

Electrical and Communications Infrastructure Delivery Report

Warnervale Shopping Centre
262 Hakone Road, Woongarra
Lot 5211 in DP 12008104

Final Issue

Prepared For:
Woolworths Group
1 Woolworths Way
Bella Vista NSW 2153
Australia

Prepared By:
Building Services Engineers

Document Issue: 4
Project Number: 20230481
Document Date: 21 March 2025



Sydney | Brisbane | Melbourne | Canberra | Adelaide

BSE | Building Services Engineers
Sydney

ABN | 24 084 076 200
Level 2, 121 Walker Street,
North Sydney, NSW, 2060

Phone | 02 9922 5200

Email | sydney@bse.com.au

Web | www.bse.com.au

Status

Document Title:	Electrical and Communications Infrastructure Delivery Report – Warnervale Shopping Centre		
Project Manager:	Geoff Taylor		
Document Author	Geoff Taylor		
Revision:	Revision	Date	Reviewer
	1	15/04/2024	G Taylor
	2	22/05/2024	G Taylor
	3	28/06/2024	G Taylor
	4	21/03/2025	G Taylor
Issued to:	Shaun Carrey, Woolworths Group		

Contents

- 1. Introduction 4
 - 1.1. Purpose and scope 4
 - 1.2. SEARs Requirements 4
- 2. Electrical Services 5
 - 2.1. Codes and Standards 5
 - 2.2. Existing Site Infrastructure 5
 - 2.3. Proposed Site Infrastructure 5
 - 2.4. Infrastructure Delivery 5
 - 2.5. Infrastructure Staging 6
- 3. Communication Services 7
 - 3.1. Codes and Standards 7
 - 3.2. Existing Site Infrastructure 7
 - 3.3. Proposed Site Infrastructure 7
 - 3.4. Infrastructure Delivery 7
 - 3.5. Infrastructure Staging 7
- 4. Appendix – Ausgrid BYDA Diagrams 8
- 5. Appendix – NBN BYDA Diagrams 10

1. Introduction

1.1. Purpose and scope

Building Services Engineers (BSE) P/L have been engaged by Woolworths to prepare an **Infrastructure Delivery, Management and Staging Plan** for the Electrical and Communications Services for the proposed Warnervale Shopping Centre at 262 Hakone Road, Woongarah, NSW 2259.

Modification to development consent **MP10_0195-Mod-2** is sought to enable the construction and operation of the Warnervale Shopping Centre with the following scope of works:

- Retail facility with a total Gross Floor Area of 12,834m² comprising
 - 7,618m² of retail floor space.
 - 840m² of commercial floor space.
 - 791m² of recreation facility (indoor) (gym).
 - 440m² of medical centre.
 - 2,408m² of e-commerce facilities.
 - 738m² for circulation space/ mall and amenities, toilets etc.
- Car parking totalling 490 spaces at grade.
- Public domain with a total area of 1540m² and 5715m² of landscaping around the site;
- Site preparation and bulk earthworks.
- Road construction including Gibraltar (Mataram) Road and Woongarah (Nikko) Roads.
- Associated infrastructure works and servicing, including subdivision.
- Use and fit out within the building of the proposed Woolworths Supermarket; and
- Site remediation and landscaping.

The development seeks to operate 24 hours per day, seven (7) days per week.

1.2. SEARs Requirements

This report addresses the requirements outlined in the Planning Secretary's Environmental Assessment Requirements (SEARs) for this proposed development.

In consultation with the relevant service providers:

- Assess the impacts of the development on existing utility infrastructure and service provider assets surrounding the site.
- Identify any infrastructure upgrades required on-site and off-site to facilitate the development and arrangements to ensure that the upgrades will be implemented on time and be maintained.
- Provide an infrastructure delivery and staging plan, including a description of how infrastructure requirements would be co-ordinated, funded and delivered to facilitate the development.
- Detail any staging (including timing) of delivery of infrastructure and utilities.

2. Electrical Services

Incoming Ausgrid electrical ducting and high voltage (HV) cabling infrastructure is required to be extended along the new carriageways to the proposed new substation easement on the development site.

Low voltage (LV) supplies will be installed underground from the terminals of each transformer to the development main switchboards.

Supplementary Ausgrid low voltage (LV) cabling provisions will be extended from the new transformers to support the local existing street network demands.

2.1. Codes and Standards

All electrical infrastructure services will be installed to:

- The NSW Service and Installation Rules
- AUSGRID Energy Network and Installation standards
- AS/NZS 3000

2.2. Existing Site Infrastructure

No electrical services authority infrastructure is installed to the proposed development site.

2.3. Proposed Site Infrastructure

A preliminary maximum demand based for the proposed development identifies an anticipated load of 2MVA. A new substation easement will be created onsite in favour of Ausgrid that would support 2-off kiosk transformers.

Existing High Voltage inground ducting exists along the surrounding Woongarra Road and Gibraltar Roads.

Final supply arrangements will be nominated by Ausgrid for the design to be carried out by an authorised Level 3 Accredited Services Provider (ASP) during the detailed design phases of the project.

2.4. Infrastructure Delivery

The Ausgrid monopoly, contribution and easement establishment costs will be borne by Woolworths to satisfy the development and approval for the ASP-3 certified design.

The construction of the new inground high voltage (HV) infrastructure ducting, cables and transformers will be undertaken by the appointed authorised Level 1 Accredited Services Provider (ASP).

Minimal disruption is expected during the construction of new ducting and HV cabling servicing the proposed development and Ausgrid, in association with the Level 1 Accredited Services Providers (ASPs) will enable switching to allowed for continued power availability to the existing surrounds.

2.5. Infrastructure Staging

There will be no staging required for these works.

3. Communication Services

3.1. Codes and Standards

All infrastructure will be installed to:

- ACMA Manuals and associated Australian Standards
- NBN Co Pathway Design and Construction Standards

3.2. Existing Site Infrastructure

No communications carrier services infrastructure is installed to the proposed development site.

3.3. Proposed Site Infrastructure

NBN Co fibre optic infrastructure will be extended to the development site from Woongarra Road via inground ducting systems.

Existing NBN fibre optic inground ducting exists along the surrounding Woongarra Road and Gibraltar Roads.

Final supply arrangements will be nominated by NBN Co for the design to be carried out by an authorised NBN Co service providers during the detailed design phases of the project.

3.4. Infrastructure Delivery

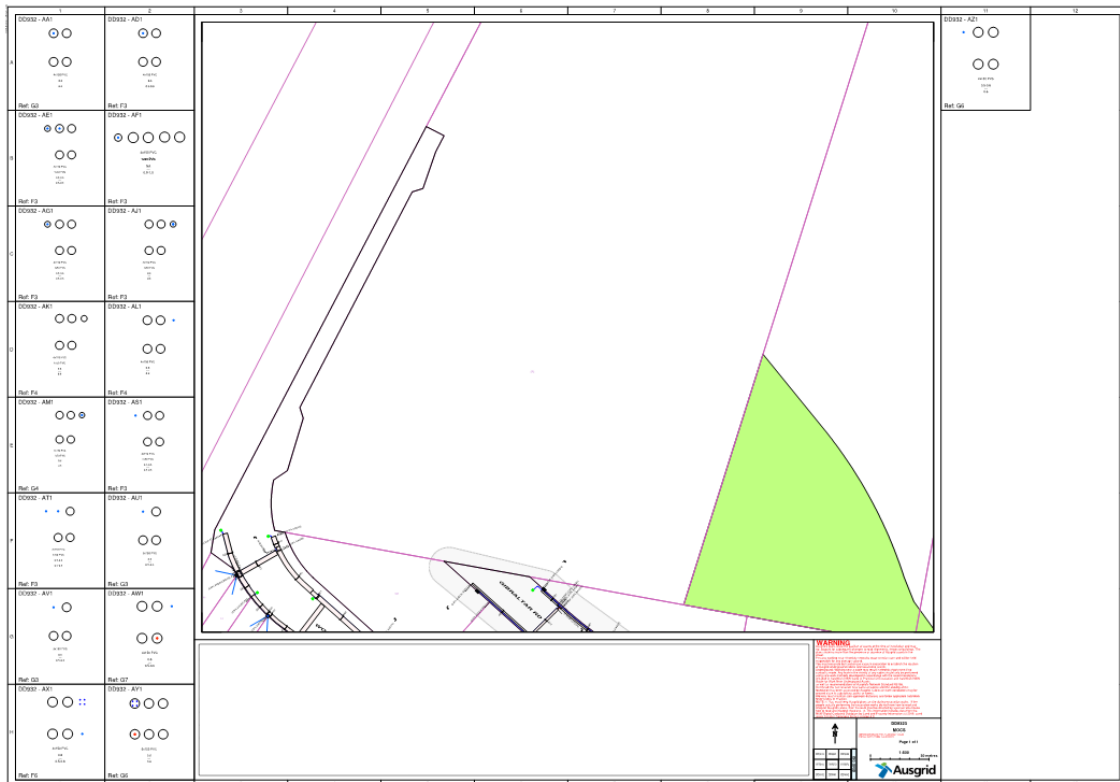
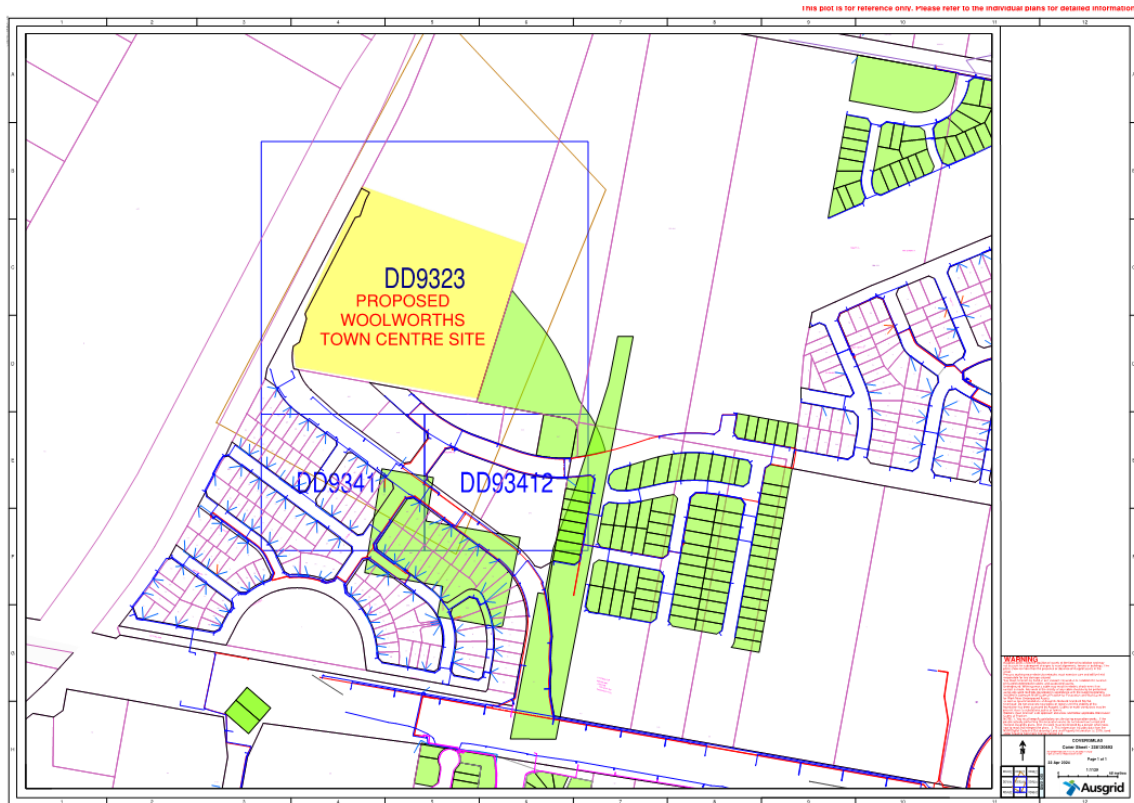
The NBN Co application, contribution and establishment costs will be borne by Woolworths.

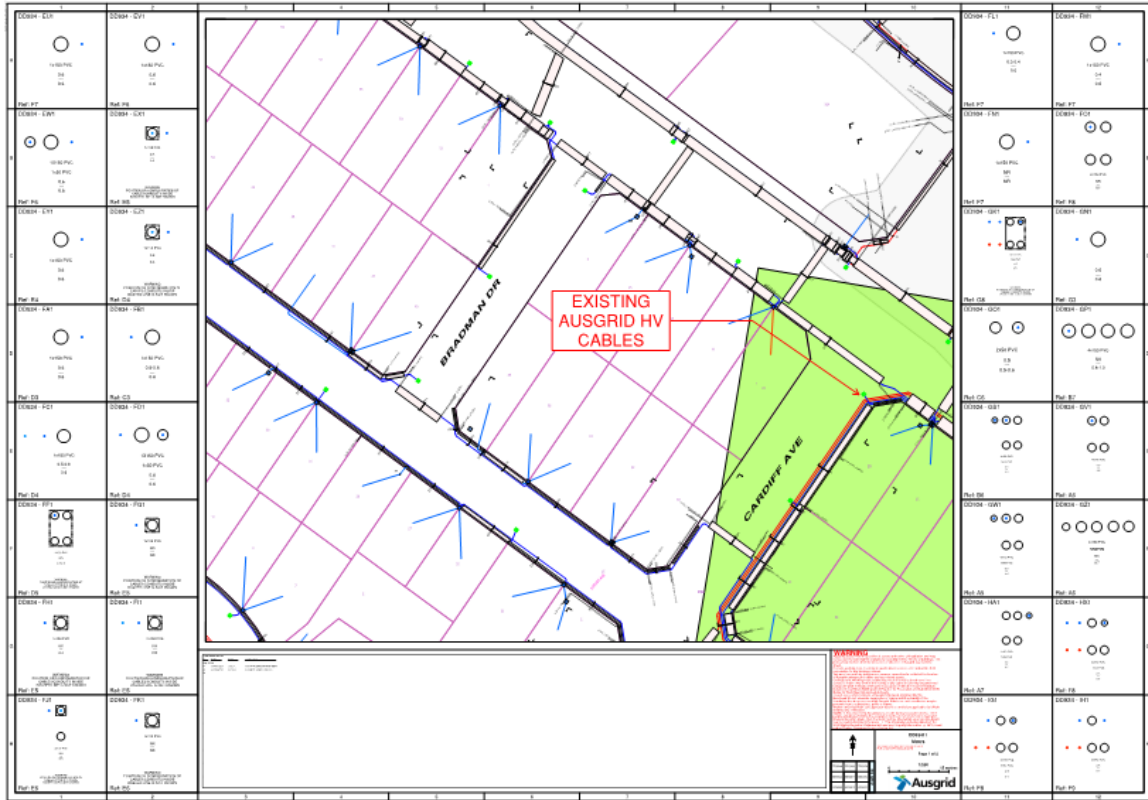
Minimal disruption is expected during the construction of new ducting and fibre optic cabling servicing the proposed development and NBN Co, in association with the authorised installers, will enable connections to be established maintaining continued availability of communication services to the existing surrounds.

3.5. Infrastructure Staging

There will be no staging required for these works.

4. Appendix – Ausgrid BYDA Diagrams





5. Appendix – NBN BYDA Diagrams

