.	DATE	DESCRIPTION	CHECKED

CLIENT:

O.R. TAMBO DISTRICT MUNICIPALITY

O.R. TAMBO DISTRICT MUNICIPALITY
NELSON MANDELA DRIVE
MYEZO PARK
MTHATHA

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CONSULTANT:

ROMH CONSULTING
LEADWOOD HOUSE, CEDAR SQUARE
BONZA BAY ROAD
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EAST LONDON

Tel: (043) 748 0018
Email: mailkk@romh.co.za
Web: www.romh.co.za

PROJECT:

MTHONJENI / eNGXANGXASINI WATER SUPPLY:
CONTRACT 2

DRAWING TITLE:

RETICULATION LAYOUT:
SIKWAYINI VILLAGE

DESIGNED:	A. MAYEKISO	DRAWN:	Q. MABUSELA
DESIGNED CHECKED:	L. SENTI	DRAWING CHECKED:	A. MAYEKISO
SCALE:		1:5 000	

DESIGN COORDINATOR APPROVAL

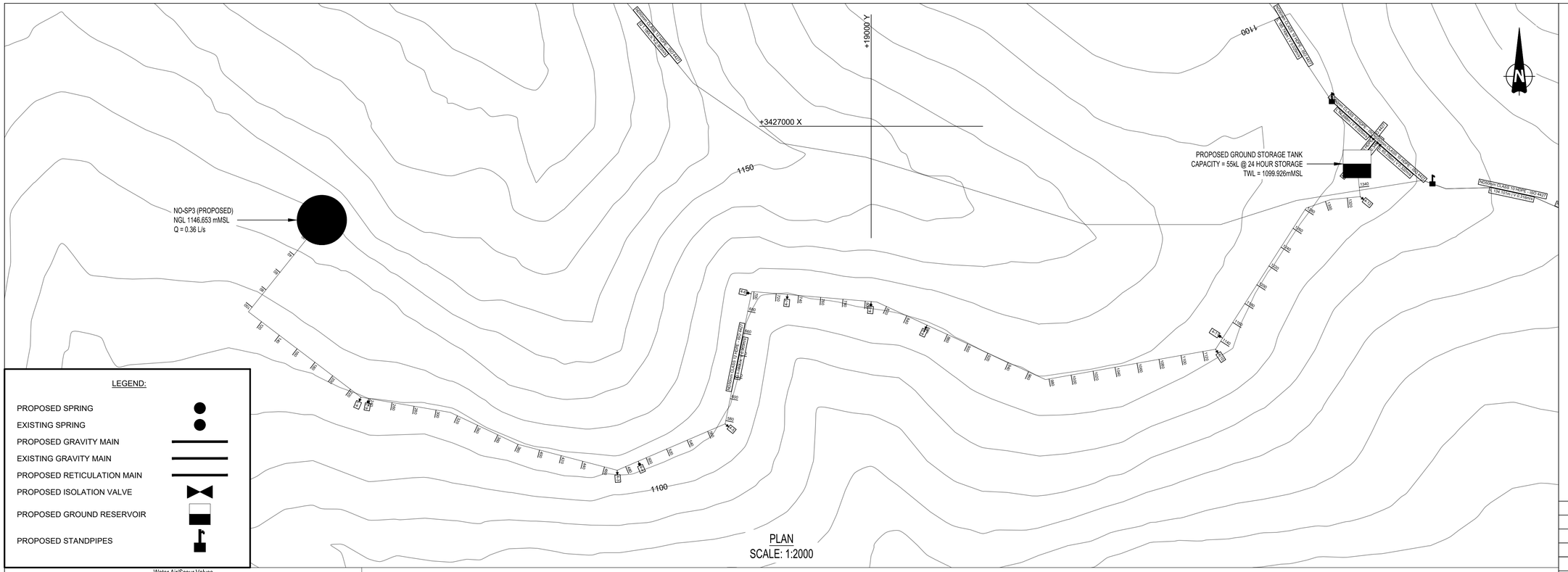
L. SENTI - 201470402 — 23 MAY 2025

ROMH CONSULTING — DATE

CLIENT APPROVAL — DATE

CONTRACT No.	ORIGINAL DRAWING SIZE:
ORTDM SCMU 45-24/25	A1

PROJECT No.	PREPARED FOR:	REV No.
PRC027-07-076-04-04	TENDER	0



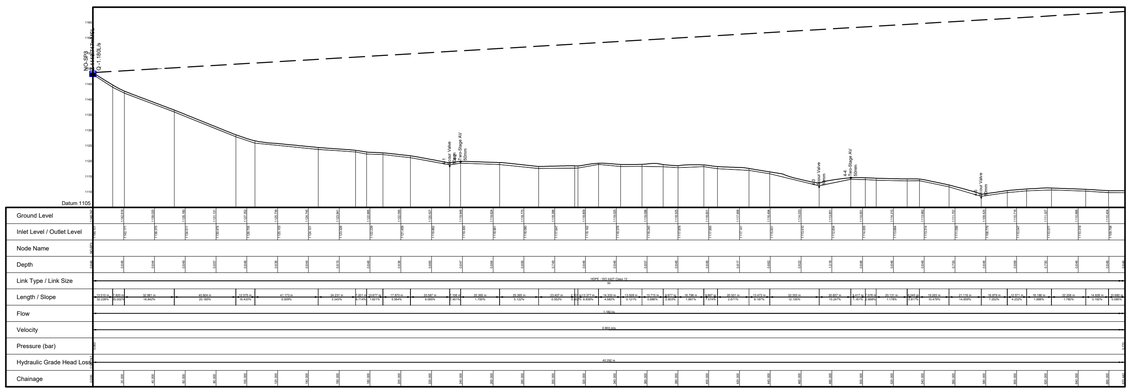
PLAN
SCALE: 1:2000

LEGEND:

- PROPOSED SPRING
- EXISTING SPRING
- PROPOSED GRAVITY MAIN
- EXISTING GRAVITY MAIN
- PROPOSED RETICULATION MAIN
- PROPOSED ISOLATION VALVE
- PROPOSED GROUND RESERVOIR
- PROPOSED STANDPIPES

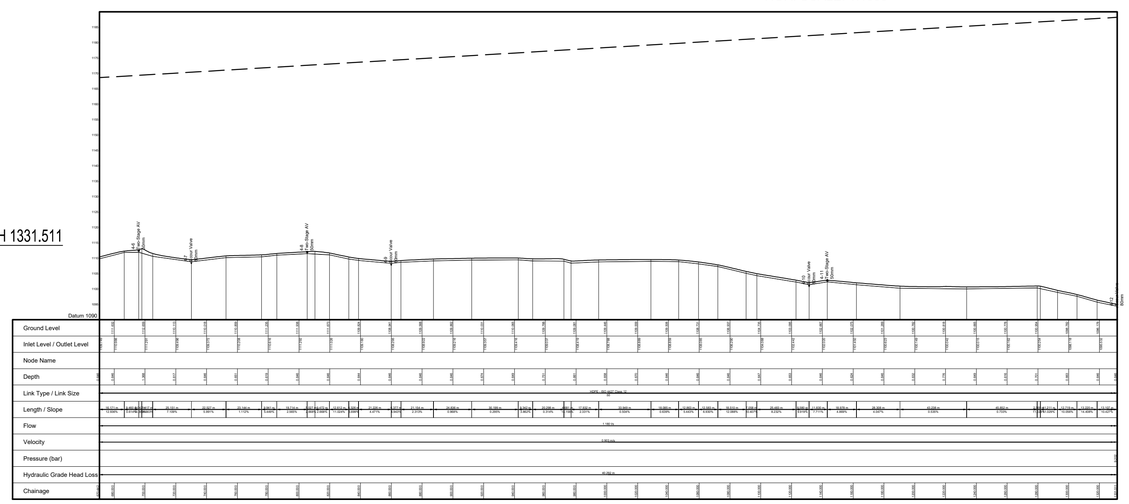
Water Air/Scour Valves

ID	Y-Coord	X-Coord	NGL	Invert	Depth	Diameter	Type
4-1	19456.986	3427242.688	1119.438	1118.792	0.646	80 mm	SV
4-2	19450.000	3427243.881	1119.966	1119.320	0.646	50 mm	AV-2S
4-3	19227.539	3427308.101	1112.634	1111.988	0.646	80 mm	SV
4-4	19208.653	3427300.000	1114.740	1114.094	0.646	50 mm	AV-2S
4-5	19130.799	3427266.604	1109.209	1108.562	0.646	80 mm	SV
4-6	19107.415	3427150.000	1112.528	1111.882	0.646	50 mm	AV-2S
4-7	19075.000	3427150.708	1109.425	1108.779	0.646	80 mm	SV
4-8	19000.000	3427157.012	1112.076	1111.429	0.646	50 mm	AV-2S
4-9	18950.000	3427178.125	1108.936	1108.290	0.646	80 mm	SV
4-10	18691.596	3427199.700	1102.005	1101.358	0.646	80 mm	SV
4-11	18685.230	3427189.770	1102.914	1102.268	0.646	50 mm	AV-2S
4-12	18562.025	3427063.055	1094.978	1094.332	0.646	80 mm	SV

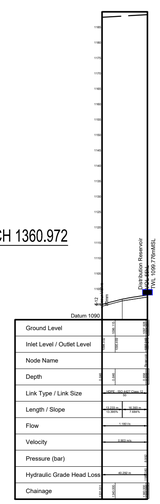


LONGITUDINAL SECTION: CH 0.000 TO CH 670.442
VERT. SCALE: 1:500
HOR. SCALE: 1:1000

LONGITUDINAL SECTION: CH 670.442 TO CH 1331.511
VERT. SCALE: 1:500
HOR. SCALE: 1:1000



LONGITUDINAL SECTION: CH 1331.511 TO CH 1360.972
VERT. SCALE: 1:500
HOR. SCALE: 1:1000



GENERAL NOTES

1. ACCEPTABLE DESIGN OPTIONS TO BE DEVELOPED BY THE CONTRACTOR IN AREAS WHERE NORMAL EXCAVATION AND BACKFILL PROCEDURES CANNOT BE DONE.
2. ALL WEATHER ACCESS TO STRUCTURES TO BE PROVIDED AS PART OF THE DESIGN.
3. ALL WORK TO BE EXECUTED IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200 AND PROJECT SPECIFICATIONS.
4. THE CONTRACTOR SHALL CHECK THE POSITION AND LEVEL OF ANY EXISTING PIPE PRIOR TO COMMENCING ANY CONSTRUCTION WHICH MUST LINK UP. THE CONTRACTOR SHALL GIVE WRITTEN CONFIRMATION OF THE ACCURACY OR INACCURACY OF THE POSITIONS AND LEVELS OF THE EXISTING PIPES TO THE ENGINEER.
5. BULK- AND RETICULATION GRAVITY MAINS GREATER THAN ND50 mm TO BE uPVC CLASS 6 (MINIMUM) SABS 966 PART 1 WITH SPIGOT / SOCKET RUBBER JOINTS.
6. BULK- AND RETICULATION GRAVITY MAINS EQUAL AND LESS THAN ND50 mm TO BE HDPE CLASS 6 (MINIMUM) TO ISO 4427 USING COMPRESSION FITTINGS AND JOINTS.
7. TRENCHES DEEPER THAN 1.5 m TO BE AVOIDED.
8. PISTEK VALVES TO BE INSTALLED FOR INLET CONTROL.
9. A FLEXIBLE CONNECTION TO BE INSTALLED ON PIPEWORK WITHIN ALL VALVE CHAMBERS TO FACILITATE DISMANTLING.
10. ALL GATE VALVES TO BE CLOCKWISE CLOSING WITH CAPTOPS.

No.	DATE	DESCRIPTION	CHECKED

CLIENT:

O.R. TAMBO DISTRICT MUNICIPALITY

O.R. TAMBO DISTRICT MUNICIPALITY
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CONSULTANT:

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Web: www.romh.co.za

PROJECT:

MTHONJENI / eNGXANGXASINI WATER SUPPLY:
CONTRACT 2

DRAWING TITLE:

LONGITUDINAL SECTIONS

DESIGNED:	A. MAYEKISO	DRAWN:	Q. MABUSELA
DESIGNED CHECKED:	L. SENTI	DRAWING CHECKED:	A. MAYEKISO
SCALE:		1:10 000	

DESIGN COORDINATOR APPROVAL

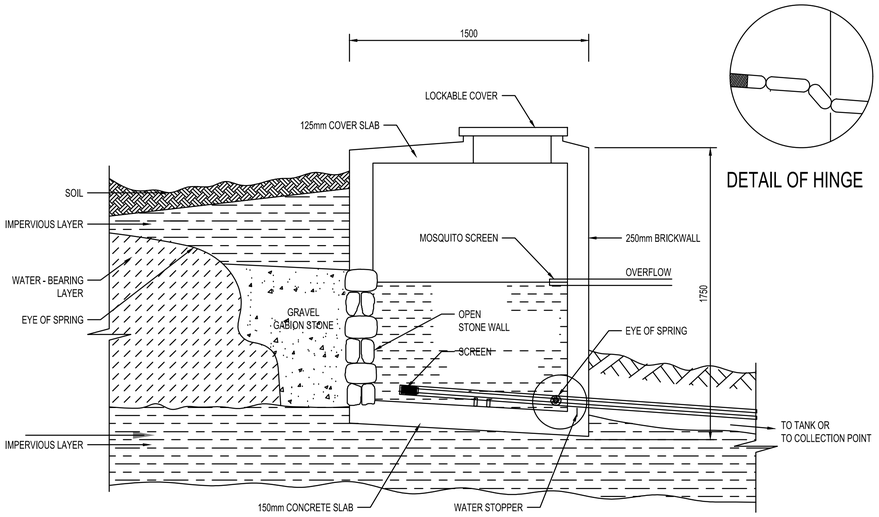
L. SENTI - 201470402 — 23 MAY 2025

ROMH CONSULTING — DATE

CLIENT APPROVAL — DATE

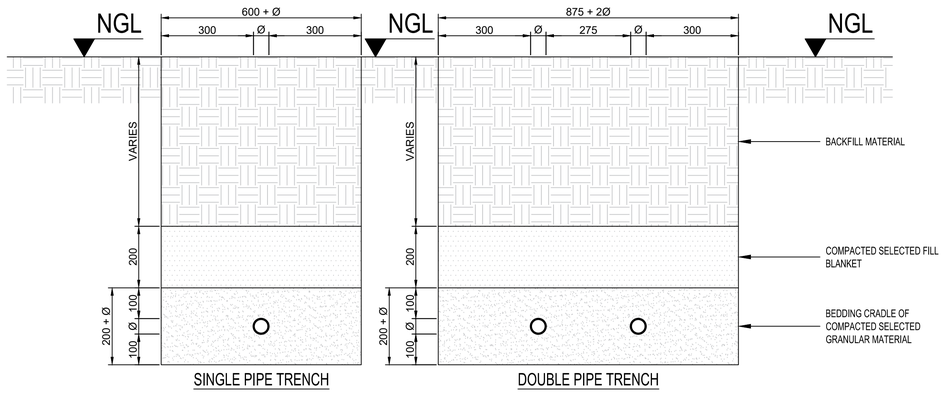
CONTRACT No.	ORIGINAL DRAWING SIZE:
ORTDM SCMU 45-24/25	A1

PROJECT No.	PREPARED FOR:	REV No.
PRC027-07-076-04-05	TENDER	0



DETAIL OF HINGE

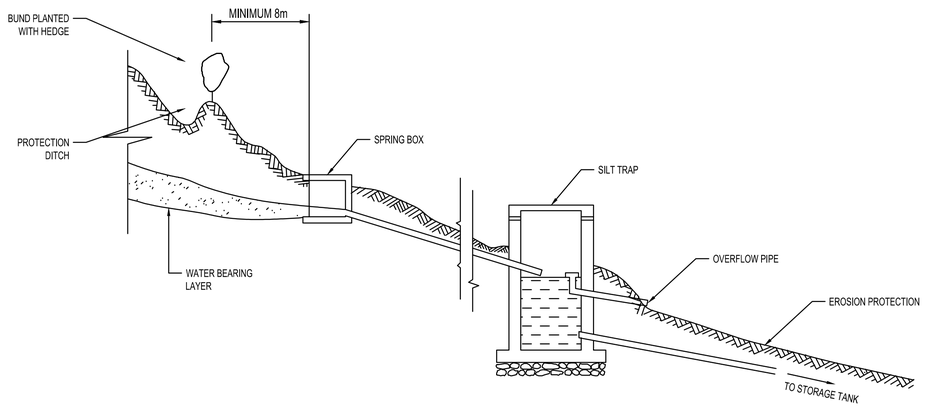
TYPICAL SPRING BOX DETAIL
SCALE: 1:50



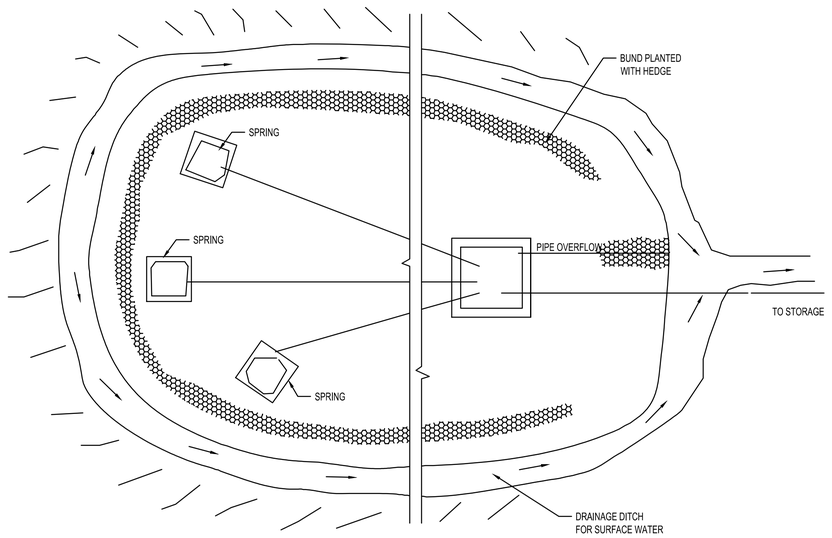
SINGLE PIPE TRENCH

DOUBLE PIPE TRENCH

TYPICAL TRENCH AND PIPE BEDDING DETAIL
SCALE: 1:10



TYPICAL SPRING BOX AND SILT TRAP SECTION
SCALE: 1:50



TYPICAL SPRING BOX PLAN
SCALE: 1:50

GENERAL NOTES

1. ACCEPTABLE DESIGN OPTIONS TO BE DEVELOPED BY THE CONTRACTOR IN AREAS WHERE NORMAL EXCAVATION AND BACKFILL PROCEDURES CANNOT BE DONE.
2. ALL WEATHER ACCESS TO STRUCTURES TO BE PROVIDED AS PART OF THE DESIGN.
3. ALL WORK TO BE EXECUTED IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200 AND PROJECT SPECIFICATIONS.
4. TRENCH SIDE WALL TOLERANCES TO BE:
   - 4.1. 200mm FOR PIPE Ø LESS THAN 150mm;
   - 4.2. 300mm FOR PIPE Ø EQUAL TO AND GREATER THAN 150mm; AND
   - 4.3. 200mm FOR PIPES (ALL DIAMETERS) IN SHARED TRENCHES.
5. SELECTIVE EXCAVATION TO BE PRACTICED BY CONTRACTOR. ENGINEER TO CONFIRM SUITABILITY OF IN-SITU MATERIAL FOR USE AS BEDDING MATERIAL.
6. TOPSOILING AND REVEGETATION TO COMMENCE IMMEDIATELY AFTER COMPLETION OF SUCCESSFUL PRESSURE TEST ON PIPEWORK.
7. SPRINGS TO BE PROTECTED AS FOLLOWS:
   - 7.1. CONSTRUCT A CUT-OFF DRAIN TO DIVERT SURFACE WATER;
   - 7.2. VEGETATION CLEARANCE ABOVE SPRING EYE;
   - 7.3. CONSTRUCT A TEMPORARY DIVERSION OF THE SPRING WATER TO ALLOW CONSTRUCTION OF THE COLLECTION CHAMBER / BOX;
   - 7.4. PLACE LARGE STONES ABOVE SPRING EYE;
   - 7.5. CONSTRUCT THE COLLECTION CHAMBER AS SHOWN;
   - 7.6. INSTALL LAYERS OF IMPERVIOUS MATERIAL ABOVE THE SPRING EYE;
   - 7.7. FENCE THE PROTECTED SPRING;
   - 7.8. AND INSTALL A DRINKING TROUGH OUTSIDE OF THE FENCED AREA FOR LIVESTOCK.

No.	DATE	DESCRIPTION	CHECKED

CLIENT:

O.R .TAMBO DISTRICT MUNICIPALITY

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CONSULTANT:

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PROJECT:

MTHONJENI / eNGXANGXASINI WATER SUPPLY:
CONTRACT 2

DRAWING TITLE:

TYPICAL SPRING PROTECTION AND PIPE TENCHING DETAILS

DESIGNED:	A. MAYEKISO	DRAWN:	Q. MABUSELA
DESIGNED CHECKED:	L. SENTI	DRAWING CHECKED:	A. MAYEKISO
SCALE:		AS SHOWN	

DESIGN COORDINATOR APPROVAL

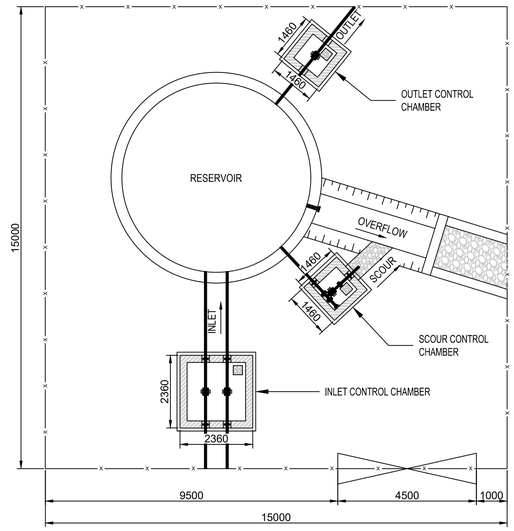
L. SENTI - PrTech(Eng) 201470402 — 23 MAY 2025

ROMH CONSULTING (Pty) Ltd — DATE

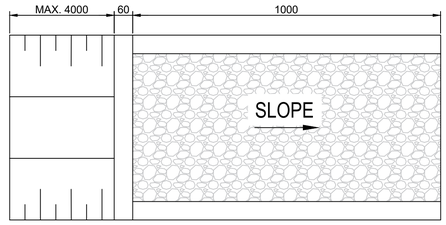
CLIENT APPROVAL — DATE

CONTRACT No.	ORIGINAL DRAWING SIZE:
ORTDM SCMU 45-24/25	A1

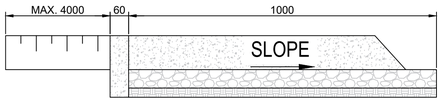
DRAWING No.	PREPARED FOR:	REV No.
PRC-027-07-076-04-06	TENDER	0



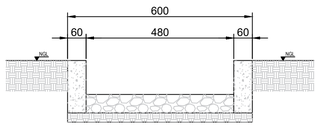
DISTRIBUTION RESERVOIR LAYOUT PLAN
SCALE: 1:100



ENERGY BREAKER: PLAN
SCALE: 1:50



ENERGY BREAKER: SIDE ELEVATION
SCALE: 1:50



ENERGY BREAKER: FRONT ELEVATION
SCALE: 1:50

GENERAL NOTES

1. ALL WORK TO BE EXECUTED IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200 AND PROJECT SPECIFICATIONS.
2. FOUNDING MATERIAL BELOW THE CONCRETE RING BEAM MUST BE STABLE. PREFERABLY BUILD ON CUT SLOPES THAN FILL SLOPES.
3. SAFE BEARING CAPACITY FOR CONCRETE RING BEAM TO BE MINIMUM 100 kPa.
4. SELECTIVE EXCAVATION TO BE PRACTICED BY CONTRACTOR. ENGINEER TO CONFIRM SUITABILITY OF IN-SITU MATERIAL FOR USE AS FOUNDING MATERIAL.
5. TOPSOILING AND REVEGETATION TO COMMENCE IMMEDIATELY AFTER RESERVOIR INSTALLATION AND WATER TIGHTNESS TESTING.
6. ALL REINFORCEMENT MUST BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO CONCRETE CASTING.
7. CONCRETE COVER TO REINFORCEMENT TO BE 50mm.
8. WHERE JOINTS ARE REQUIRED IN COVER SLABS FOR CONTROL CHAMBERS, U-BARS TO BE USED USED TO JOIN TOP AND BOTTOM REINFORCEMENT IN ROOF SLAB.
9. CONTRACTOR TO ADVISE THE ENGINEER ABOUT THE ACTUAL DEPTH FOR EACH CONTROL CHAMBER.
10. REFER TO DWG PRC-027-07-076-04-08 AND PRC-027-07-076-04-09 FOR RESERVOIR INFRASTRUCTURE DETAILS.

No.	DATE	DESCRIPTION	CHECKED

CLIENT:

O.R. TAMBO DISTRICT MUNICIPALITY

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NELSON MANDELA DRIVE
MYEZO PARK
MTHATHA
Tel: (047) 501 6400
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CONSULTANT:

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BONZA BAY ROAD
BEACON BAY
EAST LONDON
Tel: (043) 748 0018
Email: info@romh.co.za
Web: www.romh.co.za

PROJECT:

MTHONJENI / eNGXANGXASINI WATER SUPPLY:
CONTRACT 2

DRAWING TITLE:

RESERVOIR LAYOUT PLAN AND CONCRETE RING BEAM DETAIL

DESIGNED:	A. MAYEKISO	DRAWN:	Q. MABUSELA
DESIGNED CHECKED:	L. SENTI	DRAWING CHECKED:	A. MAYEKISO
SCALE:		AS SHOWN	

DESIGN COORDINATOR APPROVAL

L. SENTI - PrTech(Eng) 201470402 — 23 MAY 2025

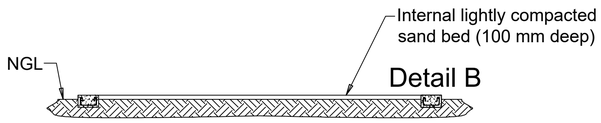
ROMH CONSULTING (Pty) Ltd — DATE

CLIENT APPROVAL — DATE

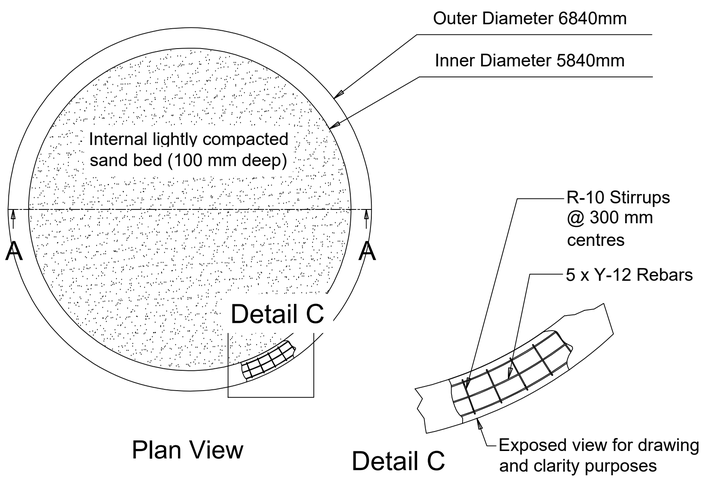
CONTRACT No.	ORIGINAL DRAWING SIZE:
ORTDM SCMU 45-24/25	A1

DRAWING No.	PREPARED FOR:	REV No.
PRC-027-07-076-04-07	TENDER	0

ST09 Concrete Ring Beam - Not to Scale



Sectional Front View on A-A

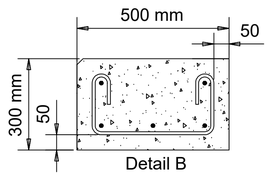


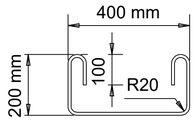
Plan View

Detail C

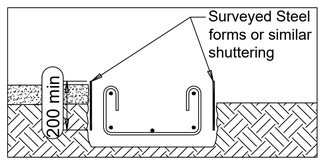
CONCRETE RING BEAM DETAIL
NOT TO SCALE

R-10 Stirrup Dimensions
(SANS 282: 2011, Shape code 72)

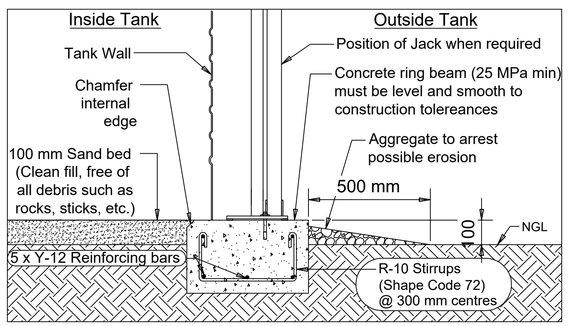




Concrete Ring Beam Width & Depth

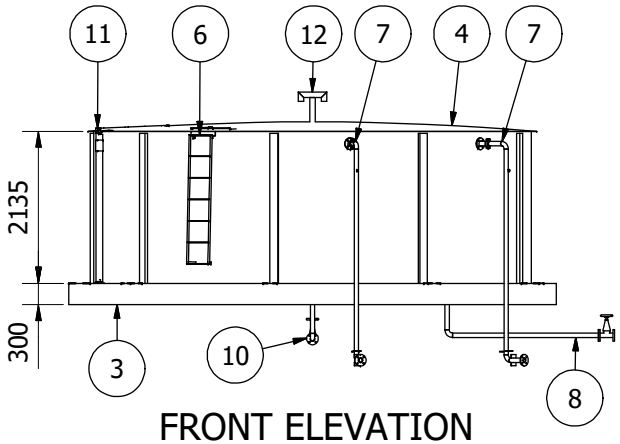


Formed Surfaces

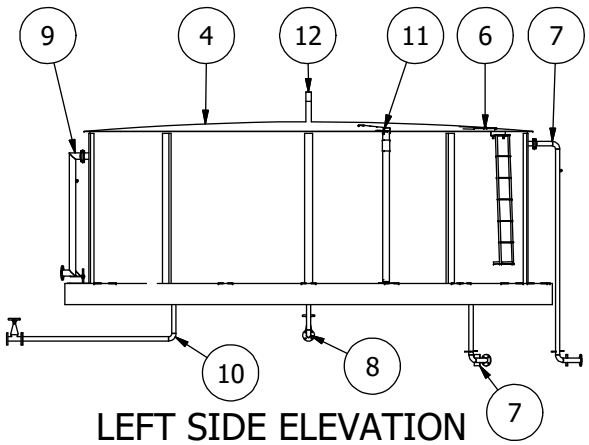


Finished Ring Beam Detail

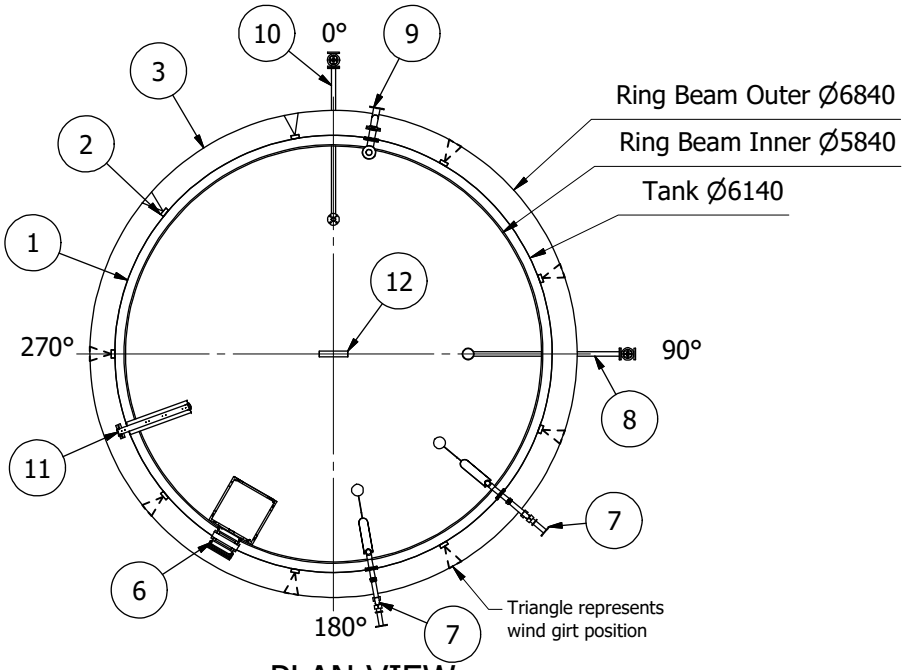
CONCRETE RING BEAM REINFORCEMENT DETAIL
NOT TO SCALE



FRONT ELEVATION



LEFT SIDE ELEVATION



PLAN VIEW

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	Tank Wall Panels	Galvalume Steel Panels, Steel Grade G300, with AZ150 Heavy Duty Coating.
2	9	Wind Girts/Uprights & Covers	Wind Girts are made from 2.4 mm hot dipped galvanised sheet metal. Punched and bent into profile
3	1	Concrete Ring Beam	Reinforced, 25MPa min.
4	1	Dome Roof	Galvalume corrugated sheets, 0.47 mm thick, Grade G550, with AZ150 coating.
5	1	Truss Set (Not Shown)	Made from SHS (300 MPa min) and EA steel. Hot dipped galvanised after fabrication.
6	1	Tank Access	Hook on (removable), c/w internal & external ladders, & access hatch
7	2	Inlet - 50NB	Internal threaded female socket c/w Balem 411 float control valve, external downpipe (terminates below ground) c/w 1 x pipe clamp & pipe closure.
8	1	Outlet, Floor Mount - 50NB	Internal flange, external flange c/w RSV Gate valve.
9	1	Overflow - 80NB	Internal Bell Mouth, external Downpipe with flanged termination complete with 1 x pipe clamp.
10	1	Scour, Floor Mount - 50NB	Internal flange, external flange c/w RSV Gate valve.
11	1	Water Level Indicator	Mechanical (true read type)
12	1	Ventilator	Static, 76 x 76 SHS.

TANK DETAILS PER TANK				
DWG No.	PROJECT	MODEL	GROSS	EFFECTIVE
PRC-027-07-076-04-08	Mthonjeni Water Supply	ST09-02	63 kl	55 kl

Note:
- Nozzle & accessory positions are for representation only, please indicate final positions if required.
- All external flanges are SANS 1123: 1000/3.
- All dimensions in mm unless otherwise specified.
- Standard SBS water liner.
- Drawing not to scale.
- **Projects to select the appropriate pipe closure for each designated nozzle.**

TANK & ACCESSORIES GA - ST09-02

Rev.	By	Date	Revisions	Approved
5				
4				
3				
2				
1				

Drawn: SC
Date: 25/06/2025
Approved: WN
Date: 25/06/2025

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Title: TANK & ACCESSORIES GA - ST09-02
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Rev: 00
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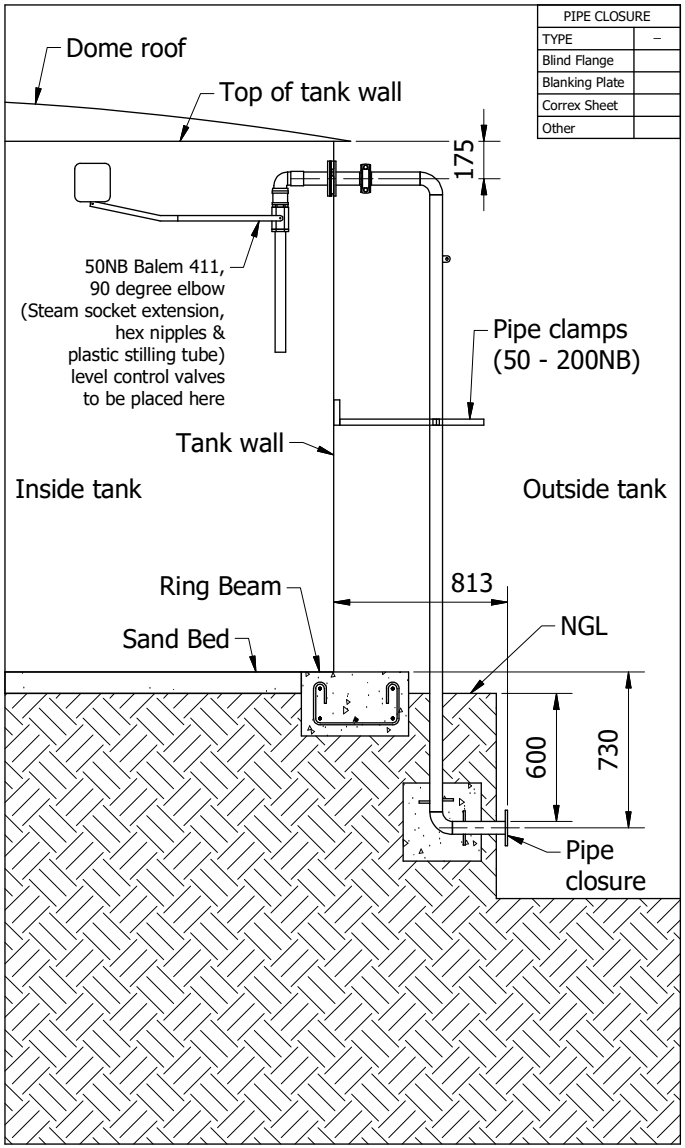
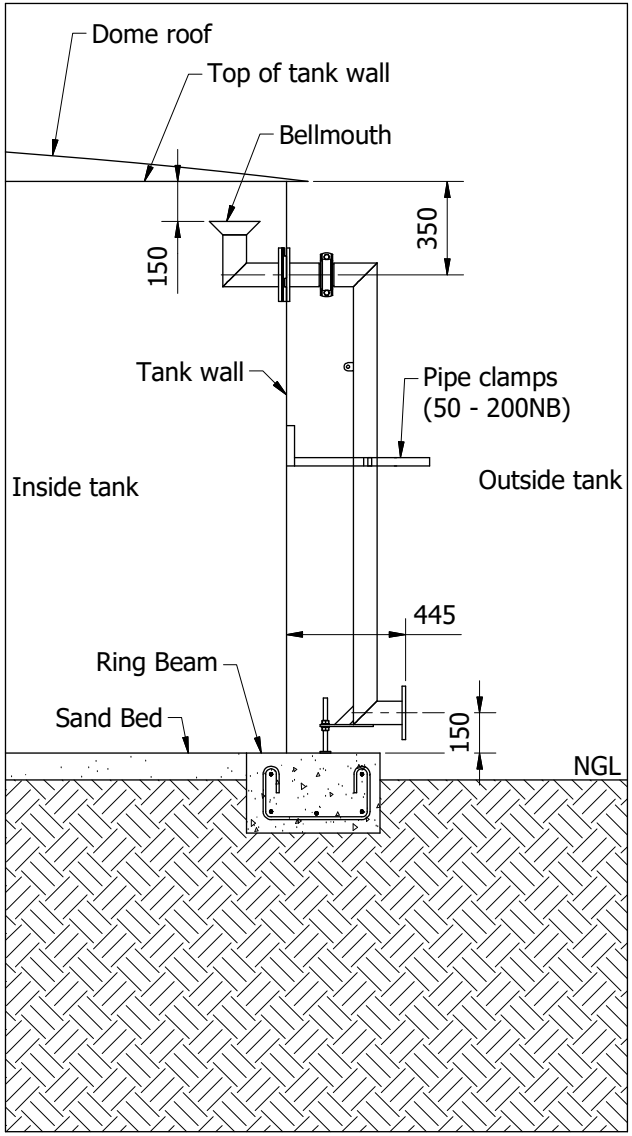


ITEM 7 (INLET - 50NB)



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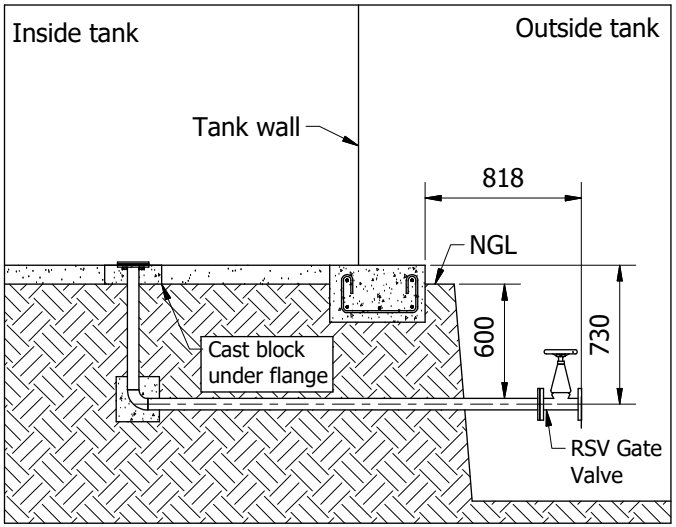
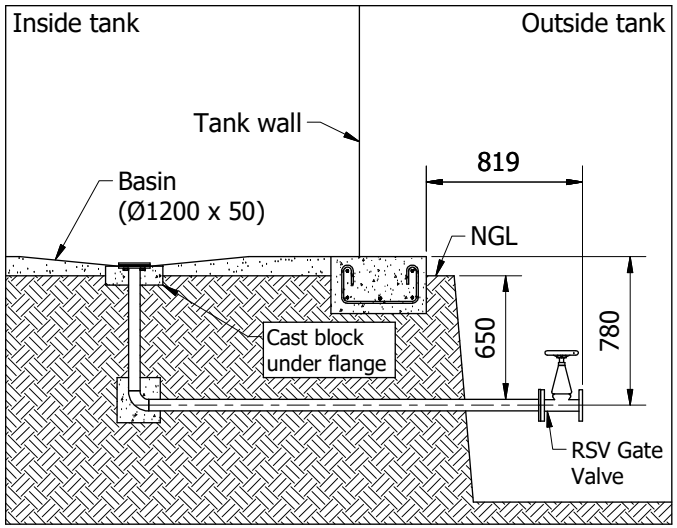


ITEM 10 (SCOUR - 50NB)



ITEM 10 (SCOUR - 50NB)

Rev.	By	Date	Revisions	Approved
5				
4				
3				
2				
1				

Drawn: SC
Date: 25/06/2025
Approved: WN
Date: 25/06/2025

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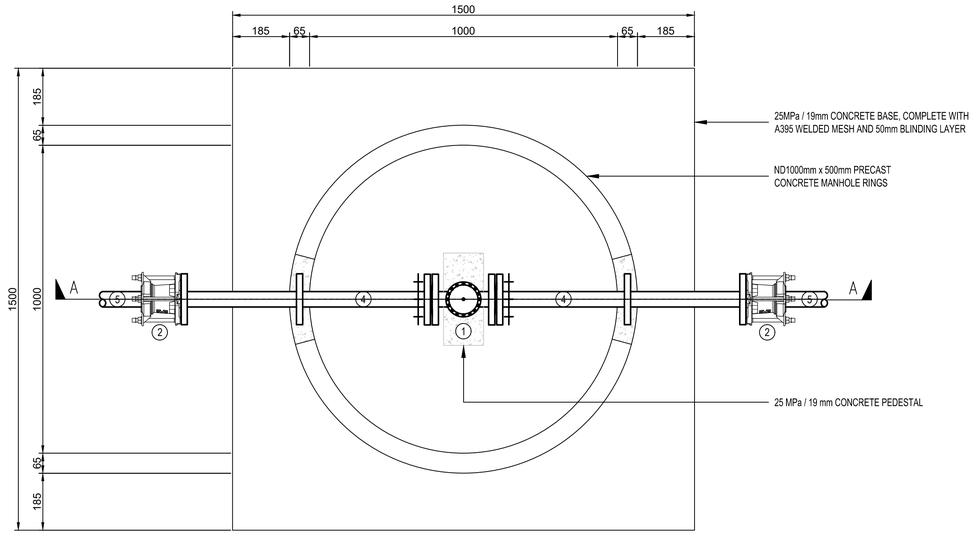
Title: TANK & ACCESSORIES GA - ST09-02

Dwg No: PRC-027-07-076-04-09

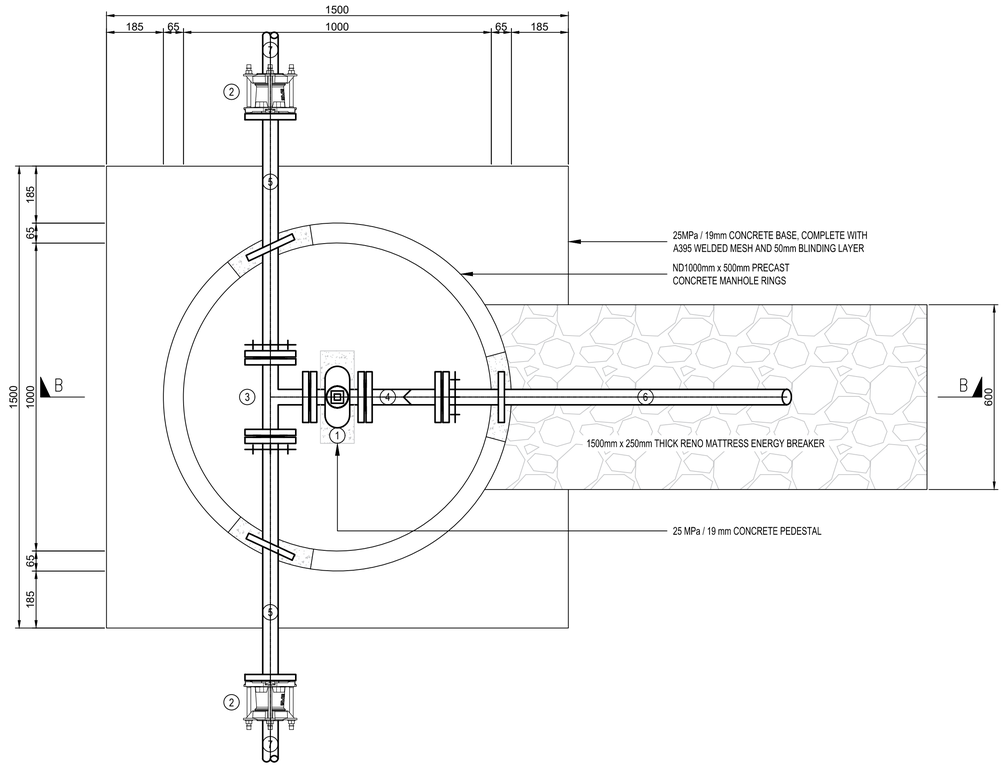
Rev: 00

Description: QUO-08010-B8B9Q2 Ver 0

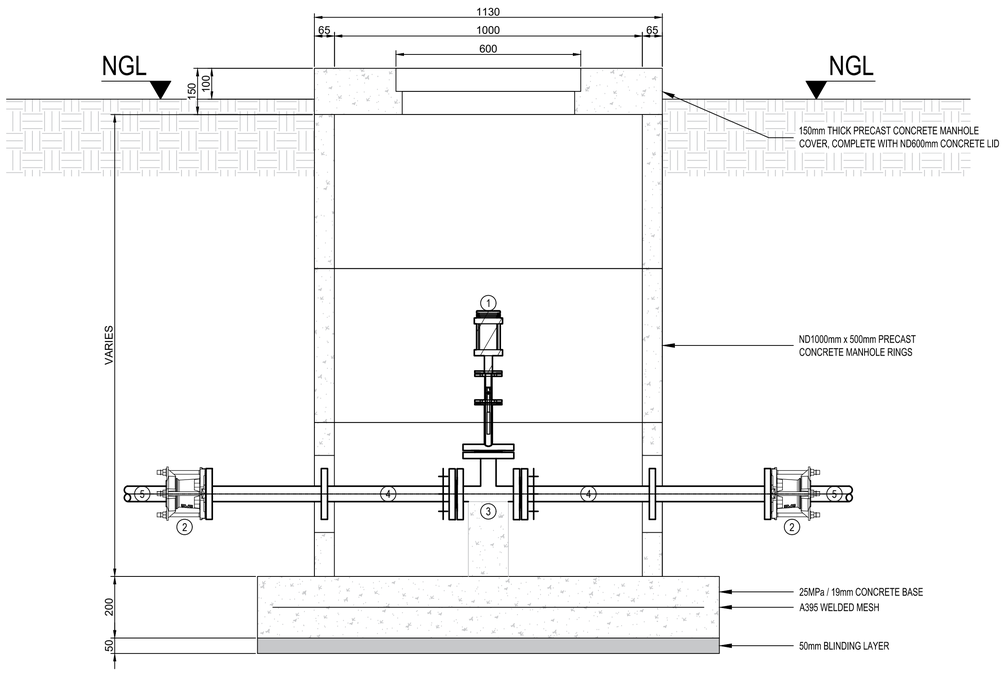
Sheet: 2 /2



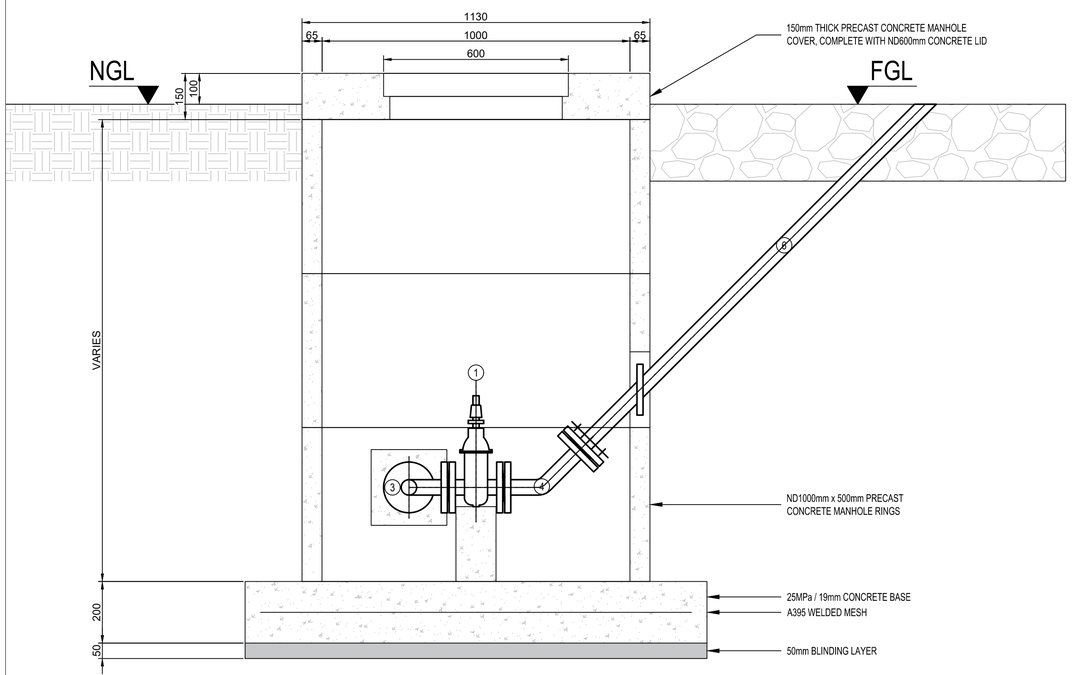
AIR VALVE PLAN
SCALE: 1:10



SCOUR VALVE PLAN
SCALE: 1:10



SECTION A-A
SCALE: 1:10



SECTION B-B
SCALE: 1:10

GENERAL NOTES

1. ACCEPTABLE DESIGN OPTIONS TO BE DEVELOPED BY THE CONTRACTOR IN AREAS WHERE NORMAL EXCAVATION AND BACKFILL PROCEDURES CANNOT BE DONE.
2. ALL WEATHER ACCESS TO STRUCTURES TO BE PROVIDED AS PART OF THE DESIGN.
3. ALL WORK TO BE EXECUTED IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200 AND PROJECT SPECIFICATIONS.
4. AREA AROUND THE STRUCTURE TO BE SHAPED TO AVOID PONDING OF WATER.
5. ENGINEER TO INSPECT AND APPROVE MATERIAL BEFORE BLINDING IS CAST.
6. ALL EXPOSED EDGES TO BE CHAMFERED 20 x 20 mm UNLESS OTHERWISE NOTED.
7. BACKFILL MATERIAL TO BE COMPACTED TO 93% MOD AASHTO IN MAX 150mm LAYERS.
8. ALL CONCRETE TO BE 25 MPa AT 28 DAYS.
9. ALL COUPLINGS, JOINTS, FLANGES, BOLTS BURIED BELOW GROUND LEVEL TO BE TREATED WITH DENSO SS PRIME, DENSO MASTIC & DENSO HT TAPE OR SIMILAR APPROVED.
10. ALL STEEL FITTINGS TO BE HEAVY DUTY HOT DIPPED GALVANIZED TO SANS 32 BEFORE FBE COATING. FURTHER MACHINING, CUTTING OR WELDING AFTER HOT DIPPED GALVANIZING WILL NOT BE ALLOWED.
11. AIR VALVE PIPE CONNECTION ASSEMBLY:
    - 11.1. Ø50mm DOUBLE ORIFICE AIR VALVE WITH IN-FLOW CHECK VALVE, PN16
    - 11.2. Ø50mm STEEL-TO-HDPE FLANGE ADAPTOR, PN16
    - 11.3. Ø50mm x Ø50mm CLASS M GMS EQUAL TEE, FLANGED ALL ENDS
    - 11.4. Ø50mm 750mm LONG CLASS M GMS PIPE, FLANGED BOTH ENDS, COMPLETE WITH PUDDLE FLANGE
    - 11.5. Ø50mm HDPE CLASS PN12.5 PIPE
12. SCOUR VALVE PIPE CONNECTION ASSEMBLY:
    - 12.1. Ø50mm RESILIENT SEAL GATE VALVE, FLANGED, PN16
    - 12.2. Ø50mm STEEL-TO-HDPE FLANGE ADAPTOR, PN16
    - 12.3. Ø50mm x Ø50mm CLASS M GMS EQUAL TEE, FLANGED ALL ENDS
    - 12.4. Ø50mm 45° CLASS M GMS BEND, FLANGED BOTH ENDS
    - 12.5. Ø50mm 750mm LONG CLASS M GMS PIPE, FLANGED BOTH ENDS, COMPLETE WITH PUDDLE FLANGE
    - 12.6. Ø50mm 1500mm LONG CLASS M GMS PIPE, FLANGED ONE END, COMPLETE WITH PUDDLE FLANGE
    - 12.7. Ø50mm HDPE CLASS PN12.5 PIPE
13. REFER TO DWG PRC-027-07-076-05-05 FOR POSITIONS OF AIR- AND SCOUR VALVES.

No.	DATE	DESCRIPTION	CHECKED

CLIENT:

O.R. TAMBO DISTRICT MUNICIPALITY

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NELSON MANDELA DRIVE
MYEZO PARK
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CONSULTANT:

ROMH

ROMH CONSULTING (PTY) LTD
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BEACON BAY
EAST LONDON
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Email: info@romh.co.za
Web: www.romh.co.za

PROJECT:

MTHONJENI / eNGXANGXASINI WATER SUPPLY:
CONTRACT 2

DRAWING TITLE:

TYPICAL AIR- AND SCOUR VALVE INFRASTRUCTURE DETAILS

DESIGNED:	A. MAYEKISO	DRAWN:	Q. MABUSELA
DESIGNED CHECKED:	L. SENTI	DRAWING CHECKED:	A. MAYEKISO
SCALE:		AS SHOWN	

DESIGN COORDINATOR APPROVAL

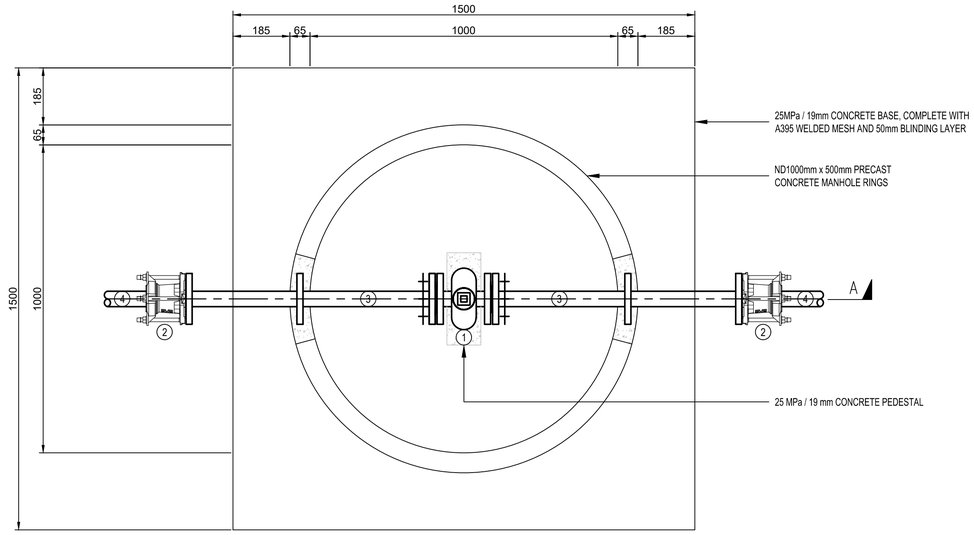
L. SENTI - PrTech(Eng) 201470402 — 23 MAY 2025

ROMH CONSULTING (Pty) Ltd — DATE

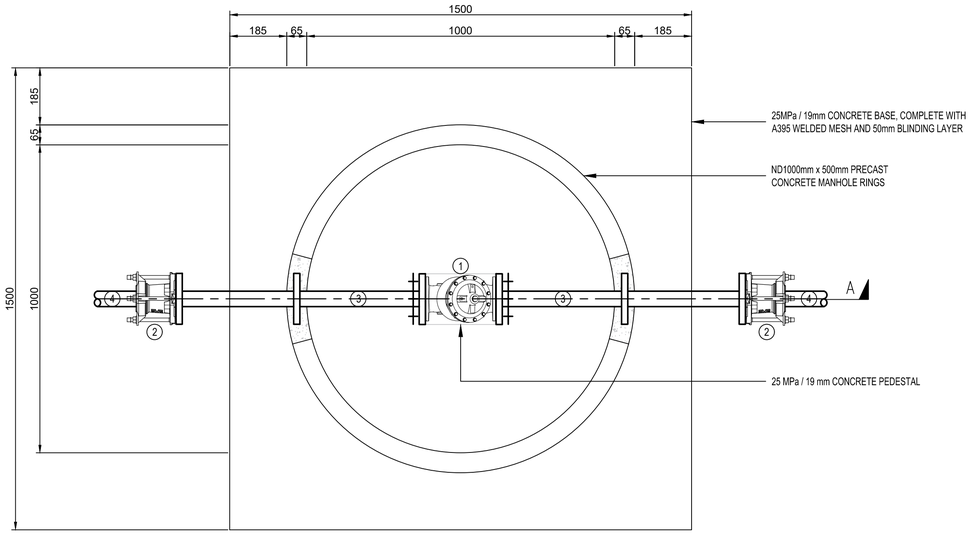
CLIENT APPROVAL — DATE

CONTRACT No.	ORIGINAL DRAWING SIZE:
ORTDM SCMU 45-24/25	A1

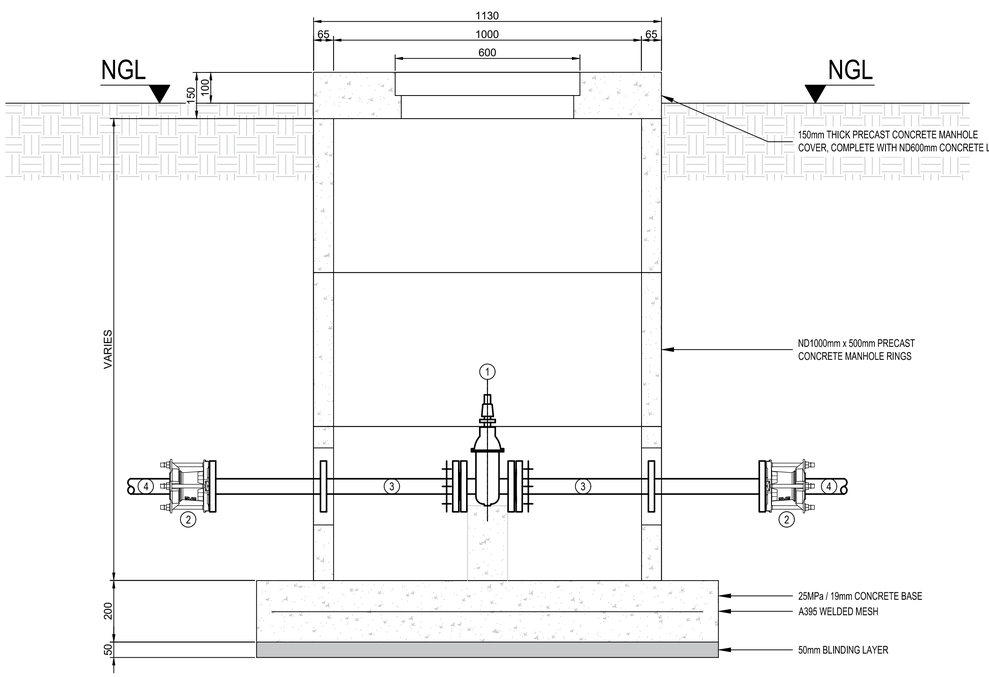
DRAWING No.	PREPARED FOR:	REV No.
PRC-027-07-076-04-10	TENDER	0



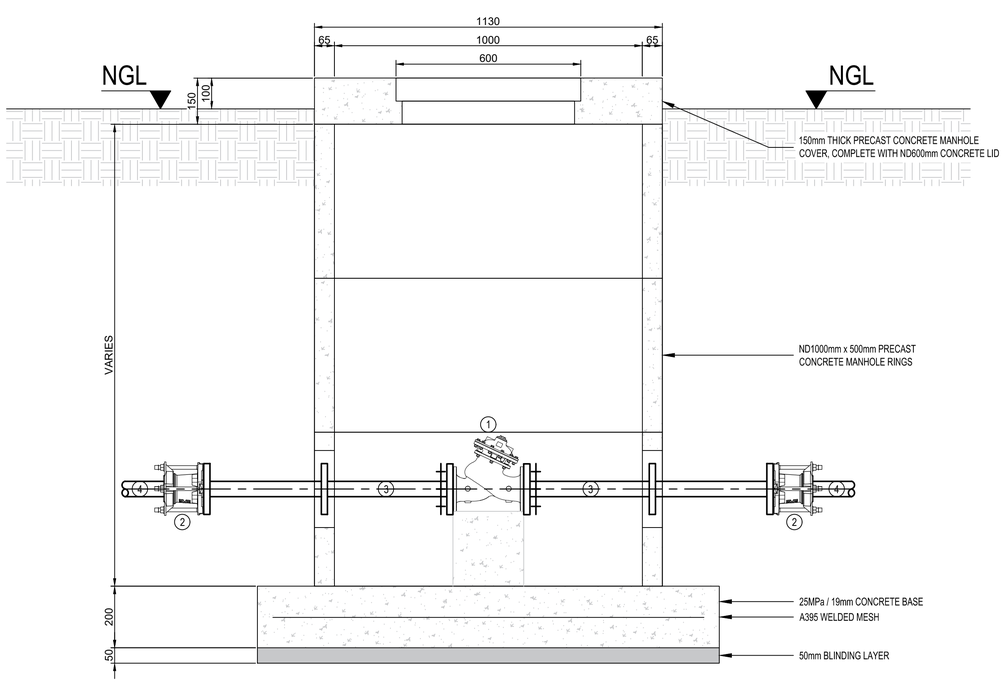
ISOLATION VALVE PLAN
SCALE: 1:10



PRESSURE REDUCING VALVE PLAN
SCALE: 1:10



SECTION C-C
SCALE: 1:10



SECTION D-D
SCALE: 1:10

GENERAL NOTES

1. ACCEPTABLE DESIGN OPTIONS TO BE DEVELOPED BY THE CONTRACTOR IN AREAS WHERE NORMAL EXCAVATION AND BACKFILL PROCEDURES CANNOT BE DONE.
2. ALL WEATHER ACCESS TO STRUCTURES TO BE PROVIDED AS PART OF THE DESIGN.
3. ALL WORK TO BE EXECUTED IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200 AND PROJECT SPECIFICATIONS.
4. AREA AROUND THE STRUCTURE TO BE SHAPED TO AVOID PONDING OF WATER.
5. ENGINEER TO INSPECT AND APPROVE MATERIAL BEFORE BLINDING IS CAST.
6. ALL EXPOSED EDGES TO BE CHAMFERED 20 x 20 mm UNLESS OTHERWISE NOTED.
7. BACKFILL MATERIAL TO BE COMPACTED TO 93% MOD AASHTO IN MAX 150mm LAYERS.
8. ALL CONCRETE TO BE 25 MPa AT 28 DAYS.
9. ALL COUPLINGS, JOINTS, FLANGES, BOLTS BURIED BELOW GROUND LEVEL TO BE TREATED WITH DENSO SS PRIME, DENSO MASTIC & DENSO HT TAPE OR SIMILAR APPROVED.
10. ALL STEEL FITTINGS TO BE HEAVY DUTY HOT DIPPED GALVANIZED TO SANS 32 BEFORE FBE COATING. FURTHER MACHINING, CUTTING OR WELDING AFTER HOT DIPPED GALVANIZING WILL NOT BE ALLOWED.
11. ISOLATION VALVE PIPE CONNECTION ASSEMBLY:
    - 11.1. Ø50mm RESILIENT SEAL GATE VALVE, FLANGED, PN16
    - 11.2. Ø50mm STEEL-TO-HDPE FLANGE ADAPTOR, PN16
    - 11.3. Ø50mm 750mm LONG CLASS M GMS PIPE, FLANGED BOTH ENDS, COMPLETE WITH PUDDLE FLANGE
    - 11.4. Ø50mm HDPE CLASS PN10 / PN12.5 PIPE
12. PRESSURE REDUCING VALVE PIPE CONNECTION ASSEMBLY:
    - 12.1. Ø50mm BERMAD 700 SIGMA EN / ES OR SIMILAR APPROVED PRESSURE REDUCING VALVE, FLANGED, PN16
    - 12.2. Ø50mm STEEL-TO-HDPE FLANGE ADAPTOR, PN16
    - 12.3. Ø50mm 750mm LONG CLASS M GMS PIPE, FLANGED BOTH ENDS, COMPLETE WITH PUDDLE FLANGE
    - 12.4. Ø50mm HDPE CLASS PN10 PIPE
13. REFER TO DWG PRC-027-07-076-05-03 AND PRC-027-07-076-05-04 FOR POSITIONS OF ISOLATION- AND PRESSURE REDUCING VALVES.

No.	DATE	DESCRIPTION	CHECKED

CLIENT:

O.R .TAMBO DISTRICT MUNICIPALITY

O.R. TAMBO DISTRICT MUNICIPALITY

O.R. TAMBO DISTRICT MUNICIPALITY
NELSON MANDELA DRIVE
MYEZO PARK
MTHATHA

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Web: www.ortambodm.gov.za

CONSULTANT:

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ROMH CONSULTING (PTY) LTD
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BONZA BAY ROAD
BEACON BAY
EAST LONDON

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Email: info@romh.co.za
Web: www.romh.co.za

PROJECT:

MTHONJENI / eNGXANGXASINI WATER SUPPLY:
CONTRACT 2

DRAWING TITLE:

TYPICAL ISOLATION- AND PRESSURE REDUCING VALVE INFRASTRUCTURE DETAILS

DESIGNED:	A. MAYEKISO	DRAWN:	Q. MABUSELA
DESIGNED CHECKED:	L. SENTI	DRAWING CHECKED:	A. MAYEKISO
SCALE:		AS SHOWN	

DESIGN COORDINATOR APPROVAL

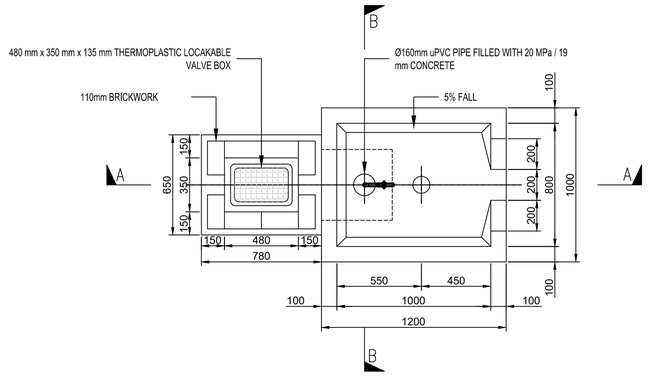
L. SENTI - PrTech(Eng) 201470402 — 23 MAY 2025

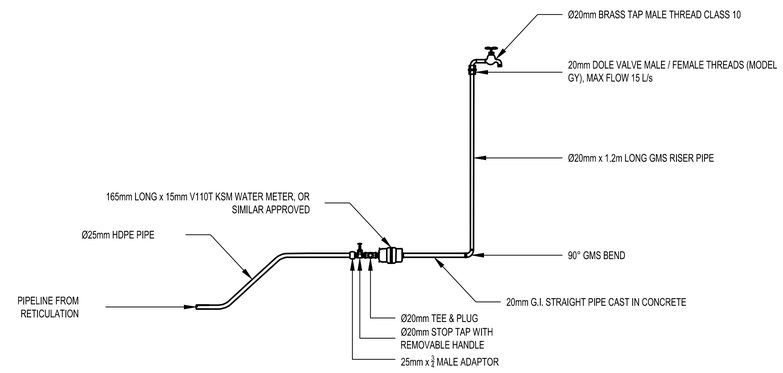
ROMH CONSULTING (Pty) Ltd — DATE

CLIENT APPROVAL — DATE

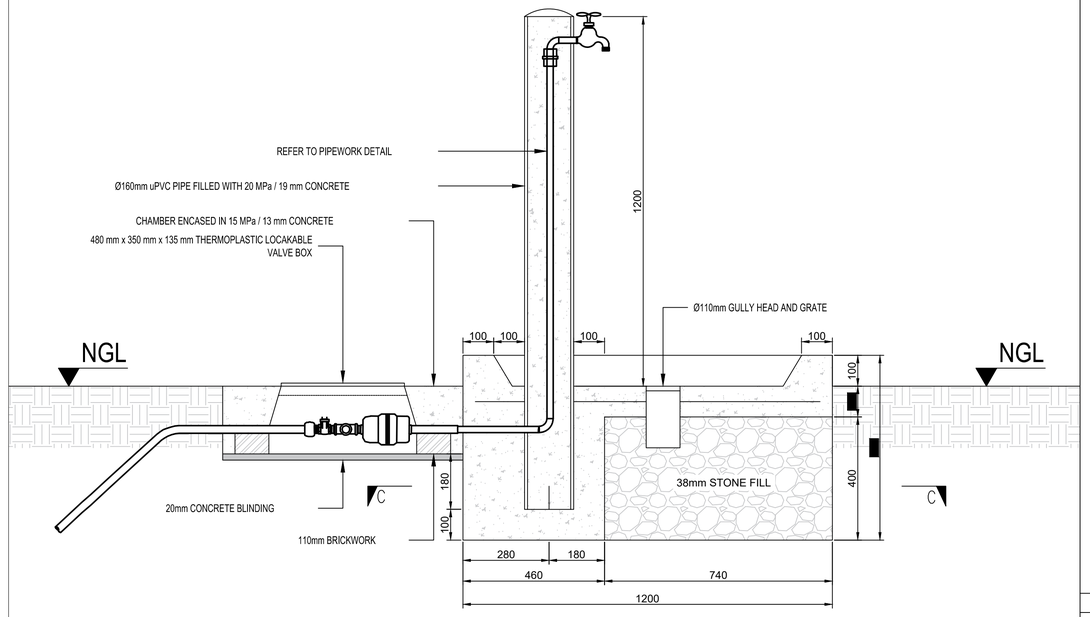
CONTRACT No.	ORIGINAL DRAWING SIZE:
ORTDM SCMU 45-24/25	A1

DRAWING No.	PREPARED FOR:	REV No.
PRC-027-07-076-04-11	TENDER	0

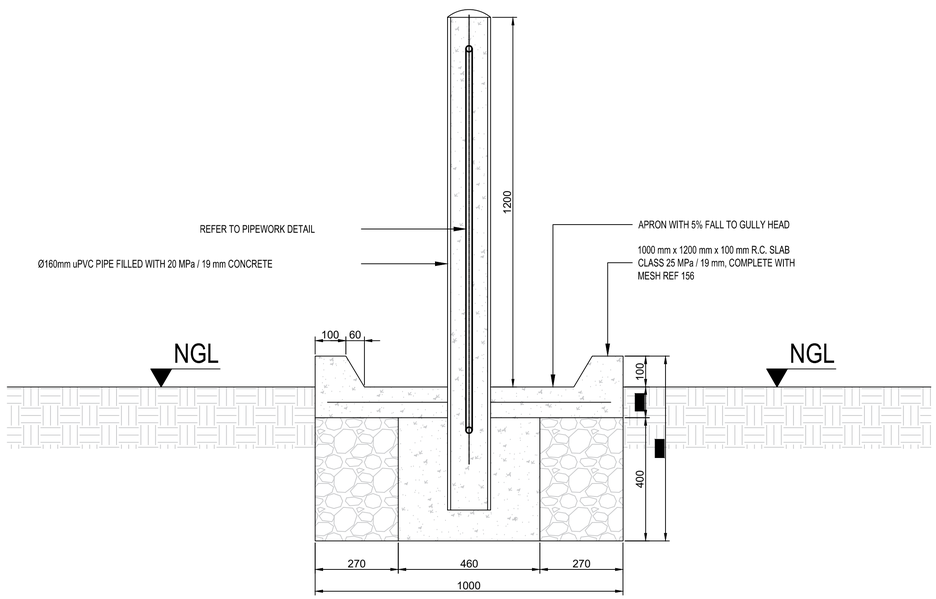




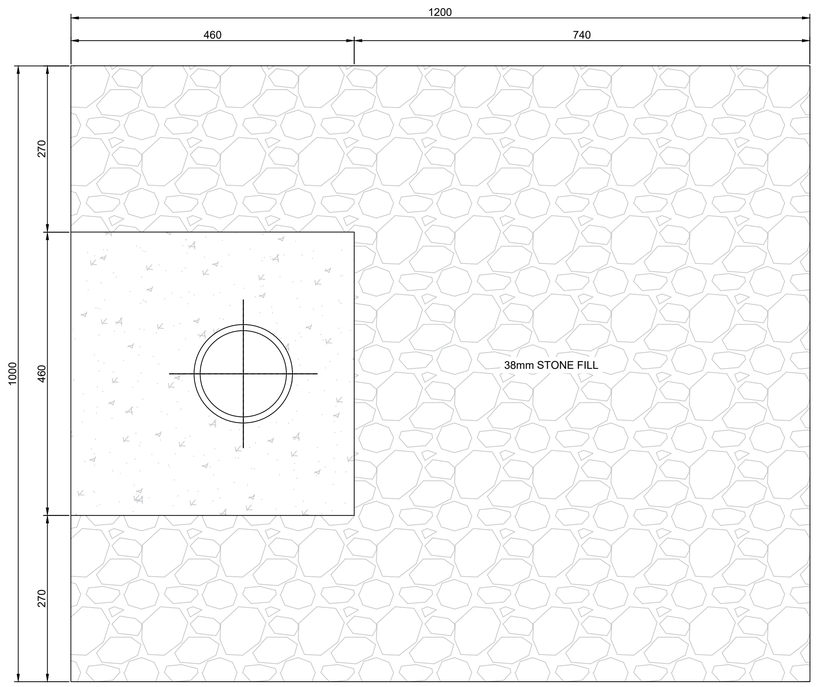
PLAN AND PIPEWORK DETAIL
SCALE: 1:20



SECTION A-A
SCALE: 1:10



SECTION B-B
SCALE: 1:10



SECTION C-C
SCALE: 1:5

GENERAL NOTES

1. ACCEPTABLE DESIGN OPTIONS TO BE DEVELOPED BY THE CONTRACTOR IN AREAS WHERE NORMAL EXCAVATION AND BACKFILL PROCEDURES CANNOT BE DONE.
2. ALL WEATHER ACCESS TO STRUCTURES TO BE PROVIDED AS PART OF THE DESIGN.
3. ALL WORK TO BE EXECUTED IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200 AND PROJECT SPECIFICATIONS.
4. STANDPIPES TO BE PLACED AT LEAST AN OFFSET OF 1m FROM CENTERLINE OF PIPE.
5. ALL COUPLINGS, JOINTS, FLANGES, BOLTS BURIED BELOW GROUND LEVEL TO BE TREATED WITH DENSO SS PRIME, DENSO MASTIC & DENSO HT TAPE OR SIMILAR APPROVED.
6. ALL STEEL FITTINGS TO BE HEAVY DUTY HOT DIPPED GALVANIZED TO SANS 32 BEFORE FBE COATING. FURTHER MACHINING, CUTTING OR WELDING AFTER HOT DIPPED GALVANIZING WILL NOT BE ALLOWED.
7. TOPSOILING AND REVEGETATION TO COMMENCE IMMEDIATELY AFTER COMPLETION OF SUCCESSFUL PRESSURE TEST ON STANDPIPE.
8. REFER TO DWG PRC-027-07-076-05-03 AND PRC-027-07-076-05-04 FOR POSITIONS OF STANDPIPES.

No.	DATE	DESCRIPTION	CHECKED

CLIENT:

O.R. TAMBO DISTRICT MUNICIPALITY

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MYEZO PARK
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CONSULTANT:

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BONZA BAY ROAD
BEACON BAY
EAST LONDON

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Email: info@romh.co.za
Web: www.romh.co.za

PROJECT:

MTHONJENI / eNGXANGXASINI WATER SUPPLY:
CONTRACT 2

DRAWING TITLE:

TYPICAL STANDPIPE INFRASTRUCTURE DETAILS

DESIGNED:	A. MAYEKISO	DRAWN:	Q. MABUSELA
DESIGNED CHECKED:	L. SENTI	DRAWING CHECKED:	A. MAYEKISO
SCALE:		AS SHOWN	

DESIGN COORDINATOR APPROVAL

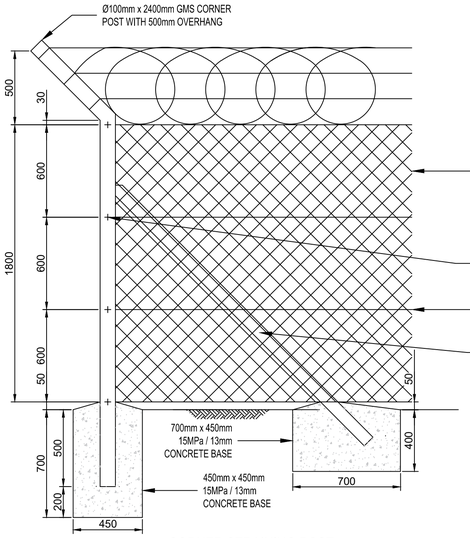
L. SENTI - PrTech(Eng) 201470402 — 23 MAY 2025

ROMH CONSULTING (Pty) Ltd — DATE

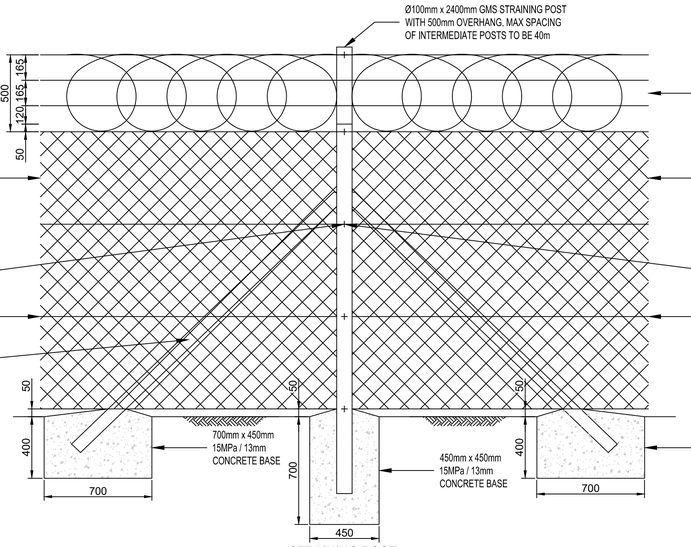
CLIENT APPROVAL — DATE

CONTRACT No.	ORIGINAL DRAWING SIZE:
ORTDM SCMU 45-24/25	A1

DRAWING No.	PREPARED FOR:	REV No.
PRC-027-07-076-04-12	TENDER	0



CORNER STRAINING POST
SCALE: 1:20



STRAINING POST
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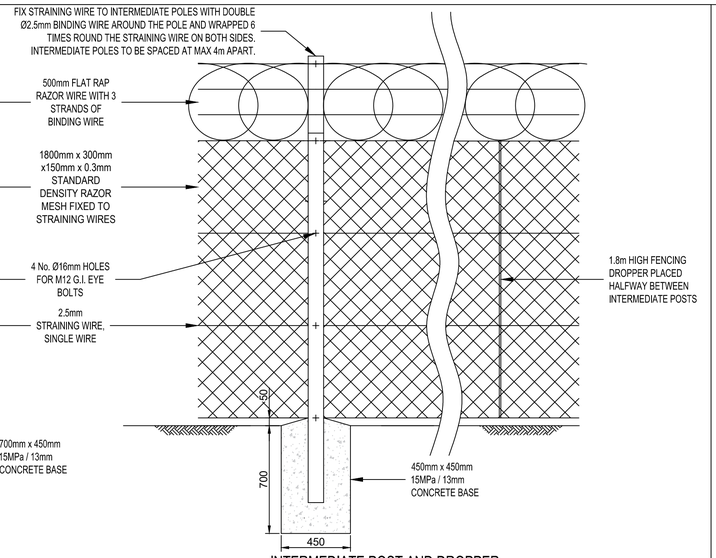
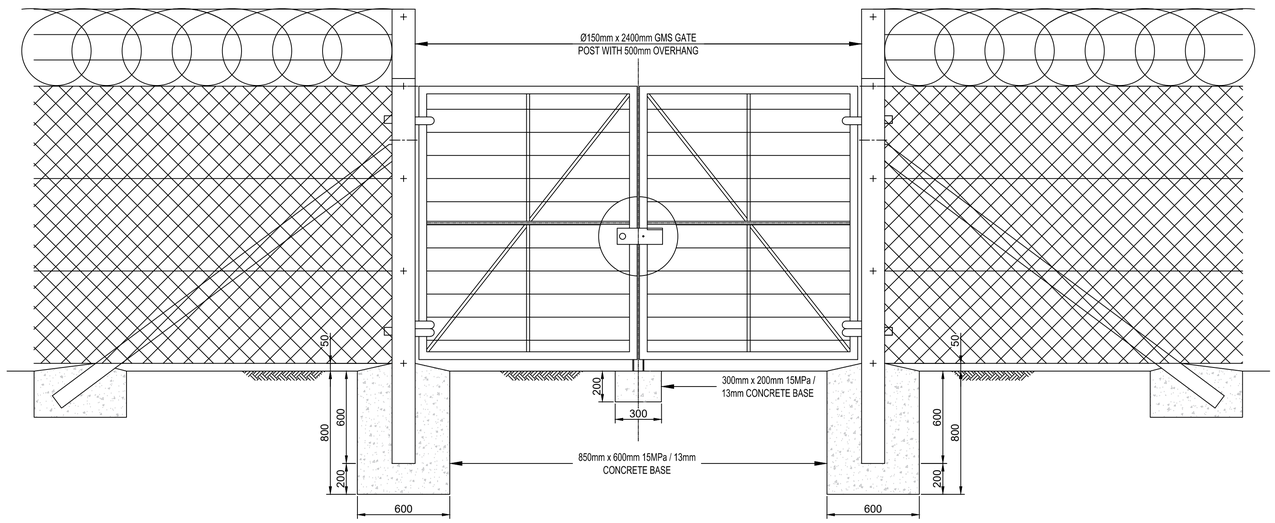


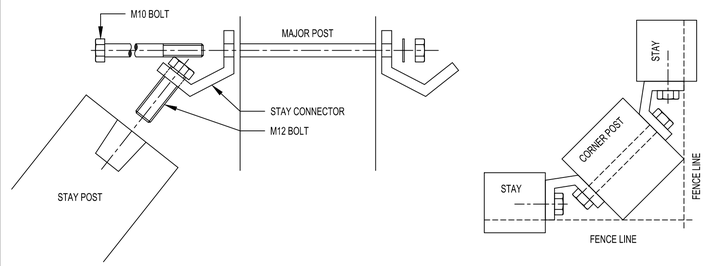
INTERMEDIATE POST AND DROPPER
SCALE: 1:20

GENERAL NOTES

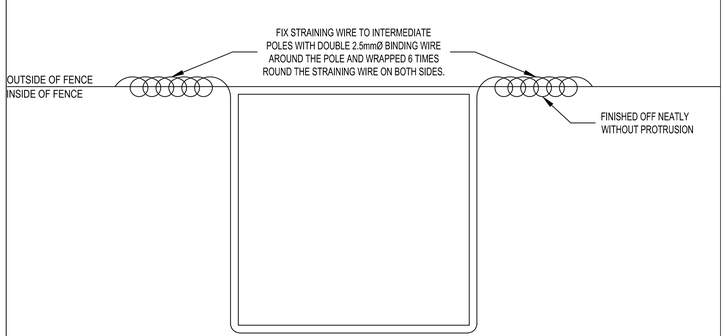
1. CLEAN THE AREA 500mm ON EACH SIDE OF THE FENCE ALIGNMENT FOR THE FENCE TO BE ERECTED.
2. IF THE NEW FENCE IS ERECTED IN THE SAME POSITION OF AN EXISTING FENCE, THE EXISTING FENCE MUST BE REMOVED AND THE POLE HOLE EXCAVATION MUST BE FILLED WITH CONCRETE OR THE EXCAVATION MUST BE EARTH FILLED AND COMPACTED TO THE SPEIFICATIONS OF THE EMPLOYER.
3. IF THE FENCE IS ERECTED IN A ROCKY AREA THE POSTS MAY NOT BE SHORTENED. INSTEAD, THE BOULDERS MUST BE REMOVED UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
4. IN THE CASE WHERE THE CORNERS OF THE FENCE ARE GREATER THAN 90°. THE OPTION OF AN EXTRA STAY MUST BE CONSIDERED ON THE INSIDE OF FENCE.
5. THE CONTRACTOR MAY NOT PROCEED WITH THE ERECTION OF THE FENCE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER THAT THE POLE HOLE EXCAVATIONS AND FENCE MATERIALS HAVE BEEN INSPECTED AND APPROVED.
6. ALL CONCRETE FOOTINGS MUST BE 15MPa IN STRENGTH AND MUST END 50mm ABOVE GROUND LEVEL AND SHAPED.
7. ONLY USE 2.5mm GALVANIZED BINDING WIRE TO FIX FLAT WRAP TO STRAINING WIRE AND STRAINING WIRE TO INTERMEDIATE POSTS.
8. MECHANICALLY STRAIN 4 STRANDS OF GALVANIZED STRAINING WIRE BETWEEN STRAINER POSTS. FIX THE STRAINING WIRE TO THE INTERMEDIATE POSTS WITH Ø2.5mm GALVANIZED BINDING WIRE.
9. STRAINING WIRES TO BE Ø2.5mm HIGH STRAIN 1600MPa TENSILE STRENGTH STEEL FENCING WIRE GALVANIZED IN ACCORDANCE WITH SABS 675 / SABS 935 TO CLASS A GRADE.
10. FLAT WRAP PLACED ON THE OUTSIDE AND FIXED TO THE STRAINING WIRE WITH Ø2.5mm GALVANIZED BINDING WIRE TIED ON THE INSIDE OF THE FENCE @ 1.0m C/C TOP, MIDDLE AND BOTTOM OF EACH LAYER OF FLAT WRAP.
11. THE FLAT WRAP MUST BE IN ACCORDANCE WITH BTO -10 SPECIFICATIONS. THE COIL FOR THE FLAT WRAP MUST BE 500mm TOP TO BOTTOM.
12. TIE STRAINING WIRE TO VEHICLE GATE, CORNER AND STRAINING POST BY DOUBLE WRAPPING AROUND THE POST AND TWISTING 8 TIMES AROUND THE INCOMING FINISH WRAPPED WIRE END OFF NEATLY - NO LOOSE / PROTRUDING ENDS.
13. PROVIDE 1 x ABUS 50mm PADLOCK AND 50mm MILD STEEL GATE CHAIN OR SIMILAR APPROVED. THE LENGTH OF THE CHAIN IS TO BE MEASURED ON SITE AND MUST BE SUCH THAT IT FITS SNUGLY THROUGH THE SECURING HOLES.



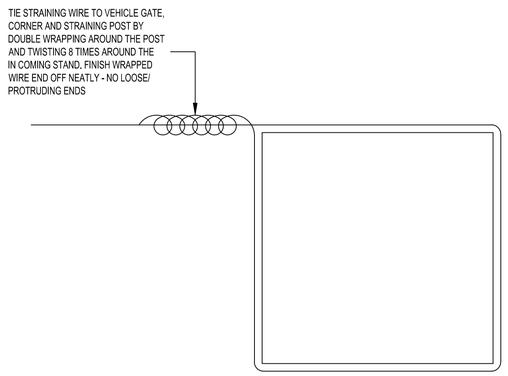
4.5m SWING GATE INCLUDING GATE POSTS
SCALE: 1:20



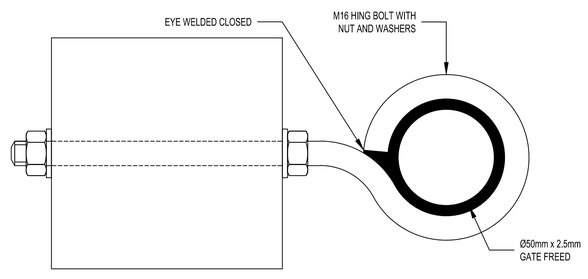
STAY CONNECTOR DETAIL
SCALE: 1:2



INTERMEDIATE POST DETAIL
SCALE: 1:2



CORNER POST DETAIL
SCALE: 1:2



TYPICAL HINGE POST FOR GATE DETAIL
SCALE: 1:5

No.	DATE	DESCRIPTION	CHECKED

CLIENT:

O.R. TAMBO DISTRICT MUNICIPALITY

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PROJECT:

MTHONJENI / eNGXANGXASINI WATER SUPPLY:
CONTRACT 2

DRAWING TITLE:

TYPICAL FENCING DETAILS

DESIGNED:	A. MAYEKISO	DRAWN:	Q. MABUSELA
DESIGNED CHECKED:	L. SENTI	DRAWING CHECKED:	A. MAYEKISO
SCALE:		AS SHOWN	

DESIGN COORDINATOR APPROVAL

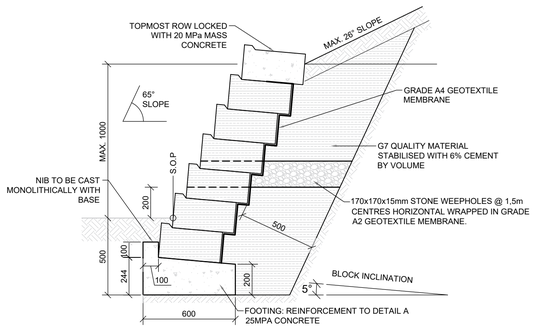
L. SENTI - PrTech(Eng) 201470402 — 23 MAY 2025

ROMH CONSULTING (Pty) Ltd — DATE

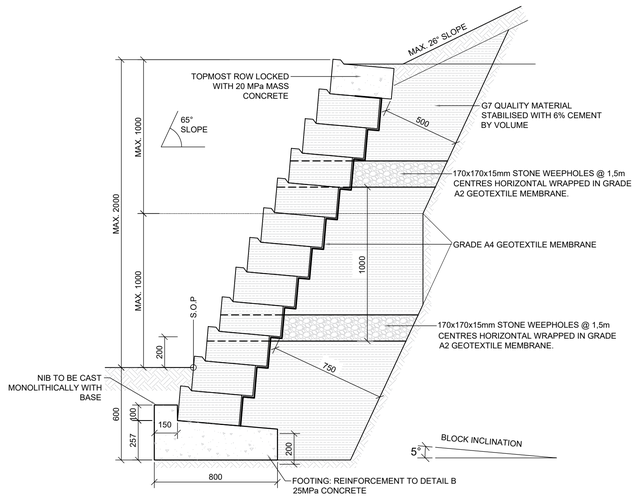
CLIENT APPROVAL — DATE

CONTRACT No.	ORIGINAL DRAWING SIZE:
ORTDM SCMU 45-24/25	A1

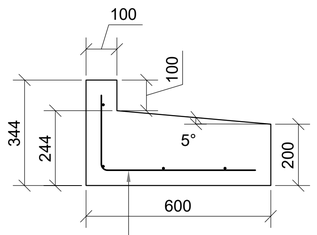
DRAWING No.	PREPARED FOR:	REV No.
PRC-027-07-076-04-13	TENDER	0



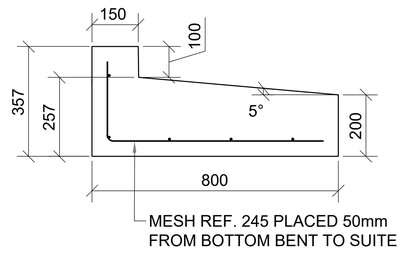
DRY STACK RETAINING WALL (> 0m TO 1m EXPOSED HEIGHT)
SCALE: 1:20



DRY STACK RETAINING WALL (> 1m TO 2m EXPOSED HEIGHT)
SCALE: 1:20



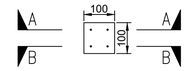
DETAIL A (> 0m TO 1m RETAINING WALL)
SCALE: 1:10

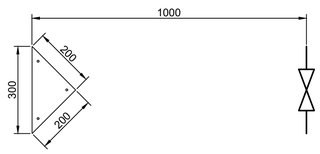


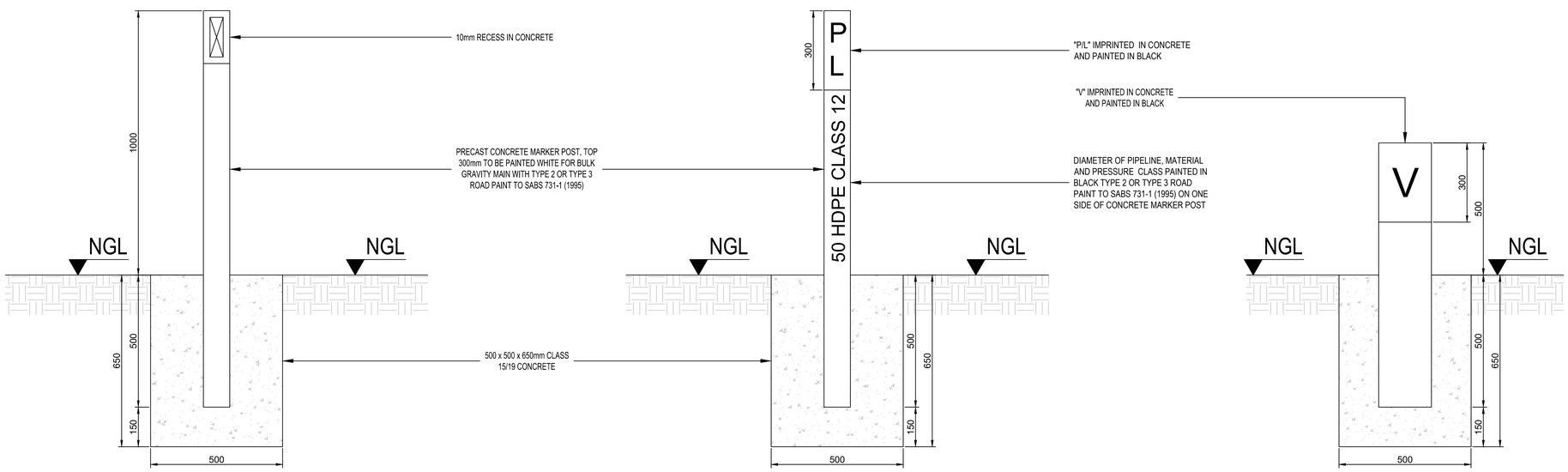
DETAIL B (> 1m TO 2m RETAINING WALL)
SCALE: 1:10

GENERAL NOTES

1. ACCEPTABLE DESIGN OPTIONS TO BE DEVELOPED BY THE CONTRACTOR IN AREAS WHERE NORMAL EXCAVATION AND BACKFILL PROCEDURES CANNOT BE DONE.
2. ALL WEATHER ACCESS TO STRUCTURES TO BE PROVIDED AS PART OF THE DESIGN.
3. ALL WORK TO BE EXECUTED IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200 AND PROJECT SPECIFICATIONS.
4. SET BOTTOM OF BLOCKS IN WET CONCRETE.
5. ALL BACKFILL TO BE COMPACTED TO 93% MAMDD.
6. PROVE ALL SERVICES PRIOR TO CONSTRUCTION.
7. ALL WORK AREAS TO BE REINSTATED (PREMIX, CONCRETE, ETC.).
8. UNLESS OTHERWISE AGREED WITH THE ENGINEER, THE CONTRACTOR TO SUPPLY THE ENGINEER WITH RESULTS OF COMPACTION TESTS, AND WHEN APPLICABLE, PERCENTAGE STABILIZATION TESTS ON BACKFILL.
9. STORMWATER RUNOFF BEHIND THE TOP OF THE WALL TO BE MANAGED IN SUCH A MANNER AS TO OBVIATE SCOUR BEHIND OR OVER TOPPING OF THE WALL.
10. BACKFILL TO BE BENCHED IN COMPETENT GROUND.
11. ALL LEVELS AND DIMENSIONS TO BE VERIFIED ON SITE.
12. ALL CONCRETE WORK TO COMPLY WITH SANS 1200 GA (SMALL WORKS).
13. CONCRETE CLASS:
14. COVER TO REINFORCEMENT:
15. ALL FOUNDATION EXCAVATIONS ARE TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING OF CONCRETE.
16. ALL REINFORCING FIXING TO BE INSPECTED BY THE ENGINEER PRIOR TO CONCRETE CASTING.
17. SIX (6) CONCRETE CUBE TESTS TO BE TAKEN PER HOUR. THREE (3) CONCRETE CUBE TESTS TO BE TAKEN AT SEVEN (7) DAYS, THE REMAINDER AT TWENTY-EIGHT (28) DAYS. THE RESULTS ARE TO BE APPROVED BY THE ENGINEER.
18. ALL STRUCTURAL CONCRETE IS TO BE CURED FOR A MINIMUM OF FIVE (5) DAYS PRIOR TO ENGINEER'S INSPECTIONS.
19. THE ENGINEER REQUIRES MINIMUM 48 HOURS NOTICE PRIOR TO ALL TESTING AND INSPECTIONS.
20. CONCRETE MARKER POSTS TO BE PLACED AT AN OFFSET OF 1m FROM CENTERLINE OF PIPE.
21. WHEN LOOKING IN THE DIRECTION OF WATER FLOW, CONCRETE MARKER POSTS TO BE PLACED ON THE LEFT HAND SIDE.
22. CONCRETE MARKER POSTS TO BE PLACED AT BENDS AND TEES ON ALL PIPELINES.
23. THE CONCRETE MARKER POSTS MUST BE PLACED IN LINE OF SITE, SO THAT THE NEXT MARKER POST IS VISIBLE FROM THE PREVIOUS MARKER POST.







PIPELINE ROUTE AND VALVE MARKER DETAIL
SCALE: 1:10

No.	DATE	DESCRIPTION	CHECKED

CLIENT:

O.R .TAMBO DISTRICT MUNICIPALITY

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PROJECT:

MTHONJENI / eNGXANGXASINI WATER SUPPLY:
CONTRACT 2

DRAWING TITLE:

RETAINING WALL AND ROUTE MARKER DETAILS

DESIGNED:	A. MAYEKISO	DRAWN:	Q. MABUSELA
DESIGNED CHECKED:	L. SENTI	DRAWING CHECKED:	A. MAYEKISO
SCALE:		AS SHOWN	

DESIGN COORDINATOR APPROVAL

L. SENTI - PrTech(Eng) 201470402
ROMH CONSULTING (Pty) Ltd

23 MAY 2025
DATE

CLIENT APPROVAL

DATE

CONTRACT No.	ORIGINAL DRAWING SIZE:
ORTDM SCMU 45-24/25	A1

DRAWING No.	PREPARED FOR:	REV No.
PRC-027-07-076-04-14	TENDER	0