SINSW - DUNDAS PUBLIC SCHOOL UPGRADE

ELECTRICAL DRAWING SET

NDY | SCHEMATIC DESIGN

SHEET NUMBER	SHEET NAME	REVISION	REVISION DATE
DUPS-NDY-XX-XX-DR-E-000000	COVER SHEET	5	08/01/2025
DUPS-NDY-XX-XX-DR-E-000001	LEGEND & GENERAL NOTES	5	08/01/2025
DUPS-NDY-XX-XX-DR-E-000011	SINGLE LINE DIAGRAM	4	08/01/2025
DUPS-NDY-XX-XX-DR-E-000021	EDB SCHEMATIC	3	08/01/2025
DUPS-NDY-XX-XX-DR-E-000031	COMMUNICATIONS SCHEMATIC	4	08/01/2025
DUPS-NDY-00-00-DR-E-001011	SITE PLAN	5	08/01/2025
DUPS-NDY-B00L-GF-DR-E-120011	BLOCK L GROUND FLOOR LIGHTING ARRANGEMENT	3	08/01/2025
DUPS-NDY-B00L-GF-DR-E-120021	BLOCK L GROUND FLOOR POWER AND COMMUNICATIONS ARRANGEMENT	5	08/01/2025
DUPS-NDY-B00L-RF-DR-E-120121	BLOCK L ROOF POWER AND COMMUNICATIONS ARRANGEMENT	4	08/01/2025

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PROJECT MANAGER
RP INFRASTRUCTURE
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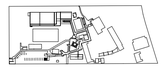
KEY PLAN



NORTH

REV	BY	DATE	DESCRIPTION
1	JU	11/10/2024	CONCEPT DESIGN
2	JU	11/11/2024	CONCEPT DESIGN
3	JU	26/11/2024	DRAFT SCHEMATIC DESIGN
4	JU	06/12/2024	SCHEMATIC DESIGN
5	JU	08/01/2025	SCHEMATIC DESIGN

PROJECT NAME
SINSW - DUNDAS PUBLIC SCHOOL UPGRADE
85 KISSING POINT RD, DUNDAS NSW 2117
BLOCK L

DRAWING TITLE
ELECTRICAL SERVICES
COVER SHEET

PROJECT NO.
758-0120.0041152.0001

STATUS
SCHEMATIC DESIGN

DRW	CHK	APP	DATE	SCALE
BC	DH	SS	08/01/2025	@A1

DRAWING NO.
DUPS-NDY-XX-XX-DR-E-000000

REV
5

ELECTRICAL SYMBOLS

- CIRCUIT BREAKER
- xxxA / yyyA — EARTH LEAKAGE CIRCUIT BREAKER
- xxxA / yyyA — xxxA = REQUIRE CIRCUIT RATING; yyyA = MAXIMUM REQUIRED SETTABLE CIRCUIT RATING
- ON LOAD ISOLATOR
- EM — EMERGENCY LIGHTING TEST FACILITY
- KWh — KILOWATT HOUR METER
- SINGLE PHASE CONDUCTOR
- THREE PHASE CONDUCTOR
- SPARE SPACE (SINGLE PHASE)
- SPARE SPACE (THREE PHASE)
- SPARE SPACE (NON)
- SURGE DIVERTER
- CURRENT TRANSFORMER
- LINK
- TRANSFORMER - GENERIC
- SWITCHBOARD
- SWITCHBOARD BY OTHERS
- ELECTRICAL EQUIPMENT GENERAL
- INVERTER
- EP — ELECTRICAL PIT (SQUARE)
- CORE HOLE/S FOR SUBMAIN RETICULATION
- INV — INVERTER (GENERAL ARRANGEMENT)
- P — ELECTRICAL PILLAR

COMMUNICATIONS SYMBOLS

- CP — COMMUNICATIONS PIT (SQUARE)
- SP — SECURITY PIT (SQUARE)
- CC — COMMUNICATIONS RACK, 45 RU, ALL METAL CONSTRUCTION, LOCKABLE MESH DOORS, LOCKABLE SIDE PANELS
- TO — TELECOMMUNICATIONS OUTLETS FOR BUILDING SERVICES
- OPTICAL FIBRE
- CAT6A STRUCTURED CABLE
- EXISTNG EQUIPMENT/ SERVICE TO BE RETAINED IN CURRENT LOCATION.
- SLAB PENETRATION FOR STRUCTURED CABLING RETICULATION
- CONDUIT EMBEDDED IN BUILDING FABRIC FOR STRUCTURED CABLING
- SFP — SECURITY FIELD PANEL

PHASING

CONTAINMENT	FIXTURES / FITTINGS	
		DENOTES EXISTING ELECTRICAL SERVICES TO REMAIN
D	D	DENOTES EXISTING ELECTRICAL SERVICES TO BE DEMOLISHED OR RELOCATED
R	R	DENOTES EXISTING ELECTRICAL SERVICES RELOCATED POSITION

LINETYPE FOR RELOCATED OR NEW CABLETRAY/CONDUIT DETERMINED BY SYSTEM TYPE.

CONDUIT

- 1/E — LOW VOLTAGE ELECTRICAL CONDUIT
- 1/HV — HIGH VOLTAGE ELECTRICAL CONDUIT
- 1/C — COMMUNICATION CONDUIT
- 1/S — SECURITY CONDUIT

CONDUIT, SIZE AS INDICATE
1: INDICATES NUMBER OF CONDUITS
E: INDICATES ELECTRICAL CONDUIT
C: INDICATES COMMUNICATIONS CONDUIT

COLOURS ABOVE ARE INDICATIVE OF NEW SERVICE CONDUIT. WHERE CONDUIT IS EXISTING AND TO REMAIN, EXISTING AND TO BE DEMOLISHED OR EXISTING AND TO BE RELOCATED, COLOURS ARE AS PER PHASING SECTION OF LEGEND.

CABLE TRAY

- 300 ECT — POWER CABLE TRAY
- 300 CCT — COMMUNICATIONS CABLE TRAY
- POWER VERTICAL CABLE TRAY
- COMMUNICATIONS VERTICAL CABLE TRAY

EXAMPLE - 300ECT

- 300 — DENOTES WIDTH
- E — DENOTES SERVICE
  E = POWER
  C = COMMUNICATIONS
  S = SECURITY
  B = BMS
- CT — DENOTES CABLE CONTAINMENT TYPE
  CT = CABLE TRAY
  CL = CABLE LADDERS
  CB = CABLE BASKET

GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS.
- ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SERVICES SPECIFICATIONS.
- DO NOT SCALE FOR SIZING. REFER TO ARCHITECTURAL, MANUFACTURERS DOCUMENTATION AND SPECIFICATION FOR EXACT MEASUREMENTS.
- CONTRACTOR TO CONDUCT FULL SITE SURVEY TO CONFIRM EXACT LOCATIONS OF ALL EXISTING ELECTRICAL SERVICES AND EQUIPMENT.
- ALL WORKS ARE NEW UNLESS NOTED OTHERWISE.
- EACH CAPTIVE SCREW OUT SHALL BE ON A DEDICATED CIRCUIT. EACH PAIR OF OUTLETS PROVIDED TO A RACK SHALL BE ON THE SAME PHASE.
- THE CONTRACTOR IS TO REFER TO THE SSU BRIEF FOR THE SECURITY SCOPE AND TECHNICAL REQUIREMENTS.
- ALL NEW DATA CABLING IS TO MEET THE DoE STRUCTURED CABLING SYSTEM SPECIFICATION v1.4
- THE CONTRACTOR IS TO REFER TO THE NSW PUBLIC SCHOOLS - AUDIO-VISUAL STANDARDS FOR SCHOOL LEARNING DISPLAYS FOR AV SCOPE AND TECHNICAL REQUIREMENTS.

ELECTRICAL ABBREVIATIONS

DGPO	DOUBLE GENERAL PURPOSE OUTLET
DTO	DOUBLE TELECOMMUNICATIONS OUTLET
GPO	GENERAL PURPOSE OUTLET
LED	LIGHT EMITTING DIODE
RU	RACK UNIT
TO	TELECOMMUNICATIONS OUTLET
WP	WEATHER PROOF
STO	SINGLE TELECOMMUNICATIONS OUTLET

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KEY PLAN

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4	JU	06/12/2024	SCHEMATIC DESIGN
5	JU	08/01/2025	SCHEMATIC DESIGN

PROJECT NAME
SINSW - DUNDAS PUBLIC SCHOOL UPGRADE
85 KISSING POINT RD, DUNDAS NSW 2117
BLOCK L

DRAWING TITLE
ELECTRICAL SERVICES
LEGEND & GENERAL NOTES

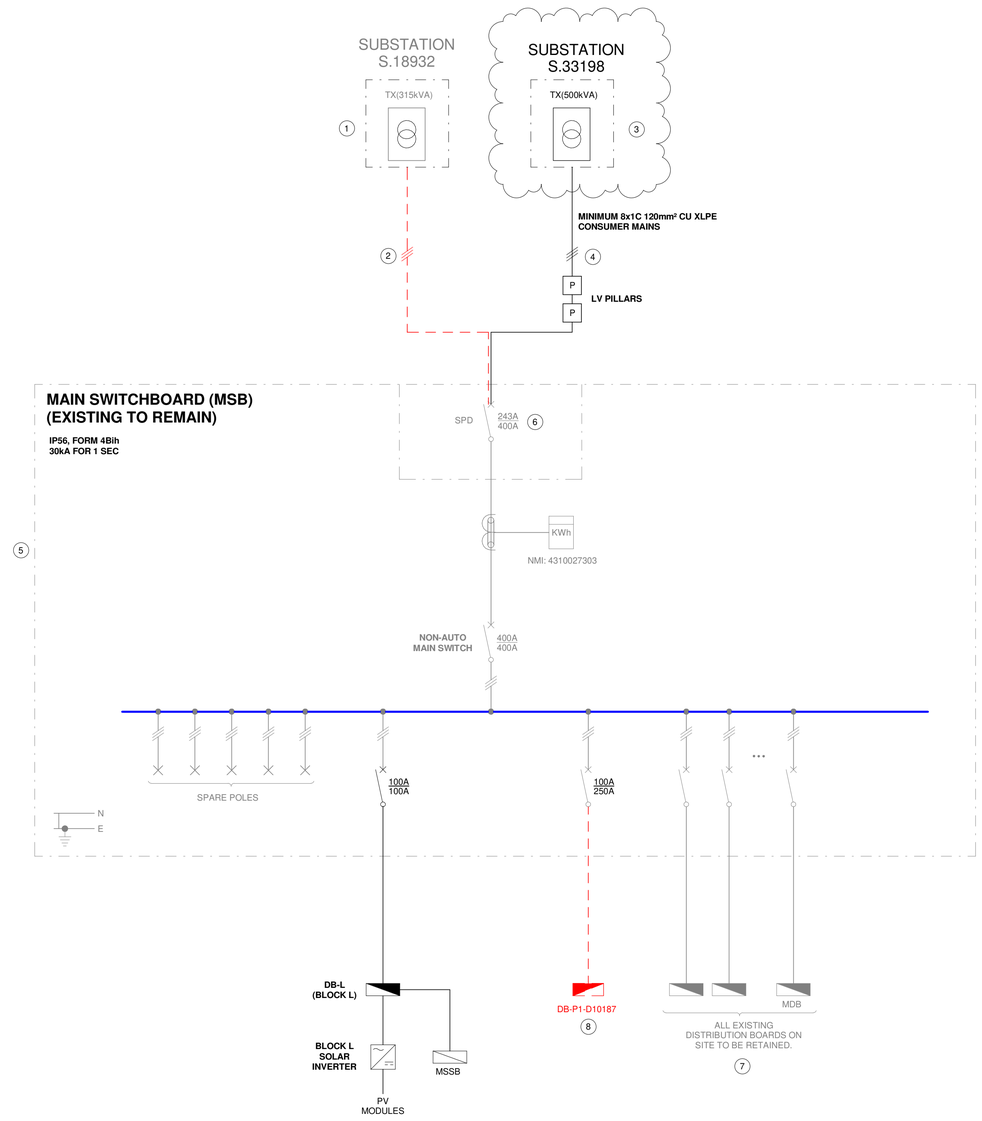
PROJECT NO.
758-0120.0041152.0001

STATUS
SCHEMATIC DESIGN

DRW	CHK	APP	DATE	SCALE
BC	DH	SS	08/01/2025	1 : 100 @A1

DRAWING NO.
DUPS-NDY-XX-XX-DR-E-000001

REV
5



No.	DESCRIPTION
1	EXISTING SUPPLY FROM ENDEAVOUR ENERGY POLE-MOUNTED SUBSTATION ON KISSING POINT ROAD TO BE DISCONNECTED.
2	EXISTING IN-GROUND CONSUMERS MAINS, PRIVATE POLE AND OVERHEAD SERVICE MAINS TO EXISTING POLE-MOUNTED SUBSTATION TO BE DISCONNECTED AND REMOVED.
3	EXISTING SUBSTATION ON KISSING POINT ROAD IS TO BE UPGRADED FROM A 315kVA TRANSFORMER TO 500kVA IN SITU. NEW LV SUPPLY CONNECTION FOR THE SCHOOL MSB TO BE ESTABLISHED ON THE UPGRADED SUBSTATION.
4	NEW CONSUMER MAINS TO BE ESTABLISHED BETWEEN EXISTING MSB AND NEW AUTHORITY CONNECTION POINT AT PROPERTY BOUNDARY. EXISTING CONSUMER MAINS TO BE DISCONNECTED, AND ASSOCIATED CONDUITS ABANDONED IN SITU.
5	EXISTING MAIN SWITCHBOARD (EXTERNAL TO BLOCK A) TO REMAIN WITH MODIFICATIONS AS SHOWN. NEW OUTGOING SUBMAIN TO BLOCK L TO CONNECT TO EXISTING MSB.
6	EXISTING SERVICE PROTECTION DEVICE TRIP RATING TO BE INCREASED TO 243A.
7	EXISTING SUBMAIN CIRCUITS TO EXISTING DISTRIBUTION BOARDS TO BE RETAINED.
8	EXISTING DB-P1-D10187 AND OUTGOING SUBMAINS TO DEMOUNTABLES TO BE DISCONNECTED AND REMOVED.

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4	JU	06/01/2025	SCHEMATIC DESIGN
5	JU	14/02/2025	SCHEMATIC DESIGN

PROJECT NAME
SINSW - DUNDAS PUBLIC SCHOOL UPGRADE
85 KISSING POINT RD, DUNDAS NSW 2117
BLOCK L

DRAWING TITLE
ELECTRICAL SERVICES
SINGLE LINE DIAGRAM

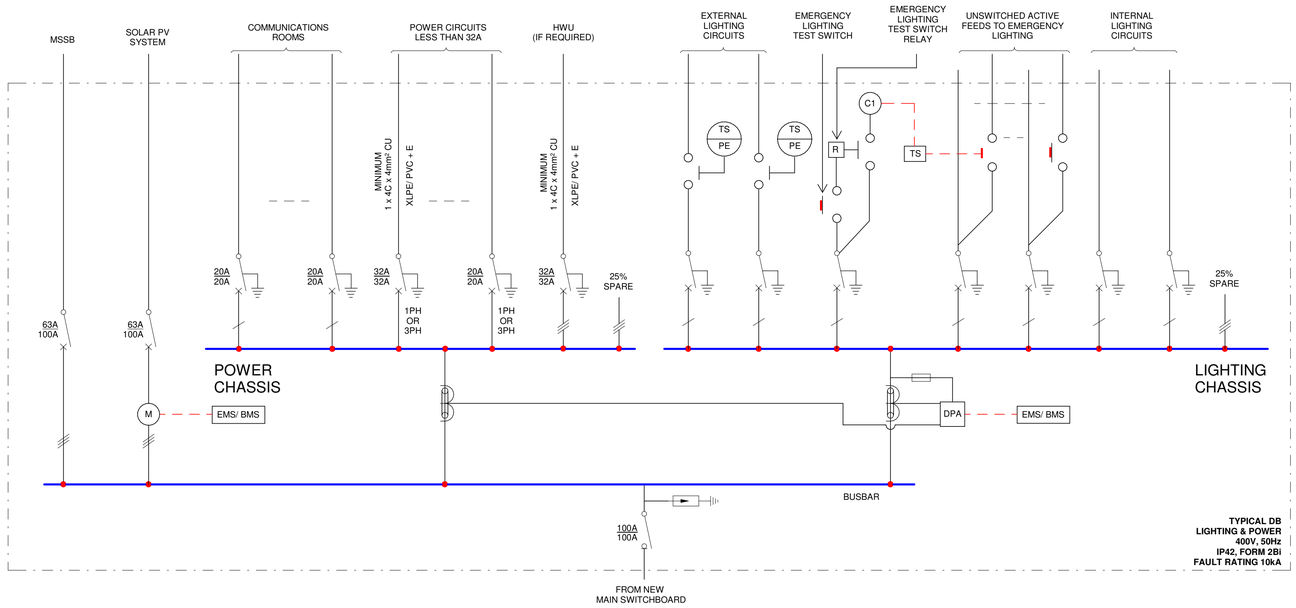
PROJECT NO.
758-0120.0041152.0001

STATUS
SCHEMATIC DESIGN

DRW	CHK	APP	DATE	SCALE
BC	DH	SS	14/02/2025	1 : 100 @A1

DRAWING NO.
DUPS-NDY-XX-XX-DR-E-000011

REV
5



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KEY PLAN

NORTH

REV	BY	DATE	DESCRIPTION
1	JU	26/11/2024	DRAFT SCHEMATIC DESIGN
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3	JU	08/01/2025	SCHEMATIC DESIGN

PROJECT NAME
SINSW - DUNDAS PUBLIC SCHOOL UPGRADE
85 KISSING POINT RD, DUNDAS NSW 2117

BLOCK L

DRAWING TITLE
ELECTRICAL SERVICES
EDB SCHEMATIC

PROJECT NO.
758-0120.0041152.0001

STATUS
SCHEMATIC DESIGN

DRW	CHK	APP	DATE	SCALE
BC	DH	SS	08/01/2025	1 : 100 @A1

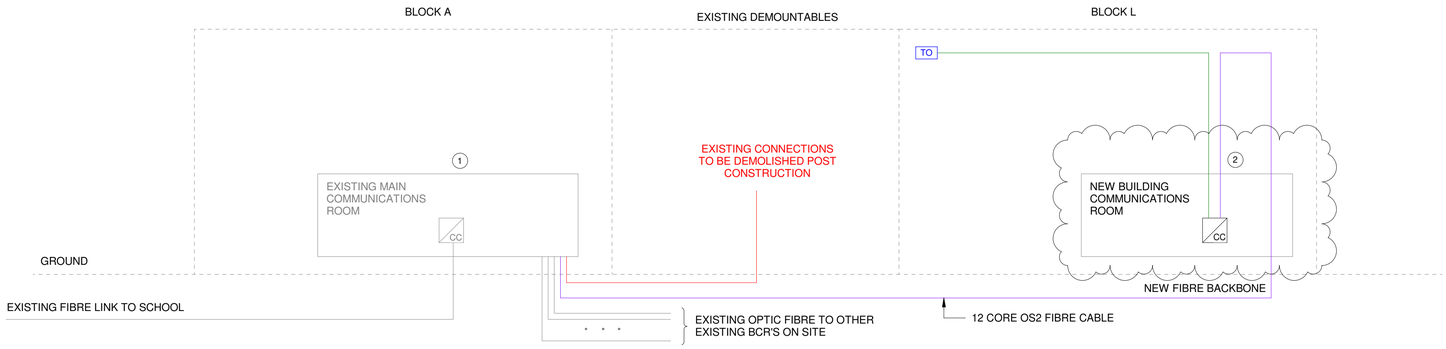
DRAWING NO.
DUPS-NDY-XX-XX-DR-E-000021

REV
3

LEGEND

- TO — TELECOMMUNICATIONS OUTLETS FOR BUILDING SERVICES
- CC — COMMUNICATIONS RACK.
- OPTICAL FIBRE
- CAT6A STRUCTURED CABLE
- EXISTNG EQUIPMENT/ SERVICE TO BE RETAINED IN CURRENT LOCATION.

No.	DESCRIPTION
1	EXISTING MAIN COMMUNICATIONS RACK TO BE MAINTAINED WITHIN BLOCK A. UPGRADES TO THE MAIN COMMUNICATIONS RACK SHALL BE IN ALIGNMENT WITH THE ICT SURVEY INFORMATION PROVIDED.
2	NEW BUILDING COMMUNICATIONS ROOM TO BE LOCATED IN THE SERVICES CORE OF NEW BLOCK L. HORIZONTAL CABLING TO BE CAT6A AND BE RETICULATED AT HIGH LEVEL. SEE POWER AND COMMUNICATIONS ARRANGEMENTS FOR DETAILS. NUMBER OF COMMUNICATIONS RACKS TO BE DETERMINED IN COLLABORATION WITH DOE ITD. BCR TO BE CONNECTED TO EXISTING MCR USING IN-GROUND FIBRE OPTICS AS SHOWN ON THE SITE PLAN.



GENERAL NOTES

- ALLOW FOR REPLACEMENT OF 28 EXISTING WIRELESS ACCESS POINTS WITHIN EXISTING BUILDINGS. QUANTITIES AND SCOPE ARE TO BE AS PER THE LATEST DUNDAS ICT SURVEY.
- ALLOW FOR REPLACEMENT OF EXISTING NEC PABX SYSTEM. NEW TIPT VOIP SYSTEM TO BE PROVIDED. CONTRACTOR TO INVESTIGATE CABLING TO TELEPHONE AND ALLOW FOR NEW STRUCTURED CABLING AS REQUIRED. SCOPE OF WORKS TO BE AS PER THE LATEST DUNDAS ICT SURVEY.

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4	JU	08/01/2025	SCHEMATIC DESIGN

PROJECT NAME
SINSW - DUNDAS PUBLIC SCHOOL UPGRADE
85 KISSING POINT RD, DUNDAS NSW 2117
BLOCK L

DRAWING TITLE
ELECTRICAL SERVICES COMMUNICATIONS SCHEMATIC

PROJECT NO.
758-0120.0041152.0001

STATUS
SCHEMATIC DESIGN

DRW	CHK	APP	DATE	SCALE
BC	DH	SS	08/01/2025	1 : 100 @A1

DRAWING NO.
DUPS-NDY-XX-XX-DR-E-000031

REV
4

AUTHORITY SUBSTATION
(EXISTING TO BE UPGRADED)
EXISTING SUBSTATION S.33198 ON KISSING POINT ROAD IS TO BE UPGRADED FROM A 315kVA TRANSFORMER TO 500kVA IN SITU.

NEW LV SUPPLY CONNECTION FOR THE SCHOOL MSB TO BE ESTABLISHED ON THE UPGRADED SUBSTATION.

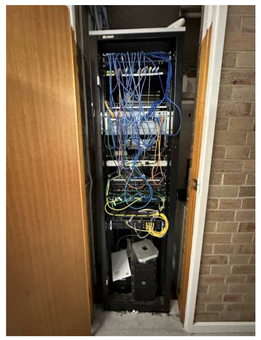
THIS WILL REQUIRE A SCHEDULED SHUTDOWN FOR CUSTOMERS CURRENTLY SUPPLIED BY THIS EXISTING SUBSTATION

BUILDING COMMUNICATIONS ROOM (BCR)
(PROPOSED NEW)
SEE BLOCK L POWER AND COMMUNICATIONS ARRANGEMENT FOR DETAILS.

SOLAR PV ARRAY
(PROPOSED NEW)
NEW 21kW SOLAR SYSTEM TO BE INSTALLED ON BLOCK L, INCLUDING PV SOLAR MODULES AND INVERTER.
1x SOLAR INVERTER TO BE LOCATED IN BLOCK L IN THE ELECTRICAL CUPBOARD. INVERTER WILL CONNECT TO THE NEW EDB ON THE GROUND FLOOR.

ELECTRICAL DISTRIBUTION BOARD (EDB)
(PROPOSED NEW)
NEW DISTRIBUTION BOARD TO SUPPLY NEW BLOCK L. TO BE CONNECTED TO THE EXISTING MSB VIA NEW UNDERGROUND SUBMAINS AS SHOWN.

SEE BLOCK L GROUND FLOOR POWER AND COMMUNCATIONS ARRANGEMENT FOR DETAILS.



MAIN COMMUNICATIONS ROOM
(EXISTING TO REMAIN)
INDICATIVE LOCATION OF EXISTING MAIN COMMUNICATIONS ROOM.

NEW FIBRE LINK TO PROPOSED NEW BUILDING TO BE TERMINATED HERE ON EXISTING COMMUNICATIONS RACK. OUTGOING FIBRE LINK SHALL RETICULATE INTERNALLY USING EXISTING CABLE TRAYS AND EXIT BUILDING A APPROXIMATELY AS SHOWN.

MCR (AR0008) IS TO BE UPGRADED DURING THESE WORKS. REFER TO LATEST DUNDAS ICT SURVEY FOR AN ITEMISED SUMMARY OF THE PROPOSED UPGRADES.

MAIN SWITCHBOARD (MSB)
(EXISTING TO REMAIN)
INDICATIVE LOCATION OF EXISTING MAIN SWITCHBOARD. NEW BLOCK L TO BE SUPPLIED BY THIS EXISTING MSB.

IT IS PROPOSED THAT THIS MSB AND ITS ENCLOSURE BE RETAINED, WITH MODIFICATIONS TO ACCOMODATE THE INCREASED SUPPLY SIZE.

EXISTING MSB HAS BEEN IDENTIFIED AS HAVING A FAULT RATING OF 30kA

AUTHORITY POLE-MOUNTED SUBSTATION (315kVA)
(EXISTING CONNECTION TO BE TERMINATED)
PRELIMINARY MAXIMUM DEMAND CALCULATIONS INDICATE THE EXISTING 315kVA SUBSTATION CONNECTION ON KISSING POINT ROAD DOES NOT HAVE SUFFICIENT CAPACITY FOR THE PROPOSED WORKS.

CONNECTION TO THIS POLE-MOUNTED SUBSTATION IS TO BE TERMINATED. THE EXISTING OVERHEAD CABLING AND PRIVATE POWER POLE SPANNING KISSING POINT ROAD IS TO BE DISCONNECTED AND REMOVED.

CONSUMER MAINS
(PROPOSED NEW)
CONSUMER MAINS TO THE EXISTING MSB IS TO BE UPSIZED TO ACCOMODATE THE LARGER SUPPLY SIZE AND SPARE CAPACITY, WITH A NEW INDICATIVE ROUTE AS SHOWN.

NEW CONSUMER MAINS TO BE A MINIMUM SIZE OF 8x1C 120mm² CU XLPE IN MINIMUM 2x100mmØ HD PVC CONDUIT.

EXISTING CONSUMER MAINS CABLING TO BE DISCONNECTED AND REMOVED. EXISTING CONDUITS SHALL BE ABANDONED IN-SITU.

NEW CONSUMER MAINS SHALL TERMINATE AT A NEW AUTHORITY CONNECTION POINT (PILLAR).

No.	DESCRIPTION
1	ALLOW FOR REPLACEMENT OF EXISTING SWITCHES IN BUILDING DISTRIBUTORS AS PER THE LATEST DUNDAS ICT AUDIT.
2	EXISTING AUTHORITY METER WITHIN TO BE RETAINED.
3	INDICATIVE RETICULATION PATH OF NEW COMMUNICATIONS AND SECURITY CABLING TO BLOCK L BCR. CABLES SHALL BE RUN WITHIN IN-GROUND CONDUITS WITH PITS EVERY 30m AND CHANGE OF DIRECTION. COMMUNICATIONS CONDUITS TO BE MINIMUM 2x 100mm DIAMETER. CABLE PIT ADJACENT TO PROPOSED NEW BLOCK TO BE P5 TYPE. OTHER NEW COMMUNICATIONS PITS ALONG CONDUIT RETICULATION PATH TO BE P6 TYPE. ALL NEW COMMUNICATION CABLE PITS INSTALLED ARE TO HAVE CONCRETE LIDS. NEW SECURITY CONDUIT SHALL CONSIST OF MINIMUM 2x 50mm CONDUIT. SECURITY PITS SHALL BE SIZED BASED ON SITE CONDITIONS, MANUFACTURER REQUIREMENTS AND RELEVANT STANDARDS.
4	NEW PRIVATE ELECTRICAL PILLAR TO BE INSTALLED WITHIN THE PROPERTY BOUNDARY FOR THE CONNECTION OF CONSUMER AND SERVICE MAINS. POINT OF COMMON CONNECTION TO BE ESTABLISHED WITHIN A NEW AUTHORITY PILLAR OUTSIDE THE PROPERTY BOUNDARY.

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4	JU	06/12/2024	SCHEMATIC DESIGN
5	JU	17/12/2024	SCHEMATIC DESIGN
6	JU	07/01/2025	SCHEMATIC DESIGN
7	JU	14/02/2025	SCHEMATIC DESIGN

PROJECT NAME
SINSW - DUNDAS PUBLIC SCHOOL UPGRADE
85 KISSING POINT RD, DUNDAS NSW 2117
BLOCK L

DRAWING TITLE
ELECTRICAL SERVICES
SITE PLAN

PROJECT NO.
758-0120.0041152.0001

STATUS
SCHEMATIC DESIGN

DRW	CHK	APP	DATE	SCALE
BC	DH	SS	14/02/2025	1 : 500 @A1

DRAWING NO.
DUPS-NDY-00-00-DR-E-001011

REV
7

LIGHTING DESIGN LEGEND

80 LUX AVERAGE HORIZONTAL ILLUMINANCE AS PER EFSFG AND AS/NZS AS1680.2.1-2008 TABLE D1
UGR AS PER EFSFG AND PER AS/NZS AS1680.1-2006 TABLE 8.2
LIGHTING UNIFORMITY AS PER EFSFG AND AS/NZS AS1680.1-2006 TABLE 3.2

160 LUX AVERAGE HORIZONTAL ILLUMINANCE AS PER EFSFG AND AS/NZS AS1680.2.1-2008 TABLE D1
UGR AS PER EFSFG AND PER AS/NZS AS1680.1-2006 TABLE 8.2
LIGHTING UNIFORMITY AS PER EFSFG AND AS/NZS AS1680.1-2006 TABLE 3.2

240 LUX AVERAGE HORIZONTAL ILLUMINANCE AS PER EFSFG AND AS/NZS AS1680.2.1-2008 TABLE D1
UGR AS PER EFSFG AND PER AS/NZS AS1680.1-2006 TABLE 8.2
LIGHTING UNIFORMITY AS PER EFSFG AND AS/NZS AS1680.1-2006 TABLE 3.2

320 LUX AVERAGE HORIZONTAL ILLUMINANCE AS PER EFSFG AND AS/NZS AS1680.2.1-2008 TABLE D1
UGR AS PER EFSFG AND PER AS/NZS AS1680.1-2006 TABLE 8.2
LIGHTING UNIFORMITY AS PER EFSFG AND AS/NZS AS1680.1-2006 TABLE 3.2

400 LUX AVERAGE HORIZONTAL ILLUMINANCE AS PER EFSFG AND AS/NZS AS1680.2.1-2008 TABLE D1
UGR AS PER EFSFG AND PER AS/NZS AS1680.1-2006 TABLE 8.2
LIGHTING UNIFORMITY AS PER EFSFG AND AS/NZS AS1680.1-2006 TABLE 3.2

(1) GENERAL LIGHTING WITHIN STAFF AREAS, LEARNING AREAS, INTERVIEW ROOMS ETC. TO BE PROVIDED INDICATIVELY BY CEILING RECESSED LED PANEL TYPE LUMINAIRES.
FINAL CONFIRMATION OF LUMINAIRE SELECTIONS TO BE CONDUCTED DURING DETAILED DESIGN AND COORDINATED WITH THE PATTERN BOOK AND EFSG.

(2) GENERAL LIGHTING WITHIN AMENITIES AND CLEANERS ROOMS TO BE PROVIDED INDICATIVELY BY RECESSED IP65 LED DOWNLIGHTS.
FINAL CONFIRMATION OF LUMINAIRE SELECTIONS TO BE CONDUCTED DURING DETAILED DESIGN AND COORDINATED WITH THE PATTERN BOOK AND EFSG.

(3) GENERAL LIGHTING WITHIN COMMON AREAS, CORRIDORS, ETC TO BE PROVIDED INDICATIVELY BY RECESSED LED DOWNLIGHTS.
FINAL CONFIRMATION OF LUMINAIRE SELECTIONS TO BE CONDUCTED DURING DETAILED DESIGN AND COORDINATED WITH THE PATTERN BOOK AND EFSG.

(4) LIGHTING WITHIN ACCESSIBLE AMMENITIES PROVIDED INDICATIVELY BY RECESSED IP65 RECESSED LED DOWNLIGHTS AND INFRARED HEAT LAMPS.
FINAL CONFIRMATION OF LUMINAIRE SELECTIONS TO BE CONDUCTED DURING DETAILED DESIGN AND COORDINATED WITH THE PATTERN BOOK AND EFSG.

(5) GENERAL LIGHTING WITHIN STORE ROOMS, ELECTRICAL CUPBOARDS, BUILDING COMUNICATION ROOMS TO BE PROVIDED INDICATIVELY BY SURFACE MOUNTED LED BATTENS.
FINAL CONFIRMATION OF LUMINAIRE SELECTIONS TO BE CONDUCTED DURING DETAILED DESIGN AND COORDINATED WITH THE PATTERN BOOK AND EFSG.

(6) GENERAL LIGHTING WITHIN EXTERNAL AREAS INCLUDING COLA, STAIRS, EXTERNAL CORRIDORS AND WALKWAYS TO BE PROVIDED INDICATIVELY BY IMPACT RESISTANT, WEATHERPROOF SURFACE MOUNTED LED BATTENS.
FINAL CONFIRMATION OF LUMINAIRE SELECTIONS TO BE CONDUCTED DURING DETAILED DESIGN AND COORDINATED WITH THE PATTERN BOOK AND EFSG.

GENERAL NOTES

- THE LIGHTING ARRANGEMENT SHOWN IS PRELIMINARY, AND IS SHOWN FOR BUDGET PURPOSES ONLY. THE LIGHTING LAYOUT IS TO BE DEVELOPED FURTHER IN DETAILED DESIGN IN CONJUNCTION WITH THE EFSG AND THE PATTERN BOOK.
- A DIGITAL ADDRESSABLE CONTROL SYSTEM (DALI) IS TO BE PROVIDED FOR LIGHTING CONTROL. LUMINAIRES ARE TO BE DALI DIMMABLE.
- INDICATIVELY, INTERNAL LUMINAIRES SHOULD BE CONTROLLED VIA MOTION SENSORS AND SWITCH PLATES WITH TIMER SHUTOFF. FINAL STRATEGY TO BE DEVELOPED IN DETAILED IN CONJUNCTION WITH THE EFSG AND THE PATTERN BOOK.
- INDICATIVELY, EXTERNAL LUMINAIRES SHOULD BE CONTROLLED VIA MOTION SENSORS AND PHOTOCELLS WITH TIMER SHUTOFF. FINAL STRATEGY TO BE DEVELOPED IN DETAILED IN CONJUNCTION WITH THE EFSG AND THE PATTERN BOOK.
- EMERGENCY LUMINAIRES AND EXIT SIGNS ARE TO BE PROVIDED IN ACCORDANCE WITH THE NCC AND AS/NZS 2293.1-2018. AN EMERGENCY LIGHTING TEST SWITCH IS TO BE PROVIDED AT THE LOCAL ELECTRICAL DISTRIBUTION BOARD.

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PROJECT MANAGER
RP INFRASTRUCTURE
Converting visions to reality

KEY PLAN

NORTH

REV	BY	DATE	DESCRIPTION
1	JU	11/11/2024	CONCEPT DESIGN
2	JU	06/12/2024	SCHEMATIC DESIGN
3	JU	08/01/2025	SCHEMATIC DESIGN

PROJECT NAME
SINSW - DUNDAS PUBLIC SCHOOL UPGRADE
85 KISSING POINT RD, DUNDAS NSW 2117
BLOCK L

DRAWING TITLE
ELECTRICAL SERVICES
BLOCK L GROUND FLOOR LIGHTING ARRANGEMENT

PROJECT NO.
758-0120.0041152.0001

STATUS
SCHEMATIC DESIGN

DRW	CHK	APP	DATE	SCALE
BC	DH	SS	08/01/2025	1 : 100 @A1

DRAWING NO.
DUPS-NDY-B00L-GF-DR-E-120011

REV
3

INDICATIVE POWER AND TELECOMMUNICATIONS OUTLETS QUANTITIES BY LOCATION

ROOM TYPE	ROOM QUANTITY	GPO	DGPO	DTO	CAPTIVE OUTLETS	STO
WC, ACC. WC, AMB. WC	7	1	-	-	-	-
CLEANER ROOMS	1	-	1 (WP)	-	-	-
AIR LOCK	1	1	-	-	-	-
DB+INVERTER CUPBOARDS	1	-	2	2	-	-
BCR	1	-	4	2	2	-
LEARNING COMMONS	2	1	4	4	-	2
MULTIPURPOSE SPACE	2	1	3	3	-	-
GENERAL LEARNING SPACE	6	3	4	3	-	2
PLANT	1	1 (WP)	-	-	-	-

POWER AND COMMUNICATIONS OUTLETS ALLOWANCES LISTED IN THE TABLE ABOVE ARE INITIAL ESTIMATES FOR BUDGETARY PURPOSES. FINAL POWER AND COMMUNICATIONS ARRANGEMENTS INCLUDING QUANTITIES ARE TO BE DEVELOPED FURTHER IN DETAILED DESIGN IN ACCORDANCE WITH THE EFSG AND PATTERN BOOK.

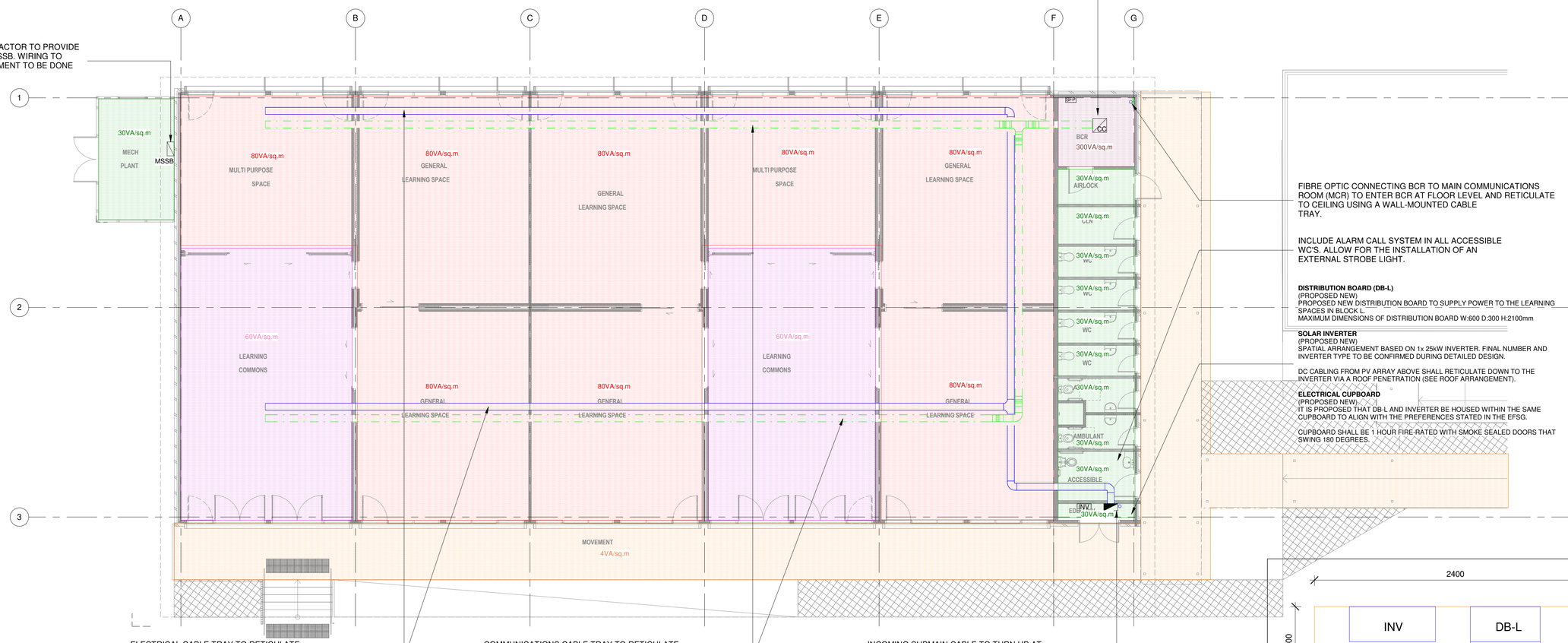
GENERAL NOTES

- ELECTRICAL CABLE TRAY SIZING IS TO BE CONFIRMED DURING DETAILED DESIGN IN ACCORDANCE WITH THE EFSG, PATTERN BOOK AND AS3000.
- COMMUNICATIONS CABLE TRAY IS TO BE CONFIRMED DURING DETAILED DESIGN IN ACCORDANCE WITH THE EFSG AND PATTERN BOOK.
- CABLE TRAYS ARE TO BE INSTALLED AT HIGH LEVEL IN THE CEILING VOID AND TO HIDDEN FROM VIEW.
- VA/SQM VALUES SHOWS ARE AS USED FOR SCHEMATIC DESIGN MAXIMUM DEMAND. THE MAXIMUM DEMAND IS TO BE CONFIRMED OR REFINED DURING DETAILED DESIGN.
- THE EXISTING CAMPUS PERIOD BELL AND PUBLIC ADDRESS SYSTEM IS TO BE EXPANDED TO INCLUDE THE NEW BUILDING.
- FANS ARE TO BE PROVIDED IN THE SLSO OFFICE, GENERAL LEARNING SPACES, LEARNING COMMONS AND MULTIPURPOSE SPACES AS PER THE EFSG AND PATTERN BOOK. INDICATIVE ALLOWANCES ARE LISTED BELOW:
  ALLOW ONE CEILING FAN FOR INTERNAL SPACES WITH FLOOR AREA BETWEEN 13 TO 25 SQM.
  ALLOW ONE CEILING FAN PER 25 SQM FOR INTERNAL SPACES WITH FLOOR AREA EXCEEDING 25 SQM.

BUILDING COMMUNICATIONS ROOM (BCR)
(PROPOSED NEW)
NUMBER AND LOCATION OF COMMUNICATIONS CABINETS ARE INDICATIVE ONLY AND TO BE DETERMINED BY SCHOOLS INFORMATION TECHNOLOGY DIRECTORATE.
GPOS ARE TO BE 15A CAPTIVE PENDANT TYPE LOCATED ABOVE COMMUNICATIONS CABINETS.

RACKS TO BE 45RU x 800 x 800mm.
INCLUDES SECURITY FIELD PANEL.

ELECTRICAL CONTRACTOR TO PROVIDE CABLING TO NEW MSSB. WIRING TO MECHANICAL EQUIPMENT TO BE DONE BY OTHERS.



FIBRE OPTIC CONNECTING BCR TO MAIN COMMUNICATIONS ROOM (MCR) TO ENTER BCR AT FLOOR LEVEL AND RETICULATE TO CEILING USING A WALL-MOUNTED CABLE TRAY.

INCLUDE ALARM CALL SYSTEM IN ALL ACCESSIBLE WC'S. ALLOW FOR THE INSTALLATION OF AN EXTERNAL STROBE LIGHT.

DISTRIBUTION BOARD (DB-L)
(PROPOSED NEW)
PROPOSED NEW DISTRIBUTION BOARD TO SUPPLY POWER TO THE LEARNING SPACES IN BLOCK L.
MAXIMUM DIMENSIONS OF DISTRIBUTION BOARD W:600 D:300 H:2100mm

SOLAR INVERTER
(PROPOSED NEW)
SPATIAL ARRANGEMENT BASED ON 1x 25kW INVERTER. FINAL NUMBER AND INVERTER TYPE TO BE CONFIRMED DURING DETAILED DESIGN.

DC CABLING FROM PV ARRAY ABOVE SHALL RETICULATE DOWN TO THE INVERTER VIA A ROOF PENETRATION (SEE ROOF ARRANGEMENT).

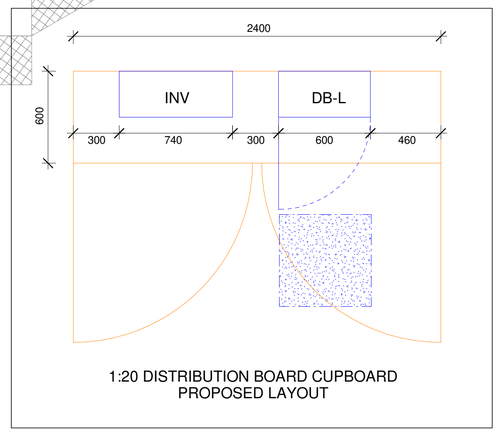
ELECTRICAL CUPBOARD
(PROPOSED NEW)
IT IS PROPOSED THAT DB-L AND INVERTER BE HOUSED WITHIN THE SAME CUPBOARD TO ALIGN WITH THE PREFERENCES STATED IN THE EFSG.

CUPBOARD SHALL BE 1 HOUR FIRE-RATED WITH SMOKE SEALED DOORS THAT SWING 180 DEGREES.

ELECTRICAL CABLE TRAY TO RETICULATE CABLING FROM DB-L.G TO LEVEL ONE SPACES OF BUILDING L. FINAL RETICULATION TO OUTLET LOCATION VIA CATENARY.

COMMUNICATIONS CABLE TRAY TO RETICULATE CABLING FROM BCR TO ALL SPACES WITHIN BUILDING L. FINAL RETICULATION TO OUTLET LOCATION VIA CATENARY.

INCOMING SUBMAIN CABLE TO TURN UP AT FLOOR LEVEL WITHIN ELECTRICAL CUPBOARD TO SUPPLY DB-L



1:20 DISTRIBUTION BOARD CUPBOARD PROPOSED LAYOUT

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NORTH

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2	JU	11/11/2024	CONCEPT DESIGN
3	JU	26/11/2024	DRAFT SCHEMATIC DESIGN
4	JU	06/12/2024	SCHEMATIC DESIGN
5	JU	08/01/2025	SCHEMATIC DESIGN

PROJECT NAME
SINSW - DUNDAS PUBLIC SCHOOL UPGRADE
85 KISSING POINT RD, DUNDAS NSW 2117
BLOCK L

DRAWING TITLE
ELECTRICAL SERVICES
BLOCK L GROUND FLOOR POWER AND COMMUNICATIONS ARRANGEMENT

DRAWING NO.
DUPS-NDY-B00L-GF-DR-E-120021

REV
5

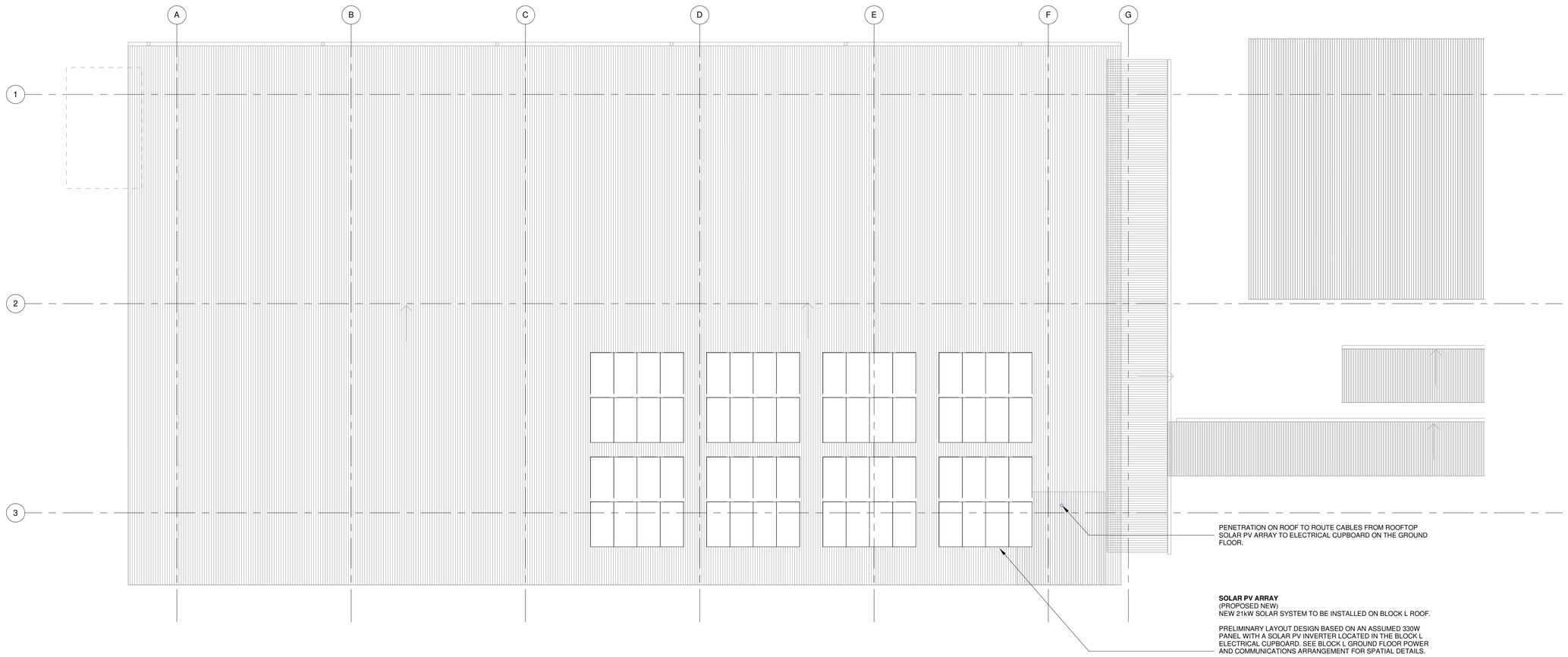
PROJECT NO.
758-0120.0041152.0001

STATUS
SCHEMATIC DESIGN

DRW	CHK	APP	DATE	SCALE
BC	DH	SS	08/01/2025	1 : 100 @A1

GENERAL NOTES

- ALLOW FOR CABLE SUPPORTS AND PERSONNEL WALKWAYS FOR MAINTENANCE ACCESS TO SOLAR PV PANELS
- DC CABLING TO BE CONTAINED WITHIN HD CONDUITS OR LIDDED CABLE TRAYS



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SINSW - DUNDAS PUBLIC SCHOOL UPGRADE
85 KISSING POINT RD, DUNDAS NSW 2117
BLOCK L

DRAWING TITLE
ELECTRICAL SERVICES
BLOCK L ROOF POWER AND COMMUNICATIONS ARRANGEMENT

PROJECT NO.
758-0120.0041152.0001

STATUS
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DRW	CHK	APP	DATE	SCALE
BC	DH	SS	08/01/2025	1 : 100 @A1

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DUPS-NDY-B00L-RF-DR-E-120121

REV
4