



CHAINAGE (m)	EXISTING GROUND LEVEL (m)	INVERT LEVELS (m)	H.G.L (m) DATUM (m)	TYPE OF PIPE AND SIZE	REMARKS.	PIPE FLOW DATA
0+020.0	1683.39	1681.89	1690.67	PN 10 450MM HDPE PIPE	S.V OFFTAKE FROM T-WORKS	0.04681M3/S
0+040.0	1682.14	1680.63	1690.63			
0+060.0	1680.92	1679.42	1690.59			
0+080.0	1679.77	1678.27	1690.54			
0+102.8	1678.20	1676.70	1690.49			
0+120.0	1677.04	1675.54	1690.46			
0+140.0	1675.55	1674.05	1690.42			
0+160.0	1673.45	1671.95	1690.37			
0+180.0	1670.83	1669.33	1690.33			
0+200.0	1667.78	1666.28	1690.29			
0+209.3	1666.33	1664.83	1690.27	PN 10 315 MM HDPE PIPE	A.V	
0+220.0	1665.37	1663.87	1690.24			
0+240.0	1663.95	1662.45	1690.20			
0+260.0	1664.09	1662.59	1690.16			
0+280.0	1665.73	1664.23	1690.12			
0+300.0	1667.84	1666.34	1690.07			
0+320.0	1669.73	1668.23	1690.03			
0+328.1	1670.50	1669.00	1690.01			
0+340.0	1671.37	1669.87	1689.99			
0+360.0	1672.85	1671.35	1689.94			
0+380.0	1673.90	1672.40	1689.90			
0+400.0	1674.62	1673.12	1689.86			
0+420.0	1674.84	1673.34	1689.82			
0+440.0	1675.09	1673.59	1689.77			
0+460.0	1674.59	1673.09	1689.73			
0+480.0	1673.49	1671.99	1689.69			
0+500.0	1672.95	1671.45	1689.65			
0+520.0	1672.57	1671.07	1689.60			
0+540.0	1671.38	1669.88	1689.56			
0+560.0	1670.36	1668.86	1689.52			
0+574.3	1669.65	1668.15	1689.49			
0+580.0	1669.45	1667.95	1689.47			
0+600.0	1668.77	1667.27	1689.43			
0+620.0	1667.63	1666.13	1689.39			
0+640.0	1666.69	1665.19	1689.35			
0+660.0	1665.94	1664.44	1689.30			
0+680.0	1665.27	1663.77	1689.26			
0+700.0	1664.60	1663.10	1689.22			
0+720.0	1663.88	1662.38	1689.17			
0+740.0	1663.40	1661.90	1689.13			
0+760.0	1662.99	1661.49	1689.10			
0+780.0	1662.60	1661.10	1689.07			
0+800.0	1662.34	1660.84	1689.05			
0+820.0	1662.23	1660.73	1689.02			
0+840.0	1662.28	1660.78	1689.00			
0+860.0	1662.59	1661.09	1688.97			
0+880.0	1663.01	1661.51	1688.95			
0+900.0	1663.03	1661.53	1688.92			
0+918.0	1662.68	1661.18	1688.90			

- 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

REV	REVISIONS	SIGN	DATE	APPROVED
	BY			
	CHECKED			
	BY			
	CHECKED			
	BY			
	CHECKED			
	BY			
	CHECKED			

CLIENT

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

PROJECT

NGARIAMA NJUKIINI WATER PROJECT

Civil/Structural Engineers

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

Drawing Title

NGARIAMA NJUKIINI WATER PROJECT
RAW WATER GRAVITY MAIN
PLAN AND PROFILE (SHEET 1 OF 17)

Designed by DWN	Drawn by EWN
Checked by JMM	Approved by
Scale AS SHOWN (A1)	Date MAY, 2022
Job No. 1	ACAD File:
C STATUS	DRAWING No.TWDA/NNWP/TW-001
	CO REV