Your Ref: 58-54 Island Point Road
Our Ref: AKH21.065

1 November 2021

Container Group P/L
C/- PDC Lawyers and Town Planners
Unit 4, 85 Worrigee Street,
Nowra

ELECTRICITY SUPPLY – URBAN LOAD –LOT 80 DP817353 (48-52) PARADISE BEACH ROAD SANCTUARY POINT

Please find enclosed AKH Design Services Level 3 design report for the proposed urban major load on Lot 80 DP817353 (48-52) Paradise Beach Road Sanctuary Point for the Container Group P/L

Aerial View

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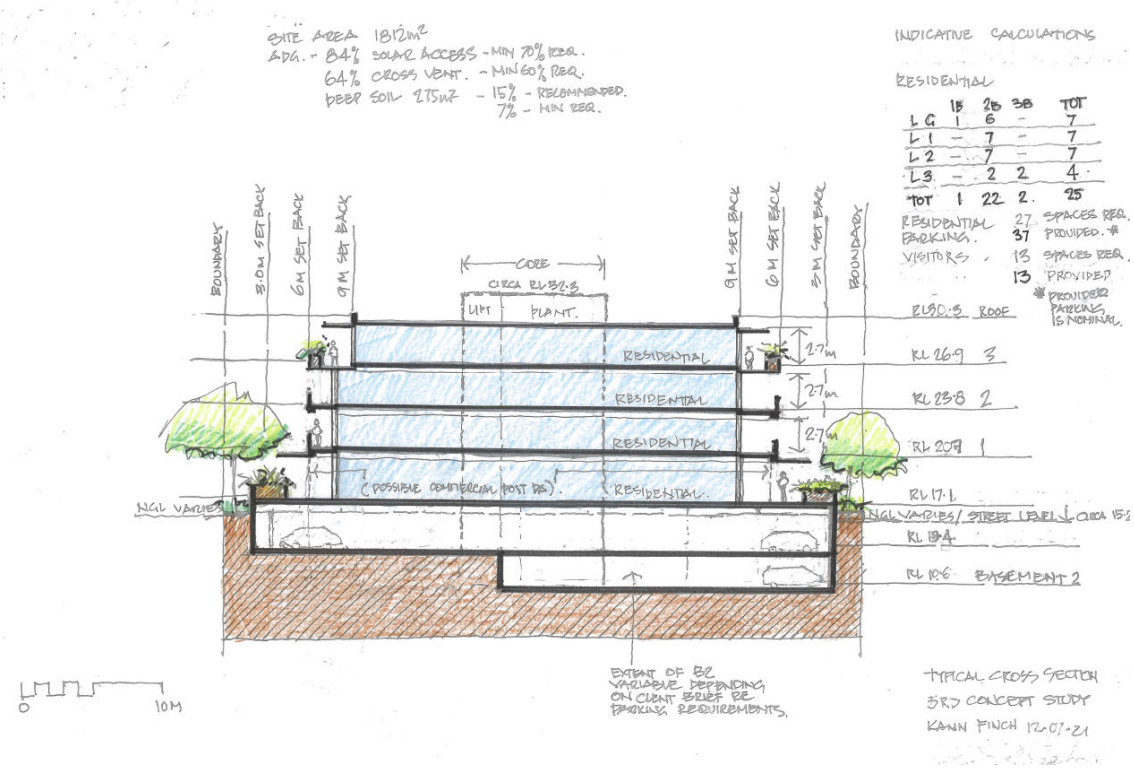

Developers Sketch Plan

It is understood from the email request and provided sketch that a multi level development is proposed on the site. This will include

- Underground parking,
- 4 residential levels
- The above preliminary concept sketch illustrates the general building layout to be adopted

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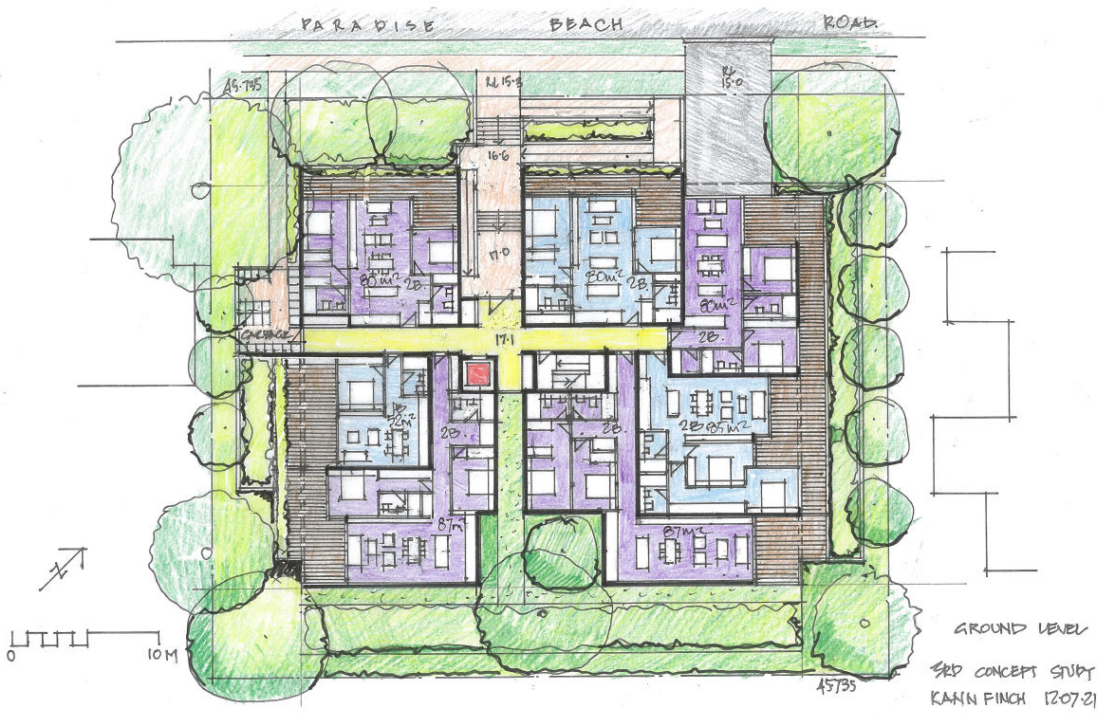
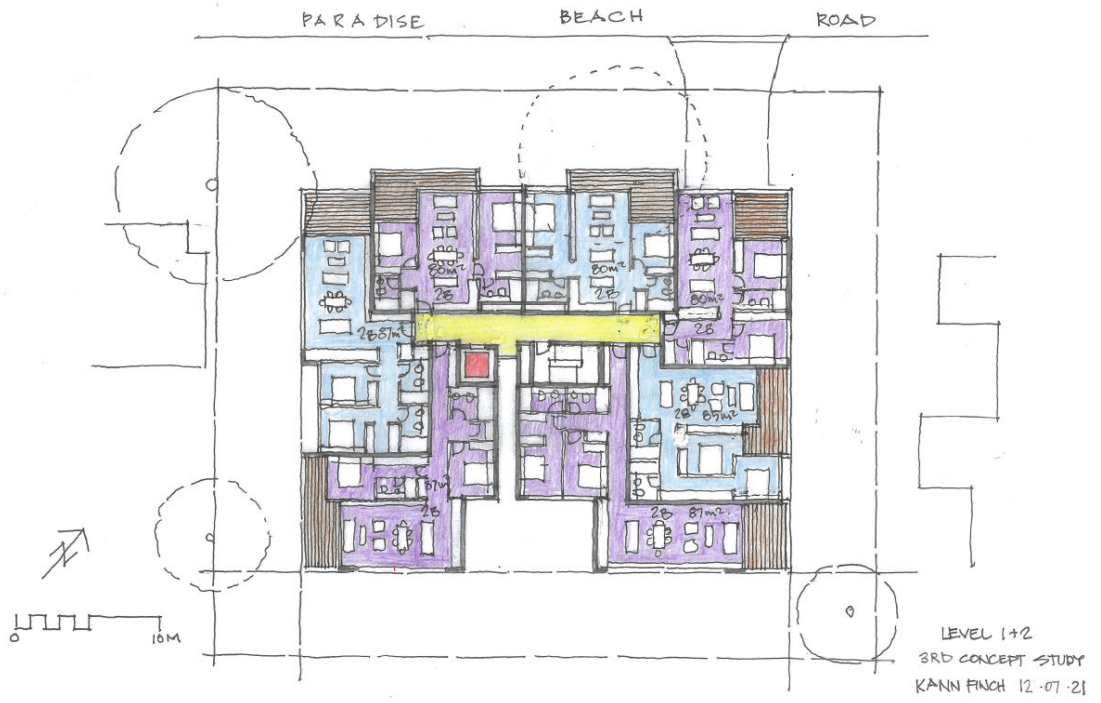


Ground Level (1 x 1 Bedroom and 6 x 2 Bedroom Units)



Level 1 & 2 (7 x 2 Bedroom Units each level)

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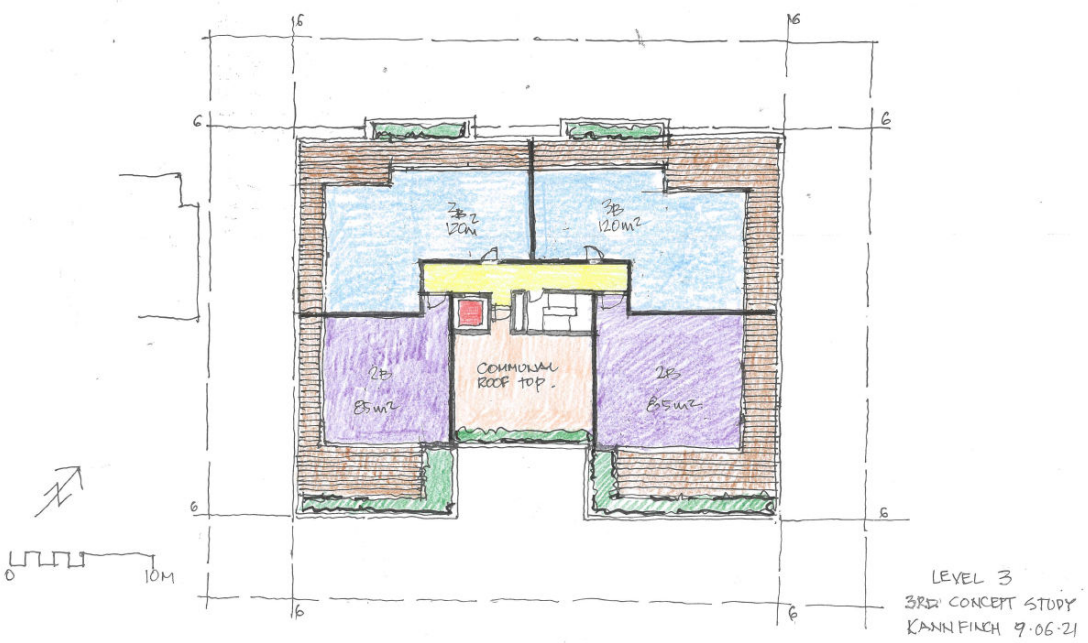

Level 3 (2 x 2 Bedroom Units, 2 x 3 Bedroom Units, Communal Rooftop Space)

Total Yield 25 Units

It is understood from further email correspondence that the adjacent lot 54 has been purchased and it is the intent to combine the lots into one larger development with a total yield of 35 units

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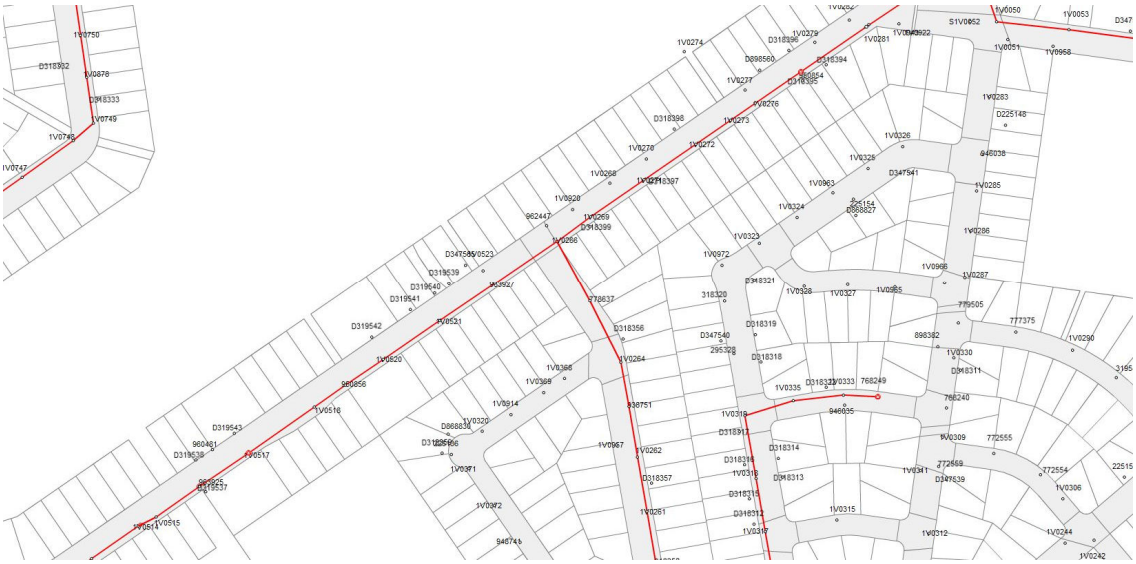
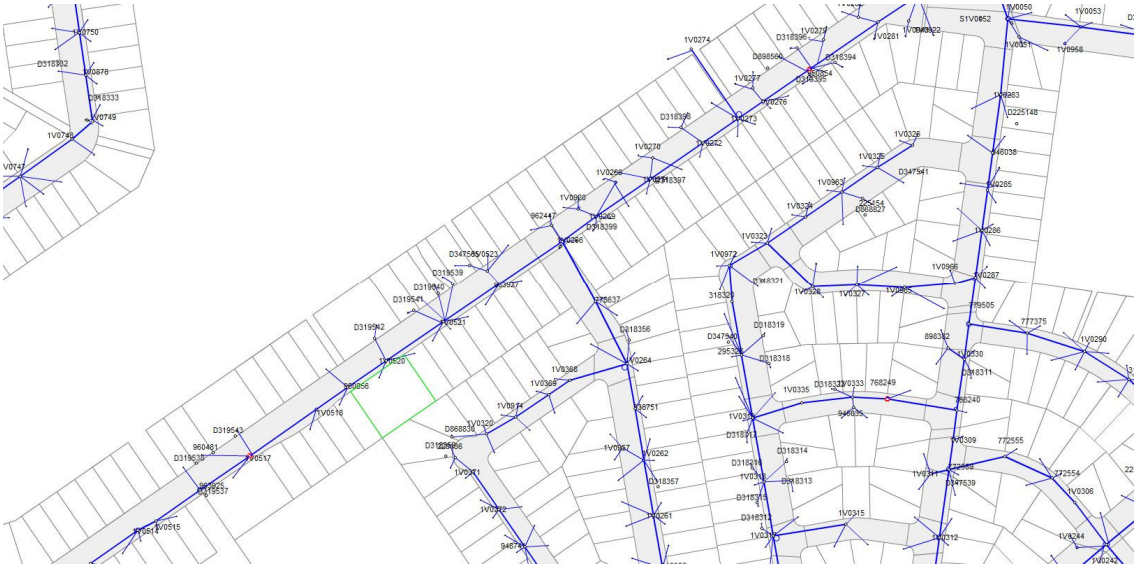


Existing Endeavour Energy HV (11kV) Network



Existing Endeavour Energy LV Network

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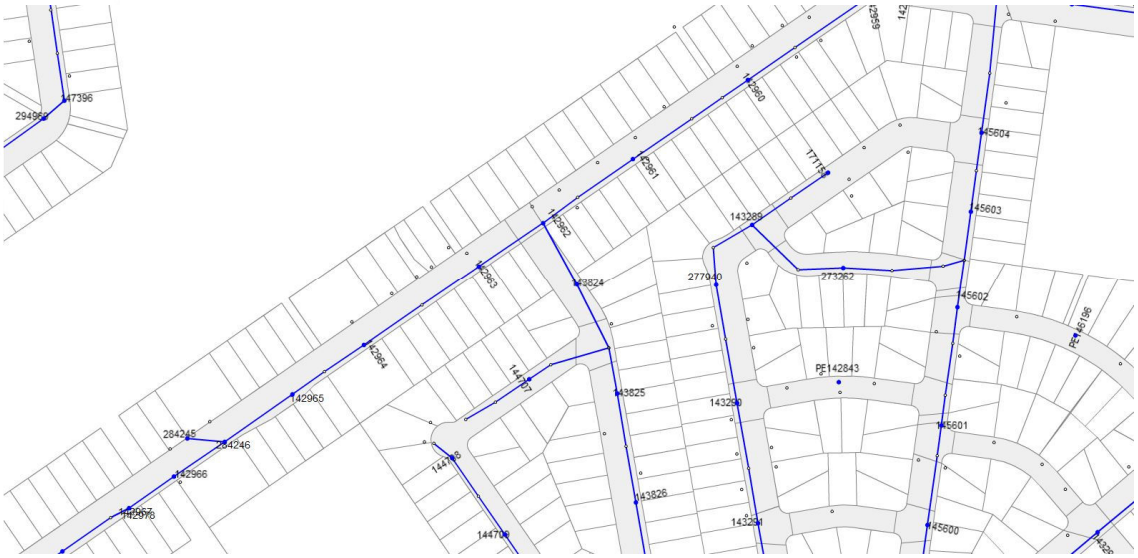

Existing Endeavour Energy SL Network

Existing Endeavour Energy Duct Network

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From the existing Endeavour Energy GIS and DBYD enquiries there are several underground assets in the road reserve at the front of the property.

These include

- Electricity
- Telstra
- NBN
- Water Mains

Copies of the DBYD plans are included at Annexure A

These will need to be considered in relation to trenching for any required underground works

Existing Site Supply Arrangements:

The existing site is Lot 80 DP 817353 (48-52) & Lot 921 DP27856 (54) paradise Beach Road Sanctuary Point. Lot 80 DP 817353 (48-52) is currently a disused church and Lot 921 DP27856 (54) is a standard residence.

The sites are supplied from the existing open wire overhead Endeavour Energy distribution network from pole sub 51318 on Paradise Beach Road (outside No 34)

Substation 51318
Is a standard Endeavour Energy pole substation.
Size 250kVA
Current Load: 200kVA
Spare Capacity:50kVA

There would be insufficient capacity in the existing pole substation to supply the potential site load

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Proposed Site Load
The existing sites are to be combined into one site and a multistorey unit development installed with underground parking and residential units on Levels 1-4.

A total Site Yield of 35 units has been allowed for maximum demand calculations.

As there is no reticulated gas in the area the site maximum demand has been calculated entirely for electrical load only.

Electricity Only
The required maximum demand calculations have been undertaken as per the requirements of AS3000 Table C1 Column. Minor assumptions have been made on

- A/C Sizing Per unit (allowed at 7.1kW each)
- Lift Motor Size (allowed at 14kW)
- Basement Car Park Extraction Fan (allowed at 7.5kW)

The maximum demand is calculated at 335A per phase 3 phase. A copy of the calculations are included at Annexure B

Electricity & Bottle Gas

If Gas was installed on site to provide gas supply for hot water and cooking the AS3000 maximum demand could be reduced.

The required maximum demand calculations have been undertaken as per the requirements of AS3000 Table C1 Column. Minor assumptions have been made on

- Gas Cooking
- Gas Hot Water
- A/C Sizing Per unit (allowed at 7.1kW each)
- Lift Motor Size (allowed at 14kW)
- Basement Car Park Extraction Fan (allowed at 7.5kW)

The maximum demand is calculated at 230A per phase 3 phase. A copy of the calculations are included at Annexure B

The site has

- Open wire high voltage 3 wire 7/4.50AAC conductor at the street frontage. This supplies the various pole substations on the network in the vicinity.
- Open wire low voltage 4 wire 7/4.50AAC conductor at the street frontage. This supplies the various lots and residences substations on the network in the vicinity.
- Open wire streetlight conductor 1wire 7/0.064 Cu conductor at the street frontage. This supplies the pole mounted street light lanterns in the area

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An assessment has been made of the existing pole substation 51318. It is 250kVA with a load of 200kVA. There is 50kVA spare capacity. The substation has 315A pole sub fuses to the South toward the shops and 400A fuses to the north toward the development site.

Endeavour Energy require substations to be loaded to 90% of their capacity and as such a 250kVA can be loaded to 225kVA giving 25kVA of spare capacity.

Proposed Site Conditions

The proposed structures on the sites are to be demolished and a development based on the sketch plan (to be finalized) is to be constructed on site.

It is envisaged this development will include

- underground parking,
- final yield of 35 units

A similar development at Ulladulla (34 apartments and 3 shops and restaurant) had a calculated maximum demand of 380A. This equated with our calculated maximum demand of 335A

Based on the maximum demand calculations the required additional capacity for the site is

- Electricity Only 335A (230kVA)
- Electricity + On site bottled gas 230A (158kVA)

As the load is to be more than 200A per phase Endeavour Energy can and likely will request a pad substation to be located on site.

However for completeness of assessment the existing substation would need to be increased to a minimum 400kVA (derated to 90%=360kVA) to have sufficient capacity to supply the site.

The 400A fuses to the north of the site are derated to 300A and there will be 19 final equivalent customers connected @ 2.99kVA ADMD

The spare capacity in the fuses would be 300-(19*2.99) = 217A/phase

Further savings would need to be found in the site to reduce the maximum demand to below 217A per phase to have any chance of connection to an upgraded pole substation

The upgrading of the pole substation to suitable size would required a completed rebuild replacing the existing pole and substation earthing and will trigger works in adjacent poles to return the pole substation fuses back to the substation pole as per the current standard.

I would suggest a budget of $80K Ex GST to undertake these works

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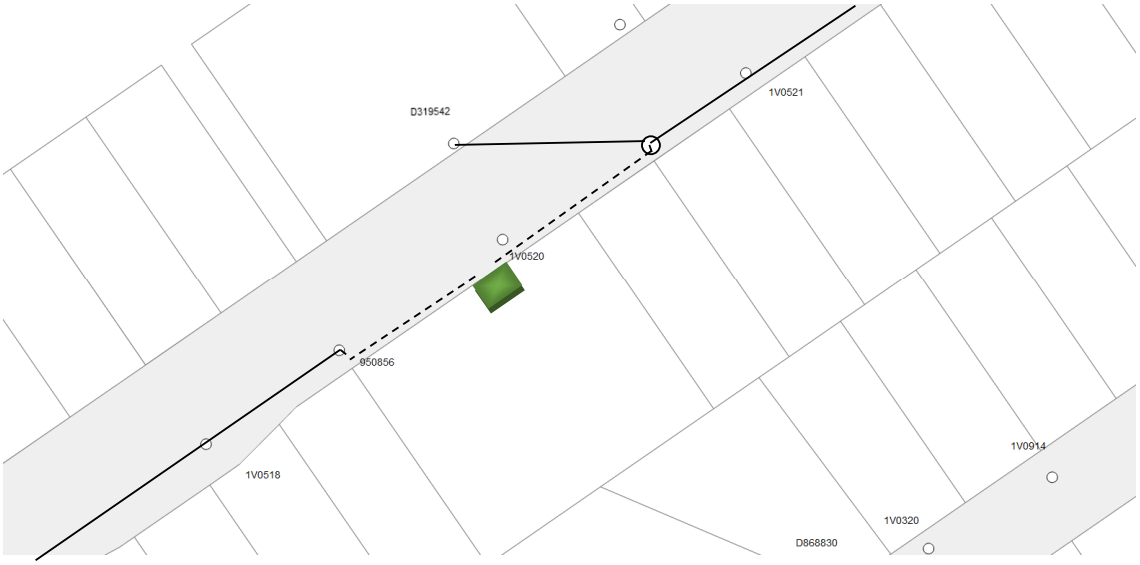
As the development load is less than 400A per phase a 315kVA pad sub could be installed on site on a short HV spur. The HV cable would be connected to one of the poles at the front of the lot and a low voltage tie would be taken from the pad substation back to the street for emergency tie and earthing requirements.

Alternatively, if the developer requires (for aesthetics etc) the overhead lines could be removed across the entire frontage of the lot this would require a 500kVA pad substation (as there would be a need to resupply some street load from the proposed substation.



A new pole would be required to be installed a the 54/56 common boundary and the lines converted to underground between pole 950856 and the new pole.

A new pad sub would be required to be installed at the street frontage with 24 hr access (sketch above indicative only) It will be required to comply to the Endeavour requirements below for siting of pad substations

This would have a budget of approximately $120K-$140K dependent on the customers requirement to remove all of the overhead crossing the property frontage.

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Endeavour Energy have very specific requirements for pad substation in relation to their location and proximity to building structures and other assets. Extracts taken from Endeavour Energy Standard MCI0006 S7

Location:

7.1.2.1 General

Access requirements shall be in accordance with AS 2067 in addition to the following requirements.

Substations must be located at the front property boundary with unrestricted 24 hour a day employee and vehicle access to the substation directly from a public street.

Driveways are not regarded as public street access except where access is available by a vehicle driveway directly to the substation and the substation is located on the perimeter of the driveway, this may also be regarded as street level access if granted dispensation by Endeavour Energy.

All secure access areas (for example gates) shall use Endeavour Energy's standard key.

For solid doors or motorised gates, then a security lock box and a key shall be required along with personnel access gates. Security lock boxes shall be in a readily accessible location and be large enough to contain the security key and have an Endeavour Energy lock on the box.

Where direct access is not available, personnel and equipment access requirements will be required as set out below.

Padmounts, including the easement, shall not be located in or under part of any building, or on corners of roadways, without approval from the Network Substation Manager, refer to clauses 7.4.1 and 7.1.4 for more details.

In all situations where multiple items of equipment are installed, provision will be made to allow a single transformer, switchgear or padmount to be installed or removed without affecting other transformers or equipment.

Access areas shall be located so that they provide two (2) safe means of entry to and exit from the substations at all times. This may mean that bollards or safety rails will need to be erected to protect the persons entering or leaving the substation.

Where fencing around a padmount substation or a switching station is required a suitable gate shall be provided. The type of fence and the gate shall be approved by the Network Substation Manager. Refer to drawing 289702 for examples.

Where a substation location is not immediately apparent from the street, a sign may need to be erected indicating the substation location at Endeavour Energy Contestable Works Officer's/ Project Manager's discretion. This shall be determined on a project basis taking into account security and visibility.

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7.1.4 Protection from vehicles

Substations are required to be located so they will not be subject to damage by vehicles. Where this is impractical locations requiring specific dedicated protection shall include, but not be limited to, the following:

- *Loading zones (shops, factories, and commercial areas).*
- *Car parking areas.*
- *Around rubbish bin storage areas.*
- *Directly adjacent roundabouts, corners and 'T' junctions.*
- *Along main traffic routes.*
- *As determined by Endeavour Energy's Contestable Works Officer/Project Manager.*

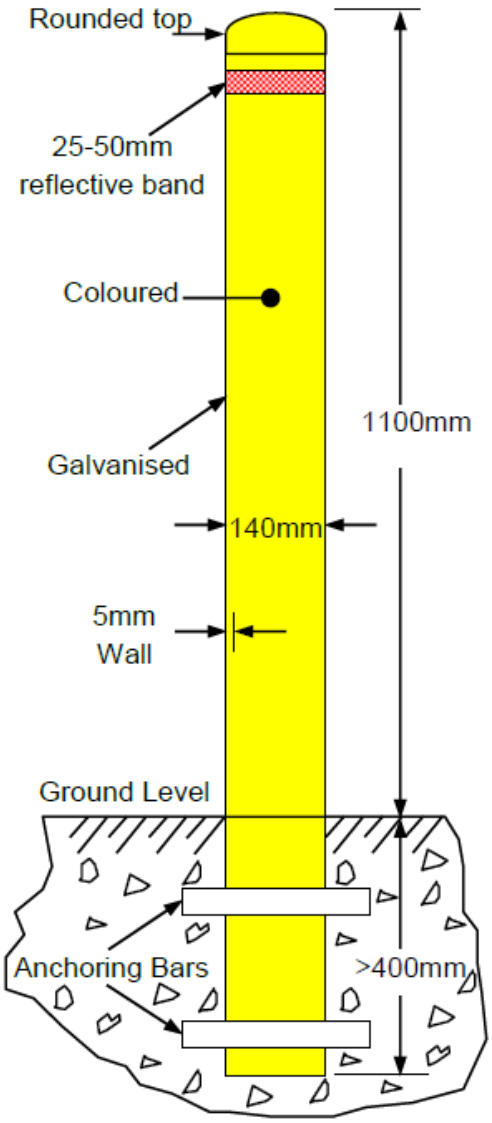

Figure 35 - Typical bollard detail

Easements are for safety, access and operational requirements, therefore protection devices shall not be located inside the standard substation easements

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7.1.6 Flooding and drainage

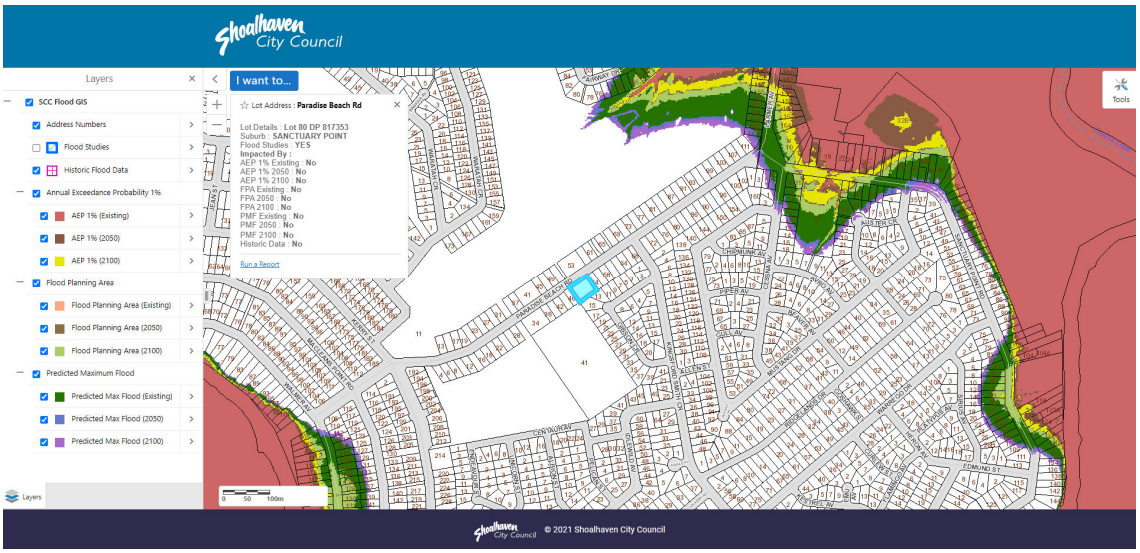
Substations are to be located such that the risk of flooding or stormwater damage is minimal.

As a minimum the level at the top of the transformer footing, HV and LV switchgear, shall not be lower than the 1:100 year flood level.

All drains within the substation site area or in the vicinity shall be properly maintained to avoid the possibility of water damage to Endeavour Energy's equipment.

In areas where, as determined by the Network Substation Manager, there is a high water table or a heightened risk of flooding, indoor substations will not be permitted.

All materials used in the construction below the substation (ground level) shall be capable of withstanding prolonged immersion in water without swelling or deterioration.



Shoalhaven Council Flood Mapping indicated the area is not flood prone.

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7.4.1 Segregation requirements for other structures

Padmount substations shall be located where practical at the front property boundary.

There are a number of restrictions to construction near substations. Figure 43 shows the overall view detailing individual requirements where easements and covenant are required. Refer to EDI 100 for further information on easement and covenants required for general earthing and metallic fences /structures in substations with separate earthing.

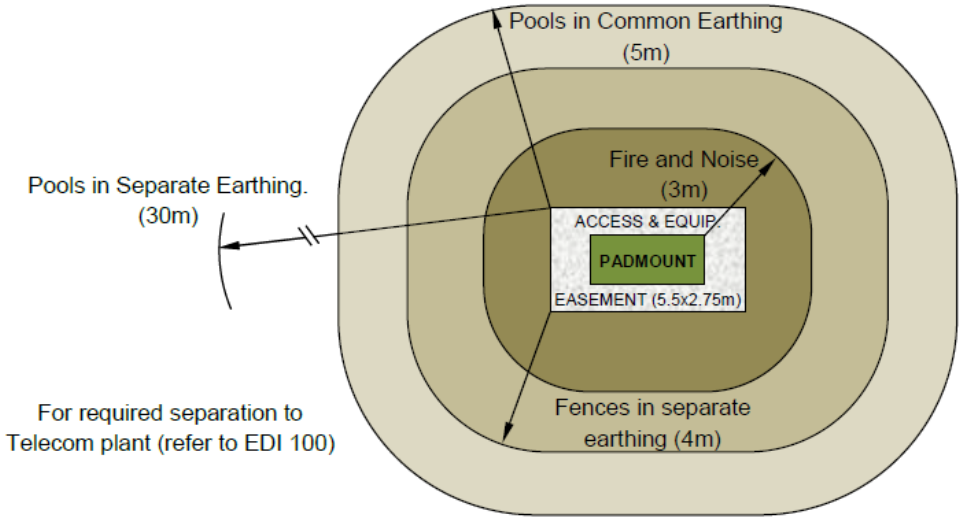

Figure 43 - All restrictions (Easement and covenants will be required)

7.4.1.1 Noise

Padmount substation sites shall comply with a nominal three (3) m noise separation between the substation and any building/living area. This three (3) m will usually satisfy acceptable noise levels in residential premises. Where a suitable fire/baffle wall is erected (by a developer/customer without cost to Endeavour Energy and with a certified sound report) the noise restriction may be reduced accordingly if approved by Endeavour Energy.

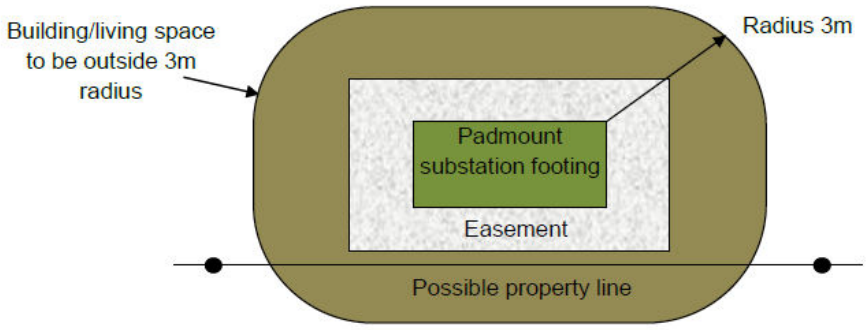

Figure 44 - Minimum clearance to building/living areas

7.4.1.2 Fire

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Padmount substations require separation from neighbouring areas and buildings that are subject to fire risk. Separation may be by means of adequate clearances or building components having minimum fire resistance level (FRL) as set out in Figure 45.

Fire ratings shall be achieved by static means (that is, walls or distance) rather than active system (that is, deluge showers and the like).

FRL means the grading period in minutes. The three (3) figures represent structural adequacy/integrity/insulation.

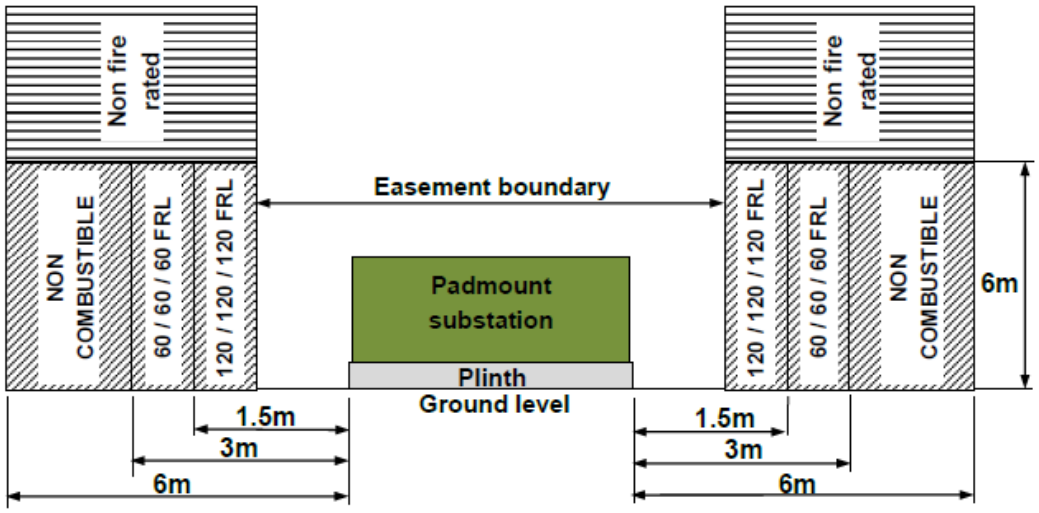

Figure 45 - Minimum FRL clearances for components

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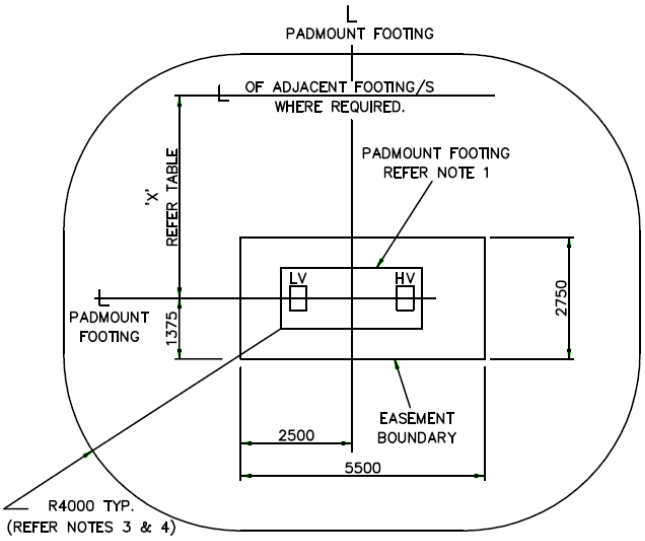
Easements:

The pad substation site will need to be encompassed in an easement to be registered on the Site DP

The General Easement Size is 5500mm as shown below x 2750mm. The HV end of the pad substation faces the street unless location of the substation arrangement necessitates it be oriented parallel to the street frontage



NOTES

1. PADMOUNT FOOTING DIMENSIONS;
   11/22kV PADMOUNT – 3190mm X 1370mm
2. HEIGHT REQUIRED ABOVE PADMOUNT FOOTING FOR NORMAL INSTALLATION TO BE 5500mm. WHERE HEIGHT IS RESTRICTED BELOW 5500mm REFER TO SDI 104.
3. EXCEPT AS NOTED IN SDI 104, ANY METAL FENCING, WITHIN THE AREA DEFINED BY A LINE 4000mm FROM FOOTING EXTREMITIES & THE EASEMENT BOUNDARY, IS TO BE CONSTRUCTED SO THAT ADJACENT PANELS ARE ISOLATED FROM EACH OTHER & FROM THE GROUND.
4. EXCEPT AS NOTED IN SDI 104, ANY METAL CLAD BU1LDING SHOULD NOT ENCROACH W1THIN THE AREA DEFINED BY A L1NE 4000mm FROM THE FOOTING EXTREMITIES.
5. IN COMMERCIAL, HIGH DENSITY AND INDUSTRIAL DEVELOPMENT AREAS, A SECOND PADMOUNT SUBSTATION CAN BE LOCATED END ON END WITH THE TWO LOW VOLTAGE ENDS FACING EACH OTHER. IN THIS CASE THE SPACING BETWEEN SUBSTATION FOOTINGS SHALL BE 1500mm, THE EASEMENT WILL THEREFORE BE 2750mm x 10500mm.

COMMERCIAL, HIGH DENSITY & INDUSTRIAL DEVELOPMENT

– ARRANGEMENT CAN BE FOR FOOTPATH ON EITHER LV OR HV SIDE OF PADMOUNT.

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The above is only an extract of the major points from Endeavour Energy's MCI0007 S7 standard in relation to Pad Substations and there may be other site-specific issues that need to be addressed once a final site layout and pad substation site is selected.

Based on the above you can see that the substation site needs to be selected carefully I would suggest in the following order of importance

1. At the Front Property Boundary
2. Flat and Level site no retaining walls (if possible)
3. Min 3m away from Side Property boundary so no building restriction zones are imposed on adjacent lands
4. Min 3m away from any buildings and structures on site
5. Minimize the potential for interaction with vehicles

Conclusion

There is insufficient capacity in the existing pole substation and low voltage network to supply the prospective site load. An upgrade of the existing pole substation and overhead network would increase capacity sufficiently to supply the site. However I believe this is marginal at best and requires substantial limitation of electrical loads on site and Gas Hot Water and Cooking would be mandatory.

For Loads over 200A per phase Endeavour Energy can and are likely to request a pad substation to be installed on site. When the calculated numbers are so tight on pad substation capacity and fuse capacity it is unlikely that Endeavour will allow the pole substation upgrade.

A Level 3 design will be required to design a pad substation of suitable size to supply the load. The substation siting and configuration will be required to comply with all of Endeavour Energy's stringent requirements relating to fire, flood, segregation, vehicle protection, noise and required easements over the substation site.

The final substation sizing cannot be advised until

- the maximum demand based on a final design layout for the combined lots is known
- the developer advises if they would like the existing overhead removed across the lot frontage for access and/or aesthetics

This however is a relatively minor consideration, as a pad substation will be required to supply the site, and this needs to be considered in the design phase of the development. It is only the size/capacity of that substation that needs to be confirmed.

As the design for the site is formalised we will be able to advise further on the site requirements for the location of the pad substation

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Scope of Fees for Level 3 Design

Endeavour Energy
(The fees are estimates only - actual fees will be invoiced as per design brief)

Administration Fee	–	-	$ 359.27
Design Information Fee	– >200-<700A /ph	-	$ 2172.99
Design Certification Fee	– >200-<700A /ph	-	$ 1810.82
Standard Connection Offer	–	-	$ 271.61
SUBTOTAL		-	$ 4614.69 GST Ex

AKH Design Services Design Fee - $6600.00 GST Ex
Includes standard pad substation and standard common earthing design

As suggested a construction budget estimate of approximately $120K-$140K Ex GST dependent on the customers requirement to remove all of the overhead crossing the property frontage.

Should you require any further information regarding these matters please do not hesitate to call.

Yours Faithfully

Paul Hamilton

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ANNEXURE A

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Endeavour Energy

WARNING

- **All electrical apparatus shall be regarded as live until proved de-energised.** Contact with live electrical apparatus will cause severe injury or death.
- In accordance with the *Electricity Supply Act 1995*, you are obliged to report any damage to Endeavour Energy Assets immediately by calling **131 003**.
- The customer must obtain a new set of plans from Endeavour Energy if work has not been started or completed within twenty **(20)** working days of the original plan issue date.
- The customer must contact Endeavour Energy if any of the plans provided have blank pages, as some underground asset information may be incomplete.
- Endeavour Energy underground earth grids may exist and their location **may not** be shown on plans. Persons excavating are expected to exercise all due care, especially in the vicinity of padmount substations, pole mounted substations, pole mounted switches, transmission poles and towers.
- Endeavour Energy plans **do not** show any underground customer service mains or information relating to service mains within private property.
- Asbestos or asbestos-containing material may be present on or near Endeavour Energy's underground assets.
- Organo-Chloride Pesticides (OCP) may be present in some sub-transmission trenches.
- All plans must be printed and made available at the worksite where excavation is to be undertaken. Plans must be reviewed and understood by the crew on site prior to commencing excavation.

INFORMATION PROVIDED BY ENDEAVOUR ENERGY

- Any plans provided pursuant to this service are intended to show the approximate location of underground assets relative to road boundaries, property fences and other structures at the time of installation.
- Depth of underground assets may vary significantly from information provided on plans as a result of changes to road, footpath or surface levels subsequent to installation.
- Such plans have been prepared solely for use by Endeavour Energy staff for design, construction and maintenance purposes.
- All enquiry details and results are kept in a register.

DISCLAIMER

Whilst Endeavour Energy has taken all reasonable steps to ensure that the information contained in the plans is as accurate as possible it will accept no liability for inaccuracies in the information shown on such plans.

LEGEND

- or — Street light column
- Padmount substation
- or — Overground pillar (O.G.Box)
- Underground pit
- Duct run
- Cable run
- Typical duct section
- Asbestos warning

N

NOT TO SCALE

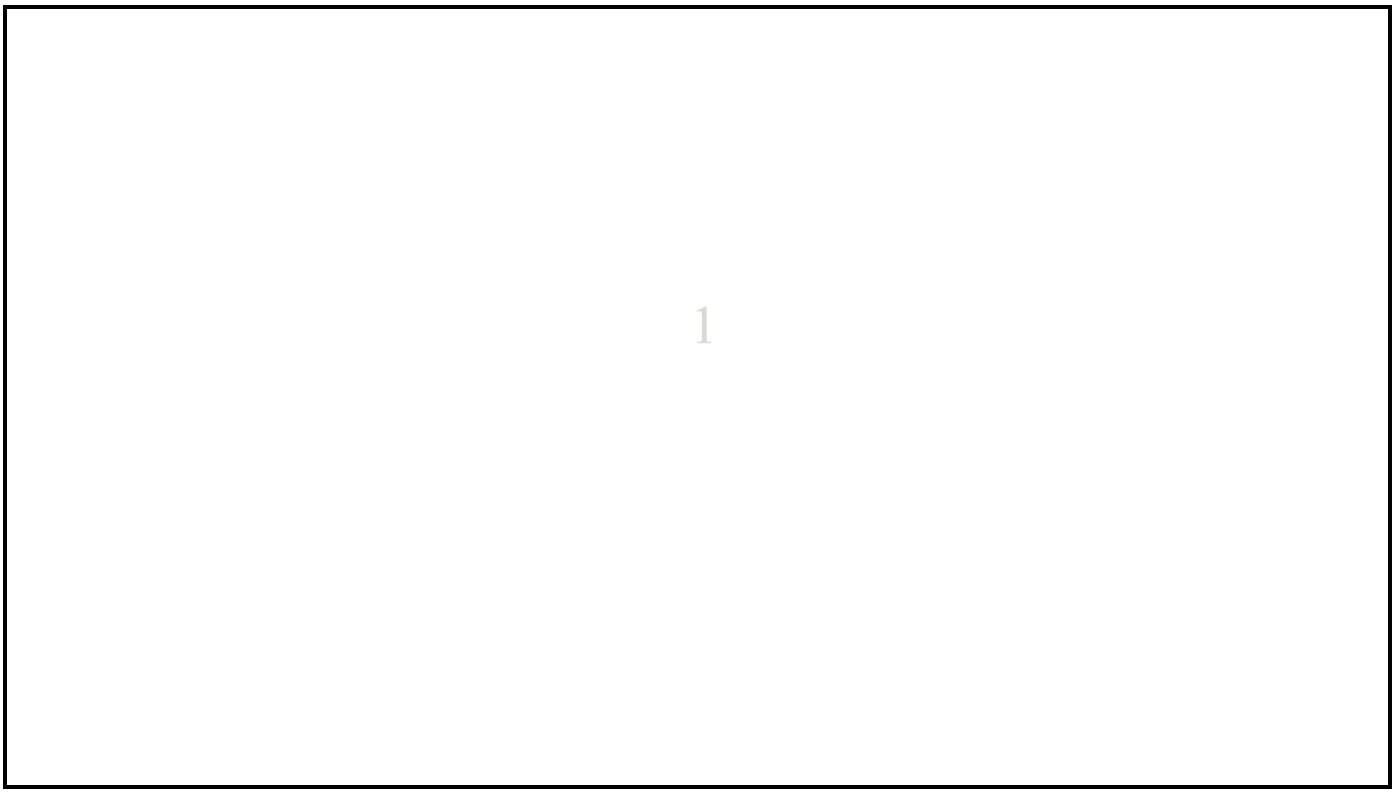
DBYD Sequence No.:	204516648
Issued Date:	26/10/2021

To:	Paul Hamilton
Phone:	Not Supplied
Fax:	Not Supplied
Email:	paul@akhdesign.com.au

Dial before you dig Job #:	30773702
Sequence #	204516647
Issue Date:	26/10/2021
Location:	50 Paradise Beach Road , Sanctuary Point , NSW , 2540

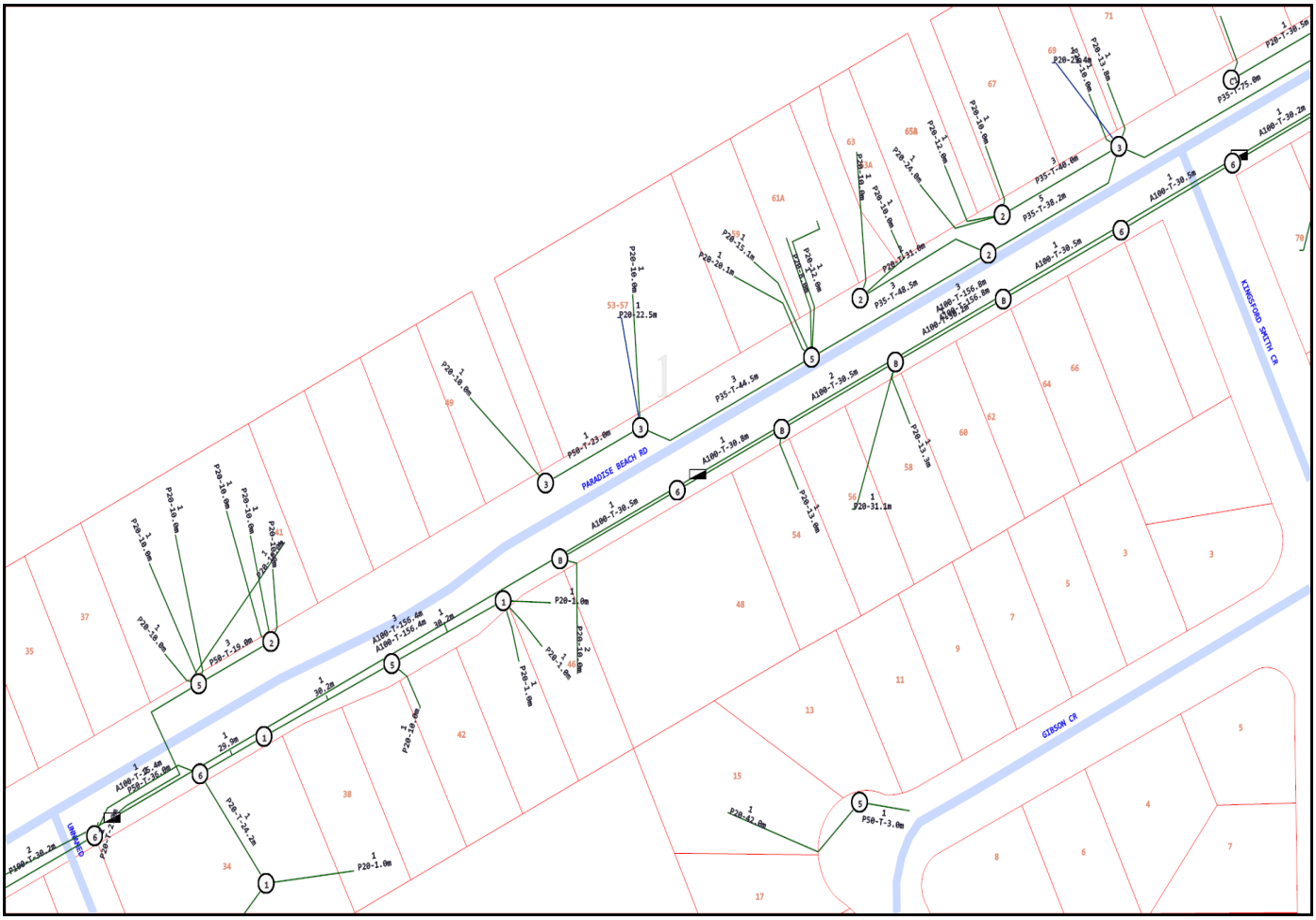
DIAL BEFORE YOU DIG www.1100.com.au

Indicative Plans



LEGEND

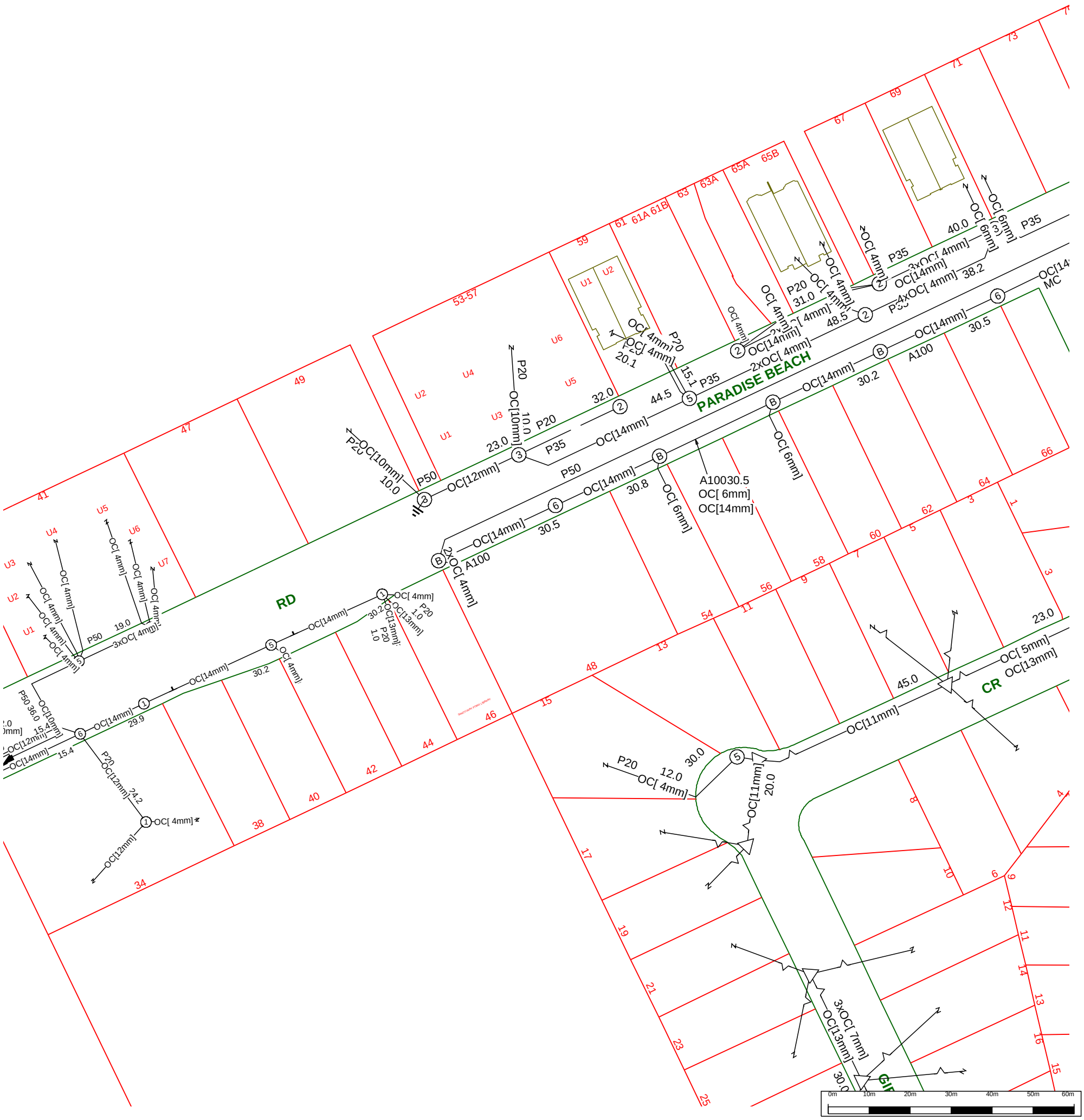
34	Parcel and the location
5	Pit with size "5"
2E	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
2 PO – T- 25.0m P40 – 20.0m 5 9	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40) owned by NBN, between pits of sizes, "5" and "9" are 20.0m apart.
2 10.0m 5 9	2 Direct buried cables between pits of sizes ,"5" and "9" are 10.0m apart.
5 9	Trench containing any INSERVICE/CONSTRUCTED (Copper/RF/Fibre) cables.
5 9	Trench containing only DESIGNED/PLANNED (Copper/RF/Fibre/Power) cables.
5 9	Trench containing any INSERVICE/CONSTRUCTED (Power) cables.
BROADWAY ST	Road and the street name "Broadway ST"
Scale	0 20 40 60 Meters 1:2000 1 cm equals 20 m



Emergency Contacts

You must immediately report any damage to the **nbn™** network that you are/become aware of. Notification may be by telephone - 1800 626 329.

Cable Plan



Telstra

For all Telstra DBYD plan enquiries -
email - Telstra.Plans@team.telstra.com
For urgent onsite contact only - ph 1800 653 935 (bus hrs)

TELSTRA CORPORATION LIMITED A.C.N. 051 775 556

Generated On 26/10/2021 13:36:01

Sequence Number: 204516645

CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

WARNING - Due to the nature of Telstra underground plant and the age of some cables and records, it is impossible to ascertain the precise location of all Telstra plant from Telstra's plans. The accuracy and/or completeness of the information supplied can not be guaranteed as property boundaries, depths and other natural landscape features may change over time, and accordingly the plans are indicative only. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans.

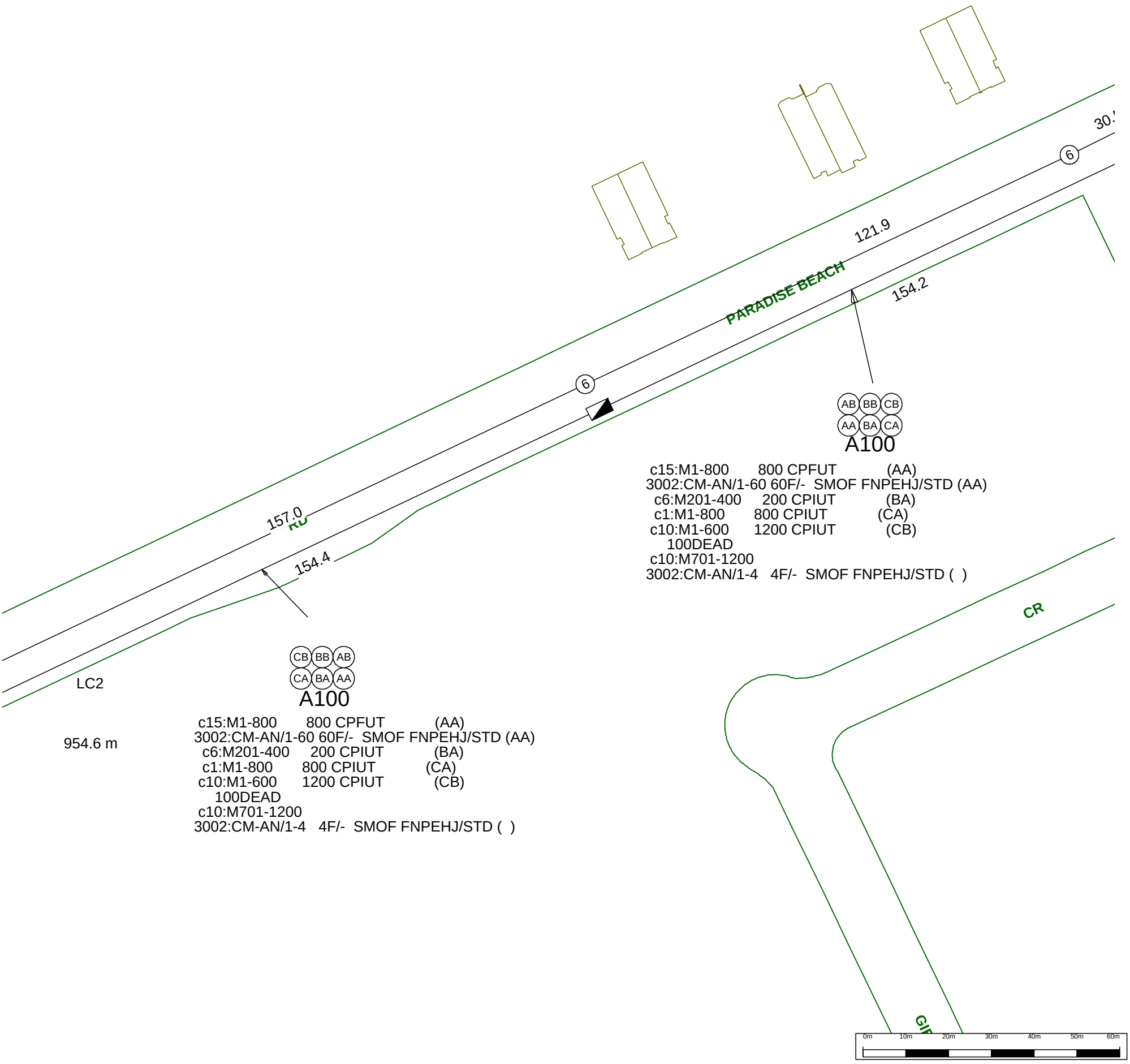
It is your responsibility to locate Telstra's underground plant by careful hand pot-holing prior to any excavation in the vicinity and to exercise due care during that excavation.

Please read and understand the information supplied in the duty of care statement attached with the Telstra plans. TELSTRA WILL SEEK COMPENSATION FOR LOSS CAUSED BY DAMAGE TO ITS PLANT.

Telstra plans and information supplied are valid for 60 days from the date of issue. If this timeframe has elapsed, please reapply for plans.

Mains Cable Plan

T372:M51-100 50/0.90 CPII



Telstra

For all Telstra DBYD plan enquiries -
email - Telstra.Plans@team.telstra.com
For urgent onsite contact only - ph 1800 653 935 (bus hrs)

TELSTRA CORPORATION LIMITED A.C.N. 051 775 556

Generated On 26/10/2021 13:36:02

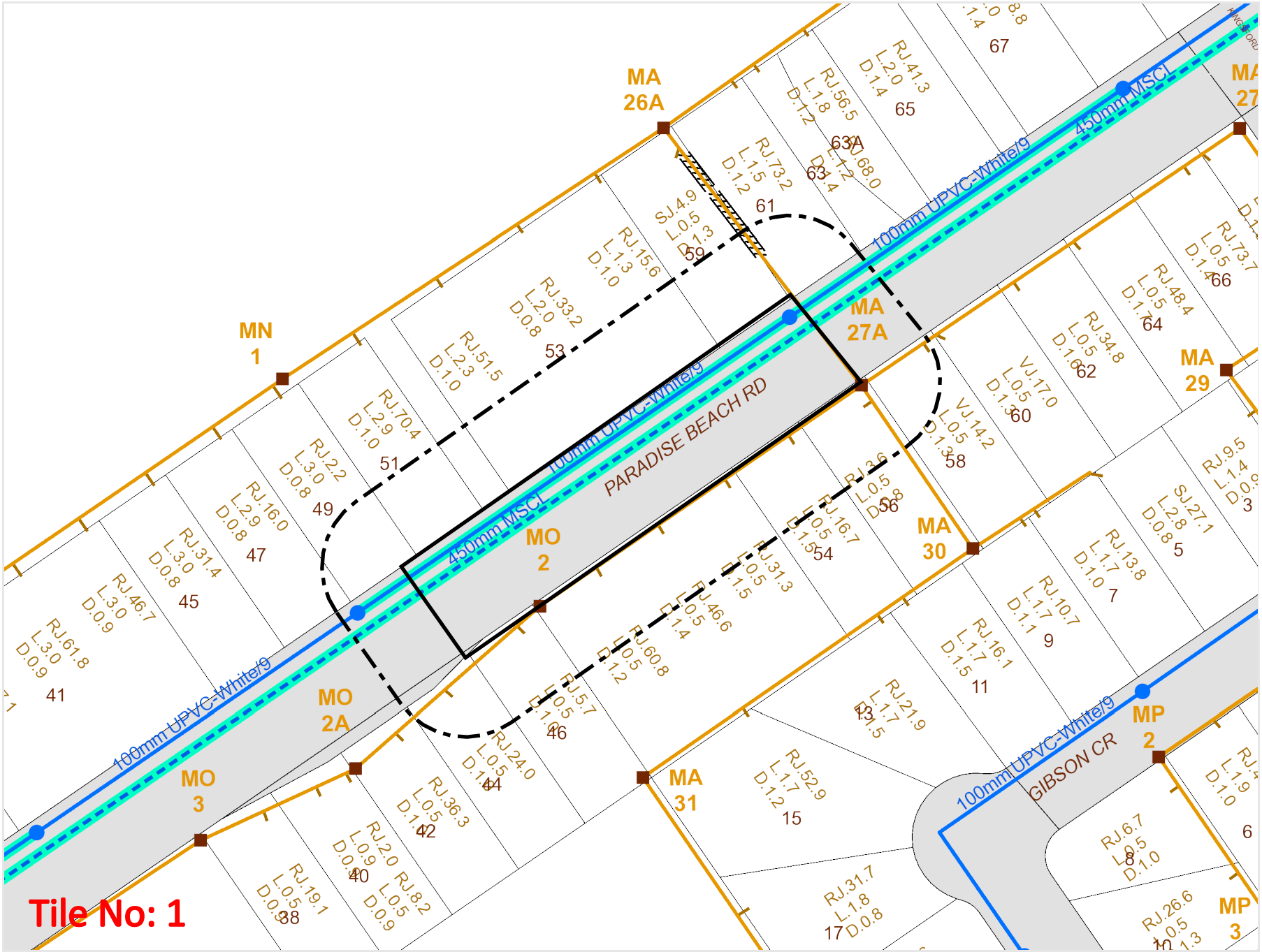
Sequence Number: 204516645

CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.

Shoalhaven Council's Water Utility **WATER**

Sequence No: 204516646
Job No: 30773702
Location: 50 Paradise Beach Road, Sanctuary Point, NSW 2540

DIAL BEFORE YOU DIG www.1100.com.au
The Essential First Step.



Legend

- Abandoned Main
- Critical
- Under Construction
- Concrete Encasement
- Pipe Encasement
- Under Road Conduit
- Pipe Sleeve

REMS

- Distribution Main
- Transfer Main
- Tertiary Treated Effluent Release Main
- Short Service Main
- Long Service Main

Water

- Hydrant
- Reticulation Main
- Trunk Main
- Raw Water Main
- Private Main
- Service Mains

Sewer

- Manhole
- Gravity Main
- Outfall Main
- Unconnected Main
- Overflow Main
- Rising Main
- Surcharge Main
- Low Pressure Sewer Main
- Discharge Pipe
- Junction Line
- Side Line

N

Scale: 1:1000
Expires: 23/11/2021

ANNEXURE B

T : 02 44228004
M : 0412423520
E : paul@akhdesign.com.au

4 Barbata Grove
South Nowra, NSW 2541

MAXIMUM DEMAND CALCULATIONS FOR							
48-54 Paradise Beach Road Sanctuary Point							
Note - 35 x living units with electric cooking, hws, split head AC's,							
AS/NZS 3000:2007 - TABLE C1 - COLUMN 4 - MAXIMUM DEMAND - SINGLE & MULTIPLE DOMESTIC ELECTRICAL INSTALLATION					ASSUMING A BALANCED LOAD		
Load Group	Single domestic electrical installation or individual living unit per phase	Units			RED PHASE AMPS	WHITE PHASE AMPS	BLUE PHASE AMPS
(a) (i) Lighting except (ii) & (h)	5A + 0.25A per living unit	11	12	12	7.8	8.0	8.0
(a) (ii) Outdoor lighting exceeding total 1000W	No assessment for max demand purposes				0	0	0
(b) Socket outlets not exceeding 10A	15A + 3.75A per living unit	11	12	12	56.3	60.0	60.0
(c) Ranges, cooking appliances	2.8A per living unit	11	12	12	30.8	33.6	33.6
(d) Fixed space heating or air cond	75% connected load (assume 7.1kW each)	11	12	12	90.8	99.0	99.0
(e) or (f) Hot water heater	6A per living unit	11	12	12	66.0	72.0	72.0
(g) Spa or swimming pool heaters	75% largest, 25% the rest			N/A	0	0	0
(h) Communal lighting	full connected load (assume 2.3kW)			common/ho	3.33	3.33	3.33
(i) Socket outlets not included in (j) and (m)	2A per point to a maximum of 15A			common/ho	0	0	0
(j) Appliances rated at more than 10A	50%, 75%, 100% - varies			N/A	0	0	0
(k) Lifts	125% largest lift motor (assume 1 @ 14kW or 28A/Ø)			common/ho	35	35	35
(l) Motors	100% largest, 50% remainder (assumed carpark ex fan 7.5kW, supply fan 7.5kW,			common/ho	23.85	23.85	23.85
(m) Socket outlets other than (a) to (l) above	10A or less no assessment for max demand purposes			N/A	0	0	0
CALCULATED TOTAL MAXIMUM DEMAND LOAD AMPS					313.73	334.78	334.78

MAXIMUM DEMAND CALCULATIONS FOR							
48-54 Paradise Beach Road Sanctuary Point							
Note - 35 x living units with gas cooking, gas hws, split head AC's.							
AS/NZS 3000:2007 - TABLE C1 - COLUMN 4 - MAXIMUM DEMAND - SINGLE & MULTIPLE DOMESTIC ELECTRICAL INSTALLATION					ASSUMING A BALANCED LOAD		
Load Group	Single domestic electrical installation or individual living unit per phase	Units			RED PHASE AMPS	WHITE PHASE AMPS	BLUE PHASE AMPS
(a) (i) Lighting except (ii) & (h)	5A + 0.25A per living unit	11	12	12	7.8	8.0	8.0
(a) (ii) Outdoor lighting exceeding total 1000W	No assessment for max demand purposes				0	0	0
(b) Socket outlets not exceeding 10A	15A + 3.75A per living unit	11	12	12	56.3	60.0	60.0
(c) Ranges, cooking appliances	2.8A per living unit	11	12	12	0.0	0.0	0.0
(d) Fixed space heating or air cond	75% connected load (assume 7.1kW each)	11	12	12	90.8	99.0	99.0
(e) or (f) Hot water heater	6A per living unit	11	12	12	0.0	0.0	0.0
(g) Spa or swimming pool heaters	75% largest, 25% the rest			N/A	0	0	0
(h) Communal lighting	full connected load (assume 2.3kW)			common/ho	3.33	3.33	3.33
(i) Socket outlets not included in (j) and (m)	2A per point to a maximum of 15A			common/ho	0	0	0
(j) Appliances rated at more than 10A	50%, 75%, 100% - varies			N/A	0	0	0
(k) Lifts	125% largest lift motor (assume 1 @ 14kW or 28A/Ø)			common/ho	35	35	35
(l) Motors	100% largest, 50% remainder (assumed carpark ex fan 7.5kW, supply fan 7.5kW,			common/ho	23.85	23.85	23.85
(m) Socket outlets other than (a) to (l) above	10A or less no assessment for max demand purposes			N/A	0	0	0
CALCULATED TOTAL MAXIMUM DEMAND LOAD AMPS					216.93	229.18	229.18