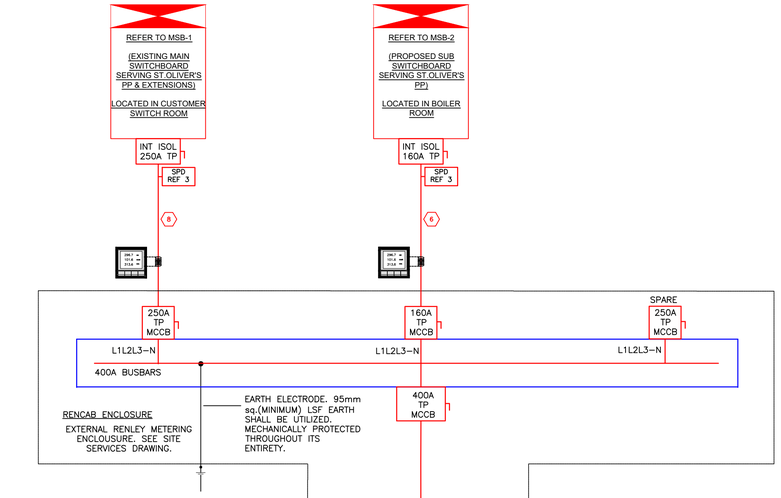
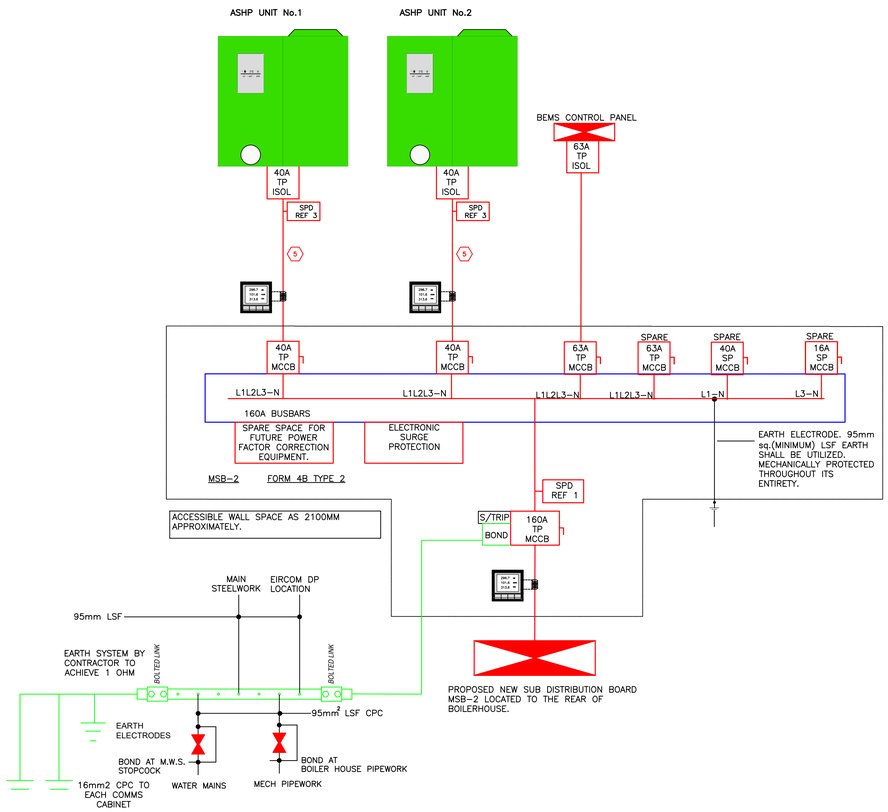
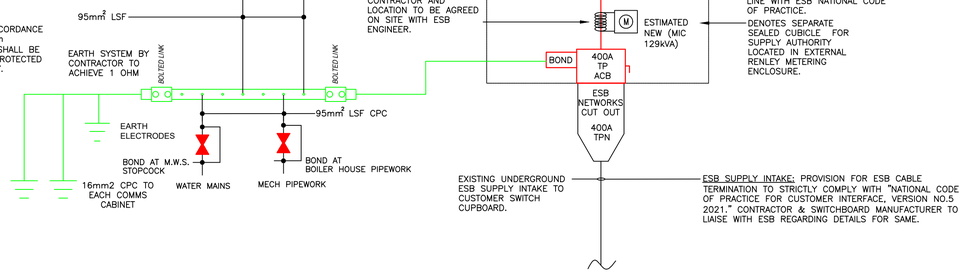
THIS DRAWING IS FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRODUCING WORKING DRAWINGS





CONTRACTOR TO ASSESS & IMPLEMENT FULL CROSS & SUPPLEMENTARY BONDING REQUIREMENTS TO COMPLY WITH IS10101:2020

EARTH ELECTRODES IN ACCORDANCE WITH IS10101:2020, 70mm sq.(MINIMUM) LSF EARTH SHALL BE UTILIZED. MECHANICALLY PROTECTED THROUGHOUT ITS ENTIRETY.



ELECTRONIC SURGE PROTECTION DEVICE LEGEND	
SPD REF 1	SURGE PROTECTION DEVICE: SERVICE ENTRY CLASS 1, 2 & 3 ENHANCED, FULL AND DIFFERENTIAL MODE, LOW LET-THROUGH VOLTAGE (600v MAX) TP&N. AS FURSE ESP 415M2 (NOT DIN RAIL MOUNTABLE, FIX TO INTERNAL MOUNTING PLATE.)
SPD REF 2	SURGE PROTECTION DEVICE: SERVICE ENTRY CLASS 1 & 2 ENHANCED, FULL AND DIFFERENTIAL MODE, LOW LET-THROUGH VOLTAGE (600v MAX) SP&N. AS FURSE ESP 240/111/TNS (DIN RAIL MOUNTABLE).
SPD REF 3	SURGE PROTECTION DEVICE: CO-ORDINATED CLASS 1, 2 & 3 ENHANCED, FULL AND DIFFERENTIAL MODE, LOW LET-THROUGH VOLTAGE (600v MAX) TP&N. AS FURSE ESP 415D1 (DIN RAIL MOUNTABLE).
SPD REF 4	SURGE PROTECTION DEVICE: CO-ORDINATED CLASS 1, 2 & 3 ENHANCED, FULL AND DIFFERENTIAL MODE, LOW LET-THROUGH VOLTAGE (600v MAX) SP&N. AS FURSE ESP 240D1 (DIN RAIL MOUNTABLE).
SPD REF 5	SURGE PROTECTION DEVICE: CO-ORDINATED CLASS 1, 2 & 3 ENHANCED FULL AND DIFFERENTIAL MODE, LOW LET-THROUGH VOLTAGE (600v MAX) SP&N/BX (READY BOXED TYPE FOR MOUNTING ADJACENT/INTEGRAL TO PROTECTED EQUIPMENT). AS FURSE ESP 240-5A/BX (READY BOXED).
SPD REF 6	AS FURSE ESP 415/111/TNS SPD

SWITCHBOARD SYMBOLS LEGEND	
--A TP MCCB	3-POLE MOULDED CASE CIRCUIT BREAKER ALL MCCB'S SHALL BE THERMALLY & MAGNETICALLY ADJUSTABLE TYPE TO A RATING OF 0.6.
--A TP MCB	3-POLE MCB
	INDICATES 3-PHASE MULTI-FUNCTION DIGITAL METER WITH PULSED & MODBUS OUTPUT MODULES. AS SCHNEIDER (SQUARE D) 'SE250MET' & 'PM750' SUPPLIED AS EXTENSION BOX KIT c/w CT's, WIRING LOOMS AND MCB's, SUITABLE FOR FITTING TO TOP AND BOTTOM ON BOARD AS A FULLY COMPATIBLE SOLUTION. TO BE SUPPLIED WITH LOCKABLE HINGED DOOR AND LINKED TO BMS.
CONTACTOR	4-POLE 32A CONTACTOR (SITE LIGHTING). QUANTITY TO BE DETERMINED BY CONTRACTOR AND ALLOWED IN TENDER.
	HAND-OFF-AUTO SWITCH
PEC	PHOTOCELL
TC	TWO CHANNEL DIGITAL TIMESWITCH (HORSTMANN, WALL-MOUNTED) c/w POWER SUPPLY
E.S.P	TRANSIENT VOLTAGE SURGE SUPPRESSOR KIT AS EATON 'TVSS M2SSK3' OR EQUAL & APPROVED (REFER TO SPEC)
ELTU	EMERGENCY LIGHTING CENTRAL TEST UNIT (CTU) PANEL. QUANTITY OF ZONES AS INDICATED AND DESCRIBED. CTU TO BE MOUNTED ADJACENT DIST BOARD IN EACH CASE - NOT INTEGRAL. PROVIDE POWER SUPPLY.

SCHEDULE OF SUBMAIN CABLES

REF NO.	CSA (mm2)	NO. OF CORES	CABLE TYPE	SEPARATE CPC (mm2)
1	6.0	5C	XLPE/SWA/LSF	--
2	10.0	5C	XLPE/SWA/LSF	--
3	16.0	4C	XLPE/SWA/LSF	16.0
4	25.0	4C	XLPE/SWA/LSF	16.0
5	35.0	4C	XLPE/SWA/LSF	16.0
6	50.0	4C	XLPE/SWA/LSF	25.0
7	70.0	4C	XLPE/SWA/LSF	35.0
8	95.0	4C	XLPE/SWA/LSF	50.0
9	120.0	4C	XLPE/SWA/LSF	70.0
10	150.0	4C	XLPE/SWA/LSF	95.0
11	240.0	4C	XLPE/SWA/LSF	150.0
12	2.5	2C & EARTH	FIRETUF ENHANCED PH120	--
13	4.0	2C & EARTH	FIRETUF ENHANCED PH120	--
14	2.5	2C & EARTH	XLPE/SWA/LSF	2.5
15	6.0	3C	XLPE/SWA/LSF	--
16	10.0	3C	XLPE/SWA/LSF	--
17	16.0	3C	XLPE/SWA/LSF	--
18	25.0	3C	XLPE/SWA/LSF	--
19	35.0	3C	XLPE/SWA/LSF	--
20	EXISTING	EXISTING	EXISTING	EXISTING

NOTES:

THIS DRAWING IS A REPRESENTATION OF EXISTING SERVICES ON SITE, THE CONTRACTOR SHOULD ALLOW FOR FULL INVESTIGATION AND TESTING WHERE NECESSARY TO VERIFY THE INSTALLATION ON SITE PRIOR TO CARRYING OUT ANY WORKS. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS AND THE SPECIFICATION.

THE CONTRACTOR SHOULD LIAISE WITH ESB REGARDING THE DISCONNECTION AND RECONNECTION OF THEIR EXISTING SUPPLY CABLE INTO THE NEW MAIN SWITCHGEAR & METERING REQUIREMENTS.

ALL ITEMS WITHIN DASHED LINES ARE TO BE INTEGRAL TO THE MAIN & MCCB SWITCHBOARDS.

IT IS THE CONTRACTORS RESPONSIBILITY TO CHECK ALL BREAKER SIZES ON SITE TO SUIT EXISTING SUPPLIES PRIOR TO MANUFACTURE OF SWITCHBOARDS.

THE MAIN SWITCHBOARD SHALL BE OF THE PURPOSE-BUILT CUBICLE PATTERN SUITABLE FOR WALL AND FLOOR MOUNTING WITH FORM 3B SEGREGATION. MAIN SWITCHBOARD TO BE METAL CLAD CUBICLE TYPE WITH 25% SPARE CAPACITY.

THE SWITCHBOARD SHALL INCORPORATE SUITABLE SECTIONS TO CONTAIN ESB METERING AND ASSOCIATED CTs.

ALL MCCBs SHALL BE AS MANUFACTURED BY MERLIN GERIN/SCHNEIDER OR EQUAL & ACCEPTED.

THE SWITCHBOARD SHALL BE SUITABLE FOR BOTTOM ENTRY AND TOP EXIT OF CABLING.

LIASE WITH ESB TO COORDINATE SITE VISITS AND RE-CONNECTION OF METERS BY ESB REPRESENTATIVE

OUT-GOING SERVICE FOR FIRE ALARM SHALL BE COLOURED RED AND PROVIDED WITH FACILITY TO BE PADLOCKED IN THE 'ON' POSITION.

OUTGOING SERVICE FOR INTRUDER ALARM TO BE COLOURED GREEN AND SHALL BE PROVIDED WITH FACILITY TO PADLOCK IN THE 'ON' POSITION.

DIGITAL MULTIMETER & PHASE HEALTHY INDICATION LIGHTS TO BE FITTED TO MAIN ISOLATOR.

ALL CABLE WAYS TO SUIT THE SIZE OF OUTGOING CABLES AND BE SUPPLIED PRE-BORED.

EACH CUBICLE ON THE MAIN SWITCHBOARD SHALL BE PROVIDED WITH A TRAFFOLYTE LABEL TO DENOTE ITS FUNCTION.

ELECTRONIC SURGE PROTECTION TO BE INSTALLED ON INCOMING SUPPLY.

ALL SUB-DISTRIBUTION BOARDS TO BE SUPPLIED WITH LOCKABLE DOORS/LIDS. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL SUB-DISTRIBUTION BOARDS HAVE SUITABLE NUMBER OF WAYS FOR ALL RELEVANT CIRCUITS, ALLOWING FOR 25% SPARE CAPACITY IN EACH.

EXISTING EMERGENCY LIGHTING CIRCUITS TO BE RETAINED SHALL BE RE-TERMINATED INTO EACH NEW & EXISTING LIGHTING DISTRIBUTION BOARD TO ENABLE AUTOMATIC REMOTE EMERGENCY LIGHTING TESTING THROUGH THE NEW CENTRAL TEST UNITS. CIRCUITS SHALL BE WIRED TO COMPLY WITH IS3217. ENTIRE EMERGENCY LIGHTING SYSTEM TO BE RE-COMMISSIONED ON COMPLETION.

REV	DESCRIPTION	DRN	CKD	DATE
P02	TENDER STAGE	MF.C	DMcD	20.04.2026
P01	FOR APPROVAL	MF.C	DMcD	09.04.2026

ISSUE: FOR TENDER

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PROJECT TITLE
ENERGY PATHFINDER MEATH SCHOOLS
ST.OLIVER'S POST PRIMARY

DRAWING TITLE
ELECTRICAL SERVICES INSTALLATION
LV SCHEMATIC

DRAWING REFERENCE	DRN	SCALE
3232-SMK-8.7-SC-DR-E-6000	MF.C	A1 NTS

Project - Originator - Volume - Level - Type - Role - Number