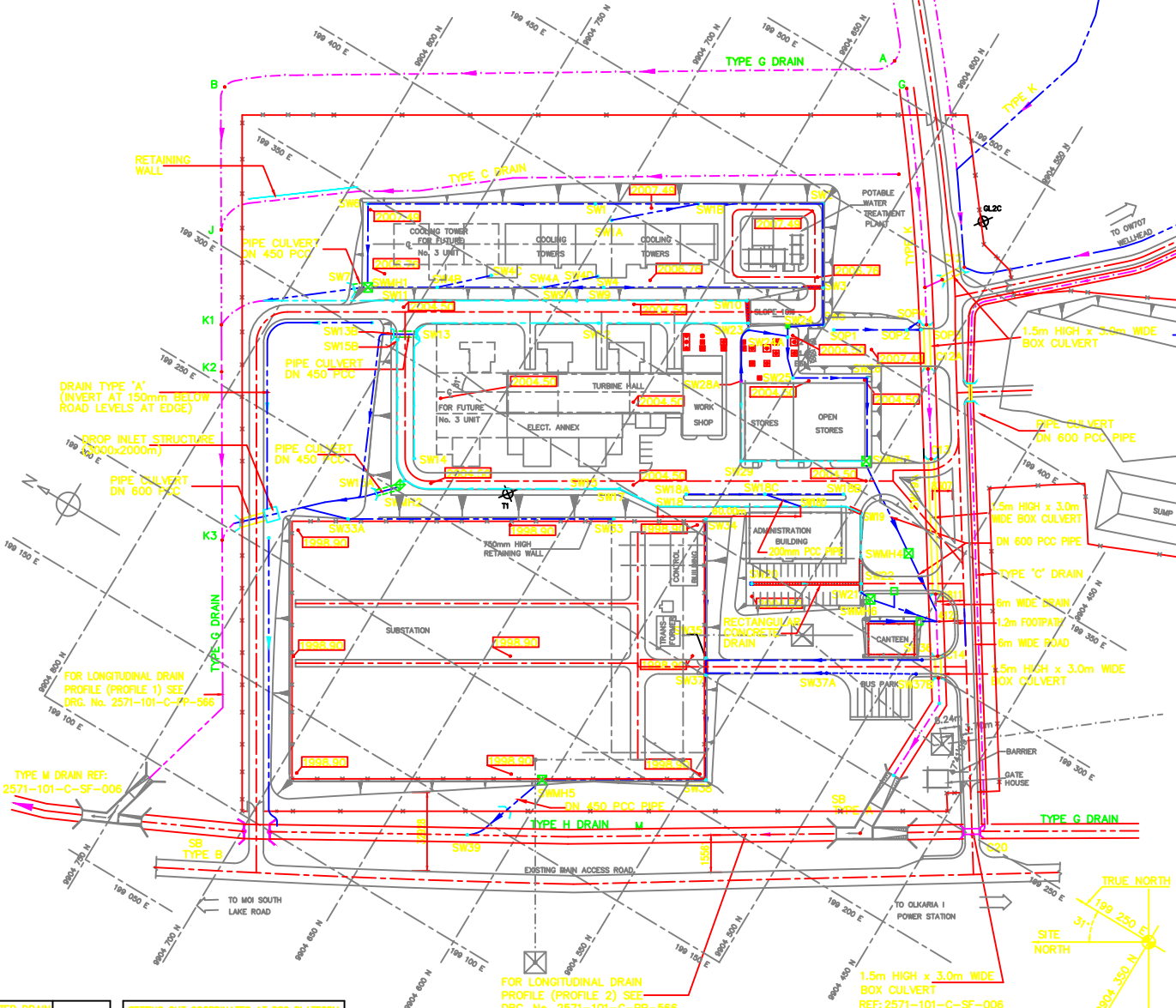


SCHEDULE OF INVERT LEVELS FOR STORMWATER DRAIN				TYPE OF DRAIN
DRAIN NOTATION	UPSTREAM INVERT LEVEL	DOWNSIDE INVERT LEVEL	LENGTH OF DRAIN (m)	
SW1 - SW2	2007.35	2006.426	94.0	A
SW1A - SW1B	2007.12	2006.856	35.0	PCC PIPE 150mm
SW2 - SW3	2006.426	2006.22	30.0	A
SW4 - SW3	2006.74	2008.11	94.0	A
SW4D - SW4A	2006.40	2008.20	61.0	PCC PIPE 150mm
SW4C - SW4B	2006.40	2008.20	40.0	PCC PIPE 150mm
SW3 - SW5	2006.11	2005.94	20.0	A
SW5A - SW5	2008.80	2005.84	40.0	A (CASCADED)
SW6 - SW24	2005.94	2004.33	14.0	800mm PCC PIPE
SW1 - SW6	2007.35	2006.75	94.0	A
SW6 - SWMH1	2006.75	2006.55	30.0	A
SWMH1 - SW7	2006.05	2006.00	5.0	PCC PIPE 450mm
SW4 - SWMH1	2006.74	2006.05	94.0	A
SW7 - T.C.D	2006.00	*	40.0	C
SW7 - SW10	2004.76	2004.40	66.80	A
SW10 - SW23	2004.46	2004.40	12.0	A
SW12 - SW23	2004.76	2004.46	60.0	A
SW23 - SW24	2004.40	2004.33	25.0	A
SW24 - SW25	2004.23	2004.09	21.0	C
SW25 - SW26	2004.23	2004.09	28.0	C
SW26 - SWMH3	2004.09	2003.92	34.0	C
SW26 - SW25	2004.80	2004.43	43.0	A
SW29 - SWMH3	2004.43	2004.10	20.0	A
SWMH3 - SWMH4	2003.75	2003.03	40.0	600mm CULVERT
SWMH4 - T.C.D	2002.03	*	35.0	600mm CULVERT
SW8A - SW11	2004.76	2004.19	78.90	A
SW11 - T.C.D	2004.19	*	50.0	A
SW12 - SW13	2004.76	2004.27	74.0	A
SW13 - SW13B	2003.91	2003.71	30.0	PCC PIPE 450mm
SW13B - T.C.D	2003.71	*	52.0	B
SW14 - SW13	2004.81	2004.24	56.0	A
SW15B - SWMH2	2004.42	2004.02	58.0	A
SW15 - SWMH2	2004.50	2004.93	85.0	A
SW15A - SW15A	2003.43	2004.40	50.0	PCC PIPE 450mm
SW15A - T.C.D	2003.40	*	60.0	B
SW33 - SW33A	1998.85	1998.15	130.0	IBD
SW33A - T.C.D	1998.15	*	40.0	B
SW15 - SW17	2004.50	2004.45	10.0	A
SW17 - SW18	2004.45	2004.35	20.0	A
SW18A - SW18C	2004.37	2004.15	33.0	A
SW18B - SW18C	2004.37	2004.15	33.0	A
SW18C - SW18D	2004.37	2004.04	60.0	PCC PIPE 200mm
SW18D - SW18E	2004.35	2004.04	60.0	A
SW18A - SW18	2004.50	2004.50	80.0	A
SW19 - SW22	2003.92	2003.77	30.0	B
SW20 - SW22	2004.50	2004.20	46.0	A
SW22 - SW21	2003.77	2003.74	5.0	B
SW21 - SWMH6	2003.74	2003.73	2.37	B
SW34 - SW35	1998.85	1998.34	60.0	A
SW35 - SW37	1998.34	1998.34	7.0	B
SW37 - SW39	1998.30	1998.08	4.0	B
SW39 - SWMH5	1998.08	1997.70	75.0	B
SW37A - SW37B	2002.13	*	50.6	A
SW37A - SW39	1997.70	1997.62	15.0	PCC PIPE 450mm
SW39 - T.C.D	1997.62	*	32.0	A
SW36 - SW35	2003.10	2001.30	84.0	A
SW35 - SW24A	2004.40	1960	17.0	A
SW35 - SW24	2004.60	2004.40	22.0	A
SWMH6 - T.C.D	2003.73	*	30.26	PCC PIPE 600mm

DRAIN SIZES.
 TYPE A - 300mm WIDE x 150mm DEEP (min)
 TYPE B - 400mm WIDE x 200mm DEEP (min)
 TYPE C - 500mm WIDE x 250mm DEEP (min)
 * - TO BE DETERMINED ON SITE
 T.C.D - TO CATCHMENT DRAIN/CULVERT



- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
 - ALL LEVELS ARE IN METRES AND BASED ON A LOCAL DATUM.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION DRGS. Nos.-
 2571-101-C-PP-565 (CATCHMENT DRAINAGE - CHANNEL DETAILS);
 2571-101-C-PP-568 (CATCHMENT DRAINAGE - CHANNEL DETAILS);
 2571-101-C-SF-006 (STORM WATER DRAINAGE LAYOUT)
 2571-101-C-PP-560 (EXTERNAL FINISHED SURFACES LAYOUT)
 2571-101-C-CS-913 (CULVERT DETAILS)
 2571-101-C-CS-903 (MANHOLE DETAILS)
 2571-101-C-SS-601 (SUBSURFACE DRAINAGE- FOR SUB-STATION)
 - ALL RECTANGULAR SECTION DRAINS WITHIN THE POWER STATION HAVE METAL GRATINGS.

LEGEND

- SB STILLING BASIN
- C12 BOX CULVERT WITH HEADWALLS
- SWMH1 CATCHMENT DRAINAGE
- C13A PIPE CULVERT WITH HEAD WALLS
- SOP1-5 STORMWATER DRAIN WITH MANHOLE
- PCC PRECAST CONCRETE
- B DRAIN POINT
- D.O.S DETERMINED ON SITE
- METAL GRATING
- 1998.90 FINISHED EARTHWORKS LEVEL IN METRES

SCHEDULE OF SETTING OUT POINTS			SCHEDULE OF SETTING OUT POINTS		
SOP NOTATION	EASTINGS	NORTHINGS	SOP NOTATION	EASTINGS	NORTHINGS
SW1	199395.83	9904708.26	SW22	199316.69	9904530.79
SW1A	199393.43	9904699.93	SW23	199393.53	9904626.04
SW2	199417.97	9904871.40	SW24	199316.74	9904812.87
SW2A	199444.80	9904828.59	SW25	199375.80	9904999.68
SW3	199414.83	9904606.46	SW26	199391.69	9904973.05
SW4	199367.57	9904687.28	SW28A	199363.66	9904617.61
SW4A	199354.69	9904708.71	SW29	199334.86	9904600.30
SW4B	199331.61	9904747.12	SW33	199286.53	9904633.66
SW4C	199347.69	9904730.22	SW33A	199229.12	9904729.20
SW4D	199370.23	9904691.96	SW34	199308.43	9904600.34
SW5	199403.64	9904601.35	SW35	199250.50	9904716.99
SW5A	199421.49	9904587.07	SW36	199302.36	9904492.43
SW6	199346.70	9904790.01	SW37	199250.28	9904566.85
SW7	199313.23	9904776.69	SW37A	199277.11	9904523.86
SW8	199359.30	9904690.24	SW37B	199297.38	9904489.42
SW9A	199356.90	9904694.23	SW36	199212.62	9904544.16
SW10	199393.72	9904632.85	SW39	199141.35	9904618.08
SW11	199317.30	9904760.14	SWMH1	199316.70	9904773.80
SW12	199353.64	9904681.39	SWMH2	199250.50	9904716.99
SW13	199310.28	9904744.43	SWMH3	199361.61	9904935.45
SW13B	199305.42	9904752.63	SWMH4	199357.89	9904920.22
SW14	199265.17	9904716.48	SWMH5	199177.27	9904603.01
SW15	199293.37	9904646.86	SWMH6	199303.03	9904525.80
SW15A	199244.40	9904724.57			
SW15B	199304.17	9904750.08			
SW17	199286.63	9904636.01			
SW18	199392.41	9904612.96			
SW18A	199311.05	9904612.96			
SW18B	199345.04	9904556.38			
SW18C	199326.04	9904584.67			
SW18D	199331.37	9904569.17			
SW19	199342.10	9904546.05			
SW19A	199362.71	9904526.85			
SW20	199293.09	9904570.07			
SW21	199313.56	9904528.91			

SETTING OUT COORDINATES AT PSC PLATFORM

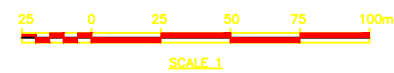
SOP No.	EASTINGS	NORTHINGS
SOP 1	1994072.029	9904596.391
SOP 2	1994172.729	9904589.176
SOP 3	1994200.845	9904564.108
SOP 4	1994233.524	9904566.496

SCHEDULE OF INVERT LEVELS FOR STORMWATER DRAIN

DRAIN NOTATION	UPSTREAM INVERT LEVEL	DOWNSIDE INVERT LEVEL	LENGTH OF DRAIN (m)	TYPE OF DRAIN
SW28A - SW23	2004.80	2004.40	22.0	A
SW23 - SW24A	2004.40	T.C.D	17.0	A
SW6 - SW24	2005.94	2004.33	14.0	A
SW24 - SW25	2004.23	2004.09	21.0	C
SW25 - SW26	2004.23	2004.09	28.0	C

NOTE: SW24 - 1m x 1m MANHOLE MADE OF CONCRETE FILLED BLOCKWORK

LAYOUT
SCALE 1



BASED ON XREF FILES
1. PPSXR5X6

AS BUILT

Z ISSUED AS BUILT PMN EGG ADP OCT. '03

Rev	Reason	By	Chk	Appr.	Date
Scale	AS SHOWN	Drawn	PMN	Designed	ERW
Date	MAR. '99	CAD Ref	553-Z	Checked	AM

Client

The Kenya Electricity Generating Company Ltd.
 Silima Plaza, Kolobot Road, Parklands P.O. Box 47856 Nairobi, KENYA
 Fax: +254-2-248848

Consultants

Sinclair Knight Merz Ltd.

Sub-Consultants

Howard Humphreys
 PB Kennedy & Donkin Limited
 Consulting Engineers

OLKARIA II GEOTHERMAL POWER PROJECT
POWER STATION INFRASTRUCTURE STORM WATER DRAINAGE LAYOUT AND DETAILS