

DB G-H				25A TP MAIN BREAKER					4mmSQ 4C		FED FROM MINISUB1					
BREAKER	10SP	10SP	10SP	30ELCB	30ELCB	30ELCB	20A SP	20A SP	SA SP	SA SP	SA SP	SA SP	SA SP	SA SP	TOTAL	
CONTROL CIRCUIT NO	L1	L2	L3	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11		
LOAD/PHASE	UGT	UGT	SPARE	H01	H02	SSO	H01	H02	EXTRACT	F/A FAN	H/WALL1	H/WALL2	CASSETTE	ODU	SPARE	
WIRE(mm)	10.5	10.5	SPARE	10.5	10.5	SPARE	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	SPARE	
Watts	468	432	SPARE	1000	1000	3680	1000	1000	194	157	560	560	560	8400	SPARE	
KW	0.468	0.432	SPARE	1	1	3.68	1	1	0.194	0.157	0.56	0.56	0.56	8.4	SPARE	
Div KW	0.5	0.4	SPARE	0.8	0.8	2.9	0.8	0.8	0.2	0.2	0.4	0.4	0.4	6.7	SPARE	
<div> <div></div> SINGLE PHASE (RED, YELLOW, BLUE) <div></div> EF <div></div> Extract Fan <div></div> Div LOAD </div> <div> <div></div> THREE PHASE <div></div> FCU <div></div> Fan Control Unit/Casette </div>															14	

[illegible][illegible][illegible]

DB UPS-G			60A TP 16 mmSQ (4C)		FED FROM UPS			
60A TP MAIN BREAKER								
BREAKER	30ELCB	30ELCB	30ELCB	30ELCB	30ELCB	30ELCB		TOTAL
CONTROL								
CIRCUIT NO	U1	U2	U3	U4	U5	U6	DB-UPS G	
LOAD/PHASE	UPS SSO	UPS SSO	UPS SSO	UPS SSO	UPS SSO	UPS SSO		
WIRE(mm)	1C/1.5	1C/1.5						SPARE
Watts	2760	4485	2760	1380	1725	3450	16,560	SPARE 33,120
KW	2.76	4.49	2.76	1.38	1.73	3.45	17	SPARE 33
Dist KW	2.48	4.04	2.48	1.24	1.55	3.11	15	SPARE 30

DB UPS-F		30A TP 4 mmSQ (4C)				FED FROM DB-UPS-G		
30A TP MAIN BREAKER								
BREAKER	30ELCB	30ELCB	30ELCB	30ELCB	30ELCB	30ELCB	TOTAL	
CONTROL								
CIRCUIT NO	U1	U2	U3	U4	U5			
LOAD/PHASE	UPS SSC	UPS SSO	UPS SSO	UPS SSO	UPS SSO			
WIRE(mm)	1C/1.5	1C/1.5				SPARE		
Watts	2760	4485	3500	2760	2760	SPARE	16,265	
Kw	2.76	4.49	3.50	2.76	2.76	SPARE	16	
DIV KW	2.48	4.04	3.15	2.48	2.48	SPARE	15	

1. ALL CABLES ENTIRE TO EQUIPMENT LOCATED OUTDOORS AND IN WASH DOWN AREAS SHALL BE FROM BELOW.
2. SUFFICIENT CABLE STAKE LENGTHS SHALL BE PROVIDED FOR EQUIPMENT WHICH NEEDS FUTURE ADJUSTMENTS.
3. SINGLE CORE CABLES FOR PHASES A-C SHALL RUN IN TREFLO FORMATION.
4. THE MINIMUM BENDING RADII OF CABLES SPECIFIED BY THE MANUFACTURER SHALL BE MAINTAINED, AND CONCRETE SLABS SHALL BE USED TO SEPARATE THE SERVICES SEPARATION FROM COMMUNICATION CABLES SHALL BE 200mm (8 in).
5. ON CROSSING PIPES SERVICES MINIMUM SEPARATION OF 150mm SEPARATION SHALL BE MAINTAINED, AND CONCRETE SLABS SHALL BE USED TO SEPARATE THE SERVICES SEPARATION FROM COMMUNICATION CABLES SHALL BE 200mm (8 in).
6. ALL THE DIMENSIONS SHOWN ON DRAWINGS ARE METRIC (mm).
7. THE MEET OF THESE DRAWINGS IS TO GUIDE THE CONTRACTOR IN THE SCHEME OF WORKS. CONTRACTOR SHALL MAKE PROPER SHOP DRAWINGS FOR THE APPROVAL OF THE ENGINEER AND SUMMIT IT BEFORE THE WORK COMMENCES AT SITE.
8. ALL ELECTRICAL WORKS SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE PROJECT SPECIFICATION.
9. THE ROUTING OF CABLES SHOWN ON THE DRAWINGS IS FOR GUIDANCE ONLY. IF IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK AT THE STAGE OF THE DESIGN. THE RUNS OF ALL CABLES IN RELATION TO STRUCTURAL RESTRICTION SO THAT ALL MATERIALS SUCH AS CONCRETE, BRICKS AND ACCESSORIES ARE INCLUDED IN THE WORK. ACTUAL LOCATIONS OF ALL OUTLETS MUST BE VERIFIED BY THE SITE ENGINEER BEFORE INSTALLATION COMMENCES.
10. ALL ELECTRICAL EQUIPMENT SHALL BE SUPPLIED BY AN APPROVED MANUFACTURER AND THE CONTRACTOR SHALL ENSURE THAT ALL EQUIPMENT ARE SUITABLE FOR THE PURPOSE FOR WHICH THEY ARE REQUIRED AND THAT IT IS FUNCTIONING PROPERLY AFTER INSTALLATION.

2. MOUNTING HEIGHTS SHALL BE GENERALLY AS INDICATED BELOW OR AS INSTRUCTED BY THE ENGINEER WITHOUT ANY COST APPLICATION TO THE CONTRACTOR.

- LIGHTING SWITCH	=	1500mm AFFL.
- GENERAL SOCKET OUTLET	=	450mm AFFL.
- SOCKET OUTLET AT KITCHEN	=	1100mm AFFL.
- HAND DRYERS	=	AS MENTIONED IN INTERIOR DESIGN DRAWINGS
- ISOLATOR SWITCH	=	ADJACENT TO EQUIPMENT

3. WIRING FOR SMALL POWER AND LOW CURRENT CIRCUITS SHALL BE TOTALLY SEGREGATED. THIS IS INCLUDING PANELS, RACEWAYS, WIRES, BOXES, SWITCHES ETC.
4. ALL ISOLATORS DESIGNATED FOR ELECTRIC APPLIANCES OR EQUIPMENT SHALL BE LABELED WITH THE EQUIPMENT REFERENCE

5. CONDUIT INSTALLATIONS SHALL BE AS PER SPECS

6. REFER TO ARCHITECTURAL REFLECTED CEILING DRAWINGS AND FINISHING TABLES FOR EXACT ARRANGEMENT OF LUMINAIRE.

7. CORD (FLEXIBLE) OUTLET SHALL BE INSTALLED FOR ANY REMOTE

8. WIRING FOR LIGHTING CIRCUITS ARE FOR GUIDANCE ONLY THE CONTRACTOR MAY CHOOSE THE MOST CONVENIENT ROUTE. MATCHING THE PROJECT SPECIFICATIONS AND SHOW IT IN HIS SHOP DRAWINGS.

9. THE CONTRACTOR SHALL SUBMIT PANEL BOARDS DETAILS ALONG WITH THE REQUIRED SUBMITTALS AND SHOP DRAWINGS SHOWING.
- CIRCUIT REFERENCE SHOWN ON LAYOUTS
  - ACTUAL LOAD OF EACH CIRCUIT PER PHASE IN VA
  - SUMMATION OF EACH PHASE LOAD ASSURING 3 PHASE LOAD

- AREAS SERVED BY EACH CIRCUIT
- RATING OF ALL COMPONENTS
- WIRE SIZE AND No. OF WIRES
- SCHEMATIC DIAGRAMS FOR CONTROL CIRCUITS IF ANY ENCLOSURE AND BUSES SPECIFICATIONS

11. CONVENIENCE SOCKET OUTLETS FED FRO EMERGENCY PANELS O  
UPS SHALL BE SELECTED WITH DIFFERENT COLOUR COVER PLATE

STAGE : TENDER			
	INITIAL	SIGN	DATE
G4 Project Engineer			
Project Manager			
Project Architect			
Client			

REV	DESCRIPTION	DATE	INITIAL

CLIENT



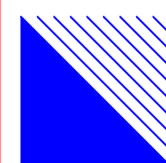
SOUTHERN AFRICAN  
DEVELOPMENT COMMUNITY

PROJECT

SADC STANDBY FORCE REGIONAL  
LOGISTICS DEPOT, AT RASESA,  
GABORONE, BOTSWANA,

DRAWING TITLE

DB ONE-LINE DRAWING



**G4 CONSULTING ENGINEERS**  
PRIVATE BAG BR 297  
GABORONE  
BOTSWANA

TEL. 3972510 FAX 3972504

DESIGNED	: HG	JOB NO.	: g4448
DRAWN	: HG	SCALE	: 1:100
APPROVED	:	DATE	: JUN 2021
DRAWING NO.			REV

SADC/ELEC/4024A

C