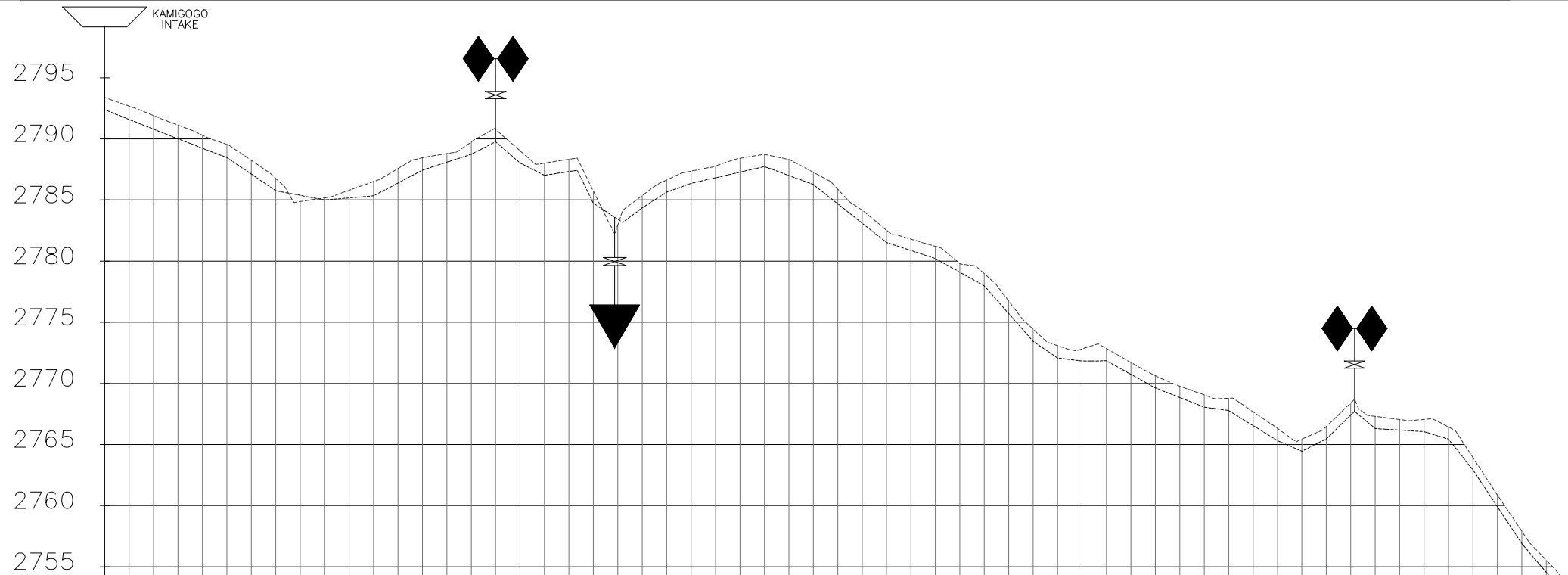
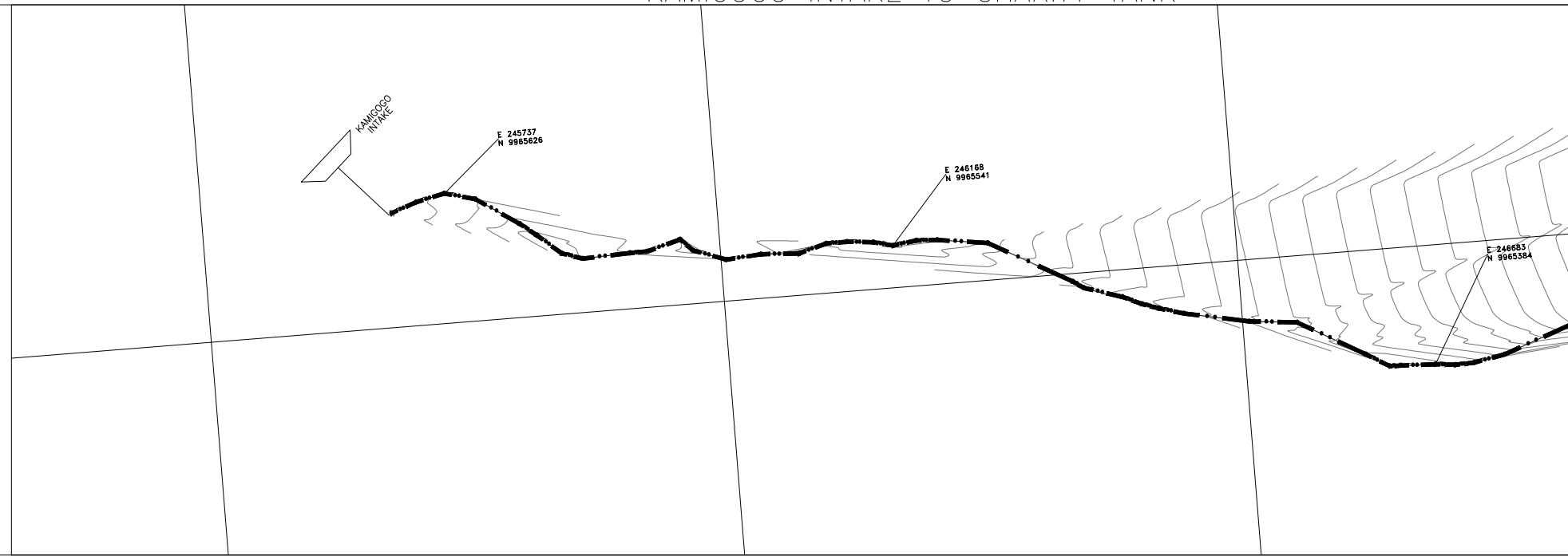


KAMIGOGO INTAKE TO CHARITY TANK



DISTANCE DATUM (m)	GROUND LEVELS (m)	INVERT LEVELS(m)	DEPTH FROM GROUND LEVEL TO INVERT LEVEL (m)	HGL(m)	FLOW DATA
0+000.00	2793.38	2792.38	1.00	2793.38	0.0058 M ³ /S
0+020.00	2792.68	2791.59	1.09	2792.68	
0+040.00	2791.91	2790.79	1.11	2791.91	
0+060.00	2791.12	2790.00	1.12	2791.12	
0+080.00	2790.30	2789.23	1.07	2790.30	
0+100.00	2789.54	2788.47	1.07	2789.54	
0+120.00	2788.24	2787.11	1.12	2788.24	
0+140.00	2786.76	2785.76	1.00	2786.76	
0+160.00	2784.88	2783.38	-0.50	2784.83	
0+180.00	2785.17	2784.77	0.17	2784.77	
0+200.00	2785.79	2785.17	0.63	2784.70	
0+220.00	2786.51	2785.34	1.18	2784.63	
0+240.00	2787.57	2786.39	1.18	2784.56	
0+260.00	2788.45	2787.44	1.01	2784.49	
0+280.00	2788.80	2788.09	0.71	2784.42	
0+300.00	2789.74	2788.74	1.00	2784.36	
0+320.00	2790.77	2789.77	1.00	2784.29	
0+340.00	2789.02	2788.02	1.00	2784.22	
0+360.00	2788.02	2787.02	1.00	2784.15	
0+380.00	2788.33	2787.33	1.00	2784.08	
0+400.00	2785.73	2784.73	1.00	2784.02	
0+420.00	2782.96	2782.96	-0.46	2783.95	
0+440.00	2785.37	2784.37	1.00	2783.88	
0+460.00	2786.64	2785.64	1.00	2783.81	
0+480.00	2787.36	2786.36	1.00	2783.74	
0+500.00	2787.79	2786.82	0.97	2783.67	
0+520.00	2788.41	2787.28	1.13	2783.61	
0+540.00	2788.74	2787.74	1.00	2783.54	
0+560.00	2788.31	2787.00	1.31	2783.47	
0+580.00	2787.27	2786.27	1.00	2783.40	
0+600.00	2785.89	2784.69	1.20	2783.33	
0+620.00	2784.16	2783.11	1.05	2783.26	
0+640.00	2782.53	2781.53	1.00	2783.20	
0+660.00	2781.79	2780.87	0.93	2783.13	
0+680.00	2781.21	2780.21	1.00	2783.06	
0+700.00	2779.80	2779.09	0.71	2782.99	
0+720.00	2778.97	2777.97	1.00	2782.92	
0+740.00	2776.73	2775.70	1.02	2782.85	
0+760.00	2774.44	2773.44	1.00	2782.79	
0+780.00	2773.08	2772.08	1.00	2782.72	
0+800.00	2772.83	2771.83	1.00	2782.65	
0+820.00	2772.85	2771.85	1.00	2782.58	
0+840.00	2771.71	2770.74	0.97	2782.50	
0+860.00	2770.63	2769.63	1.00	2782.43	
0+880.00	2769.77	2768.84	0.93	2782.35	
0+900.00	2769.06	2768.06	1.00	2782.28	
0+920.00	2768.78	2767.78	1.00	2782.20	
0+940.00	2767.68	2766.55	1.13	2782.13	
0+960.00	2766.32	2765.32	1.00	2782.05	
0+980.00	2765.44	2764.44	1.00	2781.98	
1+000.00	2766.46	2765.46	1.00	2781.90	
1+020.00	2768.41	2767.41	1.00	2781.83	
1+040.00	2767.30	2766.30	1.00	2781.75	
1+060.00	2767.04	2766.18	0.86	2781.68	
1+080.00	2767.05	2766.05	1.00	2781.61	
1+100.00	2766.44	2765.44	1.00	2781.53	
1+120.00	2763.92	2762.92	1.00	2781.46	
1+140.00	2760.87	2759.91	0.96	2781.38	
1+160.00	2757.90	2756.90	1.00	2781.31	
1+180.00	2755.54	2754.54	1.00	2781.23	
1+200.00	2753.06	2752.17	0.89	2781.16	
1+210.00	2751.82	2750.98	0.83	2781.12	

NOTES

1. ALL LEVELS ARE IN METERS ABOVE SEA LEVEL.
2. COORDINATES ARE BASED ON UTM.
3. LOCATION OF AIR VALVES, WASHOUTS, BENDS AND OTHER FITTINGS AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER ON SITE.
4. GROUND AND INVERT LEVEL SHOWN ARE AS SHOWN ON DRAWING UNLESS OTHERWISE INDICATED ON SITE BY THE ENGINEER.
5. 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.
6. ALL BENDS ARE HORIZONTAL UNLESS OTHERWISE STATED.
7. 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
- WASHOUT
- W01 - WASHOUT TYPE 1
- W02 - WASHOUT TYPE 2
- DN - NOMINAL DIAMETER
- PN - NOMINAL PRESSURE
- VB - VERTICAL BEND
- HB - HORIZONTAL BEND
- EXISTING STRUCTURE
- ER - EARTH ROAD
- GR - GRAVEL ROAD
- CUT
- TANK
- INTAKE

FOR CONSTRUCTION
signed CMTS

REV	REVISIONS	SIGN	DATE	APPROVED
	BY			
	CHECKED			
	BY			
	CHECKED			
	BY			
	CHECKED			
CO	ISSUED FOR CONSTRUCTION	BY		
		CHECKED		

CLIENT

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

PROJECT

DESIGN FOR ENDARASHA S.H. WATER PROJECT

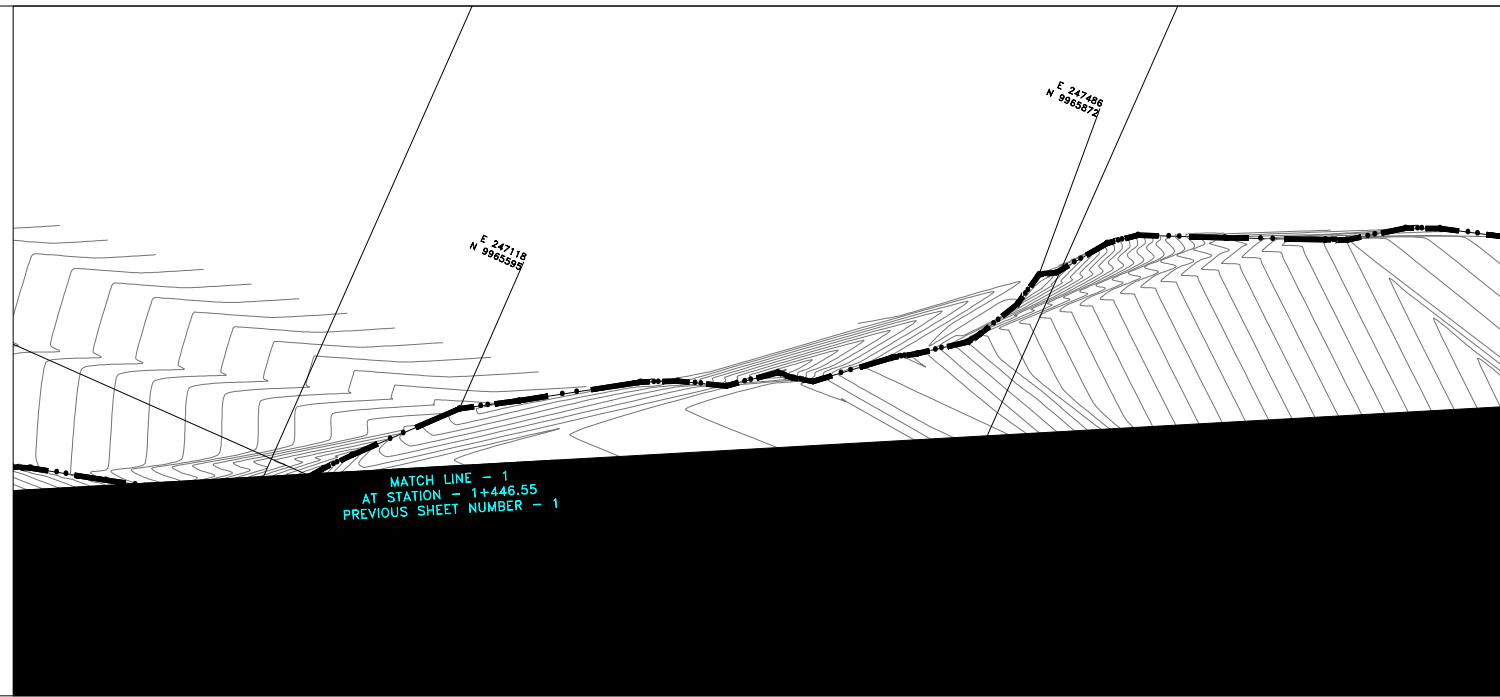
Civil/Structural Engineers

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

Drawing Title

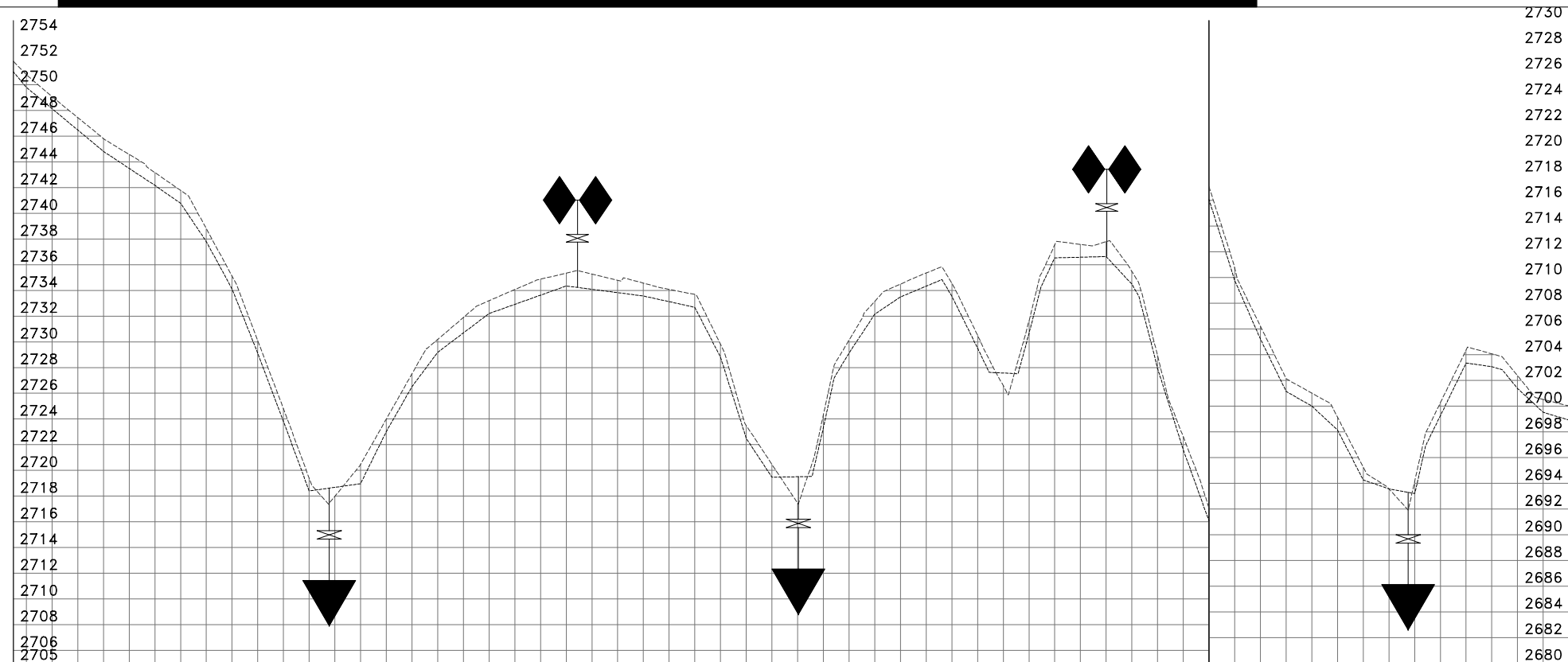
ENDARASHA S.H. WATER PROJECT
KAMIGOGO - CHARITY TANK
PLAN AND PROFILE (SHEET 1 OF 6)

Designed by DWN	Drawn by MK
Checked by JMM	Approved by
Scale AS SHOWN (A1)	Date OCT 2022
Job No. 1	ACAD File:
PD STATUS	DRAWING No. TWWDA/ENDA/KCT_1



- NOTES**
1. ALL LEVELS ARE IN METERS ABOVE SEA LEVEL.
 2. COORDINATES ARE BASED ON UTM.
 3. LOCATION OF AIR VALVES, WASHOUTS, BENDS AND OTHER FITTINGS AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER ON SITE.
 4. GROUND AND INVERT LEVEL SHOWN ARE AS SHOWN ON DRAWING UNLESS OTHERWISE INDICATED ON SITE BY THE ENGINEER.
 5. 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.
 6. ALL BENDS ARE HORIZONTAL UNLESS OTHERWISE STATED.
 7. 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
 - ⬇ WASHOUT
 - W01 WASHOUT TYPE 1
 - W02 WASHOUT TYPE 2
 - DN NOMINAL DIAMETER
 - PN NOMINAL PRESSURE
 - VB VERTICAL BEND
 - HB HORIZONTAL BEND
 - ▨ EXISTING STRUCTURE
 - ER EARTH ROAD
 - GR GRAVEL ROAD
 - ▭ CUT
 - TANK
 - ⊥ INTAKE




DISTANCE DATUM (m)	GROUND LEVELS (m)	INVERT LEVELS(m)	DEPTH FROM GROUND LEVEL TO INVERT LEVEL (m)	HGL(m)	FLOW DATA	TYPE AND SIZE OF PIPE	FITTINGS AND OTHER STRUCTURES
1+210.00	2751.82	2751.82	0.00	2751.82	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 1+455 M
1+220.00	2750.80	2750.80	0.00	2750.80			
1+240.00	2749.07	2749.07	0.00	2749.07	0.0058 M ³ /S	110MM uPVC PIPE	A.V CH 1+649 M
1+260.00	2747.44	2747.44	0.00	2747.44			
1+280.00	2745.81	2745.81	0.00	2745.81	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 1+821 M
1+300.00	2744.58	2744.58	0.00	2744.58			
1+320.00	2743.17	2743.17	0.00	2743.17	0.0058 M ³ /S	110MM uPVC PIPE	A.V CH 2+060 M
1+340.00	2741.77	2741.77	0.00	2741.77			
1+360.00	2738.80	2738.80	0.00	2738.80	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+380.00	2735.12	2735.12	0.00	2735.12			
1+400.00	2730.12	2730.12	0.00	2730.12	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+420.00	2724.81	2724.81	0.00	2724.81			
1+440.00	2719.40	2719.40	0.00	2719.40	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+460.00	2717.98	2717.98	0.00	2717.98			
1+480.00	2720.47	2720.47	0.00	2720.47	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+500.00	2723.99	2723.99	0.00	2723.99			
1+520.00	2727.52	2727.52	0.00	2727.52	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+540.00	2730.19	2730.19	0.00	2730.19			
1+560.00	2731.90	2731.90	0.00	2731.90	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+580.00	2733.20	2733.20	0.00	2733.20			
1+600.00	2734.07	2734.07	0.00	2734.07	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+620.00	2734.87	2734.87	0.00	2734.87			
1+640.00	2735.35	2735.35	0.00	2735.35	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+660.00	2735.26	2735.26	0.00	2735.26			
1+680.00	2734.78	2734.78	0.00	2734.78	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+700.00	2734.57	2734.57	0.00	2734.57			
1+720.00	2734.08	2734.08	0.00	2734.08	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+740.00	2733.69	2733.69	0.00	2733.69			
1+760.00	2729.81	2729.81	0.00	2729.81	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+780.00	2723.49	2723.49	0.00	2723.49			
1+800.00	2720.47	2720.47	0.00	2720.47	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+820.00	2717.44	2717.44	0.00	2717.44			
1+840.00	2724.31	2724.31	0.00	2724.31	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+860.00	2730.13	2730.13	0.00	2730.13			
1+880.00	2733.15	2733.15	0.00	2733.15	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+900.00	2734.49	2734.49	0.00	2734.49			
1+920.00	2735.35	2735.35	0.00	2735.35	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+940.00	2734.54	2734.54	0.00	2734.54			
1+960.00	2730.51	2730.51	0.00	2730.51	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
1+980.00	2726.58	2726.58	0.00	2726.58			
2+000.00	2731.65	2731.65	0.00	2731.65	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
2+020.00	2737.53	2737.53	0.00	2737.53			
2+040.00	2737.58	2737.58	0.00	2737.58	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
2+060.00	2737.80	2737.80	0.00	2737.80			
2+080.00	2735.48	2735.48	0.00	2735.48	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
2+100.00	2728.93	2728.93	0.00	2728.93			
2+120.00	2722.61	2722.61	0.00	2722.61	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
2+140.00	2717.07	2717.07	0.00	2717.07			
2+160.00	2710.78	2710.78	0.00	2710.78	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
2+180.00	2706.22	2706.22	0.00	2706.22			
2+200.00	2702.15	2702.15	0.00	2702.15	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
2+220.00	2701.01	2701.01	0.00	2701.01			
2+240.00	2699.14	2699.14	0.00	2699.14	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
2+260.00	2695.25	2695.25	0.00	2695.25			
2+280.00	2693.57	2693.57	0.00	2693.57	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
2+300.00	2694.14	2694.14	0.00	2694.14			
2+320.00	2700.26	2700.26	0.00	2700.26	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
2+340.00	2704.35	2704.35	0.00	2704.35			
2+360.00	2704.07	2704.07	0.00	2704.07	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
2+380.00	2702.37	2702.37	0.00	2702.37			
2+400.00	2700.52	2700.52	0.00	2700.52	0.0058 M ³ /S	110MM uPVC PIPE	W.O CH 2+295 M
2+420.00	2700.13	2700.13	0.00	2700.13			

FOR CONSTRUCTION
signed CMTS

REV	REVISIONS	SIGN	DATE	APPROVED
	BY			
	CHECKED			
	BY			
	CHECKED			
	BY			
	CHECKED			
CO	ISSUED FOR CONSTRUCTION	BY		
		CHECKED		

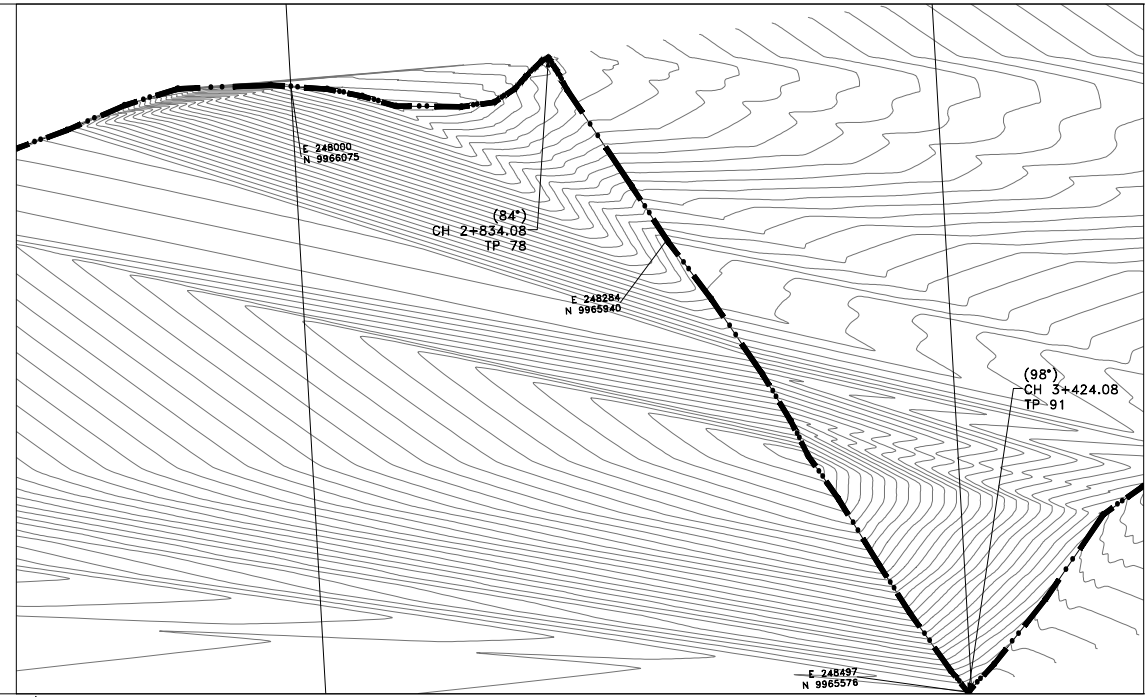
CLIENT

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

PROJECT
DESIGN FOR ENDARASHA S.H. WATER PROJECT

Civil/Structural Engineers

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

Drawing Title
ENDARASHA S.H WATER PROJECT
 KAMIGOGO – CHARITY TANK
 PLAN AND PROFILE (SHEET 2 OF 6)

Designed by DWN	Drawn by MK
Checked by JMM	Approved by
Scale AS SHOWN (A1)	Date OCT 2022
Job No. 1	ACAD File:
PD STATUS	DRAWING No. TWWDA/ENDA/KCT_2



NOTES

1. ALL LEVELS ARE IN METERS ABOVE SEA LEVEL.
2. COORDINATES ARE BASED ON UTM.
3. LOCATION OF AIR VALVES, WASHOUTS, BENDS AND OTHER FITTINGS AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER ON SITE.
4. GROUND AND INVERT LEVEL SHOWN ARE AS SHOWN ON DRAWING UNLESS OTHERWISE INDICATED ON SITE BY THE ENGINEER.
5. 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.
6. ALL BENDS ARE HORIZONTAL UNLESS OTHERWISE STATED.
7. 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
- WASHOUT
- W01 - WASHOUT TYPE 1
- W02 - WASHOUT TYPE 2
- DN - NOMINAL DIAMETER
- PN - NOMINAL PRESSURE
- VB - VERTICAL BEND
- HB - HORIZONTAL BEND
- EXISTING STRUCTURE
- ER - EARTH ROAD
- GR - GRAVEL ROAD
- CUT
- TANK
- INTAKE

FOR CONSTRUCTION
signed CMTS

REV	REVISIONS	SIGN	DATE	APPROVED
	BY			
	CHECKED			
	BY			
	CHECKED			
	BY			
	CHECKED			
CO	ISSUED FOR CONSTRUCTION	BY		
		CHECKED		

CLIENT

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

PROJECT

DESIGN FOR ENDARASHA S.H. WATER PROJECT

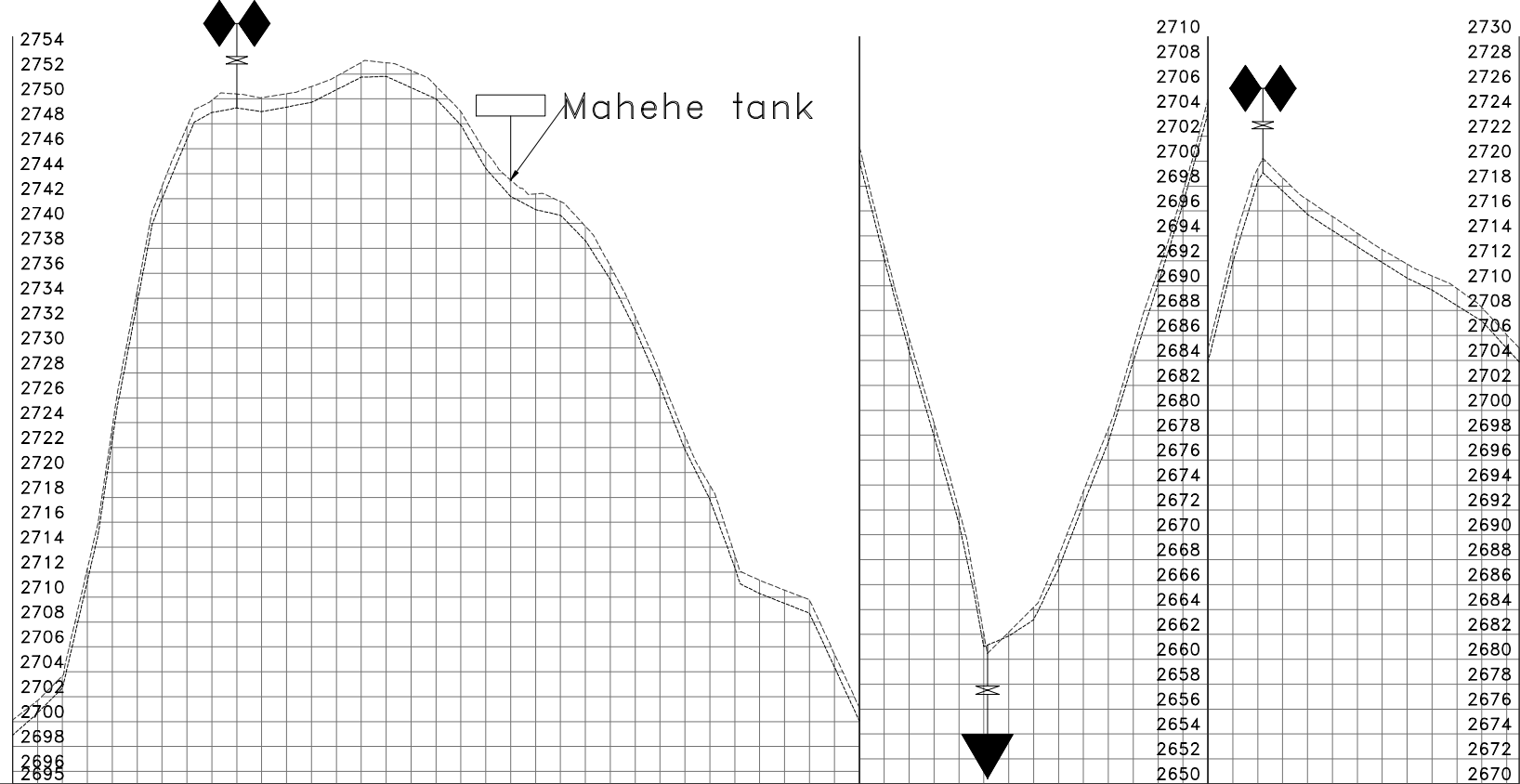
Civil/Structural Engineers

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

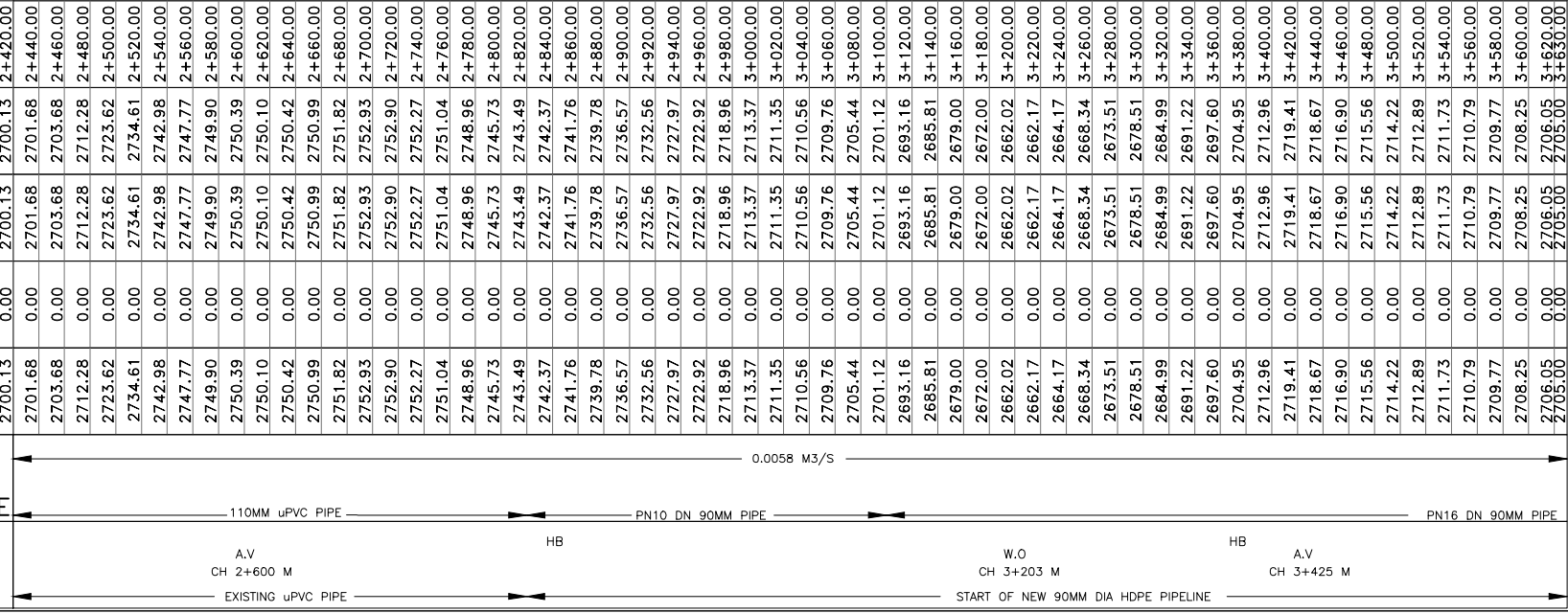
Drawing Title

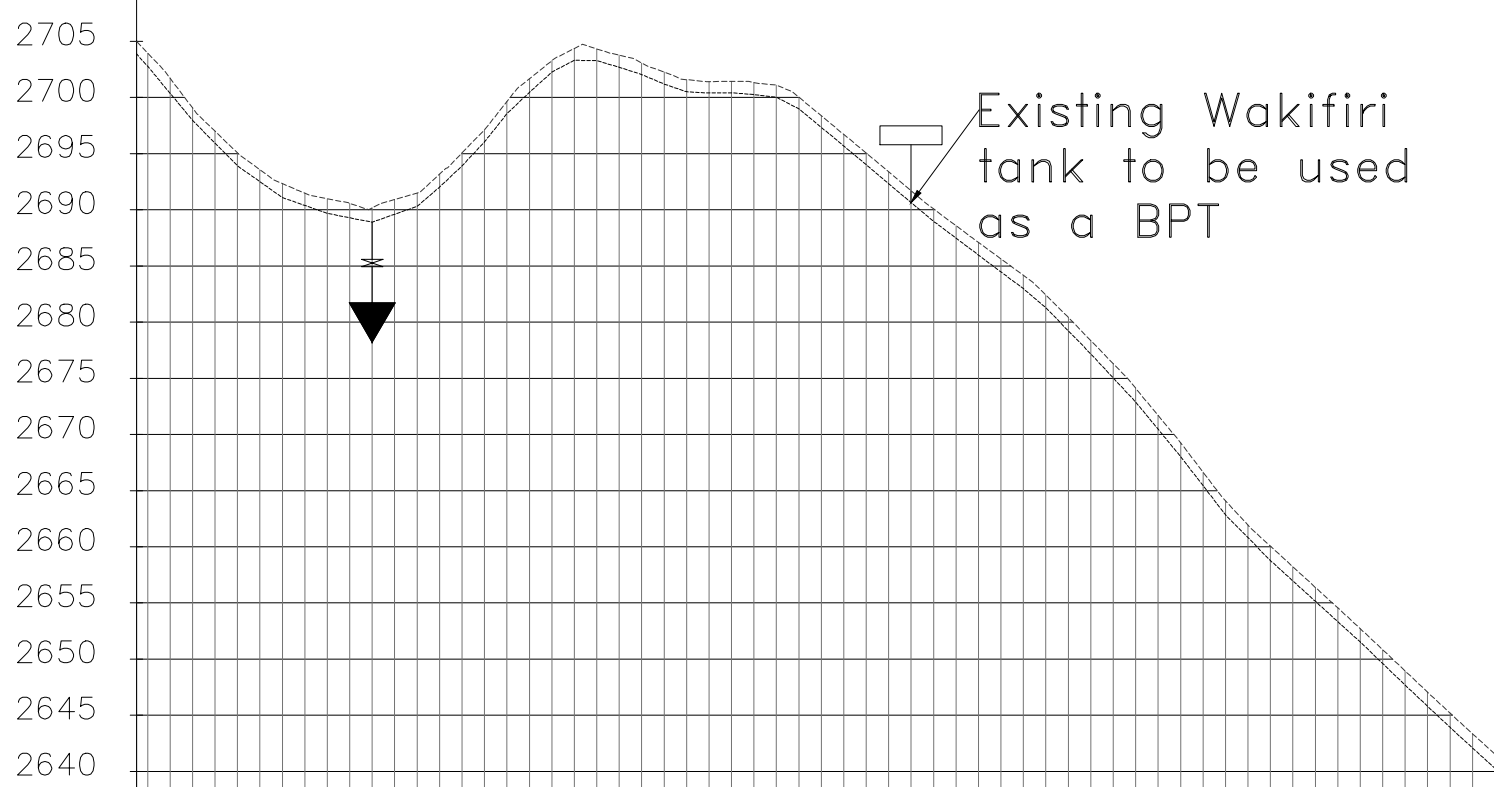
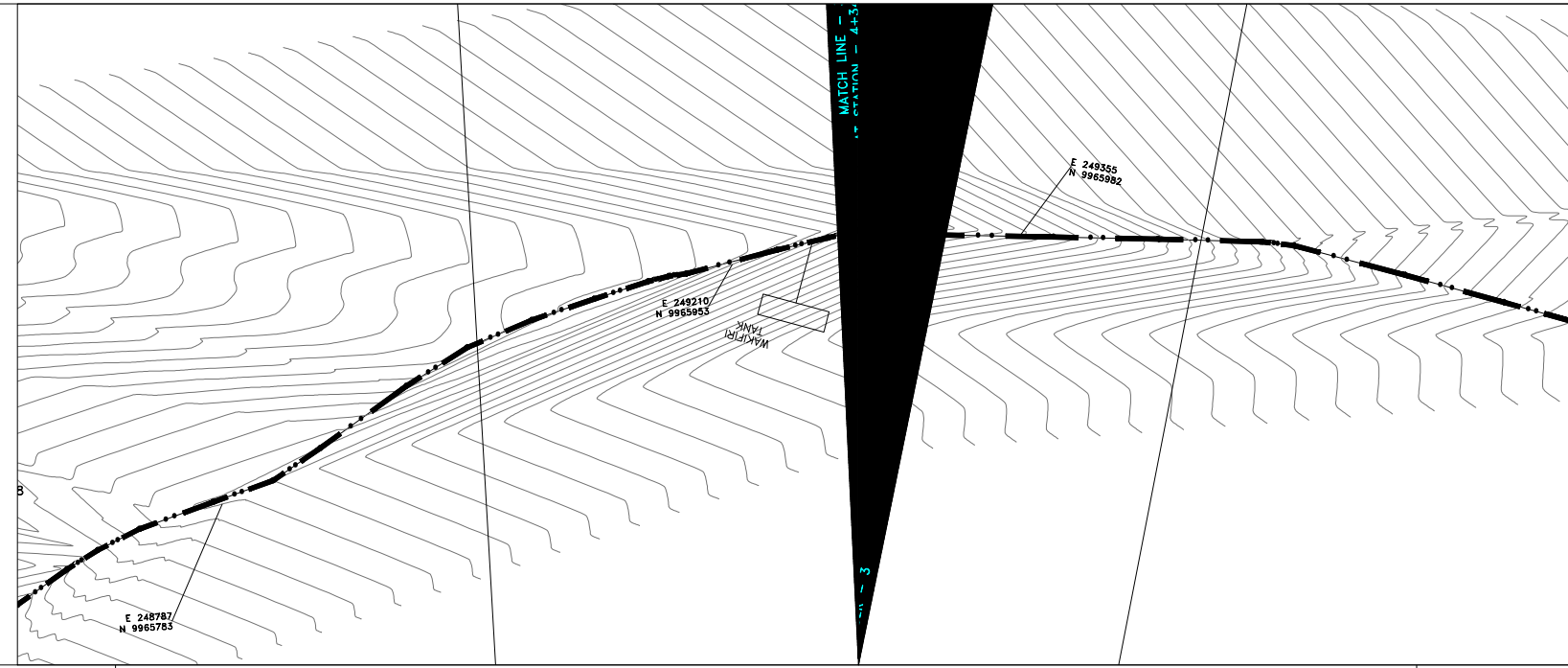
ENDARASHA S.H WATER PROJECT
KAMIGOGO - CHARITY TANK
PLAN AND PROFILE (SHEET 3 OF 6)

Designed by DWN	Drawn by MK
Checked by JMM	Approved by
Scale AS SHOWN (A1)	Date OCT 2022
Job No. 1	ACAD File:
PD STATUS	DRAWING No. TWWDA/ENDA/KCT_3



DISTANCE DATUM (m)	GROUND LEVELS (m)	INVERT LEVELS(m)	DEPTH FROM GROUND LEVEL TO INVERT LEVEL (m)	HGL(m)	FLOW DATA	TYPE AND SIZE OF PIPE	FITTINGS AND OTHER STRUCTURES
2700.13	2700.13	2700.13	0.00	2700.13	0.0058 M3/S	110MM uPVC PIPE	A.V CH 2+600 M EXISTING uPVC PIPE
2701.68	2701.68	2701.68	0.00	2701.68			
2703.68	2703.68	2703.68	0.00	2703.68			
2712.28	2712.28	2712.28	0.00	2712.28			
2723.62	2723.62	2723.62	0.00	2723.62			
2734.61	2734.61	2734.61	0.00	2734.61			
2742.98	2742.98	2742.98	0.00	2742.98			
2747.77	2747.77	2747.77	0.00	2747.77			
2749.90	2749.90	2749.90	0.00	2749.90			
2750.39	2750.39	2750.39	0.00	2750.39			
2750.10	2750.10	2750.10	0.00	2750.10			
2750.42	2750.42	2750.42	0.00	2750.42			
2750.99	2750.99	2750.99	0.00	2750.99			
2751.82	2751.82	2751.82	0.00	2751.82			
2752.93	2752.93	2752.93	0.00	2752.93			
2752.90	2752.90	2752.90	0.00	2752.90			
2752.27	2752.27	2752.27	0.00	2752.27			
2751.04	2751.04	2751.04	0.00	2751.04			
2748.96	2748.96	2748.96	0.00	2748.96			
2745.73	2745.73	2745.73	0.00	2745.73			
2743.49	2743.49	2743.49	0.00	2743.49			
2742.37	2742.37	2742.37	0.00	2742.37			
2741.76	2741.76	2741.76	0.00	2741.76			
2739.78	2739.78	2739.78	0.00	2739.78			
2736.57	2736.57	2736.57	0.00	2736.57			
2732.56	2732.56	2732.56	0.00	2732.56			
2727.97	2727.97	2727.97	0.00	2727.97			
2722.92	2722.92	2722.92	0.00	2722.92			
2718.96	2718.96	2718.96	0.00	2718.96			
2713.37	2713.37	2713.37	0.00	2713.37			
2711.35	2711.35	2711.35	0.00	2711.35			
2710.56	2710.56	2710.56	0.00	2710.56			
2709.76	2709.76	2709.76	0.00	2709.76			
2705.44	2705.44	2705.44	0.00	2705.44			
2701.12	2701.12	2701.12	0.00	2701.12			
2693.16	2693.16	2693.16	0.00	2693.16			
2685.81	2685.81	2685.81	0.00	2685.81			
2679.00	2679.00	2679.00	0.00	2679.00			
2672.00	2672.00	2672.00	0.00	2672.00			
2662.02	2662.02	2662.02	0.00	2662.02			
2662.17	2662.17	2662.17	0.00	2662.17			
2664.17	2664.17	2664.17	0.00	2664.17			
2668.34	2668.34	2668.34	0.00	2668.34			
2673.51	2673.51	2673.51	0.00	2673.51			
2678.51	2678.51	2678.51	0.00	2678.51			
2684.99	2684.99	2684.99	0.00	2684.99			
2691.22	2691.22	2691.22	0.00	2691.22			
2697.60	2697.60	2697.60	0.00	2697.60			
2704.95	2704.95	2704.95	0.00	2704.95			
2712.96	2712.96	2712.96	0.00	2712.96			
2719.41	2719.41	2719.41	0.00	2719.41			
2718.67	2718.67	2718.67	0.00	2718.67			
2716.90	2716.90	2716.90	0.00	2716.90			
2715.56	2715.56	2715.56	0.00	2715.56			
2714.22	2714.22	2714.22	0.00	2714.22			
2712.89	2712.89	2712.89	0.00	2712.89			
2711.73	2711.73	2711.73	0.00	2711.73			
2710.79	2710.79	2710.79	0.00	2710.79			
2709.77	2709.77	2709.77	0.00	2709.77			
2708.25	2708.25	2708.25	0.00	2708.25			
2706.05	2706.05	2706.05	0.00	2706.05			
2705.00	2705.00	2705.00	0.00	2705.00			





DISTANCE DATUM (m)	GROUND LEVELS (m)	INVERT LEVELS(m)	DEPTH FROM GROUND LEVEL TO INVERT LEVEL (m)	HGL(m)	FLOW DATA	TYPE AND SIZE OF PIPE	FITTINGS AND OTHER STRUCTURES
2703.98	2703.98	2703.98	0.00	2703.98			
3+638.00	2701.71	2701.71	0.00	2701.71			
3+660.00	2699.07	2699.07	0.00	2699.07			
3+700.00	2697.00	2697.00	0.00	2697.00			
3+720.00	2695.06	2695.06	0.00	2695.06			
3+740.00	2693.56	2693.56	0.00	2693.56			
3+760.00	2692.33	2692.33	0.00	2692.33			
3+780.00	2691.48	2691.48	0.00	2691.48			
3+800.00	2690.99	2690.99	0.00	2690.99			
3+820.00	2690.59	2690.59	0.00	2690.59			
3+840.00	2690.18	2690.18	0.00	2690.18			
3+860.00	2690.92	2690.92	0.00	2690.92			
3+880.00	2691.50	2691.50	0.00	2691.50			
3+900.00	2693.18	2693.18	0.00	2693.18			
3+920.00	2695.07	2695.07	0.00	2695.07			
3+940.00	2697.13	2697.13	0.00	2697.13			
3+960.00	2699.65	2699.65	0.00	2699.65			
3+980.00	2701.67	2701.67	0.00	2701.67			
4+000.00	2703.28	2703.28	0.00	2703.28			
4+020.00	2704.36	2704.36	0.00	2704.36			
4+040.00	2704.33	2704.33	0.00	2704.33			
4+060.00	2703.77	2703.77	0.00	2703.77			
4+080.00	2703.07	2703.07	0.00	2703.07			
4+100.00	2702.25	2702.25	0.00	2702.25			
4+120.00	2701.59	2701.59	0.00	2701.59			
4+140.00	2701.42	2701.42	0.00	2701.42			
4+160.00	2701.43	2701.43	0.00	2701.43			
4+180.00	2701.33	2701.33	0.00	2701.33			
4+200.00	2701.11	2701.11	0.00	2701.11			
4+220.00	2700.03	2700.03	0.00	2700.03			
4+240.00	2698.37	2698.37	0.00	2698.37			
4+260.00	2696.71	2696.71	0.00	2696.71			
4+280.00	2695.06	2695.06	0.00	2695.06			
4+300.00	2693.39	2693.39	0.00	2693.39			
4+320.00	2691.70	2691.70	0.00	2691.70			
4+340.00	2690.08	2690.08	0.00	2690.08			
4+360.00	2688.58	2688.58	0.00	2688.58			
4+380.00	2687.10	2687.10	0.00	2687.10			
4+400.00	2685.64	2685.64	0.00	2685.64			
4+420.00	2684.17	2684.17	0.00	2684.17			
4+440.00	2682.40	2682.40	0.00	2682.40			
4+460.00	2680.42	2680.42	0.00	2680.42			
4+480.00	2678.36	2678.36	0.00	2678.36			
4+500.00	2676.30	2676.30	0.00	2676.30			
4+520.00	2674.12	2674.12	0.00	2674.12			
4+540.00	2671.69	2671.69	0.00	2671.69			
4+560.00	2669.26	2669.26	0.00	2669.26			
4+580.00	2666.65	2666.65	0.00	2666.65			
4+600.00	2664.09	2664.09	0.00	2664.09			
4+620.00	2661.94	2661.94	0.00	2661.94			
4+640.00	2660.05	2660.05	0.00	2660.05			
4+660.00	2658.22	2658.22	0.00	2658.22			
4+680.00	2656.39	2656.39	0.00	2656.39			
4+700.00	2654.56	2654.56	0.00	2654.56			
4+720.00	2652.72	2652.72	0.00	2652.72			
4+740.00	2650.83	2650.83	0.00	2650.83			
4+760.00	2648.95	2648.95	0.00	2648.95			
4+780.00	2647.06	2647.06	0.00	2647.06			
4+800.00	2645.18	2645.18	0.00	2645.18			
4+820.00	2643.35	2643.35	0.00	2643.35			
4+840.00	2641.53	2641.53	0.00	2641.53			

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
- WASHOUT
- W01 - WASHOUT TYPE 1
- W02 - WASHOUT TYPE 2
- DN - NOMINAL DIAMETER
- PN - NOMINAL PRESSURE
- VB - VERTICAL BEND
- HB - HORIZONTAL BEND
- EXISTING STRUCTURE
- ER - EARTH ROAD
- GR - GRAVEL ROAD
- CUT
- TANK
- INTAKE

FOR CONSTRUCTION
signed CMTS

REV	REVISIONS	SIGN	DATE	APPROVED
	BY			
	CHECKED			
	BY			
	CHECKED			
	BY			
	CHECKED			
CO	ISSUED FOR CONSTRUCTION	BY		
		CHECKED		

CLIENT

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

PROJECT

DESIGN FOR ENDARASHA S.H.
WATER PROJECT

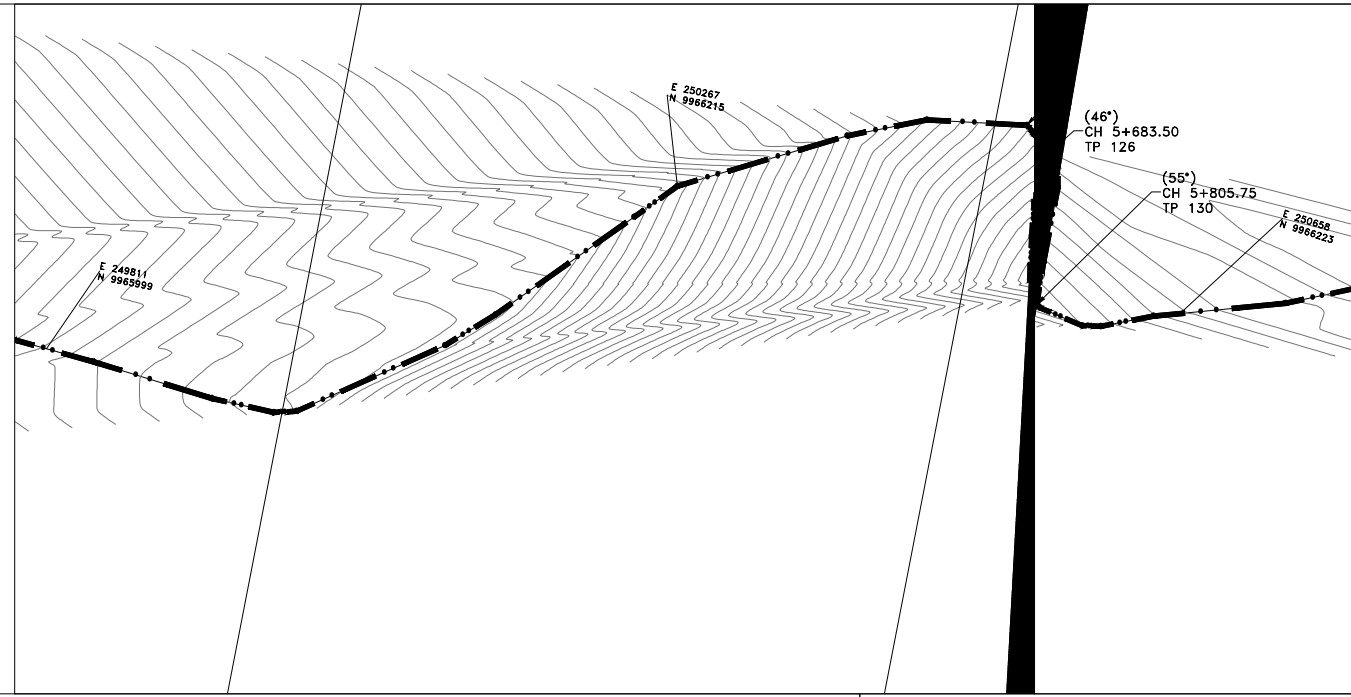
Civil/Structural Engineers

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

Drawing Title

ENDARASHA S.H WATER PROJECT
KAMIGOGO - CHARITY TANK
PLAN AND PROFILE (SHEET 4 OF 6)

Designed by DWN	Drawn by MK
Checked by JMM	Approved by
Scale AS SHOWN (A1)	Date OCT 2022
Job No. 1	ACAD File:



NOTES

1. ALL LEVELS ARE IN METERS ABOVE SEA LEVEL.
2. COORDINATES ARE BASED ON UTM.
3. LOCATION OF AIR VALVES, WASHOUTS, BENDS AND OTHER FITTINGS AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER ON SITE.
4. GROUND AND INVERT LEVEL SHOWN ARE AS SHOWN ON DRAWING UNLESS OTHERWISE INDICATED ON SITE BY THE ENGINEER.
5. 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.
6. ALL BENDS ARE HORIZONTAL UNLESS OTHERWISE STATED.
7. 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
- WASHOUT
- W01 - WASHOUT TYPE 1
- W02 - WASHOUT TYPE 2
- DN - NOMINAL DIAMETER
- PN - NOMINAL PRESSURE
- VB - VERTICAL BEND
- HB - HORIZONTAL BEND
- EXISTING STRUCTURE
- ER - EARTH ROAD
- GR - GRAVEL ROAD
- CUT
- TANK
- INTAKE

FOR CONSTRUCTION
signed CMTS

REV	REVISIONS	SIGN	DATE	APPROVED
	BY CHECKED			
	BY CHECKED			
	BY CHECKED			
CO	ISSUED FOR CONSTRUCTION BY CHECKED			

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

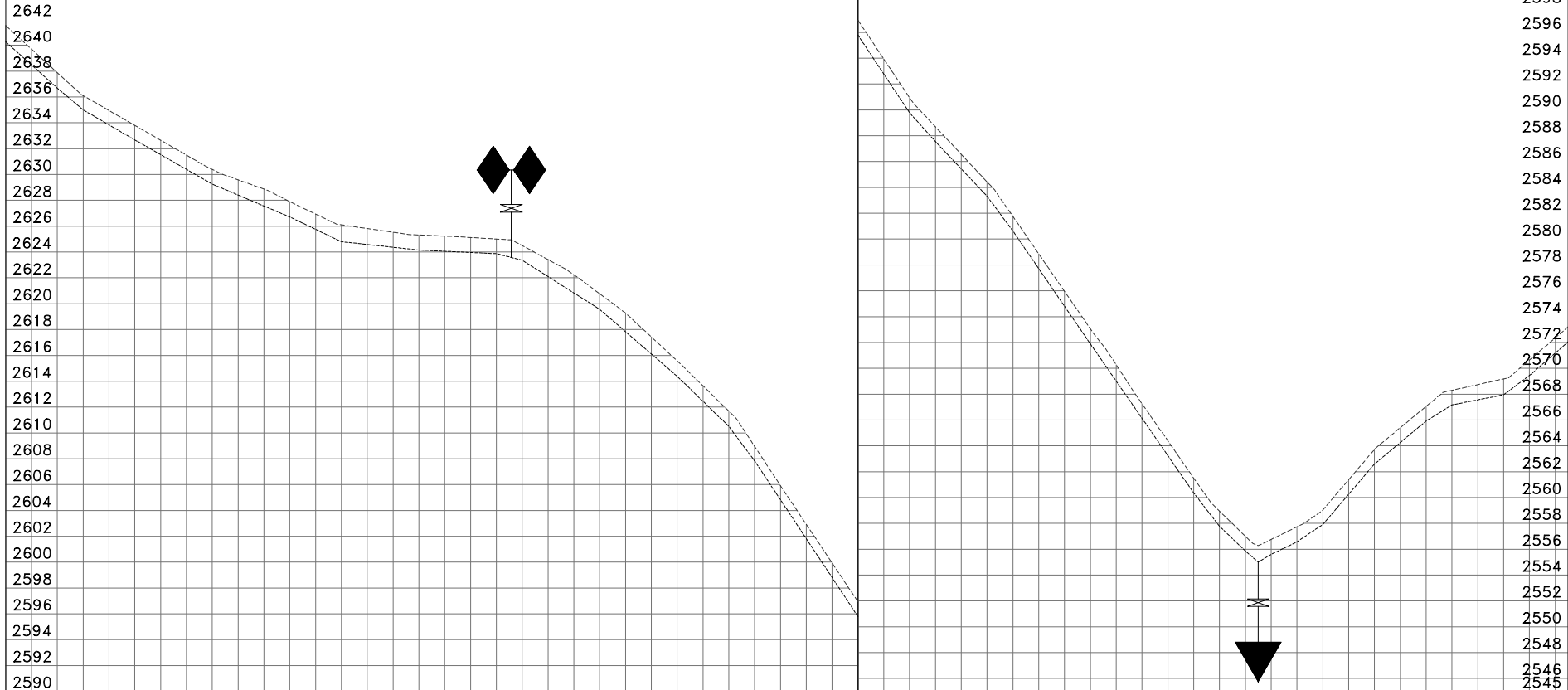
PROJECT
DESIGN FOR ENDARASHA S.H. WATER PROJECT

Civil/Structural Engineers
TANA WATER WORKS DEVELOPMENT AGENCY
 P. O. BOX 1292-10100
 NYERI

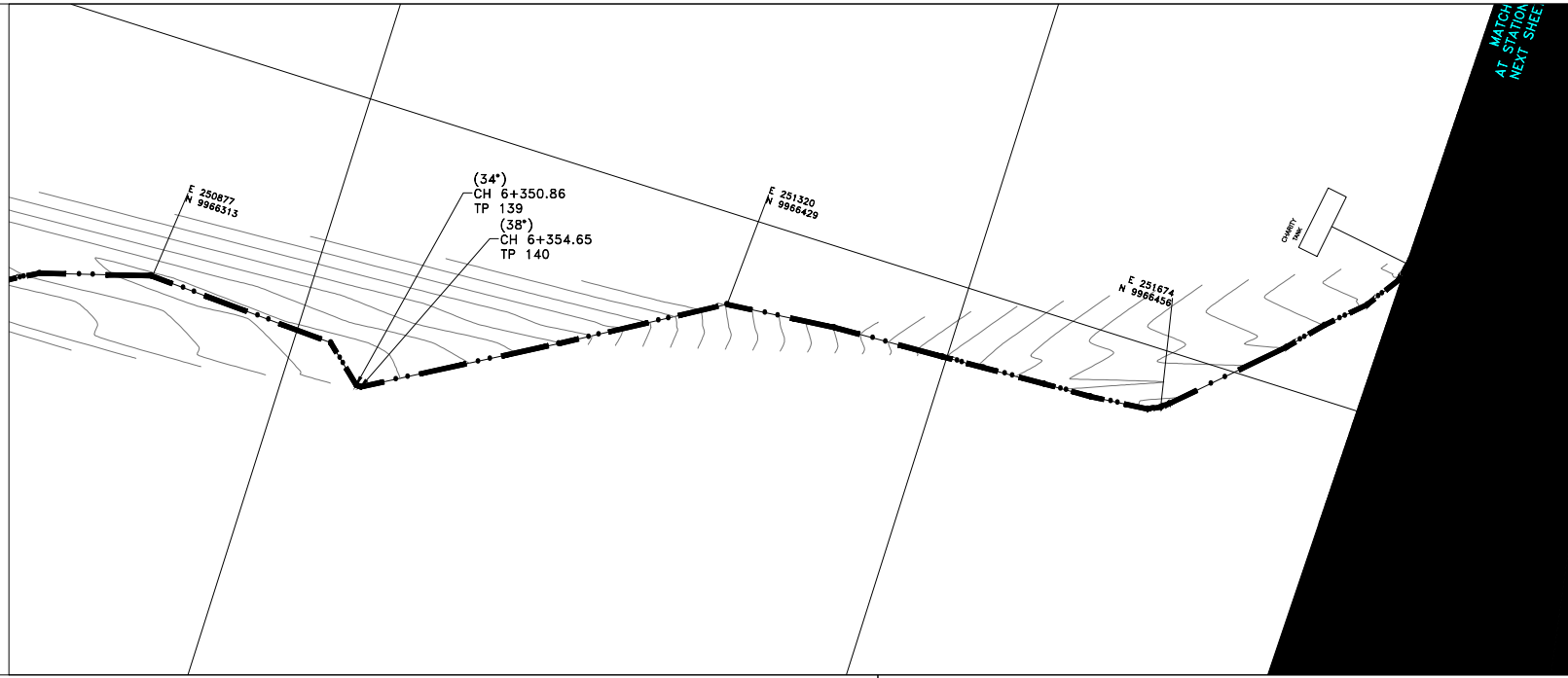
Drawing Title
ENDARASHA S.H WATER PROJECT
 KAMIGOGO - CHARITY TANK
 PLAN AND PROFILE (SHEET 5 OF 6)

Designed by DWN	Drawn by MK
Checked by JMM	Approved by
Scale AS SHOWN (A1)	Date OCT 2022
Job No. 1	ACAD File:

PD STATUS DRAWING No. TWWDA/ENDA/KCT_5 CO REV

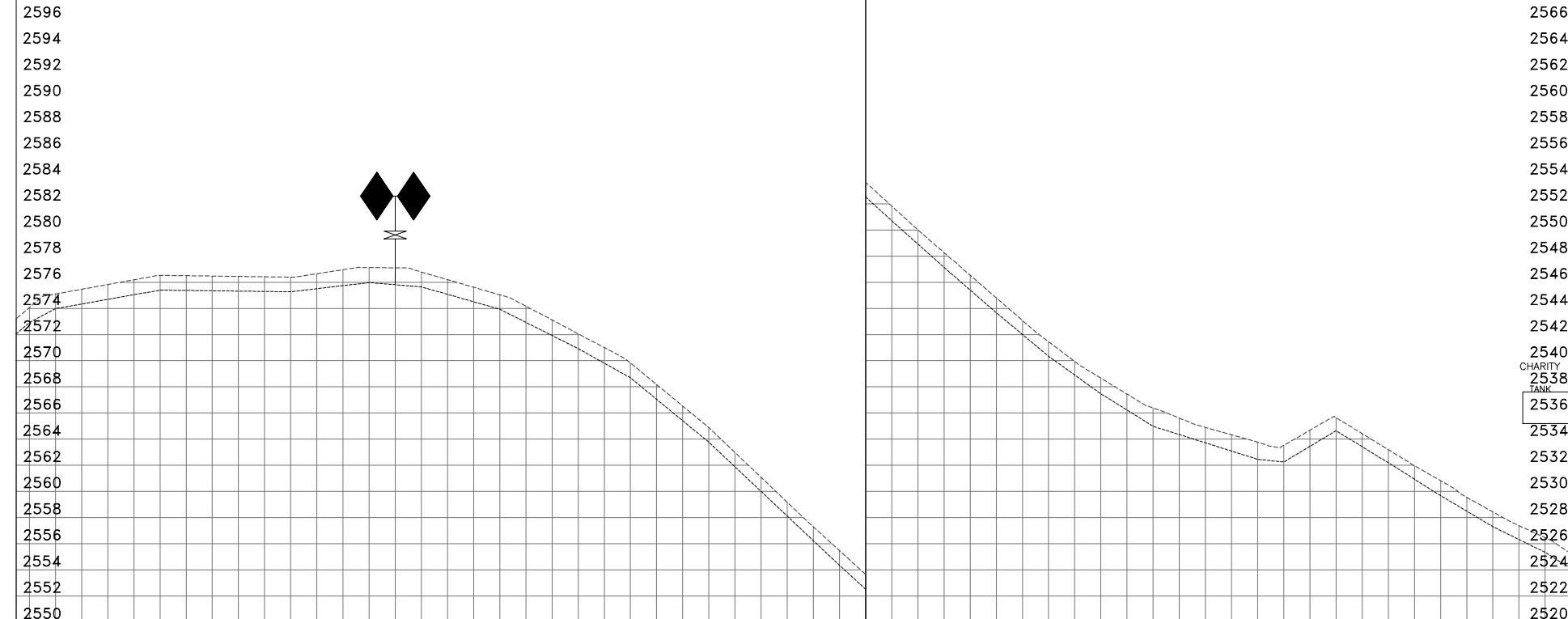


DISTANCE DATUM (m)	GROUND LEVELS (m)	INVERT LEVELS(m)	DEPTH FROM GROUND LEVEL TO INVERT LEVEL (m)	HGL(m)	FLOW DATA	TYPE AND SIZE OF PIPE	FITTINGS AND OTHER STRUCTURES
4+840.00	2641.53	2641.53	0.00	2641.53	0.0058 M3/S	PN10 DN 90MM PIPE	A.V CH 5+232 M
4+860.00	2639.70	2639.70	0.00	2639.70			
4+880.00	2637.88	2637.88	0.00	2637.88	0.0058 M3/S	PN16 DN 90MM PIPE	HB W.O CH 5+810 M
4+900.00	2636.10	2636.10	0.00	2636.10			
4+920.00	2634.95	2634.95	0.00	2634.95			
4+940.00	2633.80	2633.80	0.00	2633.80			
4+960.00	2632.65	2632.65	0.00	2632.65			
4+980.00	2631.50	2631.50	0.00	2631.50			
5+000.00	2630.40	2630.40	0.00	2630.40			
5+020.00	2629.59	2629.59	0.00	2629.59			
5+040.00	2628.87	2628.87	0.00	2628.87			
5+060.00	2627.90	2627.90	0.00	2627.90			
5+080.00	2626.94	2626.94	0.00	2626.94			
5+100.00	2626.10	2626.10	0.00	2626.10			
5+120.00	2625.82	2625.82	0.00	2625.82			
5+140.00	2625.53	2625.53	0.00	2625.53			
5+160.00	2625.32	2625.32	0.00	2625.32			
5+180.00	2625.23	2625.23	0.00	2625.23			
5+200.00	2625.13	2625.13	0.00	2625.13			
5+220.00	2625.01	2625.01	0.00	2625.01			
5+240.00	2624.50	2624.50	0.00	2624.50			
5+260.00	2623.42	2623.42	0.00	2623.42			
5+280.00	2622.24	2622.24	0.00	2622.24			
5+300.00	2620.77	2620.77	0.00	2620.77			
5+320.00	2619.28	2619.28	0.00	2619.28			
5+340.00	2617.43	2617.43	0.00	2617.43			
5+360.00	2615.57	2615.57	0.00	2615.57			
5+380.00	2613.64	2613.64	0.00	2613.64			
5+400.00	2611.68	2611.68	0.00	2611.68			
5+420.00	2608.95	2608.95	0.00	2608.95			
5+440.00	2605.92	2605.92	0.00	2605.92			
5+460.00	2602.92	2602.92	0.00	2602.92			
5+480.00	2599.93	2599.93	0.00	2599.93			
5+500.00	2596.93	2596.93	0.00	2596.93			
5+520.00	2593.94	2593.94	0.00	2593.94			
5+540.00	2590.94	2590.94	0.00	2590.94			
5+560.00	2588.69	2588.69	0.00	2588.69			
5+580.00	2586.56	2586.56	0.00	2586.56			
5+600.00	2584.43	2584.43	0.00	2584.43			
5+620.00	2581.75	2581.75	0.00	2581.75			
5+640.00	2578.85	2578.85	0.00	2578.85			
5+660.00	2575.95	2575.95	0.00	2575.95			
5+680.00	2573.06	2573.06	0.00	2573.06			
5+700.00	2570.27	2570.27	0.00	2570.27			
5+720.00	2567.26	2567.26	0.00	2567.26			
5+740.00	2564.38	2564.38	0.00	2564.38			
5+760.00	2561.51	2561.51	0.00	2561.51			
5+780.00	2558.95	2558.95	0.00	2558.95			
5+800.00	2557.00	2557.00	0.00	2557.00			
5+820.00	2556.76	2556.76	0.00	2556.76			
5+840.00	2557.73	2557.73	0.00	2557.73			
5+860.00	2559.04	2559.04	0.00	2559.04			
5+880.00	2561.38	2561.38	0.00	2561.38			
5+900.00	2563.72	2563.72	0.00	2563.72			
5+920.00	2565.41	2565.41	0.00	2565.41			
5+940.00	2567.06	2567.06	0.00	2567.06			
5+960.00	2568.30	2568.30	0.00	2568.30			
5+980.00	2568.74	2568.74	0.00	2568.74			
6+000.00	2569.18	2569.18	0.00	2569.18			
6+020.00	2570.65	2570.65	0.00	2570.65			
6+040.00	2572.36	2572.36	0.00	2572.36			
6+050.00	2573.21	2573.21	0.00	2573.21			



- 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
 - WASHOUT
 - W01 — WASHOUT TYPE 1
 - W02 — WASHOUT TYPE 2
 - DN — NOMINAL DIAMETER
 - PN — NOMINAL PRESSURE
 - VB — VERTICAL BEND
 - HB — HORIZONTAL BEND
 - EXISTING STRUCTURE
 - ER — EARTH ROAD
 - GR — GRAVEL ROAD
 - CUT
 - TANK
 - INTAKE



DISTANCE DATUM (m)	GROUND LEVELS (m)	INVERT LEVELS(m)	DEPTH FROM GROUND LEVEL TO INVERT LEVEL (m)	HGL(m)	FLOW DATA	TYPE AND SIZE OF PIPE	FITTINGS AND OTHER STRUCTURES
2573.21	2573.21	2573.21	0.00	2573.21	0.0058 M3/S	PN16 DN 90MM PIPE	HB A.V CH 6+340 M
2574.07	2574.07	2574.07	0.00	2574.07			
2575.10	2575.10	2575.10	0.00	2575.10			
2575.46	2575.46	2575.46	0.00	2575.46			
2575.83	2575.83	2575.83	0.00	2575.83			
2576.19	2576.19	2576.19	0.00	2576.19			
2576.53	2576.53	2576.53	0.00	2576.53			
2576.50	2576.50	2576.50	0.00	2576.50			
2576.48	2576.48	2576.48	0.00	2576.48			
2576.45	2576.45	2576.45	0.00	2576.45			
2576.42	2576.42	2576.42	0.00	2576.42			
2576.39	2576.39	2576.39	0.00	2576.39			
2576.65	2576.65	2576.65	0.00	2576.65			
2576.96	2576.96	2576.96	0.00	2576.96			
2577.12	2577.12	2577.12	0.00	2577.12			
2577.10	2577.10	2577.10	0.00	2577.10			
2576.78	2576.78	2576.78	0.00	2576.78			
2576.20	2576.20	2576.20	0.00	2576.20			
2575.62	2575.62	2575.62	0.00	2575.62			
2575.04	2575.04	2575.04	0.00	2575.04			
2574.17	2574.17	2574.17	0.00	2574.17			
2573.12	2573.12	2573.12	0.00	2573.12			
2572.06	2572.06	2572.06	0.00	2572.06			
2571.00	2571.00	2571.00	0.00	2571.00			
2569.83	2569.83	2569.83	0.00	2569.83			
2568.18	2568.18	2568.18	0.00	2568.18			
2566.53	2566.53	2566.53	0.00	2566.53			
2564.88	2564.88	2564.88	0.00	2564.88			
2562.98	2562.98	2562.98	0.00	2562.98			
2561.08	2561.08	2561.08	0.00	2561.08			
2559.17	2559.17	2559.17	0.00	2559.17			
2557.29	2557.29	2557.29	0.00	2557.29			
2555.47	2555.47	2555.47	0.00	2555.47			
2553.65	2553.65	2553.65	0.00	2553.65			
2551.83	2551.83	2551.83	0.00	2551.83			
2550.00	2550.00	2550.00	0.00	2550.00			
2548.27	2548.27	2548.27	0.00	2548.27			
2546.54	2546.54	2546.54	0.00	2546.54			
2544.81	2544.81	2544.81	0.00	2544.81			
2543.08	2543.08	2543.08	0.00	2543.08			
2541.45	2541.45	2541.45	0.00	2541.45			
2539.94	2539.94	2539.94	0.00	2539.94			
2538.67	2538.67	2538.67	0.00	2538.67			
2537.45	2537.45	2537.45	0.00	2537.45			
2536.39	2536.39	2536.39	0.00	2536.39			
2535.61	2535.61	2535.61	0.00	2535.61			
2534.90	2534.90	2534.90	0.00	2534.90			
2534.34	2534.34	2534.34	0.00	2534.34			
2533.77	2533.77	2533.77	0.00	2533.77			
2533.52	2533.52	2533.52	0.00	2533.52			
2534.68	2534.68	2534.68	0.00	2534.68			
2535.65	2535.65	2535.65	0.00	2535.65			
2534.42	2534.42	2534.42	0.00	2534.42			
2533.19	2533.19	2533.19	0.00	2533.19			
2531.97	2531.97	2531.97	0.00	2531.97			
2530.83	2530.83	2530.83	0.00	2530.83			
2529.55	2529.55	2529.55	0.00	2529.55			
2528.44	2528.44	2528.44	0.00	2528.44			
2527.38	2527.38	2527.38	0.00	2527.38			
2526.46	2526.46	2526.46	0.00	2526.46			
2525.89	2525.89	2525.89	0.00	2525.89			

CHARITY TANK
2538

FOR CONSTRUCTION
signed CMTS

REV	REVISIONS	SIGN	DATE	APPROVED
	BY CHECKED			
	BY CHECKED			
	BY CHECKED			
CO	ISSUED FOR CONSTRUCTION BY			
	CHECKED			

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

PROJECT
DESIGN FOR ENDARASHA S.H. WATER PROJECT

Civil/Structural Engineers
TANA WATER WORKS DEVELOPMENT AGENCY
 P. O. BOX 1292-10100
 NYERI

Drawing Title
ENDARASHA S.H WATER PROJECT
 KAMIGOGO – CHARITY TANK
 PLAN AND PROFILE (SHEET 6 OF 6)

Designed by DWN	Drawn by MK
Checked by JMM	Approved by
Scale AS SHOWN (A1)	Date OCT 2022
Job No. 1	ACAD File:
PD STATUS	DRAWING No. TWWDA/ENDA/KCT_6 CO REV