

DISTANCE	DATUM (m)	GROUND LEVELS (m)	INVERT LEVELS(m)	DEPTH FROM GROUND LEVEL TO INVERT LEVEL (m)	HGL(m)
0+000.00	1279.30	1279.16	1277.80	1.36	1279.30
0+020.00	1279.23	1278.54	1277.23	1.31	1279.23
0+040.00	1279.16	1276.76	1275.36	1.40	1279.16
0+060.00	1279.09	1274.73	1273.49	1.24	1279.09
0+080.00	1279.02	1273.01	1271.61	1.40	1279.02
0+100.00	1278.96	1271.07	1269.65	1.42	1278.96
0+120.00	1278.89	1268.98	1267.68	1.30	1278.89
0+140.00	1278.82	1267.21	1265.79	1.42	1278.82
0+160.00	1278.75	1265.32	1263.91	1.42	1278.75
0+180.00	1278.68	1263.30	1262.02	1.28	1278.68
0+200.00	1278.61	1261.15	1259.79	1.35	1278.61
0+220.00	1278.54	1258.88	1257.56	1.32	1278.54
0+240.00	1278.47	1256.69	1255.38	1.31	1278.47
0+260.00	1278.41	1254.53	1253.20	1.34	1278.41
0+280.00	1278.34	1252.40	1251.01	1.39	1278.34
0+300.00	1278.27	1250.21	1248.79	1.42	1278.27
0+320.00	1278.20	1247.74	1246.39	1.36	1278.20
0+340.00	1278.13	1245.33	1243.96	1.37	1278.13
0+360.00	1278.06	1243.17	1241.73	1.44	1278.06
0+380.00	1277.99	1240.89	1239.51	1.38	1277.99
0+400.00	1277.93	1238.64	1237.28	1.35	1277.93
0+420.00	1277.86	1236.42	1235.05	1.37	1277.86
0+440.00	1277.79	1234.17	1232.83	1.35	1277.79
0+460.00	1277.72	1231.85	1230.59	1.26	1277.72
0+480.00	1277.65	1229.78	1228.35	1.43	1277.65
0+500.00	1277.58	1227.90	1226.55	1.36	1277.58
0+520.00	1277.51	1226.11	1224.74	1.38	1277.51
0+540.00	1277.44	1224.34	1222.93	1.42	1277.44
0+560.00	1277.38	1222.56	1221.24	1.32	1277.38
0+580.00	1277.31	1220.98	1219.55	1.43	1277.31
0+600.00	1277.24	1219.56	1218.20	1.36	1277.24
0+620.00	1277.17	1218.10	1216.84	1.26	1277.17
0+640.00	1277.10	1216.92	1215.49	1.43	1277.10
0+660.00	1277.03	1215.75	1214.34	1.40	1277.03
0+680.00	1276.96	1214.55	1213.20	1.36	1276.96
0+700.00	1276.89	1213.37	1212.05	1.32	1276.89
0+720.00	1276.83	1212.31	1210.89	1.41	1276.83
0+740.00	1276.76	1211.08	1209.74	1.35	1276.76
0+760.00	1276.69	1209.91	1208.58	1.33	1276.69
0+780.00	1276.62	1208.93	1207.55	1.38	1276.62
0+800.00	1276.55	1207.89	1206.52	1.37	1276.55
0+820.00	1276.48	1206.86	1205.45	1.41	1276.48
0+840.00	1276.41	1205.72	1204.38	1.34	1276.41
0+860.00	1276.34	1204.38	1203.02	1.35	1276.34
0+880.00	1276.27	1203.32	1201.94	1.38	1276.27
0+900.00	1276.20	1202.34	1200.98	1.35	1276.20
0+920.00	1276.13	1201.15	1199.77	1.38	1276.13
0+940.00	1276.06	1200.09	1198.69	1.40	1276.06
0+960.00	1275.99	1198.94	1197.61	1.33	1275.99
0+980.00	1275.92	1197.63	1196.25	1.38	1275.92
1+000.00	1275.85	1196.20	1194.89	1.31	1275.85
1+020.00	1275.78	1194.41	1193.13	1.28	1275.78
1+040.00	1275.71	1192.56	1191.18	1.38	1275.71
1+060.00	1275.64	1190.67	1189.32	1.35	1275.64
1+080.00	1275.57	1188.78	1187.48	1.29	1275.57
1+100.00	1275.50	1187.03	1185.65	1.38	1275.50
1+120.00	1275.43	1185.14	1183.69	1.45	1275.43
1+140.00	1275.36	1183.87	1182.59	1.28	1275.36
1+160.00	1275.29	1182.87	1181.50	1.36	1275.29
1+180.00	1275.22	1181.83	1180.62	1.21	1275.22
1+200.00	1275.15	1181.07	1179.73	1.34	1275.15
1+220.00	1275.07	1180.53	1179.29	1.25	1275.07
1+240.00	1275.00	1180.19	1178.85	1.34	1275.00
1+260.00	1274.93	1179.76	1178.39	1.37	1274.93
1+280.00	1274.86	1178.67	1177.35	1.32	1274.86
1+300.00	1274.79	1179.36	1178.00	1.36	1274.79
1+320.00	1274.72	1179.96	1178.64	1.31	1274.72
1+340.00	1274.65	1180.38	1178.97	1.41	1274.65
1+357.00	1274.59	1181.07	1179.73	1.34	1274.59

RIANDUSIAKAGO ALIGN  
SCALE: HOR 1:2000 VERT 1:1000

NOTES


- ALL LEVELS ARE IN METERS ABOVE SEA LEVEL.
- COORDINATES ARE BASED ON UTM.
- LOCATION OF AIR VALVES, WASHOUTS, BENDS AND OTHER FITTINGS AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER ON SITE.
- GROUND AND INVERT LEVEL SHOWN ARE AS SHOWN ON DRAWING UNLESS OTHERWISE INDICATED ON SITE BY THE ENGINEER.
- PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0M. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
- ALL BENDS ARE HORIZONTAL UNLESS OTHERWISE STATED.
- IN WATER LOGGED AREAS, PIPES TO BE BEDDED WITH SINGLE SIZED OR GRADED AGGREGATES AS PER CLAUSE 430.1 AND 216 OF TECHNICAL SPECIFICATIONS AND/OR ANCHOR BLOCKS AS MAY BE DIRECTED ON SITE BY THE ENGINEER.

**LEGEND:**


- PROPOSED PIPELINE
- - - - - EXISTING GROUND PROFILE
- — — — — PIPE INVERT PROFILE
- — — — — EXISTING ROAD
- ⬆ — AIR VALVE
- DAV — DOUBLE AIR VALVE
- ⬆ — WASHOUT
- WO1 — WASHOUT TYPE 1
- WO2 — WASHOUT TYPE 2
- DN — NOMINAL DIAMETER
- PN — NOMINAL PRESSURE
- VB — VERTICAL BEND
- HB — HORIZONTAL BEND
- ▨ — EXISTING STRUCTURE
- ER — EARTH ROAD
- GR — GRAVEL ROAD
- ⬆ — CUT

FOR CONSTRUCTION  
signed CMTS

REV	REVISIONS	BY	SIGN	DATE	APPROVED
REV-4		CHECKED			
REV-3		CHECKED			
REV-2		CHECKED			
REV-1	ISSUED FOR CONSTRUCTION	CHECKED			

CLIENT  

**TANA WATER WORKS DEVELOPMENT AGENCY**  
 P. O. BOX 1292-10100  
 NYERI

PROJECT  
 DESIGN FOR REHABILITATION OF  
 ENA SIAKAGO WATER PROJECT

Civil/Structural Engineers  

**TANA WATER WORKS DEVELOPMENT AGENCY**  
 P. O. BOX 1292-10100  
 NYERI

Drawing Title  
**RIANDU\_SIAKAGO\_TWM**  
 PLAN\_AND\_PROFILE\_DRAWINGS

Designed by DWN	Drawn by MMN
Checked by JMM	Approved by
Scale 1:1750	Date SEP2022
Job No. 1.0	ACAD File: ACADFILENAME
PD STATUS	DRAWING No. 1-RS\ -PD\ 01