



1:50 YEAR CLEAN WATER CHANNEL CHARACTERISTICS													
NUMBER	CHANNEL TYPE	MATERIAL	DESCRIPTION	BOTTOM WIDTH (m)	SIDE SLOPES (1:..)	MANNING ROUGHNESS SS, n	SLOPE (%)	WATER LEVEL (m)	FREE BOARD (m)	TOP WIDTH (m)	Q DEMAND (m³/s)	Q ACTUAL (m³/s)	MAX VELOCITY (m/s)
C1	Trapezoidal	Concrete	Existing	1	2	0.013	0.6	0.75	0.1	4.4	0.85	6.24	3.33
C2	Trapezoidal	Concrete	Existing	1	2	0.013	0.6	0.75	0.1	4.4	2.42	6.24	3.33
C3	Trapezoidal	Concrete	Existing	1	2	0.013	0.6	0.75	0.1	4.4	3.47	6.24	3.33
C4	Trapezoidal	Concrete	Existing	1	2	0.013	0.6	0.75	0.1	4.4	4.01	6.24	3.33
C5	Trapezoidal	Concrete	Existing	1	2	0.013	0.6	0.75	0.1	4.4	4.01	6.24	3.33
C6	V-Drain	Earth	New	-	2	0.02	0.9	0.35	0.15	2	0.12	0.34	1.38
C7	V-Drain	Earth	New	-	2	0.02	0.5	0.35	0.15	2	0.16	0.25	1.03
C8	V-Drain	Earth	New	-	2	0.02	0.4	0.35	0.15	2	0.16	0.23	0.92
C9	V-Drain	Earth	New	-	2	0.02	1.6	0.35	0.15	2	0.19	0.45	1.84
C10	V-Drain	Earth	New	-	2	0.02	0.7	0.35	0.15	2	0.22	0.25	1.21
C15	Trapezoidal	Earth	New	0.5	2	0.02	1.2	0.3	0.15	2.3	0.07	0.56	1.7
C19	Trapezoidal	Earth	New	0.5	2	0.02	1.1	0.35	0.15	2.5	0.07	0.78	1.85
C20	Trapezoidal	Earth	New	0.5	2	0.02	1.1	0.35	0.15	2.5	0.33	0.78	1.85
C21	Trapezoidal	Earth	New	0.5	2	0.02	1.1	0.35	0.15	2.5	0.5	0.78	1.85
C22	V-Drain	Earth	New	-	2.5	0.02	0.7	0.3	0.15	2.25	0.18	0.25	1.12
C23	V-Drain	Earth	New	-	2.5	0.02	0.7	0.3	0.15	2.25	0.24	0.25	1.12
C24	Trapezoidal	Concrete	New Drift	1	8	0.013	1	0.1	0.1	1.8	0.24	0.23	1.29
C25	V-Drain	Earth	New	-	2	0.02	1	0.35	0.15	2	0.19	0.36	1.45
C26	Trapezoidal	Concrete	Existing	1	2	0.013	0.6	0.75	0.1	4.4	1.07	6.24	3.33
C27	Trapezoidal	Concrete	Existing	1	2	0.013	0.6	0.75	0.1	4.4	1.4	6.24	3.33
C28	Trapezoidal	Concrete	Existing	1	2	0.013	0.6	0.75	0.1	4.4	2.19	6.24	3.33
C29	Trapezoidal	Concrete	Existing	1	2	0.013	0.6	0.75	0.1	4.4	2.74	6.24	3.33
C30	V-Drain	Earth	New	-	2	0.02	0.9	0.35	0.15	2	0.06	0.34	1.38

1:50 YEAR DIRTY WATER CHANNEL CHARACTERISTICS													
NUMBER	CHANNEL TYPE	MATERIAL	DESCRIPTION	BOTTOM WIDTH (m)	SIDE SLOPES (1:..)	MANNING ROUGHNESS SS, n	SLOPE (%)	WATER LEVEL (m)	FREE BOARD (m)	TOP WIDTH (m)	Q DEMAND (m³/s)	Q ACTUAL (m³/s)	MAX VELOCITY (m/s)
C12	Trapezoidal	Concrete	New	0.5	1	0.013	1	0.4	0.1	1.5	0.66	1	2.81
C13	Pipe	Concrete	New	600 ø	-	0.013	1	0.56	-	-	0.64	0.66	2.4
C14	Pipe	Concrete	New	600 ø	-	0.013	1	0.56	-	-	0.64	0.66	2.4
C17	Trapezoidal	Concrete	From Spillway	0.5	1	0.013	0.5	0.4	0.1	1.5	0.82	1	2.81

LEGEND:

- CLEAN WATER CATCHMENTS
- DIRTY WATER CATCHMENTS
- CLEAN WATER CONDUITS
- DIRTY WATER CONDUITS
- CLEAN WATER JUNCTION
- DIRTY WATER JUNCTION
- C1 CONDUIT No.
- J1 JUNCTION No.
- ➔ CONDUIT FLOW DIRECTION

NOTE:

- FOR STORMWATER LAYOUT REFER TO DRAWING No. 0.84/54261.
- FOR CATCHMENT AREAS AND SUB-CATCHMENT LAYOUT REFER TO DRAWING No. 0.84/54262.
- FOR TYPICAL STORMWATER DETAILS REFER TO DRAWING No. 0.84/54264.

C	22.01.18	FOR INFORMATION	J.F.	L.D.L.	R.G.				
B	14.12.17	FOR INFORMATION	J.F.	L.D.L.	R.G.				
A	06.10.17	FOR INFORMATION	J.F.	L.D.L.	R.G.				

D.O.	REV	DATE	REVISION	REV BY	CHKD BY	APP BY	AUTH BY	KKS APP	REFERENCE DRAWINGS

AUTHORISED FOR ESKOM BY: _____ CLASSIFICATION: _____
 CODIFICATION BY: _____ PBS PATH: _____
 APPROVED BY: _____
 CHECKED BY: _____
 CREATED BY: _____

MEDIUPI POWER STATION

CONDUITS AND JUNCTIONS LAYOUT

CONTRACTOR DRAWING NO. 500332-0000-DRG-CIV-0033

Eskom
ESKOM HOLDINGS SOC LTD
REG. NO. 2002/0150718

0.84/54263

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