



# ELECTRICAL DESIGN GROUP

ELECTRICAL BUILDING SERVICES CONSULTANTS

P.O. Box 15, SHERWOOD Q. 4075

Phone: (07) 3278 4375

Website: www.edg.net.au Email: brisbane@edg.net.au

C3605a - KINGS CHRISTIAN COLLEGE - PIMPAMA, SENIOR SCHOOL PIM23

C3605a-0001(A).xls

## ELECTRICAL SERVICES CONTRACT DOCUMENT SCHEDULE

REVISION A - 15 JULY 2025

ISSUING INFORMATION				DATE OF ISSUE							
	DAY MONTH YEAR	REASON FOR ISSUE	15								
			07								
			25								
			P								
A = APPROVAL      C = CONSTRUCTION      N = COORDINATION      P = PRELIMINARY      T = TENDER											

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DOCUMENTS		REVISION									
C3605a-E01.dwg	LEGEND & DETAILS	A									
C3605a-E02.dwg	NOTES	A									
C3605a-E03.dwg	SCHEMATICS	A									
C3605a-E04.dwg	SITE PLAN	A									
C3605a-E05.dwg	GROUND LEVEL FLOOR PLAN	A									
C3605a-E06.dwg	GROUND LEVEL REFLECTED CEILING PLAN	A									
C3605a-E07.dwg	LEVEL 1 FLOOR PLAN	A									
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C3605a-0001.xls	CONTRACT DOCUMENT SCHEDULE	A									
C3605a-0002.xls	EQUIPMENT SCHEDULE	A									
C3605a-0004.xls	DISTRIBUTION BOARD DB-23 SCHEDULE	A									
C3605a-0001.zip	FITTING & OUTLET DATASHEETS										



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## ELECTRICAL EQUIPMENT SCHEDULE

REVISION A - 15 JULY 2025

THE EQUIPMENT SUPPLIER CONTACT DETAILS MAY BE AVAILABLE ON THE EDG WEBSITE VIA THE FOLLOWING LINK  
[www.edg.net.au/links.html](http://www.edg.net.au/links.html)

TYPE	LAMPS	DESCRIPTION	COLOUR / ACCESSORY	CATALOGUE No	REV
L1	28W 4000K LED	600 X 600 LAY IN FLAT PLATE LED FITTING C/W REMOTE DALI DIMMABLE DRIVER MOUNTED IN A SURFACE MOUNTING KIT	BLACK TRIM AND BLACK SURFACE KIT	GAMMA ILLUMINATION PHANTOM 600X600 88 SERIES 28W C/W SCREW FREE SURFACE KIT	A
L2	13W 4000K LED	SURFACE MOUNTED CAN DOWNLIGHT C/W INTEGRAL DRIVER	WHITE	GAMMA ILLUMINATION RODAR 1374-VWFL-4K-13W	A
L3	13W 4000K LED	RECESSED DOWNLIGHT C/W REMOTE DRIVER	WHITE	GAMMA ILLUMINATION CORBEL 1410-4K-13W	A
L4	36W LED 4000K	1200 LONG SURFACE MOUNTED IP65 DIFFUSED BATTEN C/W INTEGRAL ELECTRONIC CONTROL GEAR	LIGHT GREY	GAMMA STORM 1558-CCT-36W	A
L5	36W LED 4000K	1200 LONG SURFACE MOUNTED IP65 DIFFUSED BATTEN C/W INTEGRAL ELECTRONIC CONTROL GEAR AND PRESENCE DETECTION SENSOR	LIGHT GREY	GAMMA STORM 1558-CCT-36W-MS	A
L6	52W LED 4000K	WALL MOUNTED AREA LIGHT C/W INTEGRAL DRIVER. ORIENTATED DOWNWARD.	BLACK	GAMMA ILLUMINATION MOLO 1573-4K-52W	A
L7	3.9W LED 4000K	WALL MOUNTED LIGHT C/W REMOTE DRIVER. MOUNT THE FITTING CENTRED 300 AFFL. LOCATE THE DRIVER IN A REMOTE ACCESSIBLE POSITION NOTED ON THE AS CONSTRUCTED DOCUMENTS. IT IS ACCEPTABLE TO SUPPLY MULTIPLE L7 FITTINGS FROM A COMMON DRIVER	STAINLESS STEEL	GAMMA ILLUMINATION MOLO 1573-4K-52W	A
L8	28W 4000K LED	SURFACE MOUNTED CAN DOWNLIGHT C/W INTEGRAL DRIVER	WHITE	GAMMA ILLUMINATION JUTE 1322-WR-4K-28W	A
E1	LED	EMERGENCY LIGHT: RECESSED NON-MAINTAINED EMERGENCY LIGHT. AS2293 CLASSIFICATION C0-D40 - C90-D40.	WHITE	STANILITE SF1LEDP	A
E2	LED	EMERGENCY LIGHT: SURFACE MOUNTED NON-MAINTAINED EMERGENCY LIGHT. AS2293 CLASSIFICATION C0-D40 - C90-D40.	WHITE	STANILITE ECOSPITFIREBOX	A
EX	LED	EXIT LIGHT: MAINTAINED 24M VIEWING DISTANCE EXIT LIGHT C/W DIFFUSERS & DIRECTIONAL ARROWS AS SHOWN. CEILING OR WALL MOUNT BETWEEN 2100mm & 2700mm AFFL IF THERE IS NO VERTICAL SURFACE TO MOUNT THE FITTING ON WITHIN THIS RANGE CONFIRM THE MOUNTING HEIGHT WITH THE ENGINEER. AS2293 CLASSIFICATION C0-D8 - C90-E3.2.	WHITE	STANILITE PQFLEDP	A



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TYPE	LAMPS	DESCRIPTION	COLOUR / ACCESSORY	CATALOGUE No	REV
EX (WP)	LED	EXIT LIGHT: MAINTAINED 24M VIEWING DISTANCE EXIT LIGHT C/W DIFFUSERS & DIRECTIONAL ARROWS AS SHOWN AND A IP56 HOUSING CEILING OR WALL MOUNT BETWEEN 2100mm & 2700mm AFFL IF THERE IS NO VERTICAL SURFACE TO MOUNT THE FITTING ON WITHIN THIS RANGE CONFIRM THE MOUNTING HEIGHT WITH THE ENGINEER. AS2293 CLASSIFICATION C0-D3.2 - C90-E2.	GREEN LOGO, WHITE BACKGROUND, WHITE BODY	STANILITE LED WEATHERPROOF PWQFLEDP	A
EMERGENCY PACK		LIGHT FITTINGS THAT ARE DESIGNATED AS BEING PROVIDED WITH AN EMERGENCY PACK ARE TO BE PROVIDED WITH AN INTEGRAL AS2293 EMERGENCY PACK. THE FITTINGS ARE TO BE NON MAINTAINED WITH ALL LAMPS SWITCHED AS PER THE LIGHTING CONTROL FOR THAT SPACE UNLESS NOTED OTHERWISE. REFER TO THE SPECIFICATION FOR FURTHER DETAILS OF THE CONFIGURATION AND SWITCHING OF EMERGENCY LIGHTS.			A
ONE-WAY LIGHT SWITCH		ONE-WAY LIGHT SWITCH C/W CIRCUIT IDENTIFICATION ON THE FACEPLATE BEHIND THE SURROUND MOUNTED AT 1000mm AFFL UNLESS NOTED OTHERWISE.	WHITE	CLIPSAL C2000 SERIES 30USM	A
TWO-WAY LIGHT SWITCH		TWO-WAY LIGHT SWITCH C/W CIRCUIT IDENTIFICATION ON THE FACEPLATE BEHIND THE SURROUND MOUNTED AT 1000mm AFFL UNLESS NOTED OTHERWISE.	WHITE	CLIPSAL C2000 SERIES 30USM	A
SINGLE POWER OUTLET		SINGLE POWER OUTLET C/W CIRCUIT IDENTIFICATION ON THE FACEPLATE BEHIND THE SURROUND. MOUNT AT 300mm AFFL U.N.O. RATING 10A U.N.O.	WHITE	CLIPSAL C2000 SERIES	A
DOUBLE POWER OUTLET		DOUBLE POWER OUTLET C/W CIRCUIT IDENTIFICATION ON THE FACEPLATE BEHIND THE SURROUND. MOUNT AT 300mm AFFL U.N.O. RATING 10A U.N.O.	WHITE	CLIPSAL C2000 SERIES	A
WEATHERPROOF POWER OUTLET (WP)		IP54 WEATHERPROOF SINGLE / DOUBLE POWER OUTLET AS NOTED ON DRAWING C/W COVER FLAP OVER SOCKET. MOUNT AT MINIMUM 1100mm AFFL U.N.O. RATING 10A U.N.O.	-	CLIPSAL WSCF227F	A
RECESS KIT (RK)		VERTICALLY ORIENTATED WALL BOX TO ALLOW THE OUTLET TO BE RECESSED WITHIN THE WALL CAVITY	WHITE	REPELEC RECWP1WH	A
SINGLE-PHASE ISOLATOR		SINGLE-PHASE WEATHERPROOF ISOLATOR. MOUNT AT 1350mm AFFL U.N.O. RATING 20A U.N.O. CONNECT TO EQUIPMENT VIA FLEXIBLE CONDUIT.	-	CLIPSAL WHT20	A
THREE-PHASE ISOLATOR		THREE-PHASE WEATHERPROOF ISOLATOR. MOUNT AT 1350mm AFFL U.N.O. RATING 20A U.N.O. CONNECT TO EQUIPMENT VIA FLEXIBLE CONDUIT. "RSD" DENOTES ROLLER SHUTTER DOOR SUPPLY - COORDINATE LOCATION ONSITE WITH MOTOR.	-	CLIPSAL WHT35	A
MSB		EXISTING MAIN SWITCHBOARD TO REMAIN AS IS			A
DB-H		EXISTING BUILDING H MAIN DISTRIBUTION BOARD TO BE PROVIDED WITH A NEW MCCB AS PER THE POWER SCHEMATIC. THE NEW MCCB IS TO MATCH THE EXISTING UPDATE THE LABELLING			A

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## ELECTRICAL EQUIPMENT SCHEDULE

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TYPE	LAMPS	DESCRIPTION	COLOUR / ACCESSORY	CATALOGUE No	REV
DB-23		BUILDING 11 MAIN DISTRIBUTION BOARD DB-11 TO BE SUPPLIED FROM DB-H AS PER THE POWER SCHEMATIC PROVIDE DISTRIBUTION BOARD DB-H AS PER THE POWER SCHEMATICS AND NOTES. PROVIDE A SHOP DRAWING THE ESCUTCHEON IS TO BE HINGED AND SECURED VIA 1/4 TURN LATCHES. ENSURE THE ESCUTCHEON CAN BE OPENED WITHOUT ISOLATING THE POWER.			A
MSSB-23		NEW MSSB PROVIDED AS PART OF THE MECHANICAL SERVICES SUB CONTRACT. PROVIDE A MCCB IN DB-23 AND SUBMAIN AS PER THE SCHEMATIC.			A
M		SUPPLY AUTHORITY CODE COMPLIANT LV MAXIMUM DEMAND TARIFF METER. TO REMAIN AS IS			A
MFm		PRIVATE METER. TO REMAIN AS IS			A
SECURITY EQUIPMENT		SECURITY EQUIPMENT TO BE PROVIDED BY THE SCHOOL			A
COMMUNICATIONS RACK CR-H		EXISTING COMMUNICATIONS RACK TO BE USED TO ACCOMMODATE THE NEW FIBRE CABLE TO CR-23. UPGRADE THE FIBER AS REQUIRED.			A
COMMUNICATIONS RACK CR-23		PROVIDE CR-23 AS A WALL MOUNTED 12 RU MINIMUM 800 DEEP COMMUNICATIONS CONNECTED TO CR-H VIA AN UNDERGROUND LOOSE TUBE GEL FILLED 12 CORE OS2 OPTICAL FIBRE CABLES FULLY TERMINATED WITH SC CONNECTORS. PROVIDE CR-23 WITH ALL NECESSARY CAT6 AND CAT 6A STP PATCH PANELS TO ACCOMMODATE THE NEW COMMUNICATIONS OUTLETS.			A
CAT 6 COMMUNICATIONS OUTLET		RJ45 CAT-6 COMMUNICATIONS OUTLET, CABLED BACK TO A CAT 6 PATCH PANEL IN COMMUNICATIONS RACK CR-23 VIA 4-PAIR CAT-6 UTP CABLE. MOUNT UP TO 3 RJ45 OUTLETS PER MULTI-GANG FACEPLATE WITH SEPARATE PERMANENT LABELLING FOR EACH OUTLET. MOUNT AT 300 AFFL U.N.O	WHITE	CLIPSAL C2000 SERIES	A
CAT 6A STP COMMUNICATIONS OUTLET		RJ45 CAT-6A STP COMMUNICATIONS OUTLET, CABLED BACK TO A CAT 6 PATCH PANEL IN COMMUNICATIONS RACK CR-23 VIA A 4-PAIR CAT-6A STP CABLE. MOUNT UP TO 3 RJ45 OUTLETS PER MULTI-GANG FACEPLATE WITH SEPARATE PERMANENT LABELLING FOR EACH OUTLET. MOUNT AT 300 AFFL U.N.O	WHITE	CLIPSAL C2000 SERIES	A
CABLE ACCESS (A1)		PROVIDE A1 AS MULTIPLE WALL MOUNTED FACEPLATES POSITIONED AS PER THE ARCHITECTURAL DETAIL PROVIDE THE OUTLET CONFIGURATION AND CABLING AS PER THE A1 FACEPLATE SCHEMATIC. PROVIDE THE GPO AS A CONVENTIONAL GPO CIRCUITED AS SHOWN AND THE RJ45 OUTLETS AS CONVENTIONAL COMMUNICATIONS OUTLETS CABLED TO THE COMMUNICATIONS RACK.	WHITE	CLIPSAL C2000 SERIES	A



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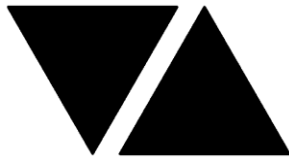
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TYPE	LAMPS	DESCRIPTION	COLOUR / ACCESSORY	CATALOGUE No	REV
CABLE ACCESS (A2)		PROVIDE A2 AS MULTIPLE WALL MOUNTED FACEPLATES POSITIONED AS PER THE ARCHITECTURAL DETAIL PROVIDE THE OUTLET CONFIGURATION AND CABLING AS PER THE A2 FACEPLATE SCHEMATIC. PROVIDE THE GPO AS A CONVENTIONAL GPO CIRCUITED AS SHOWN AND THE RJ45 OUTLETS AS CONVENTIONAL COMMUNICATIONS OUTLETS CABLED TO THE COMMUNICATIONS RACK.	WHITE	CLIPSAL C2000 SERIES	A
CABLE ACCESS (A3)		PROVIDE A3 AS MULTIPLE WALL MOUNTED FACEPLATES POSITIONED AS PER THE ARCHITECTURAL DETAIL PROVIDE THE OUTLET CONFIGURATION AND CABLING AS PER THE A3 FACEPLATE SCHEMATIC. PROVIDE THE GPO AS A CONVENTIONAL GPO CIRCUITED AS SHOWN	WHITE	CLIPSAL C2000 SERIES	A
CABLE ACCESS (A4)		PROVIDE A4 AS A WALL MOUNTED FACEPLATE POSITIONED AS PER THE ARCHITECTURAL DETAIL PROVIDE THE OUTLET CONFIGURATION AS PER THE A4 FACEPLATE SCHEMATIC.	WHITE	CLIPSAL C2000 SERIES	A
PIT A		EXISTING COMMUNICATIONS AND POWER PITS			A
PIT B		EXISTING COMMUNICATIONS AND POWER PITS			A
PIT C		PROVIDE NEW COMMUNICATIONS AND POWER PITS TO MATCH THE PIT A PITS IN SIZE, TYPE, FINISH AND STYLE. PROVIDE ALL NEW CONDUITS WITH A SPARE DRAW WIRE			A
PIT D		PROVIDE NEW COMMUNICATIONS AND POWER PITS TO MATCH THE PIT A PITS IN SIZE, TYPE, FINISH AND STYLE. PROVIDE ALL NEW CONDUITS WITH A SPARE DRAW WIRE PIT D WILL BE UTILISED TO SUPPLY THE FUTURE ADJACENT BUILDING.			A



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DISTRIBUTION BOARD DB-23

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							REV
FAULT CURRENT:		6KA		MAIN SWITCH:		250A NON AUTO LOAD BREAK ISOLATOR	A
CHASSIS SIZE:		72 POLES		SUPPLIED FROM:		DB-H	A
CHASSIS RATING:		250A		SUPPLY CABLE:		1C 185	A
PHASES:		3					A
PROVIDE THE DB WITH A FULL WIDTH EMPTY DIN RAIL TO ACCOMMODATE FUTURE CONTACTORS AND CONTROLS. ACCURATELY LABEL EACH CIRCUIT BREAKER WITH THE USE AND THE POSITION. REFER TO THE NOTES AND SCHEMATIC FOR ADDITIONAL INFORMATION							A
CIRC	PH	CIRCUIT BREAKER (AMPS)	CONTROL EQUIPMENT	CABLE SIZE ( MM2 )	LOCATION	CIRCUIT USE	
P1	1	20	RCBO	2.5	GROUND	GLA 01	A
P2	1	20	RCBO	2.5	GROUND	GLA 02	A
P3	1	20	RCBO	2.5	GROUND	GLA 03	A
P4	1	20	RCBO	2.5	GROUND	GLA 04	A
P5	1	20	RCBO	2.5	GROUND	GLA 05	A
P6	1	20	RCBO	2.5	GROUND	GLA 06	A
P7	1	20	RCBO	2.5	LEVEL 1	GLA 07	A
P8	1	20	RCBO	2.5	LEVEL 1	GLA 08	A
P9	1	20	RCBO	2.5	LEVEL 1	GLA 09	A
P10	1	20	RCBO	2.5	LEVEL 1	GLA 10	A
P11	1	20	RCBO	2.5	LEVEL 1	GLA 11	A
P12	1	20	RCBO	2.5	LEVEL 1	GLA 12	A
P13	1	20	RCBO	2.5	GROUND	COMMON	A
P14	1	20	RCBO	2.5	LEVEL 1	COMMON	A
P15	1	20	RCBO	2.5	PLANT	GPOs	A
P16	1	20	RCBO	2.5	GROUND	SECURITY	A
P17	1	20	RCBO	2.5	GROUND	CR-23	A
L1	1	20	RCBO	2.5	GROUND	GLA 01	A
L2	1	20	RCBO	2.5	GROUND	GLA 02	A
L3	1	20	RCBO	2.5	GROUND	GLA 03	A
L4	1	20	RCBO	2.5	GROUND	GLA 04	A
L5	1	20	RCBO	2.5	GROUND	GLA 05	A
L6	1	20	RCBO	2.5	GROUND	GLA 06	A
L7	1	20	RCBO	2.5	LEVEL 1	GLA 07	A
L8	1	20	RCBO	2.5	LEVEL 1	GLA 08	A
L9	1	20	RCBO	2.5	LEVEL 1	GLA 09	A
L10	1	20	RCBO	2.5	LEVEL 1	GLA 10	A
L11	1	20	RCBO	2.5	LEVEL 1	GLA 11	A
L12	1	20	RCBO	2.5	LEVEL 1	GLA 12	A
L13	1	20	RCBO	2.5	GROUND	COMMON	A
L14	1	20	RCBO	2.5	LEVEL 1	COMMON	A
L15	1	20	RCBO	2.5	GROUND	PLANT	A
L16	1	20	RCBO	2.5	EXTERNAL	LOCKERS	A
L17	1	20	RCBO PE ON DUSK TC OFF 10.00PM	2.5	EXTERNAL GROUND	NIGHT LIGHTS	A
L18	1	20	RCBO PE ON DUSK OFF DAWN	2.5	EXTERNAL	SECURITY	A
L19	1	20	RCBO PE ON DUSK TC OFF 10.00PM	2.5	EXTERNAL LEVEL 1	NIGHT LIGHTS	A

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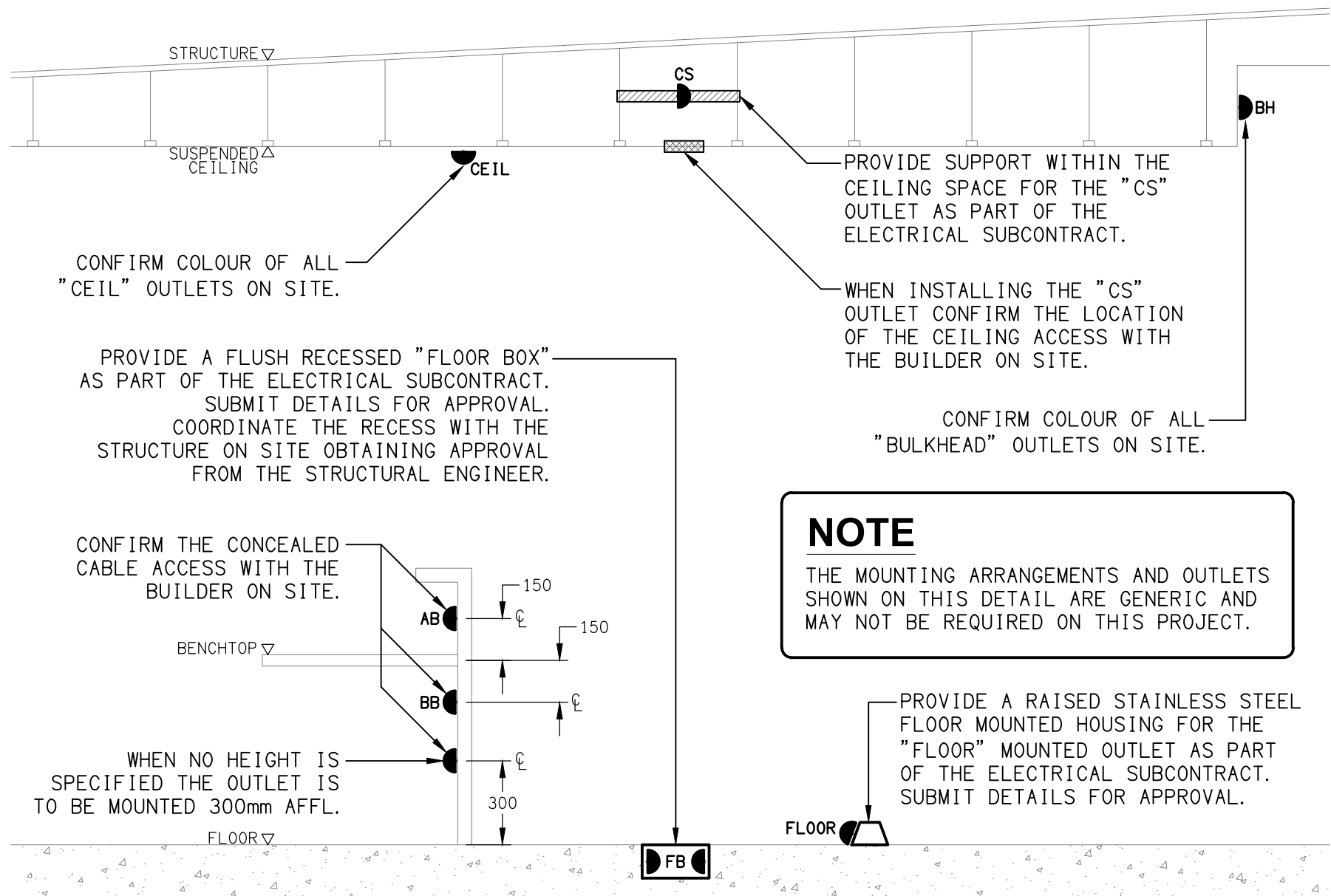
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LEGEND

	ELECTRICAL SERVICES SWITCHBOARD.
	SWITCHBOARD / CONTROL PANEL NOT PROVIDED AS PART OF THE ELECTRICAL SUBCONTRACT.
	SINGLE POWER OUTLET.
	DOUBLE POWER OUTLET.
	SPECIAL PURPOSE POWER OUTLET.
	CABLE ACCESS, TYPE AS NOTED.
	SINGLE PHASE ISOLATOR.
	THREE PHASE ISOLATOR.
	CONDUIT ROUTE.
	ELECTRICAL PIT, TYPE AS NOTED.
	ONE-WAY LIGHT SWITCH.
	TWO-WAY LIGHT SWITCH.
	CIRCUIT LINE.
	SWITCH LINE.
	POWER CIRCUIT DESIGNATION. DENOTES DB AND CIRCUIT.
	ELECTRICAL EQUIPMENT AS NOTED.
	OUTLET MOUNTED WITHIN RECESS KIT.
	CAT-6 UTP RJ45 COMMUNICATIONS OUTLET.
	CAT-6 STP RJ45 COMMUNICATIONS OUTLET.
	SUPPLY AUTHORITY METER.
	MULTI FUNCTION METER
	FUSE.
	SINGLE PHASE.
	THREE PHASE.
	CURRENT TRANSFORMER C/W REMOVABLE LINK.
	FUSE LINK.
	COMBINED FUSE SWITCH.
	CIRCUIT BREAKER.
	ISOLATOR.
	RESIDUAL CURRENT DEVICE.
	CONTACTOR - NORMALLY OPEN.
	CONTACTOR - NORMALLY CLOSED.

LEGEND

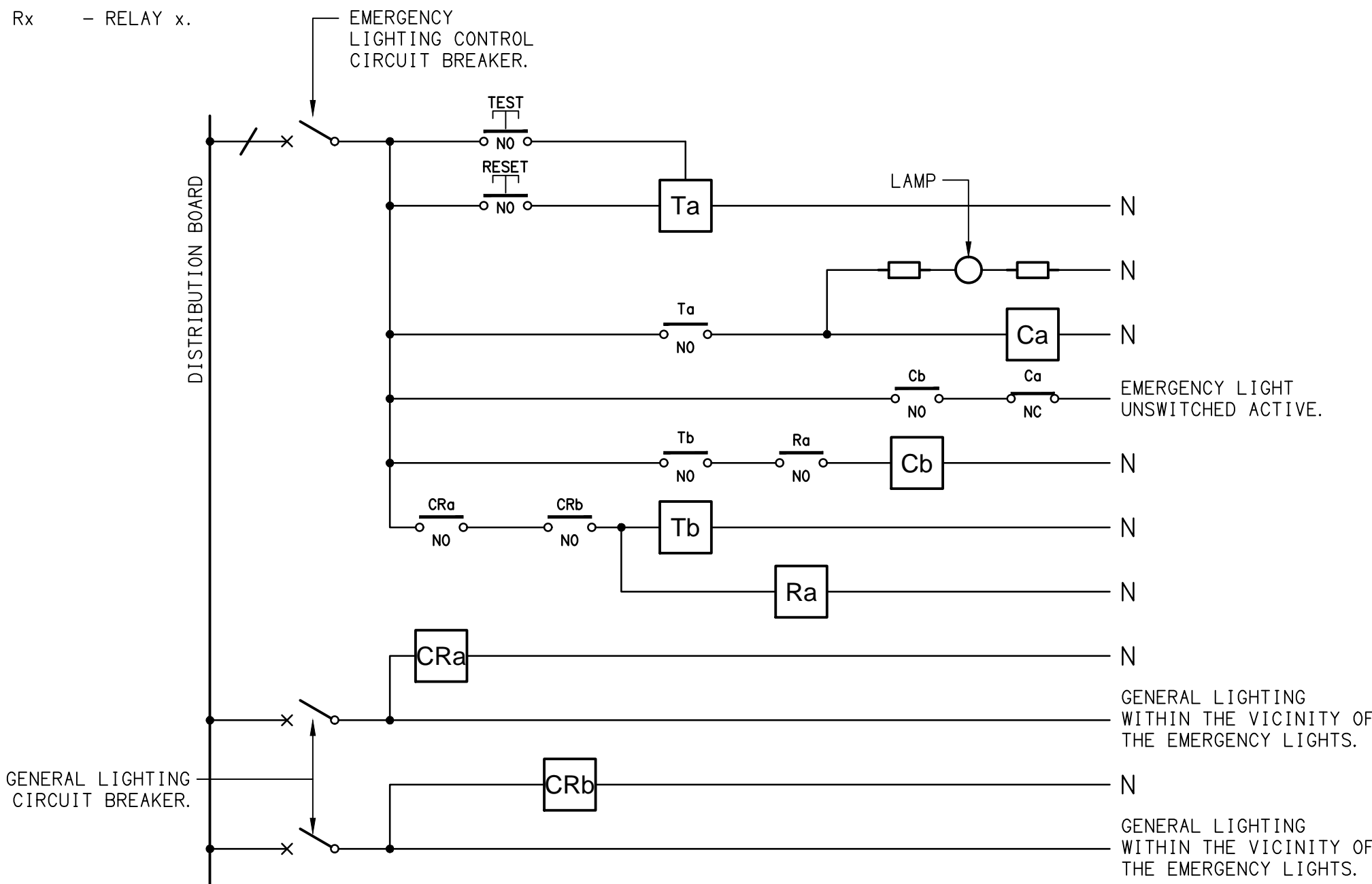
	REFER TO DETAIL NOTED FOR THE AREA SHOWN HATCHED. ADDITIONAL OUTLETS & FITTINGS MAY BE SHOWN ON DETAIL.
	E1: RECESSED GENERAL LED EMERGENCY LIGHT.
	E2: SURFACE MOUNTED GENERAL LED EMERGENCY LIGHT.
	EX: EMERGENCY LED EXIT LIGHT.
	Lx: LIGHT FITTING C/W NON-MAINTAINED EMERGENCY BATTERY PACK. TYPE AS NOTED.
	L1: 600 x 600 SURFACE LED FLAT PANEL.
	L2: SURFACE MOUNTED CAN DOWNLIGHT.
	L3: RECESSED DOWNLIGHT.
	L4: 1200 LONG SURFACE MOUNTED IP65 BATTEN C/W PRESENCE DETECTOR.
	L5: 1200 LONG SURFACE MOUNTED IP65 BATTEN C/W PRESENCE DETECTOR.
	L6: WALL MOUNTED AREA LIGHT.
	L7: LINK WALL LIGHT.
	L8: SURFACE MOUNTED CAN DOWNLIGHT.



DETAIL  
TYPICAL OUTLET MOUNTINGS  
NOT TO SCALE

EQUIPMENT:

- TEST - TEST PUSH BUTTON MOUNTED ON THE DISTRIBUTION BOARD ESCUTCHEON.
- RESET - RESET PUSH BUTTON MOUNTED ON THE DISTRIBUTION BOARD ESCUTCHEON.
- LAMP - AMBER TEST INDICATING LAMP MOUNTED ON THE DISTRIBUTION BOARD ESCUTCHEON.
- Ta - ADJUSTABLE 0-3 HOUR TIMED RELAY.
- Tb - 15 MINUTE RUN-ON TIMER TO OPERATE UPON THE RETURN OF MAINS POWER.
- Cx - CONTACTOR x.
- CRx - CONTROL RELAY x.
- Rx - RELAY x.



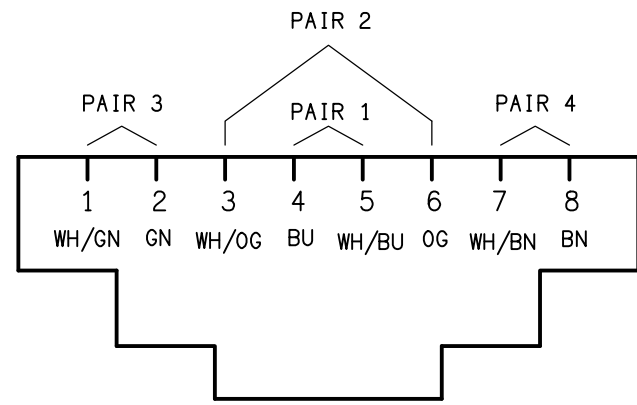
NOTES

1. THE EMERGENCY LIGHT UNSWITCHED ACTIVE / GENERAL LIGHTING SWITCHED ACTIVE CIRCUIT ARRANGEMENT AND CONTROL IS TYPICAL FOR ALL CIRCUITS SUPPLYING EMERGENCY LIGHTS.
2. PROVIDE ADDITIONAL CONTROL RELAYS (CRx) CONFIGURED AS PER CRa AND CRb FOR ALL ADDITIONAL LIGHTING CIRCUITS THAT SUPPLY LIGHTS IN THE VICINITY OF THE EMERGENCY LIGHTS.

SCHEMATIC  
EMERGENCY LIGHTING  
NOT TO SCALE

NOTE

ALL ELECTRICAL PENETRATIONS THROUGH THE ROOF SHEETING ARE TO BE IN LINE WITH THE STRUCTURAL OR MECHANICAL SERVICES PENETRATIONS TO AVOID DEDICATED FLASHINGS FOR THE ELECTRICAL SERVICES.



SCHEMATIC  
RJ45 PINOUT CONFIGURATION  
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.  
- UPDATE THE EXISTING AS BUILT DRAWINGS.  
- UPDATE THE EXISTING MAINTENANCE MANUAL.  
- CABLING, CABLE SUPPORT SYSTEMS AND ACCESS.  
- POWER DISTRIBUTION.  
- LIGHTING.  
- COMMUNICATIONS CABLING.  
- PITS AND CONDUITS.  
- 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.

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 OF ALL WORKS THAT HAVE AN EFFECT ON OR WILL BE AFFECTED BY THE ELECTRICAL SERVICES.

CONFIRM THE POSITION OF ALL OUTLETS ON SITE WITH THE SCHOOL PRIOR TO ROUGH-IN.

UPDATE THE SCHOOLS EXISTING AS BUILT DOCUMENTS AND MAINTENANCE MANUAL TO INCLUDE THE NEW 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 CONDUITS WILL NEED TO BE INCLUDED WITHIN THE PRECAST PANELS. 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.

ALL WORK IS TO BE UNDERTAKEN IN SUCH A MANNER THAT THE OPERATION OF THE REMAINING SCHOOL AREAS ARE NOT UNDULY EFFECTED BY THE WORKS.

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 PROJECT MANAGER 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 WORKPLACE, HEALTH AND SAFETY AUTHORITY.
- LOCAL FIRE AND RESCUE AUTHORITY.

5. 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. UNLESS NOTED OTHERWISE, PROVIDE ALL 240 VOLT POWER AND LIGHTING WIRING AS 2.5mm² TWIN & EARTH STRANDED COPPER CONDUCTORS, PVC INSULATED 0.6/1kV V75 GRADE TO AS3174, PROTECTED BY A 20 AMP CIRCUIT BREAKER. ALL CONDUIT AND FITTINGS TO BE RIGID UPVC TO AS2053, UNLESS NOTED OTHERWISE.

NOTES

6. POWER DISTRIBUTION

THE POWER DISTRIBUTION COMPONENT OF THIS CONTRACT INCLUDES THE PROVISION OF A NEW MCCB IN THE EXISTING DB-H AND UNDERGROUND SUBMAIN TO A NEW DISTRIBUTION BOARD DB-23. THE POWER DISTRIBUTION COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:

- POWER DISTRIBUTION.
- EARTHING.
- NEW MSB CIRCUIT BREAKER TO SUPPLY DB-23.
- NEW SUBMAINS FROM DB-H TO DB-23.
- DISTRIBUTION BOARD DB-23.
- SUBMAINS FROM DB-23 TO MSSB-23.
- CIRCUITS.
- ISOLATORS AND OUTLETS.
- TESTING AND COMMISSIONING.
- SWITCHBOARD SHOP DRAWING.
- POWER CABLE ACCESS INCLUDING PITS AND CONDUITS.

THE POWER SUPPLY TO THE REMAINDER OF THE SCHOOL MUST BE MAINTAINED AT ALL TIMES THE SCHOOL IS OPEN INCLUDING THE AFTER HOURS CARE. ANY INTERRUPTION TO THE POWER SUPPLY MUST BE ADVISED TO THE SCHOOL IN WRITING TWO WEEKS PRIOR.

REFER TO THE DISTRIBUTION BOARD SCHEDULE AND SCHEMATICS FOR ADDITIONAL REQUIREMENTS AND CIRCUIT DETAILS.

PROVIDE THE NEW DISTRIBUTION BOARD AS FOLLOW:

- IP44.
- LIGHT GREY ENCLOSURE WHITE ESCUTCHEON.
- 3 POINT LOCKABLE HANDLES ON ALL DOORS.
- LIFT OFF HINGES ON ALL DOORS AND ESCUTCHEONS.
- 1/4 TURN LATCHES AND D HANDLES ON ALL ESCUTCHEONS.
- ALL SWITCHGEAR TO MATCH THE EXISTING BRAND.
- PROVIDE SHOP DRAWINGS FOR APPROVAL.

PROVIDE WINDOWS IN ALL PANELS AND ESCUTCHEONS AS NECESSARY TO ALLOW ALL CABLE AND BUSBAR CONNECTIONS TO BE SCANNED BY A THERMAL IMAGING SCANNER / CAMERA WITHOUT HAVING TO ISOLATE THE POWER. IF THE PANEL OR ESCUTCHEON CAN BE OPENED AND THE CABLE / BUSBAR CONNECTION CAN BE SIGHTED WITHOUT ISOLATING THE POWER, WINDOWS ARE NOT REQUIRED IN THAT PANEL / ESCUTCHEON.

7. LIGHTING

THE LIGHTING COMPONENT OF THIS CONTRACT INCLUDES INTERNAL LIGHTING TO ALL AREAS OF THE BUILDING, EXTERNAL LIGHTING, GENERAL LIGHTING CONTROL, EMERGENCY AND EVACUATION LIGHTING AND THE LIGHTING SUB CIRCUIT WIRING. ALL OF THE LIGHT FITTINGS AND ACCESSORIES ARE TO BE PROVIDED AS PART OF THIS CONTRACT. ALL LIGHT SOURCES ARE TO BE SOLID STATE LED WITH A 5-YEAR MANUFACTURERS WARRANTY. ALL OF THE LIGHT FITTINGS, LAMPS AND ACCESSORIES ARE TO BE PROVIDED AS PART OF THIS CONTRACT. THE LIGHTING COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:

- LIGHTING.
- LIGHT FITTINGS AND ACCESSORIES.
- EARTHING OF THE LIGHTING INSTALLATION.
- LIGHTING CONTROL.
- LIGHTING SUBCIRCUITS.
- TESTING AND COMMISSIONING.
- SINGLE POINT EMERGENCY LIGHTING SYSTEM.

PROVIDE A SINGLE POINT EMERGENCY LIGHTING SYSTEM THAT COMPLIES WITH THE LATEST ISSUE OF ALL PARTS AS2293 AND THE RELEVANT PARTS OF THE NCC BCA. INSTALL EMERGENCY LIGHT FITTINGS NOMINATED AS MAINTAINED WITH THE LAMP PERMANENTLY ON SUPPLIED VIA AN UNSWITCHED ACTIVE MAINS SUPPLY WHEN THE MAINS SUPPLY IS AVAILABLE. WHEN THE MAINS SUPPLY IS NOT AVAILABLE, THE LAMP IS TO REMAIN ON SUPPLIED BY THE EMERGENCY PACK. SINGLE LAMP MAINTAINED EMERGENCY LIGHTS ARE NOT SWITCHED WITH THE LOCAL GENERAL AREA LIGHTING. (THE LAMP IS ALWAYS ON.)

INSTALL EMERGENCY LIGHT FITTINGS NOMINATED AS NON-MAINTAINED AS FOLLOWS:

- IF THE FITTING IS NOT BEING SWITCHED, THE LAMP IS TO REMAIN OFF WHEN THE MAINS SUPPLY IS AVAILABLE. WHEN THE MAINS SUPPLY IS NOT AVAILABLE THE LAMP IS TO BE SWITCHED ON SUPPLIED BY THE EMERGENCY PACK. UNSWITCHED SINGLE LAMP NON-MAINTAINED EMERGENCY LIGHTS ARE NOT SWITCHED WITH THE LOCAL GENERAL AREA LIGHTING. (THE LAMP IS ON ONLY WHEN THE MAINS SUPPLY IS NOT AVAILABLE.)
- IF THE FITTING IS BEING SWITCHED, THE LAMP IS TO BE SUPPLIED AND CONTROLLED WITH THE LOCAL GENERAL AREA LIGHTING WHEN THE MAINS SUPPLY IS AVAILABLE. WHEN THE MAINS SUPPLY IS NOT AVAILABLE THE LAMP IS TO BE SWITCHED ON, SUPPLIED BY THE EMERGENCY PACK. (THE LAMP IS ON WHEN TURNED ON WITH THE LOCAL GENERAL LIGHTING OR THE MAIN SUPPLY IS NOT AVAILABLE.)

INSTALL EMERGENCY LIGHTS SUCH THAT THE STATUS INDICATOR L.E.D. IS CLEARLY VISIBLE AND THE TEST BUTTONS ARE READILY ACCESSIBLE. LABEL EACH CIRCUIT BREAKER WHICH CONTROLS THE UNSWITCHED ACTIVE TO EXIT LIGHTS WITH A LABEL FIXED ADJACENT; ENGRAVED PLASTIC LAMINATE, GREEN BACKGROUND WITH WHITE CHARACTERS:-

WARNING  
INTERRUPTING SUPPLY WILL DISCHARGE  
EMERGENCY LIGHTING BATTERIES

PROVIDE WRITTEN EVIDENCE OF THE INITIAL COMMISSIONING AND TESTING AND TESTING FOR THE DURATION OF THE MAINTENANCE PERIOD IN ACCORDANCE WITH AS 2293.2.

PROVIDE MAINTENANCE OF THE EMERGENCY AND EXIT LIGHTING INSTALLATION INCLUDING RECORDS IN ACCORDANCE WITH THE LATEST ISSUE OF ALL PARTS AS2293 AND THE RELEVANT PARTS OF THE NCC BCA.

8. COMMUNICATIONS CABLING

THE COMMUNICATIONS CABLING COMPONENT OF THIS CONTRACT INCLUDES A NEW COMMUNICATION RACK CR-23 TO SUPPORT CAT 6 RJ45 OUTLETS CABLED TO MODULAR CAT 6 PATCH PANELS IN THE COMMUNICATIONS RACK CR-23 VIA CAT 6 UTP CABLING AS WELL AS CAT 6A RJ45 OUTLETS CABLED TO MODULAR CAT 6A PATCH PANELS IN THE COMMUNICATIONS RACK CR-23 VIA CAT 6 STP CABLING. PROVIDE A NEW UNDERGROUND OPTICAL FIBRE CABLE AS PER THE EQUIPMENT SCHEDULE FROM THE EXISTING COMMUNICATIONS RACK CR-H TO A NEW FOBOT IN CR-23. THE COMMUNICATIONS CABLING IS TO BE OF THE SAME EXISTING STRUCTURED CABLING SOLUTION USED AND BE PROVIDED WITH A MANUFACTURERS 15 YEAR WARRANTY.

THE COMMUNICATIONS CABLING COMPONENT OF THIS CONTRACT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING EXTENT OF WORK:

- COMMUNICATIONS RACK CR-23.
- CAT 6 PATCH PANELS.
- CAT 6 COMMUNICATIONS OUTLETS.
- CAT 6 CABLING.
- CAT 6 PATCH PANELS.
- CAT 6A COMMUNICATIONS OUTLETS.
- CAT 6A STP CABLING.
- CAT 6A PATCH PANELS.
- FOBOT.
- OPTICAL FIBRE CABLE CONNECTION CR-H TO CR-23.
- LABELLING .
- TESTING AND COMMISSIONING.
- TEACHING WALL (Ax) POINTS AND ASSOCIATED CABLING.

ALL COMMUNICATIONS CABLING IS TO BE UNDERTAKEN BY A ACMA LICENCE HOLDER. THE PATCH LEADS, FLY LEADS, POE SWITCH AND UPS WILL BE PROVIDED BY THE SCHOOL.

NOTES

9. ABBREVIATIONS

- A - AMP CURRENT RATING
- AB - MOUNT ABOVE BENCH.
- AFFL - ABOVE FINISHED FLOOR LEVEL.
- BB - MOUNT BELOW BENCH.
- BH - MOUNT ON BULKHEAD.
- CEIL - MOUNT ON CEILING.
- CS - MOUNT WITHIN CEILING SPACE.
- C/W - COMPLETE WITH.
- MCB - MINIATURE CIRCUIT BREAKER.
- MSB - MAIN SWITCHBOARD.
- MSSB - MECHANICAL SERVICES SWITCHBOARD.
- N - NEON / LED INDICATOR WHEN ON.
- NTS - NOT TO SCALE.
- RCBO - CIRCUIT PROTECTED VIA A 30ma RESIDUAL CURRENT DEVICE INTEGRAL TO THE CIRCUIT BREAKER.
- UNO - UNLESS NOTED OTHERWISE.
- STP - SHIELDED TWISTED PAIR.
- UTP - UNSHIELDED TWISTED PAIR.
- WP - WEATHERPROOF TO IP56 UNO.
- 500 - NUMBER DENOTES MOUNTING HEIGHT AFFL.

ELECTRICAL DESIGN GROUP BRISBANE PTY LTD ACN 092 710 793		THE COPYRIGHT OF THIS DRAWING REMAINS THE PROPERTY OF THE ELECTRICAL DESIGN GROUP.		PROJECT: KINGS CHRISTIAN COLLEGE PIMPAMA, SENIOR SCHOOL - PIM23		A PRELIMINARY REV: DESCRIPTION: 15/07/2025 DATE:	
TRADING AS: ELECTRICAL DESIGN GROUP		USE FIGURED DIMENSIONS IN PREFERENCE TO SCALE.		DRAWING: ELECTRICAL SERVICES NOTES		SCALE: NOT TO SCALE AT A1	
ALL DIMENSIONS TO BE VERIFIED ONSITE.		PROJECT NO: C3605a		DRAWING NO: E02		REVISION: A	
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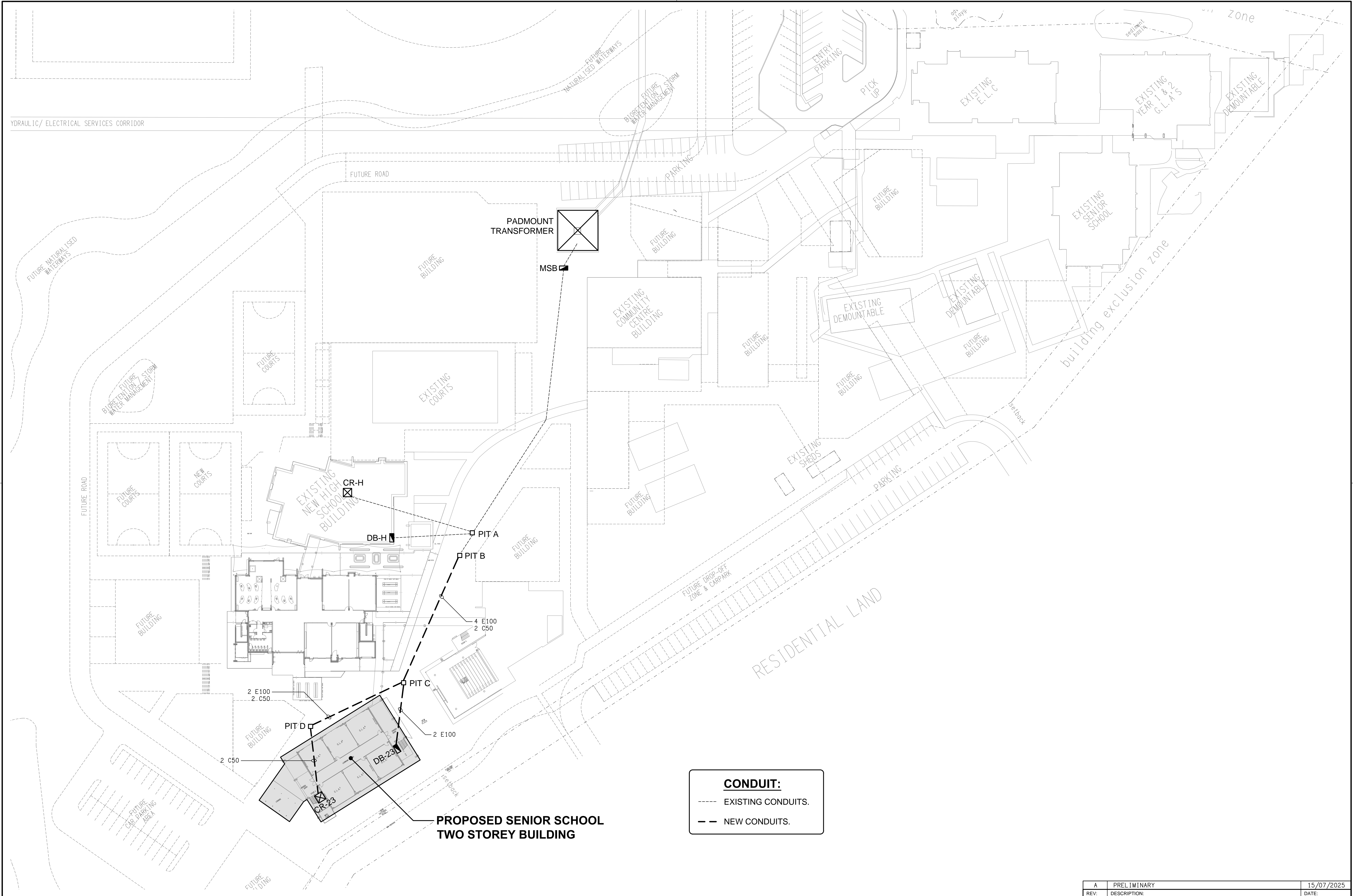
SCALE: NOT TO SCALE AT A1

PROJECT NO: <b>C3605a</b>	DRAWING NO: <b>E03</b>	REVISION: <b>A</b>
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ALL DIMENSIONS TO BE  
VERIFIED ONSITE.

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## ELECTRICAL SERVICES SCHEMATICS



**CONDUIT:**

--- EXISTING CONDUITS.

- - - NEW CONDUITS.

