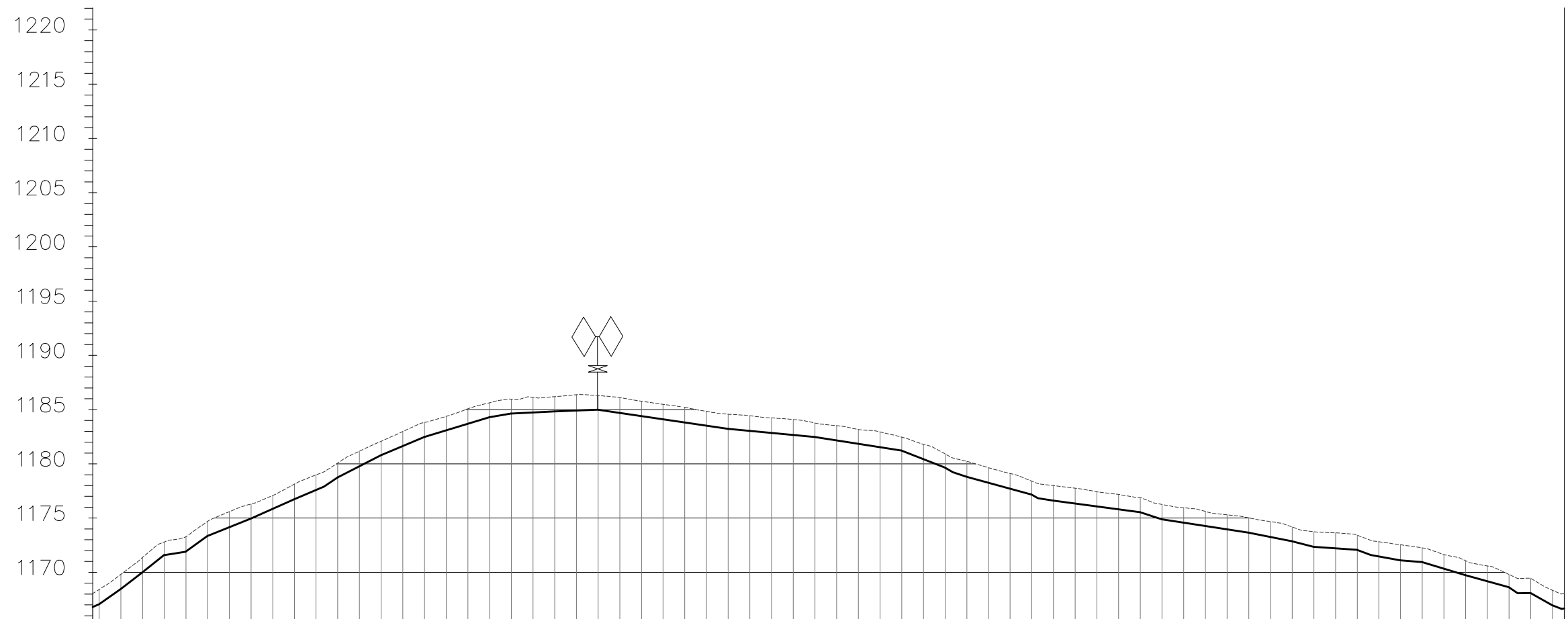


- NOTES**
- ALL LEVELS ARE IN METERS ABOVE SEA LEVEL.
  - COORDINATES ARE BASED ON UTM.
  - LOCATION OF AIR VALVES, WASHOUTS, BENDS AND OTHER FITTINGS AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER ON SITE.
  - GROUND AND INVERT LEVEL SHOWN ARE AS SHOWN ON DRAWING UNLESS OTHERWISE INDICATED ON SITE 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



DISTANCE	DATUM (m)	GROUND LEVELS (m)	INVERT LEVELS(m)	DEPTH FROM GROUND LEVEL TO INVERT LEVEL (m)	HGL(m)	FLOW DATA	TYPE OF PIPE AND SIZE
2+714.00	1166.80	1168.05	1168.05	1.25	1269.67		PN12.5 DN 160MM PIPE
2+740.00	1168.48	1169.81	1168.48	1.33	1269.57		PN12.5 DN 160MM PIPE
2+760.00	1170.02	1171.38	1170.02	1.35	1269.49		PN12.5 DN 160MM PIPE
2+780.00	1171.59	1172.80	1171.59	1.21	1269.41		PN12.5 DN 160MM PIPE
2+800.00	1173.29	1173.29	1173.29	1.37	1269.34		PN12.5 DN 160MM PIPE
2+820.00	1174.70	1174.70	1173.35	1.36	1269.26		PN12.5 DN 160MM PIPE
2+840.00	1175.59	1175.59	1174.16	1.43	1269.18		PN12.5 DN 160MM PIPE
2+860.00	1176.30	1176.30	1174.97	1.33	1269.11		PN12.5 DN 160MM PIPE
2+880.00	1177.08	1177.08	1175.85	1.23	1269.03		PN12.5 DN 160MM PIPE
2+900.00	1178.13	1178.13	1176.74	1.40	1268.96		PN12.5 DN 160MM PIPE
2+920.00	1178.98	1178.98	1177.59	1.39	1268.88		PN12.5 DN 160MM PIPE
2+940.00	1180.08	1180.08	1178.75	1.33	1268.80		PN12.5 DN 160MM PIPE
2+960.00	1181.17	1181.17	1179.78	1.39	1268.73		PN12.5 DN 160MM PIPE
2+980.00	1182.08	1182.08	1180.81	1.27	1268.65		PN12.5 DN 160MM PIPE
3+000.00	1182.98	1182.98	1181.65	1.33	1268.57		PN12.5 DN 160MM PIPE
3+020.00	1183.82	1183.82	1182.49	1.33	1268.50		PN12.5 DN 160MM PIPE
3+040.00	1184.38	1184.38	1183.09	1.29	1268.42		PN12.5 DN 160MM PIPE
3+060.00	1185.07	1185.07	1183.70	1.38	1268.34		PN12.5 DN 160MM PIPE
3+080.00	1185.64	1185.64	1184.30	1.34	1268.27		PN12.5 DN 160MM PIPE
3+100.00	1185.96	1185.96	1184.65	1.32	1268.19		PN12.5 DN 160MM PIPE
3+120.00	1186.13	1186.13	1184.74	1.39	1268.12		PN12.5 DN 160MM PIPE
3+140.00	1186.19	1186.19	1184.83	1.36	1268.04		PN12.5 DN 160MM PIPE
3+160.00	1186.37	1186.37	1184.92	1.45	1267.96		PN12.5 DN 160MM PIPE
3+180.00	1186.30	1186.30	1185.00	1.30	1267.89		PN12.5 DN 160MM PIPE
3+200.00	1186.10	1186.10	1184.70	1.40	1267.81		PN12.5 DN 160MM PIPE
3+220.00	1185.77	1185.77	1184.41	1.37	1267.73		PN12.5 DN 160MM PIPE
3+240.00	1185.49	1185.49	1184.11	1.38	1267.65		PN12.5 DN 160MM PIPE
3+260.00	1185.22	1185.22	1183.82	1.41	1267.57		PN12.5 DN 160MM PIPE
3+280.00	1184.84	1184.84	1183.52	1.32	1267.50		PN12.5 DN 160MM PIPE
3+300.00	1184.58	1184.58	1183.23	1.35	1267.42		PN12.5 DN 160MM PIPE
3+320.00	1184.43	1184.43	1183.04	1.39	1267.34		PN12.5 DN 160MM PIPE
3+340.00	1184.23	1184.23	1182.85	1.39	1267.26		PN12.5 DN 160MM PIPE
3+360.00	1184.08	1184.08	1182.66	1.42	1267.18		PN12.5 DN 160MM PIPE
3+380.00	1183.77	1183.77	1182.47	1.30	1267.10		PN12.5 DN 160MM PIPE
3+400.00	1183.52	1183.52	1182.16	1.36	1267.03		PN12.5 DN 160MM PIPE
3+420.00	1183.16	1183.16	1181.85	1.32	1266.95		PN12.5 DN 160MM PIPE
3+440.00	1182.94	1182.94	1181.54	1.40	1266.87		PN12.5 DN 160MM PIPE
3+460.00	1182.47	1182.47	1181.22	1.25	1266.79		PN12.5 DN 160MM PIPE
3+480.00	1181.81	1181.81	1180.44	1.37	1266.71		PN12.5 DN 160MM PIPE
3+500.00	1180.92	1180.92	1179.65	1.27	1266.63		PN12.5 DN 160MM PIPE
3+520.00	1180.22	1180.22	1178.81	1.42	1266.56		PN12.5 DN 160MM PIPE
3+540.00	1179.65	1179.65	1178.26	1.39	1266.48		PN12.5 DN 160MM PIPE
3+560.00	1179.11	1179.11	1177.71	1.40	1266.40		PN12.5 DN 160MM PIPE
3+580.00	1178.40	1178.40	1177.15	1.25	1266.32		PN12.5 DN 160MM PIPE
3+600.00	1177.99	1177.99	1176.60	1.39	1266.24		PN12.5 DN 160MM PIPE
3+620.00	1177.75	1177.75	1176.33	1.42	1266.16		PN12.5 DN 160MM PIPE
3+640.00	1177.43	1177.43	1176.07	1.36	1266.09		PN12.5 DN 160MM PIPE
3+660.00	1177.18	1177.18	1175.80	1.38	1266.01		PN12.5 DN 160MM PIPE
3+680.00	1176.88	1176.88	1175.53	1.35	1265.93		PN12.5 DN 160MM PIPE
3+700.00	1176.26	1176.26	1174.88	1.38	1265.85		PN12.5 DN 160MM PIPE
3+720.00	1175.95	1175.95	1174.57	1.38	1265.77		PN12.5 DN 160MM PIPE
3+740.00	1175.61	1175.61	1174.27	1.35	1265.69		PN12.5 DN 160MM PIPE
3+760.00	1175.30	1175.30	1173.96	1.34	1265.62		PN12.5 DN 160MM PIPE
3+780.00	1175.02	1175.02	1173.66	1.36	1265.54		PN12.5 DN 160MM PIPE
3+800.00	1174.67	1174.67	1173.26	1.41	1265.46		PN12.5 DN 160MM PIPE
3+820.00	1174.18	1174.18	1172.86	1.31	1265.38		PN12.5 DN 160MM PIPE
3+840.00	1173.75	1173.75	1172.35	1.39	1265.30		PN12.5 DN 160MM PIPE
3+860.00	1173.64	1173.64	1172.21	1.43	1265.22		PN12.5 DN 160MM PIPE
3+880.00	1173.42	1173.42	1172.07	1.35	1265.15		PN12.5 DN 160MM PIPE
3+900.00	1172.82	1172.82	1171.46	1.36	1265.07		PN12.5 DN 160MM PIPE
3+920.00	1172.54	1172.54	1171.09	1.45	1264.99		PN12.5 DN 160MM PIPE
3+940.00	1172.26	1172.26	1170.93	1.33	1264.91		PN12.5 DN 160MM PIPE
3+960.00	1171.63	1171.63	1170.34	1.30	1264.83		PN12.5 DN 160MM PIPE
3+980.00	1171.06	1171.06	1169.74	1.33	1264.75		PN12.5 DN 160MM PIPE
4+000.00	1170.59	1170.59	1169.18	1.42	1264.68		PN12.5 DN 160MM PIPE
4+020.00	1169.81	1169.81	1168.60	1.21	1264.60		PN12.5 DN 160MM PIPE
4+040.00	1169.45	1169.45	1168.08	1.36	1264.52		PN12.5 DN 160MM PIPE
4+060.00	1168.35	1168.35	1166.96	1.39	1264.44		PN12.5 DN 160MM PIPE
4+071.00	1168.05	1168.05	1166.67	1.38	1264.40		PN12.5 DN 160MM PIPE

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

FOR CONSTRUCTION  
signed CMTS

REV	REVISIONS	SIGN	DATE	APPROVED
REV-4	CHECKED			
REV-3	CHECKED			
REV-2	CHECKED			
REV-1	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\03
REV	REV