

DEVELOPMENT APPLICATION

| | |
|---------------------------------|---|
| APPLICATION NUMBER: | PLN-25-068 |
| PROPOSED DEVELOPMENT: | Solar Panels (Residential) |
| LOCATION: | Strathaven Nursing Home 9 Strathaven Drive Rosetta |
| APPLICANT: | Arigo Consulting |
| ADVERTISING START DATE: | 16/04/2025 |
| ADVERTISING EXPIRY DATE: | 06/05/2025 |

Plans and documentation are available for inspection at Council's Offices, located at 374 Main Road, Glenorchy between 8.30 am and 5.00 pm, Monday to Friday (excluding public holidays) and the plans are available on Glenorchy City Council's website (www.gcc.tas.gov.au) until **06/05/2025**.

During this time, any person may make representations relating to the applications by letter addressed to the Chief Executive Officer, Glenorchy City Council, PO Box 103, Glenorchy 7010 or by email to gccmail@gcc.tas.gov.au.

Representations must be received by no later than 11.59 pm on **06/05/2025**, or for postal and hand delivered representations, by 5.00 pm on **06/05/2025**.

| PV SYSTEM DETAILS | |
|-------------------|--|
| PV TYPE: | REC 450AA PURE RX 450W |
| MODULE SIZE: | 1728 X 1205 X 30 MM |
| No. MODULES: | 436 |
| DC kWp (TOTAL): | 196.2 kWp |
| AC kWp (TOTAL): | 160 kVA |
| DC/AC RATIO: | 1.23 |
| INVERTER/S: | (1) SUNGROW SG110CX-P2 (1) SUNGROW SG50CX |
| NMI: | 8000331050 |
| METER NO: | 251685103 |

| | |
|---------------|-------|
| SECTION PLANE | 1 |
| ARRAY AZI | 138° |
| ROOF PITCH | 10° |
| ROOF TYPE | TIN |
| RACKING | FLUSH |
| PANELS | 90 |

| | |
|---------------|-------|
| SECTION PLANE | 2 |
| ARRAY AZI | 228° |
| ROOF PITCH | 10° |
| ROOF TYPE | TIN |
| RACKING | FLUSH |
| PANELS | 90 |

| | |
|---------------|-------|
| SECTION PLANE | 6 |
| ARRAY AZI | 138° |
| ROOF PITCH | 10° |
| ROOF TYPE | TIN |
| RACKING | FLUSH |
| PANELS | 42 |

| | |
|---------------|-------|
| SECTION PLANE | 8 |
| ARRAY AZI | 332° |
| ROOF PITCH | 10° |
| ROOF TYPE | TIN |
| RACKING | FLUSH |
| PANELS | 24 |

| | |
|---------------|-------|
| SECTION PLANE | 4 |
| ARRAY AZI | 228° |
| ROOF PITCH | 10° |
| ROOF TYPE | TIN |
| RACKING | FLUSH |
| PANELS | 22 |

| | |
|---------------|-------|
| SECTION PLANE | 10 |
| ARRAY AZI | 228° |
| ROOF PITCH | 10° |
| ROOF TYPE | TIN |
| RACKING | FLUSH |
| PANELS | 12 |

| | |
|---------------|-------|
| SECTION PLANE | 3 |
| ARRAY AZI | 48° |
| ROOF PITCH | 10° |
| ROOF TYPE | TIN |
| RACKING | FLUSH |
| PANELS | 54 |

| | |
|---------------|-------|
| SECTION PLANE | 5 |
| ARRAY AZI | 228° |
| ROOF PITCH | 10° |
| ROOF TYPE | TIN |
| RACKING | FLUSH |
| PANELS | 54 |

| | |
|---------------|-------|
| SECTION PLANE | 7 |
| ARRAY AZI | 57° |
| ROOF PITCH | 10° |
| ROOF TYPE | TIN |
| RACKING | FLUSH |
| PANELS | 24 |

| | |
|---------------|-------|
| SECTION PLANE | 9 |
| ARRAY AZI | 332° |
| ROOF PITCH | 0° |
| ROOF TYPE | TIN |
| RACKING | FLUSH |
| PANELS | 24 |

**GLENORCHY CITY COUNCIL
PLANNING SERVICES**

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DATE RECEIVED: 25 March 2025

- NOTES:
- SOLAR MOUNTING: SCHLETTER @ 0° DEG. ARRAY CERTIFICATION INCLUDING MINIMUM FEET SPACING CERTIFIED BY ENGINEERING CERT.
 - COMMS CONNECTION VIA STANDARD ROUTER SETUP (IF APPLICABLE).
 - ALL INSTALLATION WORKS SHALL COMPLY WITH: AS3000, AS3008, AS4777, CEC GUIDELINES, SUPPLY AUTHORITY SERVICE AND INSTALLATION RULES AND LOCAL AUTHORITY GUIDELINES.
 - ALL AC ISOLATORS SHALL BE LOAD BREAK TYPE AC ISOLATORS INSTALLED EXTERNALLY SHALE MIN MIN IP65 RATED. AN AC ISOLATOR IS NOT REQUIRED IF THE INVERTER IN LINE OF SIGHT TO PVDB, WHERE THE INVERTER CB CAN BE USED FOR ISOLATION.
 - UTILISE WEEB WASHERS AND BOND ALL ARRAY FRAMES WITH EARTH CABLING ENSURING A CONTINUOUS EARTH CONNECTION EVEN WITH THE REMOVAL OF A PV MODULE
 - ENSURE SYSTEM IS LABELED TO AS5033, AS4777.1, CEC GUIDELINES AND RELEVANT STATE REQUIREMENTS
 - SOME DC DETAILS HAVE BEEN OMITTED FOR CLARITY
 - INSTALLER TO VERIFY CABLE RUNS ONSITE. INSTALLATION METHOD ASSUMED TO BE 'WIRING ENCLOSURE IN AIR' FOR INVERTERS, SUB-MAINS & PVDB SUB-MAINS.
 - ALL DC CABLE TO BE INSTALLED IN HD CONDUIT OR COVERED HDG CABLE METAL TRAY.
 - A VOLTAGE DROP OF LESS THAN 2% MUST BE ACHIEVED FOR THE AC CABLING OF THE SOLAR SYSTEM.
 - AS PER INDUSTRY STANDARDS, A DC VOLTAGE DROP OF 5% OR LESS WILL ACHIEVED.
 - THE CABLE SIZE SELECTED MUST CARRY THE FULL LOAD POTENTIAL OF THE INVERTER IT IS CONNECTED TO.
 - THE SOLAR INVERTER IS PROPOSED TO BE WALL MOUNTED WITHIN A VENTILATED, LOCATION TBC. ENCLOSURE IS TO CAPABLE OF RESTRICTED ACCESS TO INVERTERS AS PER AS 5033.
 - CABLES ARE SIZED TO THE CURRENT CARRYING CAPACITY OF THE INVERTER SYSTEM.
 - ENSURE SYSTEM IS BASED ON AS5033, AS4777.2 INVERTER REQUIREMENTS STANDARD.

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| B | 21.03.2025 | NZ | RT |
| A | 19.11.2024 | VL | RT |
| REV | DATE | DRN | APR'D |
| REVISION PANEL | | | |

INSTALLATION CONTRACTOR:

MELBOURNE ENERGY GROUP

CONSULTANT ENGINEERS:

Arigo Consulting Pty Ltd
16-22 Church St,
Hawthorn VIC 3122
E: info@arigo.com.au
W: www.arigo.com.au

arigo
CONSULTING

PROJECT:

UA - STRATHAVEN

9 STRATHAVEN DR

ROSETTA TAS 7010

DRAWING:

110 PV LAYOUT

SCALE: 1:400

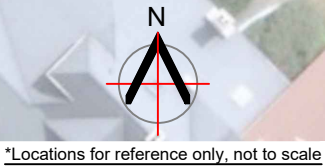
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| PROJECT NO: | REVISION: |
| P1368-176 | B |

STATUS:

FOR APPROVAL

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| DRAWN BY: V.L | CHECKED: R.O.T |
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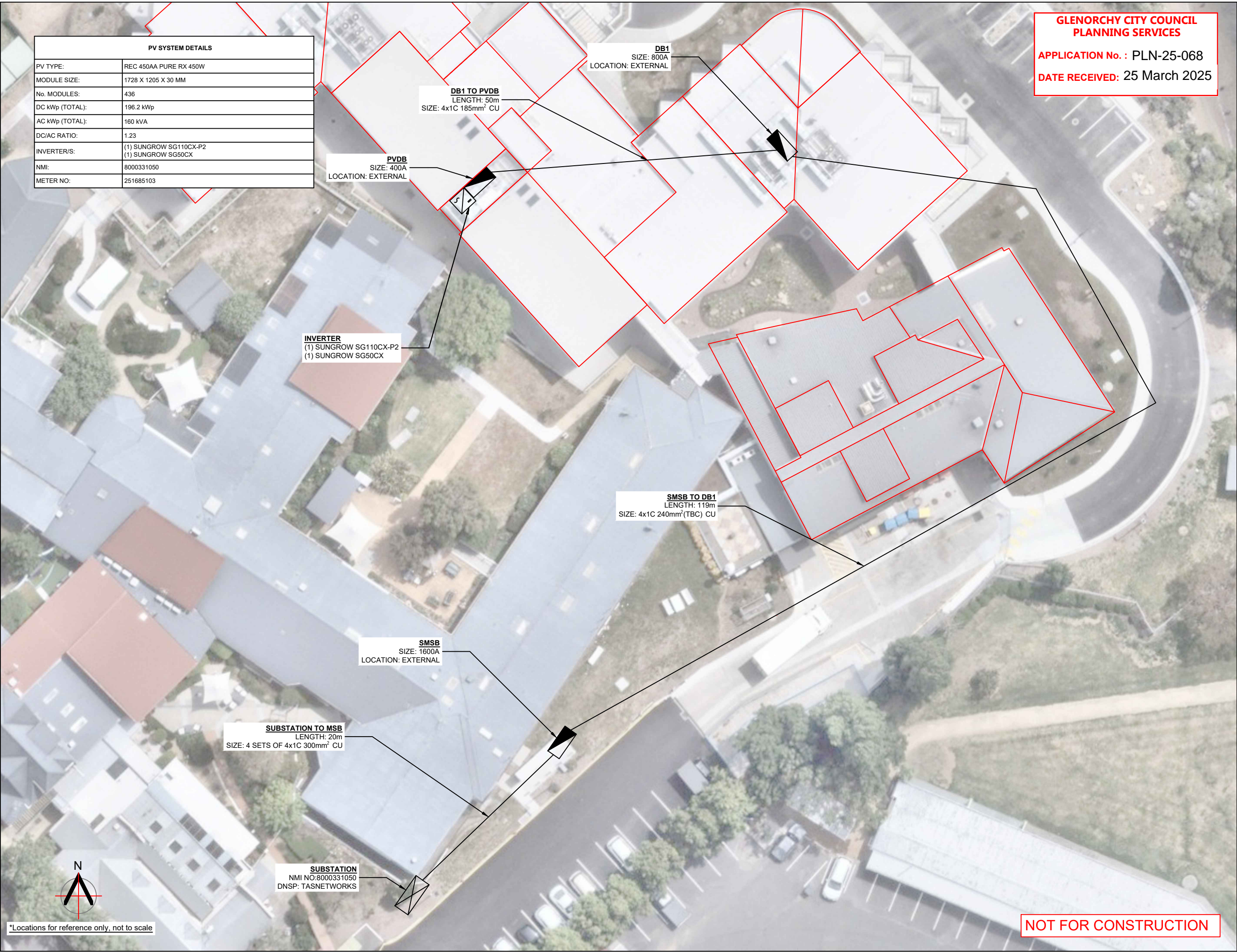
NOT FOR CONSTRUCTION

| PV SYSTEM DETAILS | |
|-------------------|--|
| PV TYPE: | REC 450AA PURE RX 450W |
| MODULE SIZE: | 1728 X 1205 X 30 MM |
| No. MODULES: | 436 |
| DC kWp (TOTAL): | 196.2 kWp |
| AC kWp (TOTAL): | 160 kVA |
| DC/AC RATIO: | 1.23 |
| INVERTER/S: | (1) SUNGROW SG110CX-P2 (1) SUNGROW SG50CX |
| NMI: | 8000331050 |
| METER NO: | 251685103 |



**GLENORCHY CITY COUNCIL
PLANNING SERVICES**

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NOTES:

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| REV | DATE | DRN | APR'D | | |
| REVISION PANEL | | | | | |
| INSTALLATION CONTRACTOR: | | | | | |
|  | | | | | |
| CONSULTANT ENGINEERS: | | | | | |
| Arigo Consulting Pty Ltd 16-22 Church St. Hawthorn VIC 3122 E: info@arigo.com.au W: www.arigo.com.au | | | | | |
|  | | | | | |
| PROJECT: | | | | | |
| UA - STRATHAVEN 9 STRATHAVEN DR ROSETTA TAS 7010 | | | | | |
| DRAWING: | | | | | |
| 120 SITE LAYOUT | | | | | |
| SCALE: Custom | | | | | |
| PROJECT NO: | | REVISION: | | | |
| P1368-176 | | B | | | |
| STATUS: | | | | | |
| FOR APPROVAL | | | | | |
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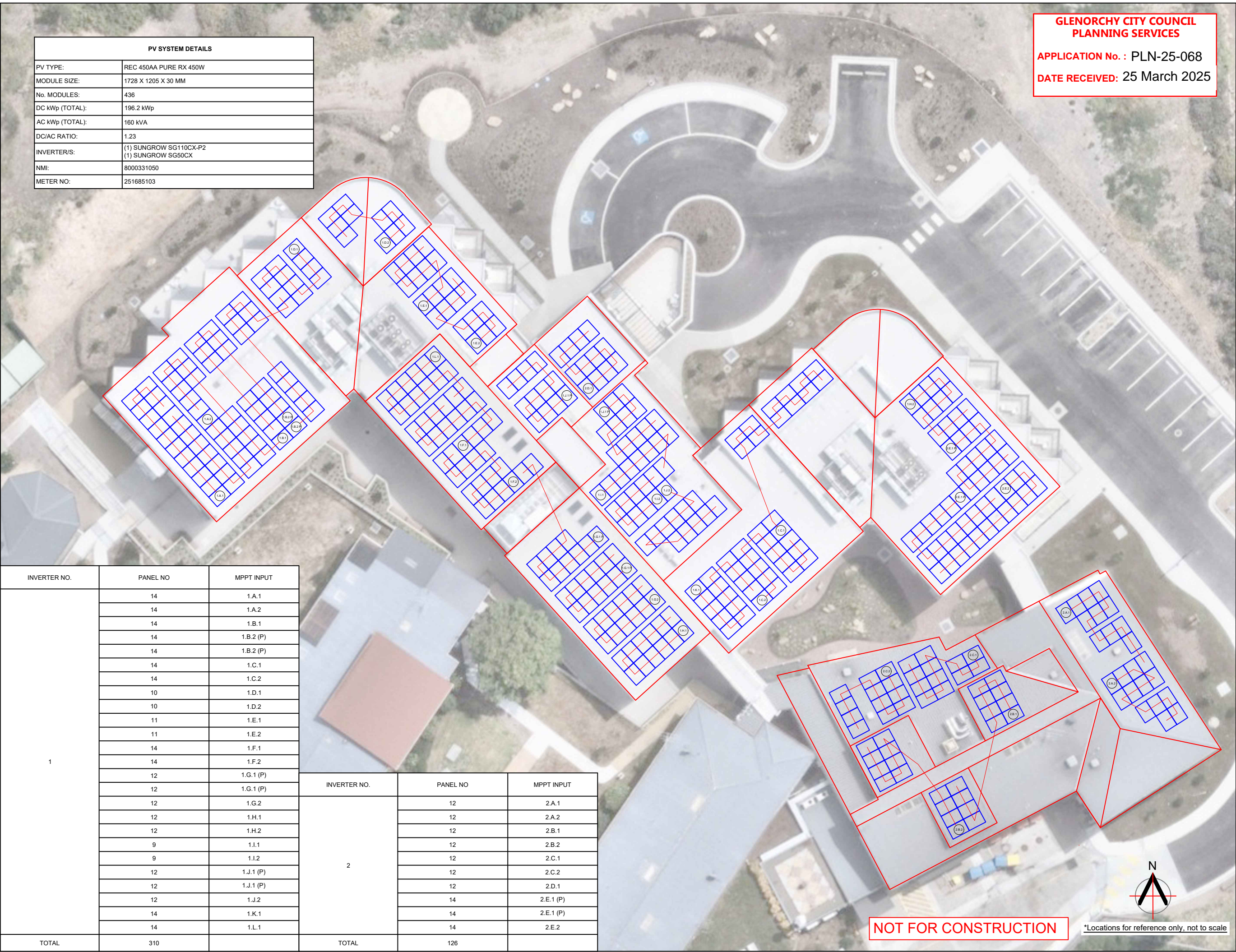
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| NMI: | 8000331050 |
| METER NO: | 251685103 |

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| INVERTER NO. | PANEL NO | MPPT INPUT |
|--------------|----------|------------|
| 1 | 14 | 1.A.1 |
| | 14 | 1.A.2 |
| | 14 | 1.B.1 |
| | 14 | 1.B.2 (P) |
| | 14 | 1.B.2 (P) |
| | 14 | 1.C.1 |
| | 14 | 1.C.2 |
| | 10 | 1.D.1 |
| | 10 | 1.D.2 |
| | 11 | 1.E.1 |
| | 11 | 1.E.2 |
| | 14 | 1.F.1 |
| | 14 | 1.F.2 |
| | 12 | 1.G.1 (P) |
| | 12 | 1.G.1 (P) |
| | 12 | 1.G.2 |
| | 12 | 1.H.1 |
| | 12 | 1.H.2 |
| | 9 | 1.I.1 |
| | 9 | 1.I.2 |
| | 12 | 1.J.1 (P) |
| | 12 | 1.J.1 (P) |
| | 12 | 1.J.2 |
| | 14 | 1.K.1 |
| | 14 | 1.L.1 |
| TOTAL | 310 | |

| INVERTER NO. | PANEL NO | MPPT INPUT |
|--------------|----------|------------|
| 2 | 12 | 2.A.1 |
| | 12 | 2.A.2 |
| | 12 | 2.B.1 |
| | 12 | 2.B.2 |
| | 12 | 2.C.1 |
| | 12 | 2.C.2 |
| | 12 | 2.D.1 |
| | 14 | 2.E.1 (P) |
| | 14 | 2.E.1 (P) |
| | 14 | 2.E.2 |
| TOTAL | 126 | |

NOTES:

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| REVISION PANEL | | | |

INSTALLATION CONTRACTOR:

 MELBOURNE ENERGY GROUP

CONSULTANT ENGINEERS:

Arigo Consulting Pty Ltd
16-22 Church St.
Hawthorn VIC 3122
E: info@arigo.com.au
W: www.arigo.com.au

 arigo CONSULTING

PROJECT:

UA - STRATHAVEN

9 STRATHAVEN DR

ROSETTA TAS 7010

DRAWING:

130 STRING LAYOUT

| | |
|---------------|-----------|
| SCALE: Custom | |
| PROJECT NO: | REVISION: |
| P1368-176 | B |

STATUS:

FOR APPROVAL

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| DRAWN BY: V.L. | CHECKED: R.O.T |
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| NEW STRUCTURE | |
|--------------------------------------|---|
| Installation type | Flush-mount (Landscape) |
| Solar panel weight including framing | 1,205mm x 1,728mm x 23.40kg (11.96kg/m²) |
| Supporting structure material | Timber |
| Roof type considered for design | Gable |
| Pitch | 10° |
| Width | 61.3m |
| Length | 67m |
| Mean roof height | 13.2m |
| Max. purlin spacing | 900mm |
| Fasteners | Rapid2+ Pro SML (Product code: 119026-102) |

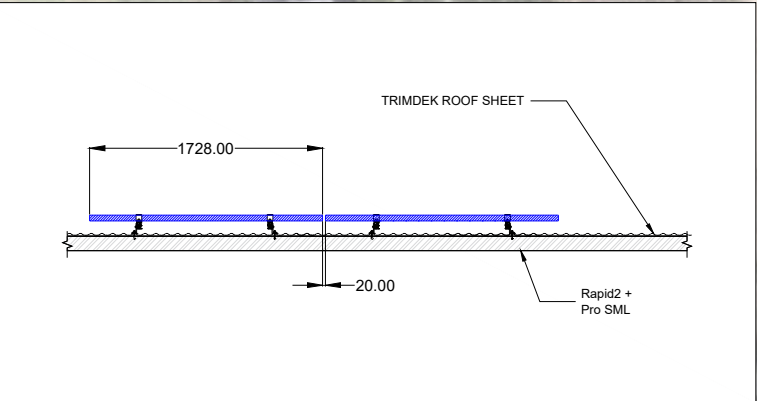
| EXISTING STRUCTURE | |
|--------------------------------------|---|
| Installation type | Flush-mount (Landscape) |
| Solar panel weight including framing | 1,205mm x 1,728mm x 23.40kg (11.96kg/m²) |
| Supporting structure material | Timber |
| Roof type considered for design | Gable |
| Pitch | 10° |
| Width | 21m |
| Length | 33.2m |
| Mean roof height | 8.93m |
| Max. purlin spacing | 930mm |
| Fasteners | Rapid2+ Pro SML (Product code: 119026-102) |

| Direct to Timber Rafters/Trusses Installation | | | | | |
|---|---|---------------|---|-------------------------------|---|
| Roof zones | Net wind pressure on solar panels (kPa) | | Ultimate reactions at each fastener (kN) | Minimum no. and type of rails | Fasteners max. spacing (**Note: must not exceed purlin spacing) |
| | Ultimate | Service | | | |
| Anywhere except exclusion zones | -2.04 / +0.72 | -1.54 / +0.54 | -1.72 / +0.76 +/-0.13 | 2 Pro35 | 900 mm |
| Rails orientation and fixing | | | Perpendicular to timber rafters/trusses | | |
| Fasteners fixing | | | Direct to timber rafters/trusses and NOT to timber battens or metal top-hats, with 14-gauge 65mm Type 17 roof timber screws | | |

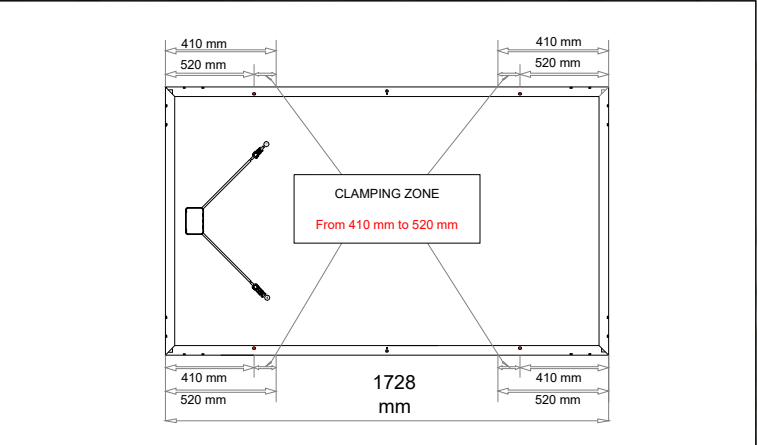
| Direct to Timber Rafters/Trusses Installation | | | | | |
|---|---|---------------|---|-------------------------------|---|
| Roof zones | Net wind pressure on solar panels (kPa) | | Ultimate reactions at each fastener (kN) | Minimum no. and type of rails | Fasteners max. spacing (**Note: must not exceed purlin spacing) |
| | Ultimate | Service | | | |
| Anywhere except exclusion zones | -1.90 / +0.67 | -1.44 / +0.51 | -1.65 / +0.74 +/-0.13 | 2 Pro35 | 930 mm |
| Rails orientation and fixing | | | Perpendicular to timber rafters/trusses | | |
| Fasteners fixing | | | Direct to timber rafters/trusses and NOT to timber battens or metal top-hats, with 14-gauge 65mm Type 17 roof timber screws | | |

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- NOTES:
- DRAWING PROVIDED TO HELP INSTALL. PLEASE REFER TO THE ARRAY CERTIFICATE DOCUMENT "DD-2412.197-CERT-C1-9 STRATHAVEN DR.PDF" FOR ACTUAL CERTIFICATE.
 - REFER TO REC PURE RX PV MODULE INSTALL MANUAL DOCUMENT FOR CLAMPING ZONES.
 - REFER TO RACKING INSTALLATION MANUAL DOCUMENT FOR RACKING INSTALLATION.
 - ALL ROOF ZONES SUITABLE FOR INSTALLATION.
 - MAINTAIN NECESSARY CLEARANCE FROM ANY HVAC UNITS ACCORDING TO THE ARRAY CERTIFICATE.



PERMISSIBLE CLAMP RANGE



L FEET SPACING



*Locations for reference only, not to scale



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| REV | DATE | DRN | APR'D |
|-----|------------|-----|-------|
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CONSULTANT ENGINEERS:
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W: www.arigo.com.au



PROJECT:
UA - STRATHAVEN
9 STRATHAVEN DR
ROSETTA TAS 7010

DRAWING:
160 ARRAY LAYOUT

SCALE: Custom

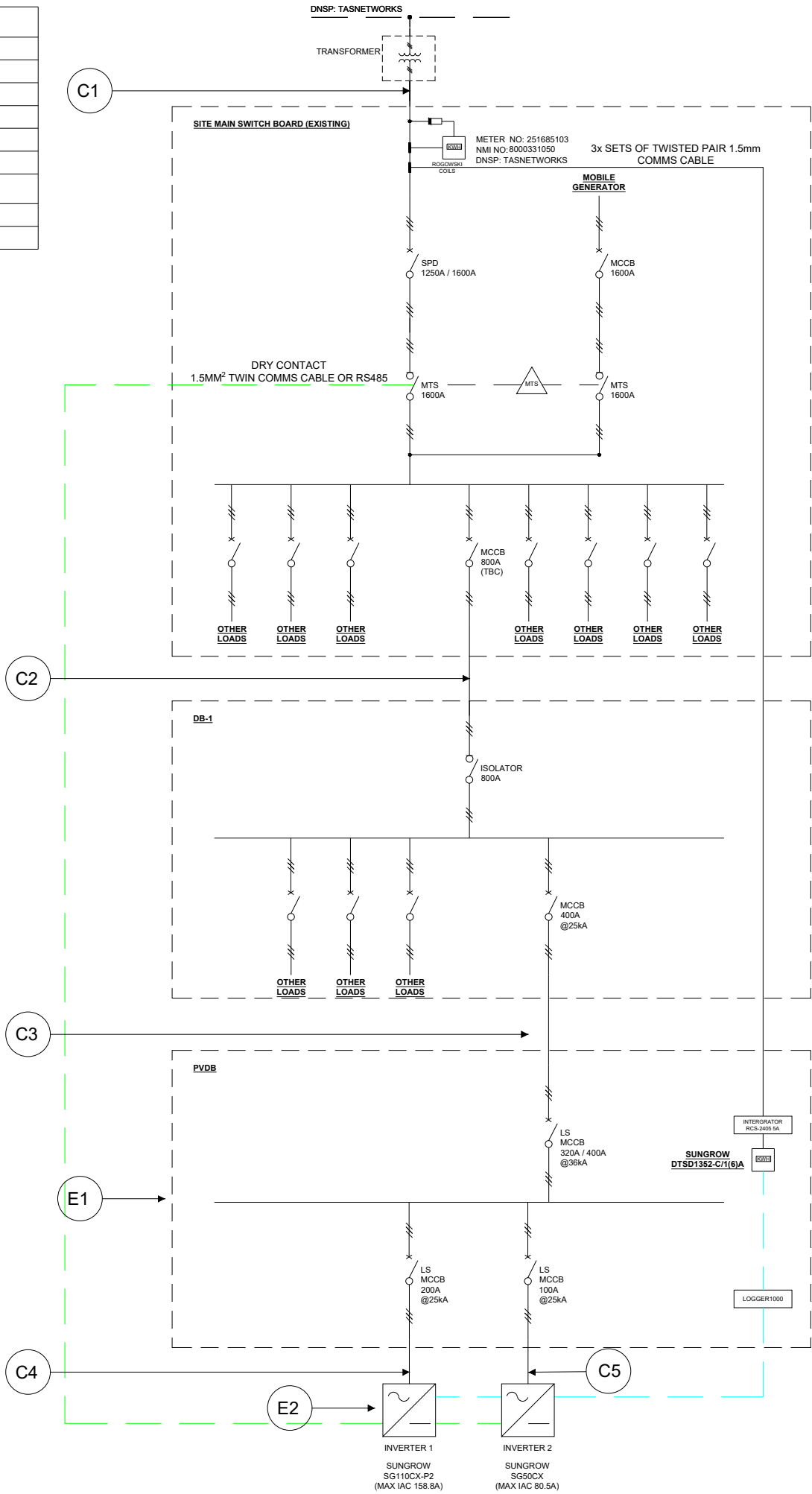
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REVISION: B

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|-------------------|--|
| PV TYPE: | REC 450AA PURE RX 450W |
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| No. MODULES: | 436 |
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| DC/AC RATIO: | 1.23 |
| INVERTER/S: | (1) SUNGROW SG110CX-P2 (1) SUNGROW SG50CX |
| NMI: | 8000331050 |
| METER NO: | 251685103 |



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| INVERTER PROTECTION SETTINGS SCHEDULE REGION AUSTRALIA C | | | |
|--|----------------|-----------------|---------------------|
| PROTECTIVE FUNCTION | FUNCTION LIMIT | TRIP DELAY TIME | MAX DISCONNECT TIME |
| UNDERVOLTAGE 2 (V<<) | 70V | 1 Sec | 2 Sec |
| UNDERVOLTAGE 1 (V<) | 180V | 10 Sec | 11 Sec |
| OVERVOLTAGE 1 (V>) | 265V | 1 Sec | 2 Sec |
| OVERVOLTAGE 2 (V>>2) | 275V | -- | 0.2 Sec |
| UNDER-FREQUENCY (F<) | 45Hz | 5 Sec | 6 Sec |
| OVER-FREQUENCY (F>) | 55Hz | -- | 0.2 Sec |
| ACTIVE ANTI ISLANDING | ACTIVE | | |

NOTES:
REGION SETTING SHALL BE SET TO "AUSTRALIA C" per AS/NZS 4777.2:2020

| VOLT-WATT SETTINGS REGION AUSTRALIA C | | |
|---------------------------------------|-------------|---|
| REFERENCE | VOLTAGE (V) | INVERTER REACTIVE POWER LEVEL (Q)% of S RATED |
| V1 | 253V | 100% |
| V2 | 260V | 20% |

| VOLT-VAR SETTINGS REGION AUSTRALIA C | | |
|--------------------------------------|-------------|---|
| REFERENCE | VOLTAGE (V) | INVERTER REACTIVE POWER LEVEL (Q)% of S RATED |
| V1 | 215V | 44% LEADING |
| V2 | 230V | 0% |
| V3 | 240V | 0% |
| V4 | 255V | 60% LAGGING |

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| EQUIPMENT SCHEDULE | | |
|--------------------|----------|--|
| TAG | QUANTITY | DESCRIPTION |
| E1 | 1 | ROOFTOP PVDB: - (1) x 400A MCCB, 3P, 400V - (1) x 200A MCCB, 3P, 400V - (1) x 100A MCCB, 3P, 400V - (1) x SUNGROW LOGGER1000 |
| E2 | 1 | - (1) x SUNGROW SG110CX-P2 - (1) x SUNGROW SG50CX |

| CABLE SCHEDULE | | | | | | | | |
|----------------|--------------------|--------------------------------------|------------|-------------------------|----------|--------|--------|--------|
| TAG | DESCRIPTION | CABLE SIZE | CABLE TYPE | INSTALL TYPE | STATUS | AMPS | T. RUN | VDRP % |
| C1 | SUBSTATION TO MSB | 4 SETS OF 4x1C 300mm ² CU | X-HF-110 | UNDERGROUND | EXISTING | 239.30 | 20 | 0.08% |
| C2 | MSB to DB1 | 4x1C 240mm ² CU (TBC) | XLPE X-90 | UNDERGROUND | TBC | 239.30 | 119 | 1.33% |
| C3 | DB-1 TO PVDB | 4x1C 185mm ² CU | XLPE X-90 | UNDERGROUND | EXISTING | 239.30 | 50 | 0.73% |
| C4 | PVDB TO INVERTER 1 | 4X1C 95mm ² CU | XLPE X-90 | WIRING ENCLOSURE IN AIR | PROPOSED | 158.80 | 10 | 0.18% |
| C5 | PVDB TO INVERTER 2 | 1X4C 35mm ² CU | XLPE X-90 | WIRING ENCLOSURE IN AIR | PROPOSED | 80.50 | 10 | 0.24% |
| TOTAL | | | | | | | | 2.55% |

- NOTES:
- POWER FACTOR ASSUMED TO BE 0.9
 - IF POWER FACTOR LOWER THAN ASSUMED, NOTIFY ENGINEER TO CONFIRM SUITABILITY.
 - INSTALLERS TO ENSURE COMPLIANCE TO AUSTRALIAN STANDARDS INCLUDING, BUT NOT LIMITED TO THE FOLLOWING, AS3000, AS3008, AS4777 AND AS5033.

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| REVISION PANEL | | | |

INSTALLATION CONTRACTOR:

MELBOURNE ENERGY GROUP

CONSULTANT ENGINEERS:

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arigo
CONSULTING

PROJECT:

UA - STRATHAVEN

9 STRATHAVEN DR

ROSETTA TAS 7010

DRAWING:

210 AC DIAGRAM

| | |
|-------------|-----------|
| PROJECT NO: | REVISION: |
| P1368-176 | B |

STATUS:

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DRAWN BY: VI.L CHECKED: RO.T

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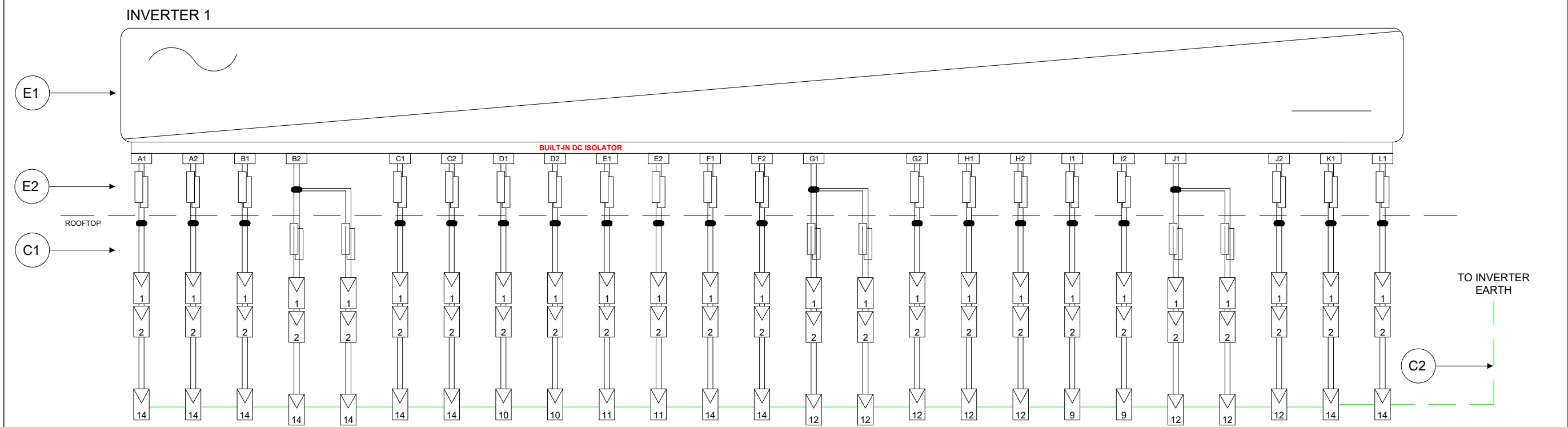
| StringInput | Tracker | no. Parallel Strings | Total Panels | Panel Qty | Cable Selection | Total Length (m) | Max Current (A) | Voltage ((Max) | Voltage (Min) | VR(%) |
|-------------|---------|----------------------|--------------|-----------|-----------------|------------------|-----------------|----------------|---------------|-------|
| A1 | 1 | 1 | 14 | 14 | Twin 4mm2 | 71.8 | 11.01 | 977.02 | 794.40 | 0.95% |
| A2 | 1 | 1 | 14 | 14 | Twin 4mm2 | 71.8 | 11.01 | 977.02 | 794.40 | 0.95% |
| B.1 | 2 | 1 | 14 | 14 | Twin 4mm2 | 70.8 | 11.01 | 977.02 | 794.51 | 0.94% |
| B.2 | 2 | 2 | 28 | 14 | Twin 4mm2 | 70.8 | 22.03 | 977.02 | 786.98 | 1.88% |
| C.1 | 3 | 1 | 14 | 14 | Twin 4mm2 | 72.8 | 11.01 | 977.02 | 794.29 | 0.96% |
| C.2 | 3 | 1 | 14 | 14 | Twin 4mm2 | 72.8 | 11.01 | 977.02 | 794.29 | 0.96% |
| D.1 | 4 | 1 | 10 | 10 | Twin 4mm2 | 63 | 11.01 | 697.87 | 566.18 | 1.17% |
| D.2 | 4 | 1 | 10 | 10 | Twin 4mm2 | 63 | 11.01 | 697.87 | 566.18 | 1.17% |
| E1 | 5 | 1 | 11 | 11 | Twin 4mm2 | 66.7 | 11.01 | 767.66 | 623.08 | 1.13% |
| E2 | 5 | 1 | 11 | 11 | Twin 4mm2 | 66.7 | 11.01 | 767.66 | 623.08 | 1.13% |
| F.1 | 6 | 1 | 14 | 14 | Twin 4mm2 | 64.8 | 11.01 | 977.02 | 795.14 | 0.86% |
| F.2 | 6 | 1 | 14 | 14 | Twin 4mm2 | 64.8 | 11.01 | 977.02 | 795.14 | 0.86% |
| G.1 | 7 | 2 | 24 | 12 | Twin 4mm2 | 61.4 | 22.03 | 837.45 | 674.40 | 1.90% |
| G.2 | 7 | 1 | 12 | 12 | Twin 4mm2 | 61.4 | 11.01 | 837.45 | 680.93 | 0.95% |
| H.1 | 8 | 1 | 12 | 12 | Twin 4mm2 | 66.4 | 11.01 | 837.45 | 680.40 | 1.03% |
| H.2 | 8 | 1 | 12 | 12 | Twin 4mm2 | 71.4 | 11.01 | 837.45 | 679.87 | 1.10% |
| I.1 | 9 | 1 | 9 | 9 | Twin 4mm2 | 54.3 | 11.01 | 628.08 | 509.82 | 1.12% |
| I.2 | 9 | 1 | 9 | 9 | Twin 4mm2 | 54.3 | 11.01 | 628.08 | 509.82 | 1.12% |
| J1 | 10 | 2 | 24 | 12 | Twin 4mm2 | 61.4 | 22.03 | 837.45 | 674.40 | 1.90% |
| J2 | 10 | 1 | 12 | 12 | Twin 4mm2 | 61.4 | 11.01 | 837.45 | 680.93 | 0.95% |
| K1 | 11 | 1 | 14 | 14 | Twin 4mm2 | 69.8 | 11.01 | 977.02 | 794.61 | 0.93% |
| K2 | 11 | 0 | 0 | 0 | | - | - | - | - | - |
| L1 | 12 | 1 | 14 | 14 | Twin 4mm2 | 71.8 | 11.01 | 977.02 | 794.40 | 0.95% |
| L2 | 12 | 0 | 0 | 0 | | - | - | - | - | - |

| SYSTEM ELECTRICAL DETAILS | | | |
|--|--|------------------------------|---------|
| SYSTEM RATING (STC) | 196.2 kWp | TOTAL PANELS | 436 |
| PV MODULE: | REC 450AA Pure RX 450W | | |
| STC RATING | 450W | SERIES FUSE RATING | 25A |
| OPEN CIRCUIT VOLTAGE | 65.1V | MAX. POWER POINT VOLTAGE | 54.3V |
| SHORT CIRCUIT CURRENT | 8.81A | MAX POWER POINT CURRENT | 8.29A |
| MAXIMUM ARRAY VOLTAGE (TEMP. CORRECTED) | | | 977.02V |
| MAXIMUM SUB-ARRAY CURRENT (INCL. 1.25 S/F) | | | 33.04A |
| INVERTER MAKE AND MODEL | (1) SUNGROW SG110CX-P2 (1) SUNGROW SG50CX ---- | | |
| NOMINAL VOLTAGE | 400V | MAXIMUM OUTPUT CURRENT | 158.8A |
| EQUIPMENT SCHEDULE | | | |
| TAG | QUANTITY | DESCRIPTION | |
| E1 | 1 | SUNGROW SG110CX-P2 | |
| E2 | 50 | 25A INLINE STRING FUSE 1500V | |
| E3 | 310 | REC 450AA Pure RX 450W | |
| C1 | 1453m | TWIN DC SOLAR RATED CABLE | |
| C2 | 45m | EARTH 6mm2 | |

GLENORCHY CITY COUNCIL
PLANNING SERVICES

APPLICATION No. : PLN-25-068

DATE RECEIVED: 25 March 2025



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NOTES:

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| | | | | | |
| B | 21.03.2025 | NZ | RT | | |
| A | 19.11.2024 | VL | RT | | |
| REV | DATE | DRN | APR'D | | |
| REVISION PANEL | | | | | |
| INSTALLATION CONTRACTOR: | | | | | |
| <div>MELBOURNE ENERGY GROUP</div> | | | | | |
| CONSULTANT ENGINEERS: | | | | | |
| <div>Arigo Consulting Pty Ltd 16-22 Church St. Hawthorn VIC 3122 E: info@arigo.com.au W: www.arigo.com.au</div> <div>arigo CONSULTING</div> | | | | | |
| PROJECT: | | | | | |
| UA - STRATHAVEN 9 STRATHAVEN DR ROSETTA TAS 7010 | | | | | |
| DRAWING: | | | | | |
| 220.1 DC DIAGRAM | | | | | |
| PROJECT NO: | | REVISION: | | | |
| P1368-176 | | B | | | |
| STATUS: | | | | | |
| FOR APPROVAL | | | | | |
| DRAWN BY: V.I.L | | CHECKED: R.O.T | | | |
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| StringInput | Tracker | no. Parallel Strings | Total Panels | Panel Qty | Cable Selection | Total Length (m) | Max Current (A) | Voltage (Max) | Voltage (Min) | VR(%) |
|-------------|---------|----------------------|--------------|-----------|-----------------|------------------|-----------------|---------------|---------------|-------|
| A.1 | 1 | 1 | 12 | 12 | Twin 4mm2 | 96.4 | 11.01 | 837.45 | 677.21 | 1.49% |
| A.2 | 1 | 1 | 12 | 12 | Twin 4mm2 | 101.4 | 11.01 | 837.45 | 676.68 | 1.57% |
| B.1 | 2 | 1 | 12 | 12 | Twin 4mm2 | 101.4 | 11.01 | 837.45 | 676.68 | 1.57% |
| B.2 | 2 | 1 | 12 | 12 | Twin 4mm2 | 106.4 | 11.01 | 837.45 | 676.14 | 1.65% |
| C.1 | 3 | 1 | 12 | 12 | Twin 4mm2 | 96.4 | 11.01 | 837.45 | 677.21 | 1.49% |
| C.2 | 3 | 1 | 12 | 12 | Twin 4mm2 | 96.4 | 11.01 | 837.45 | 677.21 | 1.49% |
| D.1 | 4 | 1 | 12 | 12 | Twin 4mm2 | 101.4 | 11.01 | 837.45 | 676.68 | 1.57% |
| D.2 | 4 | 0 | 0 | 0 | | - | - | - | - | - |
| E.1 | 5 | 2 | 28 | 14 | Twin 4mm2 | 94.8 | 22.03 | 977.02 | 781.88 | 2.51% |
| E.2 | 5 | 1 | 14 | 14 | Twin 4mm2 | 94.8 | 11.01 | 977.02 | 791.95 | 1.26% |

| SYSTEM ELECTRICAL DETAILS | | | |
|--|--|--------------------------|---------|
| SYSTEM RATING (STC) | 196.2 kWp | TOTAL PANELS | 436 |
| PV MODULE: | REC 450AA Pure RX 450W | | |
| STC RATING | 450W | SERIES FUSE RATING | 25A |
| OPEN CIRCUIT VOLTAGE | 65.1V | MAX. POWER POINT VOLTAGE | 54.3V |
| SHORT CIRCUIT CURRENT | 8.81A | MAX POWER POINT CURRENT | 8.29A |
| MAXIMUM ARRAY VOLTAGE (TEMP. CORRECTED) | | | 977.02V |
| MAXIMUM SUB-ARRAY CURRENT (INCL. 1.25 S/F) | | | 33.04A |
| INVERTER MAKE AND MODEL | (1) SUNGROW SG110CX-P2 (1) SUNGROW SG50CX ---- | | |
| NOMINAL VOLTAGE | 400V | MAXIMUM OUTPUT CURRENT | 158.8A |

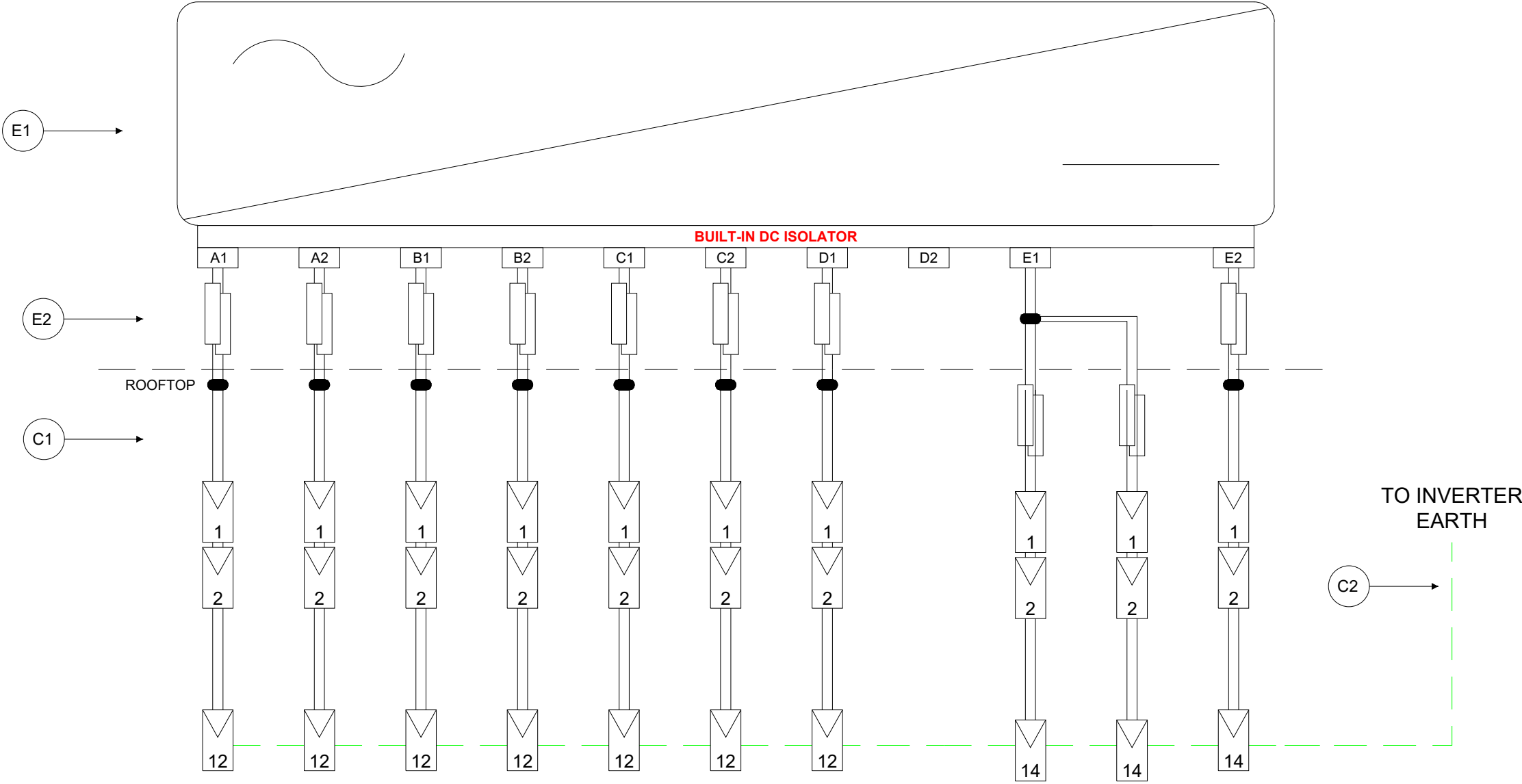
| EQUIPMENT SCHEDULE | | |
|--------------------|----------|------------------------------|
| TAG | QUANTITY | DESCRIPTION |
| E1 | 1 | SUNGROW SG50CX |
| E2 | 20 | 25A INLINE STRING FUSE 1500V |
| E3 | 126 | REC 450AA Pure RX 450W |
| C1 | 900m | TWIN DC SOLAR RATED CABLE |
| C2 | 80m | EARTH 6mm2 |

GLENORCHY CITY COUNCIL
PLANNING SERVICES

APPLICATION No. : PLN-25-068

DATE RECEIVED: 25 March 2025

INVERTER 2



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NOTES:

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| B | 21.03.2025 | NZ | RT | | |
| A | 19.11.2024 | VL | RT | | |
| REV | DATE | DRN | APR'D | | |
| REVISION PANEL | | | | | |
| INSTALLATION CONTRACTOR: | | | | | |
| <div>MELBOURNE ENERGY GROUP</div> | | | | | |
| CONSULTANT ENGINEERS: | | | | | |
| <div>Arigo Consulting Pty Ltd 16-22 Church St. Hawthorn VIC 3122 E: info@arigo.com.au W: www.arigo.com.au</div> <div>arigo CONSULTING</div> | | | | | |
| PROJECT: | | | | | |
| UA - STRATHAVEN 9 STRATHAVEN DR ROSETTA TAS 7010 | | | | | |
| DRAWING: | | | | | |
| 220.2 DC DIAGRAM | | | | | |
| PROJECT NO: | | REVISION: | | | |
| P1368-176 | | B | | | |
| STATUS: | | | | | |
| FOR APPROVAL | | | | | |
| DRAWN BY: V.I.L | | CHECKED: R.O.T | | | |
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Development Plan for 196.2kW Solar System Installation at 9 Strathaven DR, Rosetta TAS

Project Overview

The purpose of this development plan is to outline the installation of a 196.2kW solar power system at 9 Strathaven DR, Rosetta TAS 7010. The site is an existing aged care facility, and the installation is intended to offset on-site energy consumption, enhancing the facility's sustainability and reducing operational costs.

Design and Certification

As the appointed design consultants, we have secured the necessary structural and array certification for the existing roof areas, confirming their suitability for the proposed solar installation. This certificate has also been attached to this submission. The solar panels will be flash mounted, thereby ensuring that they remain unobtrusive and are not visible from the public road, preserving the aesthetic integrity of the facility and its surroundings.

Installation Details

- **Location:** 9 Strathaven DR, Rosetta TAS 7010
- **System Size:** 196.2kW
- **Project Duration:** Approximately three weeks
- **Work Schedule:** Monday to Friday during standard business hours
- **Team Composition:** A dedicated team of approximately five professionals will execute the installation process.

Construction Management

The construction phase will be carefully managed to avoid any disruption to the facility's operations or public access. All activities will comply with local regulations and site-specific safety protocols.

- **Site Access:** There will be no interruption to the public roads or access to the site.
- **Construction Noise:** Noise levels will be kept to a minimum to avoid disturbances to the residents and staff of the facility.
- **Health and Safety:** All team members will adhere to strict safety guidelines to ensure a safe working environment.

Environmental Impact

The installation of the solar system is designed to be environmentally beneficial, significantly reducing the carbon footprint of the facility. With no requirement for

additional infrastructure, the environmental impact during the construction phase is minimal.

Conclusion

This solar system installation represents a significant step towards sustainable energy use for the aged care facility at 9 Strathaven DR. All stakeholders involved in the delivery of this project are committed to delivering a high-quality installation in a timely manner, ensuring that the project goals of energy efficiency and sustainability are achieved seamlessly.

Key Stakeholders

End Client

United Agewell

**GLENORCHY CITY COUNCIL
PLANNING SERVICES**

APPLICATION No. : PLN-25-068

DATE RECEIVED: 25 March 2025

Principle Contractor

Melbourne Energy Group

Design Consultant

Arigo Consulting

Installation Contractor

Castle Solar & Electrical

Please feel free to contact us should you require further information or clarification regarding this development plan.