



INFRASTRUCTURE DELIVERY, MANAGEMENT AND STAGING PLAN

2-4 Burleigh St & 20-24 Railway Parade, Burwood

POWERED BY
neuron

Date 2025-02-13 - Revision 02.



AUTHORITY INTERFACE

EXEC SUMMARY

SITE OVERVIEW

BUILDING CONNECTIONS

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

REPORT INPUTS

Introduction

This report has been developed for the development of 2-4 Burleigh Street and 20-24 Railway Parade, Burwood, into a new development.

This document as been prepared to address Issue 21 in the Planning Secretary’s Environmental Assessment Requirements. In particular, the following dot points:

- 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 any arrangements to ensure that the upgrades will be implemented on time and be maintained.
- Provide an infrastructure delivery staging plan. Including a description of how infrastructure would be co-ordinated, funded and delivered to facilitated the development.

The intent of this report is to assess the impacts of the development on existing utility infrastructure and service provider assets surrounding the site. In addition this report will identify any infrastructure upgrades 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. In particular, it investigates the power, communications, sewer, water and gas connection implications based on the design inputs as advised by the client.

Authority Liaison:

Power, Ausgrid: The project team includes an Ausgrid Energy Accredited Service Provider to assess the existing network and provide advice to the team to include provisioning for power supply.

Water Supply, Sydney Water, : The project team have reviewed the water infrastructure in detail and understand there is likely available capacity in the network.

Sewer, Sydney Water, : The project team have reviewed the sewer infrastructure in detail and understand there is likely available capacity in the network.

Communications: The project team has assessed available communication carriers in the area and identified connection opportunities to be explored with the chosen provider.

Gas, Jemena: The project team can confirm there are no impacts on existing Jemena Gas networks but an upgrade may be required if gas is utilised for the development



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REPORT INPUTS

Declaration

Name Steven Cassells

Qualifications NER. RPEQ. CEng. MSc. BEng. MCIBSE. MIEAust.

The undersigned declares that this Social Impact Assessment (SIA) has been prepared in response to the following SEARs requirements issued for the Project on 25/10/2024 for SSD-77260958:

SEARs item no.	SEARs Requirement
20.	Infrastructure Requirements and Utilities In consultation with relevant service providers: - 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 co-ordinated, funded and delivered to facilitate the development.

Signed 

Dated 13/02/2025

SITE OVERVIEW

The site is located within Burwood, a suburb of the Burwood Local Government Area located approximately 10km west of the Sydney CBD.

The site is located on the southern side of Railway Parade and to the south of the Main Suburban railway line, and sits at the corner of Burleigh Stret and Railway Parade. This site comprises of 5 parcels of land identified as follows:

- 20 Railway Parade – Lot C in DP 438222;
- 22 Railway Parade – Lot B in DP 438222;
- 24 Railway Parade – Lot A in DP 438222.
- 2 Burleigh Street – Lot D in DP 438222; and
- 4 Burleigh Street – Lot E in DP 438222.

An aerial photograph of the site is provided at Figure 1 to the right.

All pre-existing buildings on the site have recently been demolished. Pre-existing development on the site consisted of single storey buildings, both detached and attached, occupied by various small businesses, including a family medical practice, tutoring business and a hearing clinic. Shared vehicle access was provided off Burleigh Street to a small carpark shared by all of the existing buildings.

The SSD Application will seek consent for the construction of a 39 storey mixed use development containing a hotel with 120 rooms, commercial office premises and a residential flat building with 48 dual key residential apartments and 5 levels of basement car parking.



Figure 1 Aerial Photo of The Site (Source: NearMaps)

STAGING IMPLICATIONS

The site will be built in a single stage. From a utilities connection perspective, the building power, water, communications & sewer will all be constructed in this stage. This will include all relevant infrastructure, such as substation, meters, fire pumps and the like.

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

Decommissioning the existing utilities

Decommission of existing services on the site in preparation for excavation.

- Power: Application to Ausgrid as part of the overall substation application process in conjunction with a Level 3 ASP. Existing connections & Pillars removed.
- Communications: Existing Telstra & NBN connections to be decommissioned.
- Gas: Existing connection to be capped and 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 being considered;

- Power: HV Feeder extended to the preferred location on site. Substation to be designed by an Level 3 ASP.
- Communications : Chosen fibre/s to be extended to the site.
- Gas: If Gas is to be utilised, extension of Burwood Road main to the site.
- Water Supply: Water main extended to the site.
- Sewer: Review detailed sewer analysis with Sydney Water to confirm final connection location/s

Utility works for the Proposed development

Refer to the subsequent sections of this report for details.

- Power: Builders supply likely to be partially fed from a spare panel at Substation S.79254. New substation arrangement to be built.
- Communications: Telstra, NBN or Optus 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.

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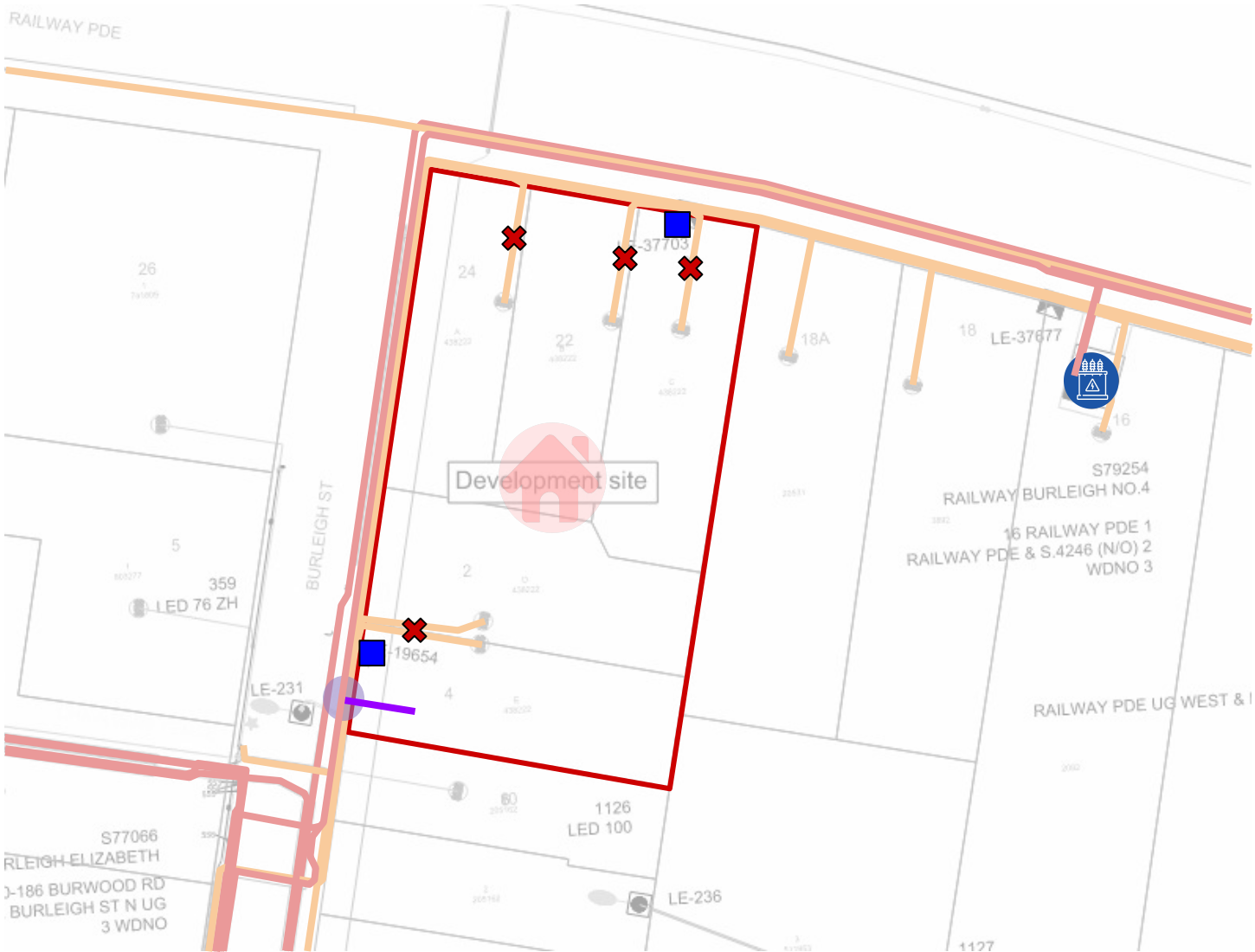
ELECTRICAL INFRASTRUCTURE

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 Burleigh Street and Railway Parade.

There are no existing substations on the site. The existing underground tee-connected service cables are to be removed and pot end to be installed on service cables to remove supplies from 2-4 Burleigh Street & 20-24 Railway Parade to allow demolition works. Additionally the two LV pillars currently adjacent the site do appear to clash with the proposed loading dock entry and/or porte cochere, and may need to be relocated or removed.

One of the WDNO panels at existing chamber substation S.79254 located at 16 Railway Parade may be available and suitable to provide temporary builders supply to the site with LV Network augmentation.



Power Infrastructure Map

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

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ELECTRICAL INFRASTRUCTURE

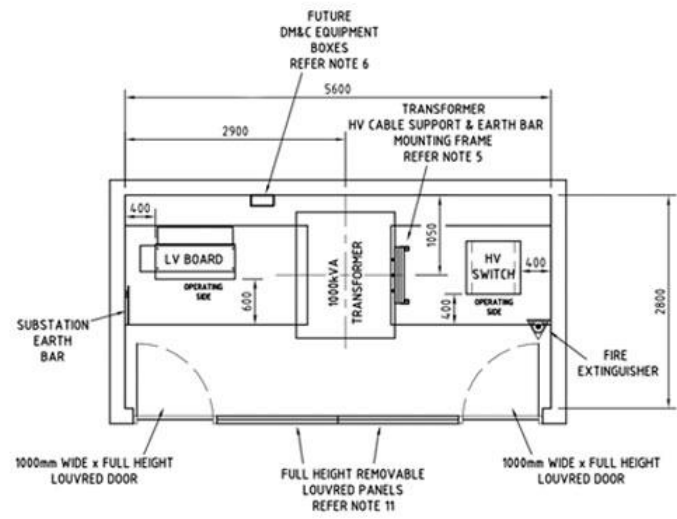
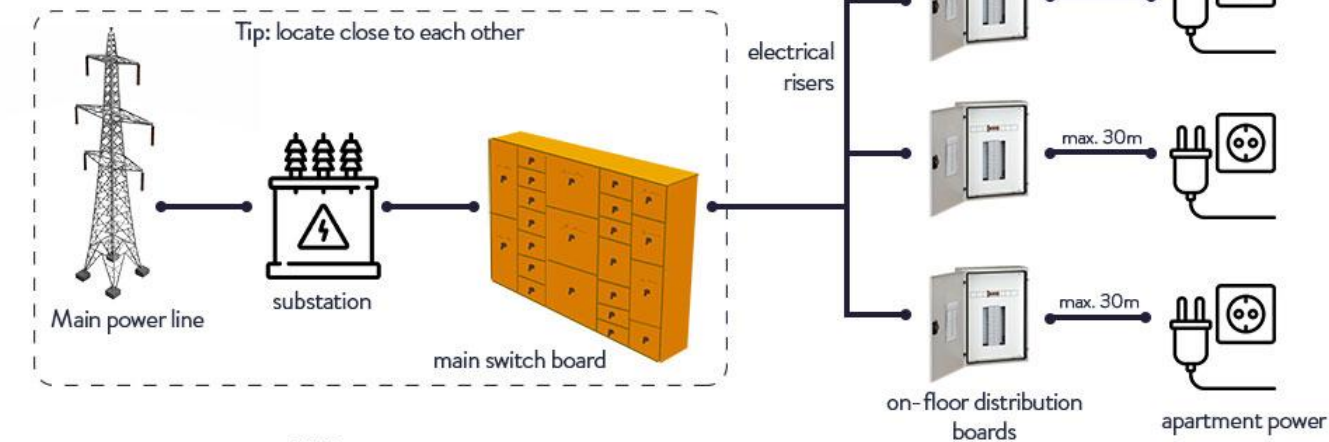
PROPOSED ELECTRICAL SERVICES

The preliminary maximum demand is 1696 amps or 1,175 kVA in accordance with AS3000.

The site will likely require at least one new 1,000 kVA substation.

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

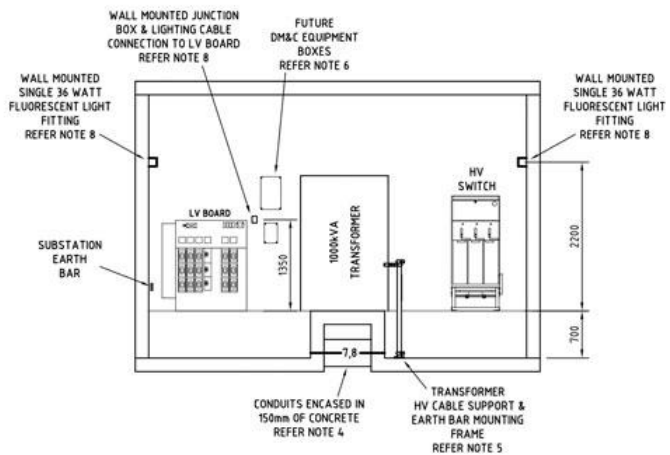
Electrical infrastructure overview



Chamber substation plan



Ventilation louvres on the front of a chamber substation



Chamber substation section



Inside a chamber substation

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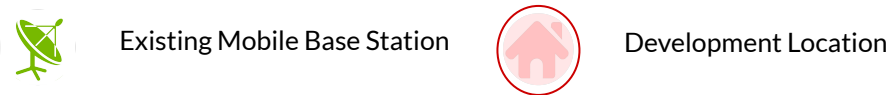
COMMUNICATIONS INFRASTRUCTURE

Mobile base stations

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



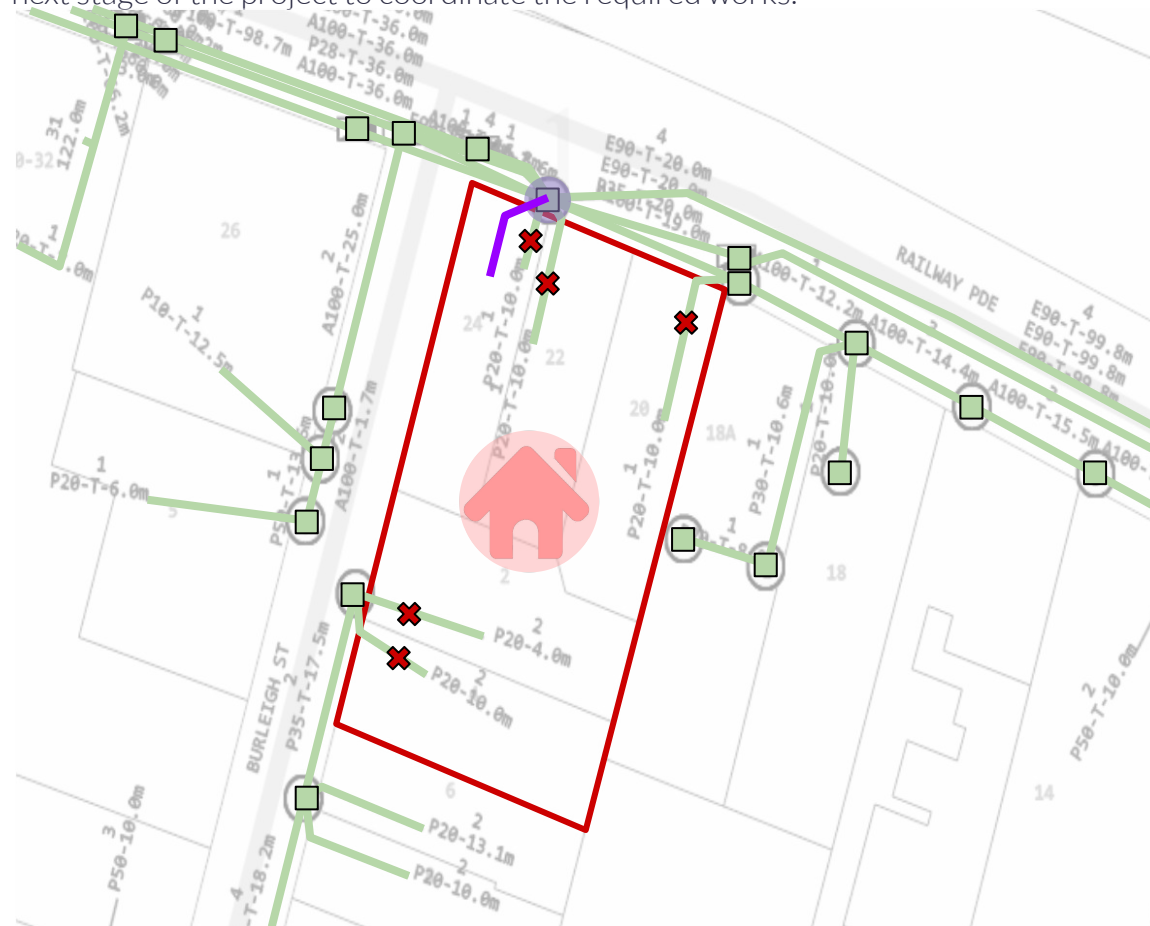
Mobile Base Station Map



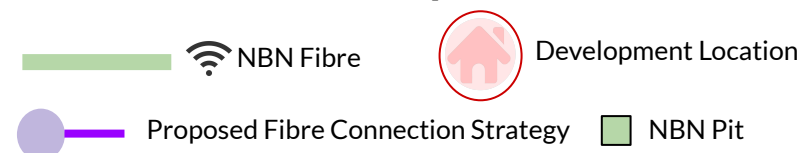
COMMUNICATIONS INFRASTRUCTURE

NBN

The existing NBN carrier service infrastructure is illustrated below. As shown, there is a connection opportunity available for this site. The existing NBN infrastructure running into the site will need to be removed prior to excavation & both adjacent pits will need to be relocated if there is any planned level changes as part of the loading dock entry or porte cochere. Consultation with NBN will be undertaken during the next stage of the project to coordinate the required works.

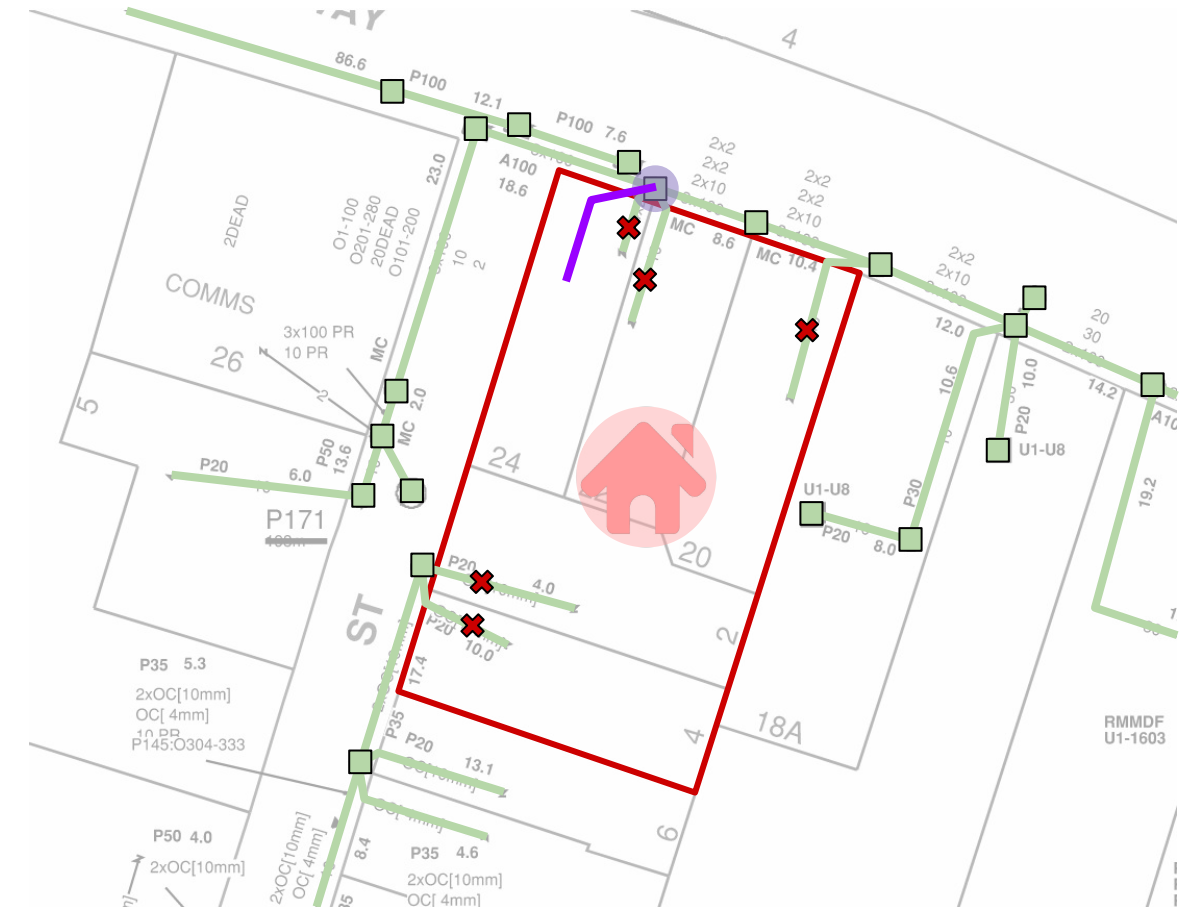


Fibre Infrastructure Map

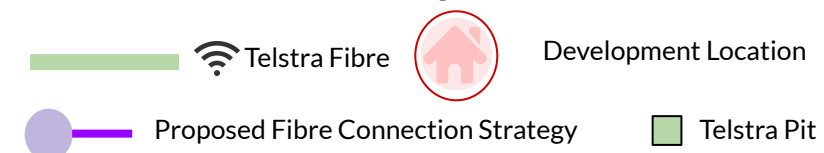


Telstra

The existing Telstra carrier service infrastructure is illustrated below. As shown, there is a connection opportunity available for this site. The existing Telstra infrastructure running into the site will need to be removed prior to excavation & both adjacent pits will need to be relocated if there is any planned level changes as part of the loading dock entry or porte cochere. Consultation with Telstra will be undertaken during the next stage of the project to coordinate the required works.



Fibre Infrastructure Map

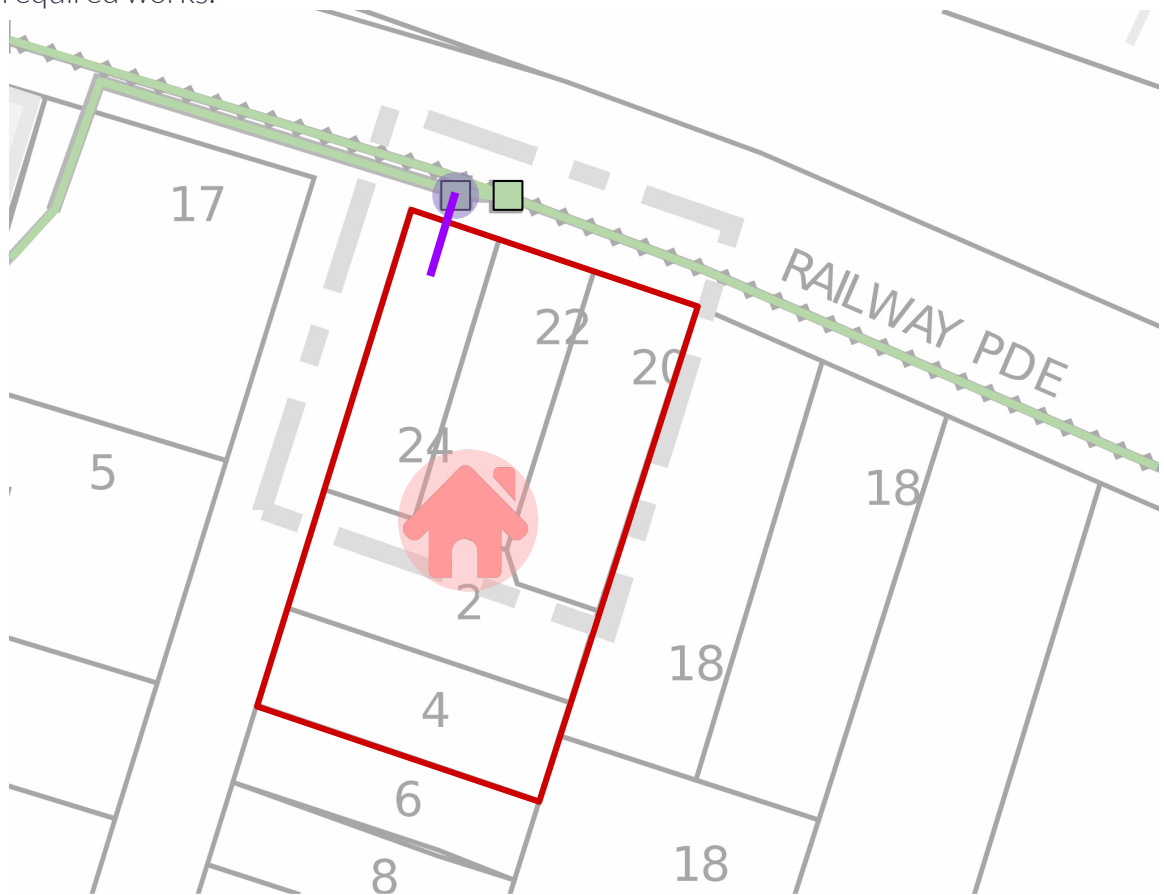


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COMMUNICATIONS INFRASTRUCTURE

Optus

The existing Optus carrier service infrastructure is illustrated below. As shown, there is a connection opportunity available for this site. The existing pits will need to be relocated if there is any planned level changes as for the porte cochere. Consultation with Optus will be undertaken during the next stage of the project to coordinate the required works.



Fibre Infrastructure Map



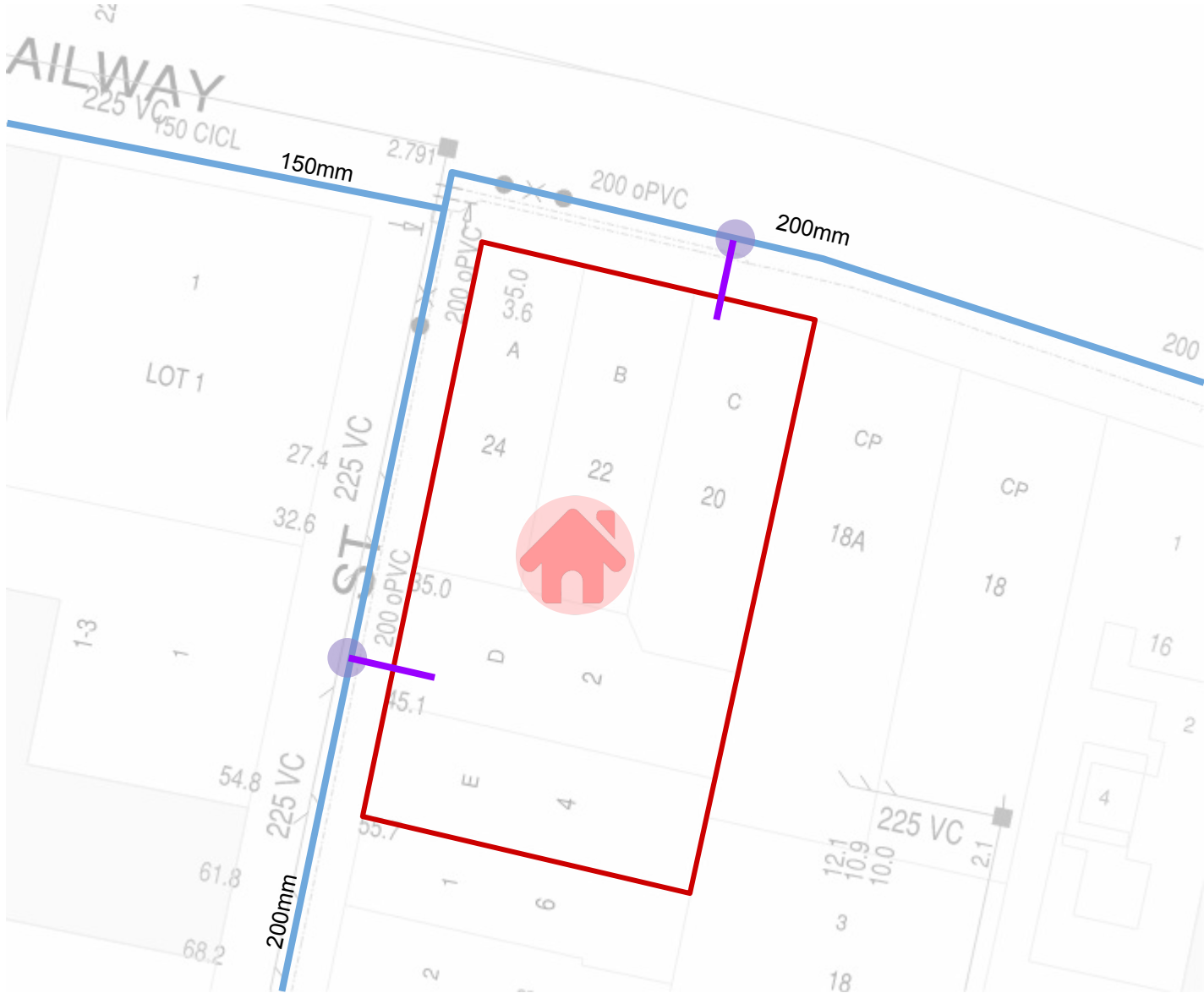
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WATER INFRASTRUCTURE

The proposed connection point and existing water mains are illustrated in the adjacent image. The site has an existing 200mm water mains running along Burleigh Street and Railway Parade.

Based on the preliminary calculations, this site is likely to require a new 200mm mains water connection. The existing water supply on Burleigh Street and Railway Parade should be sufficient to support this development. We recommend a new 200mm water main connection to either the Burleigh Street or Railway Parade water main, as illustrated in the adjacent image.

A Sydney Water Coordinator will be engaged during the next stage of the project to begin consultation with Sydney Water.



Water Infrastructure Map

-  Water Main
-  Recycled Water Main
-  Development Location
-  Proposed Water Connection Strategy

GAS INFRASTRUCTURE

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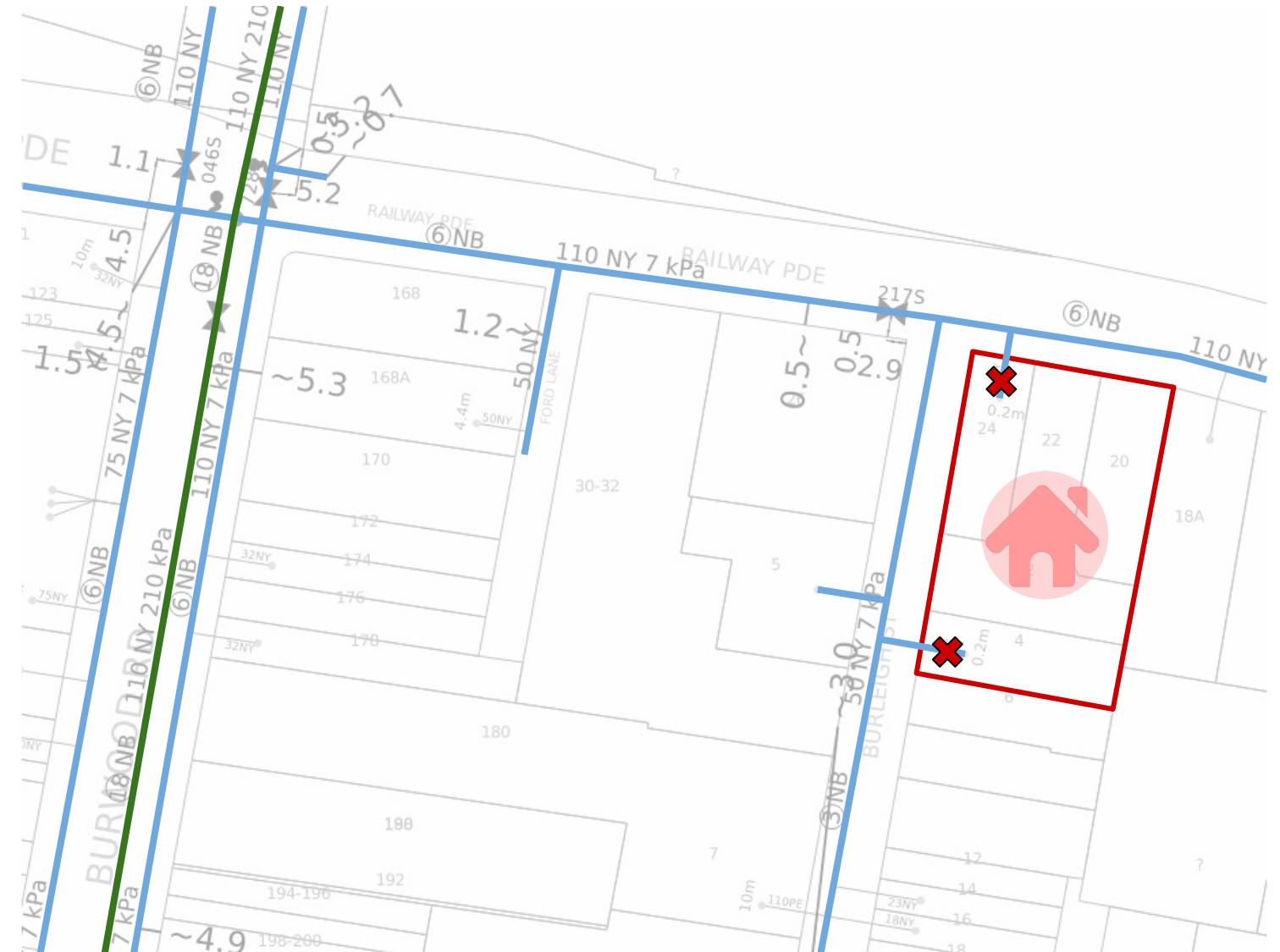
- > POWER
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REPORT INPUTS

There is a low pressure 7 kPa gas main running adjacent to the proposed site on Burleigh Street and Railway Parade as illustrated in the adjacent image.

If gas is envisioned for the site in any capacity, an upgrade of the adjacent main will likely be required, connecting to the high pressure gas main on Burwood Road. An application to Jemena would be required to confirm if any upgrades are required.

The existing service connections to the site will need to be removed.



Gas Infrastructure Map

Low Pressure Gas Main

Medium Pressure Gas Main



Development Location



Proposed Gas Connection
Strategy

SEWER INFRASTRUCTURE

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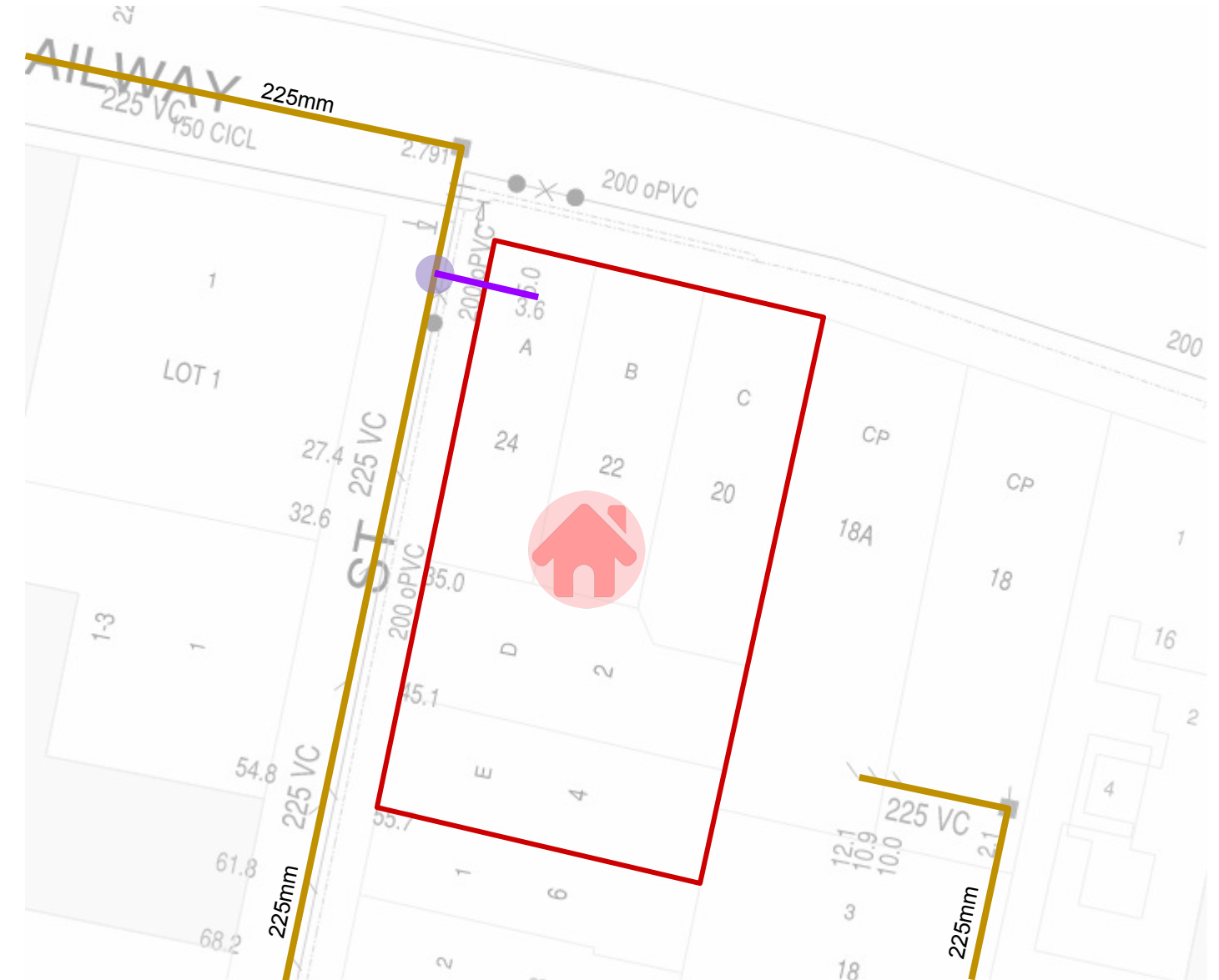
- > POWER
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REPORT INPUTS

There is a 225mm sewer main located on Burleigh Street, as shown in the adjacent image.

Based on the preliminary calculations, this site is likely to require a new 225mm mains sewer connection. The existing sewer main is a 225mm sewer main which may have capacity to serve this development. The connection point(s) are illustrated in the adjacent image.

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.



Sewer Infrastructure Map

-  Sewer Main
-  Sewer Manhole
-  Development Location
-  Proposed Sewer Connection Strategy