

JFP URBAN CONSULTANTS

INFRASTRUCTURE REPORT

Proposed Development at
16 Poole Way, Bushland Beach
for
POOLE WAY NO.2 PTY LTD





INFRASTRUCTURE REPORT

Proposed MCU Development for a Two-Storey Residential Units, Retail Tenancies, and Medical Centre Development at 16 Poole Way, Bushland Beach for POOLE WAY NO.2 PTY LTD

M3306E – Revision A (December 2025)

JFP Urban Consultants Pty Ltd

Prepared by: Muhammad Khan

Checked by: Jason Ronchi



TABLE OF CONTENTS

1. INTRODUCTION 4

 1.1 PURPOSE 4

 1.2 PROJECT INFORMATION..... 4

2. DEVELOPMENT SITE 5

 2.1 SITE..... 5

 2.2 EXISTING INFRASTRUCTURE 5

 2.3 PROPOSED INFRASTRUCTURE 5

 2.4 TOPOGRAPHY & SITEWORKS..... 6

3. SITE ACCESSIBILITY 7

 3.1 ROAD SYSTEM / ACCESS..... 7

 3.2 PEDESTRIAN ACCESSIBILITY..... 7

 3.3 CAR PARKING FACILITIES 7

4. STORMWATER & WATER QUALITY MANAGEMENT 8

 4.1 STORMWATER MANAGEMENT 8

 4.2 WATER QUALITY MANAGEMENT 8

5. AUTHORITY SERVICES 9

 5.1 SEWERAGE RETICULATION..... 9

 5.2 WATER RETICULATION 9

 5.3 ELECTRICITY & TELECOMMUNICATIONS..... 9

6. APPENDIX A..... 10

7. APPENDIX B..... 11

1. INTRODUCTION

1.1 PURPOSE

JFP Urban Consultants Pty Ltd has been commissioned by POOLE WAY No.2 PTY LTD to prepare an infrastructure report to demonstrate how the proposed development at 16 Poole Way, Bushland Beach will be satisfactorily serviced to meet Council's requirements.

This report accompanies the application to Council by JFP Urban Consultants Pty Ltd for approval for a Material Change of Use (MCU) for Mixed Use Development involving retail tenancies, residential units & medical centre, with vehicle access via Lynwood Avenue & Poole Way.

Additional supplementary drawings and reports have been prepared/provided to accompany this application as follows:

Appendix A – JFP Urban Consultants: Engineering Concept Plans M3306EA1_DA1 CT01, CE01-CE03 & CS01 dated 17/11/2025

Appendix B – Council Existing Services (DBYD) dated 15/12/2025

1.2 PROJECT INFORMATION

Pre-lodgement Meeting Application Number	PLM25/0158
Applicant	POOLE WAY NO.2 PTY LTD C/- JFP Urban Consultants Pty Ltd Kon-Tiki Business Centre – Tower 1, Level 2, Suite T1.209 55 Plaza Parade, Maroochydore QLD 4558
Street Address	16 Poole Way, Bushland Beach
RP description	Lot 6 SP333154
Local Government	Townsville City Council

2. DEVELOPMENT SITE

2.1 SITE

The site comprises a single portion of land located at the intersection of Lynwood Avenue (South) and Poole Way (East) within a Low-Density Residential Zone. The site is described as Lot 6 on SP333154 Townsville City Council. Total site area is a 2433m².

Vehicle access is proposed via a new entrance only driveway and crossover off Lynwood Avenue and entrance and exit from Poole way.

It is proposed to develop the site in accordance with the accompanying site plans – refer to Blackburne Jackson Drawing No. 5819-DA03-08, attached in Appendix A of the town planning report.

2.2 EXISTING INFRASTRUCTURE

The proposed development will be designed to integrate, where possible with existing services within the area. Existing civil infrastructure located in the vicinity of the site identified during preparation of this report include:

- Existing Townsville City Council water mains located along the frontages of both Lynwood Avenue and Poole Way.
- Existing Townsville City Council sewerage (wastewater) manhole and gravity main located in within the site on the north-eastern corner of the site.
- Existing electrical infrastructure located across the frontage of Poole Way.
- NBN & Telstra telecommunications infrastructure located on the Eastern side of Lynwood Avenue.

All works will be carried out in accordance with Council's relevant planning scheme policy and guidelines/approvals.

2.3 PROPOSED INFRASTRUCTURE

Civil infrastructure that will be provided in conjunction with the development include:

- Stormwater connection to existing drainage channel to the north-western corner of the site and kerb and channel within Poole Way on south-eastern boundary of the site as per the existing SBSMP prepared by JFP Urban Consultants M3306EA1_DA1_SBSMP – Rev A.
- Existing sewerage (wastewater) service to site is proposed via the existing sewer property connection to the existing manhole (3/WB12F6) within the north-eastern corner of the development.
- Water supply connection to existing Townsville City Council water main on Lynwood Avenue & proposed master meter for community title as per concept engineering plans M3306EA1_DA1 CS01 Rev A.
- Bulk earthworks, including retaining walls as per JFP Urban Consultants concept engineering plans M3306EA1_DA1 CE01 dated 17/11/2025.
- Electrical and telecommunication connection in conjunction with Ergon / NBN.

Design will be carried out in accordance with Council's relevant planning scheme policy and Australian Standards. Internal building hydraulics will be undertaken by a specialist Hydraulic Consultant.

2.4 TOPOGRAPHY & SITEWORKS

The site has an average slope of approximately 2% from the southern to northern boundary. Surface conditions are generally grassed.

Earthworks will be profiled to finished surface levels detailed on the JFP Urban engineering concept plans M3306EA1_DA1 CE01. The site will be generally graded towards the North-Western corner of the site towards the existing drainage channel. The site is relatively flat; however, it will require implementation of appropriate stability and erosion and control measures during construction works.

All construction activities including earthworks will be managed under the control of the superintendent.

All earthworks will be contained within the site.

3. SITE ACCESSIBILITY

3.1 ROAD SYSTEM / ACCESS

Two-way vehicle access points will be provided to service the development – one entry only via Lynwood Avenue and one two-way via exit and entry access off Poole Way along with 6.2m wide crossover as per City of Townsville Std dwg SD031 at both the frontages.

Driveways and crossovers (where provided) will be suitable and safe for their intended use and vehicle access will not adversely impact on safety, capacity and operation of the existing road network in Poole Way and Lynwood Avenue.

Refer to Colliers Traffic Report attached in Appendix E of the Town Planning Report for details.

3.2 PEDESTRIAN ACCESSIBILITY

Pedestrian access to the site is supported by formal footpaths along the eastern and only partial pathway on southern road frontage. Pedestrian crossing facilities/kerb ramps are also provided Poole Way and Lynwood Avenue.

Refer to Colliers Traffic Report attached in Appendix E of the Town Planning Report for details.

3.3 CAR PARKING FACILITIES

Sufficient off street car parking will be provided in accordance with Council guidelines. Internal car parking facilities will be provided with reference to AS/NZS 2890.1:2004.

The development provides a total of 40 on-site car parking spaces, including one ambulance bay & one van bay and one PWD space as per the existing Blackburne Jackson Site Plan 5819-DA02. Refer to Appendix A – Architectural Plans of the Town Planning Report for details.

A dedicated ambulance bay and van bay are provided on site for service vehicles and other low-impact commercial deliveries.

The dwelling units will be access by an 8.8m MRV. Smaller vehicles such as food delivery and courier vans can be accommodated within the general parking aisle.

Refuse collection for the development will be undertaken by a 10.506 Front Lift RCV with entry via Lynwood Avenue and exit via Poole Way.

Refer to Colliers Traffic Report attached in Appendix E of the Town Planning Report for details.

4. STORMWATER & WATER QUALITY MANAGEMENT

4.1 STORMWATER MANAGEMENT

Stormwater runoff from the new development will be directed to the existing drainage channel, north-western corner of the site, and kerb and channel within Poole Way on the eastern boundary of the site as per the existing SBSMP M3306EA1_DA1_SBSMP – Revision A.

No on-site detention is required as per the existing SBSMP M3306EA1_DA1_SBSMP – Revision A.

Stormwater drainage design will be carried out in accordance with Council's relevant planning scheme policy and QUDM.

Refer to JFP Urban Consultants Site Based Stormwater Management Plan M3306EA1_DA1_SBSMP – Revision A attached in Appendix B of the town planning report for details.

4.2 WATER QUALITY MANAGEMENT

It is proposed to install 3x Atlan Storm Sacks (or approved equivalent) to the inlets within the carparking area to provide a “best practices” water quality treatment solution as per the SBSMP M3306EA1_DA1_SBSMP – Revision A.

All site works will be managed via sedimentation and erosion control measures during construction

Refer to JFP Urban Consultants Site Based Stormwater Management Plan M3306EA1_DA1_SBSMP – Revision A (water quality advice) attached in Appendix B of the town planning report for details.



5. AUTHORITY SERVICES

5.1 SEWERAGE RETICULATION

The hydraulic consultant will document internal building hydraulics and sewerage (wastewater) connection to the property connection within the existing manhole on north-eastern corner of the development.

The sewerage (wastewater) system will be designed in accordance with Townsville City Council plumbing code requirements.

5.2 WATER RETICULATION

The hydraulic consultant will document internal building hydraulics and water supply connection to the proposed Townsville City Council meter assembly in Lynwood Avenue.

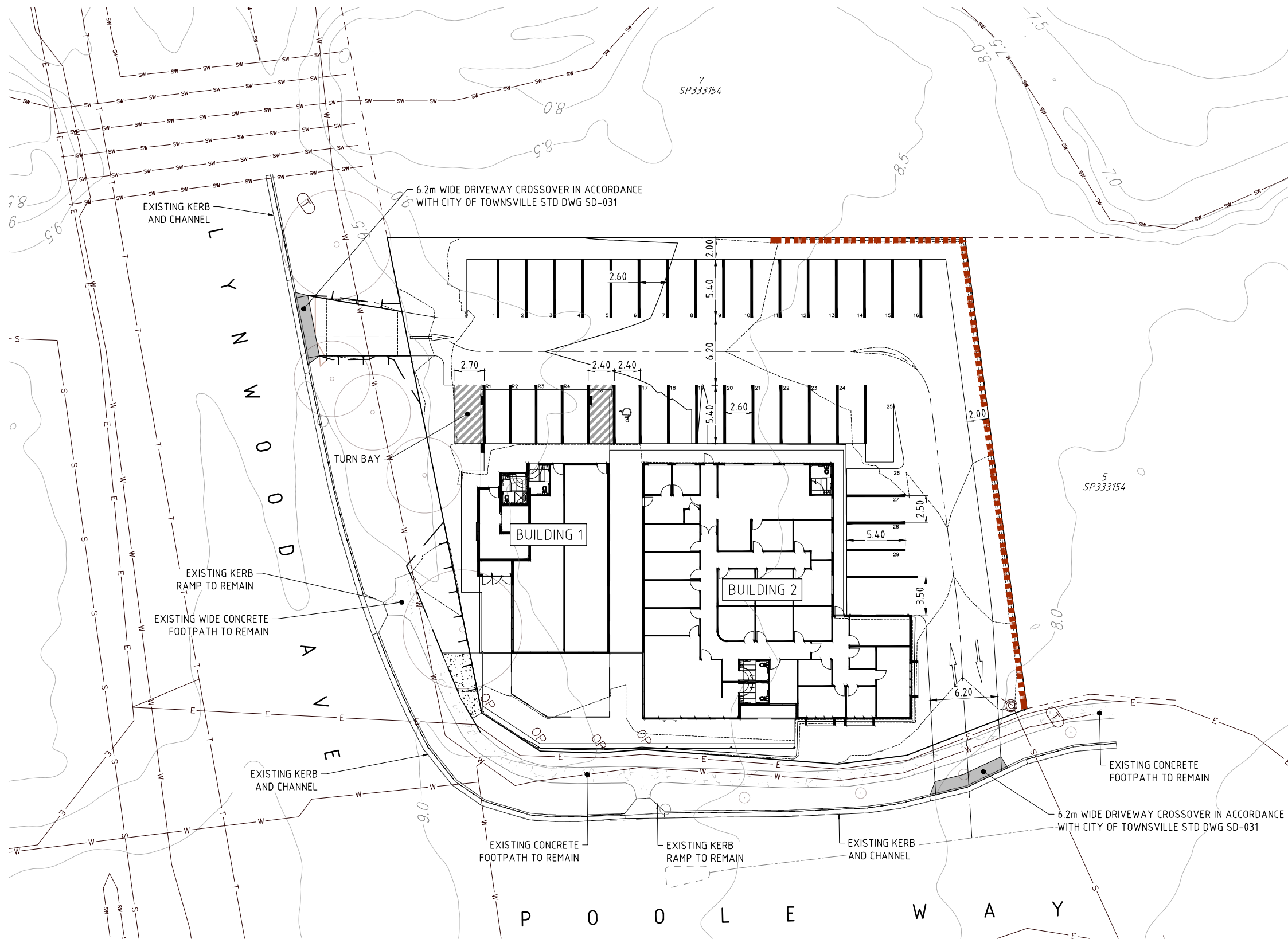
5.3 ELECTRICITY & TELECOMMUNICATIONS

It is anticipated that the connection of electricity and NBN can be made into the existing Ergon and NBN distribution systems. This will be confirmed by Electrical Consultant.



6. APPENDIX A

JFP URBAN CONSULTANTS ENGINEERING CONCEPT PLANS



- LEGEND:**
- EXISTING CONTOURS — 32 —
 - EXISTING KERB & CHANNEL =
 - EXISTING EDGE OF BITUMEN - - -
 - PROPOSED KERB & CHANNEL =
 - PROPOSED RETAINING WALL - - - - -
 - PRELIMINARY LANDSCAPE RETAINING WALL - - - - -

- TREE LEGEND**
- TREES PROPOSED TO BE RETAINED AND PROTECTED. ○
 - TREES PROPOSED TO BE RETAINED AND REQUIRE ARBORIST (AQF5) DIRECTION & SUPERVISION FOR TPZ WORKS. ⊙

TREE PROTECTION ZONE (TPZ)
TPZ to be protected in accordance with Protection of trees on Development Sites (AS4970-2009) guidelines & any approval conditions.

JFOP

BRISBANE - SUNSHINE COAST - CENTRAL QLD

BRISBANE
JFP House - 76 Ernest Street,
South Brisbane Qld 4101
P 07 3012 0100 W www.jfp.com.au

URBAN CONSULTANTS

PLANNERS

URBAN DESIGNERS

SURVEYORS

ENGINEERS

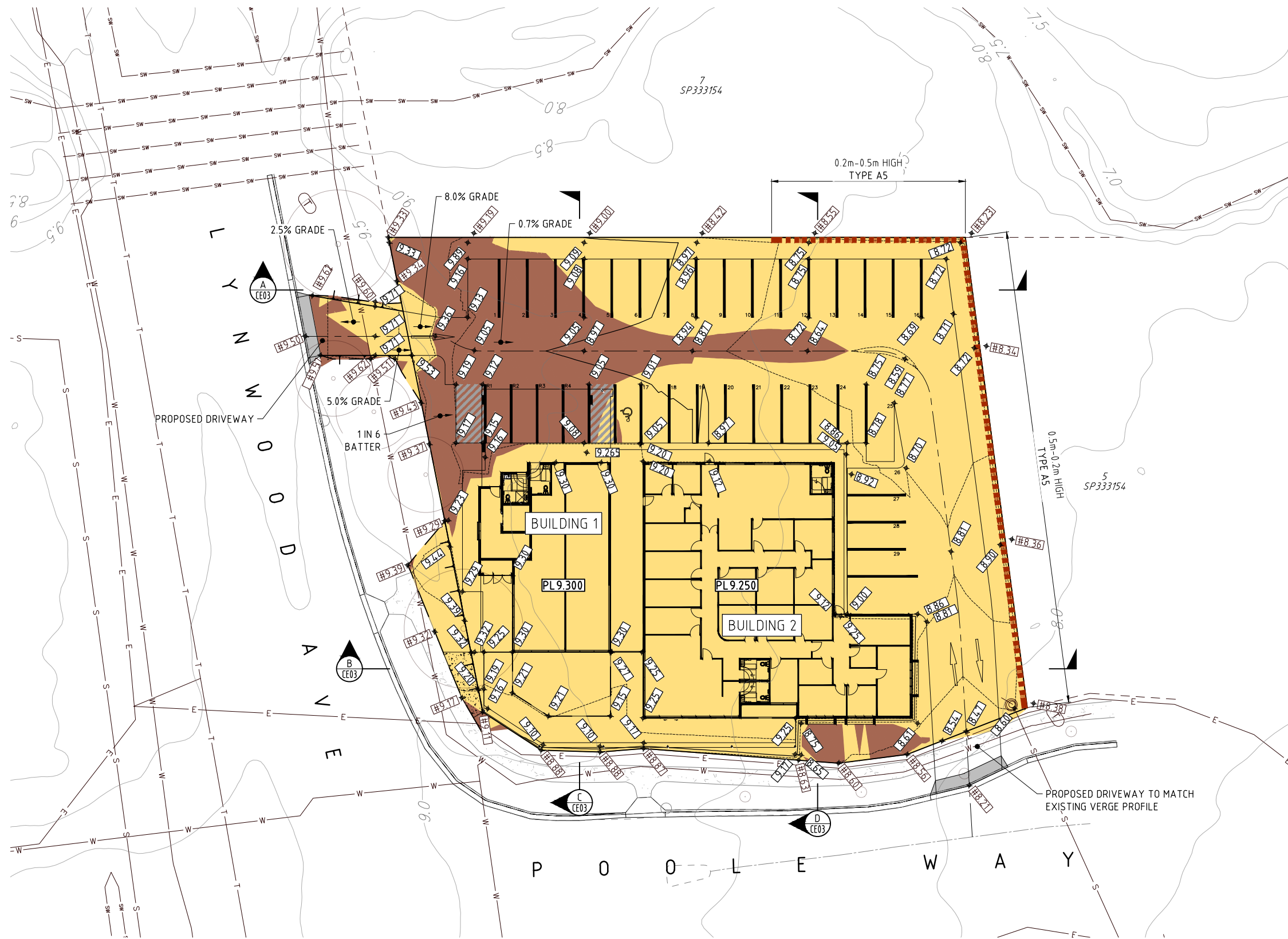
LANDSCAPE ARCHITECTS

ENGINEERING CONCEPT - FUNCTIONAL TRAFFIC LAYOUT

16 POOLE WAY BUSHLAND BEACH
BHAVIN GANDHI GROUP

JOB NO:	PLAN:	ISSUE:
M3306EA1_DA1	CT01	A
SCALE:	1:200 @ A1	
DATE:	07/11/2025	
DRAFTED BY:	CDV	
FILE NAME:	M3306EA1_DA1.DWG	

9/12/2025 11:58:00 AM D:\DESIGN\WORKING DRAWINGS\M3306EA1_DA1



LEGEND:

EXISTING CONTOURS	— 32 —
FINISHED CONTOURS	— 32 —
PRELIMINARY PAD LEVEL (PL)	PL40.65
PRELIMINARY FILLING	
PRELIMINARY EXCAVATION	
PRELIMINARY RETAINING WALL	

- NOTES:**
- BATTERS BETWEEN ALLOTMENTS TO BE 1 IN 2 MAXIMUM.
 - PAD AND EARTHWORKS LEVELS ARE PRELIMINARY ONLY AND ARE SUBJECT TO DETAILED ENGINEERING DESIGN.
 - RETAINING WALL HEIGHTS ARE INDICATIVE ONLY AND ARE SUBJECT TO DETAIL ENGINEERING DESIGN.
 - PLEASE REFER TO THE TREE RETENTION PLAN (TRP) FOR DETAILS PERTAINING TREE RETENTION &/OR REMOVAL

- TREE LEGEND**
- TREES PROPOSED TO BE RETAINED AND PROTECTED.
 - TREES PROPOSED TO BE RETAINED AND REQUIRE ARBORIST (AQF5) DIRECTION & SUPERVISION FOR TPZ WORKS.

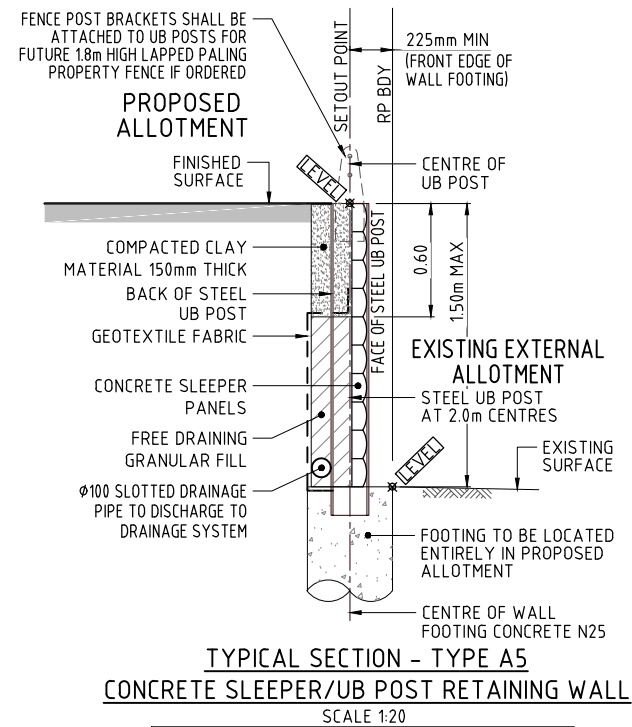
TREE PROTECTION ZONE (TPZ)
 TPZ to be protected in accordance with Protection of Trees on Development Sites (AS4970-2009) guidelines & any approval conditions.

 JFOP URBAN CONSULTANTS	BRISBANE - SUNSHINE COAST - CENTRAL QLD	PLANNERS
	BRISBANE	URBAN DESIGNERS
	JFP House - 76 Ernest Street, South Brisbane Qld 4101	SURVEYORS
	P 07 3012 0100 W www.jfp.com.au	ENGINEERS
	JFP URBAN CONSULTANTS PTY. LTD. A.C.N. 050 414 045	LANDSCAPE ARCHITECTS

ENGINEERING CONCEPT - EARTHWORKS LAYOUT PLAN

16 POOLE WAY BUSHLAND BEACH
 BHAVIN GANDHI GROUP

JOB NO:	PLAN:	ISSUE:
M3306EA1_DA1 CE01	A	
SCALE:	1:200 @ A1	
DATE:	07/11/2025	
DRAFTED BY:	CDV	
FILE NAME:	M3306EA1_DA1.DWG	



NOTE: RETAINING WALL DESIGN (INCLUDING FENCE POST BRACKETS AND FITTINGS) AND CONSTRUCTION CERTIFICATION TO INCORPORATE LOADING FROM FUTURE 1.8m HIGH LAPPED PALING PROPERTY FENCE



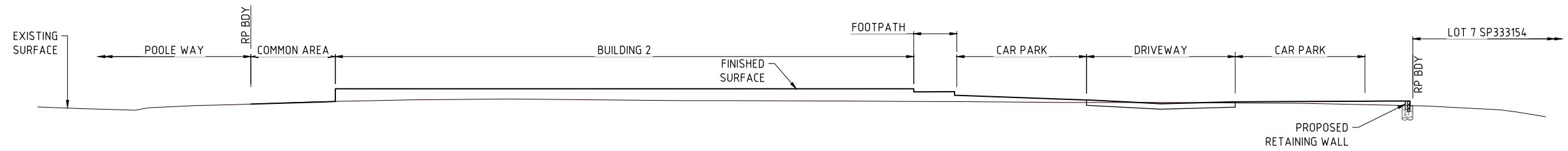
BRISBANE - SUNSHINE COAST - CENTRAL QLD
 BRISBANE
 JFP House - 76 Ernest Street,
 South Brisbane Qld 4101
 P 07 3012 0100 W www.jfp.com.au

PLANNERS
 URBAN DESIGNERS
 SURVEYORS
 ENGINEERS
 LANDSCAPE ARCHITECTS

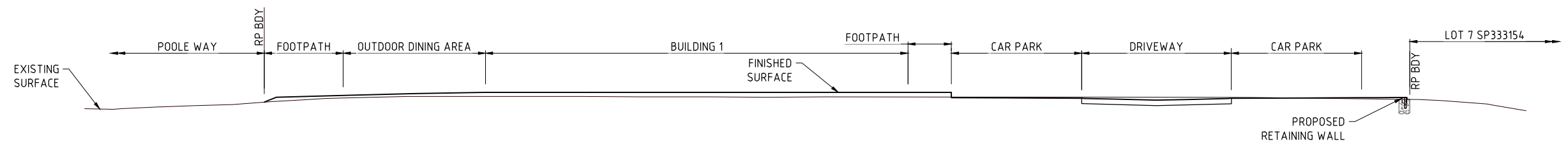
ENGINEERING CONCEPT - EARTHWORKS DETAILS PLAN

16 POOLE WAY BUSHLAND BEACH
 BHAVIN GANDHI GROUP

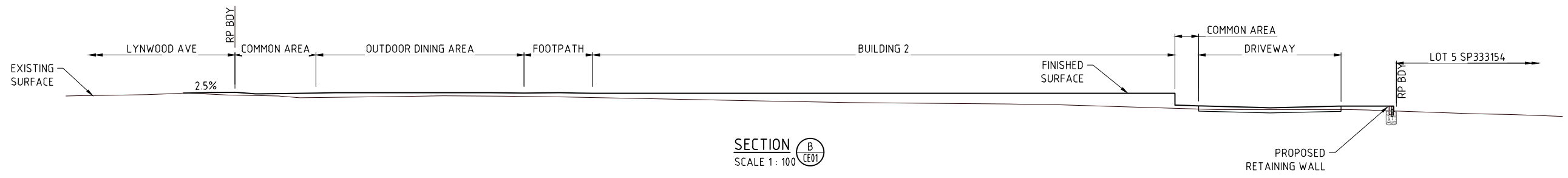
JOB NO:	PLAN:	ISSUE:
M3306EA1_DA1	CE02	A
SCALE:	1:20 @ A1	
DATE:	07/11/2025	
DRAFTED BY:	CDV	
FILE NAME:	M3306EA1_DA1.DWG	



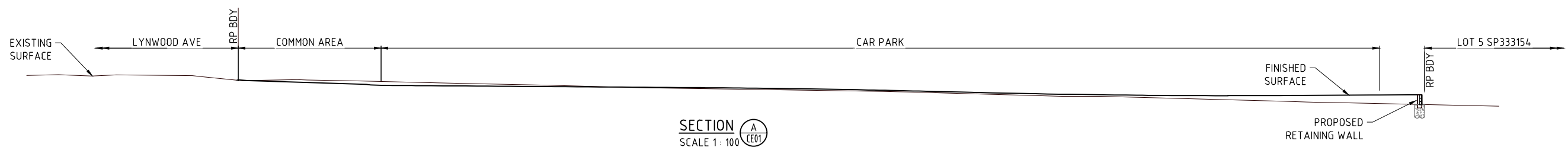
SECTION D
SCALE 1:100



SECTION C
SCALE 1:100



SECTION B
SCALE 1:100



SECTION A
SCALE 1:100



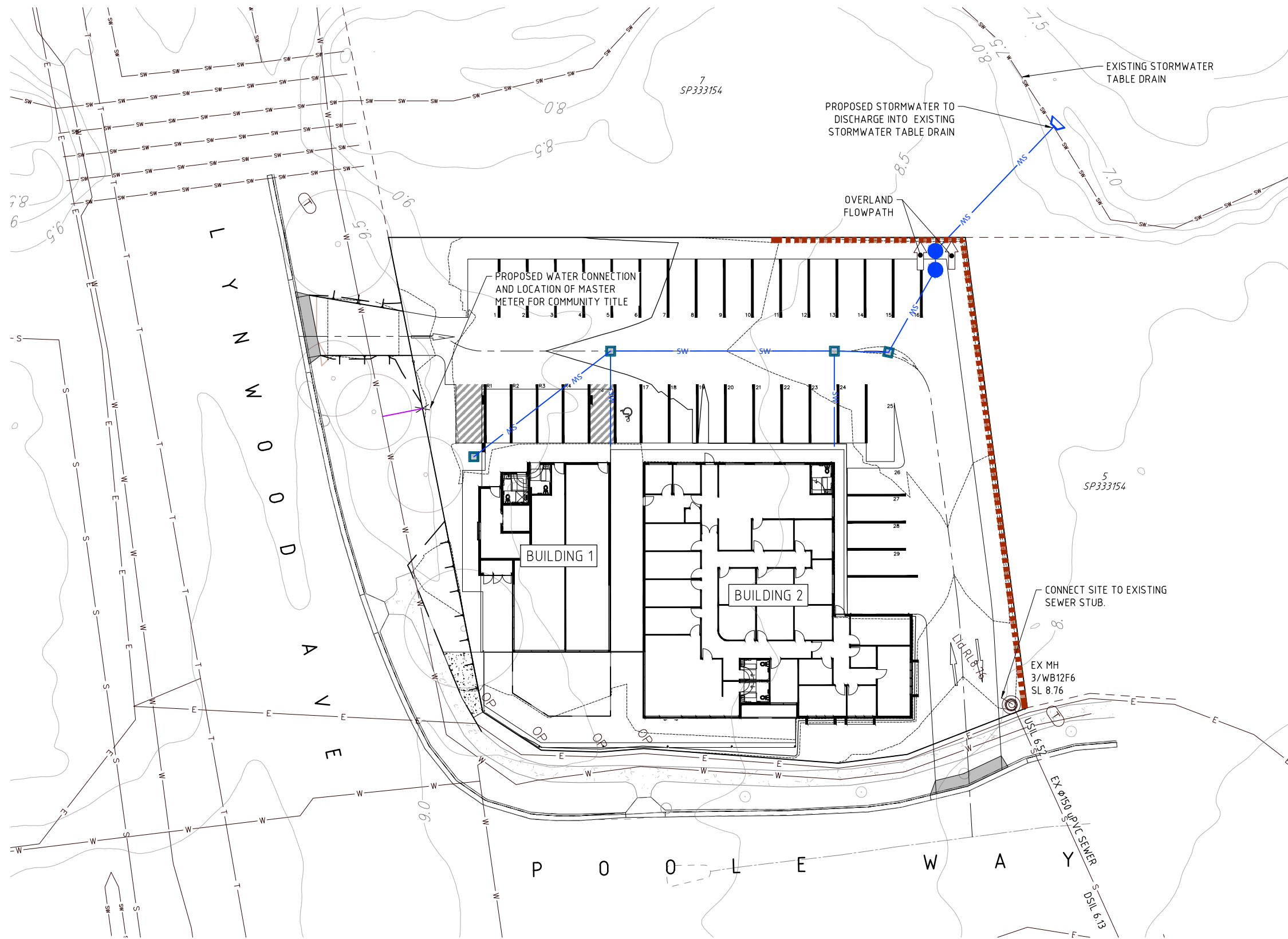
BRISBANE - SUNSHINE COAST - CENTRAL QLD
 BRISBANE
 JFP House - 76 Ernest Street,
 South Brisbane Qld 4101
 P 07 3012 0100 W www.jfp.com.au

PLANNERS
 URBAN DESIGNERS
 SURVEYORS
 ENGINEERS
 LANDSCAPE ARCHITECTS

ENGINEERING CONCEPT - EARTHWORKS SECTIONS

16 POOLE WAY BUSHLAND BEACH
 BHAVIN GANDHI GROUP

JOB NO:	PLAN:	ISSUE:
M3306EA1_DA1	CE03	A
SCALE:	1:100 @ A1	
DATE:	17/11/2025	
DRAFTED BY:	WN	
FILE NAME:	M3306EA1_DA1.DWG	



PRELIMINARY SERVICES LEGEND:

- FINISHED CONTOURS — 32 —
- EXISTING WATER — W —
- EXISTING SEWERAGE — S —
- EXISTING DRAINAGE — SW —
- EXISTING ROOFWATER — RW —
- EXISTING COMMUNICATIONS — T —
- EXISTING ELECTRICAL (U/GROUND) — E —
- PRELIMINARY DRAINAGE — SW —
- PRELIMINARY ROOFWATER — RW —
- PRELIMINARY SEWERAGE — S —
- PRELIMINARY WATER — W —
- PRELIMINARY SLEEPER WALL — [Dashed Line] —
- PRELIMINARY LANDSCAPE RETAINING WALL — [Dashed Line] —
- PROPOSED EASEMENT — [Hatched Area] —
- Q100 FLOOD LINE — [Thick Line] —
- ROOFWATER SWALE — [Green Line] —

TREE LEGEND

- TREES PROPOSED TO BE RETAINED AND PROTECTED. ○
- TREES PROPOSED TO BE RETAINED AND REQUIRE ARBORIST (AQFS) DIRECTION & SUPERVISION FOR TPZ WORKS. ⊗

TREE PROTECTION ZONE (TPZ)
TPZ to be protected in accordance with Protection of trees on Development Sites (AS4970-2009) guidelines & any approval conditions.

	<p>BRISBANE - SUNSHINE COAST - CENTRAL QLD</p> <p>BRISBANE JFP House - 76 Ernest Street, South Brisbane Qld 4101 P 07 3012 0100 W www.jfp.com.au</p>	<p>PLANNERS URBAN DESIGNERS SURVEYORS ENGINEERS LANDSCAPE ARCHITECTS</p>	<p>ENGINEERING CONCEPT - SERVICES LAYOUT PLAN</p> <p>16 POOLE WAY BUSHLAND BEACH BHAVIN GANDHI GROUP</p>
<p>URBAN CONSULTANTS JFP URBAN CONSULTANTS PTY. LTD. A.C.N. 050 414 045 <small>© COPYRIGHT © 2011 JFP URBAN CONSULTANTS PTY LTD. THIS DOCUMENT MAY NOT BE COPIED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS IN PART OR IN WHOLE WITHOUT THE WRITTEN CONSENT OF JFP URBAN CONSULTANTS PTY LTD.</small></p>			

JOB NO:	PLAN:	ISSUE:
M3306EA1_DA1	CS01	A
SCALE:	1:200 @ A1	
DATE:	07/11/2025	
DRAFTED BY:	CDV	
FILE NAME:	M3306EA1_DA1.DWG	

9/12/2025 11:03:00 AM D:\DESIGN\WORKING DRAWINGS\M3306EA1_DA1



7. APPENDIX B

Townsville City Council Existing Services - DBYD SEARCH

[Review responses online](#) ↗



Received 5 of 5 responses
All responses received

16 Poole Way, Bushland Beach QLD 4818

Job dates
 05/03/2026 → 05/03/2026

These plans expire on
 11 Jan 2026

Lodged by
 Muhammad Khan

Authority	Status	Page
✉ BYDA Confirmation		2
🏢 Ergon QLD	Received	4
🏢 NBN Co Qld	Received	44
🏢 Optus and or Ucomm Qld	Received	55
🏢 Telstra QLD Regional	Received	69
🏢 Townsville City Council	Received	78



Zero damage - Zero harm - Zero disruption

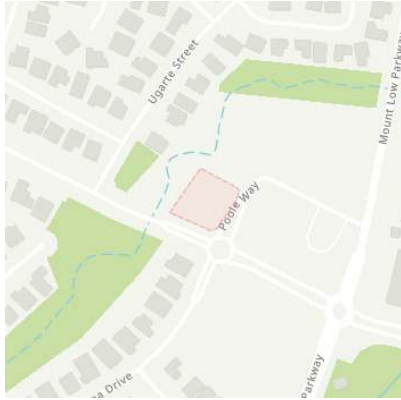
Contact Details

Contact Muhammad Khan	Contact number 0414 290 883	Company -	Enquirer ID 3239462
Email mkhan@jfp.com.au		Address 29 Sandi Street Oxley QLD 4075	

Job Site and Enquiry Details

WARNING: The map below only displays the location of the proposed job site and does not display any asset owners' pipe or cables. The area highlighted has been used only to identify the participating asset owners, who will send information to you directly.

Enquiry date 15/12/2025	Start date 05/03/2026	End date 05/03/2026	On behalf of Private	Job purpose Design	Locations Both Road, Nature Strip, Footpath	Onsite activities Planning & Design
-----------------------------------	---------------------------------	-------------------------------	--------------------------------	------------------------------	--	---



Check that the location of the job site is correct. If not, you must submit a new enquiry.

If the scope of works change or plan validity dates expire, you must submit a new enquiry.

Do NOT dig without plans. Safe excavation is your responsibility. If you don't understand the plans or how to proceed safely, please contact the relevant asset owners.

User Reference sub	Address 16 Poole Way Bushland Beach QLD 4818	Notes/description -
------------------------------	---	-------------------------------

Your Responsibility and Duty of Care

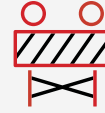
- **Lodging an enquiry does not authorise project commencement.** Before starting work, you must obtain all necessary information from all affected asset owners.
- If you don't receive plans within 2 business days, contact the asset owner & quote their sequence number.
- Always follow the 5Ps of Safe Excavation (page 2), and locate assets before commencing work.
- Ensure you comply with State legislative requirements for Duty of Care and safe digging.
- If you damage an underground asset, you MUST advise the asset owner immediately.
- By using the BYDA service, you agree to the [Privacy Policy](#) and [Term of Use](#).
- For more information on safe digging practices, visit www.byda.com.au

Asset Owner Details

Below is a list of asset owners with underground infrastructure in and around your job site. It is your responsibility to identify the presence of these assets. Plans issued by Members are indicative only unless specified otherwise. Note: not all asset owners are registered with BYDA. You must contact asset owners not listed here directly.

Referral ID (Seq. no)	Authority Name	Phone	Status
265687051	Ergon QLD	13 10 46	NOTIFIED
265687048	NBN Co Qld	1800 687 626	NOTIFIED
265687049	Optus and or Uecomm Qld	1800 505 777	NOTIFIED
265687052	Telstra QLD Regional	1800 653 935	NOTIFIED
265687050	Townsville City Council	1300 878 001	NOTIFIED

END OF UTILITIES LIST



Plan

Plan your job. Use the BYDA service at least one day before your job is due to begin, and ensure you have the correct plans and information required to carry out a safe project.

Prepare

Prepare by communicating with asset owners if you need assistance. Look for clues onsite. Engage a skilled Locator.

Pothole

Potholing is physically sighting the asset by hand digging or hydro vacuum extraction.

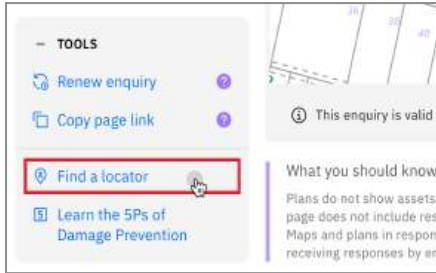
Protect

Protecting and supporting the exposed infrastructure is the responsibility of the excavator. Always erect safety barriers in areas of risk and enforce exclusion zones.

Proceed

Only proceed with your excavation work after planning, preparing, potholing (unless prohibited), and having protective measures in place.

Engage a skilled Locator



When you lodge an enquiry you will see skilled Locators to contact

Visit the Certified Locator website directly and search for a locator near you

certloc.com.au/locators

Get FREE Quotes for Contractors & Equipment Fast



Use iseekplant's FREE marketplace to get quotes for the equipment or services you need on your project. Compare quotes from trusted local contractors and get your project done on time and in budget.

1. Fill out your job details in our FREE quick quote form.
2. We send the request to trusted local contractors.
3. The local contractors will contact you directly with quotes

GET QUOTE

Use iseekplant to find trusted contractors near you today, visit: blog.iseekplant.com.au/byda-isp-get-quotes

Book a FREE BYDA Session



BYDA offers free training sessions to suit you and your organisation's needs covering safe work practices when working near essential infrastructure assets. The free sessions are offered in two different formats - online and face-to-face.

To book a session, visit: byda.com.au/contact/education-awareness-enquiry-form

BOOK NOW

Referral **Member Phone**
265687051 13 10 46

Responses from this member

Response received Mon 15 Dec 2025 8.45am

File name	Page
Response Body	5
265687051 - Ergon Energy Plan.pdf	8
Ergon Energy BYDA Terms and Conditions.pdf	11
Working Near Overhead and Underground Electric Lines.pdf	16

Assets found

Before You Dig Australia (BYDA) Request

Please DO NOT SEND A REPLY to this email as it has been automatically generated and replies are not monitored.

The attached Plan details ERGON ENERGY NETWORK Assets in relation to Your nominated search area.

Ensure You read and understand the important notes outlined below.

You:	BYDA Enquiry No:
Muhammad Khan	265687051
Company:	Date of Response:
Not Supplied	15 Dec 2025
Search Location:	Period of Plan Validity:
16 Poole Way Bushland Beach, QLD 4818	4 Weeks
External Comments (if any):	

WARNING: When working in the vicinity of ERGON ENERGY NETWORK's Assets You have a legal *Duty of Care* that must be observed.

It is important that You note:

1. Immediately report life threatening emergencies to Emergency Services on **000** or to ERGON ENERGY NETWORK on **13 16 70**.
2. Please read and understand all the information and disclaimers provided - including the Terms and Conditions on the attached pages.
3. We have only searched the area which has been nominated in the request. If this nominated area is not what You require, please resubmit another enquiry with BYDA.
4. Plans provided by ERGON ENERGY NETWORK are only an indication of the presence of underground Assets within the nominated area. Locations provided are approximate and the plans are not suitable for scaling purposes, as exact ground cover and alignments cannot be provided. You must confirm the exact location of Assets by use of an electronic cable locator followed by careful, non-mechanical excavation (i.e. potholing).
5. Plans provided by ERGON ENERGY NETWORK do not encompass ERGON ENERGY NETWORK's overhead Assets.
6. ERGON ENERGY NETWORK, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and details supplied pursuant to the BYDA Request and You agree to indemnify ERGON ENERGY NETWORK against any claim or demand for any such loss or damage to You, Your servants or Your agents.

7. You are responsible for any damage to Assets caused by works pursuant to or in any way connected with this BYDA Request.
8. In addition to underground cables marked on attached plan, there could be underground earth conductors, underground substation earth conductors, Multiple Earthed Networks(MEN) conductors, Single Wire Earth Return(SWER) Substation Earth Conductors, Air Break Switch (ABS) Earth Mats or Consumer Mains in the vicinity or private underground cables (inc. consumers' mains that may run from ERGON ENERGY NETWORK mains onto private property) in the vicinity of the nominated work area(s) that are not marked on the plans.
9. Independent underground cable locators can be found via the [Certified Locator website](#) with LV Cable (up to 1kV), HV Cable (1kV-<33kV) & HV cable (33kV and over) displayed.
10. The ERGON ENERGY NETWORK Before You Dig Australia (BYDA) information map(s) provide the vicinity of underground cable and will not be adequate for conveyancing purposes. A Request for Search (Property Search) can be arranged through ERGON ENERGY NETWORK.
11. The attached plans are only valid for a period of four weeks from receipt. If excavation does not commence within four weeks, a new plan should be obtained.
12. The ERGON ENERGY NETWORK BYDA map (named maps.pdf) may contain shaded area(s), indicating the location of planned work(s). Should You find planned works that You believe may affect Your planned work(s), please contact the ERGON ENERGY NETWORK BYDA team on the details listed below.
13. ERGON ENERGY NETWORK may contact You to discuss Your proposed excavation in the vicinity of feeders identified on the attached plan(s).
14. Do not access any Assets, for example conduits, cables, pits or cabinets.
15. Your work will need to comply with:
 - [Working near overhead and underground electric lines - Electrical safety code of practice 2020](#)
 - [Managing Electrical Risk in Workplace Electrical Safety Code of Practice \(2013\)](#)
 - [Excavation Work Code of Practice \(2021\)](#)

NOTE: Where Your proposed work location contains ERGON ENERGY NETWORK Underground cables please access the [ERGON ENERGY NETWORK BYDA Website](#) for more information.

General enquiries (7:00am - 5:30pm Mon to Fri) **13 74 66**
Life threatening emergencies only triple zero (000) or **13 16 70**

To re-submit or change the nominated search area please visit [BYDA.com.au](#)

E: byda@energyq.com.au

ABN: 40 078 849 055



Disclaimer: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither ERGON ENERGY NETWORK nor PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

If you are unable to launch any of the files for viewing and printing, you may need to download and install free viewing and printing software such as [Adobe Acrobat Reader \(for PDF files\)](#)



BYDA

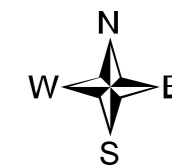
Sequence: 265687051
Date: 15/12/2025
Scale: 1:1025
Tile No: **OVERVIEW**

CAUTION - HIGH VOLTAGE

LEGEND

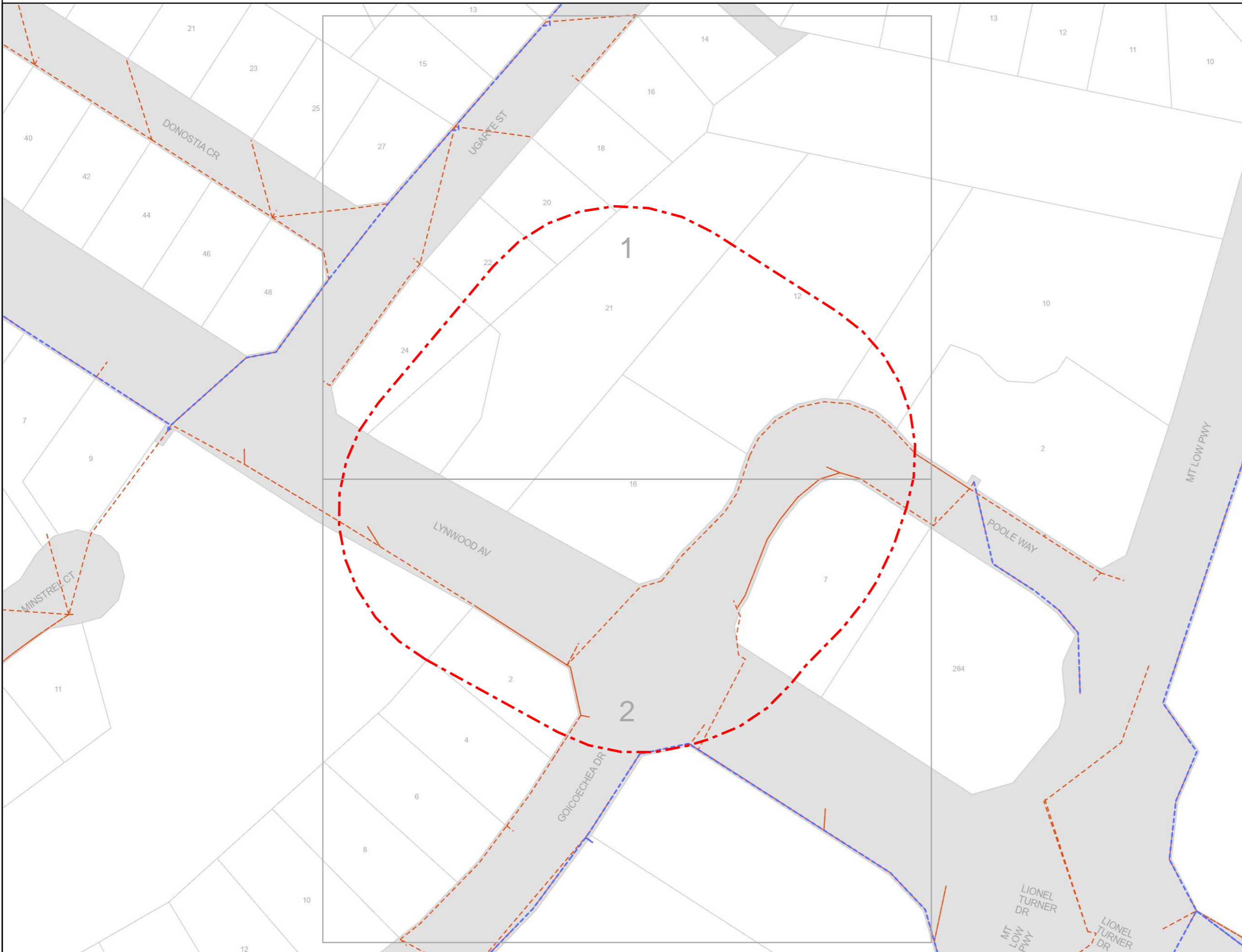
- Substation
- Cable Marker
- Pit
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pit Boundary
- Planned Work Area

AS5488 Category "D" Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Ergon Energy Network nor Pelican Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

All underground cables shall be treated as being energised. Where a cable is located that is not represented on the ERGON ENERGY NETWORK BYDA map, then ERGON ENERGY NETWORK shall be contacted immediately.





BYDA

Sequence: 265687051
Date: 15/12/2025

Scale: 1:500
Tile No: **Tile No: 1**

CAUTION - HIGH VOLTAGE

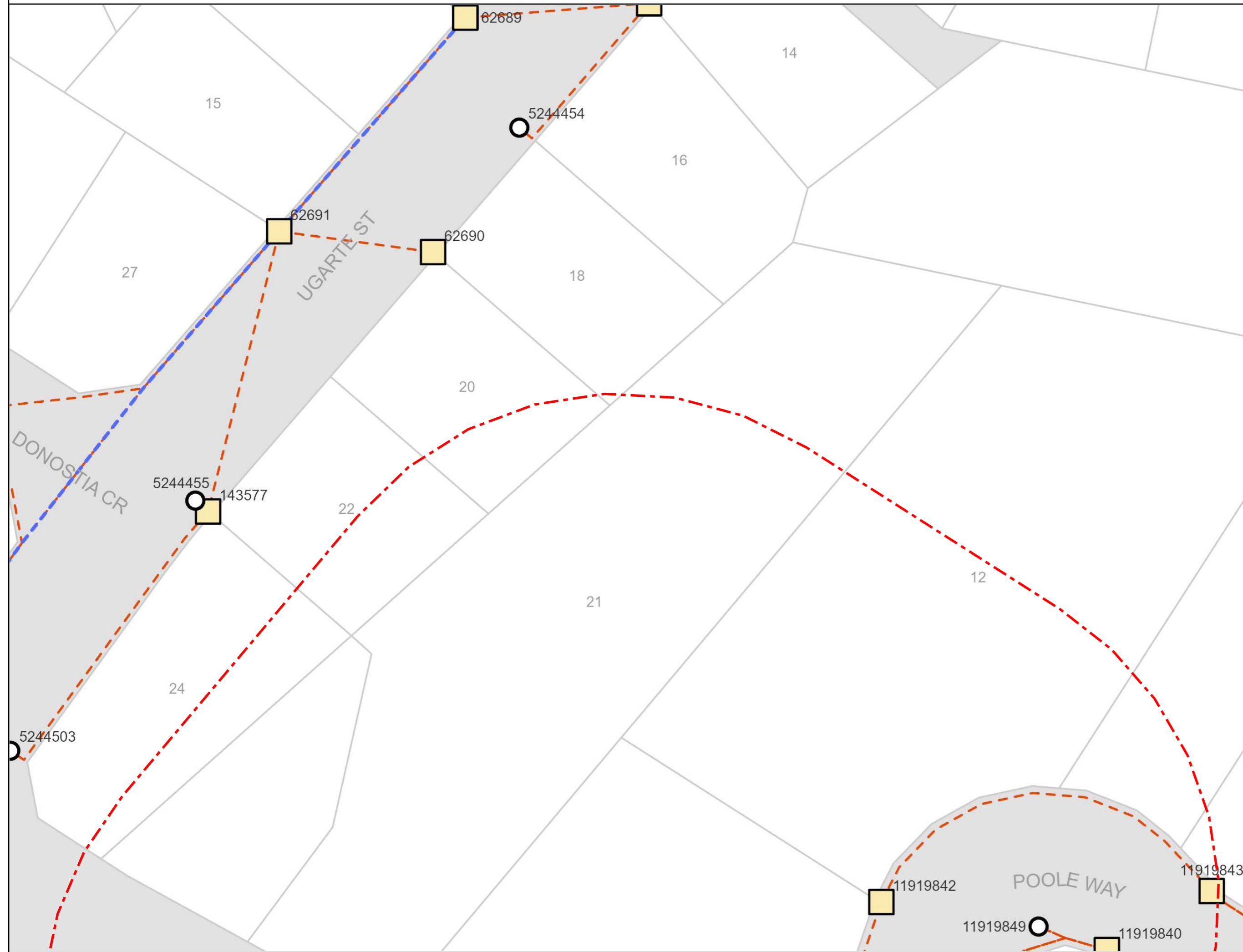
LEGEND

- Substation
- Cable Marker
- Pit
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pit Boundary
- Planned Work Area

AS5488 Category "D" Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Ergon Energy Network nor Pelican Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.





BYDA

Sequence: 265687051
Date: 15/12/2025

Scale: 1:500
Tile No: **Tile No: 2**

CAUTION - HIGH VOLTAGE

LEGEND

- Substation
- Cable Marker
- Pit
- Pole
- Pillar
- LV Cable (up to 1kV)
- HV Cable (1kV - <33kV)
- HV Cable (33kV and over)
- Pit Boundary
- Planned Work Area

AS5488 Category "D" Plan



DISCLAIMER: While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither Ergon Energy Network nor Pelican Corp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.



Responsibilities – (When Working in the Vicinity of Ergon Energy Network Asset)

Extreme care must be taken during non-mechanical or mechanical excavation as damage to Ergon Energy Network underground Asset can lead to injury or death of workers or members of the public. Assets includes underground cables, conduits and other associated underground Asset used for controlling, generating, supplying, transforming or transmitting electricity.

A Person Conducting a Business or Undertaking (PCBU) must ensure the person's business or undertaking is conducted in a way that is electrically safe. This includes:

- a) ensuring that all Assets used in the conduct of the person's business or undertaking is electrically safe;
- b) if the person's business or undertaking includes the performance of electrical work, ensuring the electrical safety of all persons and property likely to be affected by the electrical work; and
- c) if the person's business or undertaking includes the performance of work, whether or not electrical work, involving contact with, or being near to, exposed parts, ensuring persons performing the work are electrically safe.

In addition, a PCBU at a workplace must ensure, so far as is reasonably practicable, that no person, Asset or thing at the workplace comes within an unsafe distance of an underground electric line.

Workers and other persons must also take reasonable care for their own and other person's electrical safety. This includes complying, so far as is reasonably able, with any reasonable instructions given by Ergon Energy Network to ensure compliance with the [Electrical Safety Act 2002](#)

General enquiries (7:00am - 5:30pm Mon to Fri) 13 74 66
Life threatening emergencies 000 or [13 16 70](tel:131670)

E: safetyadvice@ergon.com.au

E: byda@energyq.com.au ABN: 40 078 849 055

To re-submit or change the nominated search area please visit BYDA.com.au



The following matters must be considered when working near Ergon Energy Network Asset:

1. The PCBU must ensure, so far as is reasonably practicable, that no person, Asset or thing at the workplace comes within an unsafe distance of an underground electric line (see section 68 of the [Electrical Safety Regulation 2013](#)).
2. It is the responsibility of the architect, consulting engineer, developer, and head contractor in the project planning stages to design for minimal impact and protection of Ergon Energy Network Assets.
3. It is the constructor's responsibility to:
 - a) Anticipate and request plans of Ergon Energy Network Assets for a location at a reasonable time before construction begins.
 - b) Visually locate Ergon Energy Network Assets by hand or vacuum excavation where construction activities may damage or interfere with Ergon Energy Network Assets.
 - c) To notify Ergon Energy Network if the information provided is found to be not accurate or Assets are found on site that are not recorded on the Ergon Energy Network BYDA plans.
 - d) Read and understand all the information and disclaimers provided.

Note: A constructor may include but not limited to a PCBU, Designer, Project Manager, Installer, Contractor, Electrician, Builder, Engineer or a Civil Contractor

4. Comply with applicable work health and safety and electrical safety codes of practice including but not limited to:
 - a) Working near Assets – [Electrical Safety Codes of Practice 2020](#)
 - b) Managing electrical risk in the workplace – [Managing Electrical Risks in the workplace Code of Practice 2021](#)
 - c) [Excavation work – Code of practice 2021](#)

IMPORTANT NOTES:

- As the alignment and boundaries of roadways with other properties (and roads within roadways) frequently change, the alignments and boundaries contained within Ergon Energy Network plans and maps will frequently differ from present alignments and boundaries “on the ground”. Accordingly, in every case where it appears that alignments and boundaries have shifted, or new roadways have been added, the constructor should obtain confirmation of the actual position of Ergon Energy Network Assets under the roadways. In no case should the constructor rely on statements of third parties in relation to the position of Ergon Energy Network Assets. It is the applicant's responsibility to accurately locate all services as part of the design and/or prior to excavation.
- Ergon Energy Network does not provide information on private underground installations, including consumers' mains that may run from Ergon Energy Network mains onto private property. Assets located on private property are the responsibility of the owner for identification and location.
- Ergon Energy Network plans are circuit diagrams or pipe indication diagrams only and indicate the presence of Asset in the general vicinity of the geographical area shown. Exact ground cover and alignments cannot be given with any certainty as such levels can change over time.
- All underground conduits are presumed to contain asbestos. Refer to:
 - [Electrical safety codes of practice 2020](#)
 - [Model Code of Practice: How to manage and control asbestos in the workplace | Safe Work Australia](#)
 - [How to manage and control asbestos in the workplace code of practice 2021 \(Workplace Health and Safety Queensland \(WHSQ\)\)](#)
 - [How to manage and control asbestos Code of Practice 2021 \(WHSQ\)](#)
- Plans provided by Ergon Energy Network are not guaranteed to show the presence of above ground Assets.
- In addition to underground cables marked on attached plan, there could be underground earth conductors, underground substation earth conductors, Multiple Earthed Neutral(MEN) conductors, Single Wire Earth Return(SWER), Substation Earth Conductors, ABS Earth Mats or Consumer Mains in the vicinity or private underground cables (inc. consumers' mains that may run from ERGON ENERGY NETWORK mains onto private property) in the vicinity of the nominated work area(s) that are not marked on the plans.
- Being aware of Your obligations including but not limited to [s 304] Excavation work— underground essential services information under the [Work Health and Safety Regulation 2011](#), Chapter 6 Construction work, Part 6.3 Duties of person conducting business or undertaking. This includes but is not limited to taking reasonable steps to obtain the current information and providing this information to persons engaged to carry out the excavation work. For further information please refer to: - <http://www.legislation.qld.gov.au/LEGISLTN/SLS/2011/11SL240.pdf>
- Ergon Energy Network plans are designed to be printed in colour and as an A3 Landscape orientation

General enquiries (7:00am - 5:30pm Mon to Fri) 13 74 66
Life threatening emergencies 000 or [13 16 70](tel:131670)

E: safetyadvice@ergon.com.au

E: byda@energyq.com.au ABN: 40 078 849 055

To re-submit or change the nominated search area please visit BYDA.com.au



Conditions – (When Working in the Vicinity of Ergon Energy Network Asset)

Records:

The first step before any excavation commences is to obtain records of Ergon Energy Network Assets in the vicinity of the work. For new work, records should be obtained during the planning and design stage. The records provided by Ergon Energy Network must be made available to all construction groups on site. Where Asset information is transferred to plans for the proposed work, care must be exercised to ensure that important detail is not lost in the process.

Plans and or details provided by Ergon Energy Network are current for four weeks from the date of dispatch and should be disposed of by shredding or any other secure disposal method after use. A new BYDA enquiry must be made for proposed works/activities to be undertaken outside of the four-week period.

Ergon Energy Network retains copyright of all plans and details provided in connection with Your request.

Ergon Energy Network plans or other details are provided for the use of the applicant, its servants, or agents, and shall not be used for any unauthorised purpose.

On receipt of BYDA plans and before commencing excavation work or similar activities near Ergon Energy Network's Assets, check to see that it relates to the area You have requested and carefully locate this Asset first to avoid damage. If You are unclear about any information contained in the plan, You must contact Ergon Energy Network on the General Enquiries number listed below for further advice.

Ergon Energy Network, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and or details so supplied to the applicant, its servants and agents, and the applicant agrees to indemnify Ergon Energy Network against any claim or demand for any such loss or damage.

The constructor is responsible for all Asset damages when works commence prior to obtaining Ergon Energy Network plans, or failure to follow agreed instructions, or failure to demonstrate all reasonable measures were taken to prevent the damage once plans were received from Ergon Energy Network.

Ergon Energy Network reserves all rights to recover compensation for loss or damage caused by interference or damage, including consequential loss and damages to its cable network, or other property.

NOTE: Where Your proposed work location contains ERGON ENERGY NETWORK Underground cables please access the [ERGON ENERGY NETWORK BYDA Website](#) for more information.

Location of Assets:

Examining the records is not sufficient, as reference points may change from the time of installation. Records must also be physically proven when working in close proximity to them. The exact location of Asset likely to be affected shall be confirmed by use of an electronic cable and pipe locator followed by **careful hand or vacuum excavation to the level of cable protection cover strips or conduits**. When conducting locations please be aware that **no** unauthorised access is permitted to Ergon Energy Network Assets– including Pits, Low Voltage Disconnection Boxes, Low Voltage Pillars or High Voltage Link Boxes.

Hand or vacuum excavation must be used in advance of excavators. In any case, where any doubt exists with respect to interpretation of cable records, You must contact Ergon Energy Network on the General Enquires number listed below for further advice.

If the constructor is unable to locate Ergon Energy Network underground Assets within 5 metres of nominal plan locations, they must contact the Ergon Energy Network General Enquires number listed below for further advice.

If unknown cables or conduits (i.e. not shown on issued BYDA plans) are located during excavation:

1. Call the ELECTRICITY EMERGENCIES number listed below
2. Treat cables as if alive, post a person to keep all others clear of the excavation until Ergon Energy Network crew attend to make safe.
3. All work in the vicinity of damaged Asset must cease and the area must be vacated until a clearance to continue work has been obtained from an Ergon Energy Network officer.

General enquiries (7:00am - 5:30pm Mon to Fri) 13 74 66
Life threatening emergencies 000 or [13 16 70](tel:131670)

E: safetyadvice@ergon.com.au

E: byda@energyq.com.au ABN: 40 078 849 055

To re-submit or change the nominated search area please visit BYDA.com.au



Asset Installation Methods:

Ergon Energy Network Assets are installed with a variety of protection devices including:

1. Clay paving bricks or tiles marked "Electricity" or similar (also unmarked)
2. Concrete or PVC cover slabs
3. PVC, A/C or fibro conduit, fibre reinforced concrete, iron or steel pipe
4. Concrete encased PVC or steel pipe
5. Thin plastic marker tape
6. Large pipes housing multiple ducts
7. Multiple duct systems, including earthenware or concrete 2, 4, and 6-way ducts and shamrocks

Note: Some Assets are known to be buried without covers and may change depth or alignment along the route.

Excavating Near Assets:

For all work within 2.5m of nominal location, the constructor is required to hand or vacuum excavate (pothole) and expose the Asset, hence proving its exact location before work can commence.

Cable protection cover strips shall not be disturbed. Excavation below these cover strips, or into the surrounding backfill material is not permitted.

Excavating Parallel to Assets:

If construction work is parallel to Ergon Energy Network Assets, then hand or vacuum excavation (potholing) at least every 4m is required to establish the location of all Assets, hence confirming nominal locations before work can commence. *Generally, there is no restriction to excavations parallel to Ergon Energy Network Assets to a depth not exceeding that of the Asset. Note: Asset depths & alignment may change suddenly.*

Separation from Assets:

Any service(s) must be located at the minimum separation as per the tables below:

Table 1. Minimum Separation Requirements for Underground Services Running Parallel with Ergon Energy Network Assets

(Minimum Separation required in mm)							
Voltage Level	Gas	Communication or TV	Water		Sanitary drainage		Storm Water
			≤DN 200	>DN200	≤DN 200	>DN 200	
LV	250	100	500	*1000	500	1000	500
HV		300					
*Contact Ergon Energy Network/council to obtain specific separation distances							

Table 2. Minimum Separation Requirements for Underground Services Crossing Ergon Energy Network Assets

(Minimum Separation required in mm)					
Voltage Level	Gas	Communication or TV	Water	Sanitary drainage	Storm Water
LV & HV	100	100	300	300	100

Where the above table does not list a separation requirement for a particular underground service then 300mm shall be used.

Excavating Across Assets:

The standard clearance between services shall be maintained as set down in Table 2 above. If the width or depth of the excavation is such that the cables will be exposed or unsupported, then Ergon Energy Network shall be contacted to determine whether the cables should be taken out of service, or whether they need to be protected or supported. In no case shall an Asset cover be removed without approval. An Asset cover may only be removed under the supervision of an Ergon Energy Network authorised representative. Protective cover strips when removed must be replaced under Ergon Energy Network supervision. Under no circumstances shall they be omitted to allow separation between Ergon Energy Network Assets and other services.

General enquiries (7:00am - 5:30pm Mon to Fri) 13 74 66
 Life threatening emergencies 000 or [13 16 70](tel:131670)

To re-submit or change the nominated search area please visit BYDA.com.au

E: safetyadvice@ergon.com.au

E: byda@energyq.com.au ABN: 40 078 849 055



Heavy Machinery Operation Over Assets:

Where heavy "Crawler" or "Vibration" type machinery is operated over the top of Assets, a minimum cover of 450mm to the protective cover must be maintained using load bearing protection whilst the machinery is in operation. For sensitive Assets (i.e. 33 and 110kV fluid and gas filled cables), there may be additional constraints placed on vibration and settlement by Ergon Energy Network.

Directional Boring Near Cables:

When boring parallel to Assets, it is essential that trial holes are carefully hand or vacuum excavated at regular intervals to prove the actual location of the Assets before using boring machinery. Where it is required to bore across the line of Assets, the actual location of the Assets shall first be proven by hand or vacuum excavation. A trench shall be excavated 1m from the side of the Asset where the auger will approach to ensure a minimum clearance of 500mm above and below all LV, 11kV, 33kV & 110/132kV Assets shall be maintained.

Explosives:

Explosives must not be used within 10 metres of Assets, unless an engineering report is provided indicating that no damage will be sustained. Clearances should be obtained from Ergon Energy Network's Planning Engineer for use of explosives in the vicinity of Ergon Energy Network Assets.

Damage Reporting:

All damage to Assets must be reported no matter how insignificant the damage appears to be. Even very minor damage to Asset protective coverings can lead to eventual failure of Assets through corrosion of metal sheaths and moisture ingress.

If any Damaged Asset is found:

1. Call the ELECTRICITY EMERGENCIES number listed below
2. Treat cables as if alive, post a person to keep all others clear of the excavation until Ergon Energy Network crew attend to make safe.
3. All work in the vicinity of damaged Asset must cease and the area must be vacated until a clearance to continue work has been obtained from an Ergon Energy Network officer.

Solutions and Assistance:

If Asset location plans or visual location of Ergon Energy Network Asset by hand or vacuum excavation reveals that the location of Ergon Energy Network Asset is situated wholly or partly where the developer or constructor plans to work, then Ergon Energy Network shall be contacted to assist with Your development of possible engineering solutions.

If Ergon Energy Network relocation or protection works are part of the agreed solution, then payment to Ergon Energy Network for the cost of this work shall be the responsibility of the PCBU, principal developer or constructor. Ergon Energy Network will provide an estimated quotation for work on receipt of the PCBU's, developer's or constructor's order number before work proceeds.

It will be necessary for the developer or constructor to provide Ergon Energy Network with a written Safe Work Method Statement for all works in the vicinity of or involving Ergon Energy Network Asset. This Safe Work Method Statement should form part of the tendering documentation and work instruction. Refer Interactive Tool on Safe Work Australia site: [Interactive SWMS guidance tool - Overview](https://www.safeworkaustralia.gov.au/interactive-tool) ([safeworkaustralia.gov.au](https://www.safeworkaustralia.gov.au))

Vacuum Excavations (Hydro Vac)

When operating hydro vac equipment to excavate in vicinity of Assets (cables/conduits) fitted with:

- Nonconductive (neoprene rubber or equivalent) vacuum (suction) hose.
- Oscillating nozzle on pressure wand with water pressure adjusted to not exceeding 2000 Pound force per Square Inch(PSI)

Maintain a minimum distance of 200mm between end of pressure wand and underground electrical Assets. DO NOT insert the pressure wand jet directly into subsoil.

Ensure pressure wand is not directly aimed at underground electrical Assets (cables/conduits).

Safety Notices (Underground Work)

It is recommended that You obtain a written Safety Advice from ERGON ENERGY NETWORK when working close to Ergon Asset's. For Safety Advice please contact SafetyAdvice@energyq.com.au

Further information on Working Safely around Ergon Energy Network Assets: [Working near powerlines | Ergon Energy](#)

Thank You for Your interest in maintaining a safe and secure Electricity Distribution network. Ergon Energy Network welcomes Your feedback on this document via email to byda@energyq.com.au

General enquiries (7:00am - 5:30pm Mon to Fri) 13 74 66
Life threatening emergencies 000 or [13 16 70](tel:131670)

To re-submit or change the nominated search area please visit [BYDA.com.au](https://www.byda.com.au)

E: safetyadvice@ergon.com.au

E: byda@energyq.com.au ABN: 40 078 849 055





Scan to provide feedback

ELECTRICITY ENTITY REQUIREMENTS - WORKING NEAR OVERHEAD AND UNDERGROUND ELECTRIC LINES



Part of Energy Queensland

Purpose: This instruction describes Electricity Entity requirements for working or operating plant near any Electricity Entity Overhead or Underground electric lines.

Scope: This instruction applies to anyone who may be contemplating working or operating plant near any Electricity Entity Overhead or Underground electric lines.

Person responsible for ensuring compliance with this Work Practice: All EQL employees have responsibility to comply with listed controls.

Measures in place to ensure compliance with the Work Practice: Team Leaders must provide appropriate supervision and / or assurance in addition to formal assurance activities performed by EQL.

Person(s) responsible for reviewing the Work Practice: Prior to any task listed on this Work Practice being performed, the contents must be understood by all workers exposed to the hazard on site. (i.e. using HazChat).

Work Practice control and guidance to be reviewed: All controls for this task must be verified, monitored, and maintained by crews for the duration of works.

Key tools and equipment: N/A

Note:
Prior to works commencing the contents of supporting Work Practices must be understood.
If at any time the control or procedural guidance in this Work Practice cannot be applied or are not suitable, work must cease, and advice must be sought from your leader or a Technical SME before proceeding.
Work Practices may be provided as a means of sharing hazard and control information to EQL contractors. But it is the responsibility of the contractor to provide their own safe system of work (including, consultation, training, instruction, and supervision to reduce risk SFAIRP)

[Table of Contents](#)

1. ABOUT THIS GUIDE

This guide to working near the Electricity Entity network is designed to assist any person working, contemplating work or operating plant near any Electricity Entity overhead or underground electric lines to meet their duties under the Work Health and Safety Act 2011, Electrical Safety Act 2002, Electrical Safety Regulation 2013 and relevant Codes of Practice including Electrical Safety Code of Practice 2020 Working Near Overhead and Underground Electric Lines and help to identify the steps needed to ensure risks are minimised for all who work or are likely to be affected by the work in these situations.

“The Electrical Code of Practice 2020 Working Near Overhead and Under Ground Electric Lines” provides practical advice on ways to manage electrical risk when working near electric lines including the exclusion zones that apply. An electronic copy of this Code of Practice as well as, Electrical Safety Act and Regulation is available at the Queensland Government Electrical Safety Office web site at <https://www.worksafe.qld.gov.au/electricalsafety>. You should obtain a copy and read this material, to enable you to fully understand your obligations, and prospective means of complying with them.

1.1. Who does the Electrical Safety Code of Practice 2020 - Working Near Overhead and Underground Electric Lines and Electricity Entity Requirements apply to?

A person, worker or Person Conducting a Business or Undertaking (PCBU) at a workplace is required to comply with the requirements of Electrical Safety Regulation 2013 Part 5 Overhead and Underground Electric Lines and Electrical Safety Code of Practice 2020 Working Near Overhead and Underground Electric Lines to ensure that no person, plant or thing comes within an unsafe distance (exclusion zone) of an overhead electric line. Compliance with these regulatory requirements is essential to reduce the risk of electric shock and contact with Electricity Entity electric lines and other assets which can have deadly consequences.

Examples of work activities where risk of person, plant or equipment coming near or into contact with overhead electric lines include but are not limited to:

- Pruning or felling trees or vegetation near overhead electric lines, including the service wire into a building.
- Carrying out building work, scaffolding or demolition adjacent to overhead electric lines.
- Painting fascia, replacing roofing, guttering or external cladding near service line point of entry to a building.
- Operating cranes, tip trucks, cane harvesters, elevated work platforms, fork lifts, grain augers, excavators, irrigators, etc near OH electric lines.
- Erecting or maintaining advertising signs or billboards near overhead electric lines.
- Dam or levee bank construction.

Examples of work activities that could involve risk of damage to underground cables or earthing systems include but are not limited to:

- Digging holes, excavating, sawing, trenching, under boring, sinking bore holes, earthworks or laying cables, pipes, etc or driving implements into the ground (e.g. star pickets, fence posts) near where underground cables or earthing systems may be located.

1.2. Are you working or planning to work near overhead or underground electric lines?

Electrical Safety Regulation Section 68 requires that before carrying out any work at a workplace where there is a risk of any person, plant or thing encroaching the exclusion zone of overhead electric lines, the person, worker or PCBU is required to ensure that the potential hazards are identified, a risk assessment conducted and the necessary control measures implemented to minimise electrical safety risks to ensure the safety of all workers and other persons at the workplace. The Electrical Safety Regulation 2013 and Electrical Safety Code of Practice 2020 - Working Near Overhead and Underground Electric Lines detail the Exclusion Zones that must be maintained.

1.2.1 Work near overhead electric lines

Where a risk assessment has been conducted and control measures implemented in accordance with requirement of Electrical Safety Code of Practice 2020 - Working Near Overhead and Underground Electric Lines and Electricity Entity Requirements (this document) and it has identified that exclusion zones from overhead electric lines cannot be maintained, the person, worker or PCBU is then required to contact Electricity Entity and request written Safety Advice (refer Section 1.3 below).

The person, worker or PCBU shall be required to maintain exclusion zones until such times as the Electricity Entity has provided written Safety Advice. A person, worker or PCBU would not be required to contact the Electricity Entity and request a written Safety Advice where their risk assessment and implemented control measures ensure that exclusion zones from overhead electric lines will be maintained throughout performance of work to be undertaken at a particular site.

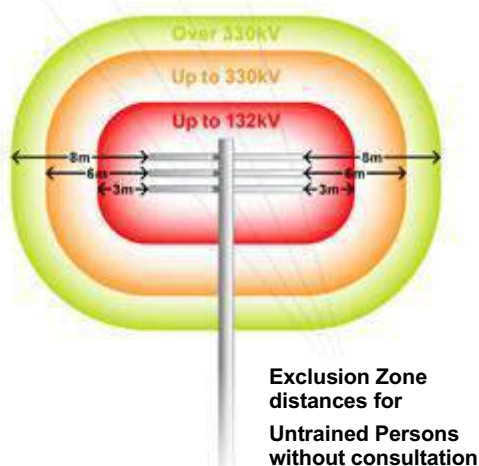
1.2.2 Exclusion Zones

An exclusion zone is a safety envelope around an overhead electric line. No part of a worker, operating plant or vehicle should enter an exclusion zone while the overhead electric line is energised (live).

Exclusion zones keep people, operating plant and vehicles a safe distance from energised overhead lines.

You must keep yourself and anything associated with the work activity out of the exclusion zone (e.g. a safe distance) unless it is not reasonably practicable to do so; and the person conducting a business or undertaking complies with the requirements of Section 68(2) of the Electrical Safety Regulation in relation to:

- conducting a risk assessment.
- implementing control measures
- adhering to any requirements of an Electricity Entity responsible for the line.



Exclusion Zone – Untrained Person (distances in mm)

Nominal phase to phase voltage of electric line	Untrained Person		
	Person	Operating Plant	Operating Vehicles
Insulated LV: Consultation with and verified by AP (Electrical)	No exclusion zone prescribed	1000	300
LV with NO consultation with Electricity Entity	3000	3000	600
LV With consultation with Electricity Entity	1000		
>LV up to 33 kV with NO consultation with Electricity Entity	3000		900
LV up to 33 kV with consultation with Electricity Entity	2000		
>33 kV up to 132 kV	3000	6000	2100
>132 kV up to 220 kV	4500		2900
>220 kV up to 275 kV	5000		

Information extracted from Electrical Safety Regulation 2013 Schedule 2

Exclusion Zone – Instructed Person and Authorised Person (distances in mm)

Nominal phase to phase Voltage of electric line	Instructed Person (IP) & Authorised Person (AP)		
	AP and IP	Operating Plant with Safety Observer or another Safe System of work	Operating of Vehicles
Insulated LV: Consultation with and verified by AP (Electrical)	No exclusion zone prescribed	No exclusion zone prescribed	No exclusion zone prescribed
LV	No exclusion zone prescribed	1000	600
>LV up to 33 kV	700	1200	700
>33 kV up to 50 kV	750	1300	750
>50 kV up to 66 kV	1000	1400	1000
>66 kV up to 110 kV		1800	
>110 up to 132	1200		

Information extracted from Electrical Safety Regulation 2013 Schedule 2

1.2.3 Work near underground electrical lines (underground electrical assets)

Before carrying out any earthworks at a location, the person, worker or PCBU is required to ensure that the potential hazards are identified, a risk assessment conducted and the necessary control measures implemented to minimise the risk of damaging identified or unidentified underground electrical assets and to ensure the safety of all workers and other persons at the workplace. The Electrical Safety Regulation 2013 and Electrical Safety Code of Practice 2020 - Working Near Overhead and Underground Electric Lines and Electricity Entity Requirements detail the requirement for work near underground electric lines.

There is no exclusion zone applicable for underground electrical assets – conduits, cables (unless cable is damaged, or conductors or terminations have been exposed) therefore there is **no requirement for a written Safety Advice** to be requested by a person, worker or PCBU, or issued by an electricity entity for work at a site that only involves identified or unidentified underground electrical assets (e.g. does not involved overhead electric lines or other exposed live parts within the work location).

1.3. Obtaining Safety Advice

To obtain written Safety Advice where identified as being required in Section 1.2.1 above, complete and return (by fax or email) the applicable Safety Advice Request Form which is accessible via the electricity entity website link on page 9:

- Energex Form - Application for Safety Advice – Working near Energex exposed live parts
- Ergon Energy Safety Advice Request Form

On receipt, the Electricity Entity will contact the Applicant to advise date and time to meet at site to provide written Safety Advice. It is advisable to bring to the meeting your copy of the Electrical Safety Code of Practice 2020 Working Near Overhead and Underground Electric Lines (and Before You Dig Australia Plan for location of underground assets where required), as reference to this will be necessary during the meeting. Written Safety Advice and/or other control measures provided by the Electricity Entity may incur a fee.

Failure to adhere to the Electrical Safety Regulation Section 68 requirements and mandatory control measures as documented on written Safety Advice as issued will result in written non-compliance advice being sent to the Electrical Safety Office.

Where this work is required to occur on a regular basis at a workplace, the PCBU may consider arranging to have one or more employees trained and subsequently accredited with the Electricity Entity as Authorised Persons.

1.4. Authorised Person and how to become one?

Under the Electrical Safety Regulation 2013, the exclusion zones for working near or operating plant or vehicles near exposed, low voltage or high voltage electric lines vary depending on whether a person is classed as an “Untrained Person”, “Authorised Person” or “Instructed Person”. An Authorised Person is permitted to carry out work closer to the electric lines than an Untrained Person (refer Electrical Safety Code of Practice 2020 Working Near Overhead and Underground Electric Lines Appendix B Exclusion Zones for Overhead Electric Lines).

To become an Authorised Person, the employer / self-employed person must first satisfy the “person in control” of the electric line, in this case the Electricity Entity, that their Applicants possess the required competencies. They must then apply in writing to Electricity Entity for approval.

Removal or replacement of LV service fuse to permit work on consumers’ mains, installation switchboard, consumer’s terminals or eliminate an exclusion that would exist requires the Electrical Mechanic to hold a current Queensland Electrical Mechanic Licence and perform the work in accordance with their documented safe system of work.

NOTE: It is not permissible to replace a blown LV service fuse(s) after loss of supply to consumer’s installation or to alter Electricity Entity LV aerial services.

1.5. Contacting Electricity Entity for Safety Advice or Authorised Person Enquiries

By phone

- call Electricity Entity on General Enquiries phone number (refer page 3).

By email

- **Energex:** custserve@energex.com.au or authorisedperson@energex.com.au
- **Ergon Energy:** safetyadvice@ergon.com.au

Website

- **Energex:** <https://www.energex.com.au/home/safety/working-near-powerlines>
- **Ergon Energy:** <https://www.ergon.com.au/network/safety/business-safety/the-outdoor-workplace/working-near-powerlines>

2. OVERHEAD ELECTRIC LINES

The following table sets out preparatory work options that may be required to be performed by the Electricity Entity (or electrical contractor where identified as being permitted who is an Authorised Person - Electrical) to assist a person, worker or PCBU in minimising the electrical safety risks of, encroaching within the exclusion zone or contact with electric lines.

Category of work		Description	Costing arrangement
Safety Advice	Base information	Provide Safety Advice	Nil cost to customer
LV Service isolation	1. Isolation carried out by customer's electrical contractor	Isolation of overhead or underground service by removal of the service fuse(s). (Preferred option to isolate supply and eliminate the exclusion zone).	No involvement by the Electricity Entity. May be a cost charged by the customer's electrical contractor.
	2. Isolation carried out by Electricity Entity	Customer requested isolation of overhead or underground service by removal of the service fuse(s); or Customer requested physical disconnection and reconnection of overhead or underground service.	Cost to customer.
Insulation integrity verification	3. Verification of insulation integrity to reduce exclusion zone to no exclusion zone prescribed e.g. no contact permitted	Verification of insulation integrity to classify as insulated service – Insulation integrity can only be verified at the time of inspection – visual inspection is required before confirmation in all cases. When service insulation integrity verified - no exclusion zone prescribed e.g. no contact permitted.	Cost to customer.
Service replacement	4. Open wire service, service fuse(s) at house/building	Replacement of service with new XLPE service cable and service fuse(s) installed at origin (pole end) of service to allow isolation of service. Insulation integrity can be verified for new XLPE services at the time of installation – visual inspection is required before confirmation.	Nil cost to customer for service replacement. Customer responsible for necessary installation, Mains Connection Box and service support bracket upgrade and associated costs if required.
		Service installations where: a. the consumer's mains cannot be insulated and an exclusion zone must be maintained, and b. the service cannot be isolated at the service fuse. Service to be isolated by breaking the service cable connection to the LV mains at the pole. Service fuse(s) to be installed at origin (pole end) of service prior to reconnection.	Nil cost to customer for first disconnection and reconnection. Cost to customer for subsequent requests.

Category of work		Description	Costing arrangement
	5. All other service replacements	Customer requested replacement of existing service with new XLPE service cable to classify as insulated service, in lieu of isolation, to allow work close (no exclusion zone prescribed e.g. no contact permitted). Service fuse(s) to be installed at origin (pole end) of service.	Cost to customer for service replacement. Customer responsible for necessary installation, Mains Connection Box and service support bracket upgrade and associated costs if required.
Tiger Tails	6. Installation of Tiger Tails (for visual indication only – not for providing electrical insulation of LV mains)	Customer requested coverage of LV mains for visual indication only (not permitted on HV mains). The Entity may also fit tiger tails to LV service line for visual indication only.	Cost to customer.
Aerial Markers	7. Installation of aerial marker flags or balls (for visual indication only)	Customer requested temporary or permanent installation of appropriate aerial marker devices on LV or HV mains.	Cost to customer.
Switching	8. Customer requested switching	Customer requested switching to allow customer/contractor to work close (no exclusion zone prescribed e.g. no contact permitted).	Cost to customer.

2.1. Isolation of supply to customer installation to eliminate exclusion zone around LV service line

An Electrical Mechanic (holding current Queensland Licence) working on behalf of an electrical contractor and accredited with the Electricity Entity as an Authorised Person (Electrical) is permitted to remove and replace LV service fuse(s) when isolation of customer LV service line is required to eliminate the exclusion zone around the LV service line, or to work on the customer’s mains and/or switchboard. Isolation of the customer’s LV service line by an Authorised Person (Electrical) is only permitted at an underground service pillar or service pole by removing a fuse wedge(s) from a service line, in accordance with Electricity Industry practices e.g. from ground level using appropriate insulated tools, PPE and insulating mats. In those situations where the service fuse/circuit breaker is not located at supply end of the LV service, contact the Electricity Entity to arrange for Safety Advice where elimination of exclusion zone around LV service line is required.

Any controls used by the Authorised Person (Electrical) to identify and confirm isolation and ensure supply to the customer’s installation is not inadvertently re-energised shall comply with Electrical Safety Regulation 2013 Section 14 and 15 requirements.

NOTE: The Authorised Person (Electrical) will not be permitted to replace a blown LV service fuse(s) after loss of supply to a customer’s installation or to alter the Electricity Entity overhead LV services. The low voltage pole top service fuse shall only be removed by use of an approved, in test, insulated telescopic pole device while standing at ground level and wearing class 00 insulating gloves. At no time is it permissible for an Authorised Person (Electrical) to climb or work aloft on the Electricity Entity’s poles or assets unless approved by the Electricity Entity.

2.2. Operating Plant

It can be extremely difficult for operating plant operators to see overhead lines and to judge distances from them. Contact with overhead lines can pose a risk of grounding live conductors and electrocution.

In many cases the likelihood of damage or injury can be reduced by setting up and operating the machinery well clear of overhead electric lines.

In situations where operating plant is operated by an Authorised Person or Instructed Person without a Safety Observer or another safe system, the exclusion zone requirements (refer Section 1) for an Untrained Person applies (refer Electrical Safety Regulation 2013 Schedule 2 or Electrical Safety Code of Practice 2020 Working Near Overhead and Underground Electric Lines).

For an Authorised or Instructed Person and their Operating Plant to approach overhead electric lines closer than the exclusion zone distances for an Untrained Person, a Safety Observer or another safe system shall be used. Refer to the Electrical Safety Regulation 2013 and the Electrical Safety Code of Practice 2020 - Working Near Overhead and Underground Electric Lines for exclusion zone distances for Authorised and Instructed Persons operating plant with a Safety Observer or another safe system.

Where a Safety Observer is used, the Safety Observer shall:

- Be trained to perform the role.
- Not be required to carry out any other duties at the time, and
- Not be required to observe more than one item of plant operating at a time, and
- Attend all times when the item of plant is operating.

Other control measures for operating plant may include, but are not restricted to:

- Constructing physical barriers or height warning indicators either side of the overhead electric line that are lower than the maximum travel height permissible without encroaching within the exclusion zone of the overhead electric line.
- Applying appropriate signage at least 8 to 10 m either side of overhead electric lines.
- Arrange for visual indicators such as Tiger Tails or aerial markers to fitted to the overhead electric lines – only erected by the Electricity Entity (tiger tails are only permitted on LV mains).
- Ground barriers, where appropriate.
- Informing workers of required work practices.
- Ensuring operators are aware of the height and reach of their machinery in both stowed and working positions.
- Lowering all machinery to the transport position when relocating.
- Providing workers with maps or diagrams showing the location of underground and overhead electric lines, and
- Where possible, directing work away from overhead electric lines not towards them.



2.3. Scaffolding Requirements

The following information provided is for guidance only and shall be read in conjunction with the Electrical Safety Regulation 2013, Electrical Safety Code of Practice 2020 - Working Near Overhead and Underground Electric Lines and AS/NZS 4576:1995: Guidelines for Scaffolding.

Requirements shall be complied with where scaffolding is required to be erected within 4 m of nearby overhead electric lines:

- The scaffolding shall not be erected before contacting and obtaining Safety Advice from the Electricity Entity.
- Erection of scaffolding to comply with requirements of AS/NZS 4576:1995: Guidelines for Scaffolding.

The scaffolding can be either:

- nonconductive material scaffolding; or

PROCEDURE / INSTRUCTIONS

- metallic scaffolding with solid nonconductive barriers (with no gaps, holes or cuts) securely fixed to the outside and/or top of the scaffolding to prevent encroachment within exclusion zones or contact with the energised mains.

Where scaffolding is erected within 3 m of nearby overhead electric lines:

- It shall be fitted with fully enclosed non-conductive solid barriers to prevent encroachment within exclusion zones or contact with the energised mains fully enclosed.
- The person required to erect and/or disassemble scaffolding as well as the required solid barrier affixed to the scaffolding should be an Authorised Person (approved in writing by the Electricity Entity - refer requirements of Section 1.4 of this Reference).
- A Safety Observer shall be used during performance of this work where there is a risk of encroachment within 3 m of nearby energised overhead electric lines for voltages up to 33 kV. Additional requirements may apply for voltage levels above 33 kV, contact the Electricity Entity for consultation.
- Alternatively, consideration should be given to the de-energisation of the nearby electric lines where possible for the duration of this work. Additional requirements may apply for voltage levels above 33 kV, contact the Electricity Entity for consultation.
- Comply with the horizontal and vertical statutory clearances from overhead electric lines as set out in Electrical Safety Regulation 2013 Schedule 4.
- Persons are not permitted to go outside of or climb on top of the solid barrier fixed on the outside and/or top of the scaffolding.

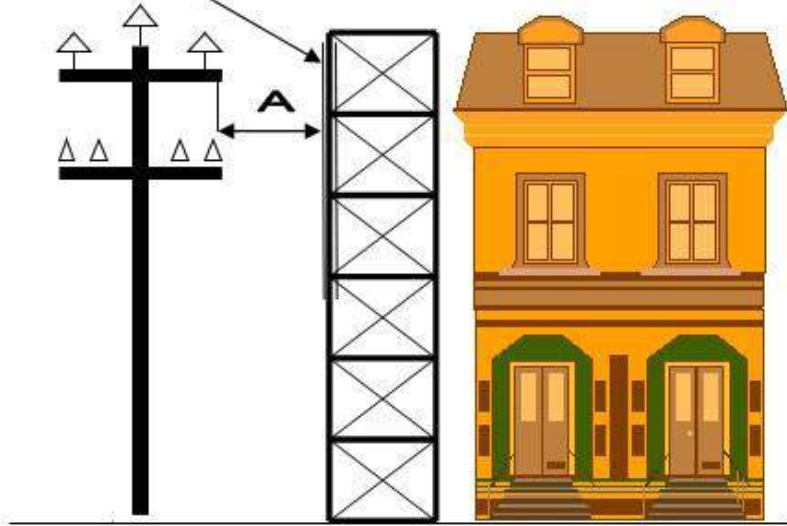
Where an insulated low voltage service line passes through the scaffolding, it should either be de-energised for duration of work or be fully enclosed by non-conductive material (e.g. form ply).

Minimum statutory clearances from nearby overhead electric lines for scaffolding erected with barriers affixed.

Voltage Level	Horizontal Distance "A" (in metres)	Vertical Distance "B" (in metres)
Low voltage conductors (uninsulated)	1.5m	2.7m
Low voltage conductors (insulated) – these distances can only be applied after the integrity of the insulation has been verified by the Electricity Entity	0.3m	0.6m
Above LV and up to 33 kV (uninsulated)	1.5m	3.0m
Above LV and up to 33 kV (insulated)	Contact Electricity Entity for consultation.	
Above 33 kV (uninsulated)	Additional requirements may apply for voltage levels above 33 kV, contact the Electricity Entity for consultation.	

NOTE: Dimension's "A" and "B" is between the scaffolding and the closest conductor of the overhead electric line. Dimension B is also taken from the lowest part of the mid span sag adjacent to the scaffolding.

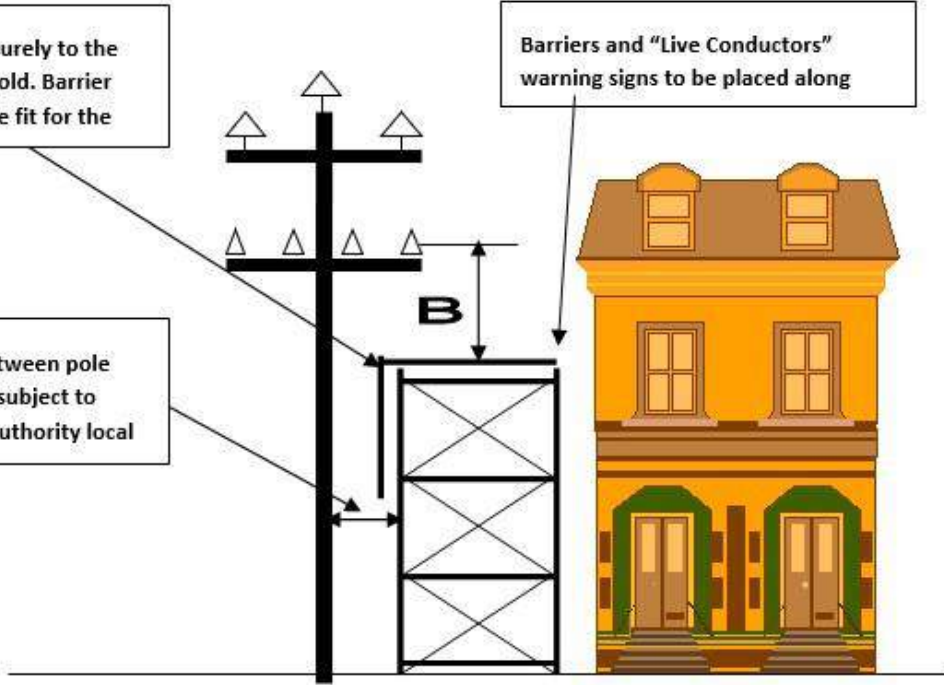
Barrier fixed securely to the face of the scaffold. Barrier material must be fit for the intended purpose.



Barrier fixed securely to the face of the scaffold. Barrier material must be fit for the

Barriers and "Live Conductors" warning signs to be placed along

Min 100 mm between pole and scaffolding subject to relevant Local Authority local



2.4. High Load transport under Overhead Electric Lines

Any person or company transporting a High Load (load in excess of 4.6 m high) under overhead electric lines must comply with Electrical Safety Code of Practice 2020 - Working Near Overhead and Underground Electric Lines is required to submit a Notification to Transport High Load form to the relevant Electricity Entity of the intended route and details of the high load involved. Before any person or company can transport a high load (load in excess of 4.6 m high), authorisation to travel must be received in writing from the Electricity Entity. Refer details below to contact the Electricity Entity for high load enquiries or to submit Notification to Transport High Load form:

Energex:

- **Email:** custserve@energex.com.au
- **Website:** www.energex.com.au
- **Phone:** Energex Contact Centre on 13 12 53 (8am to 5:30pm, Monday to Friday)

Ergon Energy:

- **Email:** Highload2@ergon.com.au
- **Website:** www.ergon.com.au
- **Phone:** (07) 4932 7566 (8am to 4:30pm, Monday to Friday)

2.5. Additional Details and Fact Sheets on Electricity Entity Requirements

Additional details and Fact Sheets on Electricity Entity requirements for working near overhead electric lines are located on the following internet sites

Energex: <https://www.energex.com.au/home/safety/working-near-powerlines>

Ergon Energy: <https://www.ergon.com.au/network/safety/business-safety/the-outdoor-workplace/working-near-powerlines>

3. UNDERGROUND ELECTRICAL ASSETS

3.1. Responsibilities When Working in the Vicinity of Electricity Entity Underground Electrical Assets

Everyone has a legal “Duty of Care” that must be observed when working in the vicinity of underground electrical assets which includes underground cables, conduits and other associated underground equipment. When discharging this “Duty of Care” in relation to Electricity Entity underground electrical assets, the following points must be considered:

1. It is the responsibility of the architect, consulting Engineer, developer, and principal contractor in the project planning stages to design for minimal impact and protection of Electricity Entity underground electrical assets. The Electricity Entity will provide plans on request via BYDA showing the presence of the underground electrical assets to assist at this design stage.
2. It is the constructor’s responsibility to:
 - a. Anticipate and request BYDA plans of Electricity Entity underground electrical assets for a particular location at a reasonable time before earthworks begins.
 - b. Visually locate Electricity Entity underground electrical assets by use of an electronic cable locator followed by careful non-mechanical excavation (potholing using hydrovac or hand tools) when earthworks activities may damage or interfere with Electricity Entity plant.

- c. After completion of steps (a) and (b) above, if there is a risk of the Electricity Entity underground electrical assets being damaged or its structural integrity compromised by your planned earthworks activities, contact the Electricity Entity (General Enquiries phone number – refer page 3) for further advice.

A constructor may include but not limited to designer, project manager, installer, contractor, civil contractor.

- 3. The alignments and boundaries contained within BYDA plans and maps will sometimes differ from present alignments and boundaries “on the ground”. Accordingly, in every case, the constructor should obtain confirmation of the actual position of Electricity Entity cables and pipelines under the roadways by non-mechanical excavation (potholing using hydrovac or hand tools) when earthworks activities may damage or interfere with Electricity Entity underground electrical assets. In no case should the constructor rely on statements of third parties in relation to the position of Electricity Entity underground electrical assets.

3.2. Conditions of Supply of Information

- Plans and details of Electricity Entity underground electrical assets provided by BYDA are only current for 4 weeks from the date of dispatch and should not be referred to after this period, if you go past this time, please re-apply to BYDA as underground services may have been updated.
- The Electricity Entity agrees to provide plans if an Electricity Entity underground electrical assets location request is made to Before You Dig Australia (BYDA) , online at <https://www.byda.com.au> or the free iPhone Application, only on the basis that at least 2 business day notice is given and the BYDA applicant agrees to the terms of this agreement.



Note that the Electricity Entity only provides information on underground electrical assets it owns. Contact the owner of any privately owned underground electrical assets for details of their assets located at site.

- The Electricity Entity retains copyright of all plans and details provided in connection to your request.
- BYDA plans or other details are provided for the use of the BYDA applicant, its servants, or agents, for the sole purpose of the applicant’s responsibilities in relation to the Electricity Entity underground electrical assets and shall not be used for any other purpose.
- BYDA plans are diagrams only and indicate the presence of Electricity Entity underground electrical assets in the general vicinity of the geographical area shown. Exact ground cover and alignments cannot be given with any certainty as such levels can change over time.
- On receipt of BYDA plans and before commencing excavation work or similar activities near Electricity Entity’s underground electrical assets, carefully locate this plant first to avoid damage.
- The Electricity Entity, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and of details so supplied to the BYDA applicant, its servants or agents, and the BYDA applicant agrees to indemnify the Electricity Entity against any claim or demand for any such loss or damage to the BYDA applicant, its servants, or agents or to any third party.
- The constructor is responsible for all damages to the Electricity Entity underground electrical assets when work commences prior to obtaining BYDA plans, or at any time after that for failure to follow agreed instructions contained in this document or any other advice provided by the Electricity Entity.
- By undertaking any work, you acknowledge that the Electricity Entity reserves all rights to recover compensation for loss or damage to the Electricity Entity caused by interference or damage, including consequential loss and damage to its cable network, or other property.
- Be aware that some underground conduits may contain asbestos. Refer to “Code of Practice for the Management and Control of Asbestos in Workplace [NOHSC: 2018 (2005)]” for guidance.

3.3. When Working in the Vicinity of Electricity Entity Underground Electrical Assets, You Must Observe the Following Conditions

3.3.1 Records

The first step before any excavation commences is to obtain BYDA plans of Electricity Entity underground electrical assets in the vicinity of the work. For new work, records should be obtained during the planning and design stage. The records provided by BYDA must be made available to all relevant work groups on site. Where underground electrical asset information is transferred to plans for the proposed work, care must be exercised that important detail is not lost in the process.

3.3.2 Location of underground electrical assets

Examining the records is not sufficient, as reference points may change from the time of installation. Records must also be physically proven when working in close proximity to underground electrical assets. The exact location of underground electrical assets likely to be affected shall be confirmed by use of an electronic cable locator followed by careful non mechanical excavation to the level of concrete slabs or conduits. Non mechanical excavation (potholing using hydrovac or hand tools) must be used in advance of excavators. In any case, where doubt exists with respect to interpretation of cable records, contact the Electricity Entity (General Enquiries phone number - refer page 3) for further advice.

If during excavation, cables or conduits are damaged:

- call Electricity Entity (Emergencies phone number – refer page 3) to report damaged cables or conduits.
- treat cables as if alive, post a person to keep all others clear of the excavation until the Electricity Entity crew attend to make safe.

If **unknown** cables or conduits (e.g. not shown on issued BYDA plans) are located during excavation:

- call Electricity Entity (Emergencies phone number – refer page 1) to report.
- treat cables as if alive, post a person to keep all others clear of the excavation until the Electricity Entity crew attend to make safe.

If the constructor is unable to locate Electricity Entity underground electrical assets within 2.5 m of nominal plan locations, they should contact the Electricity Entity (General Enquiries phone number - refer page 3) for further advice.

3.3.3 Remote or On-Site Cable Location conducted by Electricity Entity

This service shall only be provided at Electricity Entity's discretion:

- The Electricity Entity may provide this site visit only when underground cables (33 kV or above) are present.
- Due to remote locations where external cable locator or hydro vac service providers are not readily available, Electricity Entity may attend site and assist with cable location (fees may apply for this service).
- The Electricity Entity may provide either remote over the phone or on-site cable location advice to assist in the location of Electricity Entity underground electrical assets, including how to visually locate and protect the plant when excavating.
- Where the Electricity Entity provides on-site cable location advice, any markings provided for the purpose of identifying cable location are for general guidance only, and the constructor is still responsible for non-mechanical excavation (potholing using hydrovac or hand tools) to visually locate Electricity Entity underground electrical assets.
- If the constructor is unable to locate Electricity Entity underground electrical assets within 2.5 m of nominal plan locations, they should contact Electricity Entity (General Enquiries phone number - refer page 3) to request further advice.

3.3.4 Electrical Cables

Electricity Entity cables may have warning covers e.g.:

- Clay paving bricks or tiles marked “Electricity” or similar (also unmarked)
- Concrete or PVC cover slabs
- PVC, asbestos or fibro conduit, fibre reinforced concrete, iron or steel pipe
- Concrete encased PVC or steel pipe
- Thin plastic marker tape
- Large pipes housing multiple ducts
- Multiple duct systems, including earthenware or concrete

NOTE: Some cables are known to be buried without covers.

3.3.5 Separation from Electricity Entity underground electrical assets

If location plans or visual location of Electricity Entity underground electrical assets by non-mechanical excavation (potholing using hydrovac or hand tools) reveals that the location of Electricity Entity underground electrical assets is situated where the developer or constructor plans to work, then contact the Electricity Entity (General Enquiries phone number - refer page 3) for further advice.

The developer or constructor shall ensure that minimum separation distance from Electricity underground electrical assets (refer Minimum Separation Requirements tables below) is complied with when installing, altering or repairing other underground services located in the vicinity.

If the Electricity Entity relocation or protection works are part of the agreed solution, then payment to the Electricity Entity for the cost of this work shall be the responsibility of the principal developer or constructor. The Electricity Entity will provide an estimate for work on receipt of the developer’s or constructor’s order number before work proceeds.

It will be necessary for the developer or constructor to provide the Electricity Entity with a written Work Method Statement for all works in the vicinity of, or involving Electricity Entity underground electrical assets. This Work Method Statement should form part of the tendering documentation and work instruction. All Work Method Statements shall be submitted to the Electricity Entity prior to the commencement of site earthworks.

Underground Services Running Parallel with Electricity Entity Electrical Assets (Minimum Separation required in mm)							
Voltage Level	Gas	Communication or TV	Water		Sanitary drainage		Storm Water
			≤DN 200	>DN200	≤DN 200	>DN 200	
LV	300 (Ergon) 250	100	500	*1000	500	1000	500
HV	(Energex)	300					
*Contact your local utility/council to obtain specific separation distances							

**Underground Services Crossing Electricity Entity Electrical Assets
(Minimum Separation required in mm)**

Voltage Level	Gas	Communication or TV	Water	Sanitary drainage	Storm Water
LV	100	100	300	300	100
HV					

Notes:

- These clearances are each Electricity Entity’s minimum requirements, additional separation may be required by the Service Owner. The greater of the separation requirements shall apply.
- Where the above tables does not list a separation requirement for a particular underground service type, the following minimum separation from electricity entity electrical assets shall apply:
 - LV = 100 mm
 - HV = 300 mm
- Compliance with these minimum separation requirements does not guarantee that issues such as Earth Potential Rise (EPR) and Low Frequency Induction (LFI) are managed, where these issues need to be managed, advice will need to be sought from an RPEQ Engineer
- All separation distances are measured from the exterior surface of the conduit / cable not centrelines or inner wall surfaces.

Additional Details and Fact Sheets on Electricity Entity Requirements

Additional details and Fact Sheets on Electricity Entity requirements for working near underground electrical assets are located on the following internet site.

Energex: <https://www.energex.com.au/home/safety/working-near-powerlines>

Ergon Energy: <https://www.ergon.com.au/network/safety/business-safety/the-outdoor-workplace/working-near-powerlines>

4. EXCAVATION

4.1. Excavating near Poles and Stay Wires

The following requirements are to be compiled with to minimise the risk of compromising the structural integrity of the Electricity Entity poles and stay foundations when excavation or trenching work is performed nearby that could result in the failure of one or more poles and grounding of supported electric lines.

- Excavation and trenching work undertaken by a person, worker or PCBU in the vicinity of poles and stay foundations shall:
- only be commenced after requirements of Section 3 have been complied with for any underground electrical assets located within the work site.
- upon completion of excavation and site earthworks do not restrict the Electricity Entity vehicle access to pole site for purpose of carrying out maintenance activities.

PROCEDURE / INSTRUCTIONS

- comply with exclusion zones as detailed in the Electrical Safety Code of Practice 2020 - Working Near Overhead and Underground Electric Lines.
- not be attempted:
 - within 5 m (horizontal distance) of **pole stays** where the excavation depth is greater than 250 mm before contacting the Electricity Entity to determine requirements.
 - within 5 m (horizontal distance) of Electricity Entity poles with earth leads or cables running down into the ground before contacting the Electricity Entity to determine requirements.
 - within “Do Not Disturb” zone of pole prior to a certified engineering assessment having been completed by a Registered Professional Engineer Queensland, and then reviewed and approved by the Electricity Entity before proceeding with work. Approval by the Electricity Entity shall not relieve the PCBU of its duties to perform the work in a safe and proper manner and in accordance with all applicable legislation.
 - if the soil is exceedingly wet (saturated) or there is more than minimal wind loading unless additional pole support is provided in accordance with certified engineering assessment and approved by Electricity Entity.
 - when a severe weather event is occurring or expected (e.g. severe weather warning has been issued by Bureau of Meteorology).
- be backfilled as soon as possible (within same day where pole is required to be supported) soil mechanically compacted in layers of 150 mm and all rock and vegetable material excluded from the backfill.
- be backfilled and pole stabilised before removal of additional support required by a certified engineering assessment are permitted to be removed.

The PCBU shall be responsible for arrangement and costs of required certified engineering assessments, approvals by other regulatory bodies (eg councils, Main Roads pipeline owners, telecomm owns) and installation, maintenance, and removal of associated pole support.

Pole support equipment (where required in accordance with certified engineering assessment) shall be:

- only attached and removed by persons approved by the Electricity Entity.
- used to restrain both the pole head and foot to maintain pole stability during nearby excavation work.
- set up and positioned to maximise support effectiveness and minimise impact on traffic, pedestrian, excavation and machinery at site; and maintain exclusion zone from overhead lines. If insufficient clearance exists to maintain exclusion zone to pole support equipment, arrangements may be required for de-energising the electric line.

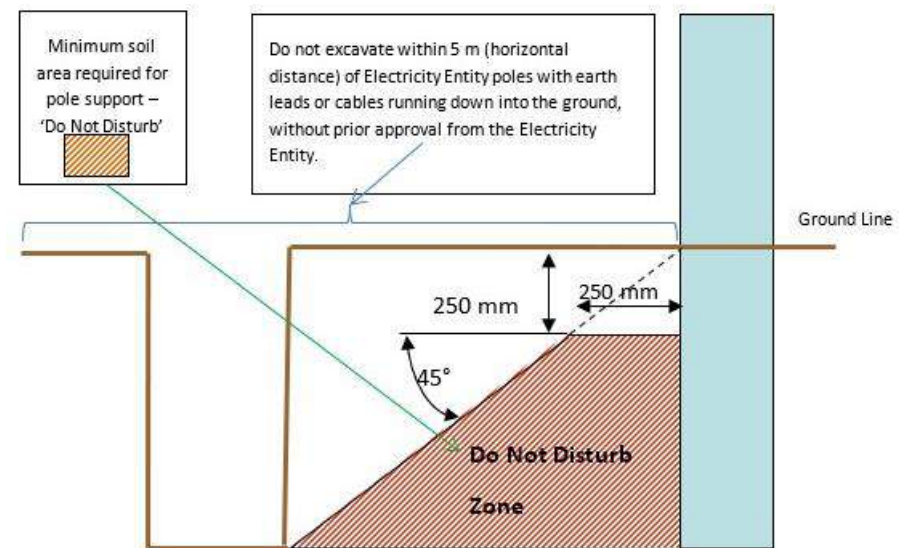


Figure 1 - Do Not Disturb Zone requirements when excavating near poles

Maximum Trench Depth	Minimum Distance from pole without pole support
Not more than 0.25 m (250 mm)	Can trench or hand dig (where cables and leads exist) right up to pole
1.0 m	1.0 m
1.5 m	1.5 m
2.0 m	2.0 m
2.5 m	2.5 m
3.0 m	3.0 m

4.1.1 Certified Engineering Assessment

Where required to be provided by the PCBU, a Certified Engineering Assessment shall:

- Ensure the stability of the Electricity Entity poles and foundations is maintained during and as a result of excavation work completed within the ‘Do Not Disturb’ zone.
- Include detailed design drawing of pole support method.
- Be completed and certified by a Registered Professional Engineer Queensland.
- Consider and address the following key points as a minimum:
 - Pole loading (vertical and lateral) including line deviation angles, direction of lean (towards or away from resultant loading)
 - Direction of pole lean.
 - Pole inspection (conducted to meet the Electricity Entity’s requirements at customer cost)
 - Pole foundation depth
 - Proximity of excavation in relation to pole
 - Soil condition
 - Proposed shoring methods as well as installation and removal process
 - Duration and staging of work
 - Requirement to independently support pole during work
 - Proximity of existing adjacent underground services and excavations
 - Proposed backfilling and reinstatement method
 - Monitoring and engineering/ geotechnical supervision during excavation work progress
 - Other equipment attached to pole (e.g. underground cables, transformer, ACR, ABS.) must be taken into consideration and in some circumstances will prevent the pole being supported.

4.2. Excavating Near Underground Electrical Assets

For all work within 2.5 m of nominal location, the constructor is required to non-mechanical excavation (potholing using hydrovac or hand tools) and expose the underground electrical assets, hence proving its exact location before earthworks can commence.

4.2.1 Excavating Parallel to Underground Electrical Assets

If excavation work is parallel to the Electricity Entity underground electrical cables, then non mechanical excavation (potholing using hydrovac or hand tools) at least every 4 m is required to establish the location of all cables, hence confirming nominal locations before work can commence. If an excavation exceeds the depth of the cables and it is likely that the covers or bedding material around the cables/pipes will move causing Electricity Entity cables or conduits to be unsupported, contact Electricity Entity (General Enquiries phone number - refer page 3) for further advice.

NOTE: Be aware that cable depths and directions may change suddenly along the route.

4.2.2 Excavating Across Underground Electrical Assets

Refer Minimum Separation Requirements table in Section 3.3.5 of this document for distances that shall be maintained to prevent inadvertent contact with or damage to underground electrical assets. If the width or depth of excavation is such that the Electricity Entity cables will be unsupported, contact Electricity Entity (General Enquiries phone number - refer page 3) for further advice. In no case shall a cable cover be removed without approval. A cable cover may only be replaced under the supervision of an Electricity Entity officer. Protective cover strips when removed must be replaced under Electricity Entity supervision. Under no circumstances shall protective cover strips be omitted to achieve the minimum separation distance required between Electricity Entity cables and other underground services.

4.2.3 Heavy Machinery Operation Over Underground Electrical Assets

Where heavy "crawler" or "vibration" type machinery is operated over the top of cables, a minimum cover of 450 mm to the cable protective cover must be maintained. Alternatively, subject to a Certified Engineering Assessment, use load bearing protection whilst the machinery is in operation.

4.2.4 Directional Boring Near Underground Electrical Assets

When boring parallel to cables, it is essential that trial holes are carefully dug using non mechanical excavation (pot holing using hydrovac or hand tools) at regular intervals to prove the actual location of the conduits/cables before using boring machinery. Where it is required to bore across the line of cables/conduits, the actual location of the cables/conduits shall be proven by non-mechanical excavation (pot holing using hydrovac or hand tools). A trench shall be excavated 1 m from the side of the cables where the auger will approach to ensure a minimum clearance of 500 mm from cables/conduits can be maintained.

4.2.5 Hydro Vac Operation

When operating hydro vac equipment to excavate in vicinity of underground electrical assets (cables/conduits):

- Fitted with:
 - nonconductive (neoprene rubber or equivalent) vacuum (suction) hose.
 - oscillating nozzle on pressure wand with water pressure adjusted to not exceeding 2000 psi.
- Maintain a minimum distance of 200 mm between end of pressure wand and underground electrical assets. DO NOT insert the pressure wand jet directly into subsoil.
- Ensure pressure wand is not directly aimed at underground electrical assets (cables / conduits).

4.3. Blasting

Explosives must not be used within 5 m of cables/conduits, unless an engineering report is provided indicating that no damage will be sustained. Clearances shall be obtained from the Electricity Entity for use of explosives in the vicinity of cables/conduits. Contact Electricity Entity (General Enquiries phone number - refer page 3) for further advice.

The Electricity Entity will accept the level of 25 mm / sec as a peak component particle velocity upper limit as defined in AS 2187.2 Appendix J for blasting operations in the vicinity of these power lines.

Electric line insulators and conductors are particularly susceptible to damage from fly rock and adequate control measure including the use of blast mats shall be used to manage this. Contact Electricity Entity for consultation and application.

5. REPORTING DAMAGE CAUSED TO OVERHEAD OR UNDERGROUND ELECTRIC LINES

Any damage caused to the Electricity Entity overhead electric lines, poles, stays, underground cables, conduits and pipes must be reported no matter how insignificant the damage appears to be. Even very minor damage to cable protective coverings can lead to eventual failure of cables through corrosion of metal sheaths and moisture ingress.

All work in the vicinity of damaged overhead or underground electric lines shall cease and the area be made safe and vacated until clearance to continue earthworks has been obtained from the Electricity Entity. Call Electricity Entity (Emergencies phone number – refer page 3).

6. INFRASTRUCTURE NEAR ELECTRIC LINES

6.1. Easements and Wayleaves

This information, whilst not a legal document, has been developed to assist the community in answering some commonly asked questions about our easements and wayleaves, and briefly outlines what you can do where land is affected by an easement or where consent to installing electrical infrastructure has been given.

6.1.1 What is an Electricity Easement?

An electricity easement is the authority held by the Electricity Entity to use your land near overhead and underground electric lines and substations (electrical assets). Electricity Entity holds this authority for your own safety and to allow employees access to electrical assets at all times. Whilst it will depend on the terms of the particular grant of easement, electrical easements generally give the Electricity Entity the right to access, maintain, repair, rebuild and to restrict development within a defined area.

The easement, which is registered on the property's title, contains a plan showing the dimensions of the easement and its location on the property together with the rights and restrictions over the easement area. The Department of Natural Resources and Mines <https://www.resources.qld.gov.au/> or your solicitor will be able to provide this information. Easements may also exist for telephone lines, water and sewage mains and natural gas supply lines.

6.1.2 Why are easements necessary?

Easements are also created to allow the Electricity Entity clear, 24 hour access to the electric lines. It is important to keep the easement clear at all times so regular maintenance, line upgrades, damage or technical faults can be attended to immediately to provide a safe and reliable supply of electricity. Interference with Electricity Entity's rights and electrical equipment may compromise safety of the public and the occupiers of the property. Therefore, it is essential that Electricity Entity's rights are understood and observed.

6.1.3 How do I know if there are easements on my property?

Contact your solicitor or The Department of Natural Resources and Mines to obtain a Title Search that shows all registered easements on the property.

6.1.4 Who owns the land the easement is on?

The ownership of that land encumbered with the easement remains with the property owner.

6.1.5 How does an easement affect what I can do with my property?

An easement controls what you can build, what size trees you can plant and what outdoor activities you can carry out in the easement area.

An easement affects the use of the property by limiting the development that can be undertaken within the easement area. The exact rights granted to an Electricity Entity under an electricity easement will depend on the wording used in the grant of easement. Property owners and occupiers should also be aware that an Electricity Entity has the right of access to land to undertake certain works (including reading meters and disconnecting supply). These rights of access are granted by Queensland legislation not the easement and so may not be registered on the property's title and therefore may not be revealed in a Title Search.

6.1.6 Who is responsible for maintenance of easement area?

You must provide a continuous, unobstructed area along the full length of the easement to allow an Electricity Entity access to electric lines, transformers, underground cables and other equipment at all times. A width of 4.5 m is typically required for the safe passage of vehicles and heavy plant.

You must NOT place obstructions in the easement within 5 m of any electric lines, transformer, power pole, equipment or supporting wire.

Maintenance of the easement area is generally the responsibility of the property owner and/or occupier, however, complying with regulatory and safety requirements associated with Electricity Entity's electrical assets within the easement area is the responsibility of the Electricity Entity.

6.1.7 What type of maintenance work does Electricity Entity undertake on easements?

To enable Electricity Entity to construct, maintain, repair and rebuild electric lines on some properties, access roads and tracks are required on or adjacent to the easement area. As required, Electricity Entity is able to construct access tracks, retain the right of use of these tracks and maintain them to a suitable level to permit access for its vehicles. Where gates are installed within the easement area, an Electricity Entity lock may be required to enable continual access along the easement corridor.

In addition, periodic vegetation management works are also undertaken by Electricity Entity to ensure that a specified minimum clearance between vegetation and the electric lines is maintained.

Where possible, property owners will be contacted prior to easement maintenance and vegetation works commencing.

6.1.8 Where consent (Wayleave) to installing Electricity Entity infrastructure has been given

Much of Electricity Entity's above ground electricity network is constructed without easements. Instead, the consent of the owner of the affected land is obtained and the electrical infrastructure is installed. Historically this consent has been in the form of a document known as a Wayleave.

This consent (or Wayleave) is a document evidencing the agreement from a particular owner, but it is not registered on the title of the land like an easement.

Once consent is obtained from an owner, Queensland legislation (the Electricity Act 1994) says that the consent of all future owners to the electrical infrastructure is not required.

Queensland legislation grants Electricity Entity rights to access, maintain, repair and replace electrical assets installed with consent.

6.2. Contact Electricity Entity when planning construction work near electric lines

When planning and before commencement (regardless of whether or not local council approval is required), it is essential to confirm that the proposed construction work (e.g. building, structure, sign, crane, scaffold) does not breach the minimum statutory clearance distances that must be maintained from nearby Electricity Entity overhead or underground electric lines. Refer Electrical Safety Regulation 2013, Schedule 4 and 5 for information on statutory clearance distances that must be complied with.

It is extremely dangerous and potentially life threatening to allow anything to come in close proximity to the conductors of an electric line.

Where it is necessary for an Electricity Entity to relocate electric lines due to statutory clearance breach caused by construction work performed nearby, the Electricity Entity is entitled to recover costs from the PCBU, property owner or occupier who caused the breach. Refer Electrical Safety Regulation 2013, Section 209 Building or adding to structure near electric lines.

Although it is preferred that the area around Electricity Entity electrical assets (including within an Easement area) is free of development, the following examples provide property owners and occupiers with an indication of what type of development is acceptable and what is not.

NOTE: Do not assume that your local council approval is sufficient approval for you to proceed with your work. The local council may not check whether or not your proposed construction work will comply with the Electricity Entity's statutory clearance requirements

6.3. What clearances must be maintained once construction work is completed?

Electrical Safety Regulation 2013, Schedule 4 - Clearance of overhead electric lines and Schedule 5 – Clearance of low voltage overhead service lines detail the statutory clearances that must be maintained from overhead electric lines for completed buildings and structures. These statutory clearances will need to be taken into consideration during the planning phase of determining the location for a building or structure. The table below sets out the minimum statutory clearances required for voltage levels up to 33 kV. Additional requirements may apply for voltage levels above 33 kV, contact the Electricity Entity for consultation.

Where the Electricity Entity has identified a breach of statutory clearance resulting from erection of a building or structure, the statutory breach will be reportable to the Electrical Safety Office as a Dangerous Electrical Event and any costs incurred in subsequent remedial work to achieve required statutory clearances may be recovered from the person or company who caused the breach of statutory clearance.

PROCEDURE / INSTRUCTIONS

CODE	LOCATION	DIRECTION	INSULATED CABLE (ABC) (Note 1)	BARE	MORE THAN 1000 VOLTS BUT NOT MORE THAN 33kV
------	----------	-----------	--------------------------------	------	---

MINIMUM CLEARANCE FROM ROADS, GROUND, OR BOUNDARIES

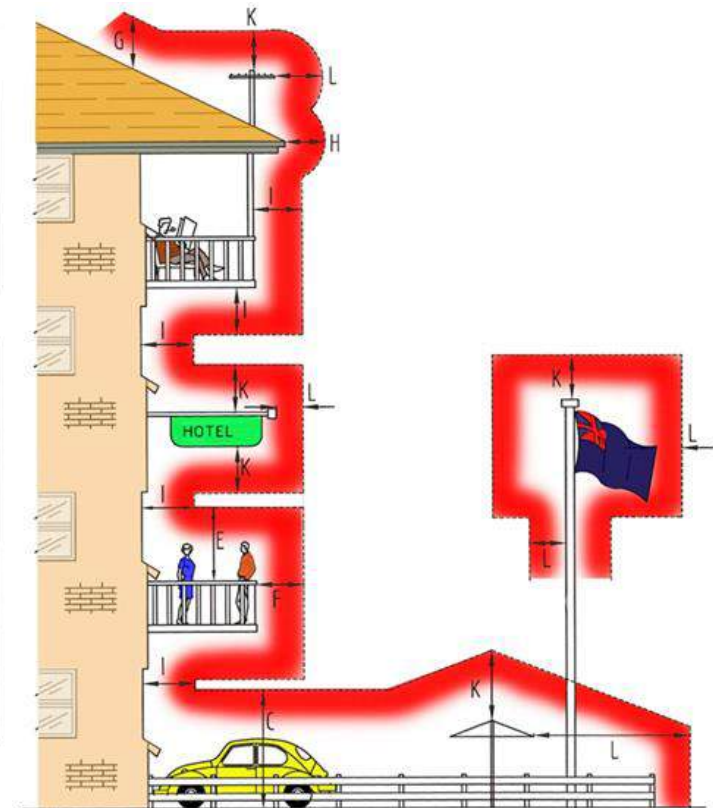
A	Crossing the carriageway, roadway	VERTICALLY	5.5m	5.5m	6.7m
A1	Designated "Over Dimension Routes"	VERTICALLY	7.0m	7.0m	7.5m
B	At other positions, footpath	VERTICALLY	5.5m	5.5m	5.5m
C	Other than roads but trafficable	VERTICALLY	5.5m	5.5m	5.5m
C1	Areas totally inaccessible to traffic or mobile machinery	VERTICALLY	4.5m	4.5m	4.5m
D	Cuttings, embankments, easement boundaries	HORIZONTALLY	1.5m	1.5m	2.1m
X	Real Property Boundaries	HORIZONTALLY	0.0m	0.0m	0.0m

MINIMUM CLEARANCE FROM STRUCTURES AND BUILDINGS

E F	Unroofed terraces, balconies, sun-decks, paved areas, etc, subject to pedestrian traffic only. A hand rail or wall surrounding such an area and on which a person may stand. (Note)	VERTICALLY AND HORIZONTALLY (Note)	2.7m 1.2m	3.7m 1.5m	4.6m 2.1m
G H	Roofs or similar structures not used for traffic or resort but on which a person may stand. A parapet surrounding such a roof and on which a person may stand. (Note)	VERTICALLY AND HORIZONTALLY (Note)	2.7m 0.9m	3.7m 1.5m	3.7m 2.1m
I	Covered places of traffic or resort such as windows which are capable of being opened, roofed open verandahs and covered balconies.	IN ANY DIRECTION	1.2m	1.5m	2.1m
J	Blank walls, windows which cannot be opened. (Note)	HORIZONTALLY	0.6m	1.5m	1.5m
K L	Other structures not normally accessible to persons. (Note)	VERTICALLY HORIZONTALLY (Note)	0.6m 0.3m	2.7m 1.5m	3.0m 1.5m

NOTE:

The vertical clearance and the horizontal clearance specified shall be maintained.



PROCEDURE / INSTRUCTIONS

The following list of examples is not exhaustive, and it may be necessary to contact the Electricity Entity if doubt exists as to what is permitted around electricity assets.

What is PERMITTED around Electricity Entity overhead or underground electric lines	What is NOT PERMITTED around Electricity Entity overhead or underground electric lines
<ul style="list-style-type: none"> ✓ Erection of fences to a maximum height of 2.4 m is generally acceptable, provided they do not affect access to, and work on, the poles, electric lines and/or cables. Trees, shrubs and plants should be located clear of vehicle access. Note: Maximum Growth Height of 3 m. ✓ Clothes hoists and barbecues should be located clear of the vehicle access way. Note: Maximum Height 2.5 m. ✓ Installation of underground utility services, such as low voltage electricity, gas, telephone and water, is generally acceptable, subject to clearances from Electricity Entity poles and supporting structures, and underground electric mains. ✓ Excavating, filling and altering of nearby land may be acceptable but full details need to be provided to the Electricity Entity for assessment. ✓ Vehicles, mobile plant and equipment within the easement area need to maintain the minimum statutory clearances distances from overhead electric lines. Normal farming, grazing and other agricultural activities can be carried out. Take care when ploughing or operating mobile machinery or irrigation equipment near Electricity Entity's equipment. ✓ Parking of vehicles, trucks, trailers, etc. is normally allowed. Note: Maximum Load and Aerial Height of 4 m. Barriers of an approved design (e.g. bollards) may be required to protect poles from vehicle contact damage. Heavy vehicle or operating plant crossings may need a protective concrete cover to ensure underground cables are not damaged. 	<ul style="list-style-type: none"> ✗ Build houses, sheds, garages or other large structures. Building of roofed/ unroofed verandahs, swimming pools and pergolas are generally not acceptable. ✗ Flying kites or model aircraft within the easement. ✗ Driving fence posts or stakes into ground within easements where there is underground cabling. ✗ Storing liquids such as petrol, diesel fuel, or any flammable or combustible material that will burn. ✗ Installing lighting poles. ✗ Stockpiling soil or garbage within the easement. ✗ Planting trees in large quantities that could create a fire hazard or that grow in excess of the approved maximum height of 3 m. ✗ Storing or using explosives. ✗ Residing in or occupying any caravan or mobile home within an easement. ✗ Placing obstructions within the vicinity of any Electricity Entity assets (e.g. power pole, overhead electric line, equipment or pole stay) that impede access to or work on these assets.

6.4. What about Electric and Magnetic Fields?

The Electricity Entity operates its electric lines within the current guidelines set by the National Health and Medical Research Council for exposure to 50/60 hertz electric and magnetic fields (EMF) and is mindful of some community concern about such fields and health. Contact the Electricity Entity (General Enquiries phone number - refer page 3). Alternatively, further information can be sourced from:

Energy Networks Association (ENA) brochure - "Electric and Magnetic Fields - What We Know", January 2014

http://www.ena.asn.au/sites/default/files/emf-what-we-know-jan-2014-final_1_1.pdf

Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) brochure - "Electricity and Health", May 2011

http://www.arpansa.gov.au/RadiationProtection/Factsheets/is_electricity.cfm

DEFINITIONS

Term	Definition
Applicant	A person contacting or applying to the Electricity Entity for a Safety Advice.
Authorised Person	For work near an electrical line, means a person who has enough technical knowledge and experience to do work that involves being near to the electrical line; and has been approved by the person in control of the electrical line (Electricity Entity) to do work near to the electrical line.
Authorised Person (Electrical)	An Electrical Mechanic or Electrical Linesperson (holding current Queensland Licence) working on behalf of an electrical contractor and accredited with the Electricity Entity who is permitted to remove and replace LV service fuse(s) when isolation of customer LV service line is required to eliminate the exclusion zone around the LV service line, or to work on the customer's mains and / or switchboard.
Earthworks	Any digging, penetration or disturbance of ground including but not limited to post hole digging, excavating, trenching, directional boring, bore hole sinking, driving pickets/posts into ground, cut and fill, dam or levee bank construction, blasting.
Electricity Entity	Where Electricity Entity appears throughout this document, it relates to either Energex or Ergon Energy area of responsibility. Refer to respective contact details below.
Instructed Person	For an electrical line, means a person who is acting under the supervision of an Authorised Person for the electrical line.
Safety Advice	A written notice identifying the known electrical hazards at a specific site and advising the control measures required to be implemented by Responsible Person (person responsible for worksite) to reduce the likelihood of harm to person, plant or vehicle at site.
Safety Observer	<p>A safety observer or "spotter", for the operation of operating plant, means a person who:</p> <ul style="list-style-type: none">(a) observes the operating plant; and(b) advises the operator of the operating plant if it is likely that the operating plant will come within an exclusion zone for the operating plant for an overhead electric line. <p>This is a person who has undergone specific training and is competent to perform the role in observing, warning and communicating effectively with the operator of the operating plant.</p>
Untrained Person	For an electrical line, means a person who is not an Authorised Person or an Instructed Person for the electrical line.

TRAINING

Staff must be current in all Statutory Training relevant for the task.

SAFETY / ENVIRONMENTAL CONTROLS

Follow the Safety Policy, procedures and practices set out for Energy Queensland and subsidiary companies.

Personnel are responsible for understanding all the risks and ensuring their individual actions do not endanger the health and safety of themselves or others.



FATAL HAZARDS CRITICAL CONTROLS FOR THE TASK



REFERENCES

Supporting Documents

Electrical Safety Regulation 2013: Part 5 - Overhead and Underground Electric Lines

Electrical Safety Code of Practice 2020 - Working Near Overhead and Underground Electric Lines

Work Health and Safety Act 2011

Work Health and Safety Regulation 2011

Energex documents:

- Application for Safety Advice – Working near Energex exposed live parts
- Important Notice – Working near Energex Power Lines Including Overhead Services
- Safety Advice on working near Energex exposed live parts

Ergon Energy documents:

- Safety Advice Request Form
- Safety Advice on Working around Electrical Parts Form
- Important Notice Regarding Safety Advice QRG

Copies of the relevant Acts, Regulation and Codes of Practice and any other relevant legislation can be found on the Queensland Government web site -

<https://www.worksafe.qld.gov.au/>

REFERENCES

Disclaimer

This document refers to various standards, guidelines, calculations, legal requirements, technical details and other information and is not an exhaustive list of all safety matters that need to be considered.

Over time, changes in industry standards and legislative requirements, as well as technological advances and other factors relevant to the information contained in this document, may affect the accuracy of the information contained in this document. Whilst care is taken in the preparation of this material, Energex and Ergon Energy do not guarantee the accuracy and completeness of the information. Accordingly, caution should be exercised in relation to the use of the information in this document.

To the extent permitted by law, Energex and Ergon Energy will not be responsible for any loss, damage or costs incurred as a result of any errors, omissions or misrepresentations in relation to the material in this document or for any possible actions ensuing from information contained in the document.

TABLE OF CONTENTS

CONTENTS

1.	ABOUT THIS GUIDE	2
1.1.	Who does the Electrical Safety Code of Practice 2020 - Working Near Overhead and Underground Electric Lines and Electricity Entity Requirements apply to?	2
1.2.	Are you working or planning to work near overhead or underground electric lines?	2
1.2.1	Work near overhead electric lines	3
1.2.2	Exclusion Zones	3
1.2.3	Work near underground electrical lines (underground electrical assets)	5
1.3.	Obtaining Safety Advice.....	5
1.4.	Authorised Person and how to become one?.....	6
1.5.	Contacting Electricity Entity for Safety Advice or Authorised Person Enquiries	6
2.	OVERHEAD ELECTRIC LINES	7
2.1.	Isolation of supply to customer installation to eliminate exclusion zone around LV service line	8
2.2.	Operating Plant.....	8
2.3.	Scaffolding Requirements	9
2.4.	High Load transport under Overhead Electric Lines	12
2.5.	Additional Details and Fact Sheets on Electricity Entity Requirements.....	12
3.	UNDERGROUND ELECTRICAL ASSETS.....	12
3.1.	Responsibilities When Working in the Vicinity of Electricity Entity Underground Electrical Assets.....	12
3.2.	Conditions of Supply of Information	13
3.3.	When Working in the Vicinity of Electricity Entity Underground Electrical Assets, You Must Observe the Following Conditions.....	14

TABLE OF CONTENTS

3.3.1	Records	14
3.3.2	Location of underground electrical assets	14
3.3.3	Remote or On-Site Cable Location conducted by Electricity Entity	14
3.3.4	Electrical Cables	15
3.3.5	Separation from Electricity Entity underground electrical assets	15
4.	EXCAVATION.....	16
4.1.	Excavating near Poles and Stay Wires	16
4.1.1	Certified Engineering Assessment	18
4.2.	Excavating Near Underground Electrical Assets	18
4.2.1	Excavating Parallel to Underground Electrical Assets.....	19
4.2.2	Excavating Across Underground Electrical Assets.....	19
4.2.3	Heavy Machinery Operation Over Underground Electrical Assets	19
4.2.4	Directional Boring Near Underground Electrical Assets	19
4.2.5	Hydro Vac Operation	19
4.3.	Blasting.....	20
5.	REPORTING DAMAGE CAUSED TO OVERHEAD OR UNDERGROUND ELECTRIC LINES.....	20
6.	INFRASTRUCTURE NEAR ELECTRIC LINES.....	20
6.1.	Easements and Wayleaves.....	20
6.1.1	What is an Electricity Easement?.....	20
6.1.2	Why are easements necessary?.....	20
6.1.3	How do I know if there are easements on my property?.....	21
6.1.4	Who owns the land the easement is on?	21
6.1.5	How does an easement affect what I can do with my property?.....	21
6.1.6	Who is responsible for maintenance of easement area?.....	21
6.1.7	What type of maintenance work does Electricity Entity undertake on easements?.....	21
6.1.8	Where consent (Wayleave) to installing Electricity Entity infrastructure has been given.....	21
6.2.	Contact Electricity Entity when planning construction work near electric lines.....	22
6.3.	What clearances must be maintained once construction work is completed?.....	22
6.4.	What about Electric and Magnetic Fields?	24

Referral
265687048

Member Phone
1800 687 626

Responses from this member

Response received Mon 15 Dec 2025 8.46am

File name	Page
Response Body	45
265687048_20251214_224554059620_1.pdf	46
4678_NBN_Dial_Before_You_Dig_Poster_20170517.pdf	49
Disclaimer_265687048_20251214_224554059620.pdf	51

Hi Muhammad Khan,

Please find attached the response to your DBYD referral for the address mentioned in the subject line. The location shown in our DBYD response is assumed based off the information you have provided. If the location shown is different to the location of the excavation then this response will consequently be rendered invalid.

Take the time to read the response carefully and note that this information is only valid for 28 days after the date of issue.

If you have any further enquiries, please do not hesitate to contact us.


Regards,
Network Services and Operations
NBN Co Limited
P: 1800626329
E: dbyd@nbnco.com.au
www.nbnco.com.au

Confidentiality and Privilege Notice

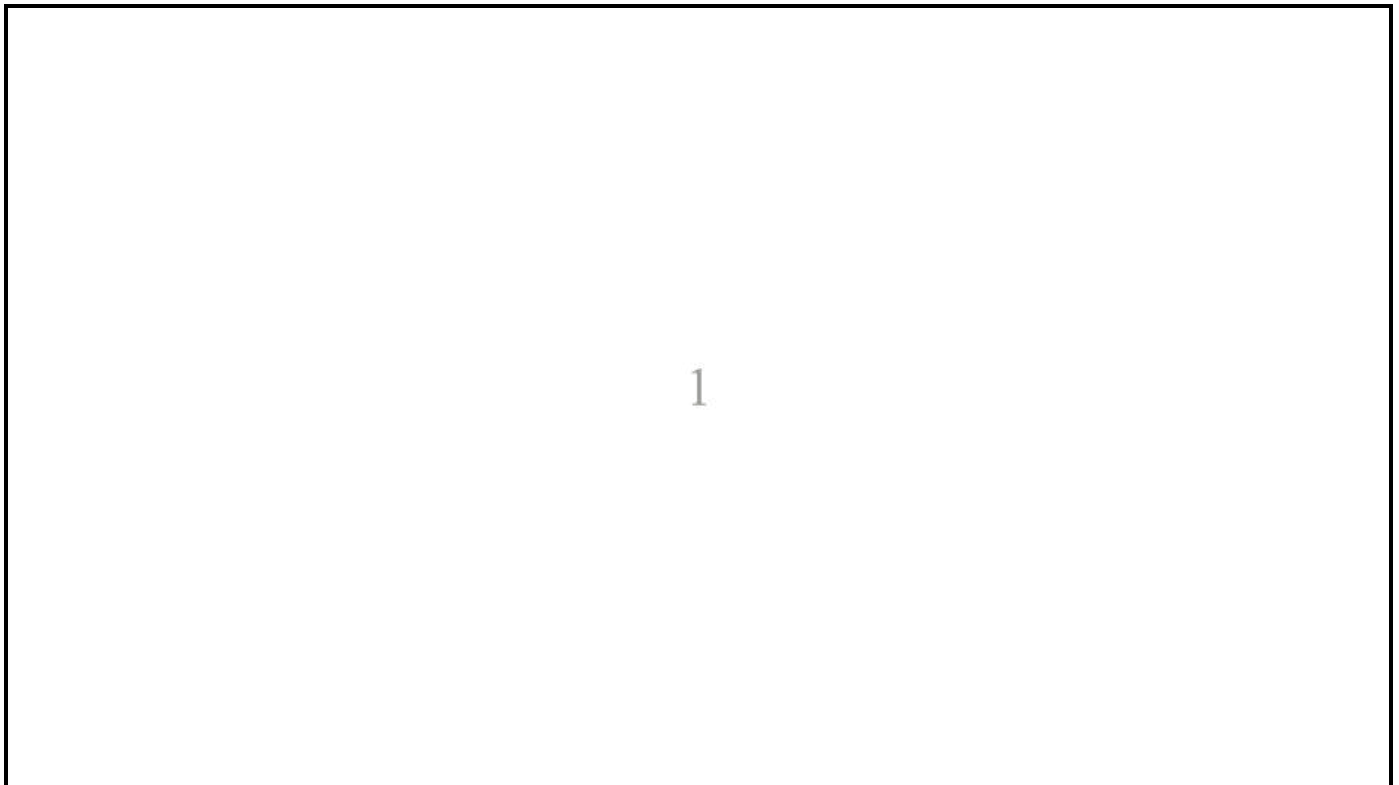
This e-mail is intended only to be read or used by the addressee. It is confidential and may contain legally privileged information. If you are not the addressee indicated in this message (or responsible for delivery of the message to such person), you may not copy or deliver this message to anyone, and you should destroy this message and kindly notify the sender by reply e-mail. Confidentiality and legal privilege are not waived or lost by reason of mistaken delivery to you. Any views expressed in this message are those of the individual sender, except where the sender specifically states them to be the views of NBN Co Limited

Please Do Not Reply To This Mail

To: Muhammad Khan
Phone: Not Supplied
Fax: Not Supplied
Email: mkhan@jfp.com.au

Dial before you dig Job #:	51942292	
Sequence #	265687048	
Issue Date:	14/12/2025	
Location:	16 Poole Way , Bushland Beach , QLD , 4818	

Indicative Plans are tiled below to demonstrate how to layout and read nbn asset plans





LEGEND



	Parcel and the location
	Pit with size "5"
	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
	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 Direct buried cables between pits of sizes, "5" and "9" are 10.0m apart.
	Trench containing any INSERVICE/CONSTRUCTED (Copper/RF/Fibre) cables.
	Trench containing only DESIGNED/PLANNED (Copper/RF/Fibre/Power) cables.
	Trench containing any INSERVICE/CONSTRUCTED (Power) cables.
	Road and the street name "Broadway ST"
Scale	 Meters 1:2000 1 cm equals 20 m



Working near nbn™ cables

nbn has partnered with Dial Before You Dig to give you a single point of contact to get information about **nbn** underground services owned by **nbn** and other utility/service providers in your area including communications, electricity, gas and other services. Contact with underground power cables and gas services can result in serious injury to the worker, and damage and costly repairs. You must familiarise yourself with all of the Referral Conditions (meaning the referral conditions referred to in the DBYD Notice provided by **nbn**).

Practice safe work habits

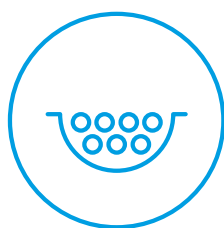
Once the DBYD plans are reviewed, the Five P's of Excavation should be adopted in conjunction with your safe work practices (which must be compliant with the relevant state Electrical Safety Act and Safe Work Australia "Excavation Work Code of Practice", as a minimum) to ensure the risk of any contact with underground **nbn** assets are minimised.



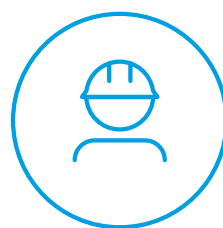
Plan: Plan your job by ensuring the plans received are current and apply to the work to be performed. Also check for any visual cues that may indicate the presence of services not covered in the DBYD plans.



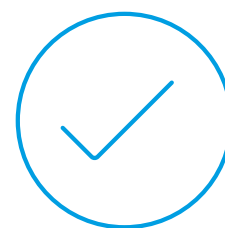
Prepare: Prepare for your job by engaging a DBYD Certified Plant Locator to help interpret plans and identify on-site assets. Contact **nbn** should you require further assistance.



Pothole: Non-destructive potholing (i.e. hand digging or hydro excavation) should be used to positively locate **nbn** underground assets with minimal risk of contact and service damage.

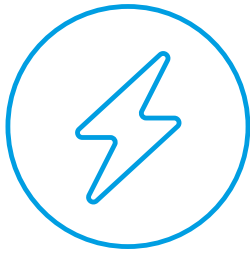


Protect: Protecting and supporting the exposed **nbn** underground asset is the responsibility of the worker. Exclusion zones for **nbn** assets are clearly stated in the plan and appropriate controls must be implemented to ensure that encroachment into the exclusion zone by machinery or activities with the potential to damage the asset is prevented.

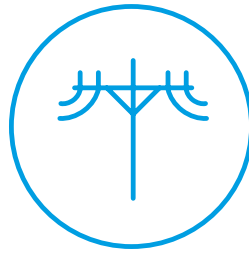


Proceed: Proceed only when the appropriate planning, preparation, potholing and protective measures are in place.

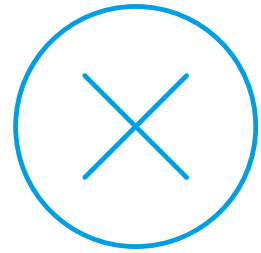
Working near **nbn**[™] cables



Identify all electrical hazards, assess the risks and establish control measures.



When using excavators and other machinery, also check the location of overhead power lines.



Workers and equipment must maintain safety exclusion zones around power lines.

Once all work is completed, the excavation should be re-instated with the same type of excavated material unless specified by **nbn**. Please note:

- Construction Partners of **nbn** may require additional controls to be in place when performing excavation activities.
- The information contained within this pamphlet must be used in conjunction with other material supplied as part of this request for information to adequately control the risk of potential asset damage.

Contact

All **nbn**[™] network facility damages must be reported online [here](#).
For enquiries related to your DBYD request please call 1800 626 329.


Disclaimer

This brochure is a guide only. It does not address all the matters you need to consider when working near our cables. You must familiarise yourself with other material provided (including the Referral Conditions) and make your own inquiries as appropriate. **nbn** will not be liable or responsible for any loss, damage or costs incurred as a result of reliance on this brochure.

This document is provided for information purposes only. This document is subject to the information classification set out on this page. If no information classification has been included, this document must be treated as UNCLASSIFIED, SENSITIVE and must not be disclosed other than with the consent of nbn co. The recipient (including third parties) must make and rely on their own inquiries as to the currency, accuracy and completeness of the information contained herein and must not use this document other than with the consent of nbn co. Copyright © 2021 nbn co limited. All rights reserved.



To: Muhammad Khan
Phone: Not Supplied
Fax: Not Supplied
Email: mkhan@jfp.com.au

Before You Dig Australia Job #:	51942292	
Sequence #	265687048	
Issue Date:	14/12/2025	
Location:	16 Poole Way , Bushland Beach , QLD , 4818	

Information

The area of interest requested by you contains one or more assets.

nbn™ Assets	Search Results
Communications	Asset identified
Electricity	No assets

In this notice **nbn™ Facilities** means *underground fibre optic, telecommunications and/or power facilities, including but not limited to cables, owned and controlled by nbn™*

Location of nbn™ Underground Assets

We thank you for your enquiry. In relation to your enquiry at the above address:

- **nbn's** records indicate that there **ARE nbn™** Facilities in the vicinity of the location identified above ("Location").
- **nbn** indicative plan/s are attached with this notice ("Indicative Plans").
- The Indicative Plan/s show general depth and alignment information only and are not an exact, scale or accurate depiction of the location, depth and alignment of **nbn™** Facilities shown on the Plan/s.
- In particular, the fact that the Indicative Plans show that a facility is installed in a straight line, or at uniform depth along its length cannot be relied upon as evidence that the facility is, in fact, installed in a straight line or at uniform depth.
- You should read the Indicative Plans in conjunction with this notice and in particular, the notes below.
- You should note that, at the present time, the Indicative Plans are likely to be more accurate in showing location of fibre optics and telecommunications cables than power cables. There may be a variation between the line depicted on the Indicative Plans and the location of any power cables. As such, consistent with the notes below, particular care must be taken by you to make your own enquiries and investigations to precisely locate any power cables and manage the risk arising from such cables accordingly.
- The information contained in the Indicative Plan/s is valid for 28 days from the date of issue set out above. You are expected to make your own inquiries and perform your own investigations (including engaging appropriately qualified plant locators, e.g BYDA Certified Locators, at your cost to locate **nbn™** Facilities during any activities you carry out on site).

We thank you for your enquiry and appreciate your continued use of the Before You Dig Australia Service. For any enquiries related to moving assets or Planning and Design activities, please visit the [nbn Commercial Works](#) website to complete the online application form. If you are planning to excavate and require further information, please email dbyd@nbnco.com.au or call 1800 626 329.

Notes:

1. You are now aware that there are **nbn™** Facilities in the vicinity of the above property that could be damaged as a result activities carried out (or proposed to be carried out) by you in the vicinity of the Location.
2. You should have regard to section 474.6 and 474.7 of the *Criminal Code Act 1995* (CoA) which deals with the consequences of interfering or tampering with a telecommunications facility. Only persons authorised by **nbn** can interact with **nbn's** network facilities.
3. Any information provided is valid only for **28 days** from the date of issue set out above.

Referral Conditions

The following are conditions on which **nbn** provides you with the Indicative Plans. By accepting the plans, you are agreeing to these conditions. These conditions are in addition, and not in replacement of, any duties and obligations you have under applicable law.

1. **nbn** does not accept any responsibility for any inaccuracies of its plans including the Indicative Plans. You are expected to make your own inquiries and perform your own investigations (including engaging appropriately qualified plant locators, e.g BYDA Certified Locators, at your cost to locate **nbn™** Facilities during any activities you carry out on site).
2. You acknowledge that **nbn** has specifically notified you above that the Indicative Plans are likely to be more accurate in showing location of fibre optics and telecommunications cables than power cables. There may be a variation between the line depicted on the Indicative Plans and the location of any power cables.
3. You should not assume that **nbn™** Facilities follow straight lines or are installed at uniformed depths

along their lengths, even if they are indicated on plans provided to you. Careful onsite investigations are essential to locate the exact position of cables.

4. In carrying out any works in the vicinity of **nbn**™ Facilities, you must maintain the following minimum clearances:
 - 300mm when laying assets inline, horizontally or vertically.
 - 500mm when operating vibrating equipment, for example: jackhammers or vibrating plates.
 - 1000mm when operating mechanical excavators.
 - Adherence to clearances as directed by other asset owner's instructions and take into account any uncertainty for power cables.
5. You are aware that there are inherent risks and dangers associated with carrying out work in the vicinity of underground facilities (such as **nbn**™ fibre optic, copper and coaxial cables, and power cable feed to **nbn**™ assets). Damage to underground electric cables may result in:
 - Injury from electric shock or severe burns, with the possibility of death.
 - Interruption of the electricity supply to wide areas of the city.
 - Damage to your excavating plant.
 - Responsibility for the cost of repairs.
6. You must take all reasonable precautions to avoid damaging **nbn**™ Facilities. These precautions may include but not limited to the following:
 - All excavation sites should be examined for underground cables by careful hand excavation. Cable cover slabs if present must not be disturbed. Hand excavation needs to be undertaken with extreme care to minimise the likelihood of damage to the cable, for example: the blades of hand equipment should be aligned parallel to the line of the cable rather than digging across the cable.
 - If any undisclosed underground cables are located, notify **nbn** immediately.
 - All personnel must be properly briefed, particularly those associated with the use of earth-moving equipment, trenching, boring and pneumatic equipment.
 - The safety of the public and other workers must be ensured.
 - All excavations must be undertaken in accordance with all relevant legislation and regulations.
7. You will be responsible for all damage to **nbn**™ Facilities that are connected whether directly, or indirectly with work you carry out (or work that is carried out for you or on your behalf) at the Location. This will include, without limitation, all losses expenses incurred by **nbn** as a result of any such damage.
8. You must immediately report any damage to the **nbn**™ network that you are/become aware of. Notification may be by telephone - 1800 626 329.
9. Except to the extent that liability may not be capable of lawful exclusion, **nbn** and its servants and agents and the related bodies corporate of **nbn** and their servants and agents shall be under no liability whatsoever to any person for any loss or damage (including indirect or consequential loss or damage) however caused (including, without limitation, breach of contract negligence and/or breach of statute) which may be suffered or incurred from or in connection with this information sheet or any plans (including Indicative Plans) attached hereto. Except as expressly provided to the contrary in this information sheet or the attached plans (including Indicative Plans), all terms, conditions, warranties, undertakings or representations (whether expressed or implied) are excluded to the fullest extent permitted by law.

All works undertaken shall be in accordance with all relevant legislations, acts and regulations applicable to the particular state or territory of the Location. The following table lists all relevant documents that shall be considered and adhered to.

State/Territory	Documents
National	Work Health and Safety Act 2011
	Work Health and Safety Regulations 2011
	Safe Work Australia - Working in the Vicinity of Overhead and Underground Electric Lines (Draft)

	Occupational Health and Safety Act 1991
NSW	Electricity Supply Act 1995
	Work Cover NSW - Work Near Underground Assets Guide
	Work Cover NSW - Excavation Work: Code of Practice
VIC	Electricity Safety Act 1998
	Electricity Safety (Network Asset) Regulations 1999
QLD	Electrical Safety Act 2002
	Code of Practice for Working Near Exposed Live Parts
SA	Electricity Act 1996
TAS	Tasmanian Electricity Supply Industry Act 1995
WA	Electricity Act 1945
	Electricity Regulations 1947
NT	Electricity Reform Act 2005
	Electricity Reform (Safety and Technical) Regulations 2005
ACT	Electricity Act 1971

Thank You,

nbn BYDA

Date: 14/12/2025

This document is provided for information purposes only. This document is subject to the information classification set out on this page. If no information classification has been included, this document must be treated as UNCLASSIFIED, SENSITIVE and must not be disclosed other than with the consent of nbn co. The recipient (including third parties) must make and rely on their own inquiries as to the currency, accuracy and completeness of the information contained herein and must not use this document other than with the consent of nbn co.

Copyright © 2021 nbn co Limited. All rights reserved.

Optus and or Uecomm Qld

Referral
265687049

Member Phone
1800 505 777

Responses from this member

Response received Mon 15 Dec 2025 8.46am

File name	Page
Response Body	56
265687049 - Optus Plan.pdf	57
265687049 - Optus Response Letter.pdf	58

Optus - Before You Dig Australia - REFERRAL NOTIFICATION

This referral has been successfully processed by Optus and the results are contained in the attached files.

Notice: Please DO NOT REPLY TO THIS EMAIL as it has been automatically generated and replies are not monitored.

If you have any queries or attachments missing please contact:

Network Operations Centre
1 Lyonpark Road,
Macquarie Park, NSW 2113
Ph: 1800 505 777
Fax: 1300 307 035

You will require Adobe Reader to view attachments.

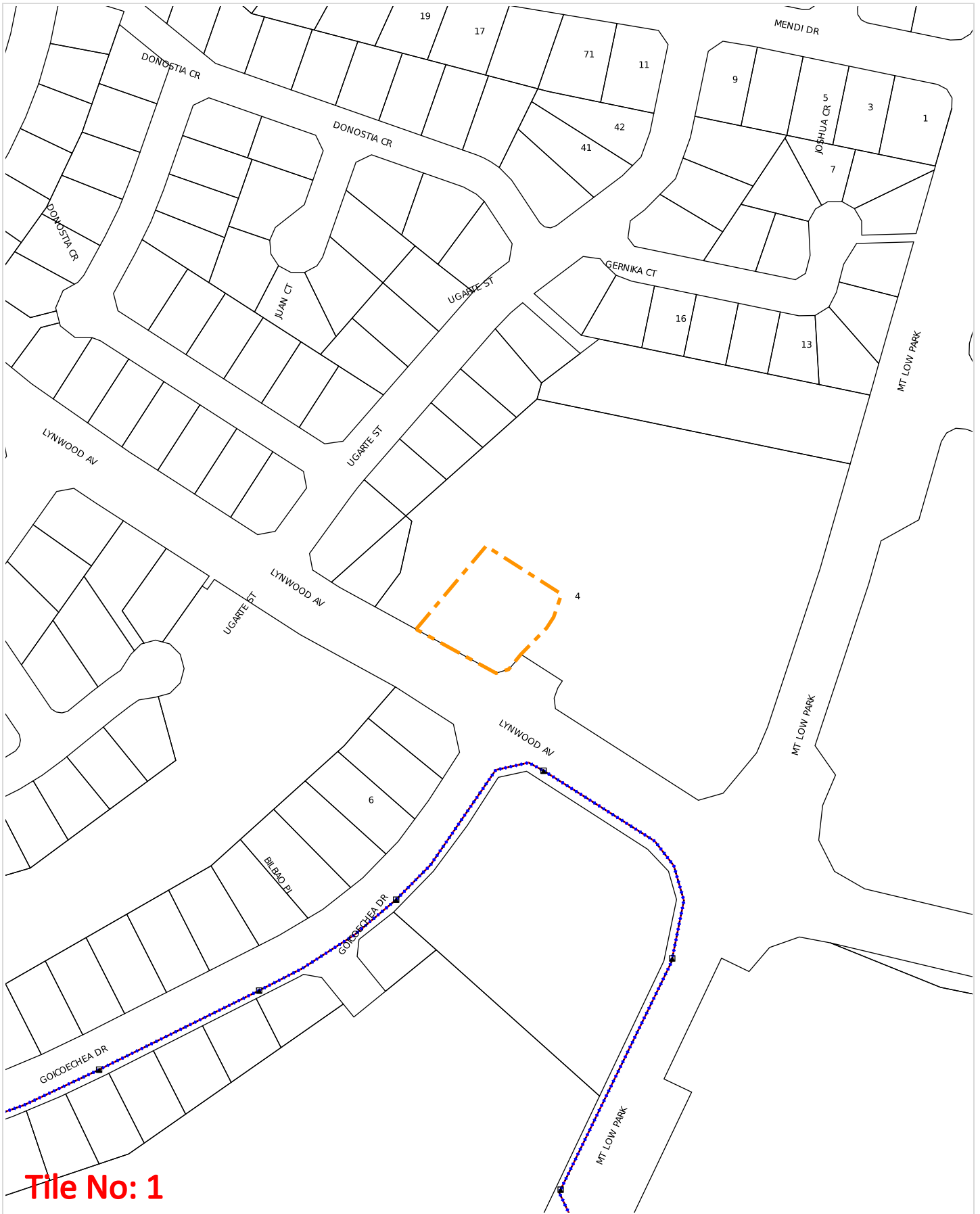
<http://www.adobe.com/downloads/>

We thank you for your enquiry and appreciate your continued use of the “Before You Dig Australia Service” Asset Analysis Service. If you require further information in relation to Optus and/or Uemcomm cables please contact Optus on above.

This reply relates only to the location indicated above and is valid for 30 days from the sent date. Where additional works are planned that have not been specified within this reply, Optus require that an additional enquiry be submitted to Before You Dig Australia enquiry Service: <http://www.byda.com.au>

In the case of no additional location request being submitted, Optus will hold the relevant party responsible for any damage to Optus and/or Uecommm plant and all expenses incurred by Optus as a result of asset damage.

This e-mail may contain confidential information. If you are not the intended recipient, please notify Network Operations Centre immediately and delete this e-mail from your system. You must not disclose this e-mail to anyone without express permission from the sender. The contents of all e-mails sent to and received from Optus may be scanned, stored, or disclosed to others at Optus' discretion.



Tile No: 1

WARNING: This document is confidential and may also be privileged. Confidentiality nor privilege is not waived or destroyed by virtue of it being transmitted to an incorrect addressee. Unauthorised use of the contents is therefore strictly prohibited. Any information contained in this document that has been extracted from our records is believed to be accurate, but no responsibility is assumed for any error or omission. Optus Plans and information supplied are valid for 30 days from the date of issue. If this timeline has elapsed, please raise a new enquiry.

Sequence Number: 265687049

Date Generated: 15 Dec 2025



For all Optus DBYD plan enquiries –
 Email: Fibre.Locations@optus.net.au
 For urgent onsite assistance contact 1800 505 777
 Optus Limited ACN 052 833 208



Date: 15 Dec 2025
To: Muhammad Khan
Company: Not Supplied
Address: 29 Sandi Street
Oxley, QLD 4075

ENQUIRY DETAILS

Location: 16 Poole Way, Bushland Beach, QLD 4818
Sequence No.: 265687049
BYDA Reference: 51942292

In relation to your enquiry concerning the above location, Optus advises as follows:

Optus records indicate that there ARE underground Optus FIBRE OPTIC TELECOMMUNICATIONS ASSETS in the vicinity of the above location as per the attached drawing(s).

PLEASE NOTE that any interference with these assets may be considered an offence under the Criminal Code Act 1995 (Cth). Optus reserves the right to seek compensation for loss or damage to its assets including consequential loss.

This reply is valid for a period of 30 days from the date above.

IMPORTANT INFORMATION

Asset location drawings provided by Optus are reference diagrams and are provided as a guide only. The completeness of the information in these drawings cannot be guaranteed. Exact ground cover and alignments cannot be provided with any certainty as these may have altered over time. Depths of telecommunications assets vary considerably as do alignments. It is essential to identify the location of any Optus assets in the vicinity prior to engaging in any works.

All Optus assets in the vicinity of any planned works will need to be electronically located to ascertain their general location. Depending on the scope of planned works in the vicinity, the assets may also need to be physically located.

YOU MUST ENGAGE THE SERVICES OF ONE OF THE OPTUS ASSET ACCREDITED LOCATORS TO CARRY OUT ASSET LOCATION (REFER LIST OF ACCREDITED LOCATORS AT THE END OF THIS OPTUS RESPONSE).

Unless otherwise agreed with Optus, where an on-site asset location is required, the requestor is responsible for all costs associated with the locating service including (where required) physically exposing the Optus asset.

DUTY OF CARE

When working in the vicinity of telecommunications assets you have a legal "Duty of Care" and non-interference that must be observed.

It is your responsibility as the requesting party (as a landowner or any other party involved in the planned works) to design for minimal impact to any existing Optus asset. Optus can assist at the design stage through consultation.

It is also your, as the requesting party (or your representative's), responsibility to:

- Obtain location drawings (through the Before You Dig Australia process) of any existing Optus assets at a reasonable time before any planned works begin;
- Have an Optus Accredited Asset Locator identify the general location of the Optus asset and physically locate the asset where planned works may encroach on its alignment; and
- Contact Optus for further advice where requested to do so by this letter.

DAMAGE TO ANY OPTUS ASSET MUST BE REPORTED TO 1800 505 777 IMMEDIATELY

You, your head contractor, and any relevant subcontractor are all responsible for any Optus asset damage as a result of planned activities in the vicinity of Optus assets.

This applies where works commence prior to obtaining Optus drawings, where there is failure to follow instructions or during any construction activities.

Optus reserves the right to recover compensation for loss or damage to its assets including consequential loss. Also, you, your head contractor and any relevant subcontractor may also be liable for prosecution under the Criminal Code Act 1995 (Cth).

ASSET RELOCATIONS

You are not permitted by law to relocate, alter or interfere with any Optus asset under any circumstance. Any unauthorised interference with an Optus asset may lead to prosecution under the Criminal Code Act 1995 (Cth). Enquiries relating to the relocation of Optus assets must be referred to the relevant Optus Damages and Relocations Team (refer to "FURTHER ASSISTANCE").

APPROACH DISTANCES

On receipt of Optus asset location drawings and prior to commencing any planned works near an Optus asset, engage an Optus Accredited Locator to undertake a general location of the Optus asset.

Physical location of the Optus asset by an Optus Accredited Locator will also be required where planned works are within the following approach distances of the general location of the Optus asset:

- a) In built up metropolitan areas where road and footpaths are well defined by kerbs or other features a minimum clear distance of 1 meter must be maintained from the general location of the Optus asset.
- b) In non-established or unformed metropolitan areas, a minimum clear distance of 3 meters must be maintained from the general location of the Optus asset.
- c) In country or rural areas where wider variations may exist between the general and actual location of an Optus asset may exist, then a minimum clear distance of 5 meters must be maintained from the general location of the Optus asset.

If planned works are parallel to the Optus asset, then the Optus asset must be physically located by an Optus Accredited Locator at a minimum of 5 meter intervals along the length of the parallel works prior to work commencing.

Under no circumstances is crossing of any Optus asset permitted without physical location of the asset being carried out by an Optus Accredited Locator. Depending on the asset involved an Optus representative may be required onsite.

The minimum clearances to the physical location of Optus assets for the following specific types of works must be maintained at all times.

Note: Where the clearances in the following table cannot be maintained or where the type of work differs from those listed then advice must be sought from the relevant Optus Damages and Relocations Team (refer to "FURTHER ASSISTANCE").

Type of Works	Clearance to Physical Location of Optus Asset
Jackhammers / Pneumatic Breakers	Not within 1 meter.
Light duty Vibrating Plate or Wacker Packer type compactors (not heavy road construction vibrating rollers etc.)	500mm compact clearance cover before a light duty compactor can be used over any Optus conduit. No compaction permitted over Optus direct buried cable without prior approval from Optus.
Boring Equipment (in-line, horizontal and vertical)	Not within 5 meters parallel of the Optus asset location without an Accredited Optus Asset Locator physically exposing the Optus asset and with an Optus representative onsite. Not to cross the Optus asset without an Accredited Optus Asset Locator physically exposing the Optus asset and with an Optus representative onsite.

Type of Works	Clearance to Physical Location of Optus Asset
Heavy vehicle Traffic (over 3 tonnes)	<p>Not to be driven across Optus conduits with less than 600mm of cover.</p> <p>Not to be driven across Optus direct buried cable with less than 1.2 meters of cover.</p> <p>Once off crossings permitted, multiple crossing (e.g. road construction or logging) will require Optus approval.</p> <p>Accredited Optus Asset Locator to physically expose the Optus asset to verify actual depth.</p>
Mechanical Excavators, Farm Ploughing, Vertical Hole installation for water bore or fencing etc.	<p>Not within 1 meter.</p> <p>Accredited Optus Asset Locator to physically expose the Optus asset to verify actual location.</p>

ASSET CLEARANCES AFTER COMPLETION OF WORKS

All Optus pits and manholes must be a minimum of 1 meter from the back of any kerb, 3.5 meters of the road surface without a kerb or not within 15 meters of street intersection.

In urban areas Optus conduit must have the following minimum depth of cover:

- Footway 600mm;
- Roadway 1 meter at drain invert and at road centre crown.

In rural areas Optus conduit must have a minimum depth of cover of 1 meter and direct buried cable 1.2 meters.

In cases where it is considered that the above clearances cannot be maintained at the completion of works, advice must be sought from the relevant Optus Damages and Relocations Team (refer "Further Assistance").







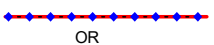

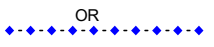




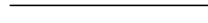


FURTHER ASSISTANCE


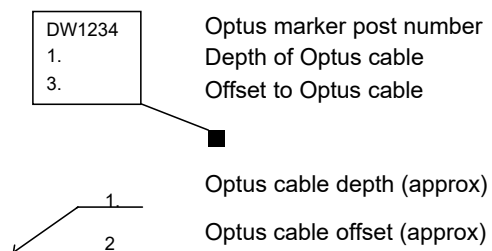

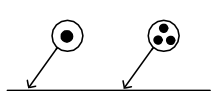
Further assistance on asset clearances, protection works, or relocation requirements can be obtained by contacting the relevant Optus Damages and Relocations Team on the following email address:

NFODamages&RelocationsDropbox@optus.com.au

Further assistance relating to asset location drawings etc. can be obtained by contacting the Optus Network Operations Asset Analysis Team on 1800 505 777.

OPTUS ENGINEERING DRAWING SYMBOLS

	Optus underground cable		Optus manhole/pit
	Optus underground IOF cable		Other Utility manhole/pit
	Optus conduit		Optus marker post
	Optus cable in Other Utility conduit		Railway / Tram line
	OR		Highway / Major Road
	Southern Cross conduit		Arterial Road
	Indigo conduit		Council Road - minor
	Uecomm conduit		
	Optus aerial fibre cable		

	Optus underground cable	
	Optus cable buried jointly with third party utility	
	Optus cable in conduit with subducts	



Optus Accredited Asset Locators

Name	Company Name	Phone	Email	State	Region/Service Area
Drew Misko	Australian Subsurface Pty Ltd	0427 879 600	admin@australiansubsurface.com	ALL	ALL
Andrew Watson	Subsurface Mapping Solutions Pty Ltd	0408 839 723	admin@subsurfacems.com.au	ALL (Not TAS)	South East QLD + Aus wide
Chris Gordon	Heavy Construction Solutions	1300 859 027	chris.gordon@heavycs.com.au	VIC, NSW, QLD, SA, TAS	All
Anthony Emmer-son	Taylor's Development Strategists	03 9501 2800	a.emmerson@taylor'sds.com.au	All	Nation Wide
Nathan Kelleher	Seeker Utility Engineering Pty Ltd	1300 733 583	info@seekerutility.com.au	VIC, NSW, ACT, QLD, TAS	Melbourne, regional Victoria, Sydney & regional NSW, all ACT, Brisbane QLD, Hobart & regional TAS
Sean Henry	Asset Survey Solutions	1300 035 796	info@assetsurvey.com.au	VIC, QLD, NSW, SA	VIC, QLD, NSW, SA
Suhairee Suhaimi	BCE Spatial	08 9791 7411	harry@bcespatial.com.au	WA/SA/VIC/NSW	All Regions
Alan Cordner	Alcom Fibre Services Pty Ltd	0400 300 337	alcomfibre@bigpond.com	NSW	Sydney, NSW
Daniel Rogers	D&D Rogers Pty Ltd T/as Bradmac Locating Services	0407662605	info@bradmaclocating.com.au	NSW	Sydney and surrounds
Shane Buckley	Cable & Pipe Locations Pty Ltd	0408730430	shane@cableandpipelocations.com.au	NSW	North Coast, Mid-North Coast, Northern Rivers, Central West, New England
Annabelle Pegler	Down Under Detection Services (DUDS)	0418 267 964	apegler@duds.net.au	NSW	All
Michael Grant	M&K Grant Bega Bobcats Pty Ltd	0427 260 423	zzbobcat@bigpond.net.au	NSW	Bega, Far South Coast
Antony Critcher	Geotrace Australia	1300 562 284	antony@geotrace.com.au	NSW	Entire Region
Sarah Martin	Hydro Digga	0447 774 000	admin@hydrodigga.com	NSW	Mid North Coast
Nathan Ellis	Utility Locating Services	0404 087 555	mail@uls.com.au	NSW	Sydney only

Scott O'Malley	Coastal Cable Locators Pty Ltd	0427 975 777	scott@coastalcablelocators.com.au	NSW	South Coast
Liam Bolger	Brandon Construction Services	0438 044 008	liam.bolger@hotmail.com	NSW	Sydney
Karen Durkin	Durkin Construction Pty Ltd	02 9712 0308	karen@durkin.au	NSW/ACT	Entire NSW and ATC
Theresa Donnelly	Locate and Map	(02) 8753 0049	admin@locateandmap.com.au	NSW	Greater Sydney Region
Ken Browne	Riteway Traffic Control Pty Ltd	0419 212 969	kbrowne@ritewaytc.com.au	NSW	Central Coast, Newcastle
Jean-Max Monty	Civilscan	1300 575 488	info@civilscan.com.au	NSW	Sydney, Central Coast, Hunter, Blue Mountains, Southern Highlands, Illawarra
Scott Hunter	Hunter Ground Search	0409327345	admin@hunter-groundsearch.net.au	NSW	Hunter, Upper Hunter, Central Coast, Newcastle
Damien Black	Mid North Coast Hydro Digging & Service Locating P/L	0418 409 465	djblack1@bigpond.com	NSW	Mid North Coast
Joseph Restuccia	ProLocate	0415 633 393	joe.restuccia@prolocate.com.au	NSW	NSW Wide
Barry Maloney	Online Pipe & Cable Locating	1300 665 384	Office@onlinepipe.com.au	NSW	Sydney, Central Coast, Canberra, Wollongong, Newcastle
Sam Romano	Locating Services	0403 065 510	sam.romano@locatingservices.com.au	NSW	NSW All
Scott Allison	CRUX Surveying Australia Pty Ltd	0285822300	scottallison@cruxsurveying.com.au	NSW	Sydney Metro
Donna Wullaert	Commence Communications Pty Ltd	02 6226 3869	admin@commencecomms.com.au	NSW	Canberra/ Yass / Bungendore/ Goulburn and surrounding regional areas
Grant Pearson	Warrabinya Services	0423 651 615	grant@warrabinya.com.au	NSW	Greater Sydney region
Stephen Fraser	Advanced Ground Locations	(02) 4930 3195	steve_agl@hotmail.com	NSW	Newcastle, Hunter Valley, Central Coast, Taree & Surrounding Areas
Mark Smith	Armidale Electrical	02 6772 3702	office@armidale-electrical.com.au	NSW	Northern Tablelands/Northern NSW
Samantha Guptill	Australian Locating Services	1300 761 545	admin@locating.com.au	NSW	All NSW
Clay Laneyrie	Laneyrie Electrical	0411142627	bindy@laneyrieelectrical.com.au	NSW	Illawarra, South Coast, Shoalhaven, Southern Highlands

Reece Gainsford	East Coast Locating Services	0431 193 111	admin@eastcoastlocatingservices.com.au	NSW	Newcastle/Maitland/ Hunter / Sydney / Central Coast / upper hunter / Port Stephens
Jason Vane	Smartsan Locators Pty Ltd	1300 778 923	bookings@sslocators.com.au	NSW	Sydney, Wollongong, Central Coast
Alex Farcash	Newcastle Locating Services	0410698599	admin@newcastlelocatingservices.com.au	NSW	NSW
Amer El Chami	Site Scan Pty Ltd	0449 992 520	office@sitescan.net.au	NSW	All NSW
Ali El Najjar	Sydney Service Locators	0449 205 705	Info@sydneyserVICelocators.com.au	NSW	Sydney only
Paul Wallis	Beveridge Williams	0431 458 878	wallisp@bevwill.com.au	NSW	NSW Wide
Cameron Handley	Wombat Underground Services	0407477038	accounts@wombatundergroundservices.com.au	NSW	ALL
Simon Williams	Geoscope Utility Detection Services Pty Ltd	1300 750 350	info@geoscopelocating.com.au	NSW	Sydney only
Laurence Mead	Astrea Pty Ltd	1300 009 346	admin@astrea.com.au	NSW	Sydney only
Braydon Greenwood	City Coast Services	0422432813	braydon.greenwood@live.com.au	NSW	NSW
Jim Morrison	Absolute Utilities Pty Ltd	0429 496 375	jim@absoluteutilities.com.au	NSW	Mid North Coast
Declan Dowd	Dowds Pipe And Cable Locating	0434 635 134	accounts@pipeandcable.com.au	NSW	Sydney/Wollongong
Nicholas Schneider	Subsurface Utility Solutions	0421157372	nick@subsurf.com.au	NSW	Sydney only
Ricky Evans	Riverina Cable Locating	0411444980	ricky@riverinacablelocating.com.au	NSW	Riverina, Murray
Adrian Ruane	Road and Rail Excavations Pty Ltd	0414 594 063	cody@roadandrailexcavations.com.au	NSW	Sydney only
Billy Cameron	Locate Down Under Pty Ltd	0431275034	info@locatedownunder.com.au	NSW	Sydney only
Daniel Hudson	Geosurv Locating Pty Ltd	1300 554 675	dan@geosurv.com.au	NSW	Sydney only
Roneel Chand	JDG Civil	0416506891	sadhunaam@gmail.com	NSW	Sydney only
Tim Briggs	Deetect Locating Services	0414630852	deetect.locating@outlook.com	NSW	ACT / NSW
Sean Ferriter	Utech Solutions Pty Ltd	1300 427 614	seanf@vaughancivil.com.au	NSW	Sydney only
Mark Restuccia	Direct Connect Locating PTY LTD	0400507690	info@dclocating.com.au	NSW	NSW only
Ali Chahine	Underground Industries	0406906787	info@undergroundindustries.com.au	NSW	Sydney only

Scott Copetti	Metiri	0435 710 399	scott@metiri.com.au	NSW	Newcastle & Hunter Region
Alex Trevisan	VFT	61 458 488 173	admin@vftes.com	NSW	Sydney only
Roneel Chand	Tonagh Civil Pty Ltd,	0416506891	roneel@tonaghcivil.com.au	NSW	All Regions
Brett Pickup	BAP Services Pty Ltd	0434006009	Brett@bapservices.com.au	NSW	All Areas, Sydney, Illawarra, Newcastle, ACT
Patrick Billingham	OzDetect Pty Ltd	0497700667	patrick@ozdetect.com.au	NSW	NSW
Cameron Brown	Sub Scan Australia	0421751343	admin@subscan.com.au	NSW	Norther Rivers
Jesse Gavin	LCG GLOBAL PTY LTD	1300032740	info@lcsolutions.com.au	NSW	All NSW
Rob Moate	Dig Safe NSW Pty Ltd	0477 900 200	rob@digsafensw.com.au	NSW	All Regions
Michael Nicholls	LocateX	0487 043 596	info@locatex.com.au	NSW	Sydney, Central Coast, New- castle
Brad Mccorkindale	b4 u dig locators	0447818260	jon@b4udiglocators.com	NSW	central west nsw
Euan Gow	Jurovich Surveying	1300 750 000	egow@jurovichsurveying.com.au	WA/NSW/SA	All state
Paul Linton	Utility Mapping	1300 627 746	plinton@isgroup.io	NSW/VIC/QLD/WA/NT	Sydney/ Melbourne/ Brisbane/ Perth/ Darwin
Karen Durkin	Durkin Construction Pty Ltd	02 9712 0308	karen@durkin.au	NSW/ACT	Entire NSW and ACT
Andrew Findlay/ Anthony Hart	LiveLocates	1300 517 062	info@livelocates.com.au	NSW/ACT	South Coast NSW, ACT, Snowy Mountains, Snowy Valley
Ian Brown	A1 Locate Services Pty Ltd	0400 484 828	Ian.brown@a1locate.com.au	NSW/ACT	Illawarra, Shoalhaven, South Coast, Southern Highlands & all NSW & ACT
Jason Steger	Steger & Associates Reg- istered Land Surveyors	0400 008 641	jason.steger@steger.com.au	ACT/NSW	ACT & Surrounds
Samuel Hathaway	Landmark Surveys	02 6280 9608	admin@landmarksurveys.com.au	NSW/ACT	ACT & Southern NSW
Kaisar Sefian	Australian Utility Search Pty Ltd	0424 841 888	kaisar@aususearch.com.au	NSW/ACT	Sydney to Canberra & all in between
Daniel Fox	Epoca Environmental Pty Ltd	1300 376 220	<a href="mailto:daniel@epocaenvironmen-
tal.com.au">daniel@epocaenvironmen- tal.com.au	NSW & ACT	All NSW & ACT
Scott Tancred	SureSearch Underground Services	1300 884 520	<a href="mailto:Scott.Tan-
cred@suresearch.com.au">Scott.Tan- cred@suresearch.com.au	NSW/ACT QLD	NSW, Sydney, Northern NSW, Canberra, QLD, South East QLD.
Justin Martinez	LCG GLOBAL PTY LTD	0401749007	J.martinez@lcsolutions.com.au	NSW, ACT, QLD, VIC	All regions
Troy Redden	On Point Utility Locating	1300 66 76 46	Troy@onpointlocating.com.au	NSW/QLD	Throughout both states

Geoff Campbell	CLS Locating	0450759497	geoffrey@campbellslocating.com.au	NSW/QLD	All QLD, Northern Rivers, NSW
Patrick Popovic	Site And See Pty Ltd	0479 162 692	patrick@siteandsee.com.au	QLD/NSW	Northern NSW, South East QLD
Kelsee Stevens	Abletech Underground Group	07 5293 7746	admin@abletechunderground.com.au	QLD / NSW	QLD / NSW
George Koenig	Downunder Locations(NSW) Pty Ltd	0438243856	downunderlocations@gmail.com	NSW/QLD	Tweed Heads/Gold Coast/Northern Rivers/Brisbane
Rhys Lambert	Provac / one find cables	1300 734 772	rhys@provac.net.au	QLD	South East QLD
Paul Beaton	Cairns Asset Locations	0448 157 227	paul.beaton@clarketrenching.com.au	QLD	FNQ to NT Border
Chris Hall	D C Locators Pty Ltd	0419 679 741	dcloc@powerup.com.au	QLD	Brisbane, Ipswich
Benji Lee	LADS	0478 915 237	benji@ladsqld.com.au	QLD	South East QLD
Ian Lambert	Lambert Locations Pty Ltd	07 5562 8400	admin@lambertlocations.com.au	QLD	South East QLD & Northern NSW
Ross Clarke	FNQ Cable Locators Pty Ltd	0428 775 655	onlineco@bigpond.net.au	QLD	QLD REGION
Col Greville	Bsure Locators	0488 520 688	admin@bsurelocators.com.au	QLD	Wide Bay & Burnett, Central and Western Queensland, Western Downs
Matthew Carr	Pensar	0405609739	matty.carr@pensar.com.au	QLD	Brisbane
Lacey Wallace	GeoRadar Asutrialia Pty Ltd	(07) 4331 5588	accounts@georadar.net.au	QLD	Widebay, Central QLD, Emerald & Surroundings
Craig Waite	C Locate	0437 808 444	clocate@bigpond.com	QLD	South East
Jeffrey Lenehan	Syndicate	0404141270	jlenehan@syndicate.com.au	QLD	Brisbane
Toni O'Dell	Utility Location Services	1300 001 857	qldops@utilitylocation-services.com.au	QLD	South East QLD
Jenny Dziduch	1300 Locate Pty Ltd	1300 562 283	admin@1300locate.com.au	QLD	All Queensland, Northern NSW
Brendon Smith	Advanced Locating PTY LTD	0424678823	admin@advancedlocating.com.au	QLD	Gold Coast
Bruce Normyle	Dynamic Locator Services	0434 731 933	Bruce@dynamicexcavations.com.au	QLD	SEQ
Robert Rutledge	Safe Dig Services	+61 7 3376 0856	rrutledge@safedig.com.au	QLD	Brisbane
Michael Falla	ICUC Locating Services Pty Ltd	0410085365	michael.falla@icuclocatingservices.com.au	QLD	South East QLD

Ben Stephens	DTS Group TA Electros-can	0434 140 556	ben.s@electroscanqld.com.au	QLD	Queensland
Adam Lloyd	Aussie HydroVac Services	07 3287 7818	adam.lloyd@aussiehydrovac.com.au	QLD	All
Michael Prentice	Onsite Utility Locations	0437 172 601	admin@onsiteutilitylocations.com.au	QLD	SEQ
Roland Mollison	LandPartners Pty Ltd	0439 488 545	roland.mollison@landpartners.com.au	QLD	South East Queensland
Duncan McGrath	Abletech Underground Group	0418 511 767	duncan@abletechunderground.com.au	QLD	QLD Wide
Daniel Poppi	Ace Cable Locations	0431517837	acecablelocations@bigpond.com	QLD	Wide Bay Burnett
Jason Bastow	Utility Underground	0414454015	jason@utilityunderground.com.au	QLD	QLD / NSW
Aidan Waszaj	South-East Scanning Pty Ltd	0421 193 439	aidan@southeastscanning.com.au	QLD	Southeast Queensland
Josh Brinn	i-LOCATE	0418 105 902	josh@i-lec.com.au	QLD	QLD only
Carl Molloy	Provac Melbourne	0451 104 611	melbourne@provac.net.au	VIC	Melbourne Region
Olivier Davies	Central Locating Pty Ltd	0439995894	ollie@centrallocating.com.au	VIC	Geelong and surrounding area
Tina Brereton	D-Tech Ground & Overhead	03 9544 8933	tina@d-tech.net.au	VIC	ALL
Josh Taylor	Advanced Locations Victoria Pty Ltd	0427846716	josh@advancedlocationsvic.com.au	VIC	All Victoria
Ben Minutoli	Geelong Cable Locations	1800 449 543	ben@geelongcablelocations.com.au	VIC	Melbourne, Geelong, Country Victoria
Mick McGoldrick	Locate Cables	0404 241 679	mick@locatecables.com	VIC	Western Victoria
Phi Nguyen	Asset Detection Services Pty Ltd	1300 300 100	Phi.nguyen@assetdetection.com.au	VIC	Melbourne/VIC
Maurice Tobin	Drain Solutions	0412 111600	info@drainsolutions.com.au	VIC	Melbourne Metro
Leigh French	Veris Australia VIC	(03) 7019 8400	melbourne@veris.com.au	VIC	Melbourne
Ben Wooldridge	Controltech Solutions	0447 760 759	ben.wooldridge@controltechsolutions.com.au	VIC	Melbourne
Chris Sandlant	Access Utility Engineering P/L	03 9799 8788	Chris.sandlant@accessue.com.au	VIC	Victoria & Regional
Shaun Stephen	STS Locating Services	0405 181 734	stslocatingservices@gmail.com	VIC	All VIC
Glen Foreman	Underground Services Detection Pty Ltd	0402 748 889	undergroundservices@bigpond.com	VIC	Victoria

Clinton Carver	Insight Underground Pty Ltd	0468 900 273	clinton@insightunderground.com.au	VIC	Victoria
Lindsay Botha	L B Underground Service Locations & Engineering	0499 658 677	lb.locations.engineering@gmail.com	VIC	Metro and Regional Victoria
Damien Nielsen	ELS Environmental Location Systems Pty Ltd	0499 499 137	bookings@elsvic.com.au	VIC	Victoria only
Tyler Blake	CHS Group	0409 437 750	tyler.blake@chsgroup.com.au	VIC	Horsham VIC
Craig Jackson	Survey Management Solutions	0400647299	craigj@surveyms.com.au	VIC	All Regions
Chloe Milligan	Tequa Plumbing and Civil	0351432666	civil@tequa.au	VIC	Gippsland only
David Hunter	Ballarat Locating Services	0488 501 261	dave@ballaratlocating.com.au	VIC	Western Victoria, Melbourne
Alex Jones	HR Utilities	1300 533 612	info@hrutilities.com.au	VIC	All of VIC
Ashley Stevens	ABS HYDRO Pty Ltd	0422 798 476	ashley.stevens@abshydro.com.au	NSW/VIC	All of VIC, Regional NSW
Robert Wootton	Trenchless Pipelaying Contractors (TPC)	08 8376 5911	tpc@trenchlesspipelaying.com.au	SA	All
Marc Rose	SADB	0488190699	marc@sadb.com.au	SA	Adelaide only
Deninis Stray	Pinpoint Services Mapping	(08) 8130 1600	hello@pinpointsm.com.au	SA	Adelaide
Michael Gear	Michael Gear	08 82788732	admin@mgsurveys.com.au	SA	South Australia
Matthew Cooper	Fulton Hogan	0447 320 581	Matthew.Cooper@fulton-hogan.com.au	SA	Adelaide
Liam Catchpole	Apex Service Locating Pty Ltd	0458 924 471	liam@apexvacolutions.com.au	SA	Adelaide and Surroundings
Bradley Gosling	Engineering Surveys	0433506880	bgosling@engsurveys.com.au	SA	Adelaide
Jason Shelvock	SA Underground Pty Ltd	0430 067 476	jason@saunderground.com.au	SA	All SA
Stephanie Leong	Platinum Locating Services	08 94080625	enquiries@platinumlocating.com.au	WA	WA
Henry Westbrook	Cable Locates & Consulting	08 9524 6600	admin@cablelocates.com.au	WA	All WA
Cameron Swift	Mikcomm Communication	08 9337 1125	cswift@mikcomm.com.au	WA	All
Tobi Lawrence-Ward	Abaxa	08 9256 0100	enquiries@abaxa.com.au	WA	Perth, Southwest, Western Australia
Ben Upton	TerraVac Vacuum Excavation	0433 374 802	locations@terravac.com.au	WA	Perth

Dale Shearsmith	Subtera	1300 046 636	dale@subtera.com.au	WA	WA
Liam Davies	Bunbury Telecom Service	897260088	admin@btswa.com.au	WA	WA
Edel O'Connor	Kier Contracting	0456 190 910	edel@kier.com.au	WA	Perth Metro & greater region; Regional WA
Nigel Nunn	CCS Group / Utility Locating Solutions	08 9385 5000	enquiry@ccswa.com.au	WA	Perth
Jeremy Brown	Spotters Asset Locations Pty Ltd	0459 130 677	jeremy@spottersassetlocations.com.au	WA	All
Reece Topham	Prime Locate	0400 888 406	reece@primelocate.com.au	WA	All
Rhyce Murphy	RM Surveys	08 9457 7900	rhyce.murphy@rmsurveys.com.au	WA	All
James Horton	Westscan Pty Ltd	1300 858 404	westscan1@gmail.com	WA	All
Ashleigh Austin	Veris WA	0419 024 696	perth@veris.com.au	WA	Perth Metro & Regional
Tim Daws	Award Contracting Pty Ltd	0411 878 895	info@awardcontracting.com.au	WA	Metro & Country Regions
Stephen Steart	Cabling WA Pty Ltd	0422 845 586	ssteart@cablingwa.com.au	WA	Perth Metro
Devvyn Barto	Pulse Locating	0431402738	devvyn.barto@pulselocating.com.au	WA	Western Australia
Shane McQuoid	Find Wise Location Services	0407992758	shane@findwise.com.au	WA	Perth
Alex King	KR SURVEYS	0400077933	alex@krsurveys.com.au	WA	Statewide
Cody Foster	Precision Locating Pty Ltd	0473029391	cody@precisionlocating.net	WA	Statewide
Scott Harrison	Triodia Scanning services PTY LTD	0438 664 196	booking@triodiascanning.com.au	WA	Perth/ Regional
Stuart Speckman	FYFE	08 8944 7888	Stuart.Speckman@fyfe.com.au	NT/SA/NSW	NT/SA/NSW
Wayne Parslow	Danisam	0417 089 865	danisam@westnet.com.au	NT	Darwin NT and Surrounds
Heather Easter	Archers Underground Service Pty Ltd	0418 737 299	admin@auslocations.com.au	TAS	Statewide
Scott Crerar	Paneltec Group	0400 895 637	scott@paneltec.com.au	TAS	All
Hayden Stone	Utility Detection & Mapping	03 61712555	admin@udmgroup.com.au	TAS	Statewide

Referral
265687052

Member Phone
1800 653 935

Responses from this member

Response received Mon 15 Dec 2025 8.51am

File name	Page
Response Body	70
265687052.pdf	72
AccreditedPlantLocators 2025-09-16a.pdf	74
Telstra Duty of Care v33.0a.pdf	75
Telstra Map Legend v4_0c.pdf	77




Attention: Muhammad Khan

Site Location: 16 Poole Way, Bushland Beach, QLD 4818

Your Job Reference: sub

Please do not reply to this email, this is an automated message -

Thank you for requesting Telstra information via Before You Dig Australia (BYDA). This response contains Telstra Information relating to your recent request.





 Accredited Plant Locator	General Contact Information including applications required to view Cable Plans - DWF & PDF
 Telstra Duty of Care v33.0a	Your responsibility and Legal requirements working near Telstra's Assets
 Telstra Map Legend 4.0	Common Symbols on Cable Plans and Safe Clearance distances when working near Telstra Assets



Please note:

When working in the vicinity of telecommunications plant you have a 'Duty of Care' that must be observed.

Ensure you read all documents (attached) - they contain important information.

In particular please read and familiarise yourself with the Before you Dig Australia - BEST PRACTISE GUIDES and The five Ps of safe excavation <https://www.byda.com.au/before-you-dig/best-practice-guides/>, as these documents set out the essential steps that must be undertaken prior to commencing construction activities.

 Best practice guides and the five P's of safe excavation	These are the essential steps to be undertaken prior to commencing construction activities	Essential Steps : Link 5 P's: Link
 We highly recommend using certified locators where possible.	CERTLOC : Link	
 1800 653 935 Telstra Plan Services	Whenever in doubt please contact this number for Telstra BYDA map related enquiries email Telstra.Plans@team.telstra.com	Note: that Telstra plans are only valid for 60 days from the date of issue
 How to Report Damage to Telstra Equipment	If you think you have damaged Telstra Assets, please Report it ASAP.	Call: 13 22 03 Report Online: Link

	<p>It is a criminal offence under the 'Criminal code act 1995' to tamper or interfere with Telecommunications infrastructure. Telstra will take action to recover compensation for the damage caused to property and assets, and for interference with the operation of Telstra's networks and customer service.</p>
	<p>Telstra plans contain confidential information and are provided on the basis that they are used solely for identifying location or vicinity of Telstra's infrastructure to avoid damage to this infrastructure occurring as part of any digging or other excavation activity. You must not use Telstra's plans for any other purpose or in a way that will cause loss or damage. You must comply with any other terms of access to the data that have been provided by you by Telstra (including conditions of use or access).</p>

WARNING - MAJOR CABLES and/or OPTIC FIBRE IN THE AREA.

Phone 1800 653 935 for further assistance.

Note: In some areas Telstra fibre routes may be marked as "Amcom", as Telstra has purchased much of this infrastructure. If in doubt, please contact Telstra Plan services on the number above. Telstra plans and information are only valid for 60 days from the date of issue.

WARNING:

Telstra plans and location information conform to Quality Level 'D' of the Australian Standard AS 5488 - Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. The exact position of Telstra assets can only be validated by physically exposing them. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy. Further on site investigation is required to validate the exact location of Telstra assets prior to commencing work. A Certified Locating Organisation is an essential part of the process to validate the exact location of Telstra assets and to ensure the assets are protected during construction works. See the **Before You Dig Australia - BEST PRACTISE GUIDES and The five Ps of safe excavation** <https://www.byda.com.au/before-you-dig/best-practice-guides/>.

Please note that:

- it is a criminal offence under the *Criminal Code Act 1995* (Cth) to tamper or interfere with telecommunications infrastructure.
- Telstra will take action to recover compensation for damage caused to property and assets, and for interference with the operation of Telstra's networks and customers' services.

Telstra's plans contain Telstra's confidential information and are provided on the basis that they are used solely for identifying the location or vicinity of Telstra's infrastructure to avoid damage to this infrastructure occurring as part of any digging or other excavation activity. You must not use Telstra's plans for any other purpose or in a way that will cause Telstra loss or damage and you must comply with any other terms of access to the data that have been provided to you by Telstra (including Conditions of Use or Access).

(See attached file: Telstra Duty of Care v33.0a.pdf)

(See attached file: Telstra Map Legend v4_0c.pdf)

(See attached file: AccreditedPlantLocators 2025-09-16a.pdf)

(See attached file: 265687052.pdf)

Mains Cable Plan

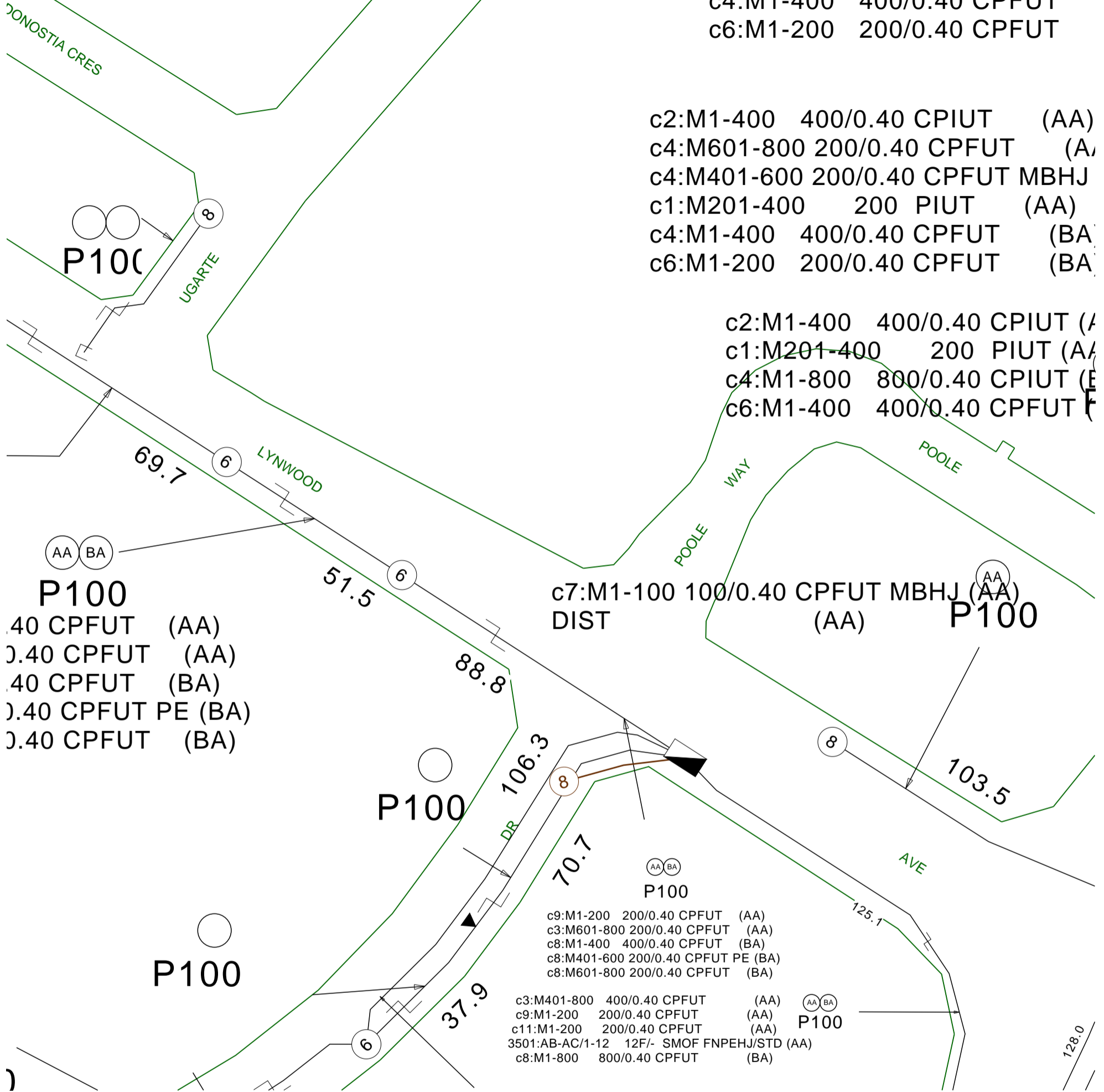


M1-200 200/0.40 CPFUT (AA)
 M601-800 200/0.40 CPFUT (AA)
 M1-400 400/0.40 CPFUT (BA)
 M401-600 200/0.40 CPFUT PE (BA)
 M601-800 200/0.40 CPFUT (BA)

c2:M1-400 400/0.40 CPIUT (AA)
 c4:M601-800 200/0.40 CPFUT (AA)
 c4:M401-600 200/0.40 CPFUT MBHJ (AA)
 c1:M201-400 200 PIUT (AA)
 c4:M1-400 400/0.40 CPFUT (BA)
 c6:M1-200 200/0.40 CPFUT (BA)

c2:M1-400 400/0.40 CPIUT (AA)
 c4:M601-800 200/0.40 CPFUT (AA)
 c4:M401-600 200/0.40 CPFUT MBHJ (AA)
 c1:M201-400 200 PIUT (AA)
 c4:M1-400 400/0.40 CPFUT (BA)
 c6:M1-200 200/0.40 CPFUT (BA)

c2:M1-400 400/0.40 CPIUT (AA)
 c1:M201-400 200 PIUT (AA)
 c4:M1-800 800/0.40 CPIUT (AA)
 c6:M1-400 400/0.40 CPFUT (BA)



Report Damage: <https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra>
 Ph - 13 22 03
 Email - Telstra.Plans@team.telstra.com
 Planned Services - ph 1800 653 935 (AEST bus hrs only) General Enquiries

Sequence Number: 265687052

TELSTRA LIMITED A.C.N. 086 174 781
 Generated On 15/12/2025 09:45:07

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
 Telstra plans and location information conform to Quality Level "D" of the Australian Standard AS 5488-Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. The exact position of Telstra assets can only be validated by physically exposing it. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy. Further on site investigation is required to validate the exact location of Telstra plant prior to commencing construction work. A Certified Locating Organisation is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works.
 See the Steps- Telstra Duty of Care that was provided in the email response.

General Information



Before you Dig Australia – BEST PRACTISE GUIDES
<https://www.byda.com.au/before-you-dig/best-practice-guides/>

OPENING ELECTRONIC MAP ATTACHMENTS –

Telstra Cable Plans are generated automatically in either PDF or DWF file types.
Dependent on the site address and the size of area selected.
You may need to download and install free viewing software from the internet e.g.



DWF Map Files (all sizes over A3)
Autodesk Viewer (Internet Browser) <https://viewer.autodesk.com/> or
Autodesk Design Review <http://usa.autodesk.com/design-review/> for DWF files.
(Windows PC)



PDF Map Files (max size A3)
Adobe Acrobat Reader <http://get.adobe.com/reader/>



Telstra New Connections / Disconnections
13 22 00



Telstra Protection & Relocation: 1800 810 443 (AEST business hours only).
[Email](#)
Telstra Protection & Relocation Fact Sheet: [Link](#)
Telstra Protection & Relocation Home Page [Link](#)



Telstra Aerial Assets Group (overhead network)
1800 047 909

Protect our Network:

by maintaining the following distances from our assets:

- **1.0m Mechanical Excavators, Farm Ploughing, Tree Removal**
- **500mm Vibrating Plate or Wacker Packer Compactor**
- **600mm Heavy Vehicle Traffic (over 3 tonnes) not to be driven across Telstra ducts or plant.**
- **1.0m Jackhammers/Pneumatic Breakers**
- **2.0m Boring Equipment (in-line, horizontal and vertical)**

For more info contact a [CERTLOC Certified Locating Organisation \(CLO\)](#) or
Telstra Location Intelligence Team 1800 653 935

Before You Dig Australia

Think before you dig

This document has been sent to you because you requested plans of the Telstra network through Before You Dig Australia (BYDA).

If you are working or excavating near telecommunications cables, or there is a chance that cables are located near your site, you are responsible to avoid causing damage to the Telstra network.

Please read this document carefully. Taking your time now and following the **BYDA's Best Practices and 5 Ps of Safe Excavation** <https://www.byda.com.au/before-you-dig/best-practice-guides/>

can help you avoid damaging our network, interrupting services, and potentially incurring civil and criminal penalties.

Our network is complex and working near it requires expert knowledge. Do not attempt these activities if you are not qualified to do so.



Disclaimer and legal details

*Telstra advises that the accuracy of the information provided by Telstra conforms to Quality Level D as defined in AS5488-2013.

It is a criminal offence under the Criminal Code Act 1995 (Cth) to tamper or interfere with telecommunications infrastructure.

Telstra will also take action to recover costs and damages from persons who damage assets or interfere with the operation of **Telstra's** networks.

By receiving this information including the indicative plans that are provided as part of this information package you confirm that you understand and accept the risks of working near **Telstra's** network and the importance of taking all the necessary steps to confirm the presence, alignments and various depths of **Telstra's** network. This in addition to, and not in replacement of, any duties and obligations you have under applicable law.

When working in the vicinity of a telecommunications plant you have a "Duty of Care" that must be observed. Please read and understand all the information and disclaimers provided below.

The Telstra network is complex and requires expert knowledge to interpret information, to identify and locate components, to pothole underground assets for validation and to safely work around assets without causing damage. If you are not an expert and/or qualified in these areas, then you must not attempt these activities. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers. Construction activities and/or any activities that potentially may impact on Telstra's assets must not commence without first undertaking these steps. Construction activities can include anything that involves breaking ground, potentially affecting Telstra assets.

If you are designing a project, it is recommended that you also undertake these steps to validate underground assets prior to committing to your design.

This Notice has been provided as a guide only and may not provide you with all the information that is required for you to determine what assets are on or near your site of interest. You will also need to collate and understand all information received from other Utilities and understand that some Utilities are not a part of the BYDA program and make your own enquiries as appropriate. It is the responsibility of the entities arranging for the works to be performed, supervising the works, and undertaking the works to protect Telstra network during excavation / construction works.

Telstra owns and retains the copyright in all plans and details provided in conjunction with the applicant's request. The applicant is authorised to use the plans and details only for the purpose indicated in the applicant's request. The applicant must not use the plans or details for any other purpose.

Telstra plans or other details are provided only for the use of the applicant, its servants, agents, or CERTLOC Certified Locating Organisation (CLO). The applicant must not give the plans or details to any parties other than these and must not generate profit from commercialising the plans or details. If the Applicant is aware of another party or parties about to perform or performing works at the location, it should ensure that the other party or parties have lodged a BYDA enquiry and obtained plans for that location. If you are undertaking excavations works you must follow the 5Ps of Safe Excavation. The 5 Ps of Safe Excavation are set out in the video in the below link.

<https://www.byda.com.au/education/resources/>

Telstra, its servants or agents shall not be liable for any loss or damage caused or occasioned by the use of plans and or details so supplied to the applicant, its servants and agents, and the applicant agrees to indemnify Telstra against any claim or demand for any such loss or damage.

Please ensure Telstra plans and information provided always remains on-site throughout the inspection, location, and construction phase of any works.

Telstra plans are valid for 60 days after issue and must be replaced if required after the 60 days.

Data Extraction Fees

In some instances, a data extraction fee may be applicable for the supply of Telstra information. Typically, a data extraction fee may apply to large projects, planning and design requests or requests to be supplied in non-standard formats. For further details contact Telstra Location Intelligence Team.

Telstra does not accept any liability or responsibility for the performance of or advice given by a CERTLOC Certified Locating Organisation (CLO). Certification is an initiative taken by Telstra towards the establishment and maintenance of competency standards. However, performance and the advice given will always depend on the nature of the individual engagement.

Neither the Certified Locating Organisation nor any of its employees are an employee or agent for Telstra. Telstra is not liable for any damage or loss caused by the Certified Locating Organisation or its employees.

Once all work is completed, the excavation should be reinstated with the same type of excavated material unless specified by Telstra.

The information contained within this pamphlet must be used in conjunction with other material supplied as part of this request for information to adequately control the risk of potential asset damage.

When using excavators and other machinery, also check the location of overhead power lines.

Workers and equipment must maintain safety exclusion zones around power lines

WARNING: Telstra plans and location information conform to Quality Level 'D' of the Australian Standard AS 5488 - Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy shown on the plans. **FURTHER ON SITE INVESTIGATION IS REQUIRED TO VALIDATE THE EXACT LOCATION OF TELSTRA PLANT PRIOR TO COMMENCING CONSTRUCTION WORK.** A plant location service is an essential part of the process to validate the exact location of Telstra assets and to ensure the assets are protected during construction works. The exact position of Telstra assets can only be validated by physically exposing them. Telstra will seek compensation for damages caused to its property and losses caused to Telstra and its customers.

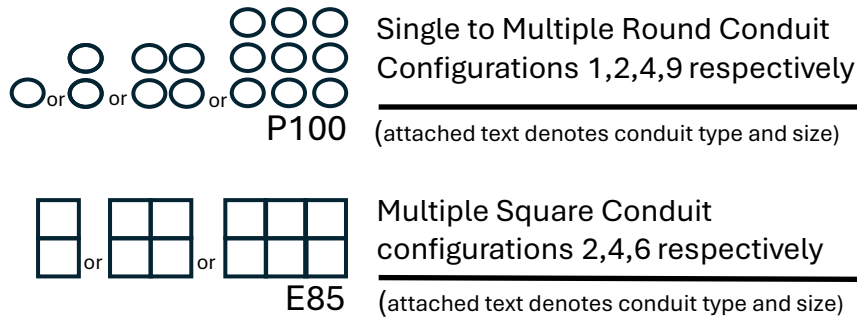
Privacy Note

Your information has been provided to Telstra by BYDA to enable Telstra to respond to your BYDA request. Telstra keeps your information in accordance with its privacy statement. You can obtain a copy at www.telstra.com.au/privacy or by calling us at 1800 039 059 (business hours only).

LEGEND



	Lead-in terminates at a Customer Address		Cable Jointing Pit Number / Letter indicating Pit type/size
	Exchange Major Cable Present		Elevated Joint (above ground joint on buried cable)
	Pillar / Cabinet Above ground Free Standing		Telstra Plant in shared Utility trench
	Above ground Complex Equipment Please note: Powered by 240v electricity		Aerial cable / or cable on wall
OC	Other Carrier Telecommunication Cable/ Asset. Not Telstra Owned		Aerial cable (attached to joint use Pole e.g., Power Pole)
DIST	Distribution cables in Main Cable Ducts		Marker Post Installed
MC	Main Cable ducts on a Distribution Plan		Buried Transponder
	Blocked or Damaged Duct		Marker Post & Transponder
	Footway Access Chamber (can vary between 1-lid to 12-lid)		Optical Fibre Cable Direct Buried
	NBN Pillar		Direct Buried Cable
	Third Party Owned Network Non-Telstra		nbn owned network



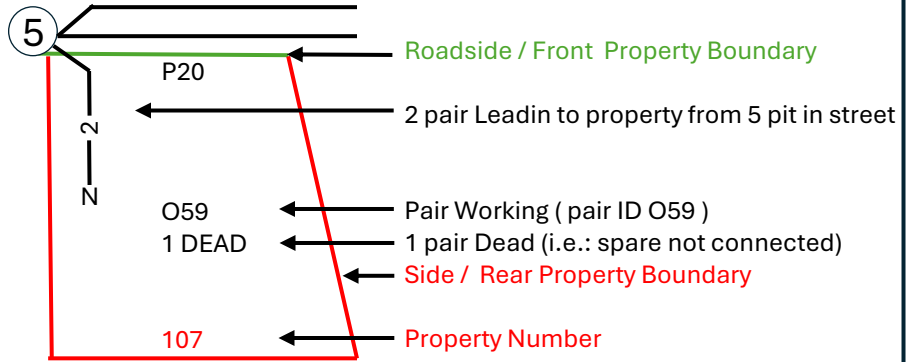
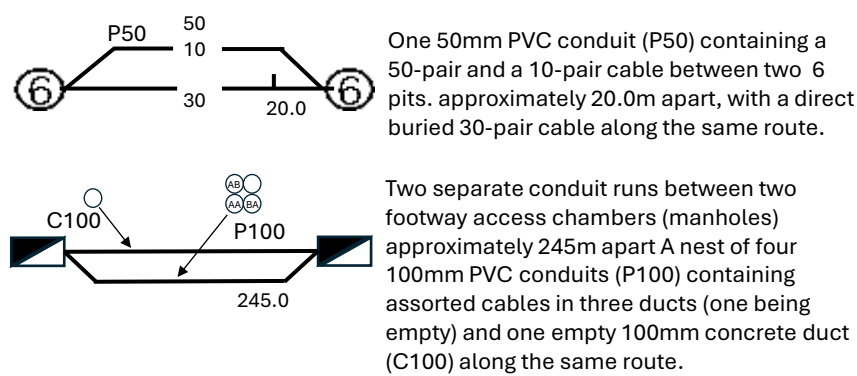
Some examples of conduit type and size:

A - Asbestos cement, P - PVC / Plastic, C - Concrete, GI - Galvanised Iron, E - Earthenware

Conduit sizes nominally range from 20mm to 100mm

P50 50mm PVC conduit
P100 100mm PVC conduit
A100 100mm asbestos cement conduit

Some Examples of how to read Telstra Plans



The 5 Ps of Safe Excavation

<https://www.byda.com.au/before-you-dig/best-practice-guides/>

<h2>Plan</h2> <p>Plan your job. Use the BYDA service at least one day before your job is due to begin, and ensure you have the correct plans and information required to carry out a safe project.</p>	<h2>Prepare</h2> <p>Prepare by communicating with asset owners if you need assistance. Look for clues onsite. Engage a Certified Locator.</p>	<h2>Pothole</h2> <p>Potholing is physically sighting the asset by hand digging or hydro vacuum extraction.</p>	<h2>Protect</h2> <p>Protecting and supporting the exposed infrastructure is the responsibility of the excavator. Always erect safety barriers in areas of risk and enforce exclusion zones.</p>	<h2>Proceed</h2> <p>Only proceed with your excavation work after planning, preparing, potholing (unless prohibited), and having protective measures in place.</p>
--	---	--	---	---

Referral
265687050

Member Phone
1300 878 001

Responses from this member

Response received Mon 15 Dec 2025 8.43am

File name	Page
Response Body	79
265687050.pdf	80

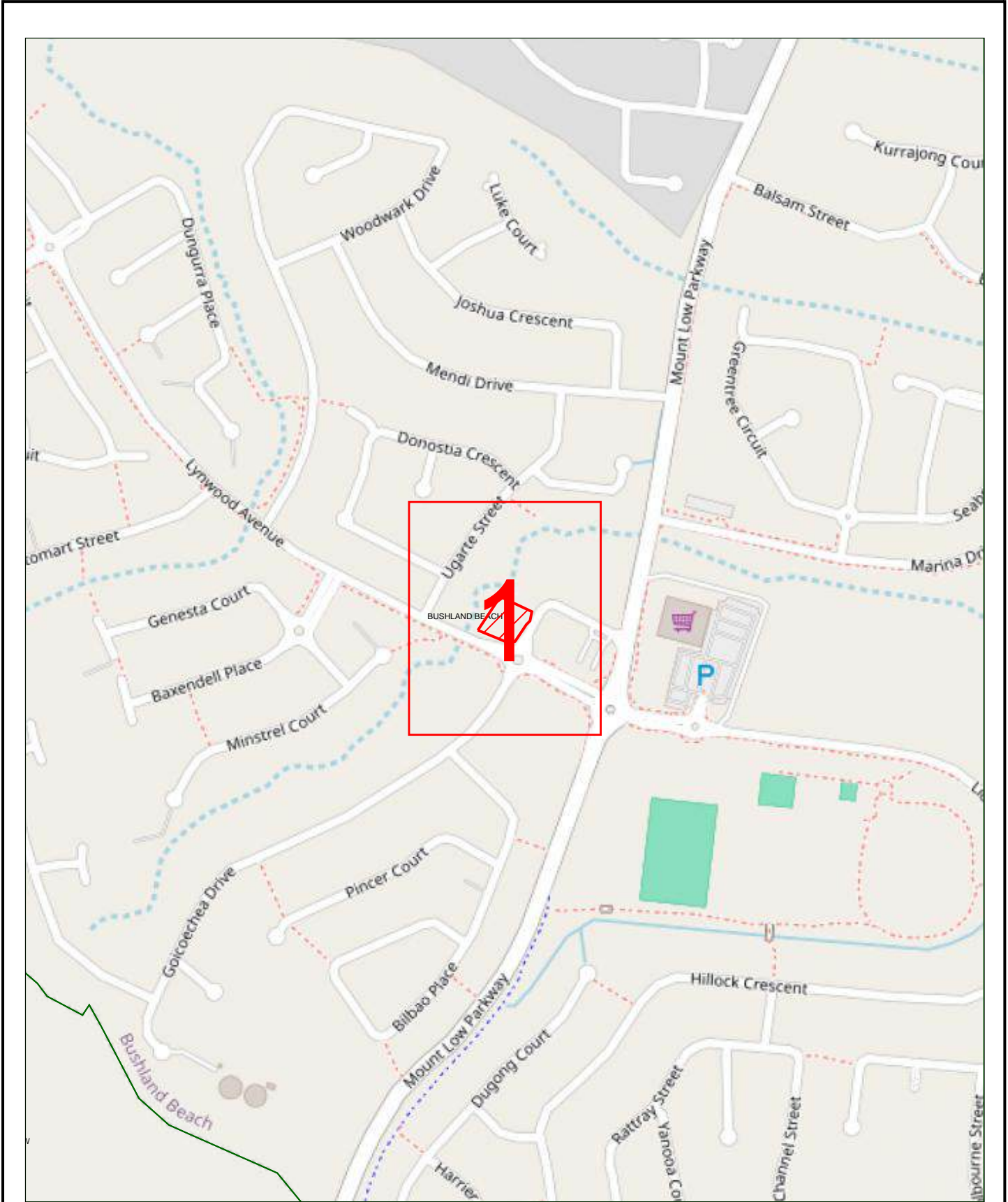
Request: 265687050 Enquirer: - 3239462 Contact: Muhammad Khan Email: mkhan@jfp.com.au Phone:
+61414290883 Address: 29 Sandi Street Oxley QLD 4075 Site Address: 16 Poole Way Bushland Beach QLD
4818 Activity: Planning and Design Job Number: 51942292

Before You Dig Australia (BYDA)

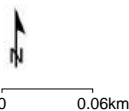
Infrastructure Location Information



Enquirer Details			
Customer ID	3239462	Contact Name	Muhammad Khan
Company Name		Phone	+61414290883
Email	mkhan@jfp.com.au		
Address	29 Sandi Street		
Enquiry Details			
Utility ID	37010	Sequence Number	265687050
Enquiry Date	15/12/2025 08:43	Enquiry Time	08:43
Response	AFFECTED	Location Road Name	Road,Nature Strip,Footpath
Activity	Planning and Design		
Address	16 Poole Way Bushland Beach		
Enquirer Responsibilities and Duty of Care			
It is the Enquirer's responsibility to ensure:			
<ul style="list-style-type: none">All Townsville City Council assets, including underground network, must be validated (physically sighted and identified), prior to commencing any excavation in the vicinityIt is recommended that a Certified Locator be engaged for the locating of assetsAll Townsville City Council assets once validated, must be protected from damageTCC infrastructure is not to be altered by any third party without prior approvalAll trench and pothole reinstatements are to occur no later than 5 days after work occurringIf your project is dependent on the position of the TCC assets, then it is recommended that you validate the position of the network prior to finalising your designTCC is contacted on 1300 878 001 if there are any errors or incorrect locations shown on the plans.Any damage to TCC owned infrastructure or property must be reported immediately to Customer Service Centre on 1300 878 001			
Important Information:			
This enquiry response, including any associated documentation, has been assessed and compiled from the information detailed within your BYDA enquiry. Please ensure that the BYDA enquiry details and this response accurately reflect your proposed works. The information shown on this map has been produced from the Townsville City Council's digital database. Asset location plans are intended to be indicative only. There is no warranty implied or expressed regarding the accuracy or completeness of the data. If damage is caused to TCC owned infrastructure or property, TCC reserves the right to recover compensation for the loss or damage.			
If you are planning to conduct works on the road verge, you need to obtain approval from Townsville City Council prior to commencing any works. Under Section 75 of the Local Government Act 2009 a person (other than the council or a person acting under some other statutory authority) must not without lawful excuse (including under another Act, for example), or the written approval of the local government—			
(a) carry out works on a road; or			
(b) interfere with a road or its operation.			
A maximum penalty - 200 penalty units.]			
To obtain approval, please complete the "Road Work Permit Application" located on the Council website at https://www.townsville.qld.gov.au/payments-rates-and-permits/forms-and-permits .			





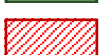
The information shown on this map has been produced from the Townsville City Council's digital database. There is no warranty implied or expressed regarding the accuracy or completeness of the data. The data has been compiled for information and convenience only, and it is the responsibility of the user to verify all information before placing reliance on it. For further assistance, please contact the Customer Service Centre on 1300 878 001



Imagery sourced from Open StreetMaps

LEGEND:

1 Detail Map

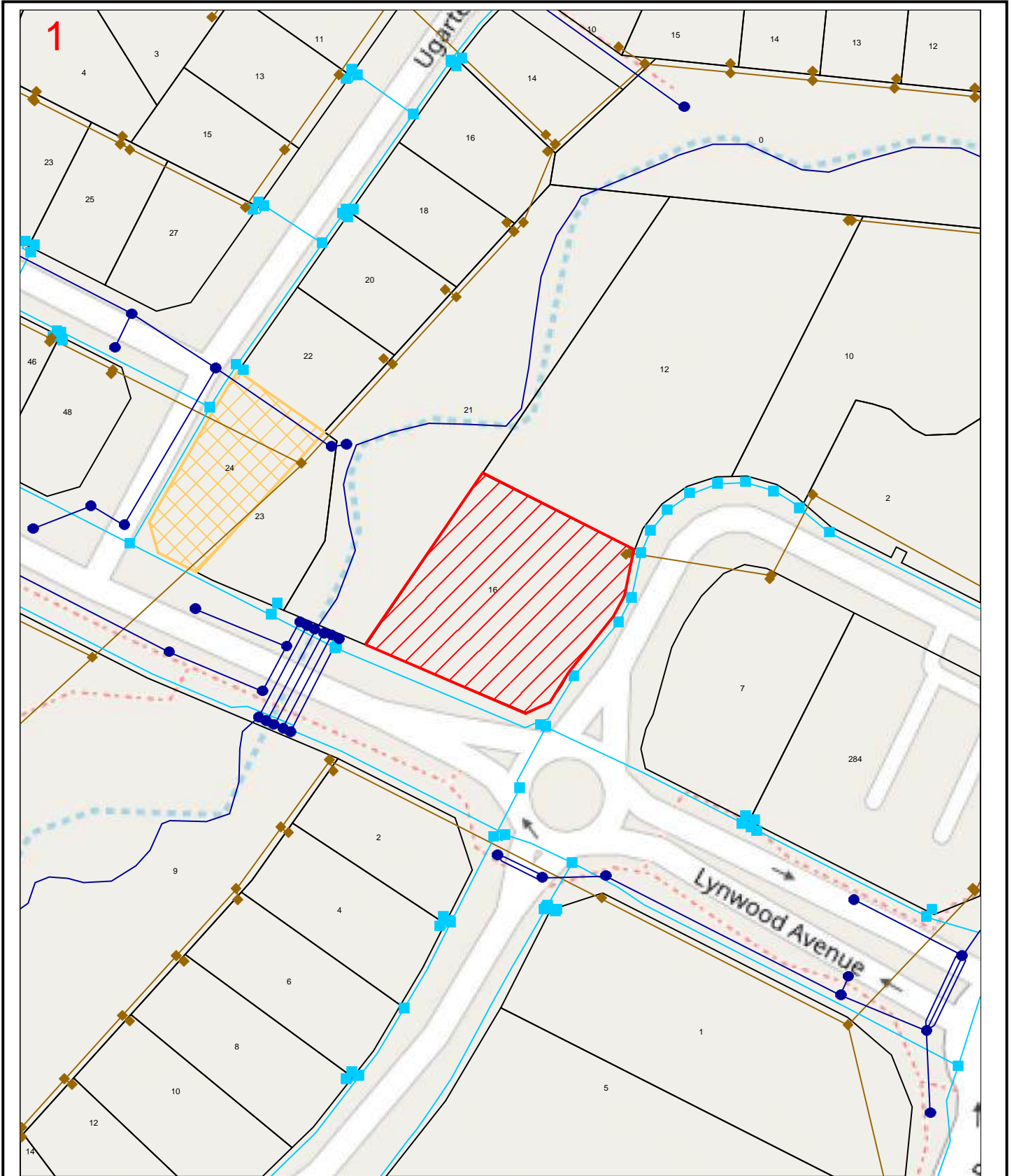
-  Council Boundary
-  Suburb
-  Affected BYDA Work Area

Overview Map

Sequence No: 265687050

16 Poole Way Bushland Beach

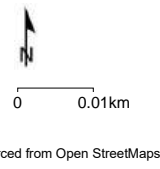
Date: 15/12/2025



LEGEND:

- Council Boundary
- Stormwater
- Suburb
- Water
- Property
- Waste Water
- Affected BYDA Work Area
- Fibre Optics (TCC)
- Electrical Locations

The information shown on this map has been produced from the Townsville City Council's digital database. There is no warranty implied or expressed regarding the accuracy or completeness of the data. The data has been compiled for information and convenience only, and it is the responsibility of the user to verify all information before placing reliance on it. For further assistance, please contact the Customer Service Centre on 1300 878 001





End of document

i This document may exclude some files (eg. DWF or ZIP files)

This document was automatically generated at a point-in-time. Be aware that the source information from which this document was created may have changed since it was produced. This document may contain incomplete or out-of-date information. Always check your enquiry details in the BYDA Referral Service for the most recent information. For copyright information refer to individual responses.