

SERVICES SPATIAL ADVICE

General Notes:

Measurements are shown in millimetres UNO.

Dimensions shown are internal clear for cupboards, risers, rooms, etc. UNO.

Building surveyor to confirm building classifications.

Building surveyor and Fire engineer to confirm fire rated and / or smoke rated doors and wall.

Fire engineer to provide performance solution for fire service test drain located within fire isolated stairway.

Vertical Transportation Notes:

Lift advise based on a building with an effective height <12m

Minimum spatial internal clear dimensions for inclusion of multiple manufacturers:

8-passenger
Car size: 1100x1400mm WxD
Shaft size: 2000x1800mm WxD
Pit: 1600mm
Overrun: 4000-4200mm

13-passenger
Car size: 1400x1600mm WxD
Shaft size: 2250x2100mm WxD
Pit: 1600mm
Overrun: 4000-4200mm

15-passenger
Car size: 1400x1900mm WxD
Shaft size: 2200x2400mm WxD
Pit: 1850mm
Overrun: 4200-4400mm

17-passenger
Car size: 1450x2000mm WxD
Shaft size: 2450x2550mm WxD
Pit: 1850mm
Overrun: 4400-4750mm

NOTES:

1. For each additional lift in the same shaft, add additional 150mm between lift shafts for lift trimmer beam. Eg. 2 No. 17p lifts have a shaft width of 2450 + 150 + 2450 = 5050mm
2. Lift speed and internal clear car height varies the overrun and pit.
3. A larger lift is recommended for the purpose of moving furniture

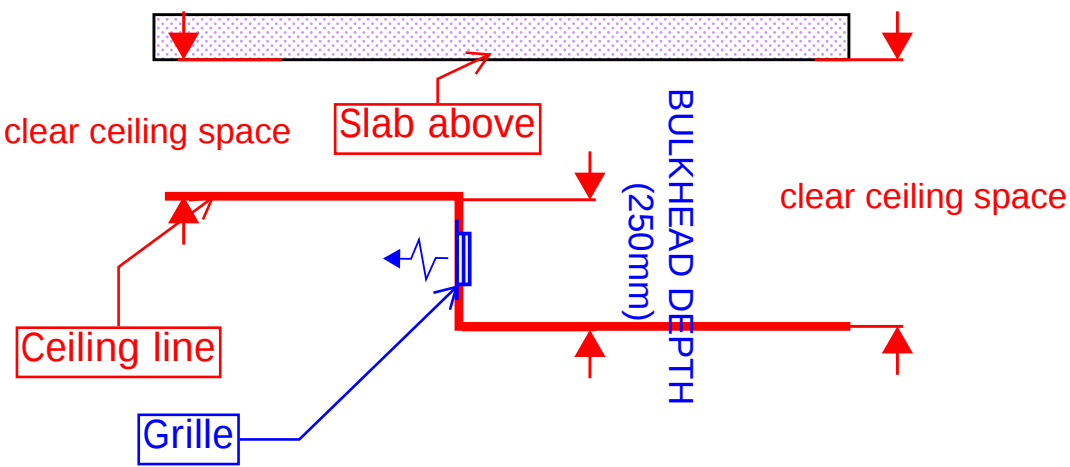
Mechanical Notes:

Provided louvre sizes indicated are TBC, sizes to be reviewed during design development and final use of space.

Number and location of air-conditioning units and louvre intakes shown on plans are indicated only to illustrate schematic design intent. TBC during design development.

Riser sizes and flow rates indicated are subject to change following receipt of updated backgrounds (eg. changes in occupancies, amenity floor plan sizes). Riser sizes are internal clear dimensions.

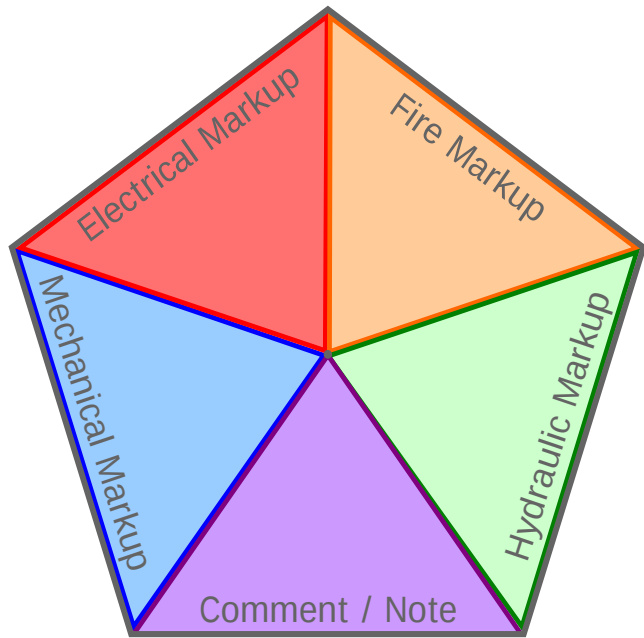
Minimum **BULKHEAD DEPTH** for installation of 150mm high slimline bar grilles is 250mm. Refer sketch below. Ensure this dimension is maintained between adjacent ceiling heights:



CFD Modelling of car park ventilation:

By taking advantage of mechanical CFD modelling for car park ventilation the car park exhaust flow rate and riser size may be investigated to be reduced by up to 20%.

The current proposed ventilation shown does not include this performance solution. **Please confirm preference to undertake modelling to rationalise the DtS ventilation design.**



wrap
consulting
engineering

WRAP Engineering Pty Ltd
132 Chestnut St, Cremorne, VIC 3121
T: +61 3 9428 7987

22315
Project No:

15/12/2022
Date:

9 Marvell Street, Byron Bay
Project:

TR / WD / AL
Designed:

Cover Page
Sketch Title:

SK01.00
Sketch No:

3
Rev:

Electrical Notes:

Electrical switchboard and cupboard doors require a minimum of 600mm clear in front of open doors as per AS3000:

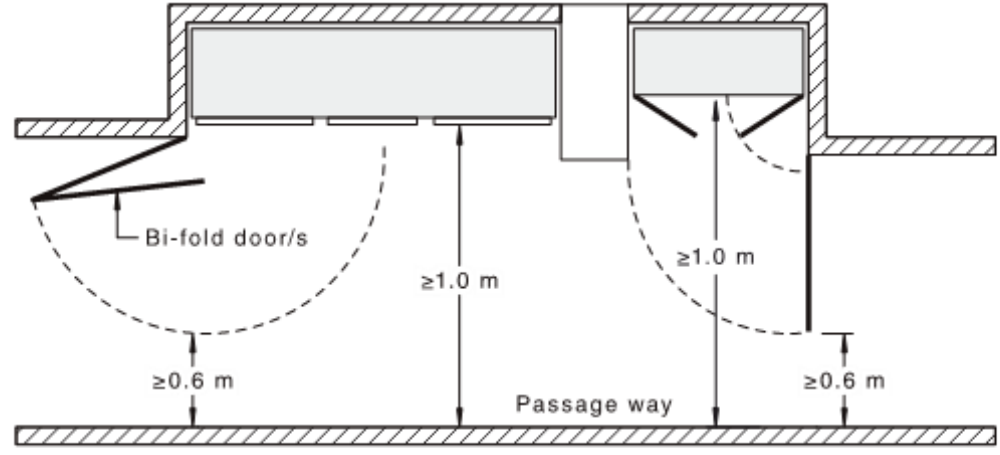
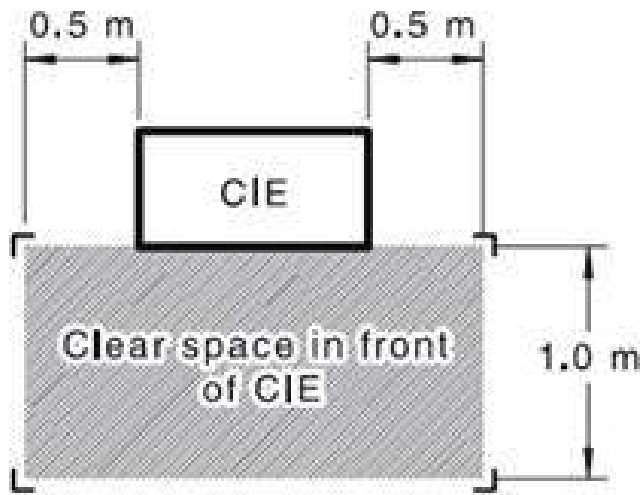


FIGURE 2.22 ACCESS TO SWITCHBOARDS—SWITCHBOARD DOORS THAT OPEN INTO ACCESS WAYS OR NARROW PASSAGE WAYS

OWS and FIP (Fire indicator panel) requires a minimum of 500mm clear either side and 1000mm clear in front as shown below as per AS1670:



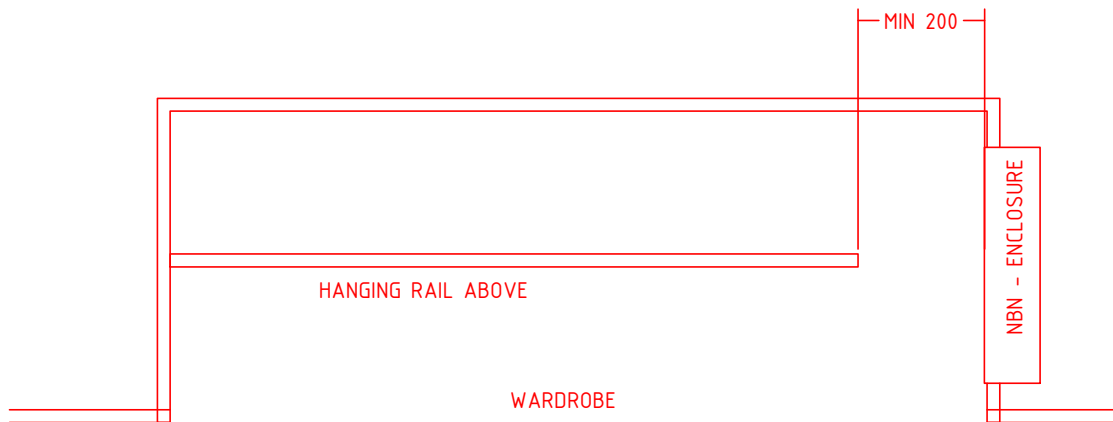
Typical House Distribution boards (Mounted on wall):



Typical SOU load centres (Mounted on wall or recessed):



Typical in-robe NBN NTD clearance requirements:



Hydraulic Notes:

Stormwater drainage to be developed during DD stage.

Provide a min. 800 W x 300 D sanitary duct at the rear of each shower, continuous from above to below. Avoid offsets / rotations to minimise impact on ceiling heights.

Min. 350mm clear space under wet areas (Bathrooms & Laundries) to allow for installation of FWG and up to 6.5m of sanitary drainage pipework reticulation.

Min. 300mm clear space under balconies / terraces to allow for installation of RWO and up to 7.0m of stormwater pipework reticulation.

Natural Gas

No gas authority infrastructure in the vicinity of the site. No Gas has been allowed to project. F&B tenancy proposed to be gas free. Architect/Client to confirm.

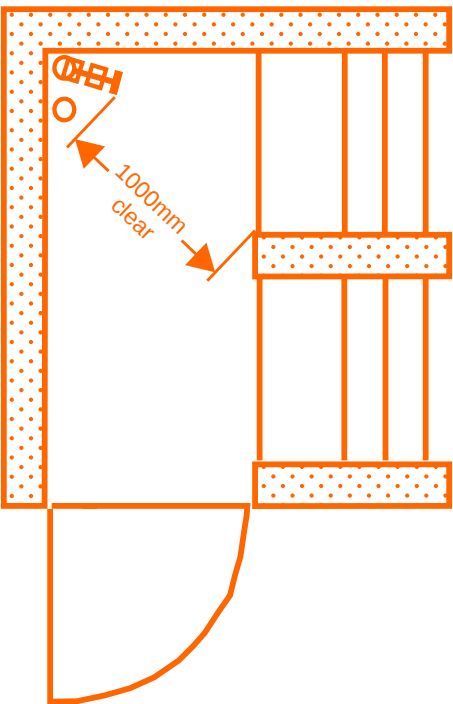
Fire Protection Notes:

Additional fire hose reels may be required, pending confirmation of fire and smoke rated doors.

Fire Extinguisher to be located within 10m of each SOU front door.

Fire extinguisher locations to be developed during DD stage.

Typical hydrant service and fire service test drain risers per stair landing. Hand wheel to be minimum 100mm clear from wall. 1000mm clearance around hand wheel required within egress pathway. Hydrant valve to be installed 750-1200mm above FFL.



Inline Fire Pumping

Current design based upon single, in-line pump requirements.

Inline fire pump subject to water authority approval.

If unsuccessful, 25kL effective capacity fire break tank will be required (5000 L x 4000 W x 2150 H) located adjacent to the fire pump for the hydrant system.

Fire Pumps and Tanks

Fire Pump and Tank requirements/dimensions pending receipt of additional PFI to confirm fire tank sizing requirements. Fire tank sizing not provided at this time.

Rise in Storeys

Building Surveyor to confirm rise in storeys. Currently assuming 3 No.

Sprinkler protection throughout the building will be triggered if deemed a rise in storeys of 4 or more.

Indicative location of Supply Connection Facility (SCF) located on Ground Floor above shown dashed. LV In-Ground conduits shall transition from SCF and penetrate Basement wall at high level for connection to MSB.

Rainwater tank - 20,000L as per ESD requirements.
7000x2000x2100 clear unit dimensions. 500mm clear on 3 sides of the tank. 1000mm clear at the front of the tank.

Rainwater First Flush and Tank Full Diversion Device Compressor unit - 700x400x1000 WxDxH clear unit dimensions. Provide 1000mm clear space in front for maintenance access.
Diversion valve at high level. Diverted water to discharge to Civil drainage system.

Sewer pump station - below ground
Nominal ø1500 x 1500 H sewer pump station. Provisions to pump out basement fixtures (bin room) and GIT.
Git and Sewer pump to be enclosed in a dedicated room.

Grease Interceptor Trap
1 No. 2000L above ground grease interceptor trap.
2450 L x 1100 W x 1400 H clear unit dimensions. Provide 600mm clear space on either side for pipework connection, and 1000mm clear space in front for maintenance access.
Complete with air tight GATIC lids for maintenance and clean out access. Current capacity based on area calculations, final tenancy requirements may vary depending on fitout.

Bin room exhaust to from above.
450x350 fire rated riser from bin room. System to combine with GIT and sewer pump pit and rise to roof level

GIT and sewer pump pit exhaust riser to roof level. Riser is required to be fire rated and have a minimum 500 x 500 internal clear space
350 x 350 duct within

Communications Riser to above. Dashed line indicates Communications cupboard on level above.

Electrical Riser to above. Dashed line indicates Electrical cupboard on level above.

Fire hydrant riser and fire test drain per stair landing. (Typical) Refer to cover sheet for clearance requirements.

Car park exhaust riser to roof level. Riser is required to be fire rated and have a minimum 950 x 550 internal clear space
800 x 400 duct within

1 Electric car charging space. Provisions for future connection of an additional 8 electric charging spaces in the basement.

New ø150 boundary trap and reflux valve for project sewer discharge to authority sewer main in Marvell Street. At high level of basement.

Final connection requirements subject to authority servicing advice.

Cold Water Booster Pump Set - Duplex pump set
1600x1200x1600 LxWxH clear unit dimensions. 1000mm clear space in front for maintenance access. 300mm clear space on either side for pipe connections.
May be omitted subject to receipt and review of Authority pressure and flow information.

Rainwater Pump and Filtration Set
1200x800x2400 LxWxH clear unit dimensions. 800mm clear space in front for maintenance access. 300mm clear space on either side for pipe connections.
Final size and capacity requirements pending ESD requirements.

Main car park entrance door to be provided with minimum 50% perforations to allow for full natural make-up air of the car park exhaust system.

Electrical penetration to MSB above

Fire hose reel
To be located within 4m of egress door (Typical). Not to impede egress when in use.
Can be located within a cupboard min. 800x310x2100 WxDxH clear internal dimensions.

PLANT LEGEND

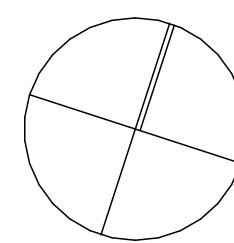
- P1 DUPLEX PUMP SET
P2 RAINWATER PUMP AND FILTRATION SET
P3 RAINWATER FIRST FLUSH AND TANK FULL DIVERSION DEVICE
P4 2000L GREASE INTERCEPTOR TRAP
P5 SEWER PUMP STATION (BELOW GROUND)



HARLEY GRAHAM ARCHITECTS
LVL 1/144 JONSON STREET BYRON BAY | PO BOX 144
T: 02 66800690 | E: office@harleygraham.com | AUSTRALIA
© HARLEY GRAHAM ARCHITECTS

5/12/22	DA1	DA ISSUE
13/11/23	DA3	DA RFI
4/12/23	DA4	DA RFI

MARVELL STREET



Project
9 MARVELL ST
Client
COBILD

Drawing Name
FLOOR PLAN - BASEMENT
Location
9 MARVELL ST BYRON BAY
NSW 2481

Job No.
HGA344
Date
6/12/23

Drawing No.
DA.04
Revision
Concept

Scale
1:200

wrap
consulting
engineering

WRAP Engineering Pty Ltd
132 Chestnut St, Cremorne, VIC 3121
T: +61 3 9428 7987

22315
Project No:

15/12/2022
Date:

9 Marvell Street, Byron Bay
Project:

TR / WD / AL
Designed:

Basement - Services Layout
Sketch Title:

SK01.01
Sketch No:

3
Rev:

Spatial provision for retail condensing units within the basement at high level.

Telecommunications in-Ground conduits shall transition from Marvell Street and penetrate Basement wall at high level for connection to Main Communications cupboard, subject to NBN review and approval. We note that existing telecommunications infrastructure does not appear to be present within Fletcher Lane.

Electrical Supply:
Supply Connection Facility located within the development boundary to meet NSW SIR's shall be the point of connection for an underground LV connection. Final location to be coordinated following development of discussions with adjacent property owner with respect to power supply.

Fire pump room supply louvre and fire rated ductwork.
Louvre: 2000x300 (LxH)
Duct: 350mm clear height required

Client/architect to confirm which tenancy is to be warm shell

Retail space to be naturally ventilated with operable windows and doors with a minimum area equal to at least 5% of the floor area of the space.

Typical: Electrical Tenant Distribution board.
Approx 600(W) X 220 (D) x 1000 (H).

Fire Pump Room - Single Pump pending PFI results

5500 x 3000 x 2600 WxDxH clear internal dimensions. Provisions for 1000mm clear space around fire pump. Double access doors to be provided. Design to be approved by the brigade

Inline pumping approval required from water authority.
DtS location is for the fire pump room to be accessed directly from a road or open space, or via a fire isolated passage way leading from an open space. Fire engineer to provide performance solution for pump room location.

Lobby space to be naturally ventilated with operable windows and doors with a minimum area equal to at least 5% of the floor area of the space.

Electrical riser shaft.
600 (W) X 400 (D) F/B T/A
Access panel to be provided in front of shaft.
Shaft to shall be physically separated from other services.

Comms riser shaft.
500 (W) X 400 (D) F/B T/A
Access panel to be provided in front of shaft.
Shaft to shall be physically separated from other services.
Design assumes NBN Co. will approve a single floor distributor (FDT) located within the comms cupboard on basement. to be further assessed in DD phase.

Hydraulic services riser

800 W x 500 D clear internal dimensions. **Continuous to roof - avoid offsets.**

Provisions for CW, HW and NPCW risers. Access via common corridor.

OWS & Fire Indicator Panel (FIP)
750x450 WxD clear unit dimensions. 1900x600 WxD if located within a weatherproof cupboard.

To be located in main entrance. Refer to cover sheet for clearance requirements.

Provide 1m clear zone for FRV safe access. Architect to ensure clear egress space is provided beyond FRV safe access zone.
Ground floor outside space assumed to be outside, therefore no ventilation required

Fire Hose Reel

To be located within 4m of egress door (Typical). Not to impede egress when in use.

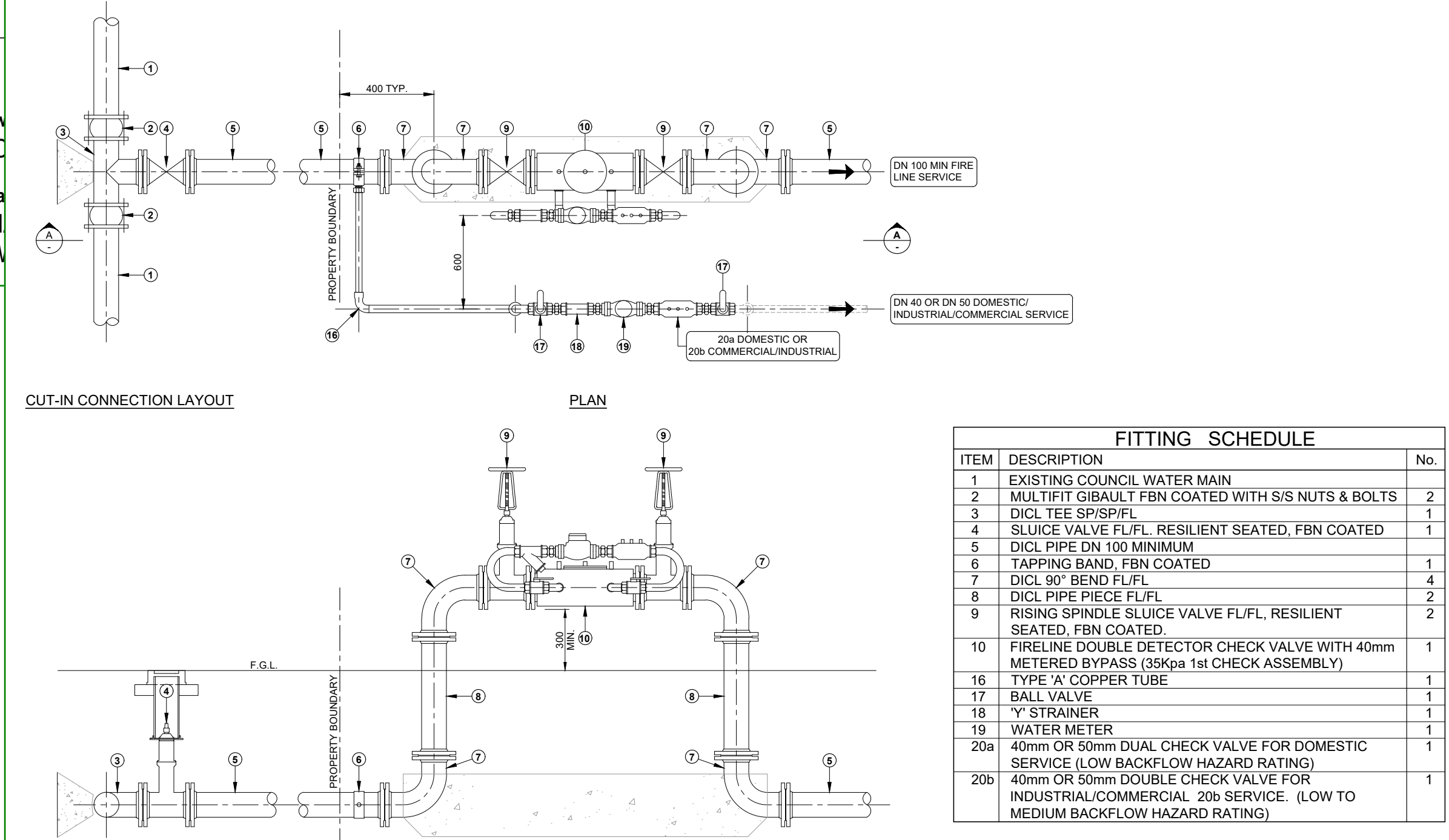
Can be located within a cupboard min. 800x310x2100 WxDxH clear internal dimensions.

Main Authority Water Meter Assembly Cupboard

2500x1300x600 LxWxH clear internal dimensions. 24hr access required. Provisions for fire, recycled and domestic main meters.

Provide 1000mm clear space in front for maintenance access. Access across entire width required.

Within 400mm of property boundary of Marvell Street.



Main Switchboard cupboar shall accommodate Main Switchboard and Group Meter Panel (GMP).

Dimensions approx 4200mm (W) x 3000mm (D) internal clear.

Architect to provide 2hr fire rated cupboard.

MSB/GMP shall accommodate group metering for all Tenant's and Apartments.

The following requirements are assumed:
- Ground Floor Cafe/Restaurant = 3 Phase, 80A CT Metering
- Ground Floor Retail 2 & 3 = 1 Phase, 63A In-Line Metering
- Apartments (L1 to L2) = 1 Phase, 63A In-Line Metering

Bin room exhaust to below.
450x350 fire rated riser to basement

Building Communications cupboard.
2200x800x2100.

Doors to swing outwards.

Comms cupboard to accommodate NBN infrastructure, security/access control panels and CCTV head end.

Provide 2No dedicated lead-in conduits from property boundary.
Proposal to have 1No active telecommunication services for Base Build safety services. Secondary pathway for future use.
Doors to be weatherproof

GIT, bin room and sewer pump pit exhaust riser to roof level.
Riser is required to be fire rated and have a minimum 500 x 500 internal clear space
350 x 350 duct within

Fire hydrant riser and fire test drain per stair landing. (Typical)
Refer to cover sheet for clearance requirements.

Car park exhaust riser to roof level.
Riser is required to be fire rated and have a minimum 950 x 550 internal clear space
800 x 400 duct within

Kitchen exhaust riser to roof level.
Riser is required to be fire rated and have a minimum 1100 x 550 internal clear space
950 x 400 duct within

Amenities exhaust riser to roof level.
Riser is required to be fire rated and have a minimum 400 x 400 internal clear space
250 x 250 duct within

Make up air louvre for kitchen exhaust.
1400 x 1800 louvre or equivalent free area

Cafe/Restaurant space to be naturally ventilated with operable windows and doors with a minimum area equal to at least 5% of the floor area of the space.

Architect to confirm.

Authority check meter cupboard.

Provision for council owned cold water and recycled water check meters.

2200 W x 500 D x 900 H clear internal dimensions.

Authority meters to be within 400mm of the property boundary. Option to explore relocating check meters internal to the building pending authority approval and advice. Check meters to be installed within current hydraulic services riser cupboard spatial allowance if approval is granted.

Telecommunications in-Ground conduits shall transition from Marvell Street and penetrate Basement wall at high level for connection to Main Communications cupboard, subject to NBN review and approval. We note that existing telecommunications infrastructure does not appear to be present within Fletcher Lane.

Fire Booster Cabinet

2500x800x1800 WxDxH clear internal dimensions.

Booster assembly to be within sight of main entrance (Marvell Street) and not be closer than 1.5m from gas meters and 10m from high voltage/substation.

Fire engineer to provide performance solution for booster assembly to be arranged perpendicular to hardstand.

WRAP Engineering Pty Ltd
132 Chestnut St, Cremorne, VIC 3121
T: +61 3 9428 7987

22315
Project No:

15/12/2022
Date:

9 Marvell Street, Byron Bay
Project:

TR / WD / AL
Designed:

Ground - Services Layout
Sketch Title:

SK01.02 3
Sketch No: Rev:

HARLEY GRAHAM ARCHITECTS
LVL 1/144 JONES
T: 02 66809690
© HARLEY GRAHAM ARCHITECTS

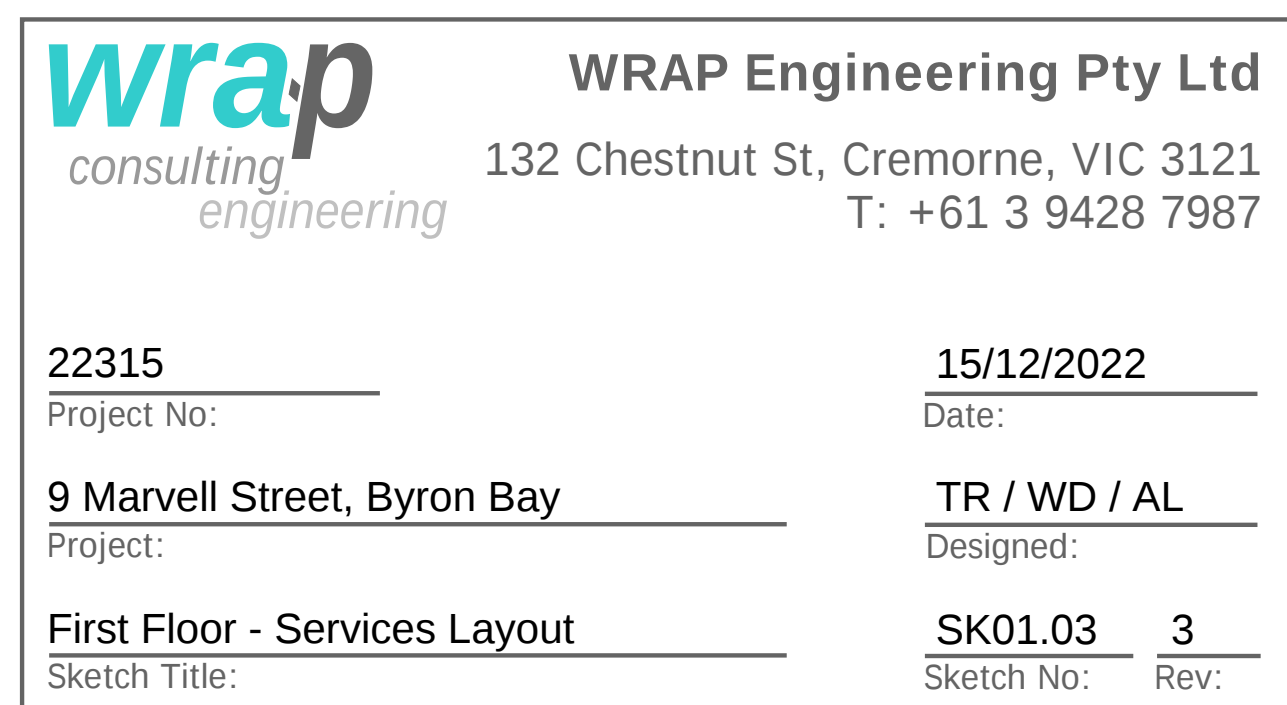
5/12/22
13/11/23
4/12/24

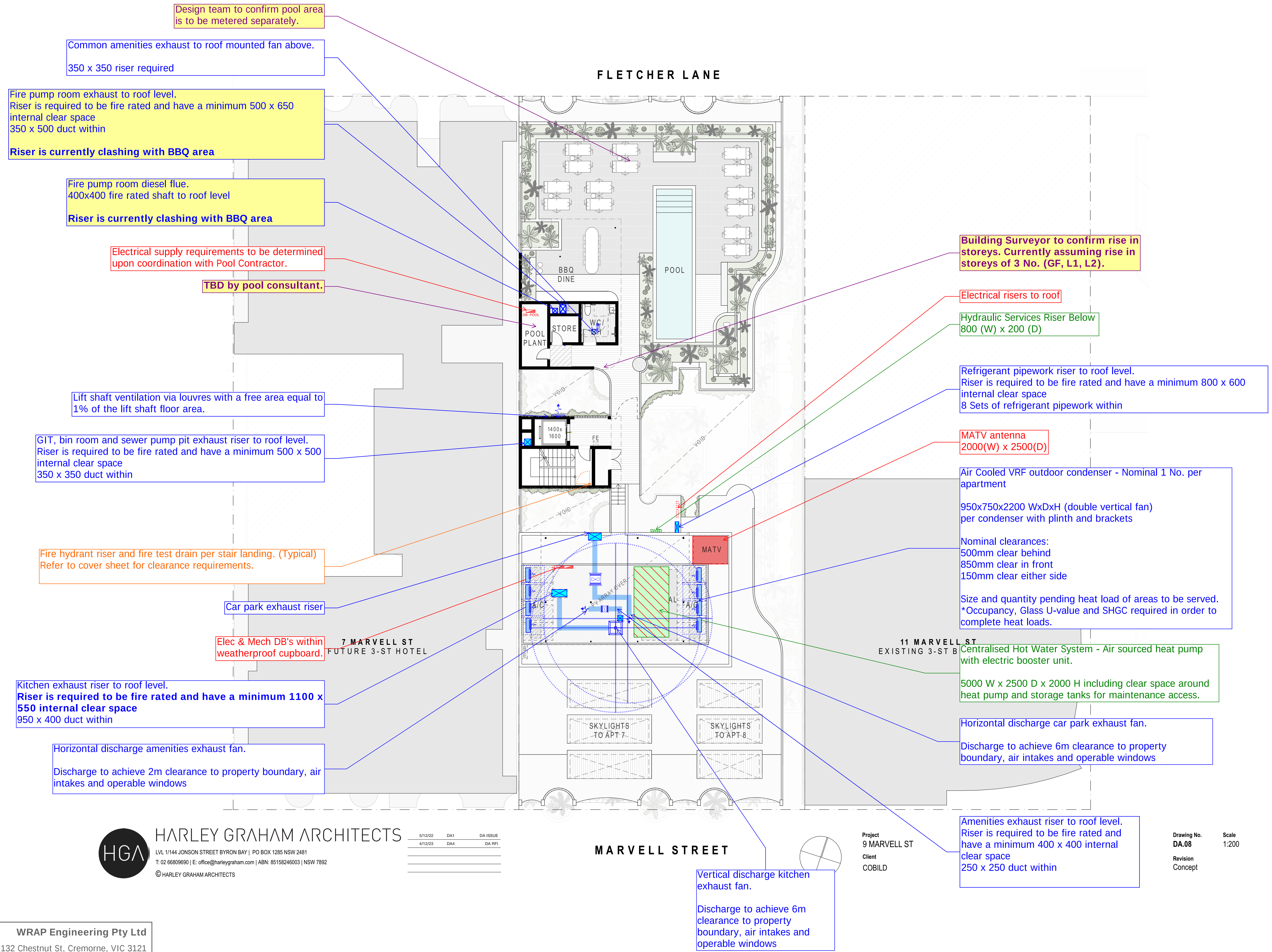
DA1
DA3
DA4

DA ISSUE
DA RFI
DA RFI

Y 2481
003 | NSW 7892

ARCHITECTS





HARLEY GRAHAM ARCHITECTS

LVL 1/144 JONSON STREET BYRON BAY | PO BOX 1285 NSW 2481
T: 02 66800690 | E: office@harleygraham.com | ABN: 85158246003 | NSW 7892
© HARLEY GRAHAM ARCHITECTS

5/12/22	DA1	DA ISSUE
4/12/23	DA4	DA RFI

MARVELL STREET

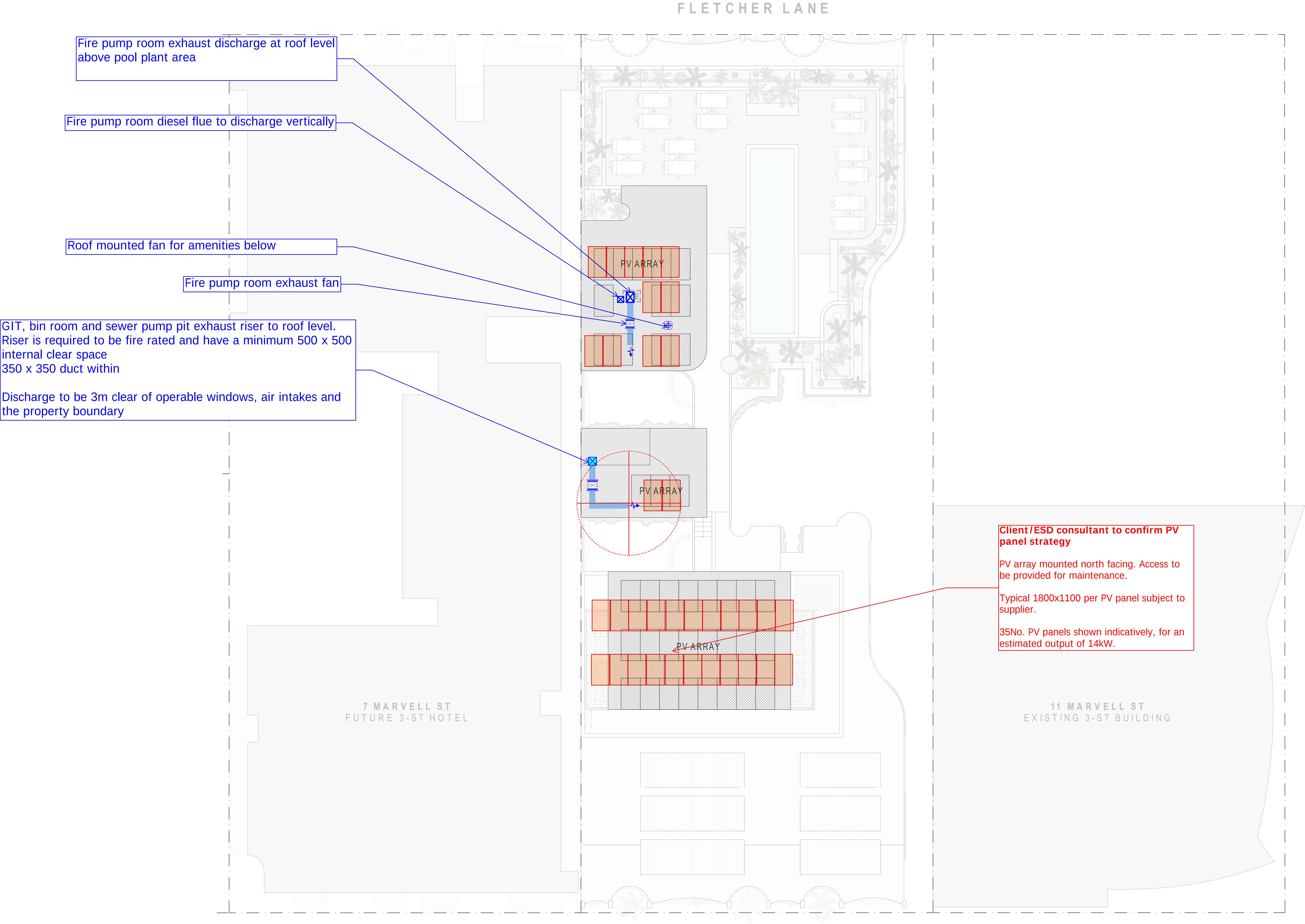
Project
9 MARVELL ST
Client
COBILD

Drawing No.
DA.08
Revision
Concept
Scale
1:200



WRAP Engineering Pty Ltd
132 Chestnut St, Cremorne, VIC 3121
T: +61 3 9428 7987

22315	15/12/2022
Project No:	Date:
9 Marvell Street, Byron Bay	TR / WD / AL
Project:	Designed:
Roof Plant - Services Layout	SK01.05 3
Sketch Title:	Sketch No: Rev:

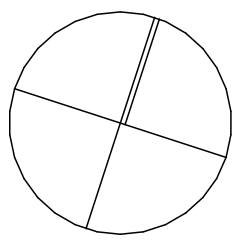


HARLEY GRAHAM ARCHITECTS

LVL 1/144 JONSON STREET BYRON BAY | PO BOX 1285 NSW 2481
T: 02 66800690 | E: office@harleygraham.com | ABN: 85158246003 | NSW 7892
© HARLEY GRAHAM ARCHITECTS

5/12/22	DA1	DA ISSUE
4/12/23	DA4	DA RFI

MARVELL STREET



Project
9 MARVELL ST
Client
COBILD

Drawing Name
FLOOR PLAN - ROOF
Location
9 MARVELL ST BYRON BAY
NSW 2481

Job No.
HGA344
Date
6/12/23

Drawing No.
DA.09
Revision
Concept

Scale
1:200

wrap
consulting
engineering

WRAP Engineering Pty Ltd
132 Chestnut St, Cremorne, VIC 3121
T: +61 3 9428 7987

22315
Project No:

15/12/2022
Date:

9 Marvell Street, Byron Bay
Project:

TR / WD / AL
Designed:

Roof Plant 2 - Services Layout
Sketch Title:

SK01.06 3
Sketch No: Rev: