

Summit Care 18 Randwick Close, Casula NSW 2758

Services Infrastructure Report

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1. EXECUTIVE SUMMARY

This report provides an infrastructure due diligence of the existing in-ground infrastructure surrounding and serving the site at 18 Randwick Close, Casula. The site is a greenfield development.

ADP have undertaken a desktop review of the information provided from the site Dial Before You Dig (DBYD) search. The report provides an overview the following information relating to each service:

- Existing infrastructure surrounding and serving the site.

The report identifies the risks and opportunities.

The following infrastructure items are anticipated to form a critical part of the project design development:

1. The coordination of the sewer design based on the final requirements from Sydney Water. It is anticipated that a sewer amplification will be required by Sydney Water.

2. INTRODUCTION

2.1 PROJECT DESCRIPTION

A new Multi tower, aged care and retirement living facility is proposed to be developed 18 Randwick Close, Casula. The site is currently a greenfield location, with no existing buildings.

The site is bound by Kurrajong Road to the north and Randwick Close to the south-west.



Figure 1 Site location (Source: Google maps)

2.2 PURPOSE OF THE REPORT

This report provides an infrastructure due diligence of the existing authority infrastructure surrounding and serving the current site. This includes an overview of the following in-ground services:

- Water & Sewer (Sydney Water)
- Power (Endeavour)
- Gas (Jemena)
- Telecommunications (Telstra & NBN)

2.3 INFORMATION SOURCES

The following information sources have been utilised to prepare this report:

- Dial before you dig (DBYD) information packages
- Architectural drawings by Jackson Teece

3. SITE INFRASTRUCTURE OVERVIEW

3.1 GENERAL

The following section of the report provides a description of the existing infrastructure and proposed works associated with the new development.

Authority infrastructure reviewed in this report includes:

- Electrical (Endeavour)
- Telecommunications (Telstra)
- Water & Sewer (Sydney Water)
- Gas (Jemena)

3.2 INFRASTRUCTURE MATRIX

There is limited information available on the status of consultation with the Authorities. The following matrix summarises our understanding of the status of the Authorities works.

Authority	Scope of Works	Status	Programme
Endeavour	1. Establishment of new substation.	Endeavour to be notified of the new works. Level 3 design to commence once design information package released by authority.	TBC pending application approval by authority.
Telstra	Confirm whether Telstra will provide infrastructure for this site.	Telstra to be notified of the new works.	TBC pending application approval by authority.
NBN	Confirm whether NBN will provide infrastructure for this site.	NBN to be notified of the new works.	TBC pending application approval by authority. Planned roll out of NBN infrastructure in first half of 2020
Sydney Water	Implementation of new services (sewer & water connections) for the building.	ADP are currently liaising with Sydney Water via the water services coordinator (WSC) regarding sewer and water connections.	TBC pending receipt of response from Sydney Water.
Jemena	Provision of new gas service / meter to the building site.	Preliminary discussion with Jemena has occurred. Jemena to be notified of the new works via application.	Receipt of offer is typically between 10 to 12 weeks from date of application.

Note: The above does not include stormwater as this will require a civil engineer to prepare the stormwater management plan. A stormwater management is generally nominated as part of the DA conditions.

4. ELECTRICAL INFRASTRUCTURE

4.1 EXISTING INFRASTRUCTURE

Based on the DBYD information, Endeavour high voltage (HV) infrastructure in the form of underground cables, reticulates within Kurrajong Rd.

4.2 NEW WORKS ASSOCIATED WITH ELECTRICAL INFRASTRUCTURE

The proposed development will require new substations. The spatial requirement for the new substations has been outlined in the preliminary spatial sketches provided by ADP. Based on preliminary load assumptions, two substations are anticipated to be required for this development.

A preliminary application to Endeavour is to be undertaken in order to initiate the substation design process. Once a response is provided by Endeavour, a Level 3 accredited service provider (ASP) design will be required in order to begin the design of the new substation works. This design process will involve ongoing negotiation with Endeavour regarding access to the new substation.

Easements to enable right-of-way and cable reticulation paths will need to be required as part of the new works.

4.3 ITEMS TO BE RESOLVED

The following items will be required to be addressed as part of the project design:

- Application to the authorities pending information from the client;
- Level 3 ASP designs are to be completed for the decommissioning of the existing substation, the street lighting relocations and the new substation;
- Easements are to be created for the right of way and high voltage cable reticulation to the new substation location;

5. TELECOMMUNICATIONS

5.1 EXISTING INFRASTRUCTURE

The current DBYD information indicates there are in-ground communication services along Kurrajong.

5.2 NEW WORKS ASSOCIATED WITH TELECOMMUNICATIONS INFRASTRUCTURE

The new development will require a new incoming telecommunications feed from Kurrajong Rd.

As required under current legislation, NBN will be provided with the first right of offer for this development.

5.3 ITEMS TO BE RESOLVED

The following items will be required to be addressed as part of the project design:

- Apply to NBN for the telecommunications service to the development site;
- Subject to NBN acceptance, determine the scope of works which are external to the site, in order to enable telecommunications to be provided for the development;
- Additional application to Telstra maybe required, pending application result from NBN;

6. WATER & SEWER INFRASTRUCTURE

6.1 EXISTING INFRASTRUCTURE

6.1.1 Sewer

The DBYD information provided by Sydney Water indicates there is an existing 150mm VC (vitrified clay) sewer main that runs within the adjacent park, along the eastern boundary of the development.

Based on the increase in density as a result of the development, there is potential for Sydney Water to requirement an amplification to the existing sewer main from 150mm to 225mm.

6.1.2 Water

The DBYD information provided by Sydney Water indicates there is an existing 100mm DICL (ductile iron, cement lined) water main located on the southern side of Kurrajong Road.

ADP have submitted a preliminary pressure and flow inquiry (PFI) to Sydney Water. The PFI results are still pending. The results will determine the size of the fire services pumps and tanks for the development.

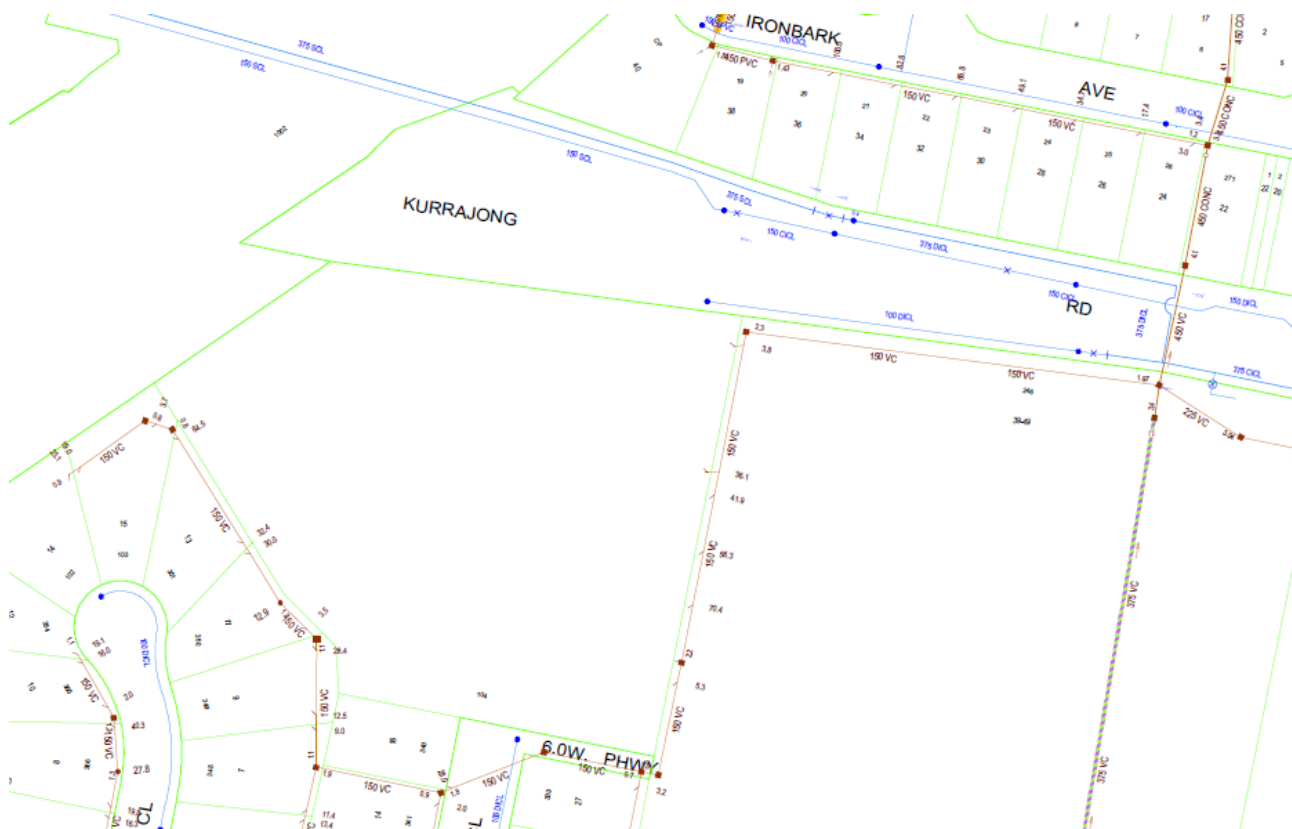


Figure 2: DBYD Sydney Water map indicating existing infrastructure

6.2 NEW WORKS ASSOCIATED WITH WATER & SEWER INFRASTRUCTURE

New water and sewer connections will be required to connect the proposed development to the existing Sydney Water infrastructure. ADP are currently liaising with Sydney Water to coordinate the water and sewer requirements specific to this development.

