

ELECTRICAL SERVICES DESIGN DRAWINGS

LEGEND	
SYMBOL	DESCRIPTION
	10A 1 GANG 1 WAY SWITCH SCHNEIDER OR APPROVED EQUAL
	10A 2 GANG 1 WAY SWITCH SCHNEIDER OR APPROVED EQUAL
	10A 3 GANG 1 WAY SWITCH SCHNEIDER OR APPROVED EQUAL
	20A DOUBLE POLE SWITCH. SCHNEIDER OR APPROVED EQUAL
	13A, SOCKET OUTLET, SCHNEIDER OR APPROVED EQUAL
	13A 2G, TWIN SOCKET OUTLET, SCHNEIDER OR APPROVED EQUAL
	SINGLE PHASE CONSUMER UNIT. 6-WAYS.63A. ABB OR APPROVED EQUAL
	9W LED CIRCULAR LIGHT FITTING FOR OUTDOOR. 235X35MM V-TAC, OR APPROVED EQUAL
	12W LED CIRCULAR SURFACE MOUNTED LIGHT FITTING. 400MMX 35MM V-TAC OR APPROVED EQUAL
	30W EXTERNAL LED LIGHT FITTING. V-TAC OR APPROVED EQUAL
	ALARM BELL. GENTS OR APPROVED EQUAL
	MEDICAL GAS AREA ALARM PANEL . AMCAREMED OR APPROVED EQUAL
	RCD. ABB OR APPROVED EQUAL
	ALL IN ONE SOLAR LIGHT C/W 60W LED LAMP, MOTION SENSOR, LITHIUM BATTERY, CHARGE CONTROLLER ETC. BLUE CAMEL ENERGY OR APPROVED EQUAL
	150A LV PANEL, TPN C/W METERING & CONTROL INSTRUMENT ABB OR APPROVED EQUAL
	100A MOULD CASE CIRCUIT BREAKER (MCCB), TPN, ABB OR APPROVED EQUAL
	40A MOULD CASE CIRCUIT BREAKER (MCCB), TPN, ABB OR APPROVED EQUAL

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PROJECT:
**PROPOSED CONSTRUCTION OF
 OXYGEN GAS PLANT FACILITY
 IN
 SIX (6) STATES IN NIGERIA**

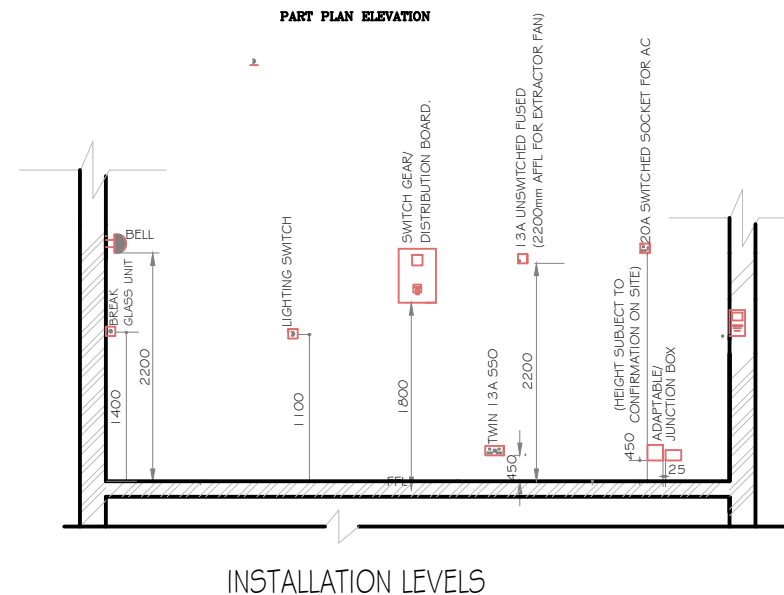
DRAWING TITLE:
GENERAL LEGEND

REVISIONS:			Designed: OZINGWA A	Drawn: MOHP H
N ^o	DATE	DESCRIPTION	Checked: KA	Approved: KA
			Date: APRIL, 2022	SCALE: NT5
			Drawn: N ^o	
			VRBD/UNICEF2022/P05/ELEC00	

SHEET N^o
E/01

GENERAL NOTES ON ELECTRICAL INSTALLATIONS

- 1) LIGHTING CIRCUIT SHALL BE WIRED USING 3X1.5mmsq. SC PVC NOCACO/NIGERCHIN CABLE AND BE PROTECTED IN CIRCUIT WITH 15A MCB EXCEPT WHERE STATED OTHERWISE.
- 2) 13A S.S.O. SHALL BE WIRED IN RING MAINS USING 3x2.5mmsq. SC PVC NOCACO/NIGERCHIN CABLE AND BE PROTECTED IN CIRCUIT WITH 30A MCB EXCEPT WHERE STATED OTHERWISE.
- 3) SUITABLE CASING SHALL BE PROVIDED FOR THE RCD, EBNL UK THE LV PANEL SHALL BE EARTHED AS SHOWN IN THE DESIGN
- 4.) ALL EXTRA LOW VOLTAGE CONDUIT WIREWAYS SHALL BE INSTALLED USING 25mm uPVC EXCEPT WHERE STATED OTHERWISE.
- 5.) SAMPLES OF ALL MATERIALS AND EQUIPMENT SHALL BE APPROVED BY THE ENGINEERS BEFORE FINAL PROCUREMENT AND INSTALLATION.
- 6.) MEDICAL GAS AREA ALARM, SHALL BE INSTALLED USING 25mm uPVC. ALSO CAT6 CABLE AND 4mm STANDARDIZED PIRELLI CABLE INSULATED FIRE RESISTANCE CABLE. ALL MUST BE INSTALLED, TESTED AND AND CERTIFIED WITH THE FIRE SAFETY & STANDARD REGULATIONS
- 7.) ALL CONDUIT PIPES SHALL BE KANO PIPE. 20MM AND 25MM DIA



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PROJECT:

PROPOSED CONSTRUCTION OF
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DRAWING TITLE:

GENERAL NOTES

REVISIONS:

N°	DATE	DESCRIPTION

Designed: EZINGWA A

Drawn: MCHP H

Checked: KA

Approved: KA

Date: APRIL, 2022

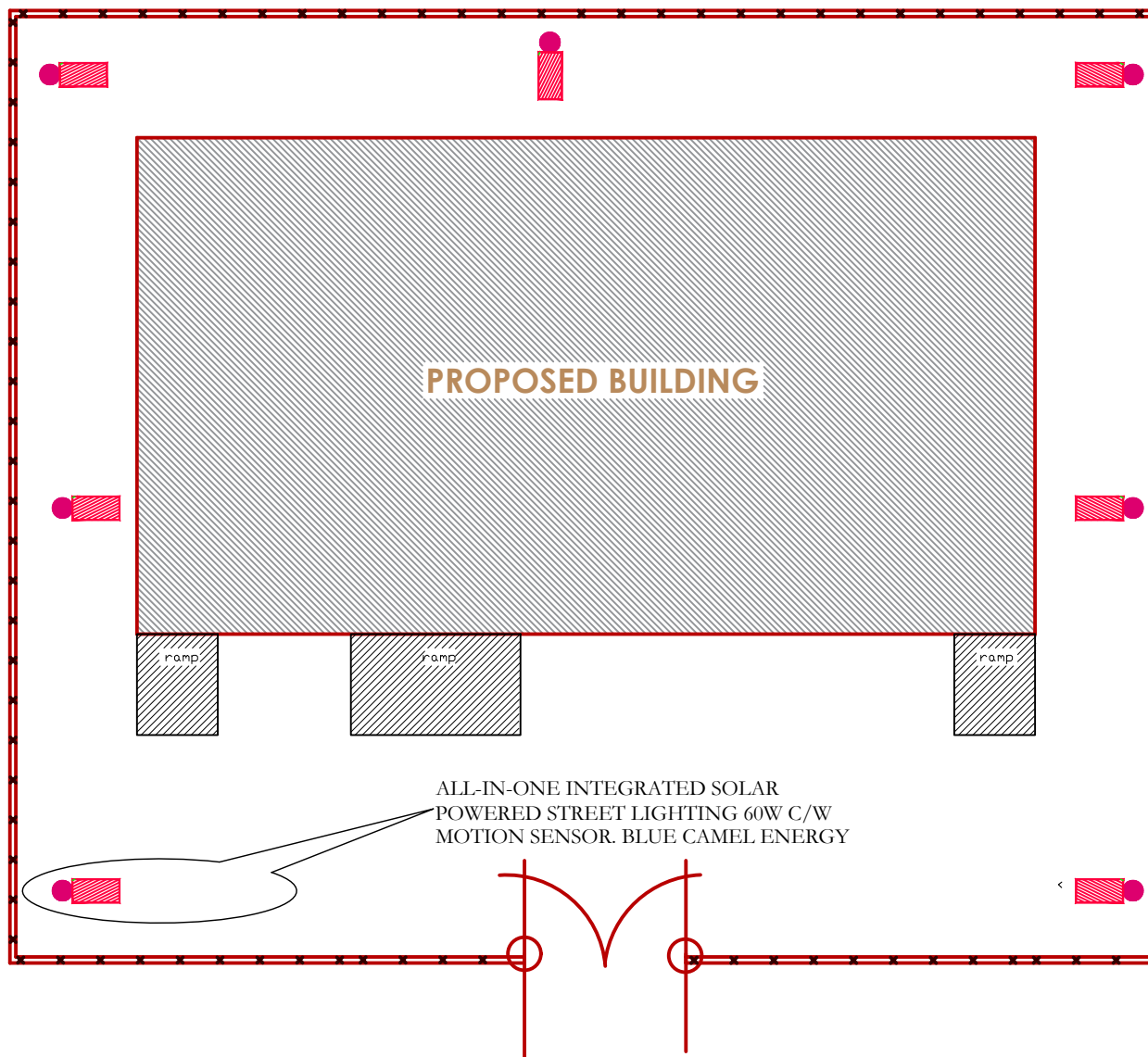
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SHEET N°

E/02



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PROJECT
PROPOSED CONSTRUCTION OF
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DRAWING TITLE:
**SITE LAYOUT
SOLAR LIGHTS**

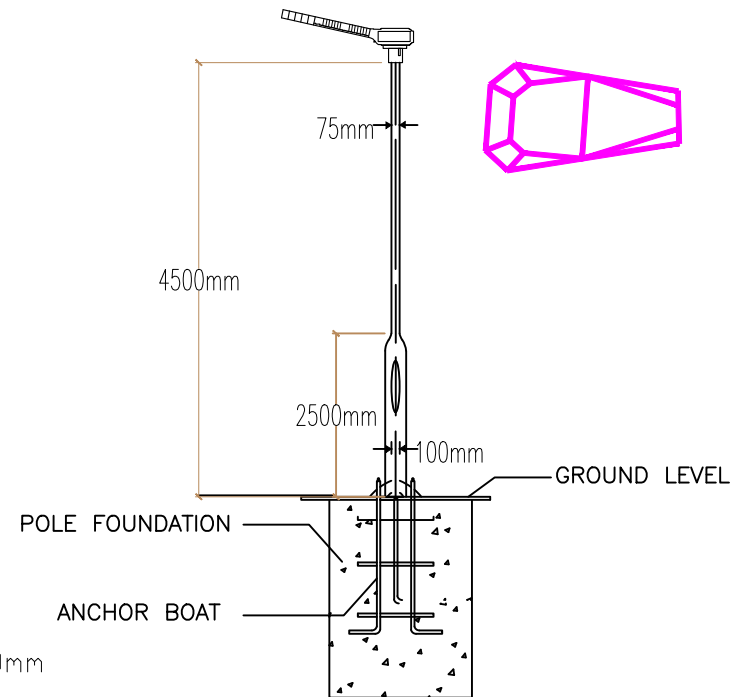
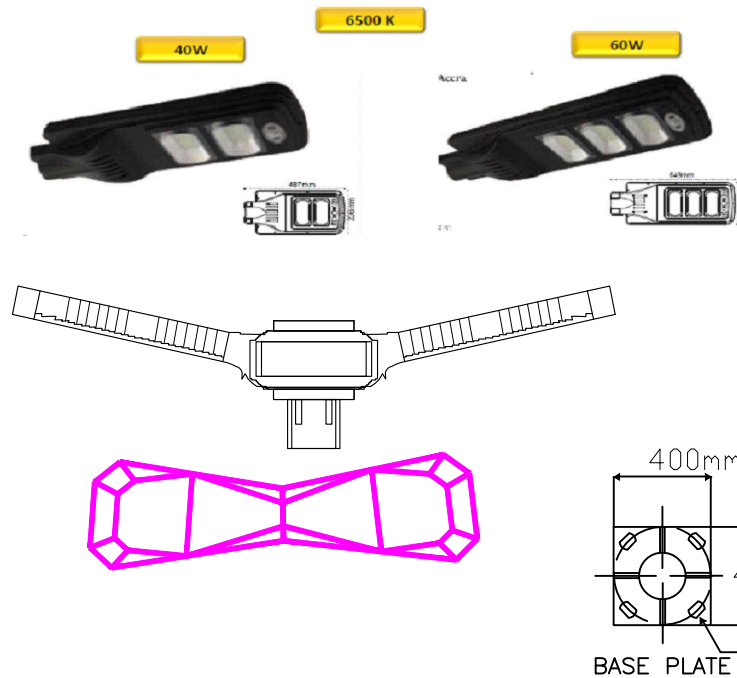
REVISIONS		
N°	DATE	DESCRIPTION

Designed: GZINGWA	Drawn: MOHD H
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Date: APRIL, 2022	SCALE: NTS
Drawn: N°	VRBD/UNICEF2022/P05/ELEC02

SHEET N°
E/03

ALL-IN-ONE INTEGRATED SOLAR POWERED STREET LIGHTING 60W C/W MOTION SENSOR. BLUE CAMEL ENERGY

- Battery and solar panel included
- Remote control
- Lights upto 2 days with the energy it stores during the day.



FOUNDATION DETAILS AND DESIGN SUBJECT
TO STRUCTURAL ENGINEER'S DESIGN AND INSTRUCTION

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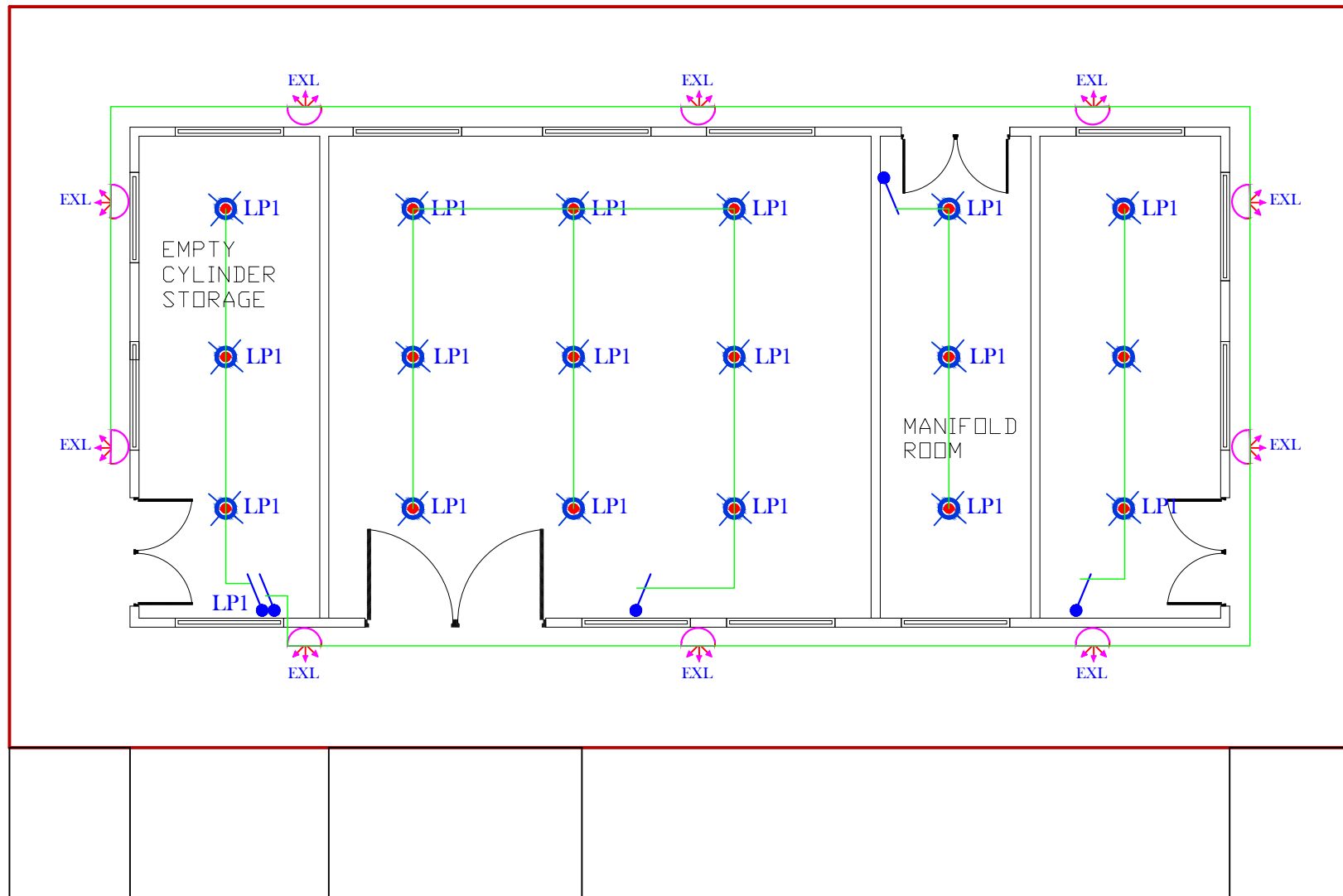
PROJECT:
PROPOSED CONSTRUCTION OF
OXYGEN GAS PLANT FACILITY
IN
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DRAWING TITLE:
SOLAR LIGHT DETAILS

REVISIONS:		
N°	DATE	DESCRIPTION

Prepared: SZINGINA A	Drawn: MOH'D H
Checked: K.A.	Approved: K.A.
Date: APRIL, 2022	SCALE: NTS
Drawing N°: VRBD/UNICEF2022/PO5/ELEC03	

SHEET N°
E/04



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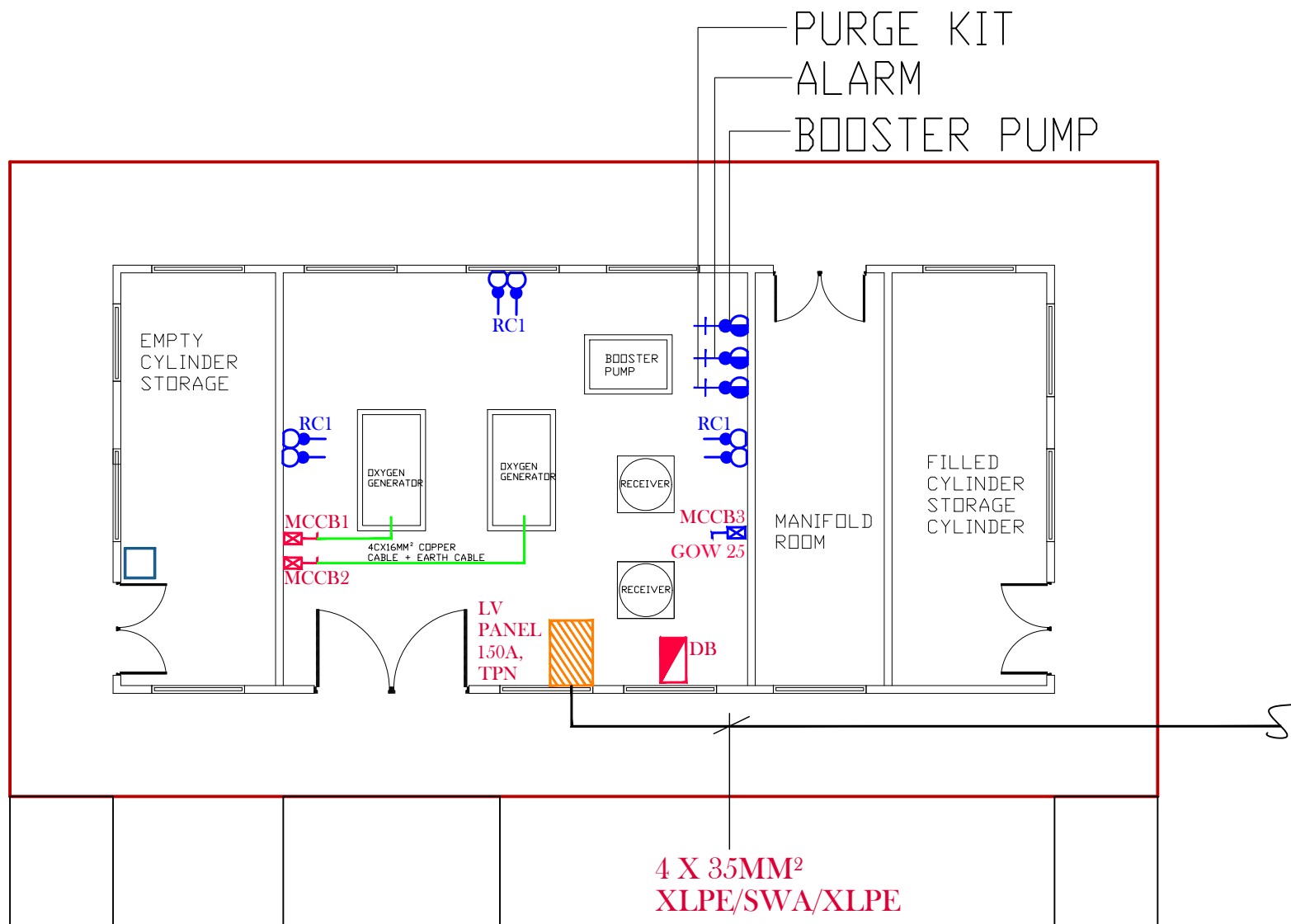
PROJECT:
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DRAWING TITLE:
LIGHTING POINTS

REVISIONS		
N°	DATE	DESCRIPTION

Designed: EZINGBA A	Drawn: MOJO H
Checked: K.A	Approved: K.A
Date: APRIL, 2022	SCALE: NTS
Drawings N°	VRBDIUNICEF2022/P05IELEC04

SHEET N°
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DRAWING TITLE:

GENERAL SOCKETS,
DB & LV PANEL POSITION

REVISIONS		
NO	DATE	DESCRIPTION

Designed: DZINGRA A

Drawn: WCHD H

Checked: K.A

Approved: K.A

Date: APRIL, 2022

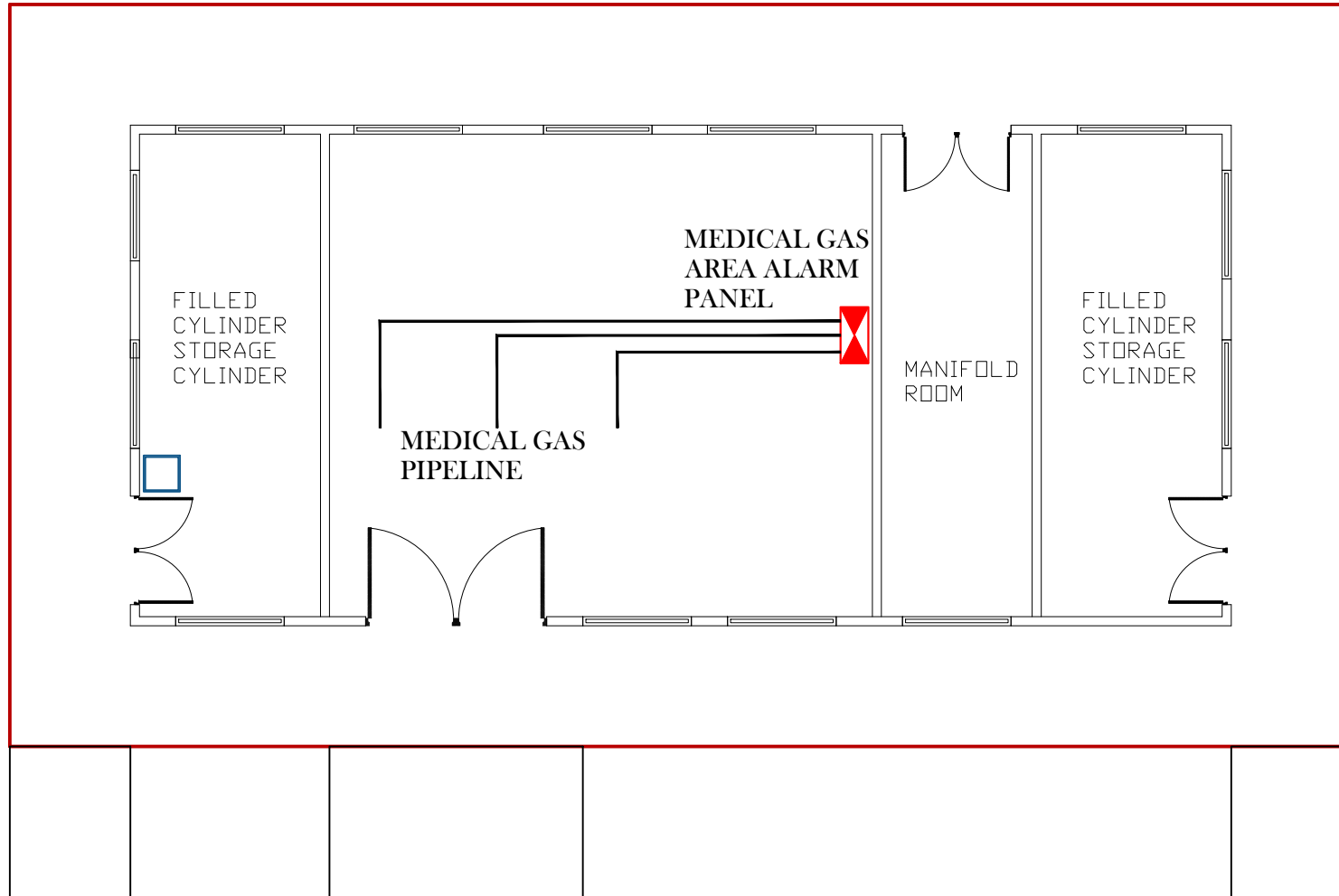
SCALE: NTS

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SHEET N°

E/06



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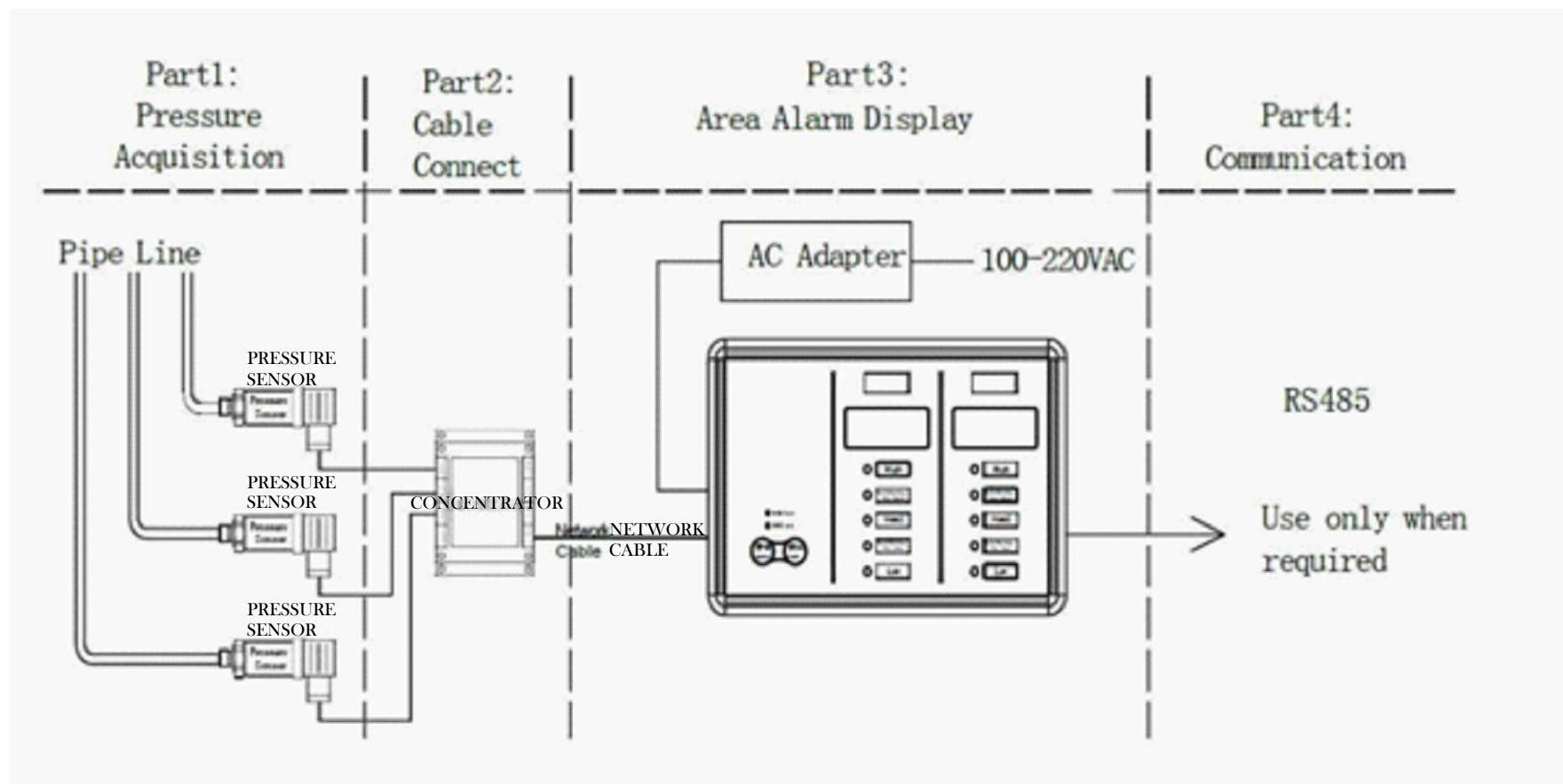
PROJECT:
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DRAWING TITLE:
FIRE ALARM

REVISIONS		
N°	DATE	DESCRIPTION

Designed: DZINGANA A	Drawn: MOHD H
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SHEET N°
E/07



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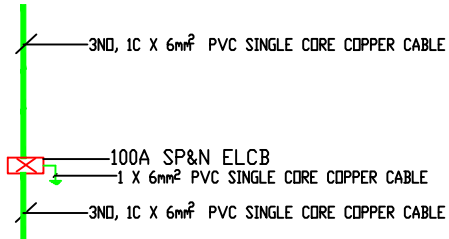
DRAWING TITLE:
FIRE ALARM SCHEMATICS

REVISIONS		
N°	DATE	DESCRIPTION

Designed: EZINGBA A	Drawn: MOH'D H
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Date: APRIL, 2022	SCALE: NTS
Drawing N°: VRBD/UNICEF2022/P05/ELEC07	

SHEET N°
E/08

FROM NEAREST POWER SOURCE



100A 8-WAYS SP&N CONSUMER UNIT									
	LP1	EXL	RC1	PUMP	ALARM	PURGE KIT	SPARE	SPARE	TOTAL (W)
MCB RATING	5A	10A	30A	20A	20A	20A			
CIRCUIT N°	1	2	3	4	5	6	7	8	
PEAK LOAD (W)	216	300	1800	30	50	15			
DIVERSITY FACTOR	1.0	1.0	0.6	1.0	1.0	1.0			
LOAD (W)	216	300	1080	30	50	15			
FINAL SUB-CIRCUIT	LIGHTING CIRCUIT		13A SOCKETS OUTLET	20A DOUBLE POLE SWITCH OUTLET			SPARE		1,691
CABLE SIZE	3 X 15mm ² PVC S/C		3x25mm ² PVC IN RING MAIN CIRCUIT	3ND, 1C x 6mm ² PVC CONNECTED IN RADIAL CIRCUIT					

MAXIMUM DEMAND = 1,691W PF = 0.8
CURRENT = 9.6A

CONSUMER UNIT LAYOUT FOR OXYGEN PLANT

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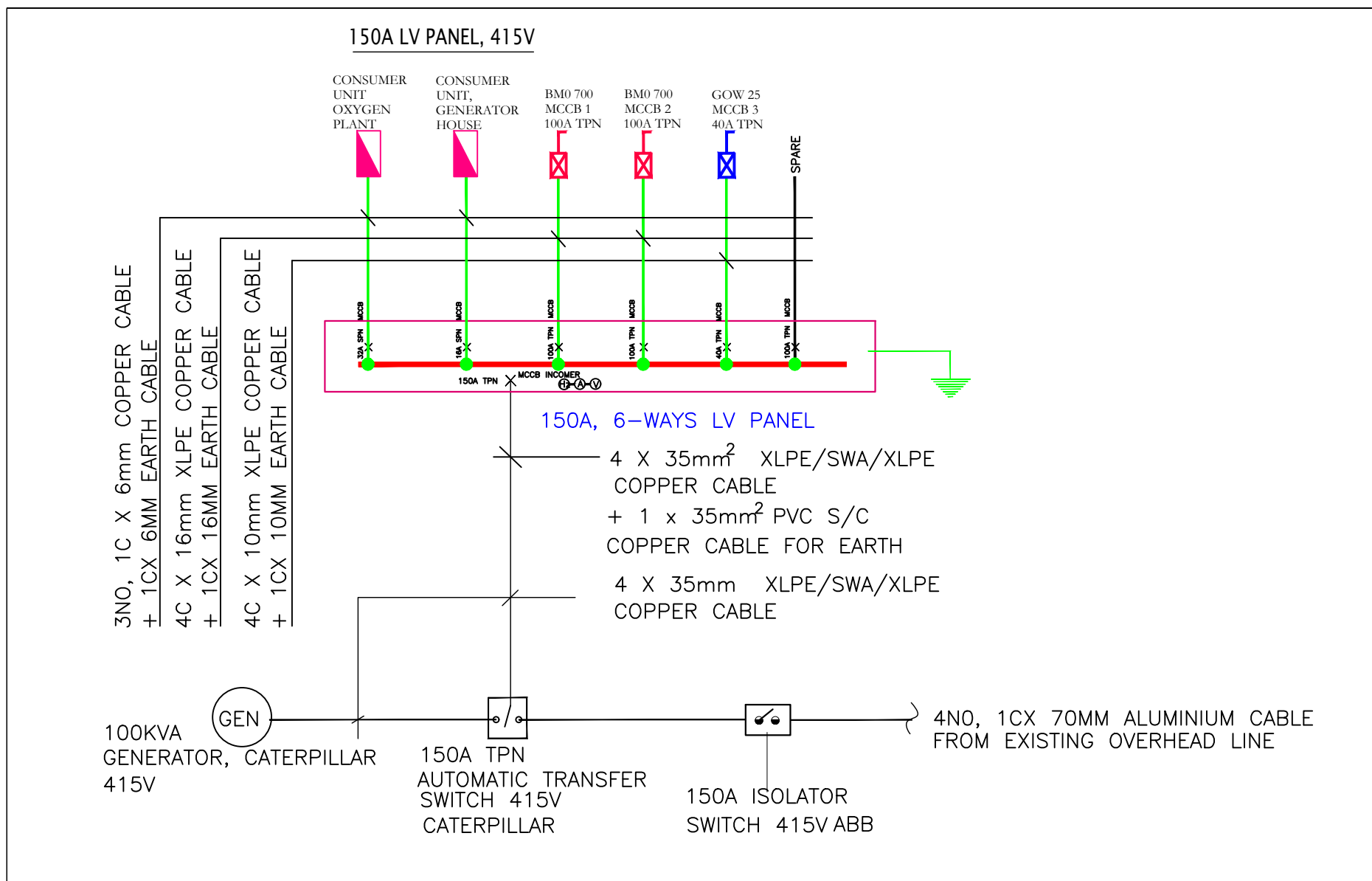
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DRAWING TITLE:
DB SCHEMATICS

REVISIONS:		
N°	DATE	DESCRIPTION

Designed: DZINGNA A	Drawn: MOHD H
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Drawing N° VRBD/UNICEF2022/P05/ELEC08	

SHEET N°
E/09



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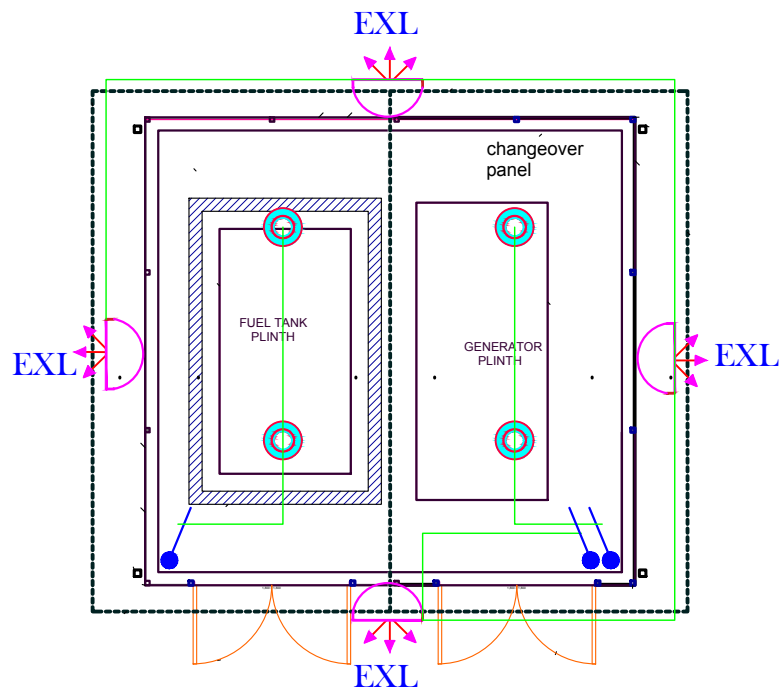
PROJECT:
PROPOSED CONSTRUCTION OF
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IN
SIX (6) STATES IN NIGERIA

DRAWING TITLE:
LV PANEL SCHEMATICS

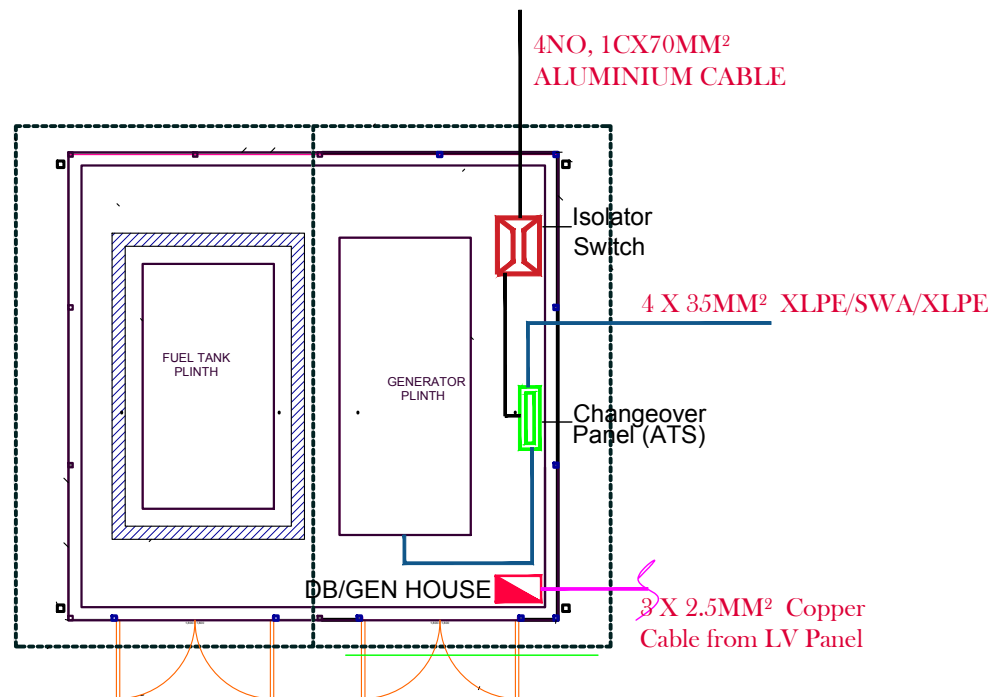
REVISIONS	
N°	DESCRIPTION

Designed: FZINGWA A	Drawn: MOYD H
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Date: APRIL, 2022	SCALE: NTS
Drawn: N°	VRBD/UNICEF2022/P05/ELEC09

SHEET N°
E/10



Generator House Lighting



Generator House
Gear Switches & Power Cables

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PROJECT:
PROPOSED CONSTRUCTION OF
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DRAWING TITLE:
GENERATOR HOUSE
LIGHTING, SWITCH GEAR
POSITIONS & POWER
CABLES

REVISIONS:		
N°	DATE	DESCRIPTION

Designed: EZINGBA A	Drawn: MOYI H
Checked: KA	Approved: KA
Date: APRIL, 2022	SCALE: NTS
Drawn: N°	
VRBD/UNICEF2022/P05/ELEC10	

SHEET N°
E/11