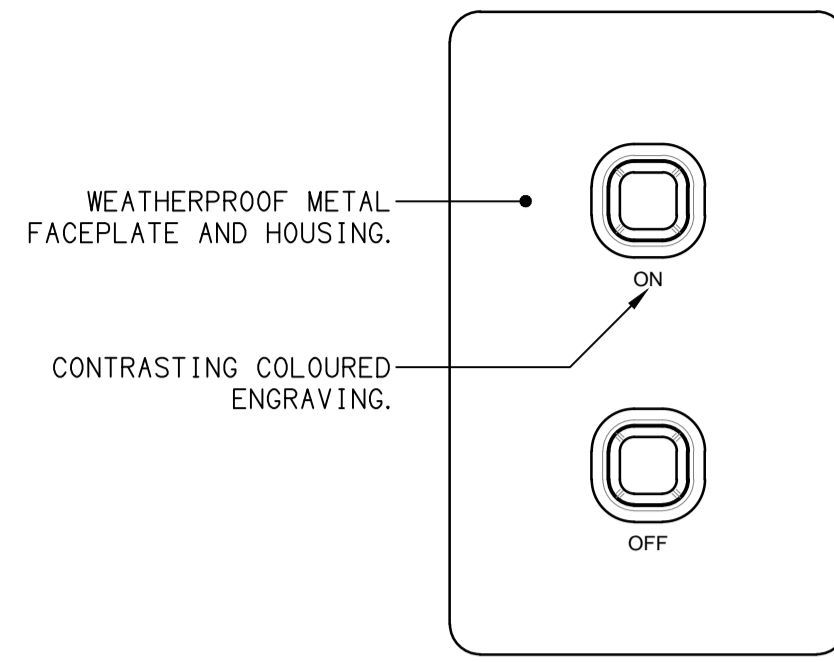
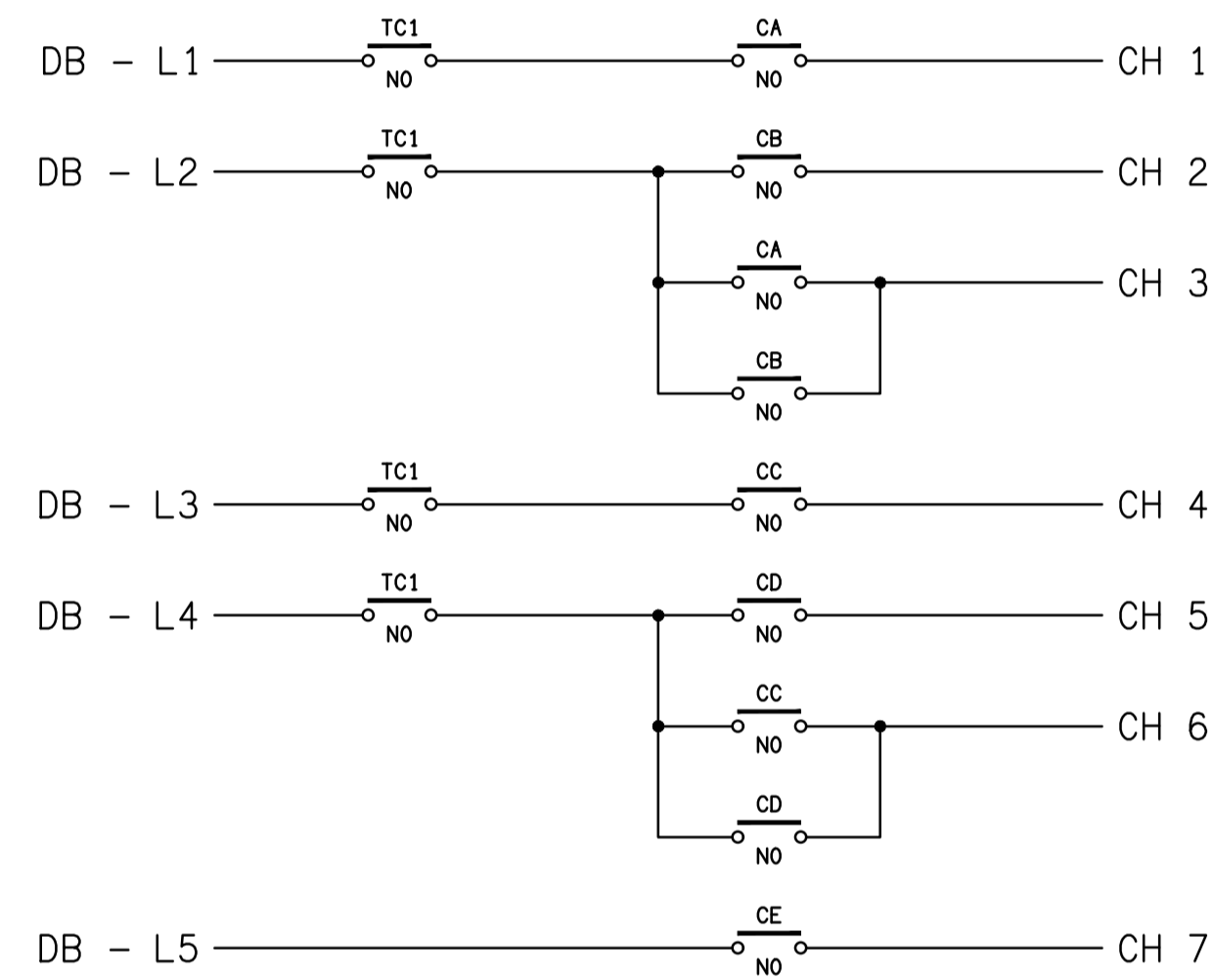


**SCHEMATIC**  
LIGHTING CONTROL  
NOT TO SCALE



**DETAIL**  
SWITCH PANELS SPA, SPB, SPC & SPD  
NOT TO SCALE



**SCHEMATIC**  
LIGHTING CONTROL  
NOT TO SCALE

**NOTES**

1. EXTENT OF WORKS

THE ELECTRICAL SERVICES SUB-CONTRACT INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:

- SUPPLY AND INSTALLATION OF ALL COMPONENTS FORMING PART OF THE ELECTRICAL SERVICES.
- CO-ORDINATION.
- INSPECTIONS.
- TESTING AND COMMISSIONING.
- MAINTENANCE.
- CABLING, CABLE SUPPORT SYSTEMS AND ACCESS.
- POWER DISTRIBUTION.
- REPLACEMENT OF THE DISTRIBUTION BOARD.
- RECONNECTION OF EXISTING SERVICES THAT REMAIN.
- LIGHTING CONTROL.
- LIGHT FITTINGS.
- LIGHTING POLES INCLUDING FOOTINGS.
- LIGHTING CONTROL.
- UNDERGROUND CONDUITS.
- REMOVAL OF ALL SERVICES AND COMPONENTS MADE REDUNDANT BY THE WORKS.
- ALL MINOR COMPONENTS AND INCIDENTAL WORKS NOT SPECIFICALLY REFERRED TO, HOWEVER NECESSARY TO COMPLETE THE ELECTRICAL SERVICES INSTALLATION SUCH THAT IT IS HANDED OVER COMPLETE, OPERATIONAL AND FIT FOR THE INTENDED USE.

REMOVE THE EXISTING EIGHT POLES, FOOTINGS AND LIGHTS.

SUPPLY ALL LABOUR, MATERIALS, EQUIPMENT, AND ALL OTHER ITEMS, WHETHER MENTIONED IN DETAIL OR NOT, REQUIRED FOR THE SATISFACTORY COMPLETION OF THE ELECTRICAL SERVICES INSTALLATION, LEAVING IN FULL WORKING ORDER TO THE SATISFACTION OF THE PROJECT MANAGER.

ACCEPT FULL RESPONSIBILITY FOR LIASING, ARRANGING AND CO-ORDINATION ALL WORKS THAT HAVE AN EFFECT ON OR WILL BE AFFECTED BY THE ELECTRICAL SERVICES.

REMOVE ALL OF THE EXISTING ELECTRICAL SERVICES THAT BECOME REDUNDANT DUE TO THE WORKS.

2. WORKMANSHIP

ENSURE THAT THE WORK IS PERFORMED BY THE HOLDER OF A CURRENT ELECTRICAL SUB CONTRACTOR LICENSE. ENSURE THE INSTALLATION AND ALL COMPONENTS, FIXTURES, FITTINGS, OUTLETS AND CABLES ARE SUPPLIED AND INSTALLED TO A HIGH STANDARD THROUGHOUT, AND INSTALLED IN A NEAT AND TRADESMAN LIKE MANNER, TO THE CURRENT INDUSTRY STANDARDS. ENSURE ALL MATERIALS AND COMPONENTS OF A SIMILAR TYPE ARE OF THE SAME MANUFACTURER AND INSTALLED IN A UNIFORM MANNER.

IT IS THE ELECTRICAL SUB CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE INSTALLATION IS FIT FOR PURPOSE AND IS PROVIDED AS A COMPLETE WORKING INSTALLATION. IT IS THE ELECTRICAL SUB CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL COMPONENTS, FITTINGS, FIXTURES, SYSTEMS, PROGRAMMING ETC IRRESPECTIVE OF THE LEVEL DETAILED IN THE DOCUMENTS SUCH THAT THE INSTALLATION IS PROVIDED AS A COMPLETE WORKING INSTALLATION.

CONCEAL ALL WIRING AND CONDUITS. EXPOSED CABLING OR CONDUITS ARE GENERALLY NOT ACCEPTABLE. IT IS NOTED THAT CHASING AND REINSTATEMENT WILL BE REQUIRED. ENSURE ALL COMPONENTS, EQUIPMENT AND MATERIALS SUPPLIED ARE NEW, UNUSED, DESIGNED AND SELECTED TO ENSURE SATISFACTORY OPERATION UNDER VARYING ATMOSPHERIC, CLIMATIC, HUMID TROPICAL CONDITIONS WITHOUT DISTORTION AND DETERIORATION IN ANY PART AFFECTING EFFICIENCY AND RELIABILITY OF THE SYSTEMS. DESIGN AND SELECT ALL EQUIPMENT TO PROVIDE THE NECESSARY SAFETY TO HUMAN LIFE AND PROPERTY DURING OPERATION AND MAINTENANCE WITH PARTICULAR ATTENTION GIVEN TO ELECTRICAL SAFETY AND SEGREGATION PRECAUTIONS.

CHECK THE FINISHED PAINTWORK AROUND THE AREA OF EACH INSTALLATION AND TOUCH UP ALL DAMAGED PARTS AND FINISHES AFTER THE INSTALLATION OF THE ELECTRICAL SERVICES.

ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH THE BUILDER'S PROGRAM. ENSURE ALL FINAL LOCATIONS OF OUTLETS AND FITTINGS ARE CO-ORDINATED ONSITE WITH THE ARCHITECT AND ALL OTHER SERVICES, TO THE APPROVAL OF THE PROJECT MANAGER. ALLOW TO CO-ORDINATE THE FINAL LOCATION OF ALL EQUIPMENT, FITTINGS, & OUTLETS, SUCH THAT THEY ARE INSTALLED IN ACCORDANCE WITH THE AS3000 RESTRICTED ZONES, AND ARE NOT COVERED INAPPROPRIATELY.

ENSURE THAT ALL METAL SURFACES ARE SUITABLY PROTECTED AGAINST CORROSION, AND THAT ALL PLASTIC MATERIALS ARE UV STABILISED.

PROVIDE ALL MATERIALS AS NEW, AND OF THE HIGHEST CLASS AVAILABLE FOR THEIR RESPECTIVE TYPES. ENSURE ALL ASPECTS OF THE WORK ARE OF A HIGH STANDARD THROUGHOUT, AND INSTALLED IN A NEAT AND TRADESMAN LIKE MANNER, TO THE CURRENT INDUSTRY STANDARDS.

3. STANDARDS

IRRESPECTIVE OF INFORMATION CONTAINED IN THE ELECTRICAL SERVICES DOCUMENTS OR IN INSTRUCTIONS, IT IS THE ELECTRICAL SUB CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL ELECTRICAL SERVICES WORKS ARE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FOLLOWING. REFER ANY DISCREPANCIES BETWEEN THE REQUIREMENTS OF THE FOLLOWING AND/OR THE ELECTRICAL SERVICES DOCUMENTS AND INSTRUCTIONS TO THE ARCHITECT FOR CLARIFICATION PRIOR TO THE PLACING OF ORDERS, FABRICATION OR INSTALLATION OF THE ITEMS/METHODS IN DISCREPANCY.

- NCC BUILDING CODE OF AUSTRALIA.
- ELECTRICITY ACT.
- ELECTRICAL SAFETY ACT.
- AS/NZS3000.
- AS3008.
- WORKPLACE HEALTH AND SAFETY ACT.
- TELECOMMUNICATIONS ACT.
- ACMA REQUIREMENTS.

4. AUTHORITIES

ENSURE ALL OF THE ELECTRICAL SERVICES COMPLY WITH THE REQUIREMENTS OF ALL REGULATORY AUTHORITIES HAVING JURISDICTION OVER THE SITE INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- ACMA.
- LOCAL COUNCIL.
- LOCAL SUPPLY AUTHORITY.
- STATE GOVERNMENT DEPARTMENT OF ENVIRONMENT AND HERITAGE.
- QLD GOVERNMENT, DIVISION OF WORKPLACE, HEALTH AND SAFETY.

**NOTES**

5. DISTRIBUTION BOARD

REMOVE THE EXISTING DISTRIBUTION BOARD AND THE ASSOCIATED SUBMAIN FROM THE MSB. PROVIDE A NEW DISTRIBUTION BOARD IN THE NEW LOCATION WITH A NEW 4C x 16mm<sup>2</sup> Cu XLPE / PVC + E SUBMAIN FROM THE EXISTING MSB. MOUNT THE NEW DISTRIBUTION BOARD ON THE EXTERNAL SIDE OF THE FENCE PROVIDING ADDITIONAL SUPPORTS MATCHING THE FENCE POLES AS REQUIRED. PROVIDE THE DISTRIBUTION BOARD WITH AN APPROPRIATELY SIZED MAIN SWITCH AND ALL NECESSARY SWITCHGEAR AND CONTROLS. ENSURE THE DISTRIBUTION BOARD HAS SPARE SPACE FOR AN ADDITIONAL 50% INCREASE IN SWITCHGEAR, CONTROLS AND CABLING.

RECONNECT ALL EXISTING CIRCUITS SUPPLIED FROM THE EXISTING DISTRIBUTION BOARD THAT REMAIN TO NEW SWITCHGEAR IN THE NEW DISTRIBUTION BOARD.

THE DISTRIBUTION BOARD IS TO BE STAINLESS-STEEL IP 56 AND HAVE A FLUSH KEY LOCKABLE DOOR WITH LIFT OFF HINGES. PROVIDE THE DISTRIBUTION BOARD WITH SURGE PROTECTION AND HORIZONTAL DIN RAILS TO MOUNT THE CONTROL EQUIPMENT. PROVIDE A SHOP DRAWING OF THE DISTRIBUTION BOARD FOR APPROVAL. THE TOP OF THE DISTRIBUTION BOARD IS TO BE SEALED AND MUST NOT CONTAIN ANY GLAND PLATES OR PROVISION FOR CABLE ACCESS. ALL CABLES ENTERING THE NEW DISTRIBUTION BOARD MUST ENTER FROM BELOW.

PROVIDE A NEW UNDERGROUND CONDUIT FROM THE EXISTING PIT TO THE NEW DISTRIBUTION BOARD TO FACILITATE ACCESS FOR THE NEW SUBMAIN FROM THE MSB. ALL CABLING AND CONDUITS INTO AND OUT OF THE DISTRIBUTION BOARD ARE TO BE CONCEALED.

6. CABLES

UNLESS OTHERWISE SPECIFIED, INSTALL AND TERMINATE CABLES IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS. DETERMINE THE FINAL ROUTES TO SUIT THE BUILDING STRUCTURE AND SITE CONDITIONS. PROVIDE CIRCUITS DB-L1 TO L5 AND DB-P1 AS SINGLE PHASE 2.5mm<sup>2</sup> TWIN & EARTH STRANDED COPPER CONDUCTORS, PVC INSULATED 0.6/1kV V75 GRADE TO AS3174, EACH PROTECTED BY COMBINATION DIN STYLE 30MA RCD 20A CIRCUIT BREAKERS. ALL CONDUIT AND FITTINGS TO BE CONCEALED RIGID UPVC TO AS2053.

B	TENDER	04/09/2020
REV:	DESCRIPTION:	DATE:

DRAWING:  
**ELECTRICAL SERVICES**  
NOTES & LIGHTING CONTROL DETAILS

SCALE: NOT TO SCALE AT A1	PROJECT NO: <b>C2226a</b>	DRAWING NO: <b>E02</b>	REVISION: <b>B</b>
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**ELECTRICAL DESIGN GROUP**  
ELECTRICAL BUILDING SERVICES CONSULTANTS  
BRISBANE GOLD COAST

P.O.Box 15, Sherwood Q.4075  
Phone: (07) 3278 4375  
Email: brisbane@edg.net.au  
Web: www.edg.net.au

PROJECT:  
**ANGLICAN CHURCH GRAMMAR SCHOOL**  
**HAZEL MILLMAN TENNIS COURTS**

HEATH PARK, HILTON STREET, EAST BRISBANE