Reading Ausgrid Plans
COMN0119

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).

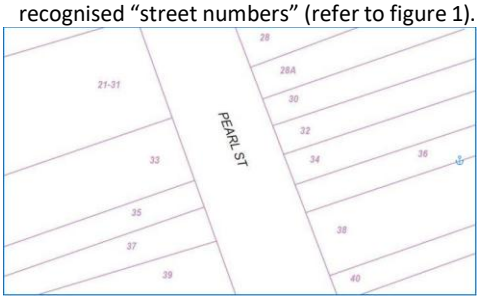


Figure 1

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).

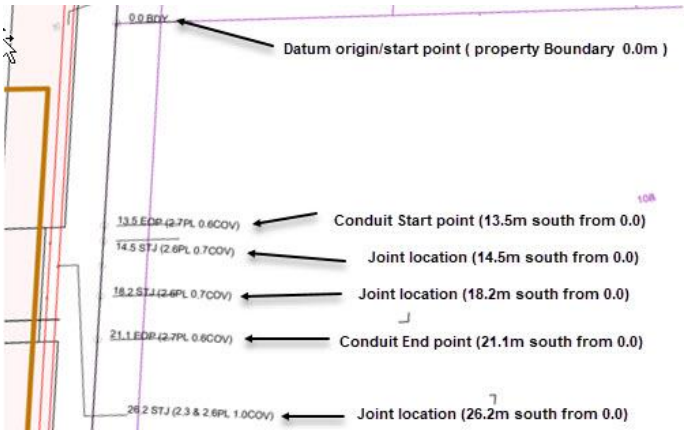


Figure 2

3. Cross Sections & Detail Boxes

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"**or **"NA".**
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 center of the trench allocation from the adjacent property line.
On some plans the "cross sections" may also be shown with a specific number (eg: PD2). This number will match with a cross section exploded detail view found on a separate plot page which will also list the Map Number and Grid Reference for the "cross Section" (refer to figures 3 and 4).

"Cross section" detail boxes are shown on separate pages.

Ausgrid plans (refer to figure 5) are bordered by numeric identifiers along the top and bottom borders and alpha identifiers along the side borders. **"Cross section"** leader line and annotation is drawn on the Ausgrid plan for a reference to **"cable"** and/or **"conduit"** information in the **"cross section"** detail boxes.

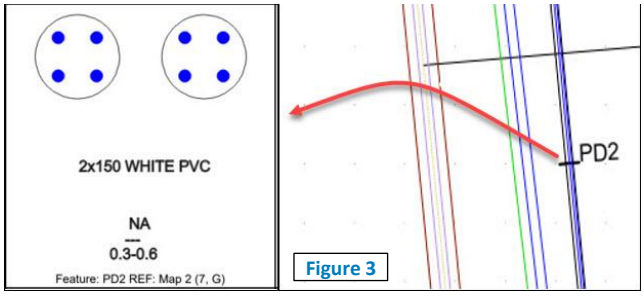


Figure 3

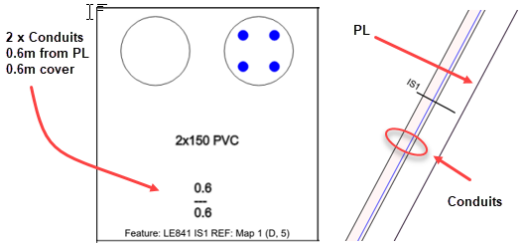


Figure 4

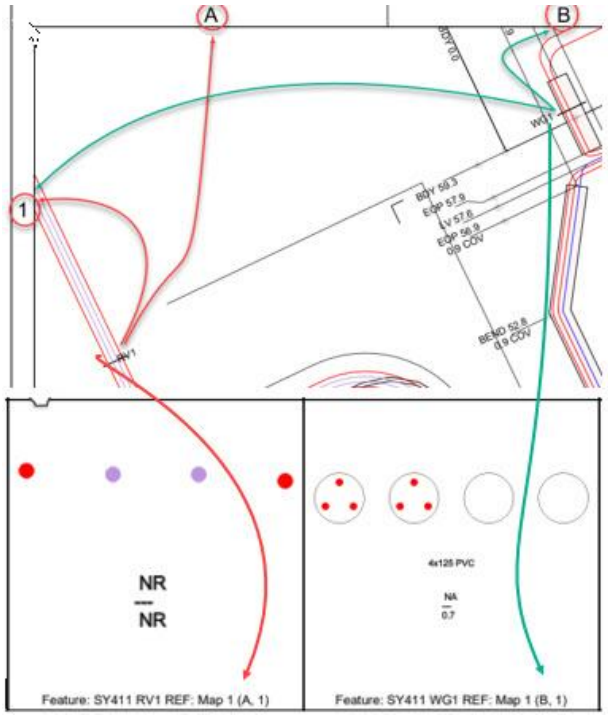


Figure 5

4. Pits

Underground **"pits"** are shown with exposed internals 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 6).

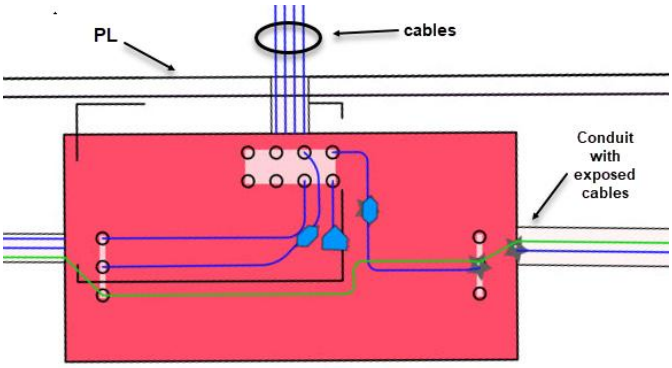


Figure 6

5. Proposal

In some instances, cables and other assets will be shown in a **bright magenta** color, indicating that these are proposed assets and may or may not be currently present in the location shown. Proposed new work displayed is based on initial planning documentation (refer to figure 7).

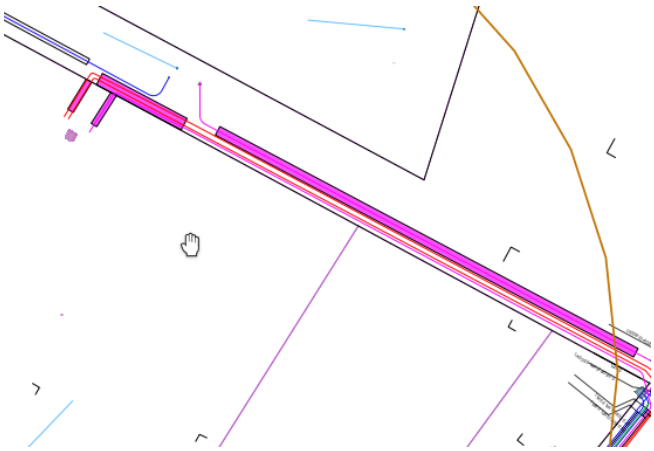


Figure 7

6. 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

6.1 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 side of Single Map Area Response and Cover Sheet Area Response will contain the BYDA Referral No , North indicator, scale and Warning Message (refer figure 8).

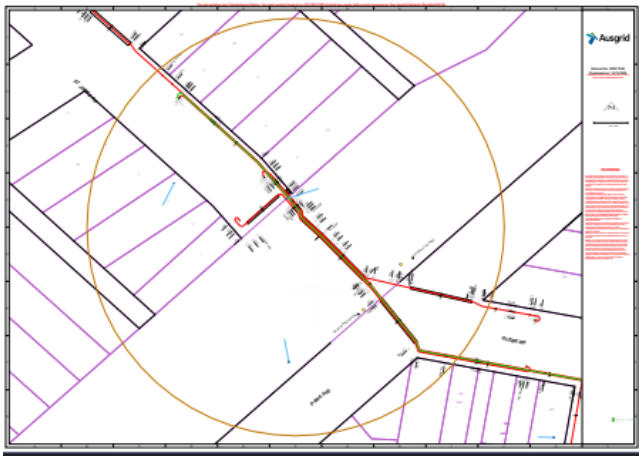


Figure 8

Referral No: 280680681
Processed on: 09-10-2026
INFORMATION ON THIS PLAN IS ONLY VALID FOR 30 DAYS FROM ISSUE DATE

WARNING

Ausgrid's plans show the position of assets at the time of installation and may not account for subsequent changes to road alignments, fences or buildings. The plans show no more than the presence or absence of Ausgrid assets in the street.
Persons working near electricity networks must exercise care and will be held responsible for any damage caused.
You must excavate by hand or use vacuum excavation to establish the location of Ausgrid underground cables and associated assets.
Underground: Working near a cable may result in electric shock even if no contact is made. Any work in the vicinity of any cable should only be performed using safe work methods developed in accordance with the recommendations included in SafeWork NSW Code of Practice for Excavation and SafeWork NSW Guide for Work Near Underground Assets as well as recommendations of Ausgrid's Network Standard NS156.
Overhead: Do not excavate near poles or towers until the stability of the foundation has been assessed by Ausgrid. Cables or earth conductors may be present close to substations, poles or towers.
Workers must maintain safe approach distances and follow applicable SafeWork NSW Codes of Practice.
NOTE: 1. 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 the plans. 2. This information includes data from the NSW Digital Cadastral Database by Land and Property

6.2 Cover Sheet Response

On a response that includes a cover sheet, the buffer AOI (Area of Interest) will be shown on the cover sheet, and it will also appear on the standard maps. The cover sheet will indicate how many standard maps have been included; the standard map sheets are numbered in the top left corner of each mapsheet. It will also provide a high-level view of the location of the underground details (refer figure 9).

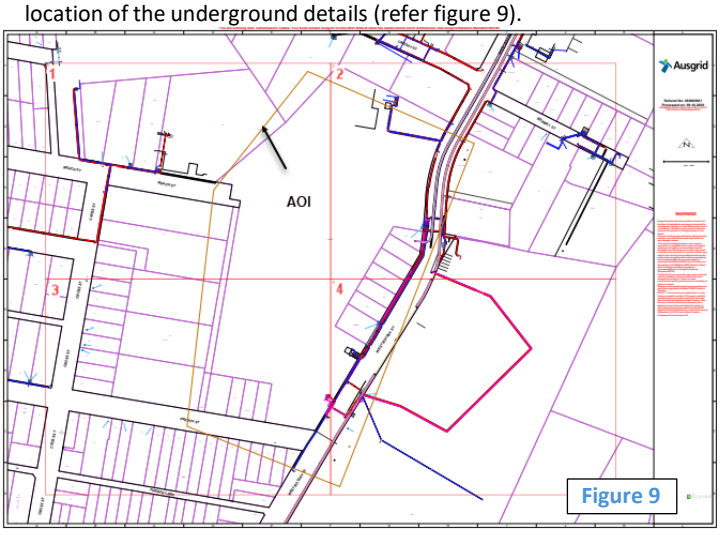


Figure 9

On a multiple mapsheet response the map sheet number can be found in the side information area on the standard maps (refer Figure 10)



Map No: 2
Referral No: 280680681
Processed on: 09-10-2026
INFORMATION ON THIS PLAN IS ONLY VALID FOR 30 DAYS FROM ISSUE DATE

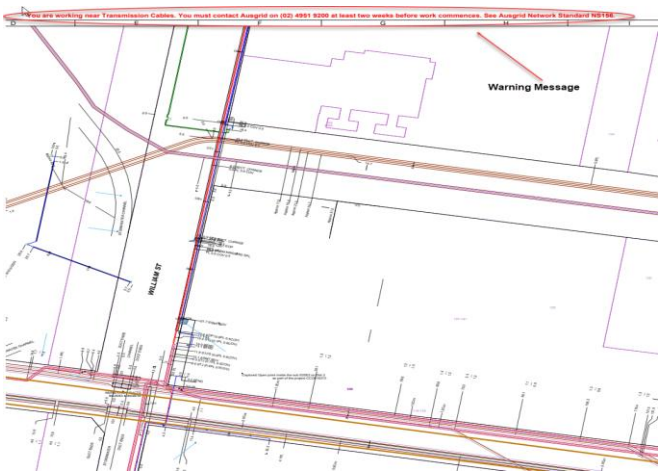
Figure 10

7. Transmission and Distribution Maps

Both Distribution and Transmission assets will be shown on the same map, but any mapsheet that **does contain** Transmission assets will also include 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 2 weeks before work commences. See Ausgrid Network Standard NS156."

The response will also include an additional Transmission Letter with more information labeled "**Transmission Letter_nnnnnnnn.pdf**" where **"nnnnnnnn"** refers to the BYDA sequence number



On a multiple mapsheet response the map sheet number can be found in the side information area on the standard maps (refer Figure 11)



Figure 11

8. 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 armor which may, under certain conditions, become energized. These cables may pose a significant risk and will be illustrated as in figures 12 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 "Excavating Near Ausgrid Underground Cables or Conduits", Technical Guide T0155 " Low Voltage Underground Cables - Degradation of Insulation" for low voltage cables susceptible to deterioration and the Electrical Safety Rules for low voltage exposed conductive sheath or armored cables must be adhered to. All other person's must contact Ausgrid before excavating near or accessing areas where these cables are present to arrange for appropriate precautions to be applied.

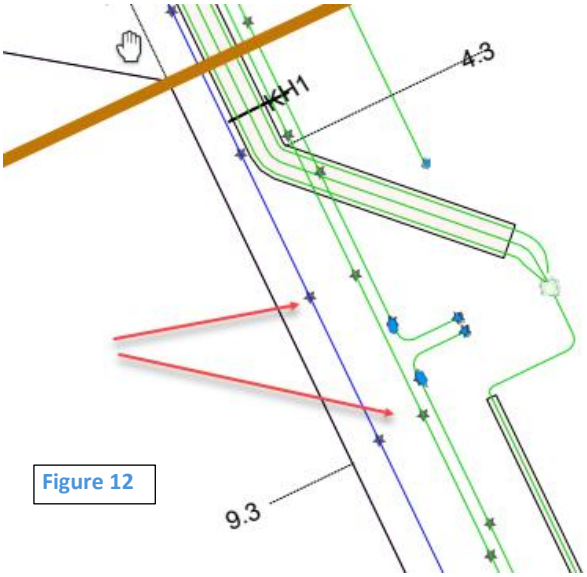


Figure 12

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 armor which could pose an electrical risk to workers.

9. Underground Earthing Infrastructure

Underground **"pits"** are shown with exposed internals 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 13).



Figure 13

10. PlusES Assets

Any PlusES Assets that are within the buffered AOI (Area of Interest) selected in the BYDA referral with show on Ausgrid plans in a golden color.

(refer figure 14)

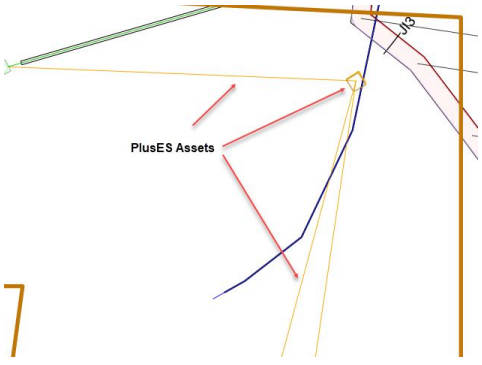


Figure 14

Ausgrid Underground Map Symbology

Object		Symbol	Proposed Asset
HV Cable (High Voltage)	HV (High Voltage) 5kV-22kV		
	TR (Transmission) 33kV-330kV		
LV Cable (Low Voltage)	Mains (Dark Blue)		
	Streetlighting		
	Service (Light Blue)		
	Stars are used to highlight At Risk Cables		N/A
			N/A
			N/A
Auxilliary Cable	All		

Object		Symbol	Proposed Asset
HV UG Joint	HV Joint		
	Transmission Joint		
HV UG Termination	Switchgear, End Box or Transition		
	Sealed End		
	Pot End		
	Transmission Pot End		
	UGOH (Underground to Overhead)		
HV Cable Repair	5kV - 330kV (HV & TR)		N/A
LV UG Joint	LV Joint		
	Network Box		N/A
LV UG Termination	Switchgear, End Box or Transition		
	Sealed End		
	Pot End		
	UGOH (Underground to Overhead)		

Object		Symbol	Proposed Asset
Auxilliary Fix	Pilot Window		N/A
Auxilliary Joint	Straight Through, Parallel Branch or Tee		
Auxilliary Termination	UGOH or Pole Termination		
	Pilot	P	N/A
	UGOP-ADSS Termination		
Cable Pit (Can be various shapes)	Cable Pit (All)		
LV Pillar	Pillar (All)		
	Private	P	P
LV Auxilliary Pillar	All Types		
LV Link Box	2 Way & 4 Way		

Object		Symbol	Proposed Asset
Substation	Substation (All)		
Swiching Station	Switching Station (All)		
Earthing	Underground Earth Cable		
	Earth Point (Cable to Stake)		
Frequency Marker	Distribution and Transmission Power	F M	N/A
	Auxilliary Communications	F M	N/A
	Distribution and Transmission Power		
	Auxilliary Communications		

Object		Symbol
Trench	Centreline	
Conduit (Can be various shapes and sizes)	Coverage (Distribution)	
	Coverage (Transmission)	
	Coverage (Underbore - Cross hatched)	
Cross Section	Marker (Staple)	
	User Line	
Measurement Point		
Miscellaneous Point Feature	Cable Clamp	
	Cable Core Split (Trifercation)	
	Cable Marker	
	Electrolysis Point	E
	End of Pipe	
	Frequency Injection Unit	IU
	Gas Charger	G
	Gas Control Cabinet	
	Gas Control Kiosk	
	Gas Control Point	
	Gas Control Valve	GV
	Gatic Pit Lid	
Map Note	Location & Text	
Dimension Feature		
	Chainage Marker	
Lead Cable	Oil / Gas / Thermocouple	
	Bonding	
	Electrolysis	
Dimension Feature		
	Chainage Marker	

Object		Symbol
Miscellaneous Point Feature	Inspection Box	
	Link Point	L
	Oil Control Valve	
	Oil Gauge	
	Oil Tank	
	Sniffer Box	
	Structure Attachment	
	Catenary Attachment	
	Thermocouple Box	
	Transmission Cable Marker	
	Transmission Link Point	L
	Static Balancer	
	Locked Gate	
	Access Gate	
	Survey Mark	
	Communicatio ns Tower	
	Submarine Cables	
	Trig Station	
	Restricted Access	
	Preformed Pit	
	PlusES Underground Utility Box	
Miscellaneous Linear Feature	All Geometries	
Map Note	Location & Text	
Lead Cable	Oil / Gas / Thermocouple	
	Bonding	
	Electrolysis	