REPUBLIC OF LEBANON COUNCIL

FOR DEVELOPMENT & RECONSTRUCTION

AKKAR SAHLEH GOVERNMENTAL HOSPITAL

ELECTRICAL DRAWINGS
DETAILED FINAL DESIGN - PHASE 5

ETEC

JULY 2026

LIST OF ELECTRICAL DRAWINGS

DWG NO.	TITLE	REVISION	SCALE
	AKKAR SAHLEH GOVERNMENTAL HOSPITAL		
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E-16	ROOF FLOOR PLAN - LIGHTING & SMALL POWER LAYOUT	-	1/100
E-17	BASEMENT FLOOR PLAN - SMALL POWER LAYOUT	-	1/100
E-18	GROUND FLOOR PLAN - SMALL POWER LAYOUT	-	1/100
E-19	FIRST FLOOR PLAN - SMALL POWER LAYOUT	-	1/100
E-20	BASEMENT FLOOR PLAN - POWER LAYOUT	-	1/100
E-21	GROUND FLOOR PLAN - POWER LAYOUT	-	1/100
E-22	FIRST FLOOR PLAN - POWER LAYOUT	-	1/100
E-23	ROOF PLAN - POWER LAYOUT	-	1/100
E-24	BASEMENT FLOOR PLAN - DATA, TELEPHONE, TV & CLOCK SYSTEMS LAYOUT	-	1/100
E-25	GROUND FLOOR PLAN - DATA, TELEPHONE, TV & CLOCK SYSTEMS LAYOUT	-	1/100
E-26	FIRST FLOOR PLAN - DATA, TELEPHONE, TV & CLOCK SYSTEMS LAYOUT	-	1/100
E-27	BASEMENT FLOOR PLAN - FIRE ALARM, PAVE & CCTV SYSTEMS LAYOUT	-	1/100
E-28	GROUND FLOOR PLAN - FIRE ALARM, PAVE & CCTV SYSTEMS LAYOUT	-	1/100
E-29	FIRST FLOOR PLAN - FIRE ALARM, PAVE & CCTV SYSTEMS LAYOUT	-	1/100
E-30	ROOF FLOOR PLAN - LOW CURRENT SYSTEMS LAYOUT	-	1/100
E-31	BASEMENT FLOOR PLAN - NURSE CALL & ACCESS CONTROL SYSTEMS LAYOUT	-	1/100
E-32	GROUND FLOOR PLAN - NURSE CALL, ACCESS CONTROL & BMS FOR OPERATING ROOMS SYSTEMS LAYOUT	-	1/100
E-33	FIRST FLOOR PLAN - NURSE CALL & ACCESS CONTROL SYSTEMS LAYOUT	-	1/100
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E-37	SITE PLAN - EXTERNAL POWER & LOW CURRENT LAYOUT	-	1/250
E-38	GUARD ROOM - ELECTRICAL LAYOUTS (1/2)	-	1/100
E-39	GUARD ROOM - ELECTRICAL LAYOUTS (2/2)	-	1/50
E-40	TYPICAL DETAILS (1/5)	-	N.T.S.
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E-43	TYPICAL DETAILS (4/5)	-	N.T.S.
E-44	TYPICAL DETAILS (5/5)	-	N.T.S.

GENERAL NOTES

1- THE LAYOUT DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT OR SPECIALIST DRAWINGS AND SPECIFICATIONS.

2- DO NOT SCALE FROM THE LAYOUT DRAWING, WORK ACCORDING TO ARCHITECTURAL OR ELECTRICAL DETAILS UNLESS OTHERWISE INDICATED.

3- THE SIZE OF CONDUITS IS IN GENERAL NOT SHOWN ON THE DRAWINGS. THE SIZE OF ALL CONDUITS SHALL BE SELECTED IN ACCORDANCE WITH THE "REGULATIONS" AND AS A FUNCTION OF THE NUMBER & SIZE OF THE INDICATED CONDUCTORS, ALL CONDUITS SHALL BE AS SPECIFIED WITH A MINIMUM SIZE OF ø20mm UNLESS OTHERWISE INDICATED.

4- CONDUCTORS FOR LIGHTING CIRCUITS SHALL BE 2.5mm2 & PROTECTED BY 16 AMP. CIRCUIT BREAKERS UNLESS OTHERWISE INDICATED.

5- CONDUCTORS FOR SINGLE PHASE SOCKET OUTLETS CIRCUITS SHALL BE 4mm2 & PROTECTED BY 20 AMP. CIRCUIT BREAKERS UNLESS OTHERWISE INDICATED.

6- ALL LIGHTING SWITCHES AND SOCKET OUTLETS SHALL BE INSTALLED AT 120cm & 45cm ABOVE F.F.L. RESPECTIVELY LIGHTING SWITCHES SHALL BE MOUNTED INSIDE THE ROOM ON THE SIDE OF THE DOOR HANDLE WITHIN 15 TO 20cm FROM DOOR FRAME UNLESS OTHERWISE INDICATED ON THE ID DRAWINGS.

7- ALL TELEPHONE AND DATA OUTLETS SHALL BE INSTALLED AT 45cm ABOVE F.F.L. UNLESS OTHERWISE INDICATED.

8- ALL PANELBOARDS SHALL BE INSTALLED WITH TOP ENDS AT 180cm ABOVE F.F.L. UNLESS OTHERWISE INDICATED.

9- THE DRAWINGS SHOWS APPROXIMATE POSITIONS ONLY. THE EXACT POSITIONS SHALL BE DETERMINED ON SITE IN CONJUNCTION WITH THE ELECTRICAL CLERK OF WORKS.

10- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING APPROVAL FOR THE DESIGN FROM THE RELEVANT LOCAL AUTHORITIES AND ALSO FOR THE CO-ORDINATION DURING CONSTRUCTION.

11- ALL PANEL BOARDS AND ISOLATORS SHALL BE OF SUITABLE RATING AS INCOMERS PER PUBLIC REGULATIONS AND REQUIREMENTS.

12- SEPARATE GREEN YELLOW PVC INSULATED COPPER EARTH CONTINUITY CONDUCTOR WITH SIZE AS INDICATED OR AS PER PUBLIC REGULATION AND REQUIREMENT SHALL BE PROVIDED FOR ALL THE FEEDERS.

13- ALL MCBS/MCCBS/CONTACTORS/RESIDUAL CURRENT DEVICES ETC. SHALL BE CAPABLE OF CARRYING CURRENT INDICATED AT AN AMBIENT TEMP OF 50 °C.

14- ALL EQUIPMENT MOTORS SHALL BE PROVIDED WITH LOCAL ISOLATING SWITCHES/EMERGENCY LOCK-OFF STOP BUTTON.

15- ALL CONDUCTIVE BUT NON CURRENT CARRYING INSTALLATIONS SUCH AS WATER PIPES, TRUCKING, TRAYS, SHEET STEEL WORK ETC. SHALL BE EARTH BONDED USING 35mm2 ECC TERMINATED WITH COPPER LUGS UNLESS OTHERWISE INIDCATED.

16- ALL SINGLE CORE WIRES SHALL BE COLOR CODED THROUGH THEIR ENTIRE LENGTH TO INDICATE THE PHASE TO WHICH THEY ARE CONNECTED.

17- ALL OPENINGS IN FIRE RATED WALLS/SLABS SHALL BE FILLED WITH SMOKE/FLAME PROOF FIRE BARRIERS.

18- ALL THE ABOVE NOTES AND THOSE GIVEN ON ANY OTHER DRAWINGS SHALL FORM PART OF THIS CONTRACT WHETHER CLARIFIED IN THE SPECIFICATION OR NOT.

19- ALL ELECTRICAL POINTS SHOULD BE READ IN CONJUNCTION WITH THE ID DRAWINGS. SOME DETAILS ARE NOT SHOWN ON THE ELECTRICAL DRAWINGS AND ARE INCLUDED IN THE ID DRAWINGS SUCH AS HEIGHT OF WALL LIGHTING. ANY MISSING POINT BUT SHOWN ON THE ID DRAWINGS SHOULD BE INCLUDED IN THE SCOPE OF WORK.

20- THE QUANTITY OF THE LIGHTING FIXTURES PROVIDED WITH BATTERY PACK TO ACHIEVE 10.8LUX IN CASE OF EMERGENCY BASED ON THE SELECTED LUMINAIRES.

21- ELECTRICAL CABLE TRAYS SHOWN ARE INDICATIVE SUBJECT TO CONTRACTOR VERIFICATION FOR THE SIZE BASED ON THE APPORVED USED CABLES. COVERED CABLE TRAY WILL BE USED FOR BUILDING WIRES AND THE CONTROL WIRES OF LIGHTING CONTROL SYSTEM.

22- UNLESS OTHERWISE INDICATED ALL COVERED CABLE TRAY FOR CONTROL CABLE SHALL BE UNPERFORATED.

23- THERE SHALL BE A MINIMUM OF ONE PULL BOX FOR EVERY 25m OF STRAIGHT EMPTY CONDUIT AND/OR ONE PULL BOX FOR MORE THAN TWO 90° BENDS OR LESSER BENDS TOTALING 180° IN A CONDUIT RUN.

24- ALL A/C PANELS MAIN BREAKERS SHALL BE PROVIDED WITH CONTACTORS CONTROLLED BY FACP (IN FAIL SAFE OPERATION).

25- ALL DEVICES IN TECHNICAL ROOMS AND OUTDOOR SHALL BE WEATHERPROOF.

GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

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PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

LIST OF DRAWINGS, GENERAL NOTES & ABBREVIATIONS

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E01
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	NTS
DRAWING NO.:	E01			REVISION	00

SYMBOLS	DESCRIPTION
ELECTRICAL OUTLETS	
	ELECTRICAL OUTLET BOX FOR POWER OF ACCESS CONTROL UNIT
	ELECTRICAL OUTLET BOX FOR GENERAL PURPOSE
M	ELECTRICAL OUTLET BOX FOR POWER OF MOTORIZED DOORS
J	JUNCTION BOX
	ELECTRICAL OUTLET BOX FOR INSECT KILLER, AT CEILING LEVEL
xA	ISOLATING SWITCH SINGLE PHASE 220V, (NEMA 1), (x=AMPERE RATING)
xA	ISOLATING SWITCH THREE PHASE 380V, (NEMA 1), (x=AMPERE RATING)
xA	ISOLATING SWITCH SINGLE PHASE 220V, (NEMA 3), WEATHER PROOF (x=AMPERE RATING)
xA	ISOLATING SWITCH THREE PHASE 380V, (NEMA 3), WEATHER PROOF (x=AMPERE RATING)
WH	ELECTRICAL OUTLET FOR WATER HEATER
	ELECTRICAL OUTLET FOR CEILING SURGICAL LIGHT
BHU	BED HEAD UNIT
BHU	BED UNIT FOR ICU
SOCKET OUTLETS	
	SINGLE PHASE SOCKET, 13A, 220V
EP	SINGLE PHASE SOCKET, 13A, 220V, EXPLOSION PROOF
	SINGLE PHASE SWITCHED SOCKET, 13A, 220V, FOR PATIENT MOTORIZED BED
	SINGLE PHASE DUPLEX SOCKET, 13A, 220V
TV	SINGLE PHASE SOCKET, 13A, 230V, AT HIGH LEVEL UNLESS OTHERWISE INDICATED
	SINGLE PHASE DUPLEX SOCKET, 13A, 220V, FLOOR MOUNTED
	SINGLE PHASE SOCKET, 13A, 220V, WEATHER PROOF
	SINGLE PHASE DUPLEX SOCKET, 13A, 220V, WEATHER PROOF
	SINGLE PHASE SWITCHED POWER SOCKET, 20A, 220V
	SINGLE PHASE SWITCHED POWER SOCKET, 20A, 220V, WEATHER PROOF
	SINGLE PHASE SWITCHED POWER SOCKET, 20A, 220V, FLOOR MOUNTED
	SINGLE PHASE SOCKET, 16A, 220V, WITH SHUTTERS, FED FROM UPS
	SINGLE PHASE DUPLEX SOCKET, 16A, 220V, WITH SHUTTERS, FED FROM UPS
	SINGLE PHASE SOCKET, 16A, 220V, WITH SHUTTERS, FED FROM UPS, FLOOR MOUNTED
	SINGLE PHASE DUPLEX SOCKET, 16A, 220V, WITH SHUTTERS, FED FROM UPS, FLOOR MOUNTED
	SINGLE PHASE SOCKET, 16A, 220V, WITH SHUTTERS, FED FROM UPS, WEATHER PROOF
	SINGLE PHASE DUPLEX SOCKET, 16A, 220V, WITH SHUTTERS, FED FROM UPS, WEATHER PROOF
	SINGLE PHASE SOCKET, 16A, 220V, WITH SHUTTERS, FED FROM UPS, CEILING MOUNTED
	SINGLE PHASE DUPLEX SOCKET, 16A, 220V, WITH SHUTTERS, FED FROM UPS, CEILING MOUNTED
	SINGLE PHASE DUPLEX SOCKET, 16A, 220V, WITH SHUTTERS, FED FROM UPS, WEATHER PROOF, CEILING MOUNTED IN BHU
	SINGLE PHASE SOCKET, 20A, 220V, FOR KITCHEN EQUIPMENT
	SINGLE PHASE SOCKET, 20A, 220V, FOR KITCHEN EQUIPMENT AT CEILING LEVEL
	THREE PHASE SOCKET, 32A, 380V
4U	BOX OF 4 SINGLE PHASE SOCKETS, 16A, 220V, WITH SHUTTERS, FED FROM UPS, CEILING MOUNTED
CLOCK SYSTEM	
	CLOCK
CSP	CLOCK SYSTEM PULL BOX
MCSP	MAIN CLOCK SYSTEM PANEL

SYMBOLS	DESCRIPTION
PANELS & ACCESSORIES	
	SECONDARY DISTRIBUTION BOARD
MDB	MAIN DISTRIBUTION BOARD
SMDB	SUB MAIN DISTRIBUTION BOARD
ECCP	EMERGENCY CENTRAL CONTROL PANEL
ECCPR	EMERGENCY CENTRAL CONTROL PANEL REPEATER
LCP	LIGHTING CONTROL PANEL
	CABLE TRAY FOR POWER WITH COVER
	CABLE TRAY FOR POWER
	DISCONNECT SWITCH
	CIRCUIT BREAKER
	FUSE
	COMBINED VOLTAGE AND CURRENT SURGE ARRESTER
	CONTACTOR
A	AMMETER
V	VOLTMETER
VS	VOLTAGE SELECTOR
	INDICATING LAMP
UPS	UNINTERRUPTIBLE POWER SUPPLY
	TRANSFORMER
	POWER BUSBAR
	CURRENT TRANSFORMER
ATS	AUTOMATIC TRANSFER SWITCH
EARTHING SYSTEM	
	EARTH PIT
	EARTH BAR
	THERMOWELD T-JOINT
	THERMOWELD T-JOINT TURNED DOWN FOR DOWN CONDUCTION
	BONDING TO METALLIC STRUCTURE AND CABLE TRAYS
	BONDING TO EQUIPMENT
	LIGHTNING ROD
	COPPER BOND GROUND ROD
	COPPER BOND GROUND ROD WITH EARTH PIT
SWITCHES	
a,b...	16A, 220V, ONE WAY SWITCH, FLUSH MOUNTED. (NUMBER OF LETTERS = NUMBER OF GANGS)
WP a,b...	16A, 220V, ONE WAY SWITCH, SURFACE MOUNTED, WEATHER PROOF. (NUMBER OF LETTERS = NUMBER OF GANGS)
EP a,b...	16A, 220V, ONE WAY SWITCH, SURFACE MOUNTED, EXPLOSION PROOF. (NUMBER OF LETTERS = NUMBER OF GANGS)
a,b...	16A, 220V, TWO WAY SWITCH, FLUSH MOUNTED. (NUMBER OF LETTERS = NUMBER OF GANGS)
a,b...	16A, 220V, INTERMEDIATE SWITCH, FLUSH MOUNTED. (NUMBER OF LETTERS = NUMBER OF GANGS)
	16A, 220V, ONE WAY SWITCH WITH ILLUMINATED LIGHT FOR WATER HEATER
	16A, 220V, PUSH BUTTON, FLUSH MOUNTED
	16A, 220V, EMERGENCY PUSH BUTTON FOR POWER CUT-OFF OF MRI MACHINE
xA	220V, DOUBLE POLE SWITCH (x=AMPERE RATING)
MS	MOTION SENSOR

SYMBOLS	DESCRIPTION
DATA / TELEPHONE SYSTEM	
	RJ45 CAT6 VOICE OUTLET
	RJ45 CAT6 VOICE OUTLET, WEATERPROOF
	RJ45 CAT6 DATA OUTLET
WP	RJ45 CAT6 DATA OUTLET, WEATERPROOF
	RJ45 CAT6 DATA OUTLET, FLOOR MOUNTED
B	RJ45 CAT6 DATA OUTLET, IN BED HEAD UNIT
	RJ45 CAT6 DATA OUTLET, CEILING MOUNTED IN BED UNIT
D	RJ45 CAT6 DOUBLE DATA OUTLET, CEILING MOUNTED
DTC	DATA & TELEPHONE CABINET
CDS	CCTV DATA SWITCH
TELEVISION SYSTEM	
TV	TELEVISION OUTLET
TV	TELEVISION SPLITTER
CCTV SYSTEM	
NVR	NETWORK VIDEO RECORDER
	CCTV COMPUTER
	CAMERA
	WEATHER PROOF CAMERA
AUDIO SYSTEM	
S	CEILING MOUNTED SPEAKER, RECESSED
DAU	DISTRIBUTED AMPLIFIER UNIT
ACU	AUDIO CONTROL UNIT
RA	RACK AMPLIFIER
A/V	AUDIO/VIDEO JACK
FIRE ALARM SYSTEM	
S	SMOKE DETECTOR
H	HEAT DETECTOR
SH	HEAT SMOKE DETECTOR
BG	MANUAL STATION
CM	CONTROL MODULE
MM	MONITOR MODULE
	STANDARD ALARM BELL 87 dBA @ 1 m
SL	STROBE LIGHT
DH	DOOR HOLDER
DH	DOOR HOLDER FLOOR MOUNTED
FACP	FIRE ALARM CONTROL PANEL
FARP	FIRE ALARM REPEATER CONTROL PANEL
BMS	BUILDING MANAGEMENT SYSTEM

SYMBOLS	
NURSE CALL SYSTEM	
NC	NURSE CALL STATION
PC	PULL CORD EMERGENCY CALL
R	RESET UNIT WITH REPEAT LAMP
CP	CALL POINT IN BED HEAD UNIT
EM	EMERGENCY CALL POINT
	ONE WAY DIRECTION LAMP
	TWO WAY DIRECTION LAMP
	THREE COLORS LAMP REPEAT PATIENT CALL, WALL MOUNTED WITH BUILT IN ROOM CONTROLER
	ANNUNCIATOR
DC	DIGITAL CONTROL
MNS	MASTER NURSE CALL STATION
ACCESS CONTROL SYSTEM	
CU	ACCESS CONTROL UNIT
	ACCESS CONTROL PROXIMITY CARD READER
	MAGNETIC DOOR LOCK WITH BUILT IN DOOR CONTACT
	ELECTRICAL DOOR LOCK
	OPEN/CLOSE PUSH BUTTON, MOUNTED AT ELBOW LEVEL, EASY TO ACTIVATE BY THE ELBOW
INTERCOM	
MI	MAIN INTERPHONE STATION
INT	INTERPHONE STATION
INFRASTRUCTURE	
	LOW CURRENT MANHOLE
	2 WAY 100mm DUCT BANK FOR SCADA AND SECURITY SYSTEMS.
	ELECTRICAL LOW VOLTAGE MANHOLE
	LOW VOLTAGE DUCT BANK
	MEDIUM VOLTAGE MANHOLE
	MEDIUM VOLTAGE DUCT BANK

GENERAL NOTES

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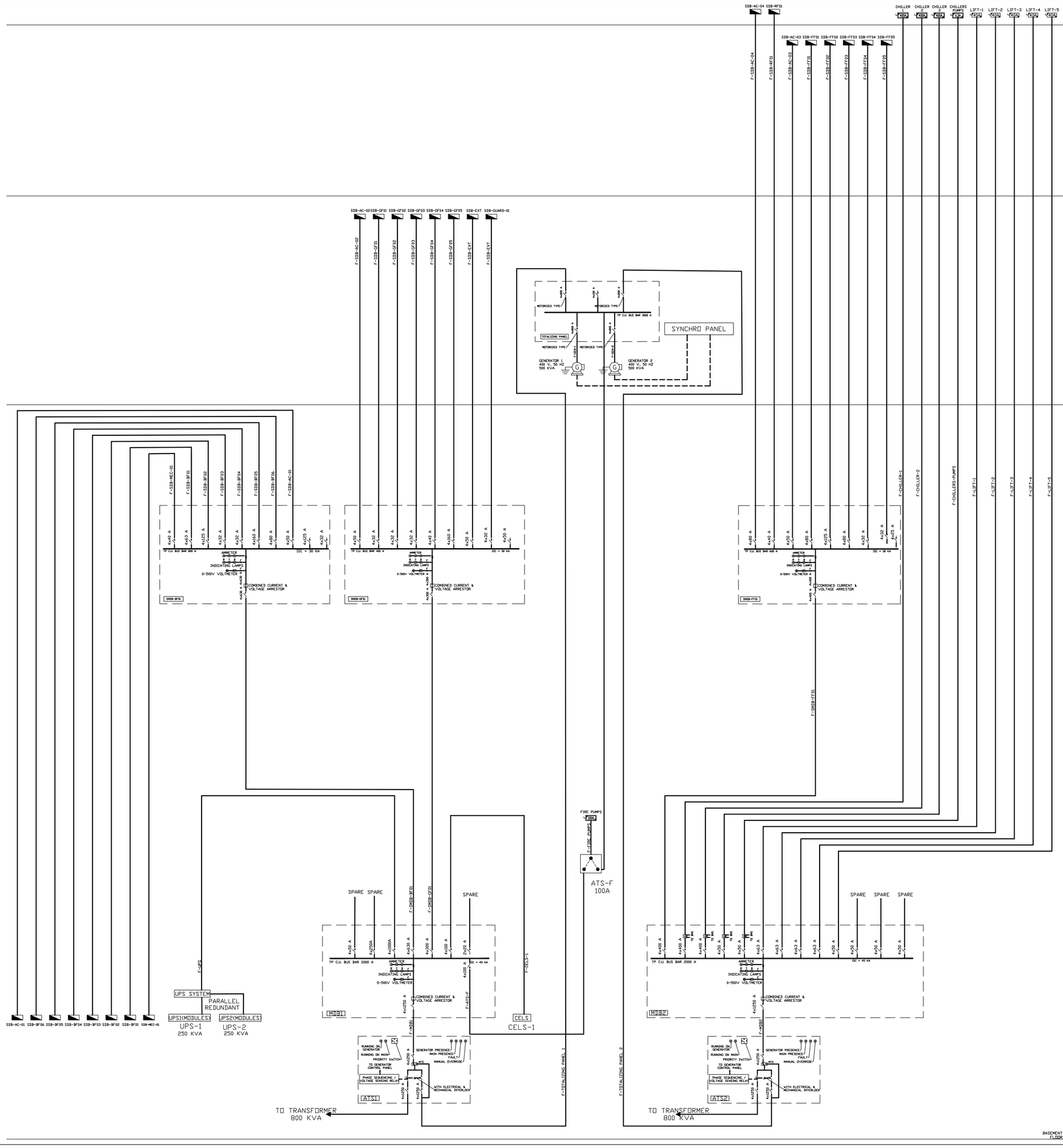
PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

LEGEND

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E02
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	NTS
DRAWING NO.:	E02			REVISION	00



GENERAL NOTES

The UPS system shall be engineered for hot-swappable power scalability, allowing to expand the capacity by adding power modules without turning off the system or dropping the critical load. (shall be similar to Socomec Modulus XM or approved equal).

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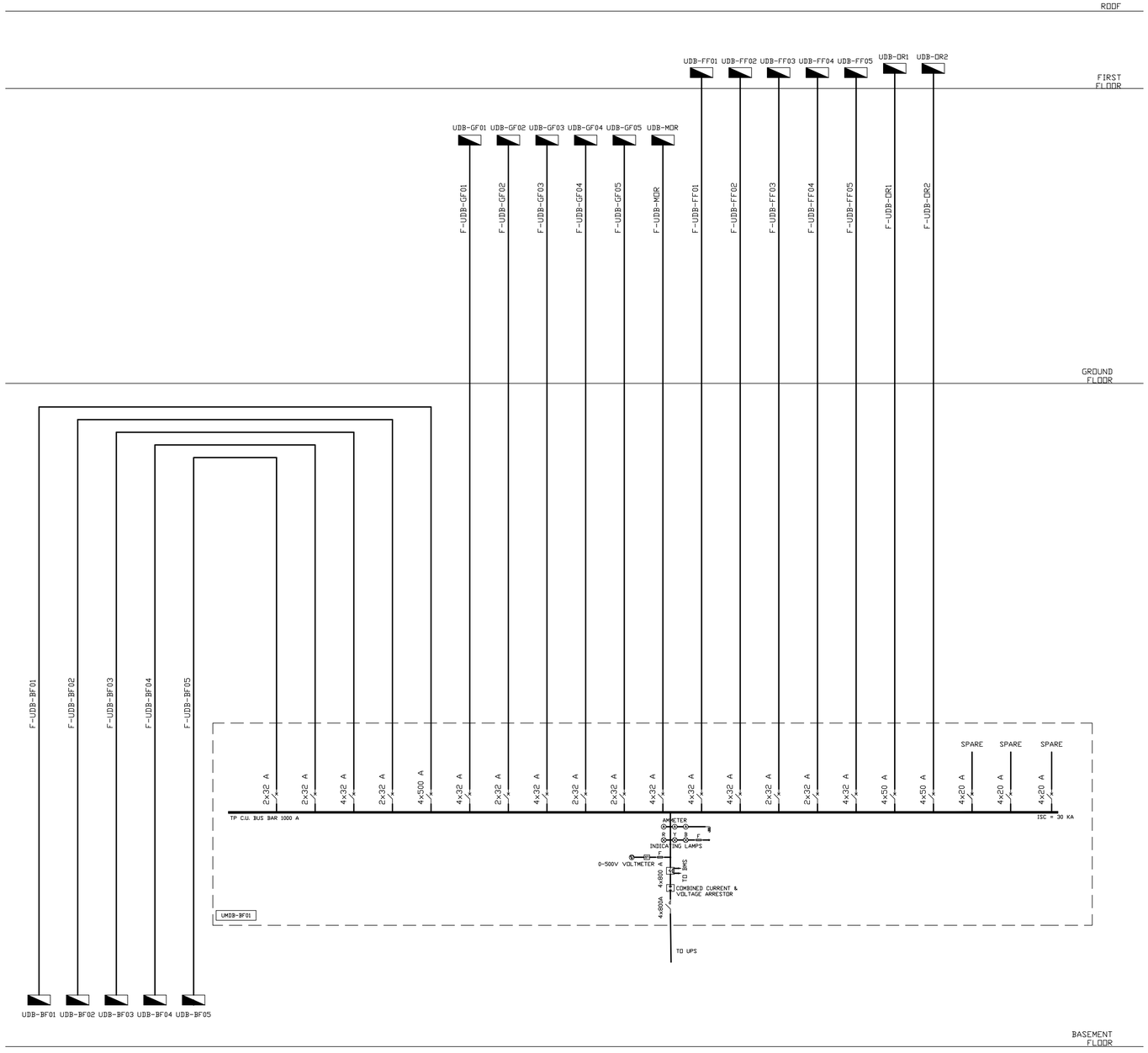
PROJECT:

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PHASE 5

TITLE:

POWER SINGLE LINE DIAGRAM
1/2

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E03
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	NTS
DRAWING NO.:	E03			REVISION	00



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PROJECT:

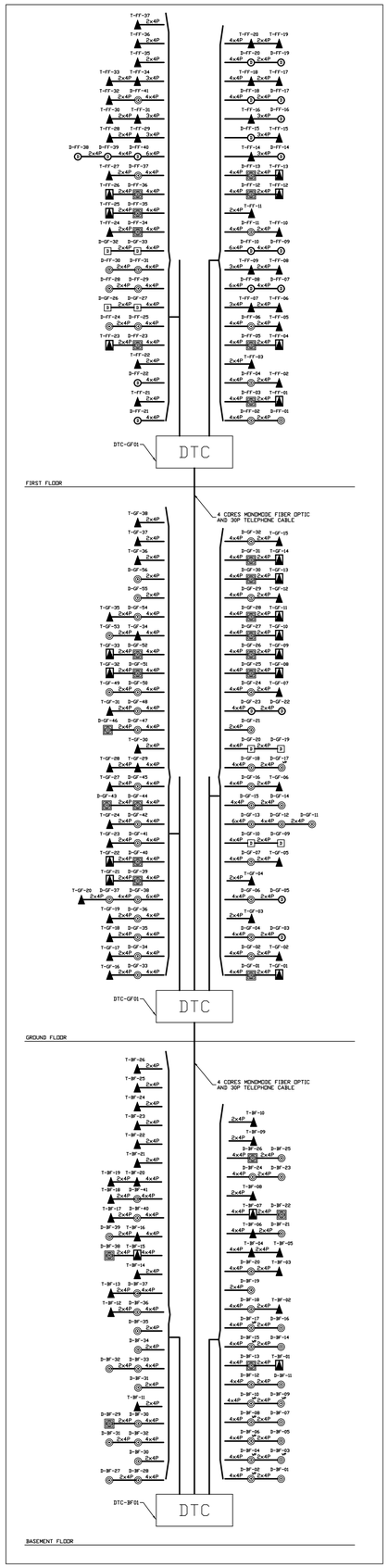
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DETAILED FINAL DESIGN
PHASE 5

TITLE:

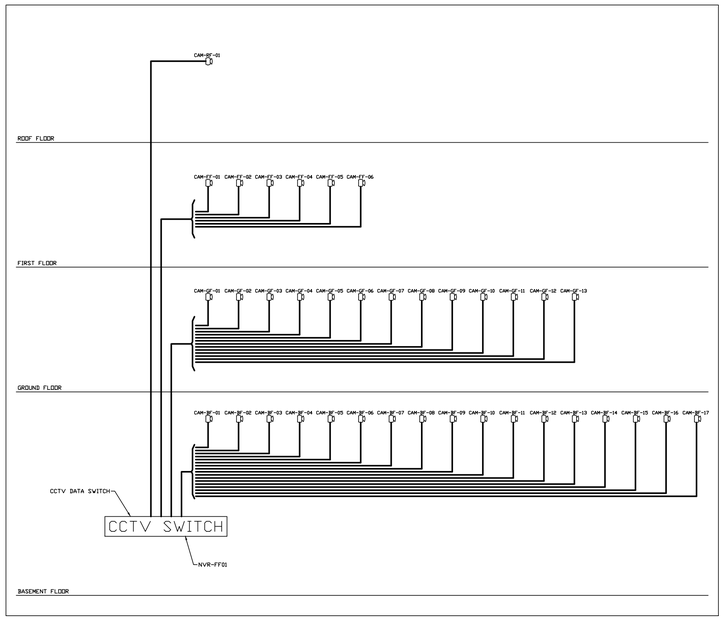
POWER SINGLE LINE DIAGRAM
2/2

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E04
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	NTS
DRAWING NO.:	E04			REVISION	00

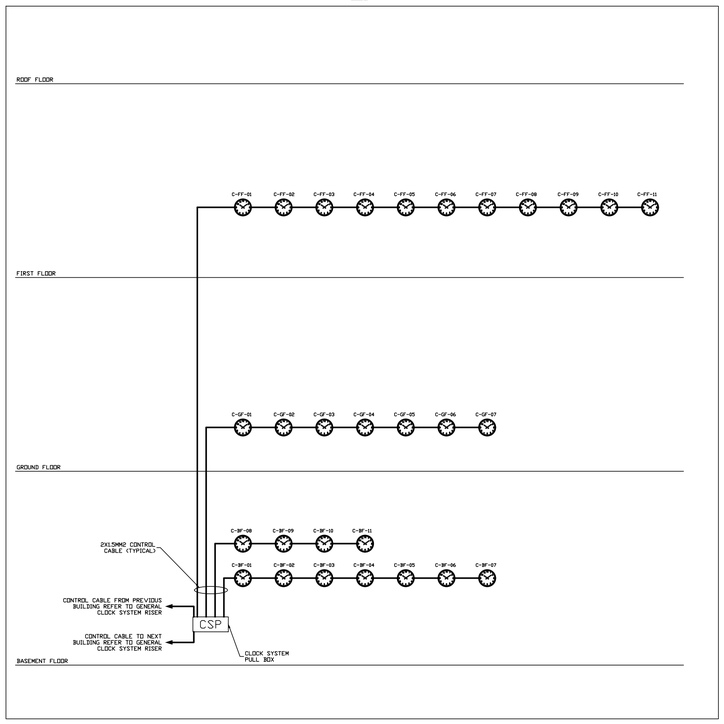
TELEPHONE/DATA RISER DIAGRAM
N.T.S.



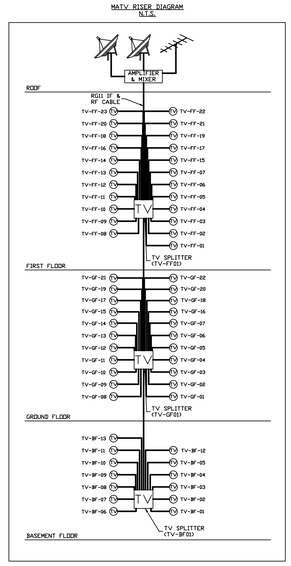
CCTV RISER DIAGRAM
N.T.S.



CLOCK SYSTEM RISER DIAGRAM
N.T.S.



MATV RISER DIAGRAM
N.T.S.



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PROJECT:

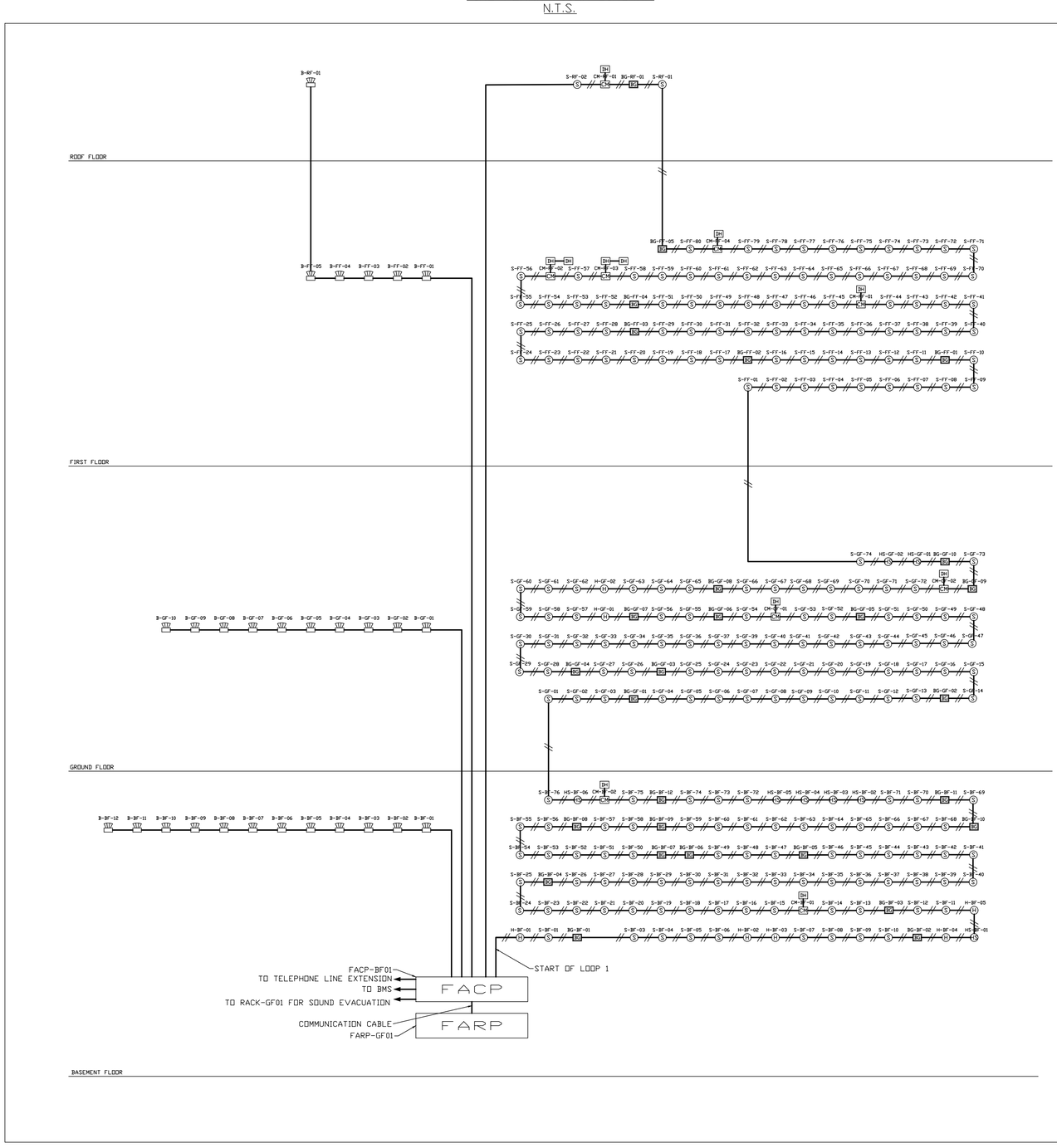
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TITLE:

LOW CURRENT SYSTEMS SCHEMATIC DIAGRAMS

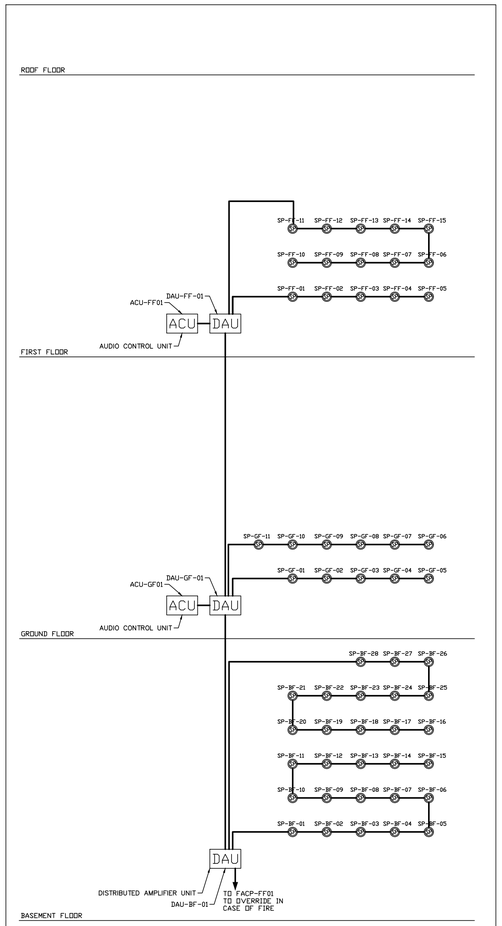
DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E05
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	NTS
DRAWING NO.:	E05			REVISION	00

FIRE ALARM RISER DIAGRAM
N.T.S.



NOTE 1: THE POWER OF CONTROL MODULE CONNECTED TO DOOR HOLDERS IS FED FROM FACP-BF01

PUBLIC ADDRESS SYSTEM RISER DIAGRAM
N.T.S.



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PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

FIRE ALARM & PAVE SYSTEMS
SCHEMATIC DIAGRAMS

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E06
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	NTS
DRAWING NO.:	E06			REVISION	00

SYMBOLS	DESCRIPTION	
LIGHTING POINTS	TYPE	
	E1	CEILING SURFACE MOUNTED LED 36W,4500 LUMENS, 220V, 50Hz STEEL HOUSING WITH ALUMINUM REFLECTOR HIGH GLOSS MIRROR OPTIC 4000 K DIMENSIONS 600mm x 600mm WITH ELECTRONIC DRIVER, IP20
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	RC1	CEILING RECESSED MOUNTED LED 36W,4500 LUMENS, 220V, 50Hz STEEL HOUSING WITH ALUMINUM REFLECTOR HIGH GLOSS MIRROR OPTIC 4000 K DIMENSIONS 600mm x 600mm ELECTRONIC DRIVER, IP20
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	RC2	CEILING RECESSED MOUNTED LUMINAIRE WHITE POWDER - PAINTED WELD SHEET BLOW MOLDED OPAL-PMMA DIFFUSER DIMENSIONS: 595mm x 595mm LED 32W - 3200 LUMENS- 4000K-IP43.
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	RC3	LED MODULAR SYSTEM FOR RECESSED TRIM INSTALLATION INCLUDING ALUMINUM PROFILE AND DIFFUSER - LED LUMINAIRE 12W- 1000 LUMENS -IP44 4000K - COLOR WHITE - 10mm x 600mm
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	RC7	SURFACE MOUNTED - LED LUMINAIRE 16W- 1322 LUMENS -IP44 4000K - COLOR WHITE - 10mm x 600mm
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	E2	CEILING SURFACE MOUNTED LED 36W,4500 LUMENS, 220V, 50Hz STEEL HOUSING WITH ALUMINUM REFLECTOR HIGH GLOSS MIRROR OPTIC 4000 K LENGTH 1200mm WITH ELECTRONIC DRIVER, IP20
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
EP	E3	CEILING SURFACE MOUNTED LED 36W,4500 LUMENS, 220V, 50Hz STEEL HOUSING 4000 K LENGTH 1200mm WITH ELECTRONIC DRIVER, EXPLOSION PROOF, IP66
EP		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	RC4	CEILING RECESSED MOUNTED LED 36W,4500 LUMENS, 220V, 50Hz STEEL HOUSING WITH ALUMINUM REFLECTOR HIGH GLOSS MIRROR OPTIC 4000 K LENGTH 1200mm WITH ELECTRONIC DRIVER, IP20
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	E4	CEILING SURFACE MOUNTED LUMINAIRE WHITE POWDER - PAINTED WELD SHEET BLOW MOLDED OPAL-PMMA DIFFUSER LENGTH 1200mm LED 32W - 3200 LUMENS- 4000K-IP65.
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	RC5	CEILING RECESSED MOUNTED LUMINAIRE WHITE POWDER - PAINTED WELD SHEET BLOW MOLDED OPAL-PMMA DIFFUSER LENGTH 1200mm LED 32W - 3200 LUMENS- 4000K-IP44.
	RC6	CEILING RECESSED MOUNTED LUMINAIRE WHITE POWDER - PAINTED WELD SHEET BLOW MOLDED OPAL-PMMA DIFFUSER LENGTH 1200mm LED 64W - 6400 LUMENS- 4000K-IP44.
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	RC8	CEILING RECESSED MOUNTED LUMINAIRE WHITE POWDER - PAINTED WELD SHEET BLOW MOLDED OPAL-PMMA DIFFUSER LENGTH 1200mm LED 32W - 3000 LUMENS- 4000K-IP44.
	RC9	CEILING RECESSED MOUNTED LED 72W,9000 LUMENS, 220V, 50Hz STEEL HOUSING WITH ALUMINUM REFLECTOR HIGH GLOSS MIRROR OPTIC 4000 K DIMENSIONS 1200mm x 600mm ELECTRONIC DRIVER, IP20
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	D1	FIXED CEILING RECESSED DOWNLIGHT WITH DIE CAST ALUMINIUM BODY- MIRROR METALIZED THERMOPLASTIC MATERIAL REFLECTOR - LED 18W - 2092 LUMENS - 3000K- IP43 WIDE BEAM- 141MM DIAM INCLUDING OPTIC DEVICE AND DRIVER.
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	D2	FIXED CEILING RECESSED DOWNLIGHT WITH DIE CAST ALUMINIUM BODY- MIRROR METALIZED THERMOPLASTIC MATERIAL REFLECTOR - LED 12W - 1250 LUMENS - 3000K- IP43 WIDE BEAM- 141MM DIAM INCLUDING OPTIC DEVICE AND DRIVER.

SYMBOLS	DESCRIPTION	
LIGHTING POINTS	TYPE	
	E6	CEILING SURFACE MOUNTED CIRCULAR LED 32W, 2540 LUMENS, 220V, 50Hz WITH OPAQUE GLASS DIFFUSER IP44 & ELECTRONIC DRIVER.
	E7	CEILING SURFACE MOUNTED LED - 39W - 2900 LUMENS, 50Hz, WITH OPAQUE GLASS DIFFUSER & ELECTRONIC DRIVER FOR STAIRS
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	E16	CEILING SURFACE MOUNTED CYLINDRICAL DOWNLIGHT, LED 32W - 2540 LUMENS, 220V, 50Hz WITH GLASS DIFFUSER, IP44 & ELECTRONIC DRIVER.
	D8	FIXED CEILING RECESSED DOWNLIGHT LED WITH DIE CAST ALUMINUM BODY - MIRROR METALIZED THERMOPLASTIC MATERIAL - OPTIC DEVICE - 1700LM - 12W - 4000K - CRI80 - IP44 - 80MM DIAM - COLOR WHITE - INCLUDING ELECTRONIC DRIVER.
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY
	E10	WALL MOUNTED LUMINAIRE LED ALUMINUM BODY - 22W- 984 LUMENS - 4000K - IP66 WITH DRIVER AND ALL ACCESSORIES FOR OUTDOOR USAGE
	E11	WALL MOUNTED LUMINAIRE LED ALUMINUM BODY - 22W- 1000 LUMENS - 4000 K - IP44 WITH DRIVER AND ALL ACCESSORIES FOR STAIRS
	E12	WALL MOUNTED LUMINAIRE LED ALUMINUM BODY - 22W- 1000 LUMENS - 4000 K - IP44 WITH DRIVER AND ALL ACCESSORIES FOR INDOOR USAGE
	E13	LIGHTING FIXTURE, FLUSH MOUNTED LED 10W - 503 LUNEMS, 220V, EQUIPPED WITH SAFETY GUARD & SAFETY GLASS, IP54.
	E14	WALL MOUNTED OCCUPANCY INDICATOR RED LIGHT 220V, 50Hz
	E15	WALL MOUNTED LUMINAIRE LED ALUMINUM BODY WITH PROTECTION GRILL - 22W- 984 LUMENS - 4000K - IP65 WITH DRIVER AND ALL ACCESSORIES
	E17	WALL MOUNTED LUMINAIRE LED ALUMINUM BODY - 12W- 600 LUMENS - 4000 K - IP44 WITH DRIVER AND ALL ACCESSORIES
	P1	GARDEN LIGHTING FIXTURE LED 60W, 5200 LUMENS INCLUDING DRIVER FIXED IN SOIL IP67.
	PL1	6 METERS STREET LIGHTING COLUMNS, WITH LED LUMINAIRE 150W, 16000 LUMENS, 1 METER OVERHANG, 5° INCLINATION
	PL2	6 METERS TWIN STREET LIGHTING COLUMNS, WITH TWO LED LUMINAIRES EACH 150W, 16000 LUMENS, 1 METER OVERHANG, 5° INCLINATION
	SL1	INDIRECT LIGHTING INCLUDING ALUMINUM PROFILE 17MM WIDTH - LED STRIP 24VDC - 14,4W/MT - CRI85 - 1330LM/M - 4000K - AND ALL NECESSARY ACCESSORIES AND POWER SUPPLY.
	MI	SURFACE MOUNTED ABOVE MIRROR - LED LUMINAIRE 10W- 900 LUMENS -IP44 4000K - COLOR WHITE - 10mm x 600mm
	P2	LIGHTING PROJECTOR 300W, 36000 LUMENS, 220V, 50Hz LED WITH DRIVER AND ACCESSORIES, IP67.
	PL3	OUTDOOR POLE TOP LUMINAIRE LED 70W, 6300 LUMENS 230V, 50Hz, 3 METER POLE HEIGHT WITH DRIVER AND ACCESSORIES
	E8	CEILING SURFACE MOUNTED CIRCULAR LED 18W, 1500 LUMENS, 220V, 50Hz WITH OPAQUE GLASS DIFFUSER IP44 & ELECTRONIC DRIVER.
		SAME AS PREVIOUS BUT WITH INTELLIGENT BATTERY PACK WITH 3 HOURS AUTONOMY

EMERGENCY LIGHTING

E	EM1	WALL MOUNTED EMERGENCY LIGHT, 220V, 50Hz, 4.5W LED, 3 HOURS AUTONOMY, NON MAINTAINED ADDRESSABLE TYPE CAPABLE OF COMMUNICATING WITH CENTRAL CONTROL UNIT.
E EP	EM2	WALL MOUNTED EMERGENCY LIGHT, 220V, 50Hz, 4.5W LED, 3 HOURS AUTONOMY, NON MAINTAINED ADDRESSABLE TYPE CAPABLE OF COMMUNICATING WITH CENTRAL CONTROL UNIT, EXPLOSION PROOF.
EXIT EXIT EXIT EXIT	EXIT	EXIT LIGHT FIXED ON WALL OR SUSPENDED FROM CEILING SINGLE SIDE WITH LABEL, 220V, 50Hz, 4.5W LED, 3 HOURS AUTONOMY MAINTAINED ADDRESSABLE TYPE CAPABLE OF COMMUNICATING WITH CENTRAL CONTROL UNIT.
EXIT EXIT EXIT		SAME AS PREVIOUS BUT WITH DOUBLE SIDE
		SWITCHED NIGHT LIGHT, FOR PATIENT ROOM WITH 1x5W, 220V, 50Hz LED LAMP.

GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
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PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

LIGHTING FIXTURES SCHEDULE

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E07
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	NTS
DRAWING NO.:	E07			REVISION	00

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-BF01 — Incoming Cable Size / Type : 1 x 4C25-1C16-E XLPE/PVC

Fed From : SMDB-BF01 — Main Breaker Type & Rating : 63A 4P

Main Isolator	Busbar Section/ECO	CCT Ref No.	MCB Rating (Amps)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA R	Y	B	Circuit Load in VA R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA R	Y	B	Remarks
RCB 100mA		1	16	2.5	2.5		LIGHTING	4	RC1	16	RC3					40.0	25.0			1424.00			LTG	1	1424.00			
								5	RC9	21	RC1					80.0	32.0											
		3	16	2.5	2.5		LIGHTING	15	RC2	11	D1					32.0	20.0			1319.00			LTG	1		1319.00		
								19	RC5	2	E11					25.0	12.0											
		5	16				SPARE															0.00						
		2	H				SPARE																0.00			0.00		
		4					SPACE																					
		6					SPACE																					
RCB 30mA		7	20	4	4		RECEPTACLES	2	SSO	3	DSO			1C	SO	200	400	1600.00						SO	0.6	960.00			
		9	20	4	4		RECEPTACLES	3	SSO	3	DSO			1C	SO	200	400		1400.00					SO	0.6		840.00		
		11	20	4	4		RECEPTACLES	3	SSO	3	DSO			1C	SO	200	400			1400.00				SO	0.6			840.00	
		8	20	4	4		RECEPTACLES	4	SSO	1	DSO			1C	SO	200	400				1600.00			SO	0.6	960.00			
		10	20	4	4		RECEPTACLES	3	SSO	2	DSO			1C	SO	200	400					1800.00		SO	0.6		1080.00		
		12	20	4	4		RECEPTACLES	4	SSO	2	DSO			1C	SO	200	400						1600.00	SO	0.6			960.00	
		13	20	4	4		RECEPTACLES	5	SSO					1C	SO	200		1000.00						SO	0.6	600.00			
		15	20	4	4		RECEPTACLES	4	SSO	2	DSO			1C	SO	200	400		800.00					SO	0.6		480.00		
		17	20	4	4		RECEPTACLES	3	SSO	2	DSO			1C	SO	200	400			1000.00				SO	0.6			600.00	
		14	20	4	4		RECEPTACLES	2	SSO	2	DSO			1C	SO	200	400				1200.00			SO	0.6	720.00			
		16	20	4	4		RECEPTACLES	3	SSO	3	DSO			1C	SO	200	400					1400.00		SO	0.6		840.00		
		18	20				SPARE																0.00					
		19	20	4	4		RECEPTACLES	3	SSO					1C	SO	1500		1500.00						SO	1.0	1500.00			
		21	20	4	4		RECEPTACLES	3	SSO					1C	SO	1000			1000.00					SO	0.6		600.00		
		23	20	4	4		RECEPTACLES	3	SSO					1C	SO	1000				1000.00				SO	0.6			600.00	
		20	25	4	4		FOR BEDPAN WASHER	3	DS					1C	DS	3000						3000.00		DS	0.6	1800.00			
		22	20				SPARE															0.00						
		24	20				SPACE																					
		25					SPACE											0.00								0.00		
		27					SPACE												0.00								0.00	
		29					SPACE																0.00					
																Total Connected Load (VA)		5524.00	4519.00	3400.00	5800.00	3200.00	1600.00					24040.00
																Load After Demand Factor (VA)										7964	5159	3000	16123.00
																Total Demand Load (KVA)													16.12
																Load After Demand Factor and 20% spare (VA)										9556.80	6190.80	3600.00	19347.60
																Demand Load With 20% Future Load (KVA)													19.35
																Demand Current (A)										43.44	28.14	16.36	

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-BF02 — Incoming Cable Size / Type : 1 x 4C70-1C35-E XLPE/PVC

Fed From : SMDB-BF01 — Main Breaker Type & Rating : 125A 4P

Main Isolator	Busbar Section/ECO	CCT Ref No.	MCB Rating (Amps)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA R	Y	B	Circuit Load in VA R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA R	Y	B	Remarks
RCB 100mA		1	16	2.5	2.5		LIGHTING	1	RC1	24	D1					40.0	20.0			960.00			LTG	1	960.00			
								4	E4	16	RC5					80.0	32.0											
		3	16	2.5	2.5		LIGHTING	21	D1	4	RC4					20.0	40.0				700.00		LTG	1		700.00		
								4	E1							80.0												
		5	16	2.5	2.5		STAIR LIGHTING	6	E7	1	EX1					40.0	8.0				352.00		LTG	1			352.00	
		2	H				SPARE																					
		4	16				SPARE																					
		6					SPACE																					
RCB 30mA		7	20	4	4		RECEPTACLES	4	SSO					1C	SO	200		1200.00						SO	0.6	720.00			
		9	20	4	4		RECEPTACLES	1	SSO	2	DSO			1C	SO	200	400		1000.00					SO	0.6		600.00		
		11	20	4	4		RECEPTACLES	1	SSO					1C	SO	200				1400.00				SO	0.6			840.00	
		8	20	4	4		RECEPTACLES	4	SSO	2	DSO			1C	SO	200	400				1600.00			SO	0.6	960.00			
		10	20	4	4		RECEPTACLES	1	SSO					1C	SO	1500						1500.00		SO	0.6		900.00		
		12	20	4	4		RECEPTACLES	1	SSO					1C	SO	1500							1500.00	SO	0.6			900.00	
		13	16	2.5	2.5		ELECTRICAL ROOM	H	EO					1C	EO	100		1000.00						EO	1.0	1000.00			
		15	20	4	4		RECEPTACLES	1	SSO					1C	SO	1500			1500.00					SO	0.6		900.00		
		17	20	4	4		RECEPTACLES	1	SSO					1C	SO	1500				1500.00				SO	0.6			900.00	
		14					FOR ELECTRIC COMBI-OVEN														3400.00			DS	1.0	3400.00			
		16	32	4x6+6																		3400.00					3400.00	
		18																					3400.00					3400.00
		19					FOR ELECTRIC PASS-THROUGH DISHWASHER											3400.00						DS	1.0	3400.00			
		21	32	4x6+6																	3400.00					3400.00		
		23																				3400.00					3400.00	
		20					FOR ELECTRIC HEATED CUPBOARD BAIN-MARIE WELL														700.00			DS	1.0	700.00			
		22	20	4x4+4																		700.00					700.00	
		24																				700.00					700.00	
		25					FOR MANUAL LAUNDRY UTILITY IRONING PRESS											2400.00						DS	1.0	2400.00			
		27	20	4x4+4																	2400.00					2400.00		
		29																				2400.00					2400.00	
		26	20	4	4		ELECTRICAL ROOM	H	OU					1C	OU	1000					10000.00			OU	0.6	6000.00			
		28	20				SPARE															0.00						
		30	20				SPACE																0.00					
																Total Connected Load (VA)		5950.00	8000.00	9050.00	11700.00	5600.00	5600.00					53900.00
																Load After Demand Factor (VA)										19530	13000	12892	45422.00
																Total Demand Load (KVA)													45.42
																Load After Demand Factor and 20% spare (VA)										23436.00	15600.00	15470.40	54506.40
																Demand Load With 20% Future Load (KVA)													54.51
																Demand Current (A)										105.33	70.34	70.32	

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-BF03 — Incoming Cable Size / Type : 1 x 4C6-1C6-E XLPE/PVC

Fed From : SMDB-BF01 — Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section/ECO	CCT Ref No.	MCB Rating (Amps)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA R	Y	B	Circuit Load in VA R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA R	Y	B	Remarks
RCB 100mA		1	16	2.5	2.5		LIGHTING	21	RC1	10	RC3					40.0	25.0			1774.00			LTG	1	1774.00			
								15	D1	12	RC2					20.0	32.0											
		3	16				SPARE																					
		5	16				SPARE																					
		2					SPACE																					
		4					SPACE																					
		6					SPACE																					
RCB 30mA		7	20	4	4		RECEPTACLES	3	SSO	1	DSO			1C	SO	200	400	1000.00						SO	0.6	600.00			
		9	20	4	4		RECEPTACLES	1	SSO					1C	SO	200			1400.00					SO	0.6		840.00		
		11	20	4	4		RECEPTACLES	4	DSO					1C	SO	200	400			1600.00				SO	0.6			960.00	
		8	20	4	4		RECEPTACLES	6	SSO					1C	DS	200					1200.00			DS	0.6	720.00			
		10	20				SPARE															0.00					0.00	
		12	20				SPARE																0.00					0.00
		13	20				SPARE											0.00								0.00		
		15	20				SPARE											0.00								0.00		
		17	20				SPARE																					
		14	20				SPARE																					
		16	20																									
		18	20																									
																Total Connected Load (VA)		1774.00	1400.00	1600.00	1200.00	0.00	0.00					6974.00
																Load After Demand Factor (VA)										5094	840	960	6894.00
																Total Demand Load (KVA)													6.89
																Load After Demand Factor and 20% spare (VA)										3712.80	1008.00	1152.00	5872.80
																Demand Load With 20% Future Load (KVA)													5.87
																Demand Current (A)										15.88	4.78	5.24	

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-BF04 — Incoming Cable Size / Type : 1 x 4C6-1C6-E XLPE/PVC

Fed From : SMDB-BF01 — Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section/ECO	CCT Ref No.	MCB Rating (Amps)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA R	Y	B	Circuit Load in VA R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA R	Y	B	Remarks
RCB 100mA		1	16	2.5	2.5		LIGHTING	4	D1	8	RC5					20.0	40.0						LTG	1	692.00			
								2	RC2	8	RC6					20.0	32.0											
		3	16				SPARE																					
		5	16				SPARE																					
		2					SPACE																				0.00	
		4					SPACE																					
		6					SPACE																					
RCB 30mA		7	20	4	4		RECEPTACLES	1	SSO					1C	SO	200		1000.00						SO	0.6	600.00			
		9	20	4	4		RECEPTACLES	1	SSO					1C	SO	200			1000.00					SO	0.6		600.00		
		11	20	4	4		RECEPTACLES	4	SSO	1	DSO			1C	SO	200	400			1200.00				SO	0.6			720.00	
		8	20	4	4		RECEPTACLES	1	SSO					1C	SO	200						200.00		SO	0.6	120.00			
		10	20				SPARE																0.00					0.00	
		12	20				SPARE																0.00					0.00	
		13					FOR COLD ROOM WITH FLOOR AND COOLING UNIT											1000.00						DS	1.0	1000.00			
		15	16	4x4+4															1000.00								1000.00		
		17																		1000.00								1000.00	
		14	20				SPARE																					
		16																										
		18																										
																Total Connected Load (VA)		2992.00	2000.00	2200.00	200.00	0.00	0.00					7092.00
																Load After Demand Factor (VA)										2492	1600	1720	5722.00
																Total Demand Load (KVA)													5.72
																Load After Demand Factor and 20% spare (VA)										2992.40	1920.00	2064.00	6982.40
																Demand Load With 20% Future Load (KVA)													6.97
																Demand Current (A)										13.31	8.73	9.38	

GENERAL NOTES

KEY PLAN:

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-BF05 — Incoming Cable Size / Type : 1 x 95C1-1C50-E XLPE/PVC

Fed From : SMDB-BF01 — Main Breaker Type & Rating : 160A 4P

Main Isolator	Busbar Section/ECO	CCT Ref No.	MCB Rating (Amps)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA R	Y	B	Circuit Load in VA R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA R	Y	B	Remarks
RCB 100mA		1	16	2.5	2.5		LIGHTING	1	D1	2	RC1					20.0	40.0			1672.00			LTG	1	1672.00			
								3	RC6	3	E8	6	E4			71.0	16.0	35.0										
								4	RC3	1	RC5					32.0	64.0											
		3	16				SPARE																					
		5	16				SPARE																					
		2					SPACE																					
		4					SPACE																					
		6					SPACE																					
RCB 30mA		7	20	4	4		RECEPTACLES	4	SSO					1C	SO	200	400	800.00						SO	0.6	480.00			
		9	20	4	4		RECEPTACLES	2	SSO	1	DSO			1C	SO	200	400		800.00					SO	0.6		480.00		
		11	20	4	4		RECEPTACLES	3	SSO					1C	SO	200				600.00				SO	0.6			360.00	
		8	20	4	4		RECEPTACLES	1	SSO					1C	SO	200		1000.00						DS	0.6	600.00			
		10	20	4	4		RECEPTACLES	3	SSO	1	DSO			1C	SO	200	400				1000.00			DS	0.6		600.00		
		12	20	4	4		RECEPTACLES	8	SSO					1C	SO	200						1600.00		DS	0.6			960.00	
		13	20	4	4		RECEPTACLES	1	SSO					1C	SO	2000		2000.00						SO	0.6	1200.00			
		15	20	4	4		RECEPTACLES	1	SSO					1C	SO	2000			2000.00					SO	0.6		1200.00		
		17	20	4	4		RECEPTACLES	1	SSO					1C	SO	1000				1000.00				SO	0.6			600.00	
		14					3 PHASE SOCKET	1	SO					3C	SO	3000						1000.00		SO	0.6	600.00			
		16	32	4x6+6																		1000.00					600.00	
		18																					1000.00					600.00
		19					FOR ELECTRICAL HEATED VACUUM FOLDING TABLE											1000.00						DS	0.6	600.00			
		21	16	4x4+4															1000.00								600.00		
		23																		1000.00								600.00
		20					FOR FORM FINISHER WITH BUILT-IN BOILER											4700.00						DS	0.6	2820.00			
		22	32	4x6+6															4700.00								2820.00		
		24																		4700.00								2820.00
		25					FOR MANUAL LAUNDRY UTILITY IRONING PRESS											4000.00						DS	0.6	2400.00			
		27	32	4x6+6															4000.00								2400.00		
		29																		4000.00								2400.00
		26	32	4x6+6			FOR ELECTRIC HEATED FLATWORK DRYING IRONER 2000 MM											4000.00						DS	0.6	2400.00			
		28																	4000.00								2400.00		
		30																		4000.00								2400.00
		31					FOR ELECTRIC HEATED TUMBLE DRYER 16 KGS											2500.00						DS	0.6	1500.00			
		33	20	4x4+4															2500.00								1500.00		
		35																		2500.00								1500.00
		32					FOR ELECTRIC HEATED TUMBLE DRYER 25 KGS											3000.00						DS	0.6	1800.00			
		34	25	4x4+4															3000.00								1800.00		
		36																		3000.00								1800.00
		37					FOR ELECTRIC HEATED HIGH SPIN WASHING MACHINE 16 KGS											4000.00						DS	0.6	2400.00			
		39	32	4x6+6															4000.00								2400.00		
		41																		4000.00								2400.00
		38					FOR ELECTRIC HEATED HIGH SPIN WASHING MACHINE 36 KGS											8000.00						DS	0.6	4800.00			
		40	50	4x16+16															8000.00								4800.00		
		42																		8000.00								4800.00
		43					FOR ELECTRIC HEATED ASEPTIC BARRIER WASHER											1300.00						DS	0.6	780.00			
		45	16	4x4+4															1300.00								780.00		
		47																		1300.00								780.00
		44	20				SPARE															0.00					0.00	
		16	20				SPARE												0.00								0.00	
		18	20				SPARE													0.00								0.00
																Total Connected Load (VA)		17272.00	16800.00	14400.00	21700.00	21700.00	22580.00					113972.00
																Load After Demand Factor (VA)										24052	21360	22035	66452.00
																Total Demand Load (KVA)													66.45
																Load After Demand Factor and 20% spare (VA)										28862.40	26856.00	26424.00	82142.40
																Demand Load With 20% Future Load (KVA)													82.14
																Demand Current (A)										111.19	122.07	120.11	

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-BF06 — Incoming Cable Size / Type : 1 x 4C35-1C16-E XLPE/PVC

Fed From : SMDB-BF01 — Main Breaker Type & Rating : 80A 4P

Main Isolator	Busbar Section/ECO	CCT Ref No.	MCB Rating (Amps)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA R	Y	B	Circuit Load in VA R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA R	Y	B	Remarks
RCB 100mA		1	16	2.5	2.5		LIGHTING	14	E8	7	E4					16.0	35.0											
								3	E5							40.0		737.00					LTG	1	737.00			
		3	16	2.5	2.5		STAIR LIGHTING	11	E6							43.0				473.00			LTG	1		473.00		
		5	16				SPARE																0.00				720.00	
		2	H				SPARE															0.00				0.00		
		4					SPACE																					
		6					SPACE																					
RCB 30mA		7	20	4	4		RECEPTACLES	6	SSO					1C	SO	200		1600.00						SO	0.6	960.00			
		9	20	4	4		RECEPTACLES	1	SSO					1C	SO	200			1400.00					SO	0.6		840.00		
		11	20	4	4		RECEPTACLES	1	SSO					1C	SO	200				600.00				SO	0.6			360.00	
		8	20	4	4		RECEPTACLES	4	SSO	2	DSO			1C	SO	200	400				1600.00			SO	0.6	960.00			
		10	20	4	4		RECEPTACLES	2	SSO	1	DSO			1C	SO	200	400					800.00		SO	0.6		480.00		
		12	20	4	4		RECEPTACLES	3	SSO	2	DSO			1C	SO	200	400						1400.00	SO	0.6			840.00	
		13	20	4	4		RECEPTACLES	4	SSO	1	DSO			1C	SO	200	400	1600.00						SO	0.6	960.00			
		15	20	4	4		RECEPTACLES	3	SSO	1	DSO			1C	SO	200	400		600.00					SO	0.6		360.00		
		17	20	4	4		RECEPTACLES	2	SSO	1	DSO			1C	SO	200	400			800.00				SO	0.6			480.00	
		14	20				SPARE																					
		16	20																									
		18	20																									
																Total Connected Load (VA)		3480.00	2600.00	1600.00	1600.00	800.00	1400.00					12000.00
																Load After Demand Factor (VA)										3400	2600	1920	7920.00
																Total Demand Load (KVA)													7.92
																Load After Demand Factor and 20% spare (VA)										4080.00	3120.00	2304.00	9504.00
																Demand Load With 20% Future Load (KVA)													9.50
																Demand Current (A)										18.93	14.18	10.47	

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-GF02 — Incoming Cable Size / Type : 1 x 4C6-1C6-E XLPE/PVC

Fed From : SMDB-GF01 — Main Breaker Type & Rating : 32A 4P

| Main Isol

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-GF03 — Incoming Cable Size / Type : 1 x 4C6-1C16-E XLPE/PVC

Fed From : SMDB-GF01 — Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section(BCD)	CCT Ref No.	MCB Rating (AMP)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single): Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 100mA		1	16	2.5	2.5		LIGHTING	24	RC1	12	RC3			40.0	25.0						LTG 1	940.00			
		3	16	2.5	2.5		LIGHTING	1 / 23	RC1 / DI	2 / 1	RC3 / EX			40.0 / 20.0	25.0 / 20.0			685.00			LTG 1		685.00		
		5	16				SPARE																		
		2	H				SPARE														0.00				
		4					SPACE																		
		6					SPACE																		
		7	20	4	4		RECEPTACLES	7	SSO	1	DSO		1C SO	200	400	1400.00					SO 0.6	840.00			
		9	20	4	4		RECEPTACLES	2	SSO	1	DSO		1C SO	200	400			800.00			SO 0.6		480.00		
		11	20	4	4		RECEPTACLES	3	SSO	3	DSO		1C SO	200	400				1600.00		SO 0.6			960.00	
		8	20	4	4		RECEPTACLES	3	DSO				1C SO	400					1200.00		DS 0.6	720.00			
		10	20	4	4		RECEPTACLES	4	SSO	1	DSO		1C SO	200	400					1200.00	SO 0.6		720.00		
		12	20	4	4		RECEPTACLES	4	SSO				1C SO	200						1200.00	SO 0.6	960.00			
		13	20	4	4		RECEPTACLES	4	SSO	2	DSO		1C SO	200	400	1600.00					SO 0.6		960.00		
		15	20	4	4		RECEPTACLES	3	SSO	2	DSO		1C SO	200	400			600.00			SO 0.6		360.00		
		17	20	4	4		RECEPTACLES	1	SSO				1C SO	1500				1500.00			SO 0.6		900.00		
		14	20	4	4		RECEPTACLES	1	SSO				1C SO	1500						1500.00	SO 0.6	900.00			
		16	20				SPARE																		
		18	20				SPARE																		
							Total Connected Load (VA)								3940.00	2685.00	3100.00	2700.00	1200.00	1200.00					
							Load After Demand Factor (VA)																4360	2225	2560	9145.00
							Total Demand Load (KVA)																			9.17
							Load After Demand Factor and 20% spare (VA)																5232.00	2670.00	3096.00	10998.00
							Demand Load With 20% Future Load (KVA)																			11.00
							Demand Current (A)																23.79	11.24	14.67	

NB: 20% SPARE AND 20% SPACE SHALL BE PROVIDED TO ALL PANELBOARDS

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-FF01 — Incoming Cable Size / Type : 1 x 4C6-1C16-E XLPE/PVC

Fed From : SMDB-FF01 — Main Breaker Type & Rating : 63A 4P

Main Isolator	Busbar Section(BCD)	CCT Ref No.	MCB Rating (AMP)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single): Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 100mA								11	DI	10	RC3			20.0	25.0											
		1	16	2.5	2.5		LIGHTING	12	RC3	24	DI			25.0	20.0	360.00					LTG	1	360.00			
		3	16	2.5	2.5		LIGHTING	32	RC3	24	DI			25.0	20.0		820.00				LTG	1		820.00		
		5	16	2.5	2.5		LIGHTING	31	DI	10	RC3			20.0	25.0			890.00			LTG	1			890.00	
		2	H	2.5	2.5		LIGHTING	10 / 10	DI / RC3	4 / 1	RC1 / RC2			20.0 / 25.0	40.0 / 32.0				842.00		LTG	1	842.00			
		4	16				SPARE																			
		6	16				SPARE																			
		7	20	4	4		RECEPTACLES	1	SSO	1	DSO		1C SO	200	400	1400.00					SO	0.6	840.00			
		9	20	4	4		BHU	1	BHU				1C BHU	1000			1000.00				BHU	0.6		600.00		
		11	20	4	4		BHU	2	BHU				1C BHU	1000				2000.00			BHU	0.6		1200.00		
		8	20	4	4		RECEPTACLES	1	SSO	1	DSO		1C SO	200	400				1400.00		SO	0.6	840.00			
		10	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400					1000.00	SO	0.6		600.00		
		12	20	4	4		BHU	2	BHU				1C BHU	1000						2000.00	BHU	0.6		1200.00		
		13	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400	1000.00					SO	0.6	600.00			
		15	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400			1000.00			SO	0.6		600.00		
		17	20	4	4		BHU	2	BHU				1C BHU	1000				2000.00			BHU	0.6		1200.00		
		14	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400				1400.00		SO	0.6	840.00			
		16	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400					1000.00	SO	0.6		600.00		
		18	20	4	4		BHU	2	BHU				1C BHU	1000						2000.00	BHU	0.6		1200.00		
		19	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400	1000.00					SO	0.6	600.00			
		21	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400			1000.00			SO	0.6		600.00		
		23	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400				1000.00		SO	0.6		600.00		
		20	20	4	4		RECEPTACLES	1	SSO				1C SO	200						1400.00	SO	0.6	840.00			
		22	20	4	4		FOR BEDPAN WASHER	1	DS				1C DS	2500						2500.00	DS	0.6		1500.00		
		24	20	4	4		RECEPTACLES	1	SSO				1C SO	200						200.00	SO	0.6	120.00			
		25	20	4	4		RECEPTACLES	2	DSO				1C SO	400		800.00					SO	0.6	480.00			
		27	20	4	4		RECEPTACLES	3	SSO				1C SO	200				1000.00			SO	0.6		600.00		
		29	20	4	4		RECEPTACLES	1	SSO				1C SO	400				2800.00			SO	0.6		1680.00		
		26	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	400						800.00	SO	0.6	480.00			
		28	20	4	4		BHU	2	BHU				1C BHU	1000						2000.00	BHU	0.6		1200.00		
		30	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400					1000.00	BHU	0.6		600.00		
		31	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400	1400.00					SO	0.6	840.00			
		33	20	4	4		BHU	3	BHU				1DC BHU	1000	400		2000.00				SO	0.6		1200.00		
		35	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400			1400.00			BHU	0.6		840.00		
		32	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400				1000.00		SO	0.6	600.00			
		34	16	2.5	2.5		ELECTRICAL OUTLET	8	OU				1C OU	100					800.00		OU	0.6	480.00			
		36	20				SPARE																			
		37	20				SPARE																			
		39					SPACE																			
		41					SPACE																			
							Total Connected Load (VA)								5990.00	6820.00	7090.00	6842.00	7300.00	5200.00					
							Load After Demand Factor (VA)																7952	6800	8530	42040.00
							Total Demand Load (KVA)																			29.53
							Load After Demand Factor and 20% spare (VA)																9540.40	10560.00	11436.00	31536.40
							Demand Load With 20% Future Load (KVA)																			31.59
							Demand Current (A)																43.79	48.89	52.96	

NB: 20% SPARE AND 20% SPACE SHALL BE PROVIDED TO ALL PANELBOARDS

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-FF04 — Incoming Cable Size / Type : 1 x 4C6-1C10-E XLPE/PVC

Fed From : SMDB-FF01 — Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section(BCD)	CCT Ref No.	MCB Rating (AMP)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single): Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 100mA		11	DI	2	M			11	DI	2	M			20.0	8.0											
		1	16	2.5	2.5		LIGHTING	6	RC3	4	RC2			25.0	32.0	1012.00					LTG	1	1012.00			
		3	16				SPARE																			
		5																								
		2																								
		4																								
		6																								
		7	20	4	4		RECEPTACLES	1	SSO				1C SO	200		200.00					SO	0.6	120.00			
		9	20	4	4		RECEPTACLES	1	SSO				1C SO	200			200.00				SO	0.6		120.00		
		11	20	4	4		RECEPTACLES	3	SSO				1C SO	200				600.00			SO	0.6		360.00		
		6	20				SPARE																			
		10	20	4	4		RECEPTACLES	1	SSO				1C DS	200						1400.00	SO	0.6		840.00		
		12																								
		13																								
		15																								
		17																								
		14																								
		16																								
		18																								
							Total Connected Load (VA)								1212.00	200.00	600.00	0.00	1400.00	0.00						
							Load After Demand Factor (VA)																1152	960	380	2492.00
							Total Demand Load (KVA)																			2.49
							Load After Demand Factor and 20% spare (VA)																1536.40	1152.00	432.00	2940.40
							Demand Load With 20% Future Load (KVA)																			2.94
							Demand Current (A)																4.17	3.24	3.96	

NB: 20% SPARE AND 20% SPACE SHALL BE PROVIDED TO ALL PANELBOARDS

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-GF04 — Incoming Cable Size / Type : 1 x 4C10-1C16-E XLPE/PVC

Fed From : SMDB-GF01 — Main Breaker Type & Rating : 40A 4P

Main Isolator	Busbar Section(BCD)	CCT Ref No.	MCB Rating (AMP)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single): Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 100mA		1	16	2.5	2.5		LIGHTING	24	RC1	4	RC3			40.0	25.0	1360.00					LTG	1	1360.00			
		3	16				SPARE																			
		5	16				SPARE																			
		2					SPACE																			
		4					SPACE																			
		6					SPACE																			
		7	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400	1000.00					SO	0.6	600.00			
		9	20	4	4		RECEPTACLES	3	SSO				1C SO	1000			1000.00				SO	0.6		600.00		
		11	20	4	4		RECEPTACLES	1	SSO				1C DS	2500				2500.00			DS	0.6		1500.00		
		8	20	4	4		RECEPTACLES	1	SSO				1C SO	200					200.00		SO	0.6	120.00			
		10	20	4	4		BHU	1	BHU				1C BHU	1000					1000.00		BHU	0.6		600.00		
		12	20	4	4		RECEPTACLES	1	SSO	2	DSO		1C SO	200	400				1000.00		SO	0.6		600.00		
		13	20	4	4		RECEPTACLES	1	SSO				1C SO	200		200.00					SO	0.6	120.00			
		15	20	4	4		RECEPTACLES	3	HD	2	DSO		1C SO	200	400		1000.00				SO	0.6		600.00		
		17	20	4	4		BHU	2	BHU				1C BHU	1000				2000.00			BHU	0.6		1200.00		
		14	20	4	4		RECEPTACLES	1	SSO				1C SO	200			200.00				SO	0.6	120.00			
		16	20	4	4		RECEPTACLES	1	SSO	2	DSO		1C SO	200	400				1000.00		SO	0.6		600.00		
		18	20	4	4		RECEPTACLES	2	DSO				1C SO	400						800.00	SO	0.6	480.00			
		19	20	4	4		FOR BEDPAN WASHER	1	DS				1C SO	2500		2500.00					DS	0.6		1500.00		
		21	20				SPARE										0.00									
		23	20				SPARE										0.00									
		20	80	4x35+16			FOR STERILIZER 1	1	DS			38000	1C DS	38000				12000.00			DS	0.6	7200.00			
		22																12000.00					7200.00			
		24																	12000.00				7200.00			
		25	80	4x35+16			FOR STERILIZER 2	1	DS			38000	1C DS	38000	12000.00						DS	0.6	7200.00			
		27														12000.00							7200.00			
		29															12000.00						7200.00			
		26	20				SPARE																			
		28	20				SPARE																			
		30					SPACE																			
							Total Connected Load (VA)								15740.00	14400.00	15040.00	15150.00	14000.00	13800.00						
							Load After Demand Factor (VA)																17736	17120	17680	52536.00
							Total Demand Load (KVA)																			52.73
							Load After Demand Factor and 20% spare (VA)																21276.80	20544.00	21408.00	63276.80
							Demand Load With 20% Future Load (KVA)																			63.28
							Demand Current (A)																96.73	93.38	97.33	

NB: 20% SPARE AND 20% SPACE SHALL BE PROVIDED TO ALL PANELBOARDS

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-FF02 — Incoming Cable Size / Type : 1 x 4C70-1C35-E XLPE/PVC

Fed From : SMDB-FF01 — Main Breaker Type & Rating : 125A 4P

Main Isolator	Busbar Section(BCD)	CCT Ref No.	MCB Rating (AMP)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single): Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 100mA		11	DI					10	DI					20.0												
		1	16	2.5	2.5		LIGHTING	10	DI					20.0	240.00						LTG	1	240.00			
		3	16	2.5	2.5		LIGHTING	10	DI					20.0		200.00					LTG	1		200.00		
		5	16	2.5	2.5		LIGHTING	12	DI					20.0			240.00				LTG	1			240.00	
		2	H	2.5	2.5		LIGHTING	30	RC3	21	DI			20.0	20.0	750.00					LTG	1	750.00			
		4	16				SPARE																			
		6					SPACE																			
		7	20	4	4		RECEPTACLES	2	DSO				1C SO	400		800.00					SO	0.6	480.00			
		9	20	4	4		RECEPTACLES	3	DSO				1C SO	400			1200.00				SO	0.6		720.00		
		11	20	4	4		RECEPTACLES	4	SSO	2	DSO		1C SO	200	400			1600.00			SO	0.6		960.00		
		8	20	4	4		RECEPTACLES	1	SSO				1C SO	200					200.00		SO	0.6	120.00			
		10	20	4	4		BHU	1	BHU				1C BHU	1000					1000.00		BHU	0.6		600.00		
		12	20	4	4		RECEPTACLES	1	SSO	2	DSO		1C SO	200	400				1000.00		SO	0.6		600.00		
		13	20	4	4		RECEPTACLES	1	SSO				1C SO	200		200.00					SO	0.6	120.00			
		15	20	4	4		RECEPTACLES	3	HD	2	DSO		1C SO	200	400		1000.00				SO	0.6		600.00		
		17	20	4	4		BHU	2	BHU				1C BHU	1000				2000.00			BHU	0.6		1200.00		
		14	20	4	4		RECEPTACLES	1	SSO				1C SO	200			200.00				SO	0.6	120.00			
		16	20	4	4		RECEPTACLES	1	SSO	2	DSO		1C SO	200	400				1000.00		SO	0.6		600.00		
		18	20	4	4		RECEPTACLES	2	DSO				1C SO	400						800.00	SO	0.6	480.00			
		19	20	4	4		FOR BEDPAN WASHER	1	DS				1C SO	2500		2500.00					DS	0.6		1500.00		
		21	20				SPARE										0.00									
		23	20				SPARE										0.00									
		20	80	4x35+16			FOR STERILIZER 1	1	DS			38000	1C DS	38000				12000.00			DS	0.6	7200.00			
		22																12000.00					7200.00			
		24																	12000.00				7200.00			
		25	80	4x35+16			FOR STERILIZER 2	1	DS			38000	1C DS	38000	12000.00						DS	0.6	7200.00			
		27														12000.00							7200.00			
		29															12000.00						7200.00			
		26	20				SPARE																			
		28	20				SPARE																			
		30					SPACE																			
							Total Connected Load (VA)								1530.00	1000.00	1000.00	0.00	1200.00	0.00						
							Load After Demand Factor (VA)																1130	1320	800	4730.00
							Total Demand Load (KVA)																			5.05
							Load After Demand Factor and 20% spare (VA)																1356.00	1584.00	720.00	5868.00
							Demand Load With 20% Future Load (KVA)																			5.66
							Demand Current (A)																4.55	7.20	3.27	

NB: 20% SPARE AND 20% SPACE SHALL BE PROVIDED TO ALL PANELBOARDS

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-FF05 — Incoming Cable Size / Type : 1 x 4C6-1C10-E XLPE/PVC

Fed From : SMDB-FF01 — Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section(BCD)	CCT Ref No.	MCB Rating (AMP)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single): Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 100mA		11	DI	2	RC2			10	RC3	2	RC2			32.0	20.0											
		1	16	2.5	2.5		LIGHTING	8	RC3	8	DI			20.0		530.00					LTG	1	530.00			
		3	16				SPARE																			
		5																								
		2																								
		4																								
		6																								
		7	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400	1000.00					SO	0.6	600.00			
		9	20	4	4		RECEPTACLES	1	SSO	2	DSO		1C SO	200	400		1000.00				SO	0.6		600.00		
		11	20	4	4		RECEPTACLES	3	SSO	1	DSO		1C SO	200	400			1000.00			SO	0.6			600.00	
		8	20				SPARE																			
		10	20	4	4		RECEPTACLES	4	SSO	1	DSO		1C SO	200	400				1200.00		SO	0.6	720.00			
		12	20				SPARE																			
		13	20																							
		15	20																							
		17	20																							
		14	20																							
		16	20																							
		18	20																							
							Total Connected Load (VA)								1530.00	1000.00	1000.00	0.00	1200.00	0.00						
							Load After Demand Factor (VA)																1130	1320	800	4730.00
							Total Demand Load (KVA)																			5.05
							Load After Demand Factor and 20% spare (VA)																1356.00	1584.00	720.00	5868.00
							Demand Load With 20% Future Load (KVA)																			5.66
							Demand Current (A)																4.55	7.20	3.27	

NB: 20% SPARE AND 20% SPACE SHALL BE PROVIDED TO ALL PANELBOARDS

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-GF05 — Incoming Cable Size / Type : 4C x 95-1C50-E XLPE/PVC

Fed From : SMDB-GF01 — Main Breaker Type & Rating : 160A 4P

Main Isolator	Busbar Section(BCD)	CCT Ref No.	MCB Rating (AMP)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single): Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 100mA		1	16	2.5	2.5		LIGHTING	11 / 3	DI / RC1	1 / 4	RC1 / RC3			20.0 / 40.0	1264.00						LTG	1	1264.00			
		3	16	2.5	2.5		LIGHTING	3 / 18	RC1 / RC2	4 / 4	RC3 / E1			40.0 / 25.0		756.00					LTG	1		756.00		
		5	16	2.5	2.5		LIGHTING	36	DI					20.0			560.00				LTG	1			720.00	
		2	H	4	4	