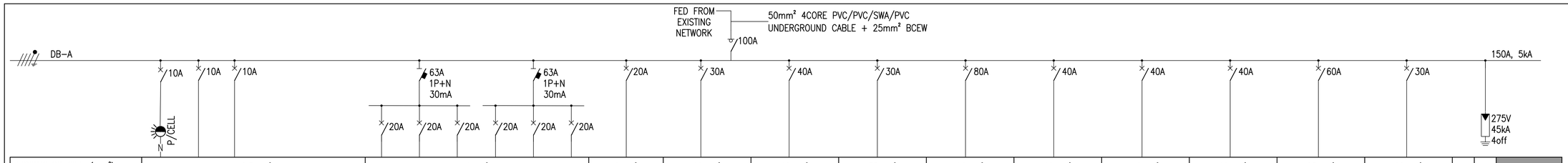
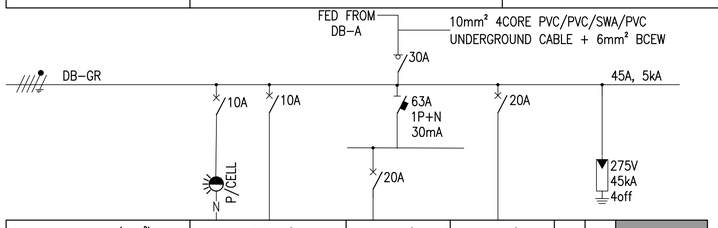
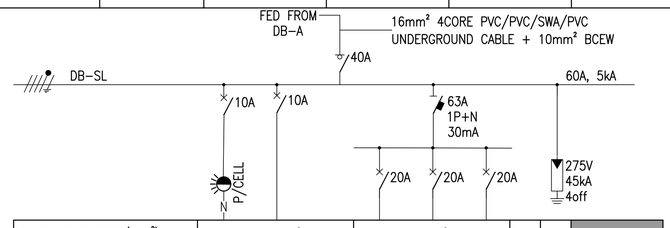


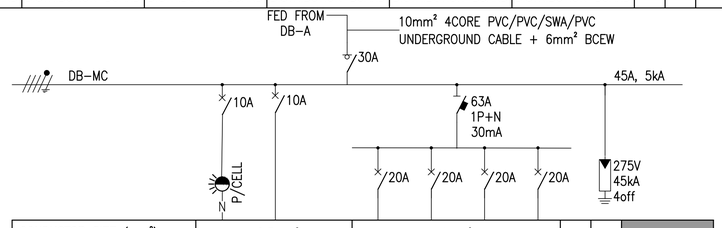
CONDUCTOR SIZE (mm²)	2.5mm²						4mm²						6mm²		16mm²	10mm²	35mm²	16mm²	16mm²	16mm²	16mm²	25mm²	10mm²			
EARTH WIRE SIZE SIZE (mm²)	2.5mm²						2.5mm²						4mm²		10mm²	6mm²	25mm²	10mm²	10mm²	10mm²	10mm²	16mm²	10mm²			
CONDUITE/SLEEVE SIZE ø (mm²)	20mm						20mm						20mm		50mm	50mm	50mm	50mm	50mm	50mm	50mm	50mm	50mm			
LABEL	EL1	L1	L2	L3	L4	SPARE	P1	P2	P3	P4	P5	P6	SG		DB-GR	DB-SL	DB-MC	DB-PR	DB-2C	DB-3CA	DB-3CB	DB-NC	DB-GH			25% SPARE
EQUIPMENT	LIGHTS						SOCKET OUTLET						SOLAR GEYSER		DISTRIBUTION BOARD	DISTRIBUTION BOARD	DISTRIBUTION BOARD	DISTRIBUTION BOARD	DISTRIBUTION BOARD	DISTRIBUTION BOARD	DISTRIBUTION BOARD	DISTRIBUTION BOARD	DISTRIBUTION BOARD			



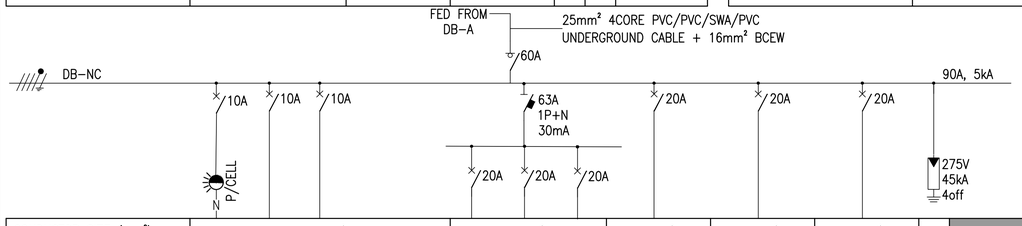
CONDUCTOR SIZE (mm²)	2.5mm²			4mm²		6mm²				
EARTH WIRE SIZE SIZE (mm²)	2.5mm²			2.5mm²		4mm²				
CONDUITE/SLEEVE SIZE ø (mm²)	20mm			20mm		20mm				
LABEL	EL1	L1	SPARE	P1	P2	SG				25% SPARE
EQUIPMENT	LIGHTS			SOCKET OUTLET		SOLAR GEYSER				



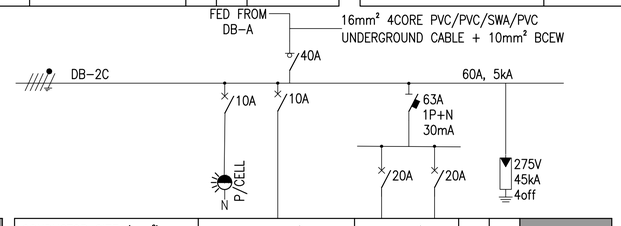
CONDUCTOR SIZE (mm²)	2.5mm²			4mm²						
EARTH WIRE SIZE SIZE (mm²)	2.5mm²			2.5mm²						
CONDUITE/SLEEVE SIZE ø (mm²)	20mm			20mm						
LABEL	EL1	L1	SPARE	P1	P2	P3				25% SPARE
EQUIPMENT	LIGHTS			SOCKET OUTLET						



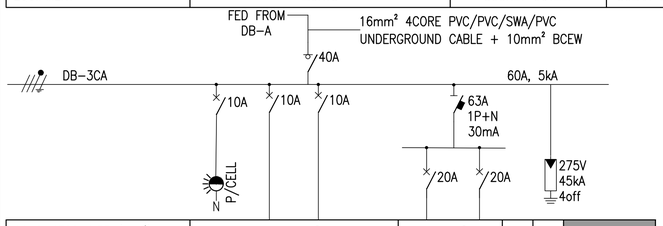
CONDUCTOR SIZE (mm²)	2.5mm²			4mm²						
EARTH WIRE SIZE SIZE (mm²)	2.5mm²			2.5mm²						
CONDUITE/SLEEVE SIZE ø (mm²)	20mm			20mm						
LABEL	EL1	L1	SPARE	P1	P2	P3	P4			25% SPARE
EQUIPMENT	LIGHTS			SOCKET OUTLET						



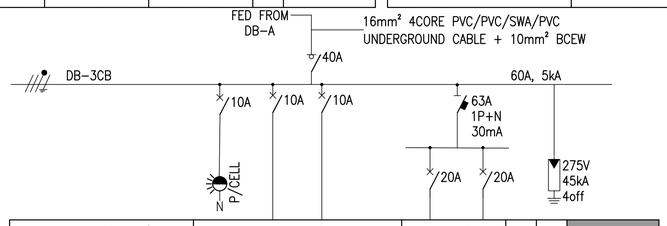
CONDUCTOR SIZE (mm²)	2.5mm²					4mm²			6mm²	6mm²	6mm²		
EARTH WIRE SIZE SIZE (mm²)	2.5mm²					2.5mm²			4mm²	4mm²	4mm²		
CONDUITE/SLEEVE SIZE ø (mm²)	20mm					20mm			20mm	20mm	20mm		
LABEL	EL1	L1	L2	L3	SPARE	P1	P2	P3	SG		EF		CR		25% SPARE
EQUIPMENT	LIGHTS					SOCKET OUTLET			SOLAR GEYSER		EXTRACTION FAN		COLD ROOM		



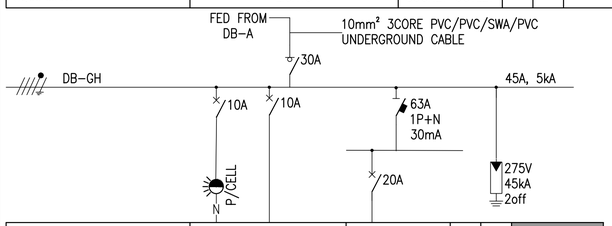
CONDUCTOR SIZE (mm²)	2.5mm²			4mm²						
EARTH WIRE SIZE SIZE (mm²)	2.5mm²			2.5mm²						
CONDUITE/SLEEVE SIZE ø (mm²)	20mm			20mm						
LABEL	EL1	L1		P1	P2					25% SPARE
EQUIPMENT	LIGHTS			SOCKET OUTLET						



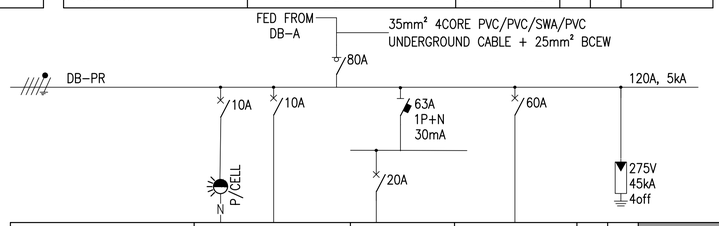
CONDUCTOR SIZE (mm²)	2.5mm²				4mm²					
EARTH WIRE SIZE SIZE (mm²)	2.5mm²				2.5mm²					
CONDUITE/SLEEVE SIZE ø (mm²)	20mm				20mm					
LABEL	EL1	L1	L2		P1	P2				25% SPARE
EQUIPMENT	LIGHTS				SOCKET OUTLET					



CONDUCTOR SIZE (mm²)	2.5mm²				4mm²					
EARTH WIRE SIZE SIZE (mm²)	2.5mm²				2.5mm²					
CONDUITE/SLEEVE SIZE ø (mm²)	20mm				20mm					
LABEL	EL1	L1	L2		P1	P2				25% SPARE
EQUIPMENT	LIGHTS				SOCKET OUTLET					



CONDUCTOR SIZE (mm²)	2.5mm²				4mm²				
EARTH WIRE SIZE SIZE (mm²)	2.5mm²				2.5mm²				
CONDUITE/SLEEVE SIZE ø (mm²)	20mm				20mm				
LABEL	EL1	L1	SPARE	P1					25% SPARE
EQUIPMENT	LIGHTS			SOCKET OUTLET					



CONDUCTOR SIZE (mm²)	2.5mm²				4mm²		16mm²			
EARTH WIRE SIZE SIZE (mm²)	2.5mm²				2.5mm²		10mm²			
CONDUITE/SLEEVE SIZE ø (mm²)	20mm				20mm		50mm			
LABEL	EL1	L1	SPARE	P1			FP			25% SPARE
EQUIPMENT	LIGHTS			SOCKET OUTLET			FIRE PUMP			

SCHEMATIC SYMBOL LIST:

xA xP	MOULDED CASE CIRCUIT BREAKER (xA, rating Amps)(xP, poles)
xA xP	ON LOAD ISOLATOR (xA, rating Amps)(xP, poles)
xA xP xmA	EARTH LEAKAGE (xA, rating Amps) (xP, poles)(xmA, relay value)
xA xP	CONTACTOR (xA, rating Amps) (xP, poles)
xA xP xmA	EARTH LEAKAGE WITH OVERLOAD (xA, rating Amps)(xP, poles) (xmA, relay value)
xkA	3PHASE, NEUTRAL & EARTH BAR (xkA, fault level rating)
xV xkA	SURGE ARRESTOR (xA, rating Amps) (xkA, fault level rating)
	TRANSFORMER

ISSUED FOR TENDER

CLIENT

DEVELOPMENT BANK OF SOUTHERN AFRICA

DBSA Development Bank of Southern Africa

1258 LEVER ROAD
HEADWAY HILL
MIDRAND
1685

www.dbsa.org

REV NO.	DATE	DESCRIPTION
B	2021-11-11	ISSUED FOR TENDER
A	2021-10-19	ISSUED FOR REVIEW

REVISIONS

PROJECT CONSULTANT

PROJECTNEERS

PROJECTNEERS CONSULTING ENGINEERS & PROJECT MANAGERS

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DRAWING CHECKS

DESIGNED BY	DESIGN CHECKED BY	DRAWN BY	DRAWING CHECKED BY
F.MPOFU	B.TSHUMA	B.MDLULI	F.MPOFU

APPROVAL CONSULTANT

F.MPOFU

DATE	PROF REG NO.	
2021-10-15	20140343	THE MASTER HELD AT THE PROJECTNEERS CONSULTING MIDRAND OFFICE BEARS THE ORIGINAL SIGNATURE OF APPROVAL

PROJECT NAME

PROPOSED ADDITIONAL SCHOOL INFRASTRUCTURE, RENOVATIONS AND REFURBISHMENTS AT GOAKGANYA PRIMARY SCHOOL ON PORTION 85 OF PORTION 4 OF THE FARM KLIPGAT No. 249-JQ ON BEHALF OF THE NORTH WEST DEPARTMENT OF EDUCATION (NW DoE)

PROJECT SITE

GOAKGANYA PRIMARY SCHOOL

SHEET TITLE

SINGLE LINE DIAGRAM

DISCIPLINE

ELECTRICAL

CONTRACT NUMBER

RFP268-2019

FILE NUMBER

ZA2020_2003

SCALE

AS INDICATED

DRAWING NUMBER

ORG	STATE	YEAR	PROJ NO	CLIENT	SITE	ROLE	SERIAL NO.	REV	SHEET SIZE
PJN	ZA	2020	2003	DBSA	GPS	ELEC	6400	B	A1