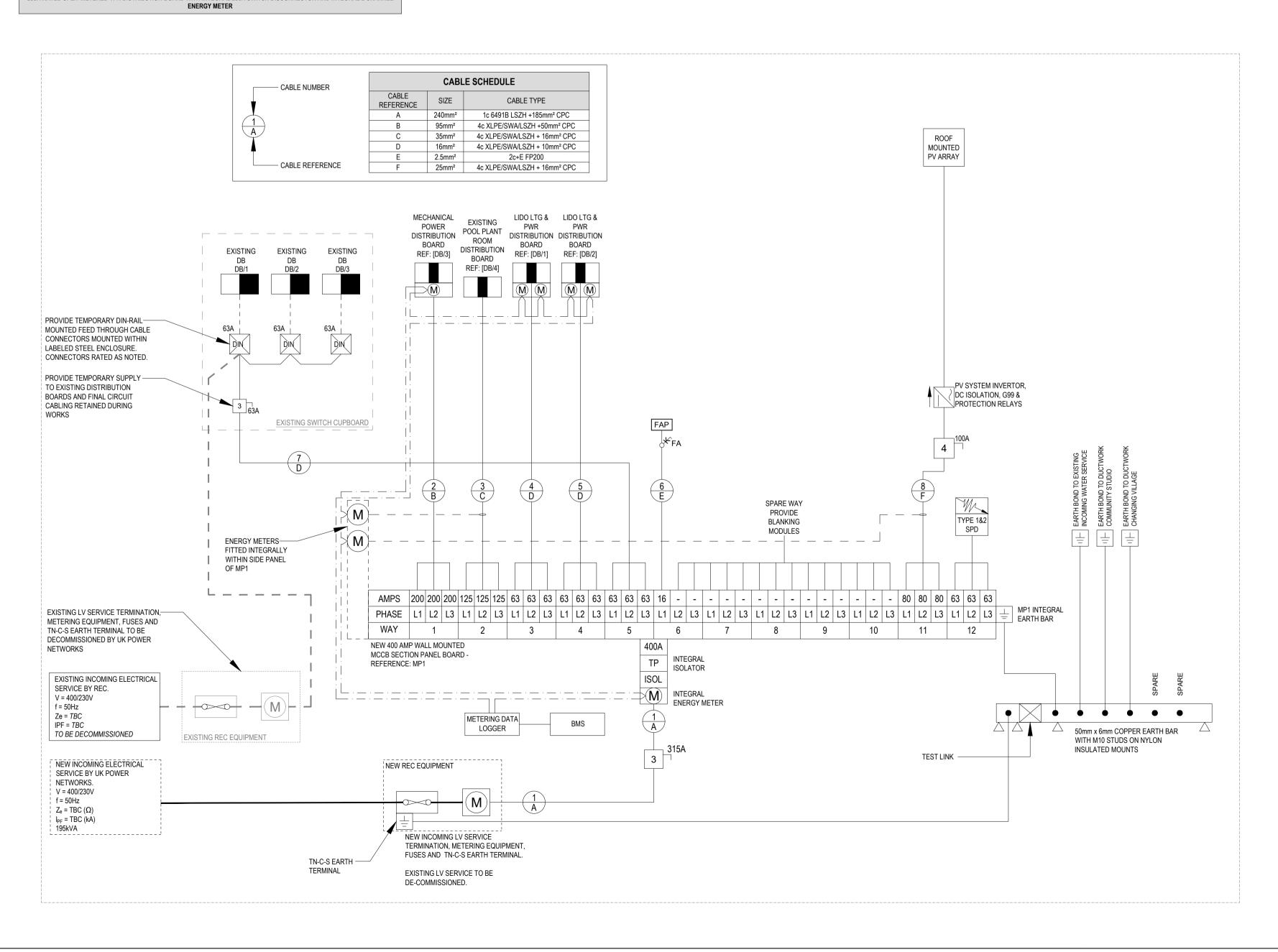
DISTRIBUTION BOARD : DB/1								
LOCATION: SWITCH ROOM								
GENERAL LIGHTING AND POWER								
SMALL POWER SECTION								
WAY	WAY MCB MCB RCD CABLE CADLETYDE CIRCUIT DESCRIPTION NOTES							
1L1	В	RATING 32	mA 30	\$IZE (mm²) 2.5	2c+E LSZH 624B	WORKSHOP REST ROOM / STORE	RING CIRCUIT	
1L2	В	32	30	2.5	2c+E LSZH 624B	SOCKET OUTLETS WORKSHOP SOCKET OUTLETS	RING CIRCUIT	
1L3	В	32	30	2.5	2c+E LSZH 624B	COMMUNITY STUDIO SOCKET	RING CIRCUIT	
2L1	В	32	30	2.5	2c+E LSZH 624B	OUTLETS COMMUNITY STUDIO KITCHEN	RING CIRCUIT	
2L1	В	32	30	2.5	2c+E LSZH 624B	SOCKET OUTLETS TREATMENT ROOMS SOCKET		
					2c+E LSZH 624B	OUTLETS COMMUNITY STUDIO WC HAND	RING CIRCUIT	
2L3	В	16	30	2.5		DRYER	RADIAL CIRCUIT	
3L1	В	16	30	2.5	2c+E LSZH 624B	ACCESSIBLE WC HAND DRYER	RADIAL CIRCUIT	
3L2	В	32	30	2.5	2c+E LSZH 624B	LOBBY SOCKET OUTLETS	RING CIRCUIT	
3L3	В	32	30	2.5	2c+E LSZH 624B	OFFICE AREA SOCKET OUTLETS WORKSHOP ROLLER SHUTTER	RING CIRCUIT	
4L1	С	20	-	4.0	2c+E LSZH 624B	DOOR POWER	RADIAL CIRCUIT	
4L2	В	32	30	6.0	3c XLPE/SWA/LSZH	EXTERNAL SOCKET OUTLET	RADIAL CIRCUIT BLANKING MODULE TO BE	
4L3						SPARE	PROVIDED  BLANKING MODULE TO BE	
5L123						SPARE	PROVIDED	
6L1	В	16	-	2.5	1c 6491B LSZH	DATA LOGGER POWER SUPPLY	RADIAL CIRCUIT	
6L2	В	16	-	2.5	2c+E LSZH 624B	ACCESSIBLE WC ALARM SYSTEM	RADIAL CIRCUIT	
6L3	В	16	-	2.5	2c+E LSZH 624B	PA SYSTEM	RADIAL CIRCUIT	
7L1	В	16	-	2.5	2c+E LSZH 624B	GATE ACCESS CONTROL SYSTEM SYSTEM	RADIAL CIRCUIT	
7L2	В	16	-	2.5	2c+E LSZH 624B	CCTV SYSTEM	RADIAL CIRCUIT	
7L3	В	16	-	2.5	2c+E LSZH 624B	SECURITY SYSTEM	RADIAL CIRCUIT	
8L123	В	63	-	INTEGRAL	INTEGRAL	SURGE PROTECTION DEVICE	-	
					LIGHTI	NG SECTION		
9L1	С	6	-	1.5	2c+E LSZH 624B	SWITCH ROOM LIGHTING	RADIAL CIRCUIT	
9L2	В	6	-	1.5	1c 6491B LSZH	LIGHTING CONTROL CIRCUIT	RADIAL CIRCUIT	
9L3	С	10	-	1.5	2c+E LSZH 624B	WORKSHOP LIGHTING	RADIAL CIRCUIT	
10L1	С	10	30	1.5	2c+E LSZH 624B	COMMUNITY STUDIO LIGHTING	RADIAL CIRCUIT	
10L2	С	10	30	1.5	2c+E LSZH 624B	COMMUNITY STUDIO LIGHTING	RADIAL CIRCUIT	
10L3	С	10	30	1.5	2c+E LSZH 624B	COMMUNITY STUDIO LIGHTING	RADIAL CIRCUIT	
11L1	С	10	30	1.5	2c+E LSZH 624B	TREATMENT ROOM LIGHTING	RADIAL CIRCUIT	
11L2	С	10	-	1.5	2c+E LSZH 624B	RECEPTION LOBBY LIGHTING	RADIAL CIRCUIT	
11L3	С	10	30	1.5	2c+E LSZH 624B	OFFICE LIGHTING	RADIAL CIRCUIT	
12L1	С	10	-	1.5	2c+E LSZH 624B	EXTERNAL LIGHTING	RADIAL CIRCUIT. TIME SWITCH CONTROLLED	
12L2	С	10	-	1.5	2c+E LSZH 624B	EXTERNAL LIGHTING	RADIAL CIRCUIT. TIME SWITCH CONTROLLED	
12L3	С	6	30	EXISTING	EXISTING	EXISTING EXTERNAL LIGHTING COLUMN	RADIAL CIRCUIT. TIME SWITCH CONTROLLED. EXISTING CIRCUIT EXTENDED TO NEW SWITCH ROOM	
13L123						SPARE	BLANKING MODULE TO BE PROVIDED	
14L123						SPARE	BLANKING MODULE TO BE PROVIDED	
230A RATED SPLIT-METERED TPN DISTRIBUTION BOARD WITH INTEGRAL 230A SWITCH DISCONNECTOR AND INTEGRAL 2 CHANNEL ENERGY METER								

	DISTRIBUTION BOARD : DB/2							
						: SWITCH ROOM		
	GENERAL LIGHTING AND POWER							
SMALL POWER SECTION								
WAY	MCB						NOTES	
1L1	В	20	30	2.5	2c+E LSZH 624B	CHANGING VILLAGE SOCKET	RADIAL CIRCUIT	
1L2	В	20	30	2.5	2c+E LSZH 624B	OUTLETS CHANGING VILLAGE SOCKET OUTLETS	RADIAL CIRCUIT	
1L3	В	20	30	2.5	2c+E LSZH 624B	WC HAND DRYERS	RADIAL CIRCUIT	
2L1	В	32	30	2.5	2c+E LSZH 624B	VANITY BENCH SOCKET OUTLETS	RING CIRCUIT. PROVIDE AFFD PROTECTION.	
2L2	В	32	30	2.5	2c+E LSZH 624B	VANITY BENCH SOCKET OUTLETS	RING CIRCUIT. PROVIDE AFFD PROTECTION.	
2L3						SPARE	BLANKING MODULE TO BE PROVIDED	
3L1	В	20	30	2.5	2c+E LSZH 624B	WC HAND DRYERS	RADIAL CIRCUIT	
3L2	В	20	30	2.5	2c+E LSZH 624B	WC HAND DRYERS	RADIAL CIRCUIT	
3L3						SPARE	BLANKING MODULE TO BE PROVIDED	
4L1						SPARE	BLANKING MODULE TO BE PROVIDED	
4L2						SPARE	BLANKING MODULE TO BE PROVIDED	
4L3						SPARE	BLANKING MODULE TO BE PROVIDED	
5L123						SPARE	BLANKING MODULE TO BE PROVIDED	
6L123	В	63	-	INTEGRAL	INTEGRAL	SURGE PROTECTION DEVICE	RADIAL CIRCUIT	
					LIGHT	ING SECTION		
7L1	С	6	-	1.5	2c+E LSZH 624B	WC LIGHTING	RADIAL CIRCUIT	
7L2	С	10	30	1.5	2c+E LSZH 624B	CHANGING VILLAGE LIGHTING	RADIAL CIRCUIT	
7L3	С	10	30	1.5	2c+E LSZH 624B	CHANGING VILLAGE LIGHTING	RADIAL CIRCUIT	
8L1	С	10	30	1.5	2c+E LSZH 624B	CHANGING VILLAGE LIGHTING	RADIAL CIRCUIT	
8L2	С	10	30	1.5	2c+E LSZH 624B	CHANGING VILLAGE LIGHTING	RADIAL CIRCUIT	
8L3	С	10	30	1.5	2c+E LSZH 624B	CHANGING VILLAGE LIGHTING	RADIAL CIRCUIT	
9L1	С	10	30	1.5	2c+E LSZH 624B	CHANGING VILLAGE LIGHTING	RADIAL CIRCUIT	
9L2	С	10	30	1.5	2c+E LSZH 624B	CHANGING VILLAGE LIGHTING	RADIAL CIRCUIT	
9L3	С	6	-	1.5	2c+E LSZH 624B	EXTERNAL LIGHTING	RADIAL CIRCUIT.	
10L1						SPARE	BLANKING MODULE TO BE PROVIDED	
10L2						SPARE	BLANKING MODULE TO BE PROVIDED	
10L3						SPARE	BLANKING MODULE TO BE PROVIDED	
230A F	230A RATED SPLIT-METERED TPN DISTRIBUTION BOARD WITH INTEGRAL 230A SWITCH DISCONNECTOR AND INTEGRAL 2 CHANNEL							

					DISTRIBU	JTION BOARD : DB/3	
					LOCAT	ION: PLANT ROOM	
					MECHANIC	AL SERVICES POWER	
WAY	MCB TYPE	MCB RATING	RCD mA	CABLE SIZE (mm²)	CABLE TYPE	CIRCUIT DESCRIPTION	NOTES
1L123	D	80	-	25	5c XLPE/SWA/LSZH	AIR SOURCE HEAT PUMP	27mm MCB WAY RADIAL CIRCUIT
2L123	В	100	-	35	5c XLPE/SWA/LSZH	MVHR 1 HEATER BATTERY	27mm MCB WAY RADIAL CIRCUIT
3L1	В	16	30	2.5	2c+E LSZH 624B	TREATMENT ROOM WATER HEATER	RADIAL CIRCUIT. CONTACTOR CONTROLLED.
3L2	В	16	-	2.5	2c+E LSZH 624B	TREATMENT ROOM INTERNAL AC UNITS	RADIAL CIRCUIT.
3L3	В	20	30	2.5	2c+E LSZH 624B	ACCESS WC / LOBBY ELECTRIC HEATING	RADIAL CIRCUIT. CONTACTOR CONTROLLED.
4L1	В	20	30	2.5	2c+E LSZH 624B	OFFICE AREA ELECTRIC HEATING	RADIAL CIRCUIT.
4L2	В	16	30	2.5	2c+E LSZH 624B	ACCESS WC WATER HEATER	RADIAL CIRCUIT. CONTACTOR CONTROLLED.
4L3	В	16	-	2.5	2c+E LSZH 624B	RECEPTION AMBIENT AIR CURTAIN	RADIAL CIRCUIT.
5L123	С	40	-	10.0	4c XLPE/SWA/LSZH	MECHANICAL CONTROL PANEL	RADIAL CIRCUIT
6L123	В	20	-	4.0	4c XLPE/SWA/LSZH	IMMERSION HEATER 1	RADIAL CIRCUIT. CONTACTOR CONTROLLED.
7L123	В	20	-	4.0	4c XLPE/SWA/LSZH	IMMERSION HEATER 2	RADIAL CIRCUIT. CONTACTOR CONTROLLED.
8L123	С	16	-	2.5	5c XLPE/SWA/LSZH	MVHR 1	RADIAL CIRCUIT.
9L123	С	16	-	4.0	5c XLPE/SWA/LSZH	MVHR 2	RADIAL CIRCUIT.
10L123	В	25	-	6.0	5c XLPE/SWA/LSZH	MVHR 2 HEATER BATTERY	RADIAL CIRCUIT.
11L1	В	20	30	2.5	3c XLPE/SWA/LSZH	TRACE HEATING	RADIAL CIRCUIT.
11L2	С	16	-	2.5	3c XLPE/SWA/LSZH	BCWS PUMP SET 1	RADIAL CIRCUIT.
11L3	С	20	-	2.5	1c LSZH 6491B	UNDERFLOOR HEATING MANIFOLDS	RADIAL CIRCUIT
12L1	В	20	30	2.5	1c LSZH 6491B	SWITCH ROOM SMALL POWER	RADIAL CIRCUIT
12L2	С	16	-	2.5	3c XLPE/SWA/LSZH	BCWS PUMP SET 2	RADIAL CIRCUIT.
12L3						SPARE	BLANKING MODULE TO BE PROVIDE
13L123						SPARE	BLANKING MODULE TO BE PROVIDE
14L123						SPARE	BLANKING MODULE TO BE PROVIDE
15L123						SPARE	BLANKING MODULE TO BE PROVIDE
16L123	В	63	-	6.0	1c LSZH 6491B	TYPE 2 SURGE PROTECTION DEVICE	RADIAL CIRCUIT

	DISTRIBUTION BOARD : DB/4  LOCATION: POOL PLANT ROOM  MECHANICAL SERVICES POWER							
WAY	MCB MCB PCD CARIF							
1L123	С	63	-	EXISTING	EXISTING	EXISTING MECHANICAL CONTROL PANEL	EXISTING CIRCUIT RETAINED	
2L123						SPARE		
3L1	С	16	30	EXISTING	EXISTING	POOL COVER POWER SUPPLY	EXISTING CIRCUIT RETAINED	
3L2	В	10	-	EXISTING	EXISTING	EXISTING GATE SUPPLY	EXISTING CIRCUIT RETAINED	
3L3	С	6		1.5	1c LSZH 6491B	POOL PLANT ROOM LIGHTING	RADIAL CIRCUIT	
4L1						SPARE		
4L2	В	16		2.5	2c+E LSZH 624B	COMMUNITY STUDIO INTERNAL AC UNITS	RADIAL CIRCUIT.	
4L3	С	32		EXISTING	EXISTING	EXISTING POOL PLANT ROOM SOCKET OUTLETS	EXISTING CIRCUIT RETAINED	
5L1	С	20	30	2.5	2c+E LSZH 624B	WORKSHOP AREA ELECTRIC HEATING	RADIAL CIRCUIT.	
5L2	В	16	30	2.5	2c+E LSZH 624B	PLANT ROOM WATER HEATER	RADIAL CIRCUIT. CONTACTO CONTROLLED.	
5L3	В	16	30	2.5	2c+E LSZH 624B	COMMUNITY STUDIO WATER HEATER	RADIAL CIRCUIT. CONTACTO CONTROLLED.	
6L123	С	32	-	6.0	5c XLPE/SWA/LSZH	NEW COMMUNITY STUDIO EXTERNAL HEAT PUMP UNIT	RADIAL CIRCUIT	
7L123	С	32	-	EXISTING	EXISTING	EXISTING AIR SOURCE HEAT PUMP	EXISTING CIRCUIT RETAINE	
8L123	С	33		EXISTING	EXISTING	EXISTING AIR SOURCE HEAT PUMP	EXISTING CIRCUIT RETAINED	
	EXISTING 125A RATED TPN DISTRIBUTION BOARD RETAINED. PROVIDE NEW FINAL CIRCUITS AS INDICATED							



Notes:

This drawing is not to be scaled. All dimensions to be checked on site and any discrepancies to be reported to Tyse Design and Consultancy Ltd. All material is produced on behalf of Tyse Design and Consultancy Ltd. All drawings to be read in conjunction with specification where applicable. © Tyse Design & Consultancy Limited

MAIN SWITCHGEAR AND ELECTRICAL DISTRIBUTION

THE NEW ELECTRICAL SERVICES INSTALLATION SHALL BE INSTALLED, TESTED AND FULLY

- OPERATIONAL IN ACCORDANCE WITH THE FOLLOWING: BS 7671: 2018 REQUIREMENTS FOR ELECTRICAL INSTALLATIONS WIRING **REGULATIONS 18TH EDITION**
- APPROPRIATE PUBLICATIONS OF THE BRITISH STANDARD INSTITUTION
- THE ELECTRICITY AT WORK ACT THE HEALTH AND SAFETY AT WORK ACT
- THE REQUIREMENTS OF THE LOCAL BUILDING CONTROL AUTHORITY AND THE LOCAL
- FIRE PREVENTION AUTHORITY, THE BYE-LAWS AND REGULATIONS OF THE COUNTY AUTHORITY AND/OR THE LOCAL AUTHORITY.
- THE CURRENT EDITION OF THE GUIDE TO CURRENT PRACTICE ISSUED BY THE CHARTERED INSTITUTE OF BUILDING SERVICES ENGINEERS (CIBSE).
- SPECIFICATIONS AND CODES OF PRACTICE OF THE BRITISH STANDARDS

**DESIGN PARAMETERS** 400V/230V, 50 HZ, 3-PHASE AND NEUTRAL SUPPLY (TP&N)

THE ELECTRICITY SUPPLY REGULATIONS 1988 (AS AMENDED)

THE ELECTRICITY AT WORK REGULATIONS 1989 THE CONTRACTOR SHALL CARRY OUT THE FOLLOWING WORKS:

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF THE NEW MOULDED CASE

- CIRCUIT BREAKER PANEL BOARD AND MINIATURE CIRCUIT BREAKER DISTRIBUTION BOARDS AND ASSOCIATED SUB-MAIN CABLING REQUIRED AND INSTALLED UNDER THIS CONTRACT.
- SUPPLY, INSTALLATION AND TESTING OF NEW DISTRIBUTION BOARDS, PROTECTIVE DEVICES AND NEW FINAL CIRCUITS.

THE CONTRACTOR SHALL SUPPLY, INSTALL, TEST AND COMMISSION THE NEW LOW VOLTAGE DISTRIBUTION BOARDS INDICATED. INCLUDE ALL MCCB'S, SINGLE-MODULE MINIATURE CIRCUIT BREAKER (MCB/RCDS/RCBOS) PROTECTIVE DEVICES, BLANKING PLATES AND CIRCUIT CHARTS, RCDS AND/OR RCBOS TO BE 30mA TO BS EN 61008-1 OR BS EN 61009-1. THE CONTRACTOR SHALL INCLUDE FOR LIAISING WITH UK POWER NETWORKS AND ENERGY

SUPPLIERS AND PROVIDE ALL REQUIRED ATTENDANCES TO ALLOW NEW ELECTRICITY SUPPLIES TO BE INSTALLED TO SUPPLY THIS SITE. ALL NEW SWITCH GEAR TO BE FROM THE EATON MEM 'MEMSHIELD 3' RANGE. ALL NEW ITEMS ASSOCIATED WITH THE ELECTRICAL DISTRIBUTION SYSTEM SHALL BE PROVIDED WITH INDIVIDUAL TRAFFOLYTE LABELS CLEARLY DETAILING THEIR UNIQUE REFERENCES. LABELS SHALL COMPRISE BLACK LETTERING ON A WHITE BACKGROUND AND

INCLUDE THE DB REF/WAYNO/PHASE AS APPLICABLE. ALL NEW CONTAINMENT SHALL BE ELECTRICALLY CONTINUOUS THROUGHOUT. THE CONTRACTOR SHALL PROVIDE A TYPED DISTRIBUTION BOARD SCHEDULE MOUNTED IN A PLASTIC WALLET SECURELY FIXED WITHIN THE LID OF THE NEW DISTRIBUTION BOARDS DETAILING THE WAY NUMBER, CIRCUIT DESCRIPTION, PROTECTIVE DEVICES TYPE AND RATING,

CABLE AND CPC TYPES AND SIZES TOGETHER WITH TEST RESULTS  $Z_{\rm S}$  AND  $Z_{\rm E}$  FOR INDIVIDUAL

ELECTRONIC COPIES OF THE DISTRIBUTION BOARD SCHEDULES SHALL BE PROVIDED WITH THE OPERATION & MAINTENANCE MANUALS. NICEIC TEST AND INSPECTION SHEETS SHALL BE PROVIDED TO THE CONTRACT

ADMINISTRATOR UPON COMPLETION. EARTHING AND BONDING THE EARTHING SYSTEM SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND

- RECOMMENDATIONS: BS 7430:1998 - CODE OF PRACTICE FOR EARTHING
- SUPPLY AUTHORITIES REQUIREMENTS
- BS7671 IET WIRING REGULATIONS LATEST EDITION AND AMENDMENTS

CARRY OUT WORKS AS NECESSARY TO AREAS COVERED BY THIS CONTRACT. EARTHING, MAIN EQUIPOTENTIAL BONDING, SUPPLEMENTARY BONDING AND PROTECTIVE CONDUCTORS SHALL BE PROVIDED IN ACCORDANCE WITH BS 7430, ELECTRICITY SUPPLIER'S

REQUIREMENTS AND IEE REGULATIONS BS 7671 AND GUIDANCE NOTES. WHERE PROVIDED, EARTH CLAMPS TO CONFORM TO BS: 951. MAIN EQUIPOTENTIAL BONDING IS CURRENTLY INSTALLED TO THE MAIN SWITCHROOM. PROVIDE NEW BONDING CONNECTIONS AS INDICATED.

NEW BONDING CABLES TO BE LSZH SINGLE CORE CABLES WITH A SEPARATE STRANDED GREEN/YELLOW. ALL METALLIC CONTAINMENT SHALL BE BONDED TO EARTH AND ELECTRICALLY CONTINUOUS THROUGHOUT.

LABELS: PROVIDE A PERMANENT LABEL "SAFETY ELECTRICAL CONNECTION - DO NOT REMOVE" FIXED IN A VISIBLE POSITION. LABELLING

IDENTIFICATION AND NOTICES: STANDARDS: TO BS 5499-5 AND BS 5378-2. EQUIPMENT: LABEL WHEN A VOLTAGE EXCEEDING 230 V IS PRESENT.

SUB-MAIN CABLES: LABEL AT BOTH ENDS WITH PROPRIETARY CABLE MARKER SLEEVES. EXTERNALLY FIXED WITH CABLE TIES GIVING CABLE SIZE AND FUNCTION. PROVIDE ALL LABELLING THROUGHOUT THE NEW INSTALLATION TO COMPLY WITH THE IET REGULATIONS AND OTHER HEALTH AND SAFETY REQUIREMENTS.

FIX ALL LABELS AND SIGNS SECURELY BEFORE SYSTEMS ARE TESTED. THE CONTRACTOR SHALL ALLOW FOR ELECTRICITY AT WORK WARNING NOTICES INFORMATION SIGNAGE TO THE SWITCH CUPBOARD.

DRAWING SPECIFIC NOTES:

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ELECTRICAL ENGINEERING SERVICES SPECIFICATION

T01	TENDER ISSUE  PRELIMINARY ISSUE	LT LT	9/10/24	
REV:	DESCRIPTION:	BY:	9/10/24 DATE:	
STATU		вт.	DATE:	



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WARE PRIORY LIDO. PROPOSED EXTENSION & REFURBISHMENT PRIORY STREET, WARE SG12 0DE

ELECTRICAL SERVICES PROPOSED LOW VOLTAGE SCHEMATIC & DISTRIBUTION BOARD SCHEDULES

SCALE AT A1:	DATE:	DRAWN:	CHECKED:
As Noted	October 2024	RT	LT
PROJECT NO:	DRAWING NO:		REVISION:
240804	240804/E/02	2	T01