ARUP

Department of Education

New High School for Medowie

Electrical and ICT Services Report

Reference: EL-MHS-RPT-002

2 | 29 November 2024

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 304050-00

Arup Australia Pty Ltd | ABN 76 625 912 665

Arup Australia Pty Ltd Level 5 151 Clarence Street Sydney NSW, 2000 Australia arup.com

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1. Introduction

This Electrical and Information and Communication Technology (ICT) Services Report has been prepared to support a Review of Environmental Factors (REF) for the proposed New High School for Medowie (the activity). The purpose of the REF is to assess the potential environmental impacts of the activity prescribed by State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP) as "development permitted without consent" on land carried out by or on behalf of a public authority under Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The activity is to be undertaken pursuant to Chapter 3, Part 3.4, Section 3.37 of the T&I SEPP.

The activity will be carried out at 6 Abundance Road, Medowie (the site). The purpose of this report is to:

- Identify existing electrical and ICT infrastructure.
- Identify proposed incoming electrical and ICT infrastructure to support the activity.

Table 1 Electrical and ICT Services Extract from REF Checklist

Requirement	Y	N	N/ A	Comments
Utilities				
Does the REF broadly set out how the proposal will be serviced by necessary services and utilities?	X			EL-MHS-RPT-002 Medowie HS Services Report (REF), Section 3
Does the REF assess any works required to provide necessary services and utilities and conclude that these would not have significant environmental affects?	\boxtimes			EL-MHS-RPT-002 Medowie HS Services Report (REF), Section 3
If temporary arrangements are required (i.e. generator), does the REF assess any potential temporary environmental effects as a result of the arrangements and conclude that significant effects would not be likely?				

1.1 Site description

The site has a street address of 6 Abundance Road, Medowie. It is 6.51ha in area, and comprises 1 allotment, legally described as Lot 3 in DP788451.

A large proportion of the site is currently unused and vacant. A small shed structure and caravan are located adjacent to the northern boundary. A cluster of buildings including a single storey dwelling, an outhouse/shed structure and temporary greenhouse are located within the south eastern corner.

The site contains a largely vegetated area to the south west corner. The site is relatively flat with a gradual fall from west to east toward Abundance Road.

The site has a primary frontage to Abundance Road to the east and Ferodale Road to the north. Abundance Road and Ferodale Road are both classified Local Roads. Medowie Road, approximately 1km east of the site, is a classified Regional Road.

The area surrounding the site mostly consists of industrial, rural residential, educational, and agricultural lands. Adjacent to the north western boundary is a Shell petrol station and mechanic garage. Adjacent to the north eastern boundary is a medical health clinic. Across Abundance Road along the eastern boundary are a number of warehouse and light industrial developments. Directly north of the site across Ferodale Road are large lots used for agricultural purposes. Medowie Public School is located on Ferodale Road, to the north west of the site, opposite the Shell petrol station.

2. Existing Services

2.1 Existing Utilities – Electrical

2.1.1 Existing Utilities – Proposed School Site

A desktop Before You Dig Australia (BYDA) study was conducted for the proposed Medowie High School site and the surrounding area. The following outlines the existing services and infrastructure around the site, providing context for the proposed development's servicing strategy.

The Ausgrid BYDA plans indicate that there are currently no existing High Voltage (HV) cables or substations at the site perimeter. The nearest HV connection is located at an existing kiosk substation that supports the existing primary school. Figure 1 BYDA Ausgrid existing services illustrates the existing HV connections.



Figure 1 BYDA Ausgrid existing services

2.1.2 Existing Utilities – Communications

Telstra is available at the site perimeter. The site does not require any diversions of existing Telstra/NBN assets. Existing services are indicated in Figure 2 BYDA Telstra assets.



Figure 2 BYDA Telstra assets

Utility applications for connection will be completed at the next stage of design to provide confidence in the proposed connection strategies.

3. Description of Proposed Services

3.1 Proposed Electrical Infrastructure

- **HV connection:** Connect in to existing HV cables near the existing Primary School Kiosk Substation. Run HV cables to site and terminate at the new kiosk substation.
- **Substation:** A 1000kVA kiosk substation adjacent to Block A, installed on a raised plinth for flood resilience.
- **Emergency Generator:** A 500-600kW generator with an acoustic canopy to comply with noise attenuation requirements set out in the Arup Acoustic Specification. Includes an 8-hour double-skin fuel tank to support he facility during a bushfire.
- Photovoltaic System: Initial capacity of 70kW, expandable to 100kW in future stages.
- **LV Distribution:** Underground cabling connecting the substation to Block A's main switchboard and other buildings.



Figure 3 Proposed Electrical Infrastructure

3.2 Proposed ICT Infrastructure

- Main Communications Room (MCR): Located on the ground floor of Block A, housing the Campus Distributor.
- **Building Communications Rooms (BCRs)**: Strategically located to maintain the required 75m cabling radius.
- Wireless Access Points (WAPs): Distributed across classrooms, corridors, and communal spaces, with external WAPs for covered outdoor learning areas.
- Lead-In Infrastructure: Extension of Telstra conduits from the perimeter and integration with NBN conduits.



Figure 4 Proposed ICT Infrastructure

3.3 Environmental Considerations

• Environmental Impact:

- Trenching for underground cabling could disturb soil and vegetation.
- Noise from construction activities may temporarily affect surrounding areas.
- Visual impact from above-ground installations like the substation.

3.4 Electrical Infrastructure Impacts

- **Impact:** Potential disturbance during trenching, substation installation, and generator placement. Potential ongoing noise from generator operation.
- **Mitigation:** Noise barriers during construction, erosion control, and re-vegetation measures. Acoustic canopy for emergency generator as per acoustic consultant specification.

3.5 ICT Infrastructure Impacts

- Impact: Minimal as ICT works are primarily underground or within buildings.
- **Mitigation**: Ensure all trenching avoids sensitive areas and complies with environmental management plans.

3.6 Compliance with Standards and Regulations

- The design aligns with:
- NCC 2022 and relevant Australian Standards, including AS3000:2018, AS1768 (Lightning Protection), and AS2293.1 (Emergency Lighting).
- NSW Department of Education's EFSG 2.0 and Structured Cabling Systems Specifications.
- Acoustic Performance Specification AC03
- Australian standards as outlined in the conclusion section
- Utility standards

3.7 Stakeholder Consultation

• BYDA for Telstra, NBN and Ausgrid complete

- Coordination with Ausgrid for electrical connections and approvals will commence at the next stage of design.
- Engagement with NBN for ICT infrastructure integration will commence at the next stage of design.

Project Stage	Mitigation Measures	Relevant Section of Report
D / C	Trenching for underground cabling will include erosion control measures to minimise soil disturbance and protect vegetation.	Section 3.3
С	Noise management plans, including temporary noise barriers, will be implemented during construction to reduce noise impact on surrounding areas.	Section 3.3
0	Above-ground installations, such as the substation, will be designed to minimise visual impacts and blend with the surrounding environment.	Section 3.3
D / C	Ground disturbance during trenching, substation installation, and generator placement will be mitigated through erosion control and re-vegetation measures.	Section 3.4
C / O	Noise from the emergency generator operation will be mitigated using an acoustic canopy designed as per the acoustic consultant's specification.	Section 3.4
D / C	ICT trenching works will avoid sensitive areas and comply with environmental management plans to ensure minimal impact.	Section 3.5
D	The design aligns with NCC 2022 and relevant Australian Standards, including AS3000:2018, AS1768 (Lightning Protection), and AS2293.1 (Emergency Lighting).	Section 3.6
D	Compliance with the NSW Department of Education's EFSG 2.0, Structured Cabling Systems Specifications, and Arup Acoustic specifications will be ensured.	Section 3.6
D/C	DBYD investigations for Telstra, NBN, and Ausgrid have been completed. Coordination with Ausgrid for electrical connections and NBN for ICT infrastructure integration will commence at the next stage of design.	Section 3.7
D / C	Early engagement with utility providers will confirm connection points and design approvals to avoid delays.	Section 3.7
С	Implementation of detailed erosion, sediment control, and noise management plans during construction will mitigate environmental impacts.	Section 3.3, 3.4
D/C	Close coordination with the design team will integrate sustainability measures, including ICT infrastructure and acoustic management, while minimising environmental impacts.	Section 3.6

3.8 Mitigations measures Table

3.9 Conclusion

This assessment has evaluated the potential environmental impacts associated with the proposed electrical and ICT services for the New High School for Medowie. The identified impacts include ground disturbance during trenching, substation installation, and generator placement, as well as temporary noise from construction activities and potential ongoing noise from generator operation. Additionally, visual effects from above-ground installations, such as the substation, have been considered.

Mitigation measures, including erosion and sediment control plans, noise management strategies, revegetation measures, and the use of an acoustic canopy for the emergency generator, have been incorporated into the project. These measures will ensure that all potential environmental impacts are effectively managed and mitigated.

Furthermore, the proposed electrical and ICT services have been designed in compliance with all relevant standards, including NCC 2022, AS3000:2018, AS1768, AS2293.1, the NSW Department of Education's EFSG 2.0, and the Arup Acoustic Specification. This ensures that the project aligns with industry best practices, environmental considerations, and regulatory requirements.

Subject to the implementation of the recommendations and mitigation measures detailed in this report, it is concluded that the proposed electrical and ICT services will not result in any likely significant environmental effects and can be implemented with minimal impact on the surrounding environment.

Appendix A

Before You Dig Australia Documentation

Job ID 37081602 Medowie

Review responses online 7





Authority		Page
☑ BYDA Confirmation		2
IIIn Ausgrid	Received	4
Hunter Water Corporation	Received	23
III NBN Co NswAct	Received	39
III Telstra NSW Central	Received	52



Contact Details

Contact Kenisha Pudun

Email

Contact number 0450 050 026 Company

151 Clarence Street

Sydney NSW 2000

Address

Enquirer ID 3578567

Kenisha.pudun@arup.com

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 09/07/2024	Start date 12/09/2024	End date 09/10/2024	On behalf of Private	Job purpose Design	Locations Private	Onsite activities Conveyancing, Planning & Design		
	Medowie ed Public School Ferodale Road		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.					
Abundance Road			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 Medowie			dale Road e NSW 2318		Notes/description -			
Your Responsibility and Duty of Ca								
 Lodging an asset owne 		not authorise p	oroject commen	cement. Before	e starting work, you must ol	otain all necessary information from all affected		

- 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.

Authority Name	Phone	Status
Ausgrid	(02) 4951 0899	NOTIFIED
Hunter Water Corporation	1300 657 657	NOTIFIED
NBN Co NswAct	1800 687 626	NOTIFIED
Telstra NSW Central	1800 653 935	NOTIFIED
	Ausgrid Hunter Water Corporation NBN Co NswAct	Ausgrid (02) 4951 0899 Hunter Water Corporation 1300 657 657 NBN Co NswAct 1800 687 626

END OF UTILITIES LIST

Prepare

Prepare by

Locator.

communicating with

need assistance. Look

asset owners if you

for clues onsite.

Engage a skilled



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.

Engage a skilled Locator



Book a FREE BYDA Session



BYDA offers two different sessions to suit you and your organisation's needs. The free sessions are offered in two different formats - online and face-to-face:

1. Awareness Session: Understand the role of BYDA, safe excavation practices, complying with asset-owner instructions, and the consequences of damages. Learn how to mitigate and avoid potential damage and harm and ensure a safe work environment.

2. **Plan Reading Session:** Develop the skills to interpret asset owners' plans, legends, and symbols effectively. Understand the complexities of plan interpretation to ensure smooth project execution.

BOOK NOW

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



Pothole

When you lodge an enquiry you will

see skilled Locators to contact

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.

for a locator near you



Proceed

Visit the Certified Locator website directly and search

dbydlocator.com/certified-locating-organisation

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

Member Phone Referral 241613832 (02) 4951 0899 **Responses from this member** Response received Tue 9 Jul 2024 9.41am File name Page 5 Response Body H_241613832_KR6432_GMLA0_1.pdf 6 H_241613832_KR6414_GMLA0_1.pdf 7 8 How To Read AusGrid Plans.pdf Working Near AusGrid Cables.pdf 14 Assets Affected Letter.pdf 20 21 Important Information.pdf H_241613832_COVERGMLA0_1.pdf 22

Thank you for contacting Dial Before You Dig (DBYD) prior to engaging in work or activities which may affect the infrastructure of Ausgrid.

WARNING : AUSGRID ASSETS FOUND YOU MUST READ AND UNDERSTAND ALL ATTACHED FILES IN THIS EMAIL BEFORE PROCEEDING WITH ANY WORKS Please pay special attention to the attached file 'Assets Affected Letter.pdf'

Job number - 37081602 Sequence number - 241613832

Dig site location -26a Ferodale Road Medowie NSW 2318

Attention - Kenisha Pudun

Attached are the files containing information relating to your Dial Before You Dig request. For further enquiries or assistance with interpretation of plans and search content please contact our DBYD support team via email dbyd.ops@ausgrid.com.au or phone 02 4951 0899.

Please DO NOT SEND A REPLY to this email address as it has been generated by an automated system and replies are not monitored.

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). http://get.adobe.com/reader/

This e-mail may contain confidential or privileged information. If you have received it in error, please notify the sender immediately via return e-mail and then delete the original e-mail. If you are the intended recipient, please note the change of sender email address to @ausgrid.com.au. Ausgrid has collected your business contact details for dealing with you in your business capacity. More information about how we handle your personal information, including your right of access is contained at http://www.ausgrid.com.au/



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of 1 30 metres				
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2 3 KR641 - AE1 KR641 - AD1 $\bigcirc \bigcirc \bigcirc \bullet$ • • • • $\bigcirc \bigcirc \bullet \bullet$ NA 5x150 PVC NA 1x50 PVC ---0.75 (1.2PL 0.8COV)EOP~ 1.0-1.2 ---0.8 Ref: A4 Ref: B4 2x125 PVC 1X50 PVC 0 -JOINT DETAIL REPORT No. <u>Bk-Pg</u><u>Pl/Cvr</u><u>Joint Location</u> Map: KR641 1 LH09-0058 0.80/0.80 35.3 W OF PL 13 & PS 2 3 1 A0 MOCS_std_plot



Reading Ausgrid Plans

1 Property Lines

"property line" (PL), sometimes referred to as "building line" (BL), is the standard dimensioning reference point on all Ausgrid plans and represents property boundaries.

Typically, the PL is the boundary between private property and local council's footpath area or nature reserve. Most residential fences and office blocks are erected along the PL.

"kerb line" (KL) is less frequently referred to on Ausgrid plans, and where used will be identified clearly as KL.

Numbers listed within property boundaries should correspond to recognised "street numbers" (refer to figure 1).





2 Datum References

"datum references" identify distances (in metres) from significant features (such as corners of property boundaries) to reference points such as Ausgrid assets (eg: "conduits", "cables", "joints") (refer to figure 2).



Figure 2

3 Cross Sections

A "cross sections" displayed on Ausgrid plans detail information relating to the relative position (ie: distance from the **"property line"**, and the depth of **"cover"**) of Ausgrid assets.

"Cover" is a term used to refer to the depth of cables underground.

A "cross section" leader line will be drawn indicating the location of the displayed "cable" or "conduit" information on Ausgrid plans.

The distance from **"property line"** (in metres) and depth of **"cover"** (in metres) references are displayed as; ie: 0.6 metres from PL and 0.5 metres underground.

Where distance and cover are not recorded, they will be clearly marked as "NR".

NOTE: Distance and cover where indicated may be different to the actual position of the cables (eg: fill may have been placed at site that has changed the ground level).

"PL" distance shown in cross sections is an indicative measure to the centre of the trench allocation from the adjacent property line.

On some plans the "cross sections" may also be shown with a specific number (eg: HR1). This number will match with a cross section detail found in the border of the plot or on a separate plot page (refer to figures 3 and 4).



Figure 3



Figure 4

4 Cable Joints and Joint Reports

"cable joints" (numbered individually) and "joint reports" (attached to Ausgrid plans) can provide information relating to the relative position of Ausgrid assets, distance from the "property line" (in metres), and the depth of "cover" (in metres) (refer to figures 5 and 6).





Figure 6

5 Cross Section Detail Boxes

"cross section" detail boxes on the sides of an Ausgrid plan are used when there is insufficient room to display "cable" and/or "conduit" information on the Ausgrid plan.

Ausgrid plans (refer to figure 7) are bordered by numeric identifiers along the top and bottom borders and alpha identifiers along the side borders.





6 Pits

Underground **"pits"** are numbered on Ausgrid plans, positioned relative to the **"property line"** (PL), and can be found on either the footpath (nature strip) or the road (refer figure 8).



Figure 8

7 Proposal Areas

section" detail boxes. There are areas where underground work may have been issued for construction by Ausgrid, but details are not yet completely displayed on Ausgrid plans. In such cases a shaded "proposal area" is displayed on the Ausgrid plan, indicating underground work may have commenced in the vicinity but is not yet complete.

In some instances, cables and other assets within the shaded **"proposal area"** will be shown in a **bright magenta** colour, indicating that the proposed new work displayed within the shaded area is based on initial planning documentation (refer to figure 9).



Figure 9

In other instances, the shaded **"proposal area"** itself may be shown as a blue colour, indicating that the new work displayed within the shaded area on the Ausgrid plan is yet to include details regarding final depths and dimensioning (refer to figure 10).



NOTE: In cases where these shaded **"proposal areas"** are displayed on Ausgrid plans.

"Ausgrid's design plans showing the proposed position of its underground cables, overhead lines and structures have been prepared solely for Ausgrid's own planning use. They show the proposed position of such underground cables, overhead lines and structures as proposed at the time of planning and have not necessarily been corrected to take into account any changes to road widths, road levels, fences and buildings subsequent to proposed installation.

Actual installations may vary from proposed installations as it may be necessary to take account of unforeseen above ground or subterranean constructions. Therefore, Ausgrid does not hold out that the design plans show more than the proposed presence or absence of its underground cables, overhead lines and structures in the street and will accept no liability for inaccuracies in the information shown on such design plans from any cause whatsoever."

Any further information regarding information displayed for "proposal areas" can be obtained by contacting the Ausgrid Before You Dig Australia (BYDA) office at the number indicated on the response to your BYDA enquiry for further information.

8 Ausgrid Maps

Depending on the size of the BYDA request, the response will either be a **single map area** or **a cover sheet** and several standard maps.

8.1 Single Map Area Response

The single map area response will have a buffer area shown on the plan that should relate to the original Before You Dig Australia request.



The **map grid index box** on Ausgrid plans should be used when reading the **"joint report"** (see part 4 of this document for more detail) to accurately locate underground cables. The buffer area will display on the grid index box for single map area responses

There are two different size maps that can be produced – A3 will be issued if there are no cross sections in the area, and an A0 will be issued if there are cross sections that are required to be displayed in the detail boxes on the side.

A single map area response could include two maps in the Sydney region. Ausgrid plans are separately labelled as "**Distribution – nnnnnn**" and " **Transmission – nnnnnn**", where "**nnnnnn**" refers to the BYDA sequence number quoted. If the request does not include any Transmission assets, then only one Distribution map will be issued.

In the Hunter region, the Ausgrid plans show combined **"distribution"** and **"transmission"** voltage assets, are clearly labelled as **"Distr + Trans – nnnnnn"** where **"nnnnnn"** refers to the BYDA sequence number.

Some Hunter plans may have transmission cables in the area, when these cables are present there will be a warning printed at the top of the plan supplied: ""You are working near Transmission Cables. You must contact Ausgrid on (02) 4951 9200 at least two weeks before work commences. See Ausgrid Network Standard NS156"

8.2 Cover Sheet Response

On a response that includes a cover sheet, the buffer area will only be shown on the cover sheet and it will not appear on the standard maps. The cover sheet will indicate which standard maps have been included and provide a high-level view of the location of the underground details (Figure 12). The standard maps will have the detail of the underground assets (Figure 13).



Figure 12

A **map grid index box** has been included in the cover sheet and on the standard maps. The buffer area will only display on the grid index box on the cover sheet and not on standard maps (Figure 12 + Figure 13).



9. Shifting Land Base" on Ausgrid Distribution and Transmission Plans

In some instances, the plans supplied may indicate road or property outlines that appear to have shifted in relation to the Ausgrid assets displayed (refer to figure 14).





In such instances, always refer to the **"property line"** (in metres) and depth of **"cover"** (in metres) references displayed on the nearest relevant **"cross sections"** to obtain Ausgrid asset location information (*see* Reading Ausgrid Plans, clause 3, Cross Sections for more detail).

10. "Underground Earthing Infrastructure"

In some instances, the plans supplied may also indicate the presence of underground earthing infrastructure associated with underground and/or overhead Ausgrid assets.

The **"Earth Point"** symbol (refer to figure 15) will be shown on plans to minimize risk of disturbance or damage to any Ausgrid underground earthing infrastructure in the vicinity. Figure 15

Figure 15



11. Hazardous Cables – Specific Excavation Hazard

Certain low voltage cables are susceptible to deterioration or defects that may pose a risk of electric shock when working near them particularly in damp ground. Other low voltage cables may have an exposed conductive sheath or armour which may, under certain conditions, become energised. These cables may pose a significant risk and will be illustrated as in figures 15 and 16 below. For all work on or near Ausgrid's network where workers have been trained in Ausgrid's "Working near or around underground cables" course the work practices outlined in NS156 "Working near or around underground cables", NS199 "Safe Electrical Work on Low Voltage Underground Assets" for low voltage cables susceptible to deterioration and the Electrical Safety Rules for low voltage exposed conductive sheath or armoured cables must be adhered to. All other persons must contact Ausgrid before excavating near or accessing areas where these cables are present to arrange for appropriate precautions to be applied.



The **"star"** symbols over the cable indicates that it may be susceptible to deterioration or defects or the cable may contain an exposed conductive sheath or armour which could pose an electrical risk to workers.

Cables that are in duct lines have this symbology covered so an at-risk cable is indicated only within a cross section by a "#" appended to its cable code as illustrated below.





Ausgrid Underground Map Symbology

NOTE: Please note symbology is subject to change. This document provides underground (UG) related objects only. In cases where you are unsure of the data presented, please contact Ausgrid's BYDA for clarification *prior* to any planning/excavation works.

Object		Symbol	O	Object Symbol		Object		Symbol	
HV Cable	HV (High Voltage) 5kV-22kV	In Service Out of Service		Straight Through, Parallel Branch	-	Auxiliary Fix	Pilot Window Straight		
	TR (Transmission) 33kV – 330kV	In Service Out of Service	HV UG Joint	or Tee Switchgear, End		Auxiliary Joint	Through, Parallel Branch or Tee		
LV Cable	Mains (Dark blue)	In Service		Box or Transition			UGOH or Pole Termination	•	
(Low Voltage)	(Dark blue)	Out of Service		Sealed end		Auxiliary Termination	Pilot	P	
	Street Lighting (Green)	In Service	HV UG Termination	Pot End			UGOP-ADSS Termination		
	Note: Mains Connector also used as Street Lighting	Out of Service		UGOH		Cable Pit (Can be	Auxiliary Distribution		
	(dark blue) Service	In Service	HV Cable Repair	5kV-330kV (HV & TR)		various shapes)	Transmission		
	(Light blue)	Out of Service		Straight			Distribution		
	Stars are used to	In Service Risk	LV UG Joint	Through, Parallel Branch,			Switch	1-3 WAY	
	highlight At Risk cables	$\frac{1}{2} \frac{1}{2} \frac{1}$	EV OG JOINT	Tee or Service Network Box		LV Pillar	SL Pillar	+ NO SLCP X SLCP	
		In Service Risk					SL Cubicle	\times	
		****	LV UG Termination	Switchgear, End Box or			Fargo	F	
	Unknown Data			Transition			Private	P	
Auxiliary	Comms Telco	In Service		Sealed end		LV Auxiliary Pillar	All Types		
Cable	Protection	Out of Service		Pot End					
	Fibre Optic Pilot			UGOH		LV Link Box	2 Way & 4 Way		



Ausgrid Underground Map Symbology

O	oject	Symbol
Trench	Centreline	
Conduit _	Coverage	
 (Can be	(Distribution)	
various	Coverage	
shapes)	(Transmission)	
	Coverage	
	(Underbore –	
	cross hatched)	
Cross	Marker (Staple)	
Section	User Line	
Measure-		
ment Point		
Miscella-	Cable Clamp	
neous Point		Ŭ
Feature	Cable Core split	
	(Trifurcation)	
	Cable Marker	÷
	Electrolysis	
	Point	
	End <u>Of</u> Pipe	
	Frequency	
	Injection Unit	(IŬ)
	Gas Charger	G
	Gas Control	
	Cabinet	
	Gas Control	
	Kiosk	
	Gas Control	
	Point	
	Gas Control	GV
	Valve	
	Gatic Pit lid	

O	bject	Symbol
Miscella-	Inspection Box	
neous Point		
Feature	Link point	
	Oil Control Valve	
	Oil Gauge	0
	Oil Tank	
	Sniffer Box	Ū.
	Thermocouple	
	Box	
	Transmission	
	Cable Marker	Contract Sec.Cov
	Transmission	
	Link Point	
Miscella- neous		
Linear	All Geometries	
Feature		
Map Note	Location & Text	💥 Text about note
Dimension	Placement	
Feature	Change	
1	Oil/Gas/	·
	Thermocouple	A2 50
Lead Cable	Bonding	
	Electrolysis	



Working near Ausgrid cables

Finding out what 's below the surface can save your life. Contact Before You Dig Australia @ www.byda.com.au or call 1100





Changes in the Law.

NSW legislation now requires people who are planning to do excavation work to obtain copies of underground electricity cable plans through Before You Dig Australia (Phone 1100) and to make sure that the plans are no more than 30 days old when excavation commences.

The aim of the legislation is to ensure that when workers dig near electricity cables, they will establish the exact location of the cables and thus avoid coming into contact with them or damaging them. This will ensure worker safety and also prevent disruption to Ausgrid's electricity network.

This brochure gives you a brief overview of how to prepare for excavation works near or around electricity cables. It is important that you also consult our guide How to Read Ausgrid Plans and make sure that workers engaged in excavation works fully understand how to read the plan. If the people actually doing the digging can't read the plans, it is essential that the work is directed by a person who has been trained to read Ausgrid's plans.

You must also consult Ausgrid's Network Standard NS156, which contains comprehensive information concerning all the issues that arise when excavating near underground cables (such as safety hazards from asbestos conduits and organochlorine pesticides).

Excavating near transmission cables.

If any cable plan you receive says "You are working near transmission cables" it is compulsory to notify Ausgrid two weeks before work is scheduled to begin. Ausgrid will then arrange for an Ausgrid representative to attend the site during excavation work.

Phone the Ausgrid Transmission enquiries line on (02) 4951 9200 to arrange for an Ausgrid representative in your region.



Be prepared. Wise words for safety at work.

Here are some simple precautions you and your workers need to follow to be as safe as possible.

- Make sure that your Before You Dig Australia (BYDA) plan is less than 30 days old
- · Keep a copy of the cable plan on site at all times
- · Make sure the excavation work is conducted or directed by staff who are trained to read the plan
- \cdot Hand dig until the exact location of the cable has been established
- \cdot $\,$ Have on site at all times a first aid kit and a person trained in resuscitation
- \cdot $\,$ Wear protective clothing, including safety footwear and safety helmet
- · Have emergency contact numbers on site
- Set up safety barriers, witches hats and warning lights to reduce the risk of injury to the general public
- · Comply with all SafeWork NSW requirements and codes.

See also:

- SafeWork NSW Guidelines: Work Near Underground Assets
- SafeWork NSW Code of Practice: Excavation Work
- SafeWork NSW Code of Practice: Work Near Overhead Powerlines (if applicable).

Before you start. Complete the checklist. Stop and look around.

Before you start excavating, consult the flow chart and fill in the checklist at the end of this brochure.

Then, be sure to look for clues where cables might be located on the site: for example, pits, distribution pillars (green and other colours), cables attached to the side of poles, street lights without overhead wires.



Do all power cables look the same?

No. Power cables come in different sizes, colours and coverings. They may be covered in black plastic sheath, steel wires in a sticky bitumen like material, or even a simple lead or steel wire/tape sheath.

What else should I look for below ground level?

Cables may also be buried in orange PVC or PE conduits or even in earthenware or steel pipes. A bank of cables may be covered with electrical bricks, plastic warning markers or protective covers, or they may not be covered at all. If they have been buried close to the surface, they may be covered by concrete slabs or steel plates.

When in doubt, ask Ausgrid.

If you have any questions about excavating near Ausgrid cables, read NS156 (available at <u>ausgrid.com.au</u>). For further information call 13 13 65.

You've taken every precaution, but accidents still happen. What now?

If you damage an electricity cable, it is compulsory to notify Ausgrid on 13 13 88.

Striking power cables can cause serious damage to the cables and endanger the lives of anyone who comes in contact with them. Machinery and hand operated plant such as jack hammers can become alive if it is in contact with electrical cables or equipment. Keep people well away from machinery and the work site if contact is made with a cable.



Flow Chart for work near Ausgrid Cables



Ausgrid Checklist for work near or around underground cables

It is the responsibility of the Constructor to ensure that underground pits, ducts and cables are not damaged as a result of construction work. It is also your duty to protect your workers from harm or injury. This Checklist is intended to be used as a guide to what Constructors should do to make sure they have satisfied the minimum requirements to minimise damage to underground networks.

PLANS, LOCATION and NOTIFICATIONS	Completed
ll relevant utilities plans obtained from Before You Dig Australia? (call 1100 – allow at least 5 working days for plans).	
hecked issue date on all the above plans to ensure issue was within the last 30 days?	
xamined plans and assessed all possible impacts on Ausgrid's network?	
o you have both Underground Distribution and Transmission Plans (if applicable), on site at all times?	
Il cables and conduits shown on the Ausgrid plans been located and marked on the ground?	
you are planning to use a bore, have you ensured that the equipment is calibrated?	
lave you read and understood the requirements of NS 156? For copies of NS 156 visit Ausgrid's Website or phone Ausgrid BYDA Office (02) 4951 0899) /ww.ausgrid.com.au	
lave you notified Ausgrid as specified by NS 0156 and complied with requirements?	
Where an Ausgrid representative is required, two weeks notice is required before work commencing on site. Contact phone number for Transmission cable enquiries is (02) 4951 9200. For all other cases contact Ausgrid CYDA Office: (02) 4951 0899.	
NSPECTION OF WORK BY Ausgrid's REPRESENTATIVE	
s the Ausgrid representative on site for any work near or around' any transmission cable before you start? 'Refer to NS 156.)	
or proposed work near or around cables other than transmission and/or conduits, are any requirements specified by usgrid's representative clearly understood and ready to be applied before you start the work? ('Refer to NS 156.)	
PROTECTION	
heck that all people on-site have been made aware of the presence and location of ALL Ausgrid underground cables nd/or conduits; especially boring, drilling and trenching machine operators?	
s there any asbestos or asbestos containing material in Ausgrid's underground network assets?	
lave you checked for the presence of any Organo-Chloride Pesticides (OCP) in transmission trenches?	
the site supervisor monitoring all machine operators working near or around Ausgrid's underground cables and/or onduits?	
re the requirements specified by Ausgrid's representative being followed?	
re Ausgrid's requirements in place for any exposed cables and/or conduits to be supported and protected?	
lave you marked all exposed underground cables and/or conduits with flags that are clearly visible from within all nachinery used on-site?	
lave safety barriers, fencing or para-webbing been erected to protect staff and the public as well underground cables and/or onduits in areas that are at risk?	
lave safety barriers, fencing or para-webbing been erected to protect staff and the public as well underground cables and/ onduits in areas that are at risk?	

In the event of DAMAGE to Ausgrid's cable or conduits, call 13 13 88 immediately. PROCEED with CAUTION

It is your responsibility to protect Ausgrid's cables and conduits from damage and your Duty of Care to protect your workers from harm or injury.

Signed:

Responsible person on site

_ Date: ____ / ___/

For more information call 13 13 65 or visit <u>www.ausgrid.com.au</u>



Emergency Phone Number 131388



Underground Cable Location Search Advice

-- Ausgrid Assets Affected -

To:	Kenisha Pudun		
	Not Supplied	Phone No:	+61450050026
	151 Clarence Street	Issue Date:	9/07/2024
	Sydney NSW 2000		

In response to your enquiry, Sequence No: 241613832 the records of Ausgrid disclose that there <u>are</u> Ausgrid underground cables in the defined search location and relevant Ausgrid plans have been provided.

This search is based on the geographical position of the dig site as denoted in the Before You Dig Australia caller confirmation sheet and an overview is provided:

Address:	26a Ferodale Road Medowie NSW 2318
Job #:	37081602



Important

- All information provided to you is ONLY VALID FOR <u>30 DAYS</u> from the date of issue
- You must keep Ausgrid plans on site during excavation works. If the people actually performing the excavation works do not know how to read and interpret Ausgrid's plans, then the work must be directed by a person who knows how to read and interpret plans.
- If you require a full size print of A0 plans and don't have the resources to do so please contact our office on 49510899 to request a hard copy to be posted. Please allow 3 working days for delivery.
- Please note you will ONLY receive portions of your search area that contain Ausgrid Underground Assets

YOU MUST READ AND UNDERSTAND THE <u>SUPPLEMENTARY MATERIAL</u> CONTAINED IN THIS ADVICE <u>BEFORE</u> PROCEEDING WITH ANY WORKS.

Material	Purpose	Location
Important Information.pdf	Details important information	Attached
Working near Ausgrid Cables.pdf	Summary of NS156	Attached
COMN0119 How to Read Ausgrid Plans.pdf	Details how to read Ausgrid plans	Attached
SafeWork NSW "Work near underground assets: Guide"	To assist you in deciding appropriate measures to eliminate or control risks when working near underground assets.	Web Link [Click Here]
Ausgrid's Network Standard NS156	For important information for work near or around underground cables	Web Link [Click Here]
Ausgrid's Network Standard NS199	This Network Standard applies to specific work on Ausgrid Low Voltage Underground Assets and associated Hazards	Web Link [Click Here]
Working in Confined Spaces	For important information when working in confined spaces	Web Link [Click Here]



IMPORTANT INFORMATION

YOU MUST BE AWARE THAT:

- 1. There may be underground cables owned by other utilities, in the vicinity of your work, about which Ausgrid has no information.
- 2. Ausgrid does not usually keep plans of privately owned underground cables or its underground service cables on private property. (Refer NS 156 for further information.)

YOU MUST MAKE YOUR OWN ENQUIRIES IN RESPECT OF THESE CABLES.

YOU MUST UNDERSTAND THAT:

- 1. Ausgrid takes all reasonable care in providing details of its underground cables. However, owing to changes in road and footway alignments and levels, and the age and incompleteness of some records, it is not possible to conclusively specify the location of all of Ausgrid's underground cables. The accuracy and completeness of the information provided to you cannot be guaranteed. It is intended to be indicative only. It must not be **solely** relied upon when undertaking underground works.
- 2. Except to the extent that liability may not be capable of lawful exclusion, Ausgrid, its servants and agents will be under no liability whatsoever to any person for loss or damage (including indirect or consequential loss or damage) however caused (including without limitation, for breach of contract, negligence and breach of statute) which may be suffered or incurred from or in connection with the advice provided.
- 3. Due to the inherent dangers associated with **excavation, under boring and directional drilling** in the vicinity of underground cables, precautions must always be taken when undertaking any underground works. Ausgrid's Network Standard NS 156 specifies standards for working in the vicinity of underground cables. It is deemed to be part of this Advice, and it <u>must</u> be read by you.
- 4. Due to the inherent risk of compromising the stability of Ausgrid's power poles during excavation which could lead to pole movement or collapse, precautions must always be taken. If excavation is to be carried out within 1m from a power pole, Ausgrid must be contacted at construction.works@ausgrid.com.au for advice. Do not proceed until you have received such advice from Ausgrid.

YOU <u>MUST</u> READ <u>NETWORK STANDARD NS 156</u>, *WORKING NEAR OR AROUND UNDERGROUND CABLES.* IT IS PART OF THIS ADVICE.



This plot is for reference only. Please refer to the individual plans for detailed information

Member Phone

1300 657 657

Referral 241613833 **Responses from this member** Response received Tue 9 Jul 2024 9.12am File name Page Response Body 24 25 Legend.pdf 241613833.pdf 26

THIS IS AN AUTOMATED RESPONSE. PLEASE DO NOT RESPOND TO THIS EMAIL To: Kenisha Pudun RE: Before You Dig Australia (BYDA) REFERRAL NOTIFICATION FROM HUNTER WATER CORPORATION NSW Sequence No: 241613833 Enquiry Date: 09/07/2024 Commencement Date: 12/09/2024 Completion Date: 09/10/2024 Thank you for the above enquiry. Please find attached the "241613833.pdf" which overviews your proposed work area in association with Hunter Water Corporation's assets. Please note that this communication, including any attachments, is confidential. If you are not the intended recipient, you should not read it please contact us immediately, destroy it, and do not copy or use any part of this communication.




Hunter Water Corporation 36 Honeysuckle Drive NEWCASTLE NSW 2300

То:		
Kenisha Pudun		
151 Clarence Street		
Sydney	NSW	2000

Enquiry Details	
Utility ID	80220
Job Number	37081602
Sequence Number	241613833
Enquiry Date	09/07/2024 09:11
Response	AFFECTED
Address	26a Ferodale Road Medowie
Location in Road	
Activity	Planning and Design,Conveyancing

Enquirer Details	
Customer ID	3578567
Contact	Kenisha Pudun
Company	
Email	Kenisha.pudun@arup.com
Phone	+61450050026

Powered by Robert State

Enquirer Responsibilities

HWC's provision, and your access to and use, of the data, maps and other information contained in HWC's response to your Before You Dig Australia (BYDA) enquiry (Information) are subject to the following terms and conditions and any additional disclaimers contained in HWC's response.

1. Nature of HWC's assets

You acknowledge and accept that:

- (a) water in HWC mains is under pressure and may cause injury or damage if a main is damaged;
- (b) HWC sewer mains can be under pressure and may cause injury or damage if a main is damaged;
- (c) HWC recycled water mains can be under pressure and may cause injury or damage if a main is damaged;
- (d) HWC services are laid at varying depths;
- (e) the Information does not include data related to property services;
- (f) HWC will seek recovery of repair costs if an HWC asset is damaged; and
- (g) all electrical services are to be considered live.

Accordingly, all persons must exercise extreme care and only use hand excavation until the exact location of all assets within a work area is established.

2. Your use of Information

You acknowledge and accept that:

- (a) neither HWC nor BYDA make any representation or give any guarantee, warranty or undertaking (express or implied) as to the currency, accuracy, completeness, effectiveness or reliability of the Information;
- (b) all Information is:
 - i. generated by an automated system based on the information you submit to the BYDA website and it is your responsibility to ensure that the dig site is properly defined in your enquiry;
 - ii. approximate, intended to be of general application and may not be suitable for your specific requirements;
 - iii. unsuitable for scaling purposes; and
 - iv. based on information available to HWC and may not show all existing structures. For example, the location of Private Sewer/Water Mains is the initial indicative location supplied to HWC. This may not be the current location of such mains and not all private mains have been supplied to HWC;
- (c) you must not solely rely on the Information when undertaking underground works;
- (d) all Information is provided for the sole purpose of assisting you to locate HWC assets before excavation (Permitted Purpose) and you must not copy, translate, modify, distribute or make derivative works of the Information except as directly required to achieve the Permitted Purpose;
 (e) all Information must be used and kept together;
- (f) your access to and use of the Information does not grant you any ownership of or intellectually property rights in the Information;
- (g) in identifying in the Information the presence or potential presence of hazardous or potentially hazardous materials in HWC assets, HWC is not representing or warranting that other HWC assets not identified in the Information as containing or potentially containing hazardous materials do not also contain such materials; and
- (h) in excavating and conducting underground works, you must do so having regard to the fact that asbestos cement pipelines may form part of HWC's water and sewer reticulation systems.
- 3. Your other obligations

You are responsible for, amongst other things:

- (a) exposing underground structures, including HWC assets, by pot-holing using hand-held tools or vacuum techniques to determine the precise location and extent of structures before any mechanical means of excavation are used;
- (b) protecting underground structures, including HWC assets, from damage and interference;
- (c) maintaining acceptable clearances between HWC assets and structures belonging to others;
- (d) ensuring that backfilling in the vicinity of HWC assets complies with HWC's requirements (as set out on HWC's website or otherwise communicated to you by HWC);
- (e) notifying HWC immediately of any damage caused or threat of damage to any HWC asset; and
- (f) ensuring that plans are approved by HWC (usually by stamping) prior to landscaping or building over or in the vicinity of any HWC asset.

x dbydsuite

www.hunterwater.com.au 1300 657 000

Enquirer Responsibilities Continued

4. Disclaimer

While HWC takes reasonable care in providing details of its underground assets, due to changes in road and footway alignments and levels, the age and incompleteness of some records and the general nature of the Information, it is not possible to conclusively specify the location of all HWC underground assets, including pipes that contain or may contain hazardous materials.

ALL INFORMATION IS PROVIDED AS GENERAL GUIDANCE ONLY AND SHOULD NOT BE USED OR RELIED UPON IN SUBSTITUTION FOR SPECIALISED PROFESSIONAL INDEPENDENT ADVICE. YOU ACKNOWLEDGE AND AGREE THAT YOUR USE OF THE INFORMATION IS AT YOUR OWN RISK.

If you have any questions or concerns about the appropriateness, reliability or application of any Information you must seek advice from a relevantly qualified professional. Further, dealing with hazardous materials is potentially dangerous, and you must always seek advice where the Information provides that HWC's assets contain or may contain hazardous materials.

HWC makes no representation and gives no warranty or undertaking (express or implied) as to the currency, accuracy, completeness, effectiveness or reliability of the Information or that the Information can be used for any purpose in substitution for specialised, professional and independent advice.

5. Limitation of liability

To the fullest extent permitted by law:

- (a) all conditions and guarantees concerning the Information (whether as to quality, outcome, fitness, care, skill or otherwise) expressed or implied by statute, common law, equity, trade, custom, usage or otherwise are expressly excluded and to the extent such conditions and guarantees cannot be excluded, HWC's liability is limited to either of the following (as nominated by HWC):
 - i. HWC supplying the Information to you again; or
 - ii. HWC paying you the cost of having the Information supplied to you again.
- (b) HWC is not responsible for and you release HWC from any actions, liabilities, losses, damages, costs, claims, expenses, injuries or other claims whatsoever (including loss of revenue, use, production, goodwill, profit, business, contract, anticipated savings, financing costs, increased operating costs or other purely financial, economic, special or indirect loss or damage) arising out of:
 - i. your access to or use of the Information;
 - ii. any delay in HWC providing you with Information;
 - iii. your reliance on the Information or its inability to meet your needs;
 - iv. your failure to correctly or accurately:
 - (1) submit relevant or valid data to BYDA; or
 - (2) use or interpret Information provided to you by HWC; or
 - v. any failure, interruption or corruption of any Information;

(c) you must indemnify HWC and its employees, agents and officers from and against all actions, liabilities, losses, damages, costs, claims, expenses, injuries and other claims arising out of or in connection with HWC providing you with incorrect or incomplete Information; and you assume all risk associated with your use of BYDA and HWC's websites and you release BYDA and HWC from and against all actions, liabilities, losses, damages, costs, claims, expenses, injuries or other claims which may arise in respect of such usage.







Overview Map

Sequence No: 241613833 26a Ferodale Road Medowie









Sequence No: 241613833





HUNTER WATER

Map 2









HUNTER WATER

Map 4









6			
N Ma 0.006km	IMPORTANT THIS PLAN IS NOT TO BE USED FOR CONVEYANCING THIS INFORMATION IS VALID FOR 30 DAYS FROM THE DATE OF IS	ELECTRICAL - UTILITY DATA © HUNTER WATER CORPORATION 2019 SERVICE LOCATIONS ARE APPROXIMATE. HAND DIG UNTIL ACTUAL LOCATIONS ARE IDENTIFIED CADASTRAL DATA © Dep	HIS PLAN MAY NOT BE UP TO DATE ACCEPTS NO RESPONSIBILITY FOR artment Finance, Services & Innovation

HUNTER

Map 6













Sequence No: 241613833



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HUNTER WATER

Map 9



^{Referral} 241613831

Member Phone 1800 687 626

Responses from this member

Response received Tue 9 Jul 2024 3.35pm

File name

Response Body

4678_NBN_Dial_Before_You_Dig_Poster_20170517.pdf 241613831_20240709_053446147594_1.pdf

Disclaimer_241613831_20240709_053446147594.pdf

Page

40

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43

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Hi Kenisha Pudun,

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



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: Nondestructive 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 nbmcablesImage: Constraint of the state of the state

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 <u>here</u>. 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. Impleteness 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.



То:	Kenisha Pudun
Phone:	Not Supplied
Fax:	Not Supplied
Email:	Kenisha.pudun@arup.com

Dial before you dig Job #:		BEFORE
Sequence #	241613831	YOU DIG
Issue Date:	09/07/2024	Zero Damage - Zero Harm
Location:	26a Ferodale Road , Medowie , NSW , 2318	

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



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







Emergency Contacts

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

То:	Kenisha Pudun
Phone:	Not Supplied
Fax:	Not Supplied
Email:	Kenisha.pudun@arup.com

Dial before you dig Job #:	37081602	DIAL BEFORE
Sequence #	241613831	YOU DIG
Issue Date:	09/07/2024	www.1100.com.au
Location:	26a Ferodale Road , Medowie , NSW , 2318	

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 <u>ARE</u> **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 DBYD 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 Dial Before You Dig Service. For any enquiries related to moving assets or Planning and Design activities, please visit the **nbn** <u>Commercial Works</u> website to complete the online application form. If you are planning to excavate and require further information, please email <u>dbyd@nbnco.com.au</u> 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.

- **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 DBYD Certified Locators, at your cost to locate **nbn**[™] Facilities during any activities you carry out on site).
- 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
	Work Health and Safety Act 2011
	Work Health and Safety Regulations 2011
National Safe Work Australia - Working in the Vicinity of Overhead and	
Nacional	Underground Electric Lines (Draft)

	Occupational Health and Safety Act 1991
	Electricity Supply Act 1995
NSW	Work Cover NSW - Work Near Underground Assets Guide
	Work Cover NSW - Excavation Work: Code of Practice
VIC	Electricity Safety Act 1998
VIC	Electricity Safety (Network Asset) Regulations 1999
QLD	Electrical Safety Act 2002
QLD	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 DBYD

Date: 09/07/2024

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ReferralMember P2416138341800 6

Member Phone 1800 653 935

Responses from this member

Response received Tue 9 Jul 2024 9.18am

File name	Page
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AccreditedPlantLocators 2024-06-21a.pdf	54
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Telstra Duty of Care v32.0a.pdf	58

Site Location: 26a Ferodale Road, Medowie, NSW 2318

Your Job Reference: Medowie

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 BYDA request.

Information for opening Telstra Asset Plans as well as some other useful contact information is listed in the attached **Telstra Map Legend attached**.

Please refer to all enclosed attachments for more information.

Please Report Damage to Telstra Equipment: <u>Report damages to Telstra equipment - Telstra</u>

Please note:

When working in the vicinity of telecommunications plant you have a 'Duty of Care' that must be observed. Please ensure you read the 'Telstra Duty of Care' document (attached) - it contains important information including essential steps that must be undertaken prior to commencing construction activities.

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 Steps - Working Near Telecommunications Assets (attached Telstra Duty of Care).

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 v32.0a.pdf)

(See attached file: Telstra Map Legend 4.0a.pdf)

(See attached file: AccreditedPlantLocators 2024-06-21a.pdf)

(See attached file: 241613834.pdf)





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Telstra Corporation Limited ACN 051 775 556

LEGEND



100mm PVC conduits (P100) containing assorted cables in three ducts (one being empty) and one empty 100mm concrete duct (C100) along

Protect our Network:

by maintaining the following distances from our assets:

• 1.0m Mechanical Excavators, Farm Ploughing, Tree Removal

245.0

- 500mmVibrating Plate or Wacker Packer Compactor
- 600mm Heavy Vehicle Traffic (over 3 tonnes) not to be driven across Telstra ducts or plant.
- 1.0mJackhammers/Pneumatic Breakers
- 2.0m Boring Equipment (in-line, horizontal and vertical)

For more info contact a Certified Locating Organisation or Telstra Plan Services 1800 653 935



	Report Damage: https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment Ph - 13 22 03	Sequence Number: 241613834	
	Email - Telstra.Plans@team.telstra.com Planned Services - ph 1800 653 935 (AEST bus hrs only) General Enquiries	CAUTION: Fibre optic and/ or major network present	
TELSTRA LIMITED A.C.N. 086 174 781		 in plot area. Please read the Duty of Care and contact Teletre Plan Continue about dyour require 	
	Generated On 09/07/2024 09:15:12	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.



-	Report Damage: https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra-equipment Ph - 13 22 03	Sequence Number: 241613834
	Email - Telstra.Plans@team.telstra.com Planned Services - ph 1800 653 935 (AEST bus hrs only) General Enquiries	CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and
TELSTRA LIMITED A.C.N. 086 174 781		contact Telstra Plan Services should you require
	Generated On 09/07/2024 09:15:13 Contact Teistra Plan Services sho any assistance.	

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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.



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 steps below 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 of the 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 undertaking the works to protect Telstra's 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 Certified Locating Organisation. 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.

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 Planned Services.

Telstra does not accept any liability or responsibility for the performance of or advice given by a Certified Locating Organisation. 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 <u>www.telstra.com.au/privacy</u> or by calling us at 1800 039 059 (business hours only).



End of document

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

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