



INFRASTRUCTURE DELIVERY, MANAGEMENT AND STAGING PLAN

47494_RPT_01 - 2-16 Pockley Avenue, Roseville

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Date 2025-04-08 - Revision 02

EXECUTIVE SUMMARY


This report has been developed for Aqualand for the new residential development located at 2-16 Pockley Ave, Roseville NSW 2069, Australia.

The intent of this report is to outline the existing public utility provisions and describe the likely services infrastructure requirements to support this new development. In particular, it investigates the power, communications, sewer, water and gas connection implications based on the design inputs as advised by the client.

This report is based on the following sources of information:

- Dial Before You Dig information
- Publicly available information

- > POWER
- > COMMS
- > GAS
- > WATER
- > SEWER

Name	Steven Cassells	
Qualifications	NER. RPEQ. CEng. MSc. BEng. MCIBSE. MIEAust.	
	The undersigned declares that this Infrastructure Delivery, Management and Staging Plan has been prepared in response to the following SEARs requirements for the Project on 15/11/2024 for SSD-77825469:	
SEARs item no.	SEARs Requirement	Relevant Section of this Report
21.	<p>In consultation with relevant service providers:</p> <ul style="list-style-type: none"> • Assess the impacts of the development on existing utility infrastructure and service provider assets surrounding the site. • Identify any infrastructure required on-site and off-site to facilitate the development and any 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 coordinated, funded and delivered to facilitate the development. 	Building Connections - All Staging Implications
Signed	 Steven Cassells	
Dated	08/04/2025	

SITE OVERVIEW

The applicant seeks development consent under Division 4.7 State Significant Development of the Environmental Planning & Assessment Act 1979 (EP&A Act) for a new residential development comprising three residential flat buildings which includes the provision of in-fill affordable housing on the site at 2-16 Pockley Avenue, Roseville.

Specifically, this SSDA seeks approval for:

- Site preparation including demolition, excavation and tree removal of the site;
- Construction of a residential flat building containing 3 building elements of up to 9 storeys including:
 - Part-3, part 4 and part 5-level combined basement parking with the provision of 285 car parking spaces,
 - 178 dwellings including 39 affordable housing dwellings above car park;
- Ground level and on-building landscaping works including communal open spaces in Pavilion A.
- Augmentation of, and connection to, existing utilities as required



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BUILDING CONNECTIONS

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STAGING IMPLICATIONS

The site has two proposed stages, with stage 1 consisting of the construction of all basement carpark levels and Pavilion A and B, and stage 2 consisting of the construction of Pavilion C from ground level up. From a utilities connection perspective, the building power, water, communications, sewer & gas connections have been designed and coordinated to ensure that all property connections are completed in stage 1. This will include all relevant infrastructure, such as substation, meters, fire pumps and the like. Stage 2 works can then be carried out without impacting the operation of the utility infrastructure for Stage 1.

The infrastructure utility works for the proposed development has three stages, and the programme for applications, design and construction need to be carefully developed in order to meet the overall development programme.

Decommissioning Utilities: Decommission of existing services to buildings and then buildings demolished. Clean site for excavation.

- Power: Application to Ausgrid as part of the overall substation application process in conjunction with a Level 3 ASP.
- Communications: Existing Telstra & NBN connections to be decommissioned.
- Gas: Existing medium pressure gas mains to be decommissioned.
- Water: Sydney Water Tapin application to disconnect water (or modify for construction purposes)
- Sewer: Sydney Water Tapin application to disconnect sewer (or modify for construction purposes)

Early Works Utility Modifications: To allow the early works of shoring and excavation the following scope is to be considered;

- Power: HV Feeder extended to the site in consultation with Ausgrid and a Level 2 ASP. Substation to be designed by an Level 3 ASP
- Communications : Chosen fibre to be extended to the site.
- Gas: No work required.
- Water: Supply - New Water main extended to the site across Pacific Highway
- Sewer: Undertake building plan approval process to instigate the major works scope. Make allowance in program for design submission and approval including the detailed sewer analysis with Sydney Water to confirm final connection location.

Utility works for the Proposed development: Refer to the subsequent sections of this report for details.

- Power: Builders supply to be further coordinated with Ausgrid. Potential for a temporary power source from a nearby substation, or a temporary substation to be provided during the development phase. New substation arrangement to be built once the site has been developed to the ground floor.
- Communications: NBN or Telstra adjacent to the site.
- Gas: New gas connection to adjacent gas main.
- Water supply: Finalised Section 73 application with proposed connection to the adjacent water main.
- Sewer: Finalised Section 73 Application with confirmation of sewer connection as per early works statement.

Infrastructure Funding and Delivery

The developer will be responsible to fund and deliver the local authority works through certified designers and installers for Ausgrid, Sydney Water (sewer and water), Jemena gas services and NBN (Communications). There are no known authority contributions at this stage and where this may apply in the future, the developer will investigate and agree with individual authorities.



INFRASTRUCTURE FUNDING AND DELIVERY

The developer will be responsible to fund and deliver the local authority works through certified designers and installers for Ausgrid, Sydney

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ELECTRICAL INFRASTRUCTURE

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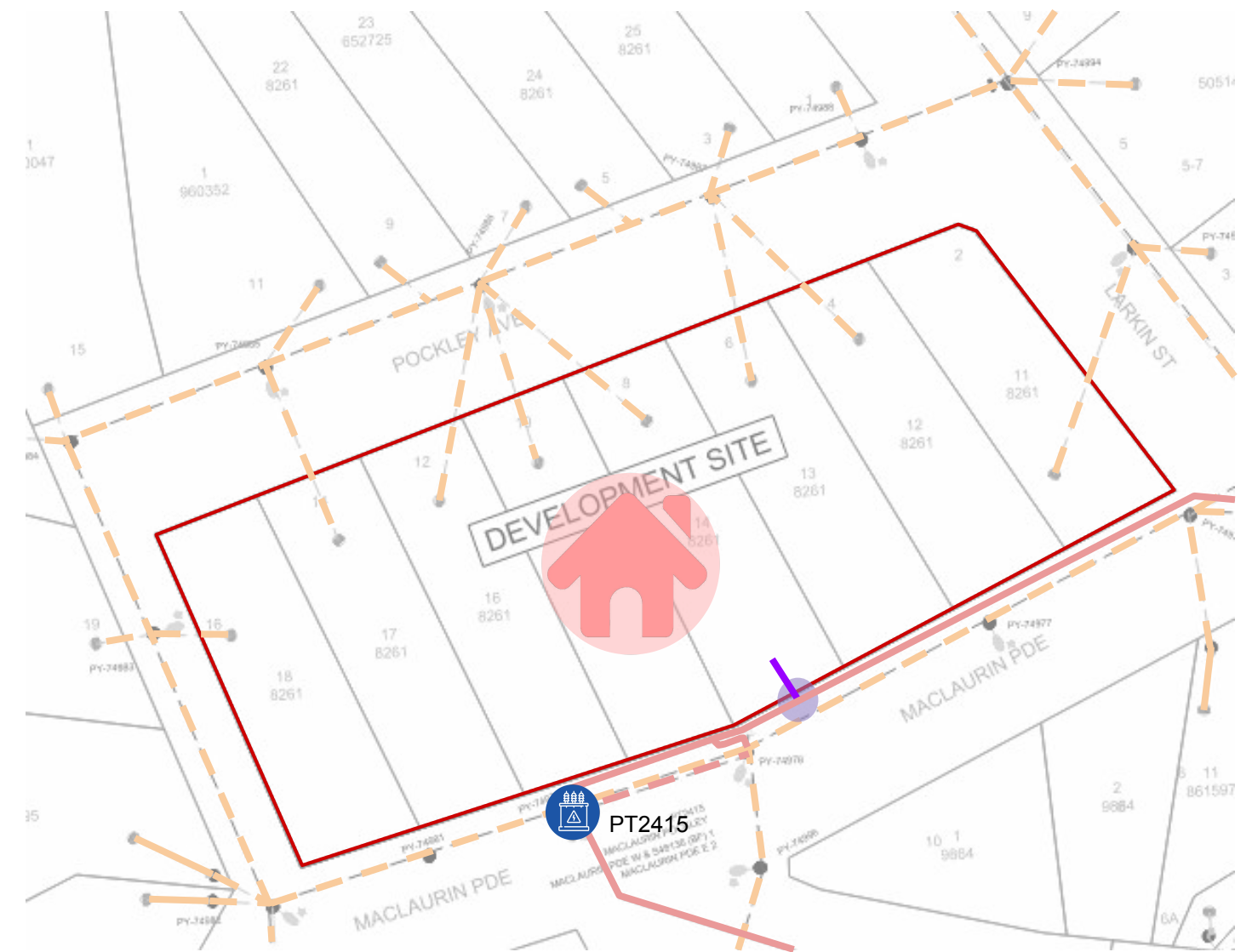
BUILDING CONNECTIONS

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EXISTING POWER INFRASTRUCTURE

The Ausgrid network maps indicate that the nearest High Voltage available for substation loop-in is adjacent to the site with connection opportunities along Maclaurin Parade.

There are existing utilities infrastructure within the site that will be removed prior to construction. There are no existing substations on the site.



Power Infrastructure Map

- Below Ground High Voltage Power
- Overhead High Voltage Power
- Below Ground Low Voltage Power
- Overhead Low Voltage Power
- Substation
- Development Location
- Proposed Power Connection Strategy

ELECTRICAL INFRASTRUCTURE

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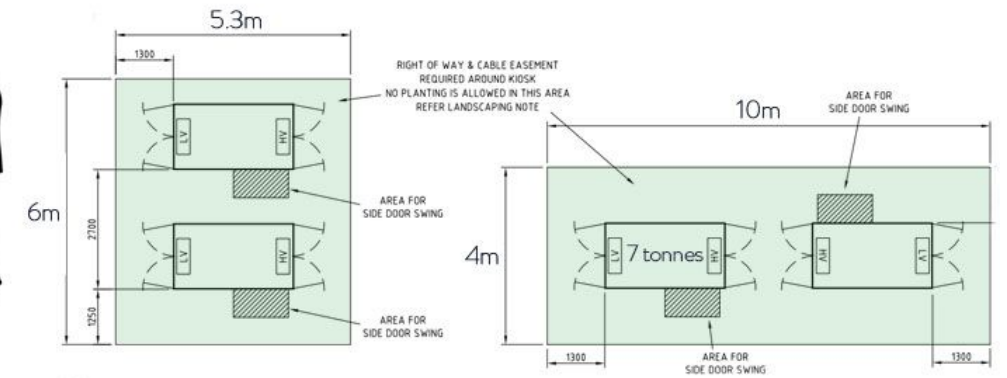
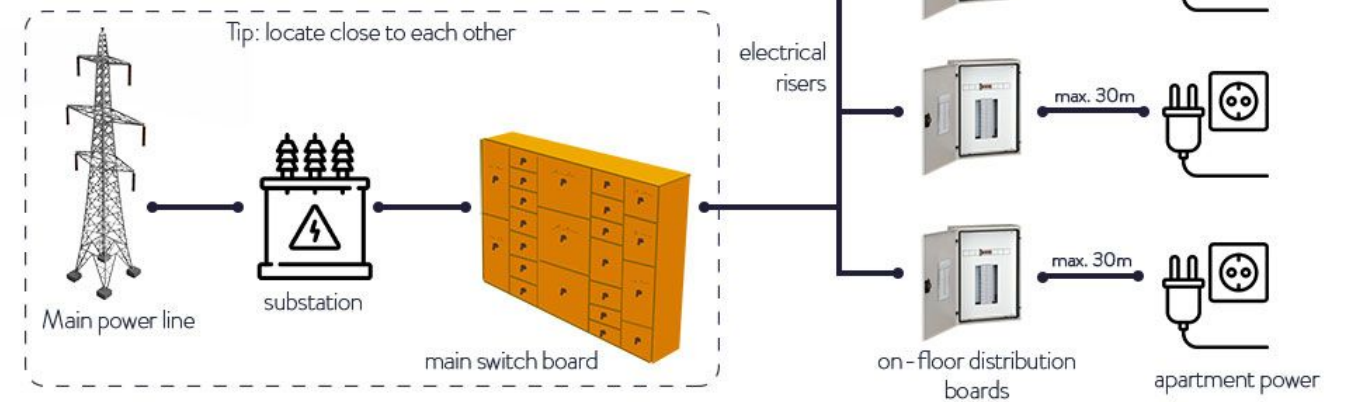
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PROPOSED ELECTRICAL SERVICES

The preliminary maximum demand, based on the AS/NZS 3000 calculation method, is 1,684 amps (1,167 kVA). The site will require two new 1,000 kVA kiosk or mini chamber substations.

As part of the next phase of works, an ASP Level 03 will be engage to begin the detailed design of this substation including consultation with Ausgrid.

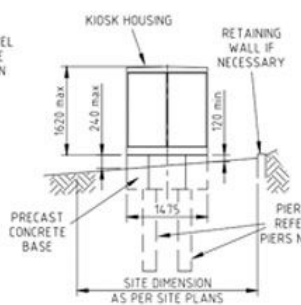
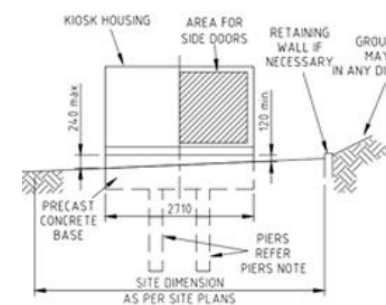
Electrical infrastructure overview



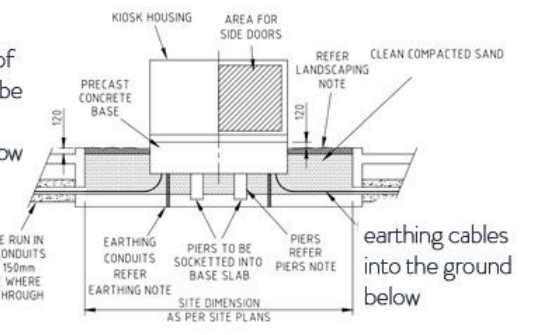
A padmount substation is delivered/replaced via heavy truck with 5m span vehicle mounted crane on all weather surface road.

Multiple padmount arrangement options

Easement (green) to be within the lot boundary



The level at the top of the kiosk base must be not more than two metres above or below the access roadway level



Installing padmount substations on the ground

Installing padmount substations over a supporting structure

COMMUNICATIONS INFRASTRUCTURE

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Mobile base stations

There are no carrier mobile base stations located on this site.



Mobile Base Station Map



Existing Mobile Base Station



Development Location

GAS INFRASTRUCTURE

AUTHORITY INTERFACE

There is Medium Pressure (210kPa) gas mains running along Larkin Street, Pockley Avenue and Maclaurin Parade.

EXECUTIVE SUMMARY

The existing gas mains along Larkin Street may be sufficient to support this development. We recommend a new gas connection, including a gas meter and regulator.

SITE OVERVIEW

The site currently has multiple existing connection points to the gas main which will require removal.

STAGING IMPLICATIONS

Consultation with Jemena will be undertaken during the next stage of the project to coordinate the required connection works.

BUILDING CONNECTIONS

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- > **GAS**
- > WATER
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Gas Infrastructure Map

- Low/Medium Pressure Gas Main
- High Pressure Gas Main
- Development Location
- Proposed Gas Connection Strategy

WATER INFRASTRUCTURE

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The proposed connection point and existing water mains are illustrated in the adjacent image. The site has existing 100mm water mains running along Larkin Street and Pockley Avenue, and a 150mm water main on Maclaurin Parade.

Based on the preliminary calculations, the proposed development is likely to require a new 200mm main water connection. The existing 100mm and 150mm water mains running adjacent to the site may not be sufficient to serve this development. Two connection strategies have been proposed, as illustrated in the adjacent image: we recommend early discussions with Sydney Water to ascertain their preferred connection strategy. We have detailed two options below that are also illustrated in the adjacent drawing:

- Option 1: A new 200mm main to be extended from the 300mm trunk main on Pacific Highway, with a new 200mm connection to the site.
- Option 2: A direct connection to the 150mm main on Maclaurin Parade.

A Sydney Water Coordinator will be engaged during the next stage of the project to begin consultation with Sydney Water and ascertain their preferred connection strategy.



Water Infrastructure Map

- Water Main
- New Water Main



Development Location



Proposed Water Connection Strategy

SEWER INFRASTRUCTURE

AUTHORITY INTERFACE

The dial before you dig investigation reveals there is an existing 225mm sewer main next to the site along Pockley Avenue and running into the site.

EXECUTIVE SUMMARY

Based on the preliminary calculations, the proposed development is likely to require a new 300mm or multiple 225mm sewer mains connection. The connection strategy illustrated in the adjacent image involves connections to the 225mm mains on Pockley Avenue and Nola Road.

SITE OVERVIEW

The existing sewer main running through the site does not appear to serve any adjacent sites and is proposed to be removed prior to excavation.

STAGING IMPLICATIONS

A Sydney Water Coordinator will be engaged during the next stage of the project to begin consultation with Sydney Water to agree on their preferred connection strategy.

BUILDING CONNECTIONS

- > POWER
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