

**October 25**

**ST GEORGE PRIVATE HOSPITAL INPATIENT UNIT & SUPPORT SERVICES**  
**CLIENT: AKALAN PROJECTS PTY LTD**  
**119-129 PRINCES HIGHWAY AND 2 HOGBEN STREET AND 1 SOUTH STREET, KOGARAH**  
**APPLICATION NUMBER: SSD- 86969958**  
**INFRASTRUCTURE REQUIREMENTS AND UTILITIES PLAN**



**PROJECT NUMBER: 224111**

Prepared by:



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## DOCUMENT CONTROL SHEET

|                        |                                                                                                            |
|------------------------|------------------------------------------------------------------------------------------------------------|
| Title                  | Infrastructure Management Plan – Electrical and Hydraulic Services                                         |
| Project                | St George Private Hospital                                                                                 |
| Description            | Details of the Infrastructure Requirements and Impacts for the new Inpatient and Support Services Building |
| Key Contact            | Raphael Pullin                                                                                             |
| Client Project Manager | Akalan Projects Pty Ltd                                                                                    |

### Prepared by

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### Revision History

| Issued To      | Revision and Date |              |                                       |  |  |  |  |
|----------------|-------------------|--------------|---------------------------------------|--|--|--|--|
| Raphael Pullin | A                 | 30 Sept 2025 | Draft Issue for Comment               |  |  |  |  |
| Raphael Pullin | B                 | 23 Oct 2025  | Revised to incorporate Patch comments |  |  |  |  |
|                |                   |              |                                       |  |  |  |  |
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|                |                   |              |                                       |  |  |  |  |

### Client Status

|                       |                          |
|-----------------------|--------------------------|
| Client Representative | Raphael Pullin           |
| Date                  |                          |
| Signature             |                          |
| Approved              | <input type="checkbox"/> |
| Amended as Noted      | <input type="checkbox"/> |

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## 1. INTRODUCTION

DSA Consulting have been engaged by Akalan Projects Pty Ltd to prepare an Infrastructure Management Plan for the Electrical, Communications and Hydraulic Services for the proposed St George Private Hospital Inpatient Unit and Support Services Building located at 119-129 Princes Highway and 2 Hogben Street and 1 South Street Kogarah, Sydney, NSW.

### 1.1 PURPOSE OF THIS REPORT

This Electrical and Hydraulic Service Infrastructure report has been prepared on behalf of Akalan Projects Pty Ltd in support of a State Significant Development Application (SSDA) submitted to the Department of Planning, Housing and Infrastructure (DPHI) under Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act 1979).

The SSDA seeks approval for the expansion of the St George Private Hospital. Specifically, the SSDA seeks consent for two components: the first being the erection of a health services facility (hospital), and the second relating to upgrades to the main hospital campus, including a new emergency department.

For reporting purposes, the site subject to the new health services facility (hospital) is referred to herein as the 'clinical tower site' and the main hospital campus is referred to as such.

This report provides an assessment of Electrical and Hydraulic Service Infrastructure and responds to the Secretary's Environmental Assessment Requirements (SEARs) issued by DPHI on 30 June 2025 in relation to the project. Utilities and servicing for the main hospital will continue as existing, except where outlined in this report.

### 1.2 SITE LOCATION AND CONTEXT

The sites are in the Georges River Local Government Area (LGA), within the Kogarah town centre.

The clinical tower site is adjoined to the south by an existing multi-storey health services facility, which forms part of the St George Private Hospital campus. South Street separates this facility from the main hospital campus, though a connecting sky-bridge provides pedestrian access between the buildings. Further west is the St George Public Hospital, and other surrounding development comprises a mix of commercial premises (typically at ground floor) and medium and high-density residential premises.

On the opposite (eastern) side of Princes Highway is a mix of educational premises including Moorfield Girls High School, James Cook Boys Technology High School, St George High School, and a TAFE NSW campus. Surrounding development on this side of Princes Highway primarily constitutes low density residential premises.

Kogarah Train Station is south-west of the site, approximately 500m away. There is a pedestrian bridge that extends from Hogben Street over the Princes Highway, which provides direct access to the eastern side of the highway.

The sites are approximately 1.7km from Brighton Le Sands Beach, and approximately 3.5km from Sydney Airport. Refer to Figure 1 for a site context map.



Figure 1

### 1.3 SITE DESCRIPTION

#### Clinical Tower Site

The proposed new health services facility (hospital) will be located on land that is bound by three road frontages, being Princes Highway to the east (a classified road), Hogben Street to the north, and Bank Lane to the west. This site comprises eight adjoining allotments of land, known as 119 – 129 Princes Highway, Kogarah, and 2 Hogben Street, Kogarah.

The site currently accommodates a hard-stand parking lot, providing approximately 76 car parking spaces and a two-storey commercial premises (subject to separate demolition), which is attached to the existing multi-storey health services facility at 2 South Street, Kogarah.

Refer to Figure 2 for a site aerial excerpt.



Figure 2 Site Aerial Extract – Source: Metro Map, modified by Patch

### Main Hospital Campus

The existing hospital is located at 1 South Street, Kogarah which is also known as 1A South Street, Kogarah. This site is bound by two road frontages, being South Street to the north and Princes Highway (a classified road) to the east.

The site accommodates the St George Private Hospital's main campus, with vehicular access provided off South Street. Refer to Figure 2 for a site aerial excerpt.



Figure 3 Main Hospital Site Aerial Extract - Source: Metro Map, modified by Patch

## 1.4 OVERVIEW OF THE PROPOSED DEVELOPMENT

The SSDA seeks approval for the expansion of the St George Private Hospital. Specifically, the SSDA seeks consent for two components: the first being the erection of a health services facility (hospital), and the second relating to upgrades to the main hospital campus, including a new emergency department.

In summary, approval for the following is sought for the clinical tower site:

- Site preparation works and bulk earthworks, including tree clearing;
- Construction of a seven (7) storey health services facility (hospital) equating to a total GFA of 9,952sqm;
- Construction of a five (5) level basement carpark including a radiation oncology unit, providing a total of 241 parking spaces;
- Ancillary office, amenities, and loading dock provisions;
- Basement storage and a substation; and
- Landscaping works.

In addition, approval for the following is sought for the main hospital campus:

- Construction of an emergency department at the northern end of the existing hospital, to be operated 24 hours a day, seven days a week;
- Alterations to the South Street frontage, to facilitate ambulance bays and access requirements; and

- Associated internal re-configurations.

## 1.5 SEARS RELEVANT TO THIS REPORT

This Electrical and Hydraulic Services Infrastructure report has been prepared to respond to the SEARs issued for the St George Private Hospital Expansion project. The SEARs that are relevant to this Electrical and Hydraulic Services Infrastructure assessment, and where they are addressed within this report, are detailed below.

| Table 1. SEARs for [Infrastructure and Utilities]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Issue and Assessment Requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Documentation                  | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p>Electrical Infrastructure Requirements and Utilities</p> <p>In consultation with relevant service providers:</p> <ul style="list-style-type: none"> <li>• Assess the impacts of the development on existing utility infrastructure and service provider assets surrounding the site.</li> <li>• 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.</li> <li>• 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.</li> </ul> | Infrastructure Management Plan | <p>Electrical Power:</p> <ul style="list-style-type: none"> <li>• Electrical infrastructure to be extended into the new development from the existing Ausgrid 11kV network. A cut in and extension of the existing HV network required.</li> <li>• New Chamber substations required to site to allow for the power requirements of the development. Power requirements to existing facilities surrounding will be retained.</li> <li>• Infrastructure will be via Level 3 Accredited Services Provider (HV and substation design) and installed by a Level 1 Accredited Services Provider (HV installation and Substation implementation) in liaison with Ausgrid. Installation will be coordinated with respect to the development program.</li> </ul> <p>Communications:</p> <ul style="list-style-type: none"> <li>• Communications will be extended from the existing private hospital. A supplemental NBN service will be provided. Impacts will not affect surrounding properties as main infrastructure is well clear of the development site. NBN/Telstra services will be removed that currently service the development site.</li> <li>• Communications infrastructure upgrades on or around the site will not be required.</li> <li>• Communications will be delivered in coordinated with the project development program. NBN will be engaged to provide the supplementary services to the site from existing NBN network.</li> </ul> <p>Further information as per Section 2 of this report.</p> |
| <p>Hydraulic Infrastructure Requirements and Utilities</p> <p>In consultation with relevant service providers:</p> <ul style="list-style-type: none"> <li>• Assess the impacts of the development on existing utility infrastructure and service provider assets surrounding the site.</li> <li>• Identify any infrastructure required on-site and off-site to facilitate the development and any arrangements to ensure that the</li> </ul>                                                                                                                                                                                                                                                                | Infrastructure Management Plan | <p>Section 3 of this report confirms that available authority (Sydney Water) sewer and water supply services are adequate and suitable for the proposed Inpatient Unit and Support Services Building.</p> <p>Upon approval, the normal Sydney Water Section 73 application process will commence</p> <p>Sewer Drainage</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

Table 1. SEARs for [Infrastructure and Utilities]

| Issue and Assessment Requirements                                                                                                                                                                                                                                                                           | Documentation | Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>upgrades will be implemented on time and be maintained.</p> <ul style="list-style-type: none"> <li>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.</li> </ul> |               | <p>It is proposed to extend house sewer drainage from the proposed site to Sydney Water DN225 sewer main in Bank Lane</p> <p>Water Supply</p> <p>Water supply for building potable and fire fighting purposes will extend from the proposed site and connect to the Sydney Water 150upvc water main in Hogben Street.</p> <p>Hydraulic services infrastructure for the proposed existing hospital emergency department works is not affected as there is no increase in demand loads</p> |

## 2. ELECTRICAL SERVICES

### 2.1 GENERAL

All services are to be installed to meet (but not limited to) the requirements of:

- NSW Service and Installation Rules
- Endeavour Energy Network and Installation standards
- AS3000
- AS3003
- AS/NZS3008.1
- AS3009
- AS1670 Series
- NCC 2019 A1
- ACMA Manuals and associated Australian Standards

### 2.2 ESD PROVISIONS/CONSIDERATIONS

#### Energy Metering

Additional load meters will be provided to BCA Section J8 requirements, and to any additional heavy power load equipment systems. Coordination of interconnection to mechanical systems BMS will be required.

Metering Inclusions (but not limited to):

- Mechanical Plant (any gas and electricity consumption to be separately metered)
- Lifts
- Lighting
- Power
- Hot Water

Meters will be located in an area that allows regular monitoring and maintenance by facilities managers and other facilities management personnel.

#### Monitoring Systems

Energy information is proposed to be monitored through an electronic system capable of capturing and processing the data produced by the installed energy meters to meet BCA Section J8.3. The automatic monitoring system must be capable of:

- Collecting data from all meters;
- Alerting to missing data due to failures;
- Recording and processing of data on energy use consumption at user adjustable levels;
- Provide a breakdown of the information by building system type;
- Include the energy consumption, the load versus time (load profile) and the power factor

#### Minimum Lighting Comfort

Lighting colour rendition index will have a rating CRI  $\geq 80$ .

#### General Illuminance and Glare Reduction

Glare will be reduced where possible and “best practice” methods put into place to minimise glare impact issues.

#### Localised Lighting Control

Ward areas and care areas are generally exempted from lighting control requirements under the NCC.

Individual Wards are generally all locally switched via traditional light switches at the room entrance. We can utilise localised controls in medical suite areas.

### **PV Cell Installation**

A Photo Voltaic (PV) system will be investigated as part of the ESD consultants review.

### **Light Pollution to Neighbouring Properties – Lighting Strategy**

#### **External and Pedestrian Drop Off Area Lighting**

An external lighting system will be required for the proposed clinical tower site at the expanded St George Private Hospital as proposed below.

The design and installation of a system of lighting to operate from dusk to dawn via a photo-electric switch within areas where the public have general access will be implemented (public vehicle/pedestrian drop-off areas and pathways). Internal carparks will be controlled via movement sensor systems, and/or via the Building Management System.

Any lighting to the facade and accent lighting to highlight the external features of the building will be incorporated into the design where requested by the design architect. This lighting will be timer controlled via a building management system, and linked to a photo-electric switch.

The obtrusive effects of lighting will be controlled in accordance with the requirements of AS4282. This standard outlines the requirements to limit/remove light spill to neighbouring properties from external lighting sources.

Lighting to the external areas of the development will be designed to the minimum following requirements:

- AS/NZS1158.3.1 – Pedestrian Area (Minimum Category PR2 Drop Off / Driveway Lighting)
- AS/NZS1158.3.1 – Pedestrian Area (Category PR2 for General External Lighting)
- AS/NZS1680 Series – Interior and Workplace Lighting (AS/NZS 1680.2.1 – for Indoor Carparks)

Lamp type will be LED.

#### **Light Pollution to Night Sky**

Lighting will be designed to minimise light spill to the night sky and meet any Australian Standards and/or Greenstar/ESD requirements..

## **2.3 SEARs REQUIREMENTS - ELECTRICAL**

### **General**

This electrical services section of this report, addresses the relevant clause requirements outlined in the Planning Secretary's Environmental Assessments Requirements (SEARs)

The following item will be addressed.

### **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 upgrades required 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 management plan, including a description of how infrastructure requirements would be co-ordinated, funded and delivered to facilitate the development.

## 2.4 SUBSTATION

A preliminary maximum demand based on area methods give a preliminary additional demand of 1890kVA.

A proposed new substation will be required for the new development. It is proposed to establish a new 2 x 1000kVA mini-chamber type substation to Ausgrid standards and regulations). It services the current hospital.

An existing High Voltage line exists along the Princes Highway that currently services the existing private hospital and medical centre in South Street. The existing HV supply is generally underground to supply the existing private hospital substation and Medical Centre Substation. Refer to Figure 2.4.

Preliminary advice from Ausgrid advised that their network has capacity for the proposed works. Refer to the Appendices for Ausgrid correspondence.

*Note: The information supplied by Ausgrid is applicable at that time of advice. Formal application is to be made to secure the capacity as outlined.*

Final supply arrangements are required to be negotiated by the successful contractor with the local supply authority.

*Note: Demand calculation will be revisited upon confirmation of final internal make-up/usage of building.*

Final substation arrangements and design will be carried out by an authorised Level 3 Accredited Services Provider (ASP) during the detailed design phases of the project.

Ausgrid application and contribution costs will be as Ausgrid policies for substation and associated works.

Any Ausgrid works will be carried out via Ausgrid Policies utilising Level 1 and Level 3 Accredited Services Providers as per NSW Department of Planning and Environment requirements.

Figure 2.4 is attached indicating general arrangements of the existing Ausgrid network around the site

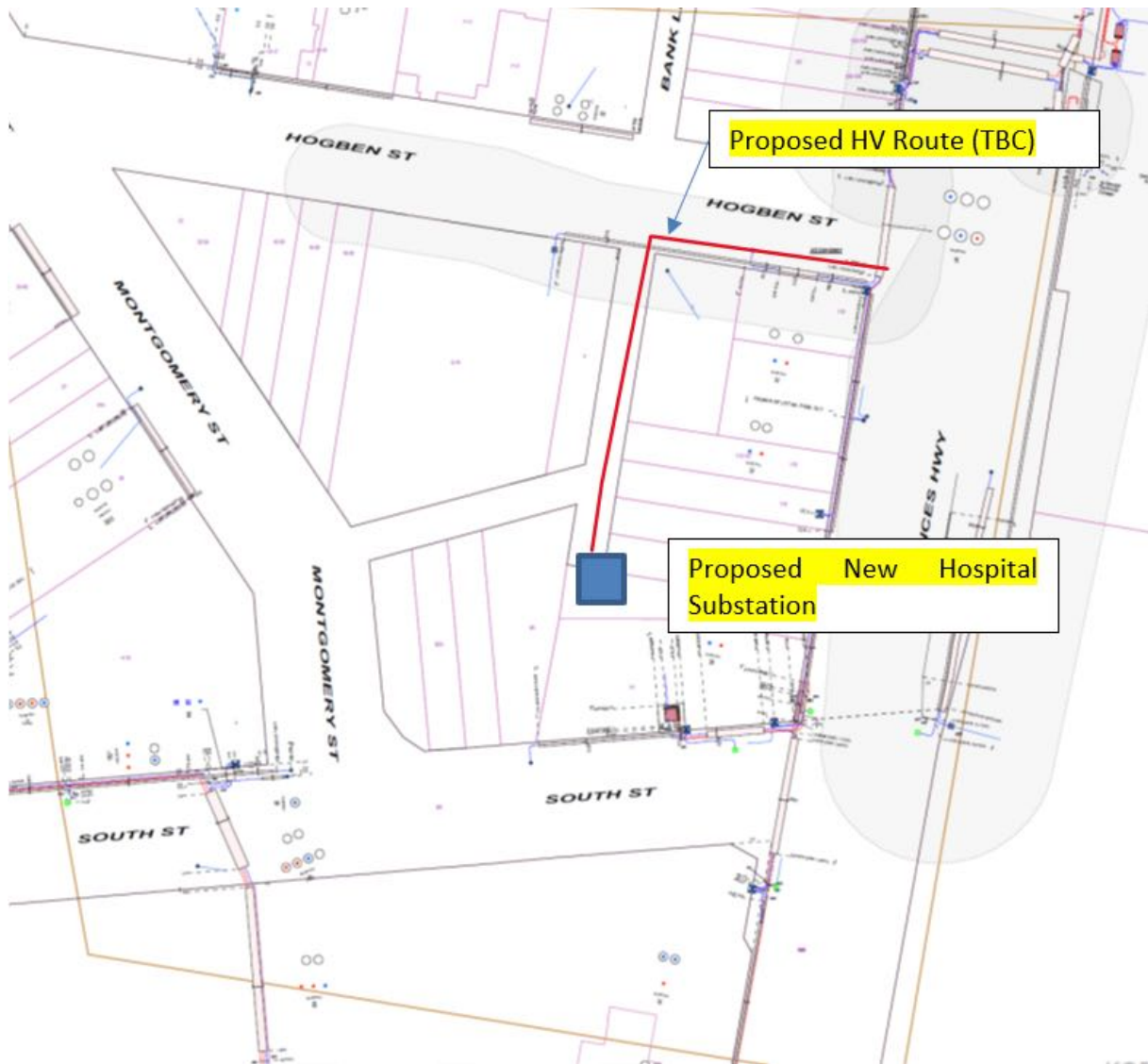


Figure 2.4 - Existing Underground Ausgrid Network and Indicative New Substation Location

### **Construction Period Services Continuity**

Minimal disruption is expected during the proposed new clinical tower construction period and Ausgrid, in association with the Level 3 and Level 1 Accredited Services Providers (ASPs) will enable switching to allowed for continued power availability to the existing hospital and surround.

## **2.5 MAIN SWITCHBOARD**

### **Proposed:**

The new clinical tower is required to be serviced via site Main Switchboard/s (MSBs).

Main switchboard/s minimal requirements:

- All general building loads, including lifts, house services, etc.
- All hospital loads including Wards, BOH areas, etc.
- Bulk metering of development, existing and new buildings
- MSB to be arranged into BCA essential, unmetered, hospital essential and hospital non-essential sections.
- Inclusion of Automatic Transfer Switching (ATS) system for diesel generation system. Diesel generator section/s to cater for all BCA essential systems supplies and essential hospital loads.
- A dedicated diesel generator switchboard for distribution of diesel generator loads.

Main switchboards (including main diesel generator switchboard) are to be housed in 2hr fire rated dedicated rooms to satisfy BCA and AS3000 requirements.

Interface to any solar array system will be implemented into the main switchboard and/or distribution system.

## **2.6 DIESEL GENERATION SYSTEM**

The generator system will supply standby power to NCC Life Safety equipment, selected hospital clinical, administration and circulation areas.

An additional generator will be required for the new extension. It would be proposed this generator would be in the order of 800-1000kVA for the new building. The new generator will meet all the NCC2022, AS/NZS3000, AS/NZS3009 and AS/NZS3010 requirements for the new building extension.

The new diesel generator will need to be housed in a dedicated 2hr fire rated room/s, or in an acoustic enclosure. Allow for all attenuation and ventilation requirements to satisfy the running requirements of the generator and acoustic performance requirements.

All generator systems will be of a Standby type and proposed not to synchronise with the Ausgrid network.

## **2.7 UNINTERRUPTABLE POWER SUPPLY (UPS) SYSTEM**

Additional central UPS systems will be proposed for the new clinical tower to service the clinical needs of the new extension.

## **2.8 CONSUMERS AND SUBMAINS**

Consumer mains, submains from standby generator, submains from generator switchboard, BCA essential supplies and hospital essential supplies are to be WS53 to AS3013, BCA and AS3000 requirements.

Non-essential submains are to be of the XLPE/PVC type.

Dedicated submains are required for all mechanical plant, medical gases plant, etc. Provide separate BCA Essential, hospital essential and non-essential supplies as required.

All major power supplies will be metered/monitored to minimum NCC Section J8 requirements, and to any potential green star assessment/ESD requirements.

## **2.9 GENERAL DISTRIBUTION REQUIREMENTS**

Electrical risers are requested to be in a straight line vertically up the building where possible to minimise offsets and bends to the rising cable system/s.

Electrical risers will need to back onto a 2hr fire rated structure.

### *Carparking Levels*

Essential and non-essential supplies to each carparking level. Carparking areas.

Dedicated supplies to carpark mechanical ventilation supplies (fire rated where required)

### *Ground Floor and Mezzanine*

Hospital Medical Essential (if applicable) and non-essential supplies to public areas and hospital back of house, administration areas and to general circulation.

Dedicated supplies to BCA essential systems – Upgrade existing to current compliance.

### *Hospital Levels*

Hospital Medical Essential and non-essential supplies to hospital back of house, administration areas and to general circulation.

Dedicated supplies to BCA essential systems – upgrade existing to current compliance.

Dedicated Hospital essential and non-essential supplies to mechanical services (as applicable)

*Plant and Lifts*

Dedicated BCA Essential, hospital essential and non-essential supplies to mechanical services switchboards to plant areas and stairs (final extent to be determined and advised by mechanical trades).

Dedicated BCA essential supplies to lifts and lift motor room.

## **2.10 COMMUNICATION SYSTEMS**

*General*

The new clinical tower will be serviced from the existing building ICT network and will not impact on any service provider systems from the street.

*Data and Telephony*

The new clinical tower will be interlinked to the exiting St George Private Hospital Building in South Street.

Propose to establish a new main communications room for the new building with distribution to all levels of the new building. Fibre Optic backbone extended from the existing PABX room to the new building.

Systems to meet the requirements of the ACMA Manuals and standards.

*MATV*

An MATV distribution system is to be extended to all new areas from the existing building system. MATV to distribute all Free-to-air (FTA) and Pay TV channels/requirements.

*Nurse Call*

Data backbone to support nurse call backbone system. Nurse call to each new hospital level via backbone system to allow for hospital inter-departmental interconnection.

*NBN*

One building is to be demolished (under separate approval) within the clinical tower site and the land area incorporated into the overall development. As such, several existing NBN services will need to be removed. It is not anticipated that the removal of these NBN services will affect the existing services already in place to the surrounding properties. Please refer to Figure 1.10.1.

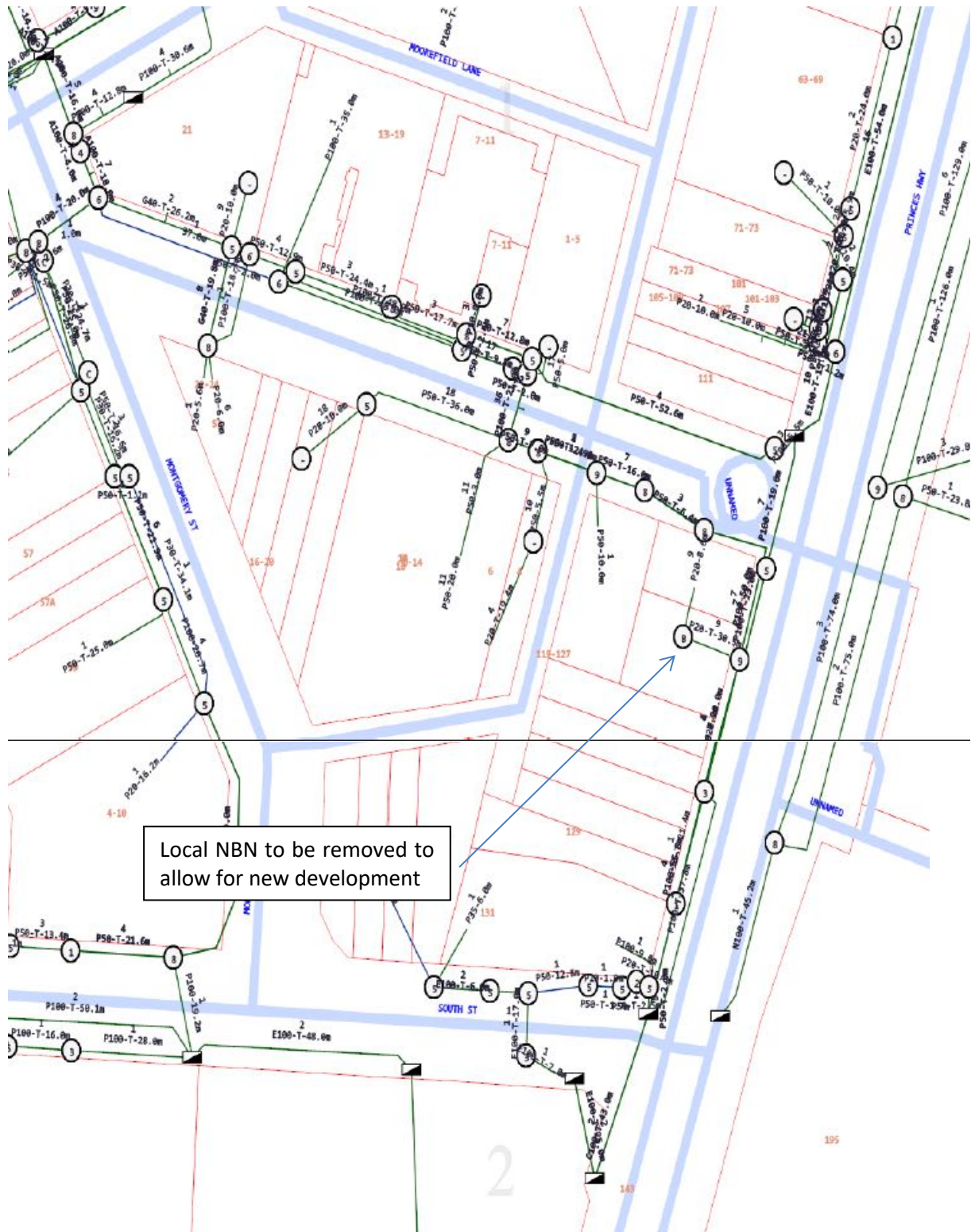


Figure 2.10.1 – NBN

### Optus and UECOM

Existing Optus and UECOM services are present around the site but will not be impacted by the works. Please refer to Figure 2.10.2.



Figure 2.10.2 –UECOM services.

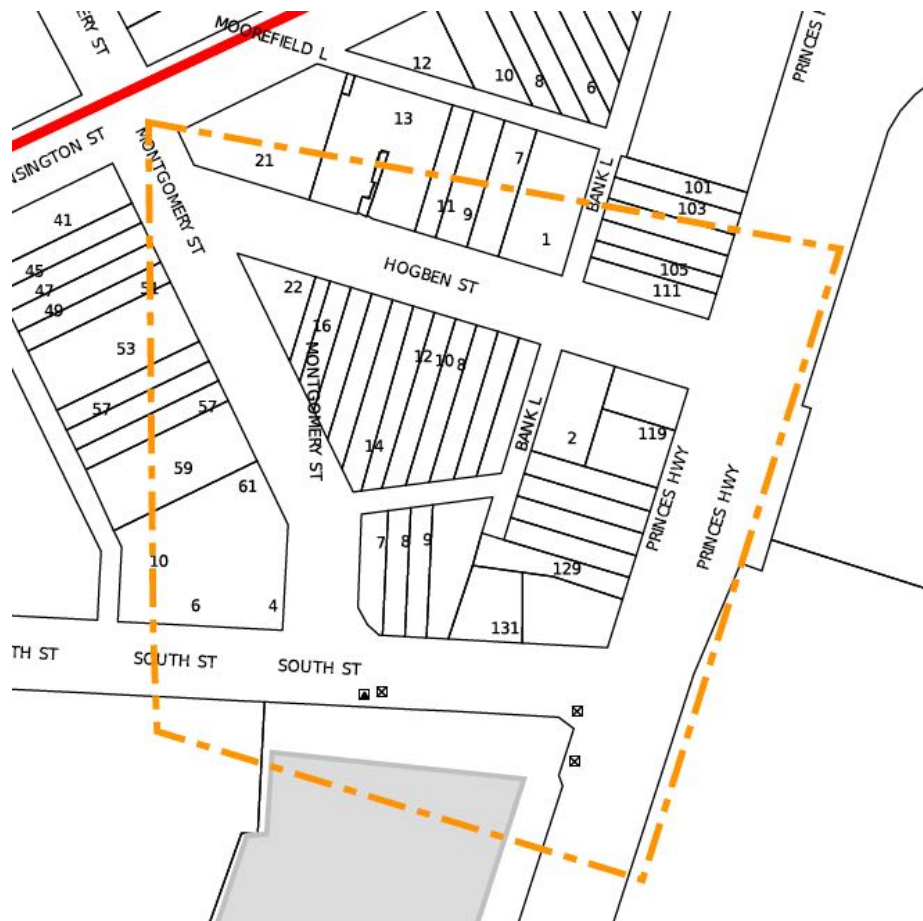


Figure 2.10.3 –Optus Fibre services.



Figure 2.10.4 – Optus services.

### **Construction Period Services Continuity**

It is anticipated that no interruption is expected during the proposed new clinical tower construction period to the existing hospital and surrounds as the new extension will utilise and extend the existing hospital network system already on site.

It should be noted that there are existing communications utilities services around the proposed clinical tower site and care is required during any Electrical Systems upgrade works, to avoid these services.

## **2.11 ACCESS CONTROL / MONITORING / CCTV SYSTEM**

Access control to all new external entries and lift services is anticipated for the new building.

Access control provisions to carparking levels, including access control to a potential dedicated staff carparking area.

CCTV to all entries and carparking levels.

All external doors to be monitored under the access control system.

All systems are to be expandable to allow for dedicated hospital and future medical tenancy suite requirements.

All systems expanded from the existing building systems.

### 3. HYDRAULIC SERVICES

#### 3.1 GENERAL

All services are to be installed to meet (but not limited to) the requirements of:

- National Construction Code (NCC) – 2022 Volume 1, 2 & 3
- Work Cover Authority
- Georges River Council regulations having jurisdiction on this project
- NSW Fire and Rescue
- Sydney Water Corporation
- Jemena network operator rules
- AS 2419.1 Fire hydrant installations
- AS 2441 Installation of fire hose reels
- AS 3500.0 Glossary of terms
- AS 3500.1 Water services
- AS 3500.2 Sanitary plumbing & drainage
- AS 3500.4 Heated water services
- AS 5601 Gas installations
- NSW Environmental Planning and Regulation 2000

#### 3.2 EXISTING INFRASTRUCTURE

##### Sydney Water Corporation

Sydney Water Corporation currently has the following mains available to serve the proposed Inpatient and Support Services Building

##### **Water Supply**

- 100mm CICL water main located within Princes Highway
- 500mm CICL water main located within Princes Highway
- 150mm uPVC water main located within Hogben Lane.

##### **Sewerage**

- 225mm VC sewer main located within Princes Highway
- 225mm VC sewer main located within Hogben Street

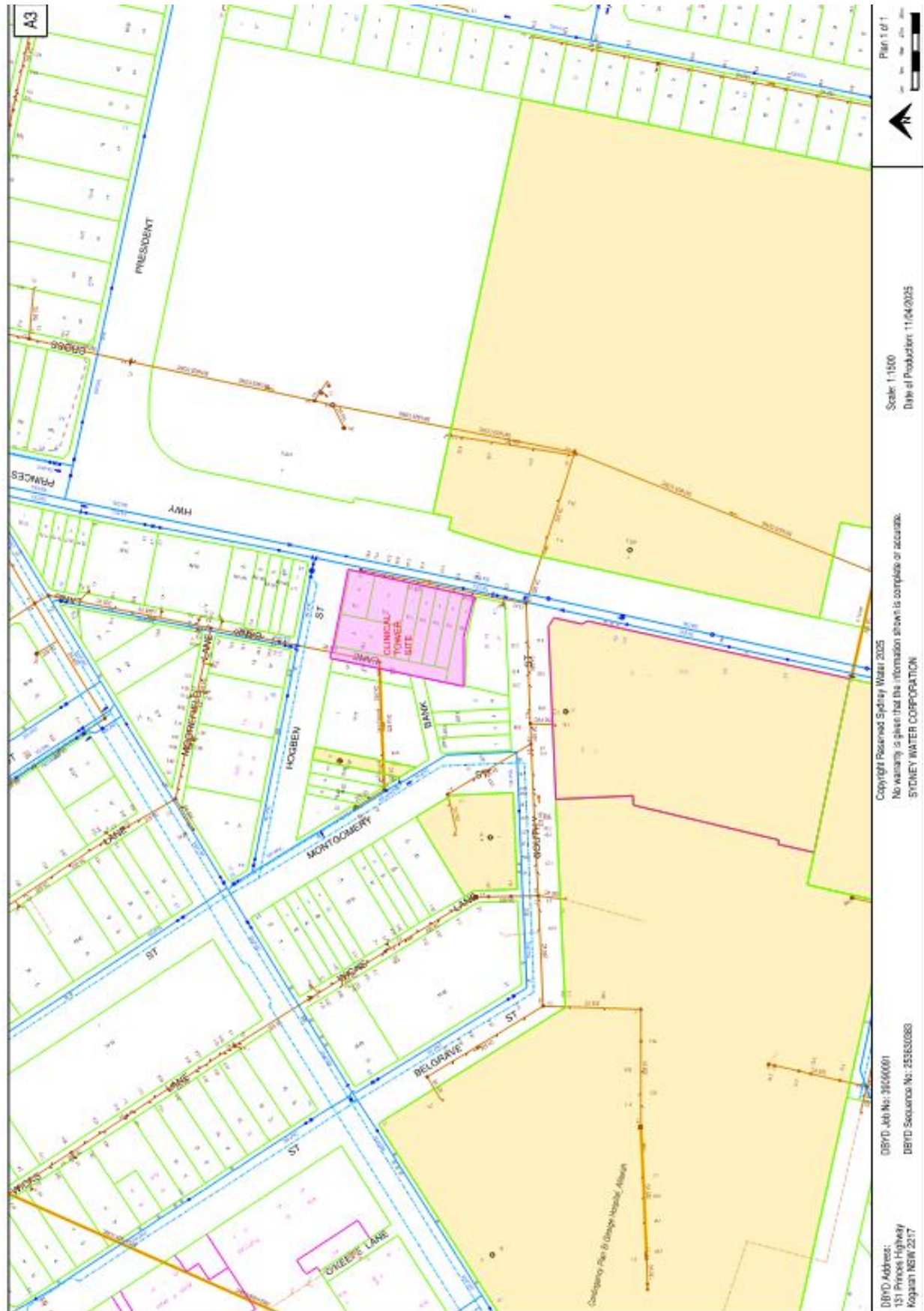


Figure 3.2(A) Sydney water DBYD Plan

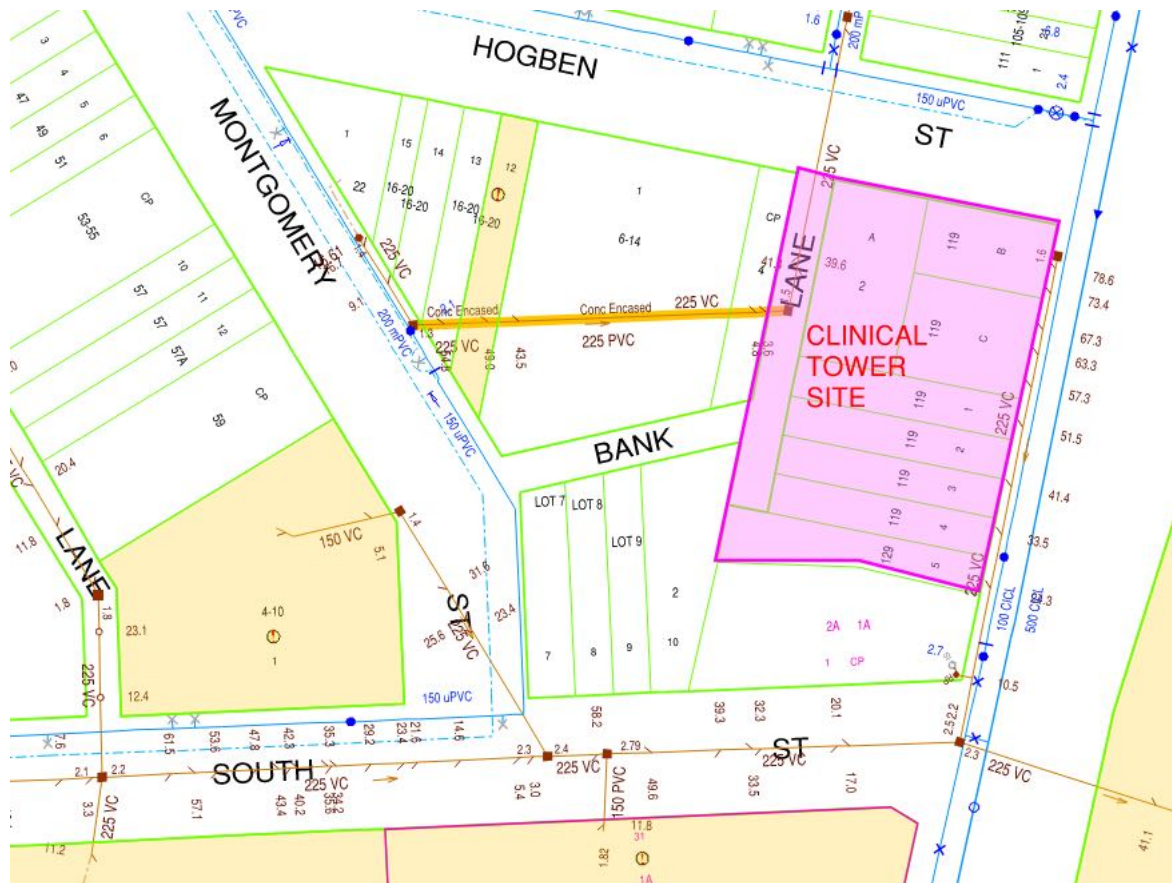


Figure 3.2(B) Detailed View Sydney water DBYD Plan

**Statement of Available Pressure and Flow**

**Dakota Masters**  
**277 Clarence Street**  
**Sydney, 2000**

**Attention: Dakota Masters**

**Date: 24/04/2025**

**Pressure & Flow Application Number: 2116046**

**Your Pressure Inquiry Dated: 2025-04-14**

**Property Address: 119 Princes Highway, Kogarah 2217**

The expected maximum and minimum pressures available in the water main given below relate to modelled existing demand conditions, either with or without extra flows for emergency fire fighting, and are not to be construed as availability for normal domestic supply for any proposed development.

**ASSUMED CONNECTION DETAILS**

|                                                |                                   |
|------------------------------------------------|-----------------------------------|
| Street Name: Princes Highway                   | Side of Street: West              |
| Distance & Direction from Nearest Cross Street | 38 metres North from South Street |
| Approximate Ground Level (AHD):                | 20 metres                         |
| Nominal Size of Water Main (DN):               | 100mm (As per diagram provided)   |

**EXPECTED WATER MAIN PRESSURES AT CONNECTION POINT**

|                          |               |
|--------------------------|---------------|
| Normal Supply Conditions |               |
| Maximum Pressure         | 55 metre head |
| Minimum Pressure         | 19 metre head |

| WITH PROPERTY FIRE PREVENTION SYSTEM DEMANDS                                                                                           | Flow l/s | Pressure head m |
|----------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|
| Fire Hose Reel Installations<br>(Two hose reels simultaneously)                                                                        | 0.66     | 19              |
| Fire Hydrant / Sprinkler Installations<br>(Pressure expected to be maintained for 95% of the time)                                     | 10       | 19              |
|                                                                                                                                        | 15       | 18              |
|                                                                                                                                        | 20       | 16              |
|                                                                                                                                        | 25       | 15              |
| Fire Installations based on peak demand<br>(Pressure expected to be maintained with flows combined with peak demand in the water main) | 10       | 18              |
|                                                                                                                                        | 15       | 17              |
|                                                                                                                                        | 20       | 15              |
|                                                                                                                                        | 25       | 13              |
| Maximum Permissible Flow                                                                                                               | 26       | 13              |

(Please refer to reverse side for Notes)

**For any further inquiries regarding this application please email :**

[hydraulicassessment@sydneywater.com.au](mailto:hydraulicassessment@sydneywater.com.au)

*Figure 3.2.1 Sydney Water Statement of Available Water Supply Flow and Pressure (100mm Watermain within Princes Highway)*

## Statement of Available Pressure and Flow



**Dakota Masters**  
**277 Clarence Street**  
**Sydney, 2000**

**Attention: Dakota Masters**

**Date: 22/04/2025**

**Pressure & Flow Application Number: 2116050**  
**Your Pressure Inquiry Dated: 2025-04-14**  
**Property Address: 119 Princes Highway Kogarah 2217**

The expected maximum and minimum pressures available in the water main given below relate to modelled existing demand conditions, either with or without extra flows for emergency fire fighting, and are not to be construed as availability for normal domestic supply for any proposed development.

### ASSUMED CONNECTION DETAILS

|                                                |                                                |
|------------------------------------------------|------------------------------------------------|
| Street Name: Princes Highway                   | Side of Street: West                           |
| Distance & Direction from Nearest Cross Street | 43 metres North from South Street              |
| Approximate Ground Level (AHD):                | 20 metres                                      |
| Nominal Size of Water Main (DN):               | 500 mm (Please refer to General Note Number 4) |

### EXPECTED WATER MAIN PRESSURES AT CONNECTION POINT

| Normal Supply Conditions                                                                                                               |               |                 |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------|
| Maximum Pressure                                                                                                                       | 55 metre head |                 |
| Minimum Pressure                                                                                                                       | 19 metre head |                 |
| WITH PROPERTY FIRE PREVENTION SYSTEM DEMANDS                                                                                           | Flow l/s      | Pressure head m |
| Fire Hose Reel Installations<br>(Two hose reels simultaneously)                                                                        | 0.66          | 19              |
| Fire Hydrant / Sprinkler Installations<br>(Pressure expected to be maintained for 95% of the time)                                     | 10            | 19              |
|                                                                                                                                        | 20            | 19              |
|                                                                                                                                        | 30            | 19              |
|                                                                                                                                        | 40            | 19              |
|                                                                                                                                        | 50            | 19              |
|                                                                                                                                        | 60            | 19              |
|                                                                                                                                        | 70            | 19              |
|                                                                                                                                        | 80            | 18              |
| Fire Installations based on peak demand<br>(Pressure expected to be maintained with flows combined with peak demand in the water main) | 10            | 19              |
|                                                                                                                                        | 20            | 18              |
|                                                                                                                                        | 30            | 18              |
|                                                                                                                                        | 40            | 18              |
|                                                                                                                                        | 50            | 18              |
|                                                                                                                                        | 60            | 18              |
|                                                                                                                                        | 70            | 17              |
|                                                                                                                                        | 80            | 17              |
| Maximum Permissible Flow                                                                                                               | 120           | 16              |

(Please refer to reverse side for Notes)

**For any further inquiries regarding this application please email :**

[hydraulicassessment@sydneywater.com.au](mailto:hydraulicassessment@sydneywater.com.au)

Figure 3.2.2 Sydney Water Statement of Available Water Supply Flow and Pressure (500mm Watermain within Princes Highway)

## Statement of Available Pressure and Flow



**Dakota Masters**  
**277 Clarence Street**  
**Sydney, 2000**

**Attention: Dakota Masters**

**Date: 24/04/2025**

**Pressure & Flow Application Number: 2116053**  
**Your Pressure Inquiry Dated: 2025-04-14**  
**Property Address: 2 Hogben Street, Kogarah 2217**

The expected maximum and minimum pressures available in the water main given below relate to modelled existing demand conditions, either with or without extra flows for emergency fire fighting, and are not to be construed as availability for normal domestic supply for any proposed development.

### ASSUMED CONNECTION DETAILS

|                                                |                               |
|------------------------------------------------|-------------------------------|
| Street Name: Hogben Street                     | Side of Street: North         |
| Distance & Direction from Nearest Cross Street | 20 metres East from Bank Lane |
| Approximate Ground Level (AHD):                | 21 metres                     |
| Nominal Size of Water Main (DN):               | 150 mm                        |

### EXPECTED WATER MAIN PRESSURES AT CONNECTION POINT

|                          |               |
|--------------------------|---------------|
| Normal Supply Conditions |               |
| Maximum Pressure         | 95 metre head |
| Minimum Pressure         | 42 metre head |

| WITH PROPERTY FIRE PREVENTION SYSTEM DEMANDS                                                                                           | Flow l/s | Pressure head m |
|----------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|
| Fire Hose Reel Installations<br>(Two hose reels simultaneously)                                                                        | 0.66     | 42              |
| Fire Hydrant / Sprinkler Installations<br>(Pressure expected to be maintained for 95% of the time)                                     | 10       | 44              |
|                                                                                                                                        | 15       | 43              |
|                                                                                                                                        | 20       | 43              |
|                                                                                                                                        | 25       | 42              |
|                                                                                                                                        | 30       | 41              |
|                                                                                                                                        | 40       | 40              |
|                                                                                                                                        | 50       | 37              |
|                                                                                                                                        | 60       | 35              |
| Fire Installations based on peak demand<br>(Pressure expected to be maintained with flows combined with peak demand in the water main) | 66       | 33              |
|                                                                                                                                        | 10       | 41              |
|                                                                                                                                        | 15       | 41              |
|                                                                                                                                        | 20       | 40              |
|                                                                                                                                        | 25       | 39              |
|                                                                                                                                        | 30       | 38              |
|                                                                                                                                        | 40       | 36              |
|                                                                                                                                        | 50       | 34              |
| Maximum Permissible Flow                                                                                                               | 60       | 32              |
|                                                                                                                                        | 66       | 29              |

(Please refer to reverse side for Notes)

**For any further inquiries regarding this application please email :**

*Figure 3.2.2 Sydney Water Statement of Available Water Supply Flow and Pressure (150mm Watermain within Hogben Street)*

### Jemena

Jemena has not provided any gas infrastructure diagrams as part of the dial before you dig application process.

It is not proposed to connect the proposed construct natural gas appliances for the proposed new Inpatient Unit and Support Services Building

## 3.3 AUTHORITY SUPPLIES AND CONNECTIONS

### Sydney Water Corporation

#### Section 73 Application Process

The proposed development will require a Section 73 application to be submitted to Sydney Water upon development approval.

After Sydney Water Section 73 application review, Sydney Water will issue a Section 73 Notice of Requirements (NOR).

The NOR will specify: -

1. Whether Sydney Water sewer and water assets need to be protected,
2. If Sydney Water sewer and water assets they are suitable for the proposed development or,
3. If minor or major works are required to enable new water and sewer connections for the proposed development, and
4. Locations of sewer and water supply connections

Upon completion of all the Section 73 requirements, a Section 73 certificate is issued to allow building occupation.

#### **Potable Cold Water Service**

Based on Sydney Water water metering guidelines Sydney Water nominate to have only one main water meter assembly, for this type of development.

A review of the available Sydney Water water supply and proposed building potable water supply demand, as per AS3500 design procedures, has determined adequate and compliant flow capacity is available to service the proposed building from the 150mm Upvc watermain in Hogben Street.

If Sydney Water determine, through the Section 73 application process, that adequate capacity is not available from existing infrastructure, upgrade options include: -

1. Incorporation of on-site water storage tanks to accommodate any short falls in peak flow.

#### **Fire Protection Systems**

Water based fire protection systems for the proposed Inpatient Unit and Support Services Building include:-

1. Automatic Fire Sprinkler Suppression System.
2. Fire hydrant Protection System
3. Fire Hose Reel Protection Systems

Based on Fire and Rescue policy, each development site shall only have one point for pressure boosting in a fire emergency.

A review of the available Sydney Water water supply and proposed building firefighting supply demands, as per AS2118 and AS2419 design procedures, has determined adequate and compliant flow capacity is available to service the proposed building from the 150mm Upvc watermain in Hogben Street, with the incorporation of onsite site fire water storage tanks and booster pumps.

#### **Sanitary Drainage Service**

Sanitary plumbing and drainage systems for the new building works will comply with NCC 2022, AS3500.2 (2021) and Sydney Water Notice of Requirements, when made available.

#### **Jemena**

Natural Gas Service is not proposed to be utilized for the proposed new building.

### **3.4 EXISTING HOSPITAL HYDRAULIC SERVICES**

#### **Sanitary Drainage**

The existing hospitals sanitary drainage service connections to Sydney Water sewer main would likely remain unchanged, with only reconfiguration of existing internal house sewer to suit new proposed operational requirements.

**Drinking Cold Water, Fire Hydrant and Natural Gas**

The existing hospitals hydraulic services would need to be maintained throughout the construction phase to ensure minimal disruptions hospital medical care normal operations.

Proposed hydraulic services design would not incorporate any required upgrades for infrastructure connections and or meters and regulators.

**Domestic Hot Water Service**

The existing hospitals hot water plant would need to be reviewed for both spare capacity, ability to be expanded and available plant space.

Based on the proposed emergency department works incorporating the existing hot water plant has sufficient spare capacity to meet the minor increase in potable hot water hydraulic demand.

**3.5 ESD PROVISIONS/CONSIDERATIONS**

Hydraulic ESD considerations for the proposed Inpatient Unit and Support Services building include the following:

- Efficient hot water plant with flow and return system and suitable insulation to meet NCC/PCA requirements.
- Sub metering and monitoring for hot water plant and equipment
- Sub metering and monitoring for tenancies, and high water and energy use departmental areas.
- Water efficient fixtures and appliances.

Additional ESD provisions are not being considered existing hospital reconfiguration works.

Where provided, water meters will be located in an area that allows remote monitoring and safe maintenance by facilities managers and other facilities management personnel.

**Monitoring System**

Potable Water consumption shall be monitored through an electronic system capable of capturing and processing the data produced by the sub meters to meet ESD requirements.

Hydraulic plant and equipment shall also be monitored for faults or failures. The automatic monitoring system must be capable of:

- Collecting data from all meters
- Alert to any faults or failures of hydraulic plant and equipment

## 4. APPENDIX A – SERVICES CORRESPONDENCE

**Ausgrid**

## Preliminary Enquiry – Response Letter



20/10/25

Webform ref: 2064789

THE TRUSTEE FOR L & J GOWER FAMILY TRUST - T/AS ELECTRICAL DESIGN CONSULTING

Attention: LEON GOWER

Via email: leon.gower@edconsulting.com.au

Premises address: **119 PRINCES HIGHWAY, KOGARAH**

Ausgrid AE Reference: **700010512**

Dear Leon,

I refer to your preliminary enquiry regarding the electricity connection at the above address and provide the following information.

- ☐ The Ausgrid network does have the capacity to connect the proposed 1.88MVAamp 3 phase low voltage electricity connection. An extension/augmentation of the Ausgrid network is required. Following is the likely work(s) required to provide the request capacity.
  - Extension of the 11kV underground network
  - Installation of two standard surface chamber substations (max. rating 2800Amps)
- ☐ An extension/augmentation of the Ausgrid network is Contestable and requires the customer to engage accredited service providers to undertake the design and construction of the required works. Information on how to connect to the Ausgrid network can be found on our website at the following link: <https://www.ausgrid.com.au/Connections>
- ☐ Ausgrid is unable to provide costs or timeframes for Contestable works. However, accredited service providers may be able to provide the information.
- ☐ The electrical connection will require Ausgrid to provide auxiliary services that only Ausgrid can provide. The auxiliary services and the associated fee are detailed in the Ausgrid document **Alternative control services fee schedule**. The document is available on our website at the following link: <https://www.ausgrid.com.au/Connections/charges>
- ☐ To proceed further in obtaining a new or altered electrical connection to the property a Connection Application will need to be submitted. The various application forms are available on our website at the following link: <https://www.ausgrid.com.au/Connections>

**It should be noted that the above advise is based on Ausgrid's policies and network status as of today and are subject to change.**

Connections to the Ausgrid network are governed by a set of laws and rules referred to as the National Energy Customer Framework (NECF). Included in the NECF is the National Electricity Rules (NER). Under these rules, a binding contract may only be formed after a connection application is lodged and Ausgrid has made a connection offer in response to that application. Accordingly, to make arrangements for the electricity connection of the development to the Ausgrid network you should lodge a completed connection application.

Should you require any further information please contact me.

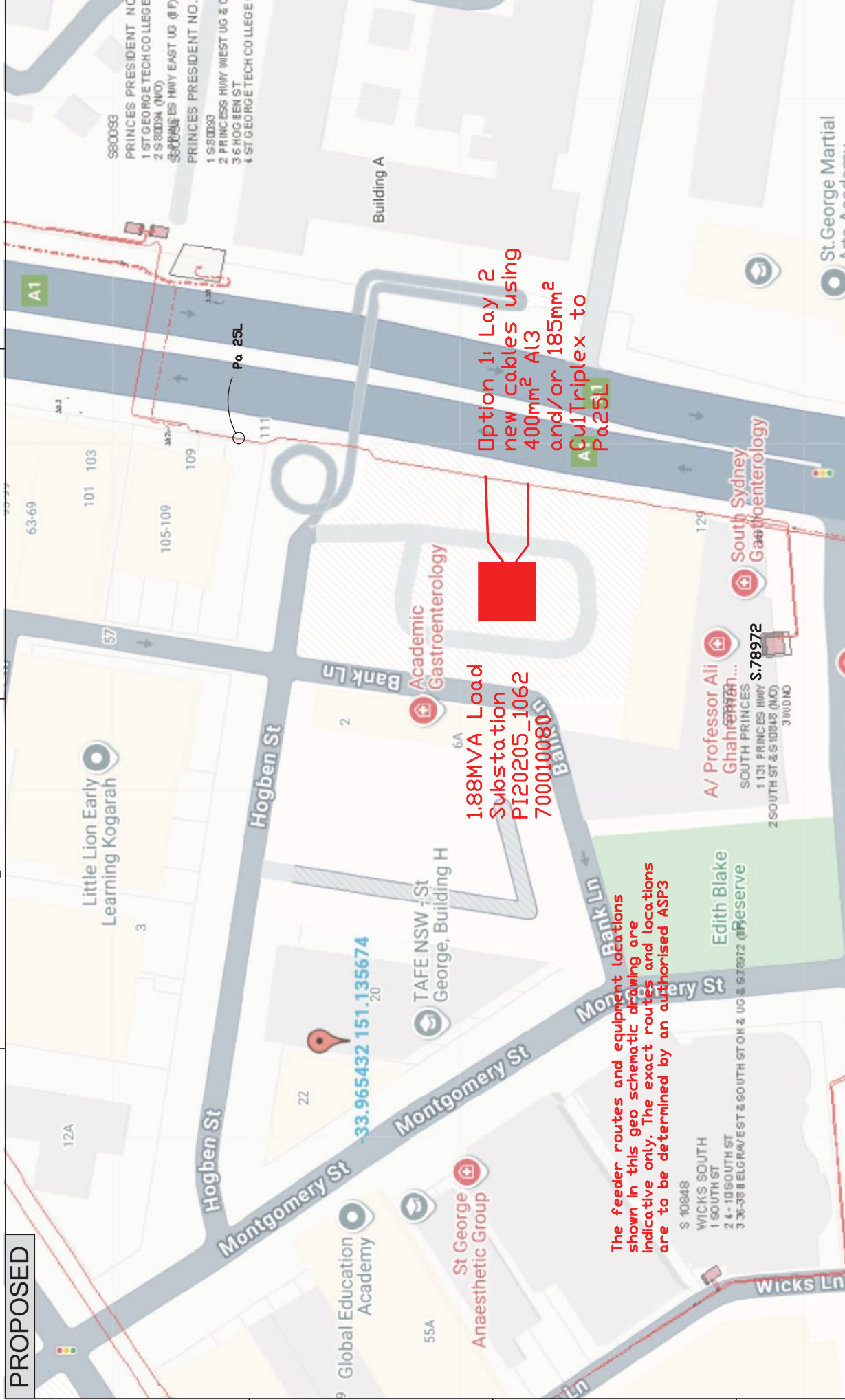
Yours sincerely,

**Jonathan Simpson**

**Ausgrid**

Direct Telephone Number: 0295855740

Email: [jsimpson@ausgrid.com.au](mailto:jsimpson@ausgrid.com.au)



1.88MVA Load  
Substation  
PI20205\_1062  
700010080

Option 1: Lay 2 new cables using 400mm<sup>2</sup> Al3 and/or 185mm<sup>2</sup> Cu1Triplex to Pa251

-33.965432 151.135674



Allsard

700010080 - 119 PRINCES HIGHWAY, KOGARAH 11KV  
FEASIBILITY STUDY - KOGARAH ZONE

## KOGARAH ZONE

|            |  |
|------------|--|
| SAP NUMBER |  |
|------------|--|

PROJTRAK No.

13/10/2025

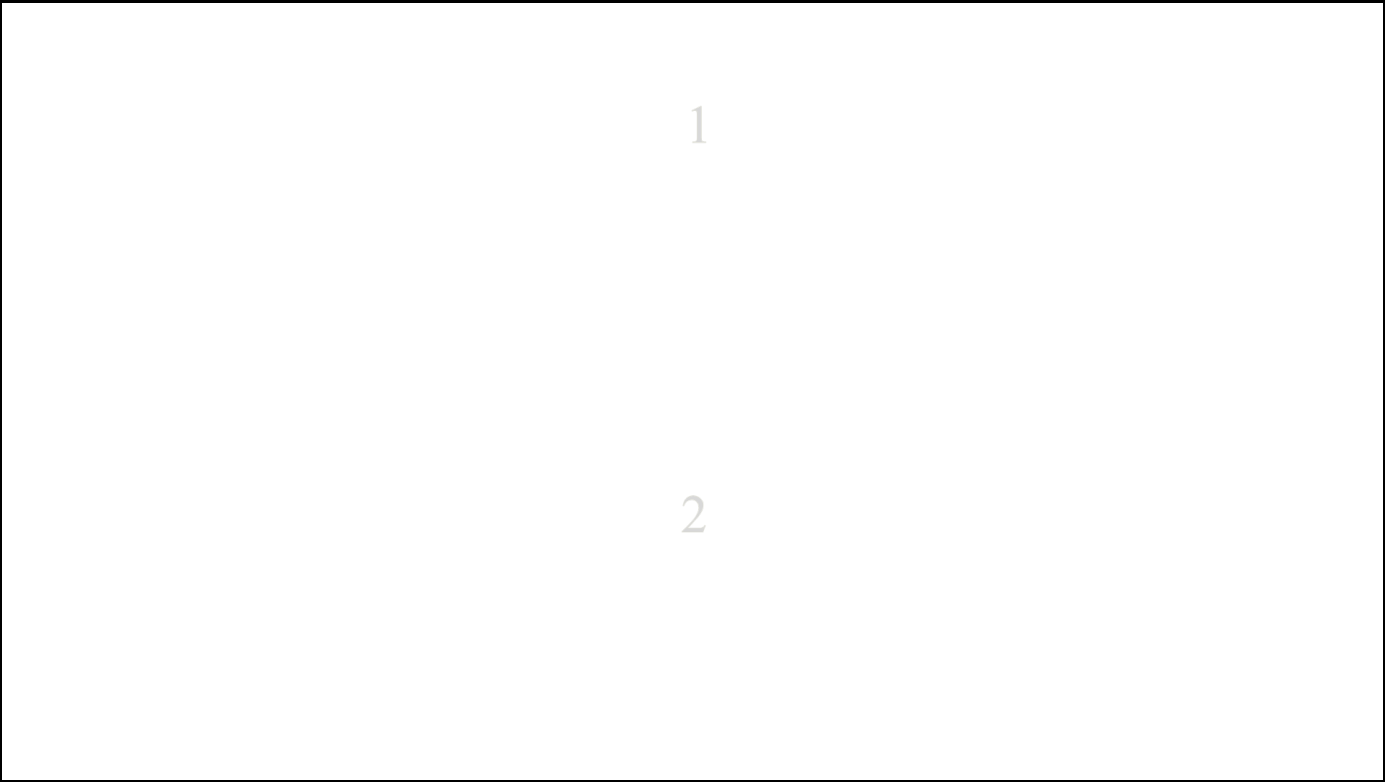
Sheet 1 of 1 Sheets

## 5. APPENDIX B – DIAL BEFORE YOU DIG INFORMATION

**To:** Leon Gower  
**Phone:** Not Supplied  
**Fax:** Not Supplied  
**Email:** leon.gower@edconsulting.com.au

|                                   |                                       |                                                                                     |
|-----------------------------------|---------------------------------------|-------------------------------------------------------------------------------------|
| <b>Dial before you dig Job #:</b> | 50914085                              |  |
| <b>Sequence #</b>                 | 259536183                             |                                                                                     |
| <b>Issue Date:</b>                | 14/08/2025                            |                                                                                     |
| <b>Location:</b>                  | 2 South Street , Kogarah , NSW , 2217 |                                                                                     |

Indicative Plans are tiled below to demonstrate how to layout and read nbn asset plans

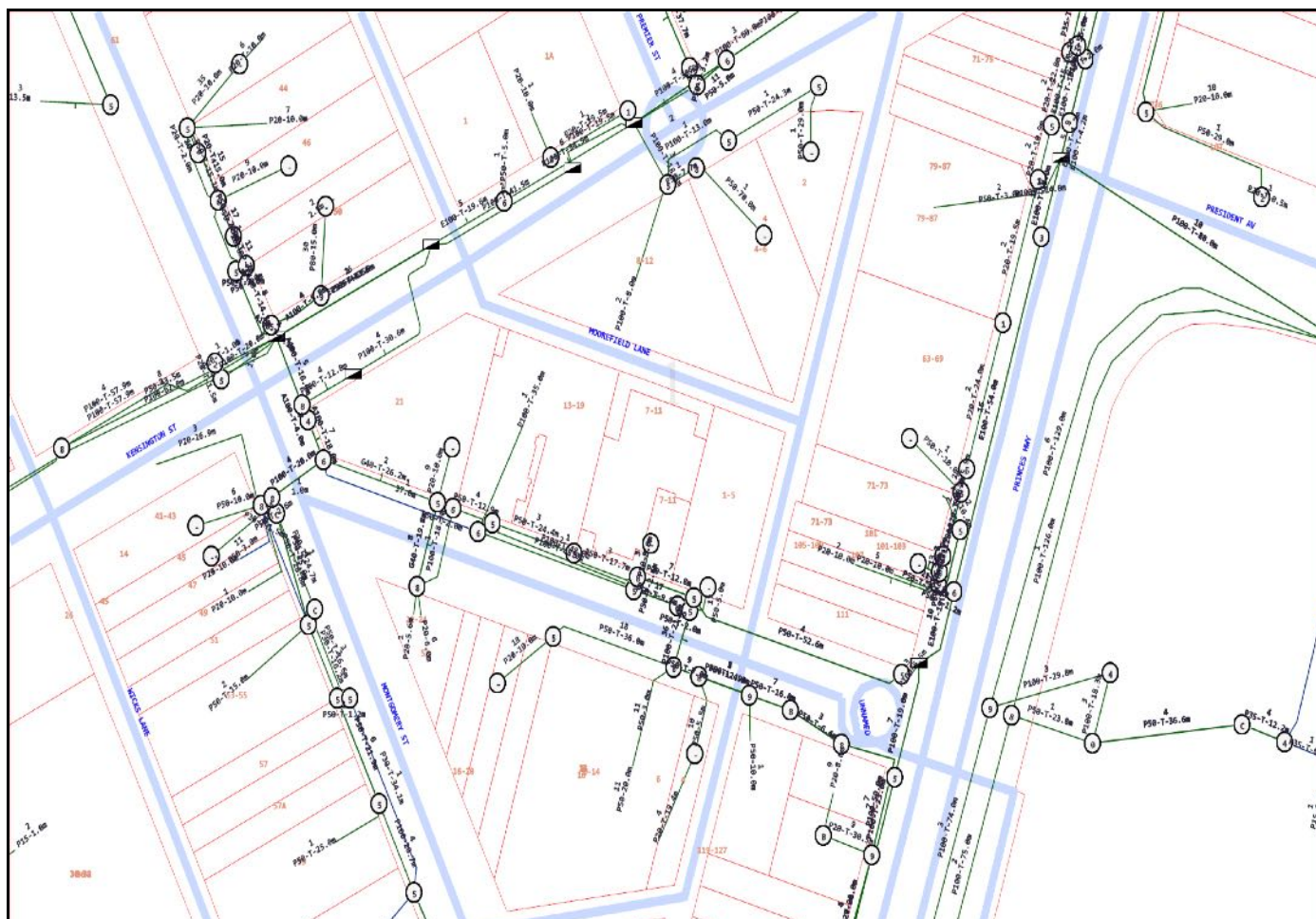


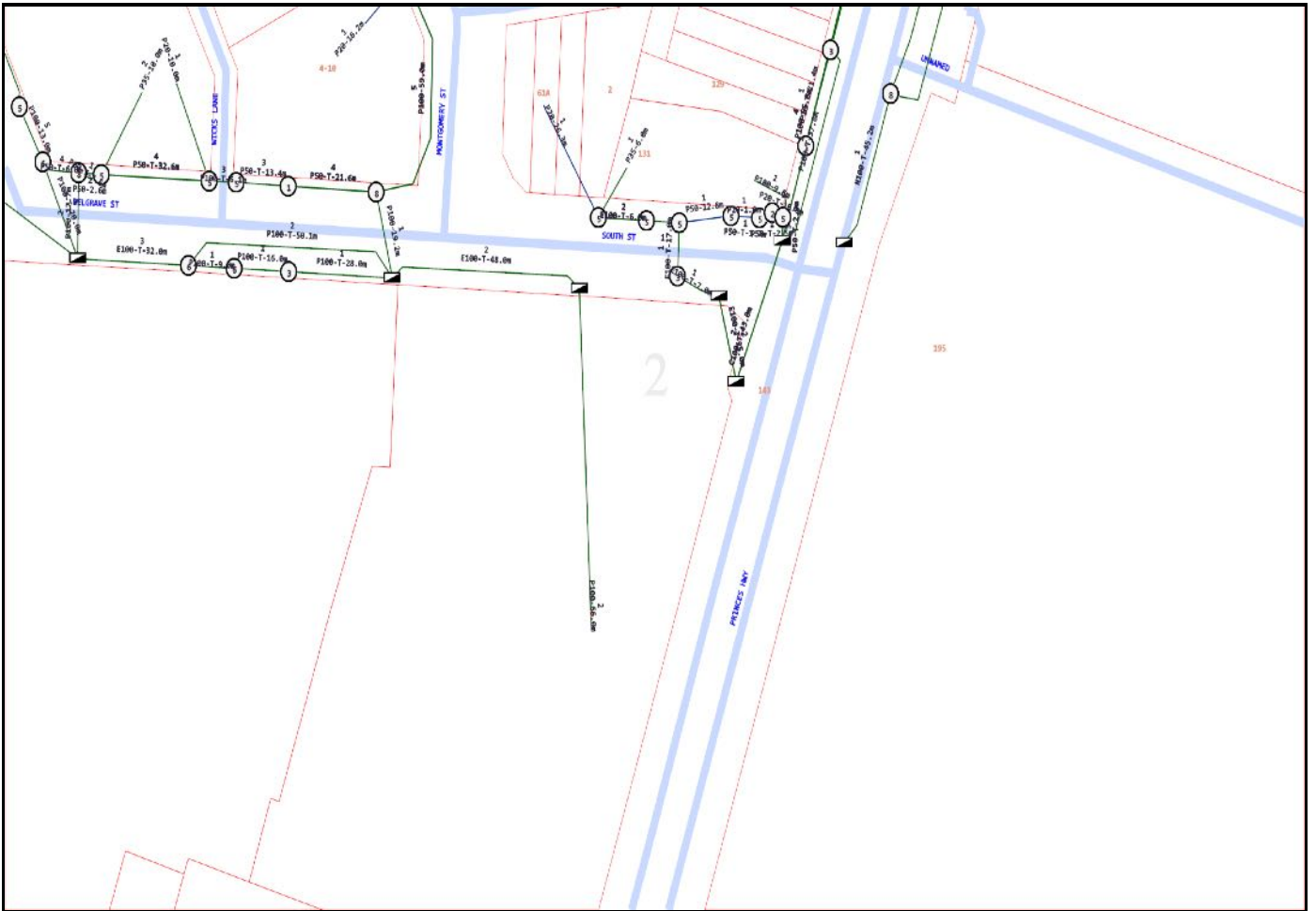


## LEGEND



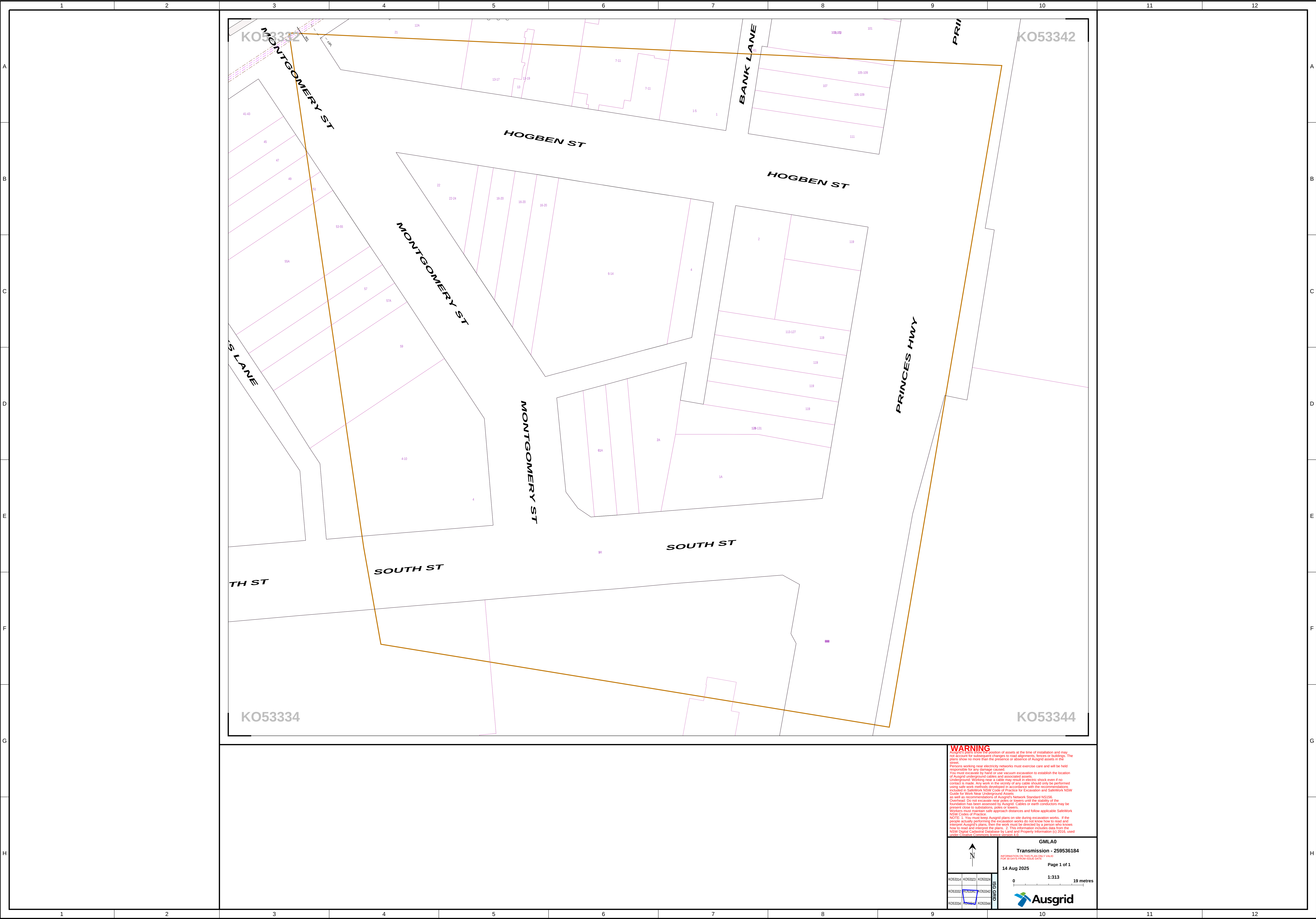
|       |                                                                                                                                                                                                                                              |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Parcel and the location                                                                                                                                                                                                                      |
|       | Pit with size "5"                                                                                                                                                                                                                            |
|       | Power Pit with size "2E".<br>Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.                                                                                                                                                               |
|       | Manhole                                                                                                                                                                                                                                      |
|       | Pillar                                                                                                                                                                                                                                       |
|       | Cable count of trench is 2.<br>One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart.<br>One 40mm PVC conduit (P40) owned by NBN, between pits of sizes, "5" and "9" are 20.0m apart. |
|       | 2 Direct buried cables between pits of sizes, "5" and "9" are 10.0m apart.                                                                                                                                                                   |
|       | Trench containing any <b>INSERVICE/CONSTRUCTED</b> (Copper/RF/Fibre) cables.                                                                                                                                                                 |
|       | Trench containing only <b>DESIGNED/PLANNED</b> (Copper/RF/Fibre/Power) cables.                                                                                                                                                               |
|       | Trench containing any <b>INSERVICE/CONSTRUCTED</b> (Power) cables.                                                                                                                                                                           |
|       | Road and the street name "Broadway ST"                                                                                                                                                                                                       |
| Scale | 0 20 40 60 Meters<br>1:2000<br><br>1 cm equals 20 m                                                                                                                                                                                          |



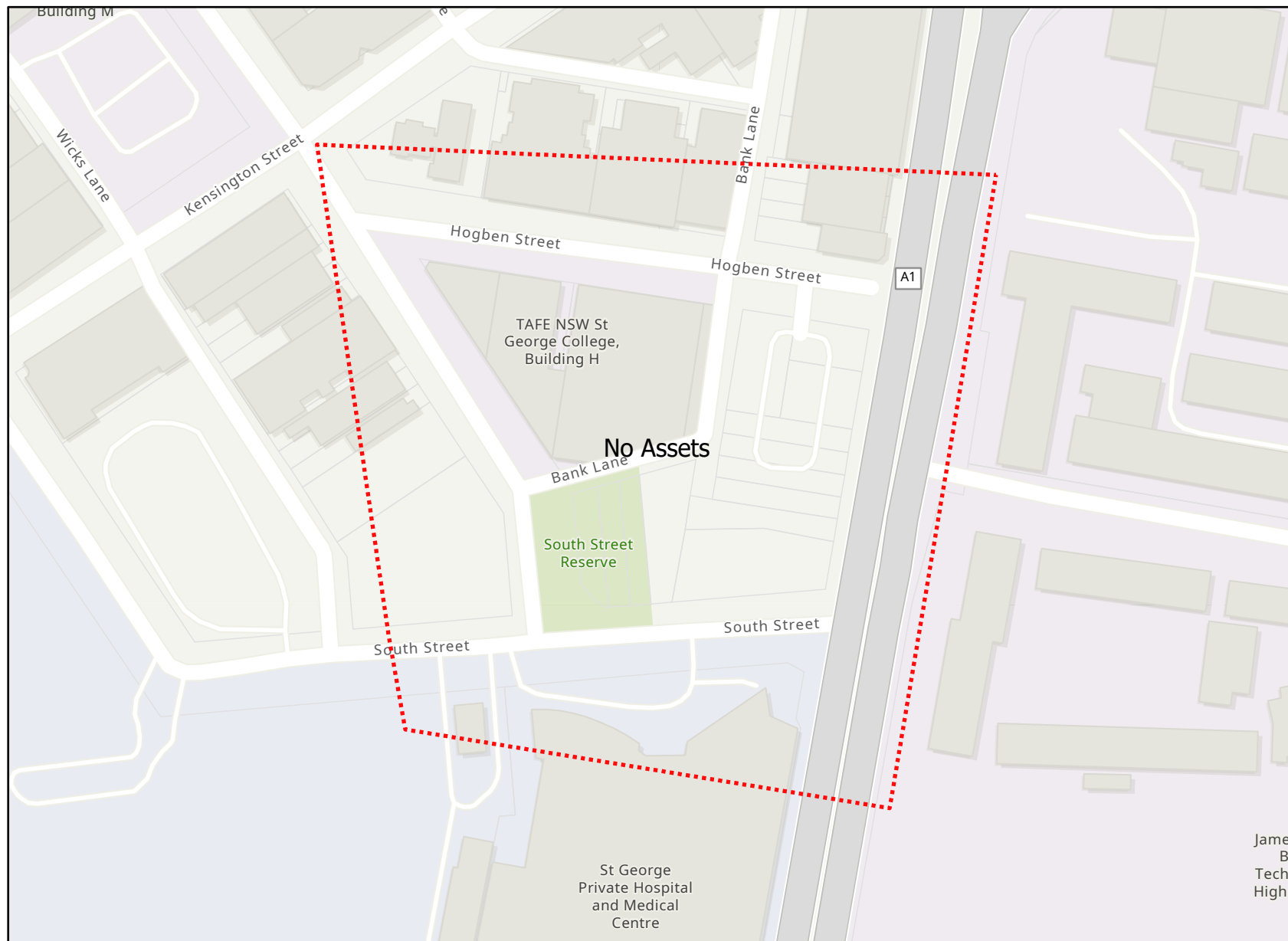


## Emergency Contacts

You must immediately report any damage to the **nbn™** network that you are/become aware of. Notification may be by telephone - 1800 626 329.

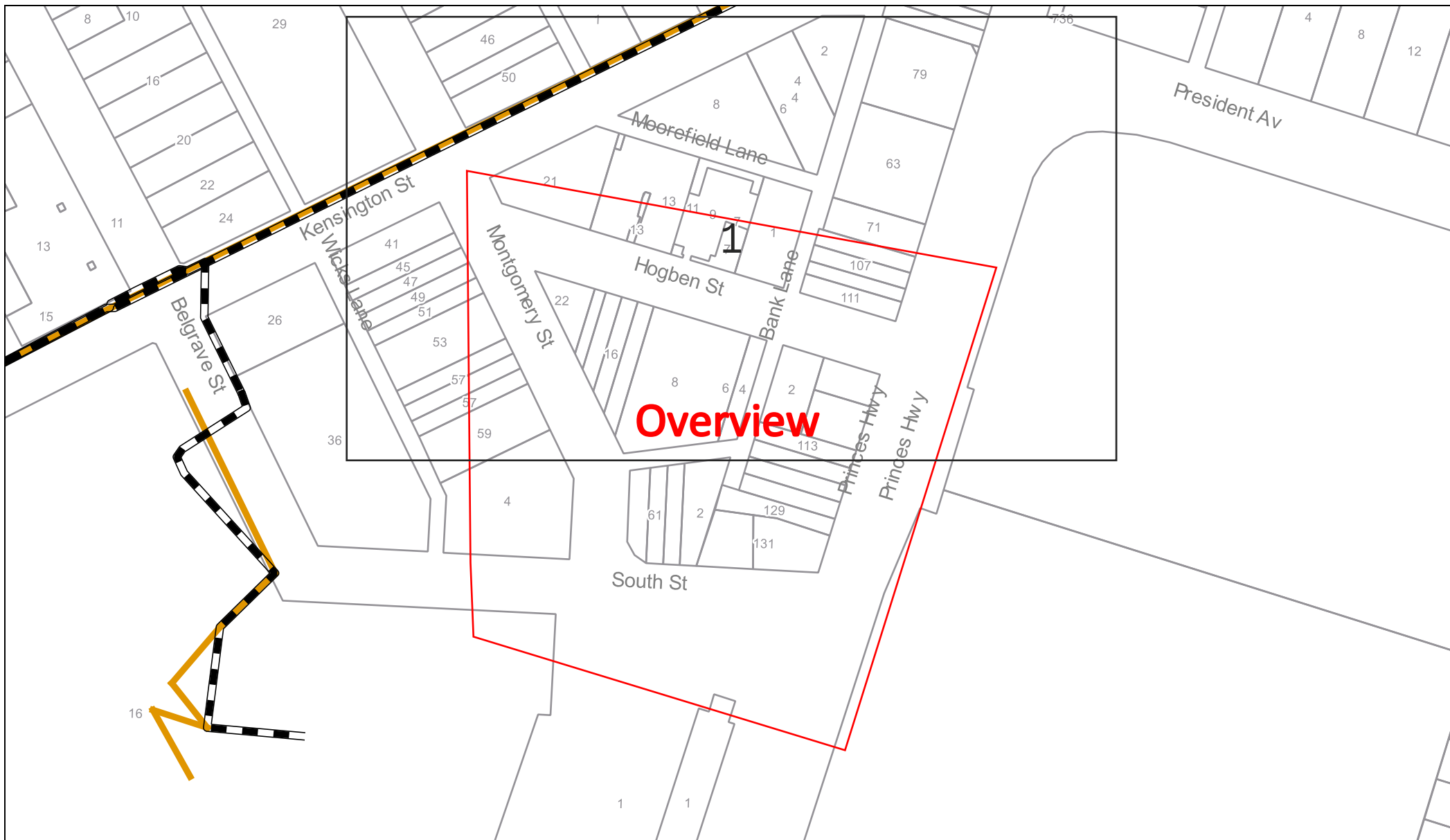


[illegible]



**Legend**  
 BYDA Enquiry

Disclaimer: The plan is provided in response to a Before You Dig request. While all reasonable care has been taken to ensure the accuracy of the information on this plan, its purpose is to provide a general indication of the location of Aussie Broadband's infrastructure. The information provided may contain errors or omissions and the accuracy may not suit all users. A site inspection and investigation are recommended before commencement of any project based on this data.



Sequence Number: 259536189

Date: 14/08/2025

**DISCLAIMER:** THIS DRAWING SHOULD NOT BE SCALED TO LOCATE CABLES. NO WARRANTY IS GIVEN THAT THE INFORMATION IS ACCURATE OR COMPLETE. IF YOU REQUIRE INFORMATION REGARDING LOCATING THE CABLE PLEASE CALL NEXTGEN. THIS DOCUMENT HAS BEEN PREPARED SOLELY FOR DIAL BEFORE YOU DIG USE. THIS PLAN CONTAINS COMMERCIAL SENSITIVE INFORMATION AND IS TO BE TREATED ACCORDINGLY. NO SUCH INFORMATION IS TO BE PASSED ONTO OTHER PARTIES WITHOUT WRITTEN CONSENT FROM NEXTGEN PTY LTD.



## LEGEND

### Digsite



Area

### Assets



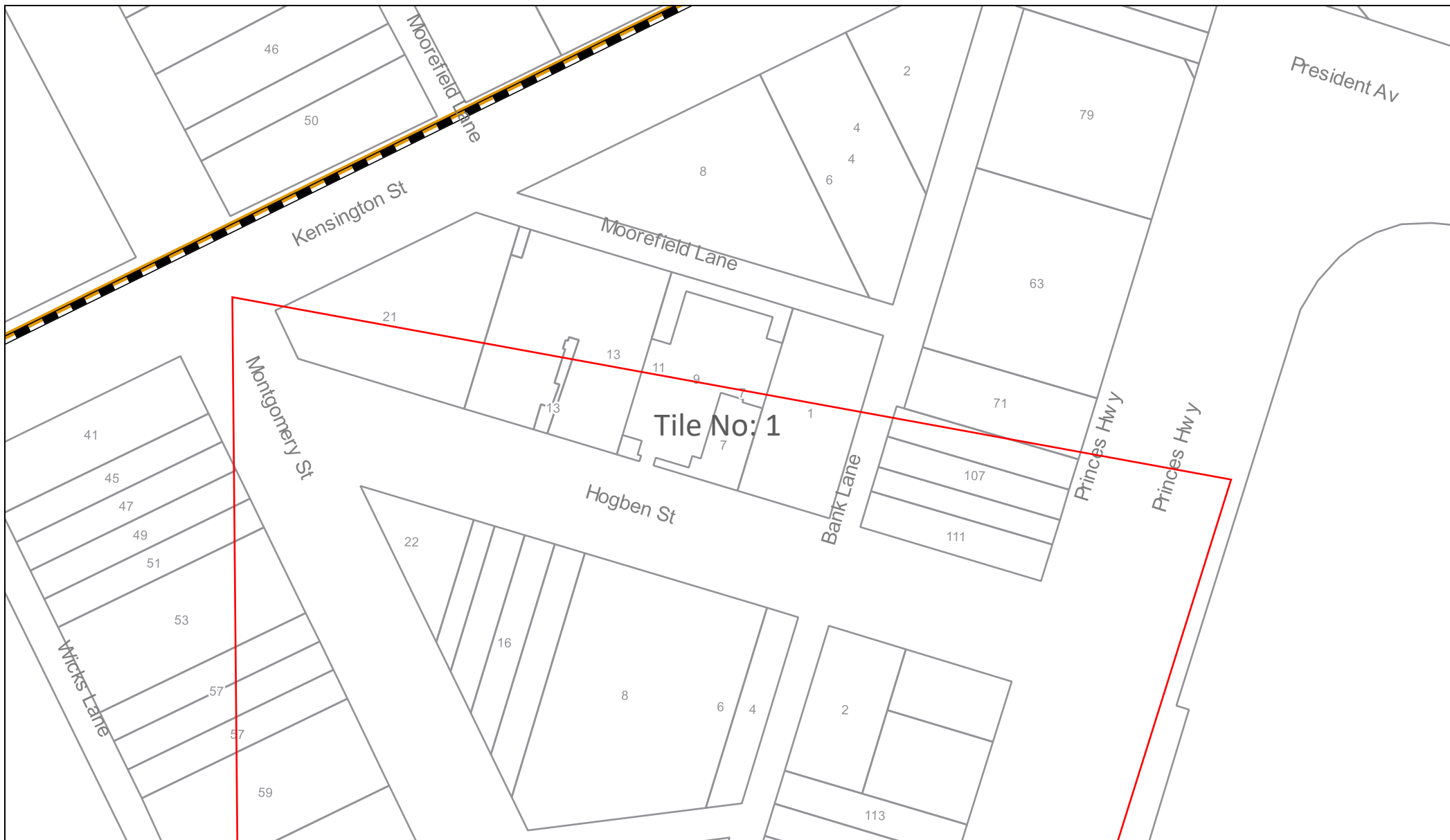
Cable



3rd Party Duct



Marker Post



Sequence Number: 259536189

Date: 14/08/2025

**DISCLAIMER:** THIS DRAWING SHOULD NOT BE SCALED TO LOCATE CABLES. NO WARRANTY IS GIVEN THAT THE INFORMATION IS ACCURATE OR COMPLETE. IF YOU REQUIRE INFORMATION REGARDING LOCATING THE CABLE PLEASE CALL NEXTGEN. THIS DOCUMENT HAS BEEN PREPARED SOLELY FOR DIAL BEFORE YOU DIG USE. THIS PLAN CONTAINS COMMERCIAL SENSITIVE INFORMATION AND IS TO BE TREATED ACCORDINGLY. NO SUCH INFORMATION IS TO BE PASSED ONTO OTHER PARTIES WITHOUT WRITTEN CONSENT FROM NEXTGEN PTY LTD.



### LEGEND

#### Digsite



Area

#### Assets



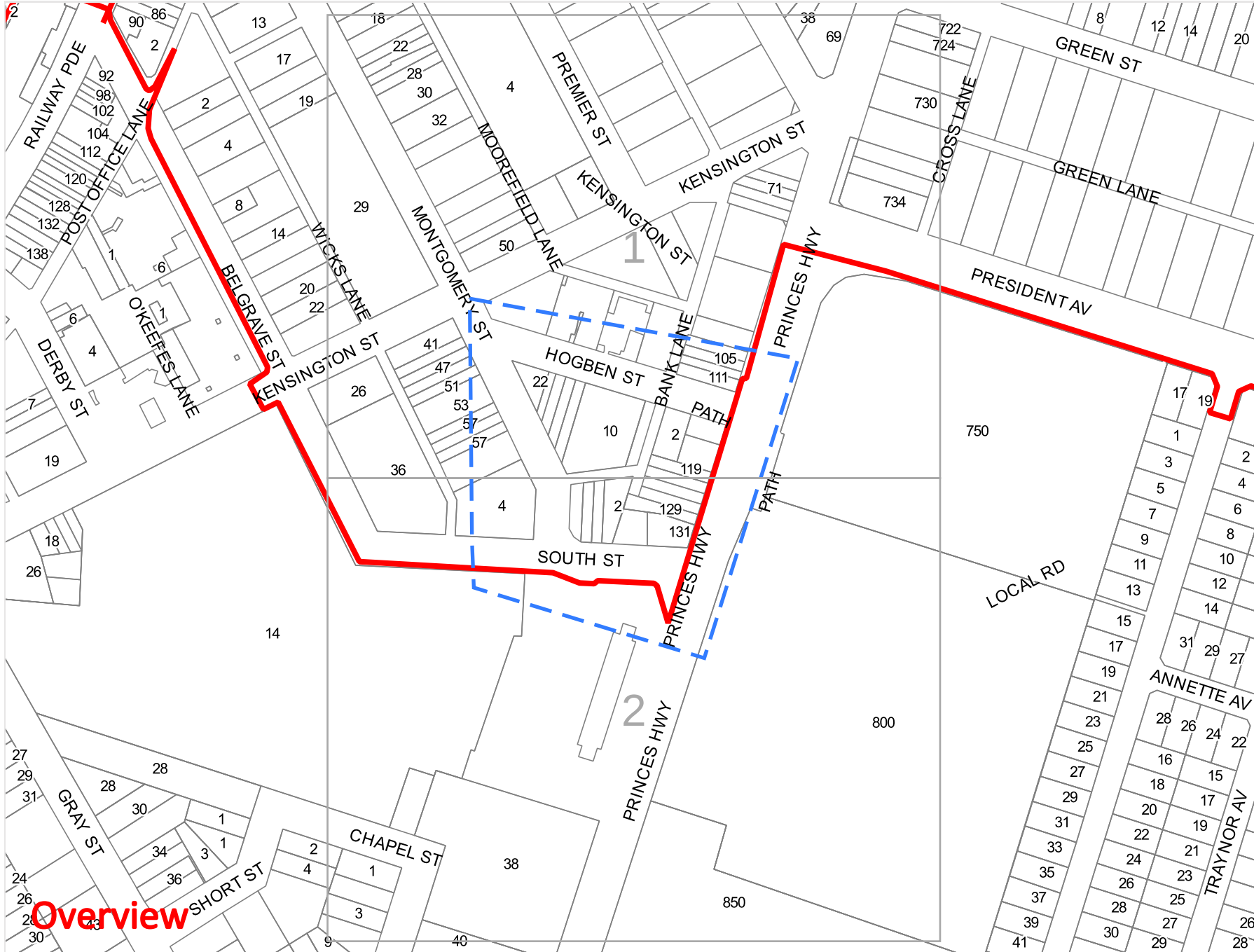
Cable



3rd Party Duct



Marker Post



#### Legend

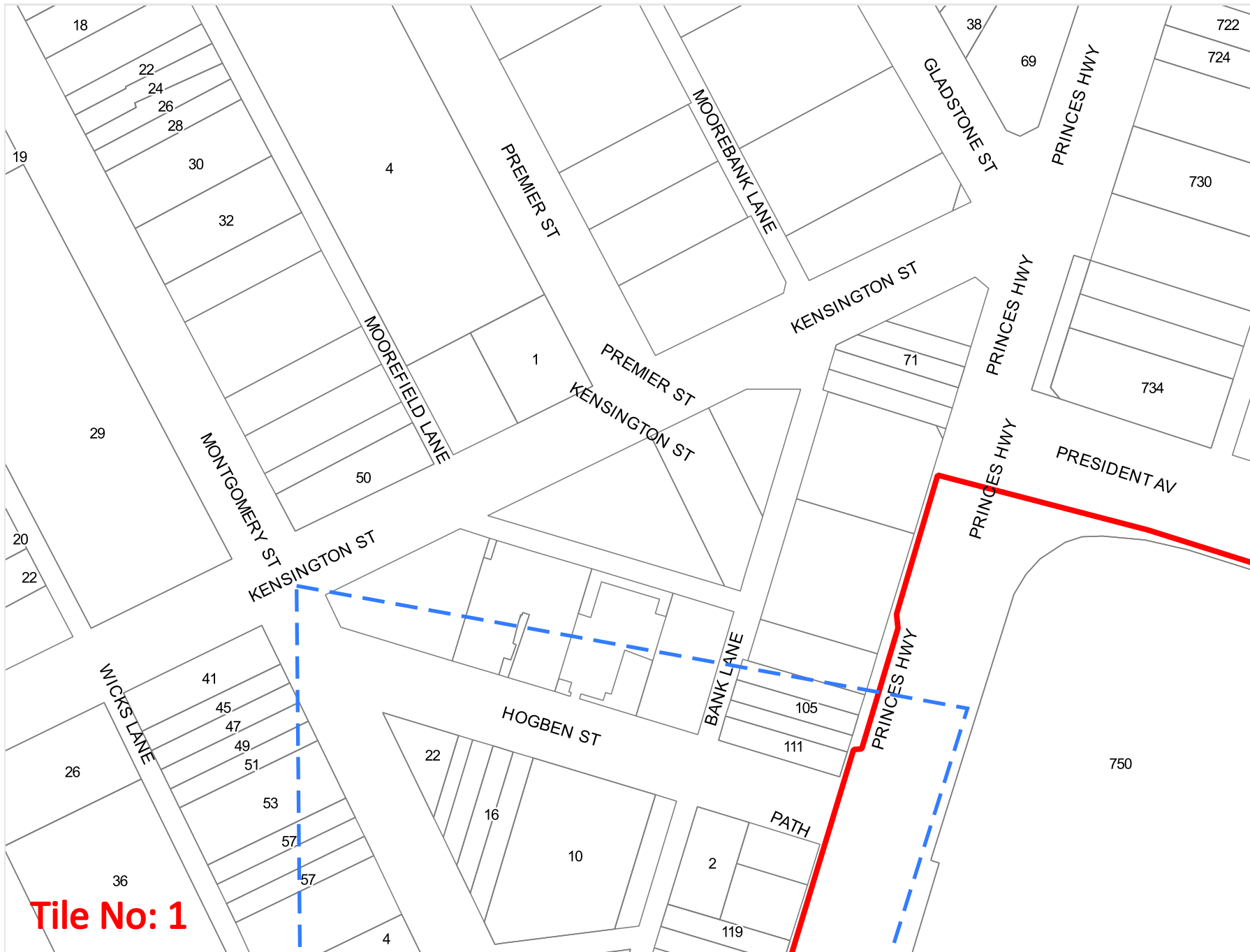
- Enquiry Area
- AARNET Fibre Optic Assets
- AARNET Power Assets
- Cadastre



Scale: 1:3075  
Expires: 11 Sep 2025

**DISCLAIMER:** While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither AARNET nor PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

Overview



**Legend**

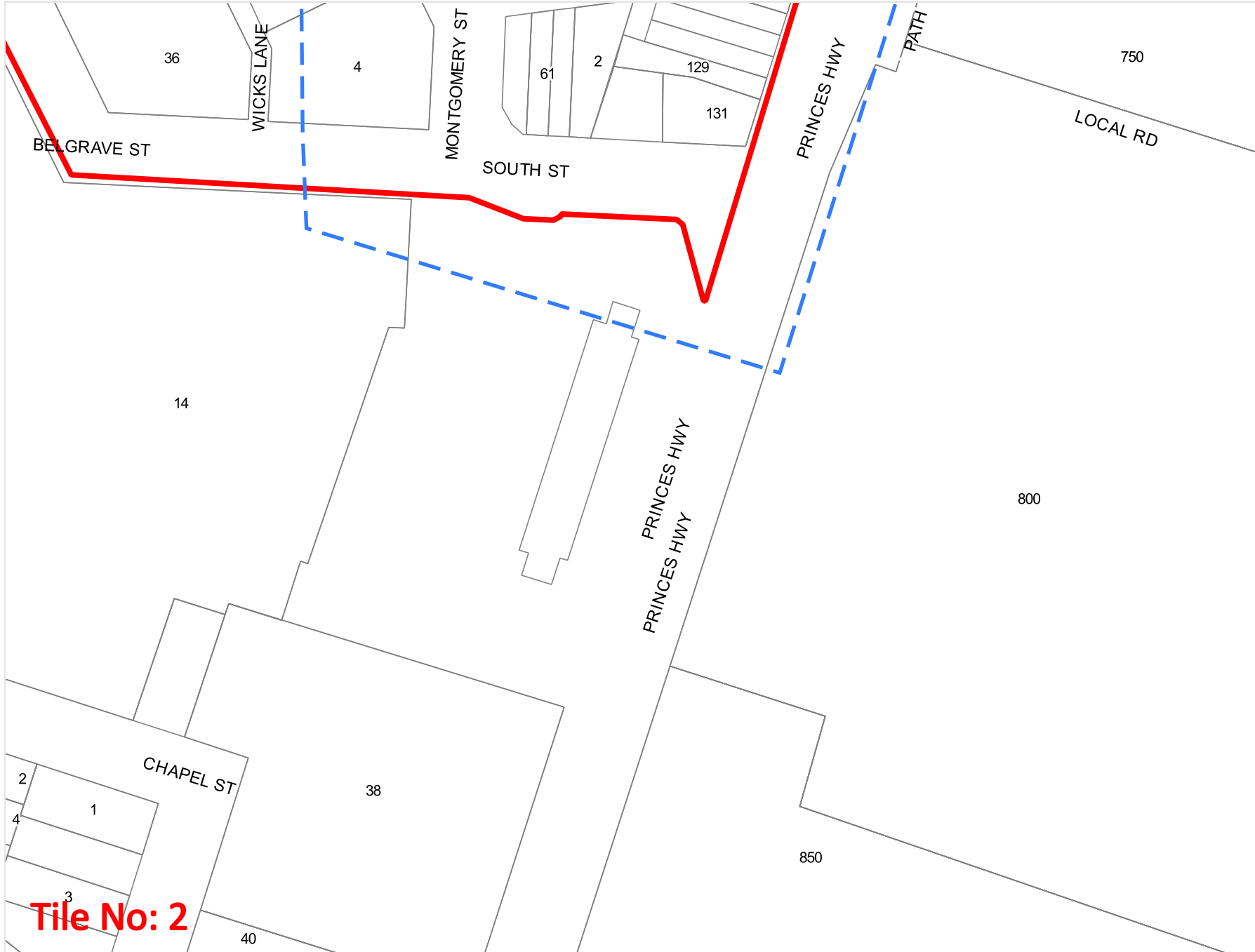
- Enquiry Area
- AARNET Fibre Optic Assets
- AARNET Power Assets
- Cadastre



Scale: 1:1500  
Expires: 11 Sep 2025

**DISCLAIMER:** While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither AARNET nor PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.

**Tile No: 1**



#### Legend

-  Enquiry Area
-  AARNET Fibre Optic Assets
-  AARNET Power Assets
-  Cadastre



Scale: 1:1500  
Expires: 11 Sep 2025

**DISCLAIMER:** While reasonable measures have been taken to ensure the accuracy of the information contained in this plan response, neither AARNET nor PelicanCorp shall have any liability whatsoever in relation to any loss, damage, cost or expense arising from the use of this plan response or the information contained in it or the completeness or accuracy of such information. Use of such information is subject to and constitutes acceptance of these terms.



## HIGH PRESSURE - ASSETS AFFECTED

This information is only valid for 28 days from the date of issue

There are **High Pressure Gas Mains and Services** in the vicinity of your intended work, as generally illustrated on the attached map. There may also be other mains or services at the location. For an explanation of the map, please see the legend attachment and read the Important Information.

### Excavation Guidelines

To arrange a Jemena Representative please log a request via [www.myportal.jemena.com.au](http://www.myportal.jemena.com.au) and choose 'Gas Mains' application type and "High Pressure Standby Service". If you do not have an account, you will need to choose 'register' and follow the prompts.

Please review the attached Construction Guidelines – '**GAS-9899-GL-CN-001 Guideline for construction around AS4645 assets**' and ensure that you meet the minimum construction requirements in this document. If the minimum requirements cannot be achieved, submit your proposal in the form of an Application via [www.myportal.jemena.com.au](http://www.myportal.jemena.com.au) and choose 'Gas Mains' application type and select 'Encroachments', an Engineering review will be conducted to address the considerations. Please allow up to 10 working days for the application to be reviewed.

Please note that a duty of care exists to ensure gas assets are not compromised or damaged. Jemena's expectation is that the excavator operator holds a current Verification of Competency (VOC) or equivalent for the machine to be used near Jemena High Pressure Gas Assets.

Further standby enquiries can be directed to the High Pressure Coordinator via:

**E: [infrastructureprotection@jemena.com.au](mailto:infrastructureprotection@jemena.com.au) or PH: 1300 665 380.**

Appointments will be coordinated with availability of a Jemena Representative to arrange a site meeting / standby. For all works in the vicinity of High Pressure Gas Mains you must arrange for a Jemena Representative to attend and supervise all excavations. Charges may apply.

### Important Information:

1. The enclosed plans have been prepared solely for the use of Jemena Gas Networks (NSW) Ltd and Jemena Asset Management Pty Ltd (together "Jemena") and show the position of Jemena's underground gas mains and installations in public gazetted roads. If the enclosed plans show gas assets located on private property or other third party property, these are approximate locations.
2. There may be underground assets owned by other utilities in the vicinity of your work and it is your responsibility to identify and locate such assets.
3. The plans may show the position of underground mains and installations relative to fences, buildings and other structures as they existed at the time the assets were installed and may not have been updated to take account of any subsequent change in the location or style of those features. Depth of underground assets may also vary as a result of changes to road, footpath or surface levels subsequent to installation.
4. While Jemena takes all reasonable care to ensure the accuracy and completeness of the information provided, it makes no warranty as to the accuracy or completeness of the enclosed plans and does not assume any duty of care to you nor any responsibility for the accuracy, adequacy, suitability or completeness of the plans or for any error or omission. It is intended to be indicative only and must not be solely relied upon when undertaking underground works.
5. Except to the extent that liability may not be capable of being lawfully excluded, Jemena, its employees, agents, officers and contractors will not be liable to any person for loss or damage (including indirect and consequential loss or damage) which may be suffered or incurred in connection with the provision of this information.
6. Persons excavating or carrying out other earthworks will be held responsible for any damage caused to Jemena's underground mains, service lines and equipment. In accordance with the *Work Near Underground Assets – Guide* published in 2007 by Work Cover Authority\*, Jemena recommends that you carry out potholing by hand to accurately confirm the location of gas mains and installation prior to commencing excavations.

## Network Mains

|                                                                                     |                                                     |
|-------------------------------------------------------------------------------------|-----------------------------------------------------|
|    | Proposed New Main (coloured as per kPa)             |
|    | Proposed Isolate (coloured as per kPa)              |
|    | Unknown kPa                                         |
|    | 2kPa Low Pressure gas main                          |
|    | 7kPa Low Pressure gas main                          |
|    | 30kPa Medium pressure gas main                      |
|    | 100kPa Medium Pressure gas main                     |
|    | 210kPa Medium Pressure gas main                     |
|    | 300kPa Medium Pressure gas main                     |
|    | 400kPa Medium Pressure gas main                     |
|    | 1050kPa High Pressure gas main                      |
|    | 3500kPa High Pressure gas main                      |
|   | 7000kPa High Pressure gas main                      |
|  | >7000kPa Transmission pipeline                      |
|  | Isolated Service - Former Med/High Pressure         |
|  | Isolated Steel Main - <b>Treat as High Pressure</b> |

|                                                                                     |                                              |
|-------------------------------------------------------------------------------------|----------------------------------------------|
|  | Conduit or Casing                            |
| 100 PVC                                                                             | Size & Material (see conduit material codes) |

|                                                                                     |                                                                             |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
|  | Critical Main - <b>Treat as High Pressure</b><br>(Main coloured as per kPa) |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|

|                                                                                     |                      |
|-------------------------------------------------------------------------------------|----------------------|
|  | Exposed Main section |
| EXPOSED                                                                             |                      |



SHALLOW-SP

Shallow Main section: see Protection Code below, no code assume no protection

|    |               |     |                  |
|----|---------------|-----|------------------|
| SP | Steel Plate   | CE  | Concrete Encased |
| PP | PE Plate      | UNK | Unknown Type     |
| CS | Concrete Slab |     |                  |

## Gas Services

|                                                                                     |                               |
|-------------------------------------------------------------------------------------|-------------------------------|
|  | Gas service – coloured by kPa |
|  | Serviced Site indicator       |

Jemena has created service pipe features programmatically based on known pipe characteristics and cartographic principles. They may provide guidance to identify assets whilst in the field in addition to existing processes.

## Network Assets

|                                                                                   |                                                                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------|
|  | Siphon                                                          |
|  | Network Valve                                                   |
|  | High Pressure Main Line Valve ( $\geq 1050\text{kPa}$ )         |
|  | High Pressure Automatic Line Break Valve ( $> 1050\text{kPa}$ ) |
|  | Boundary Regulator Set ( $\leq 1050\text{kPa}$ )                |
|  | Distribution Regulator Set ( $\leq 1050\text{kPa}$ )            |
|  | High Pressure Regulating Station ( $> 1050\text{kPa}$ )         |

## Annotations

### Pipe and Conduit Material Codes

|      |                     |      |                          |
|------|---------------------|------|--------------------------|
| NY   | Nylon               | NB   | Nominal Bore – Cast Iron |
| PE   | Polyethylene        | ST   | Steel                    |
| P/PL | Plastic (undefined) | C/CO | Copper                   |
| PVC  | Polyvinyl Chloride  |      |                          |

### Pipe code combinations and dimension references

|                                                                                     |                                                                    |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------|
|  | 50mm Nylon main inserted into 6 inch (Nominal Bore) Cast Iron pipe |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------|

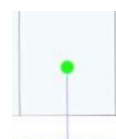
|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
|  | 32mm Nylon main inserted into 50mm Steel pipe |
|-------------------------------------------------------------------------------------|-----------------------------------------------|

|      |                                                       |
|------|-------------------------------------------------------|
| ~1.5 | Distance (in metres) of main from Boundary Line (MBL) |
|------|-------------------------------------------------------|

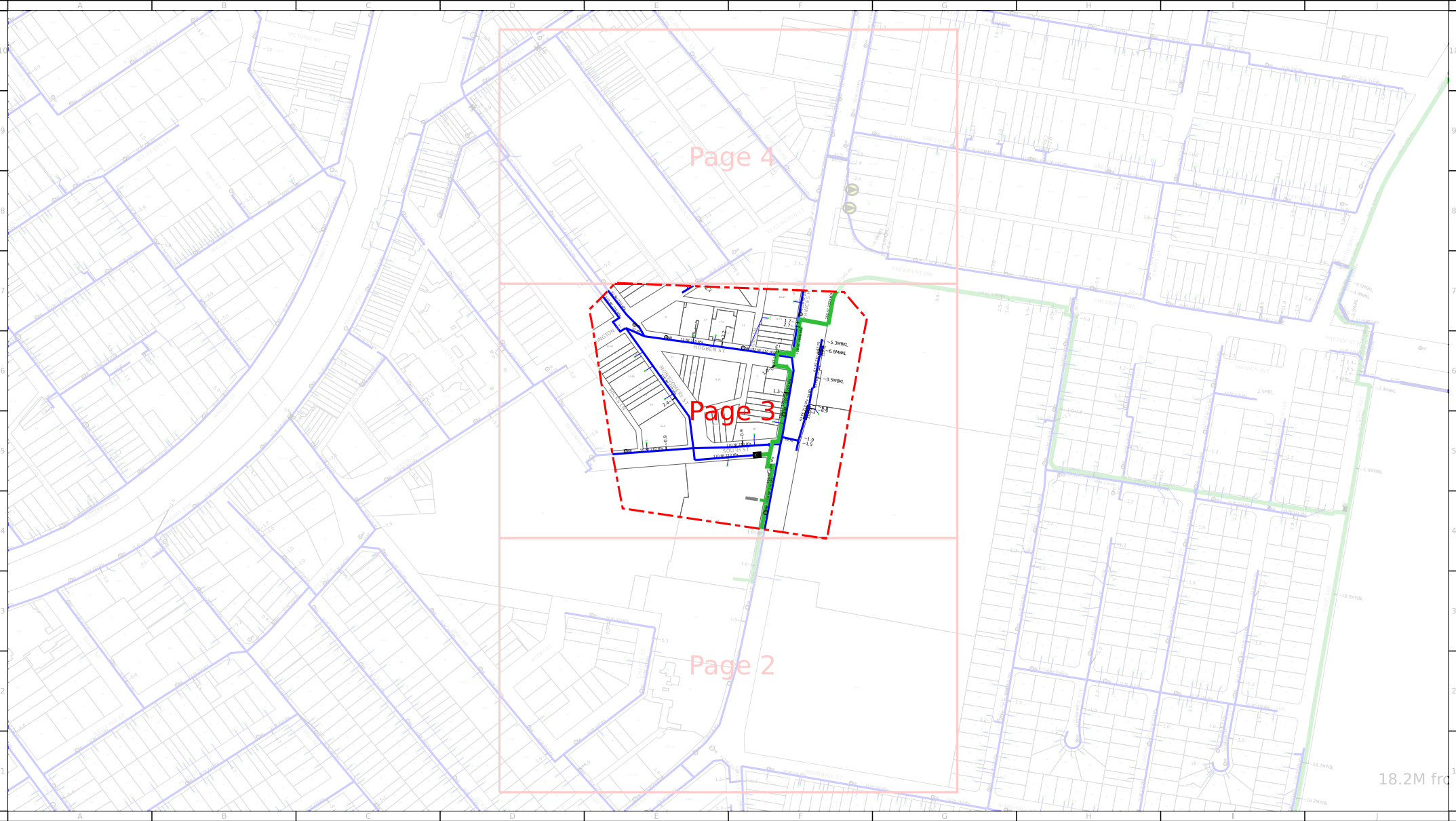
|      |                                                                  |
|------|------------------------------------------------------------------|
| MBK  | Distance in Metres Back of Kerb                                  |
| MKL  | Distance in Metres from Kerb Line                                |
| MEBL | Distance in Metres from Eastern Boundary Line (North/South/West) |
| MCL  | Distance in Metres from Centre Line of Road                      |
| MFL  | Distance in Metres from Fence Line                               |



Distance (in metres) of service from side Boundary where the service pipe crosses from the road reserve into the private lot  
Service placed towards left or right boundary  
Service pipe size & material where known



For connected sites with insufficient asset details, service is shown down the centre of the lot with no attributes plotted



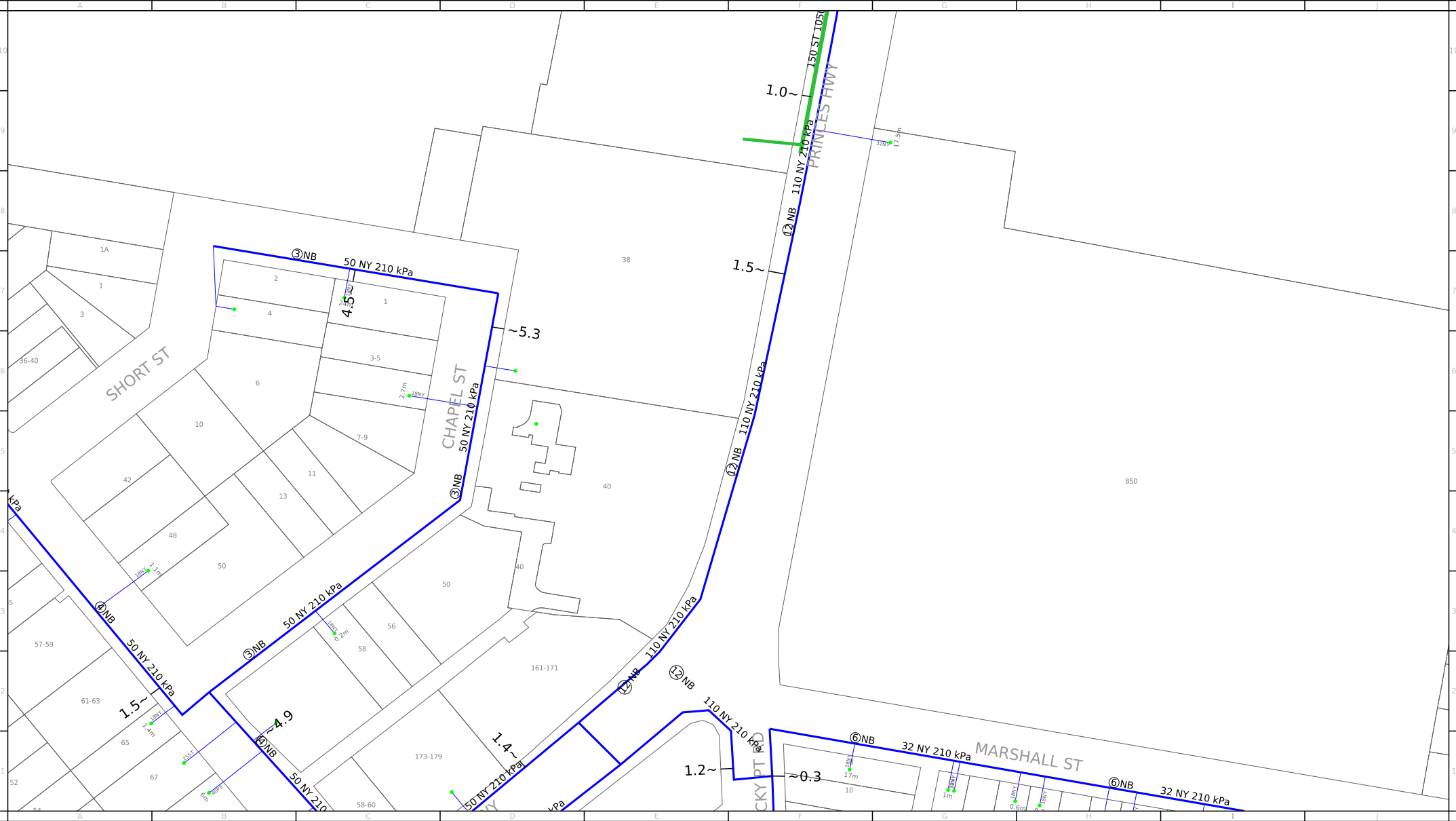
For legend details, please refer to the Coversheet attachment provided as part of this BYDA response.



Scale:1:6301

Issue Date: 14/08/2025  
BYDA Seq No: 259536191  
BYDA Job No: 50914085  
Overview Page:

**WARNING:** This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.



For legend details, please refer to the Coversheet attachment provided as part of this BYDA response.



Scale:1:2000

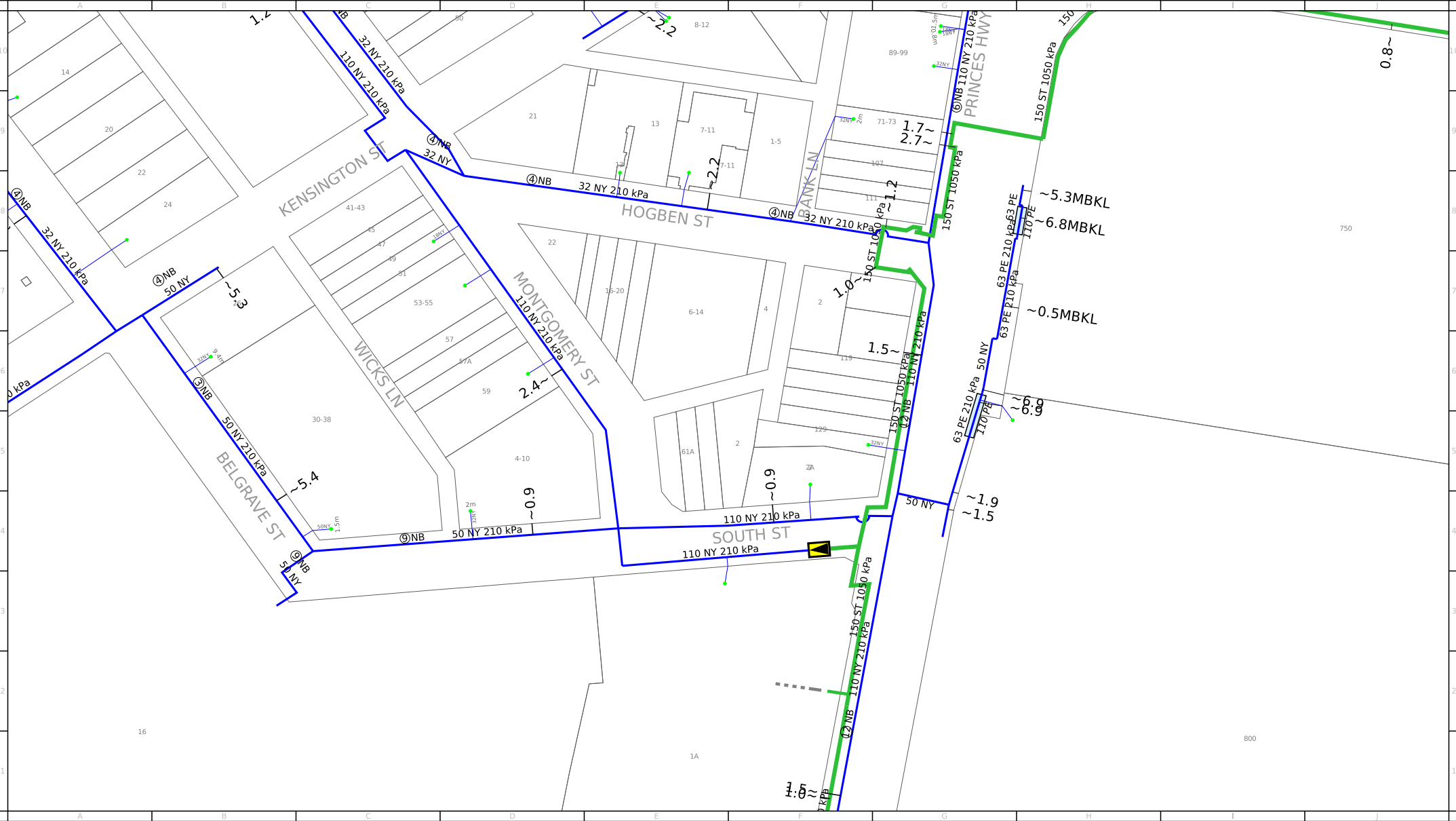
Issue Date: 14/08/2025

BYDA Seq No: 259536191

BYDA Job No: 50914085

0m 10m 20m 30m 40m 50m 60m 70m80m

**WARNING:** This is a representation of Jemena Gas Networks underground assets only and may not indicate all assets in the area. It must not be used for the purpose of exact asset location in order to undertake any type of excavation. This plan is diagrammatic only, and distances scaled from this plan may not be accurate. Please read all conditions and information on the attached information sheet. This extract is subject to those conditions. The information contained on this plan is only valid for 28 days from the date of issue.

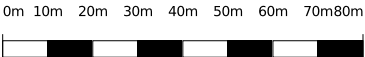


For legend details, please refer to the Coversheet attachment provided as part of this BYDA response.

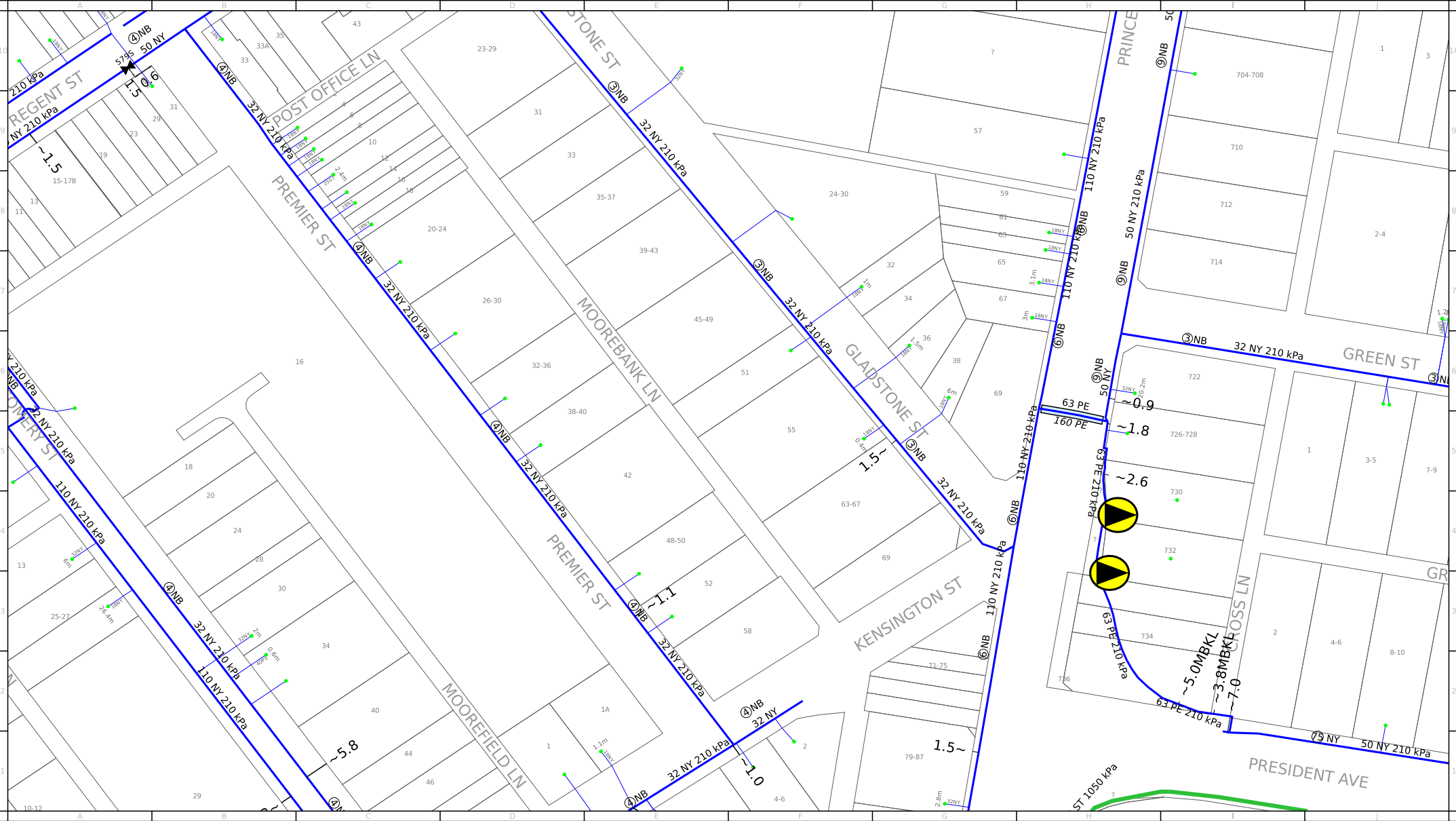


Scale:1:2000

Issue Date: 14/08/2025  
BYDA Seq No: 259536191  
BYDA Job No: 50914085



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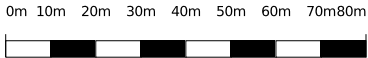


For legend details, please refer to the Coversheet attachment provided as part of this BYDA response.

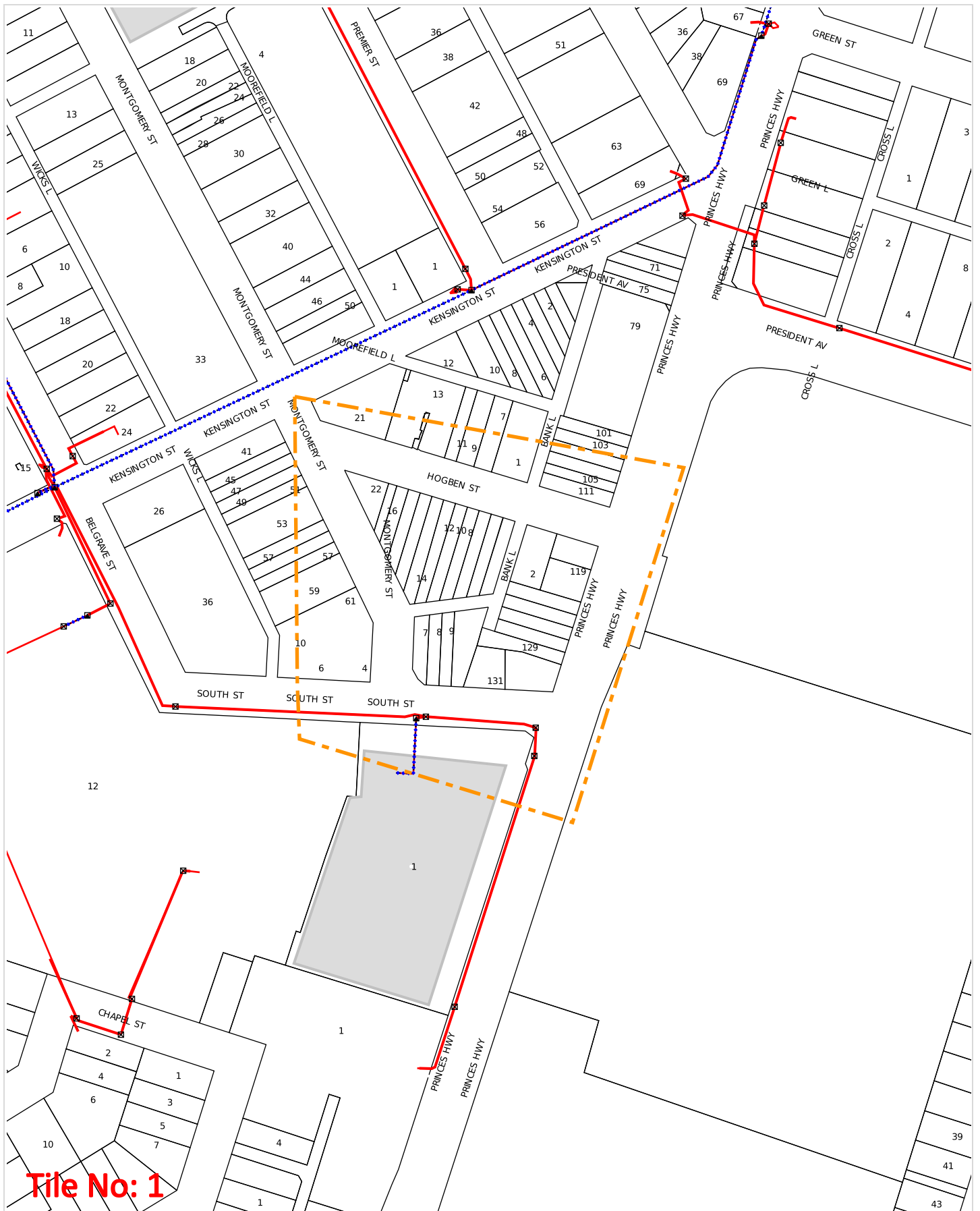


Scale:1:2000

Issue Date: 14/08/2025  
BYDA Seq No: 259536191  
BYDA Job No: 50914085



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Sequence Number: 259536192

Date Generated: 14 Aug 2025



For all Optus DBYD plan enquiries –  
 Email: [Fibre.Locations@optus.net.au](mailto:Fibre.Locations@optus.net.au)  
 For urgent onsite assistance contact 1800 505 777  
 Optus Limited ACN 052 833 208





**Tile No: 1**

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Tile No: 1

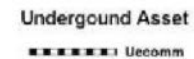
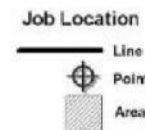
# Uecomm Underground Cable

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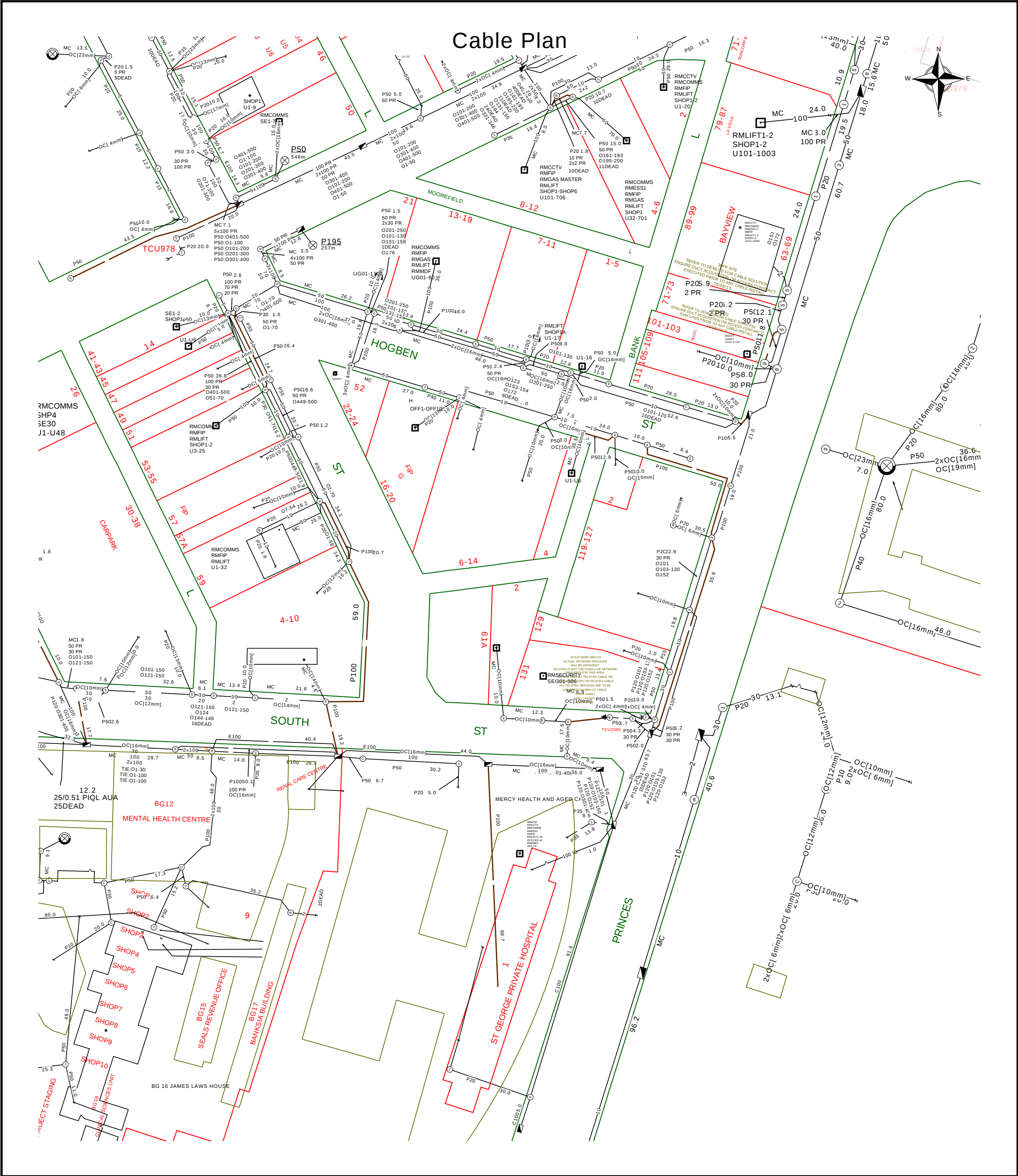
Printed on: 14 Aug 2025

Sequence Number: 259536192

Location: 2 South Street, Kogarah, NSW 2217



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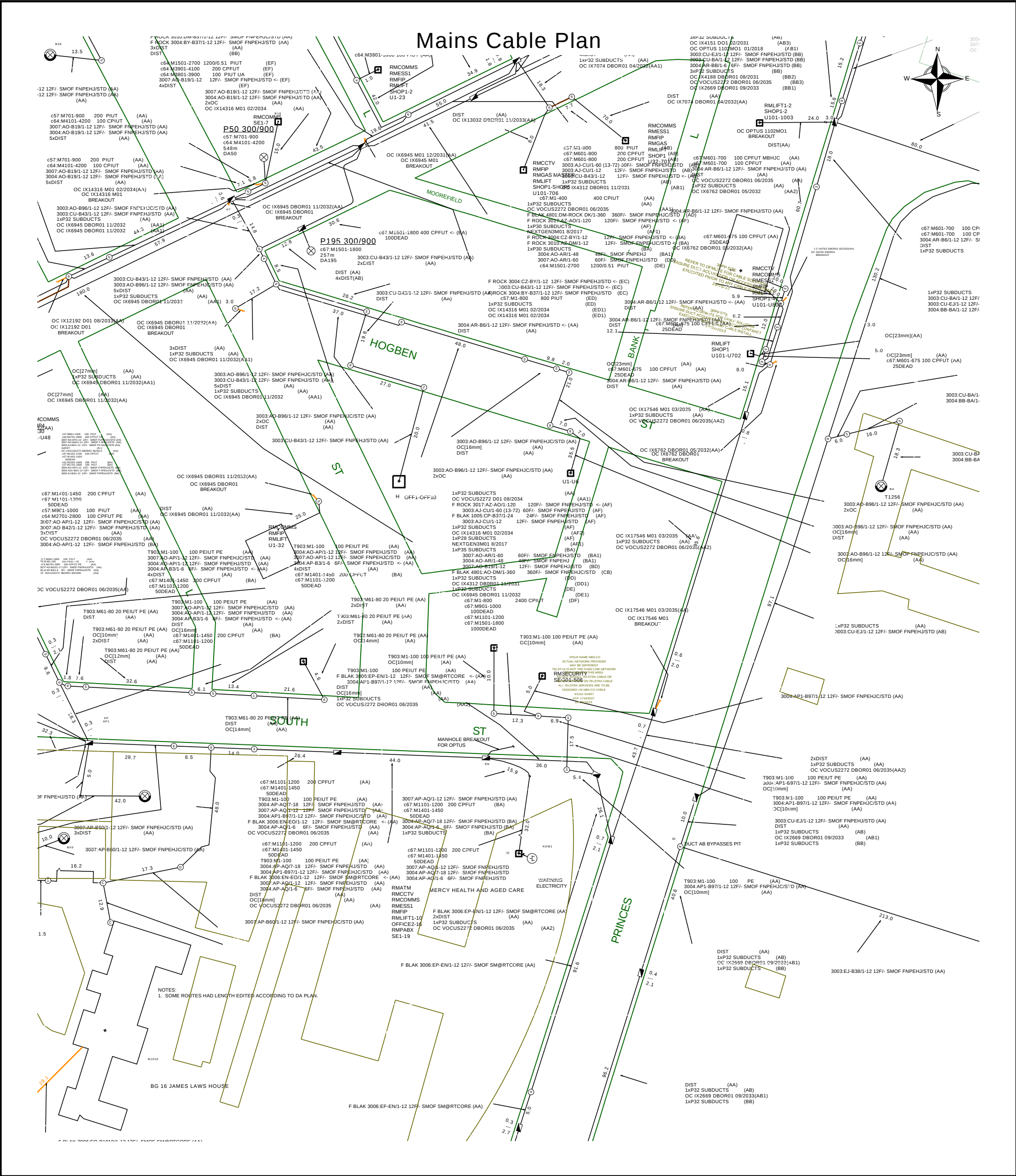


|                                                                                    |                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                           |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Report Damage: <a href="https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra/">https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra/</a><br>Ph - 13 22 03<br>Email - Telstra.Plans@team.telstra.com<br>Planned Services - ph 1800 653 935 (AEST bus hrs only) General Enquiries | Sequence Number: 259536193                                                                                                                                                |
|                                                                                    | TELSTRA LIMITED A.C.N. 086 174 781<br>Generated On 14/08/2025 10:39:11                                                                                                                                                                                                                                                              | <b>CAUTION: Fibre optic and/ or major network present in plot area. Please read the Duty of Care and contact Telstra Plan Services should you require any assistance.</b> |

The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

**WARNING**  
Telstra plans and location information conform to Quality Level "D" of the Australian Standard AS 5488-Classification of Subsurface Utility Information. As such, Telstra supplied location information is indicative only. Spatial accuracy is not applicable to Quality Level D. Refer to AS 5488 for further details. The exact position of Telstra assets can only be validated by physically exposing it. Telstra does not warrant or hold out that its plans are accurate and accepts no responsibility for any inaccuracy. Further on site investigation is required to validate the exact location of Telstra plant prior to commencing construction work. A Certified Locating Organisation is an essential part of the process to validate the exact location of Telstra assets and to ensure the asset is protected during construction works.

See the Steps- Telstra Duty of Care that was provided in the email response.





Report Damage: <https://service.telstra.com.au/customer/general/forms/report-damage-to-telstra/>  
Ph - 13 22 03  
Email - [Telstra.Plans@team.telstra.com](mailto:Telstra.Plans@team.telstra.com)  
Planned Services - ph 1800 653 935 (AEST bus hrs only) General Enquiries

TELSTRA LIMITED A.C.N. 086 174 781

Generated On 14/08/2025 10:39:17

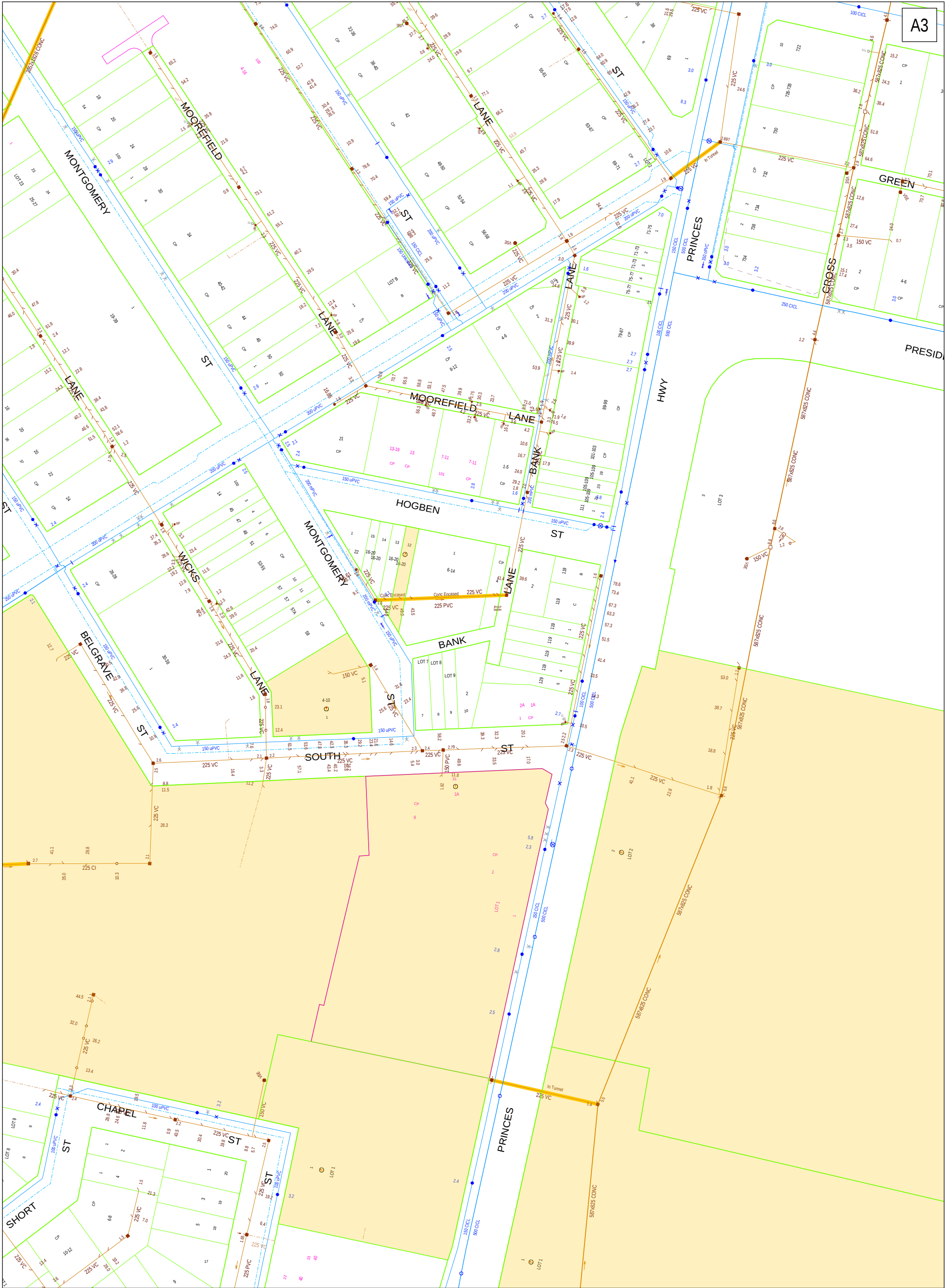
Sequence Number: 259536193

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The above plan must be viewed in conjunction with the Mains Cable Plan on the following page

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See the Steps- Telstra Duty of Care that was provided in the email response.



A3

DBYD Address:  
2 South Street  
Kogarah NSW 2217

DBYD Job No: 50914085  
DBYD Sequence No: 259536194

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SYDNEY WATER CORPORATION

Scale: 1:1500  
Date of Production: 14/08/2025

Plan 1 of 1  
0m 7m 14m 21m 28m  
N

Date: 14/08/2025

Enquirer Name: Leon Gower  
Enquirer Address: Unit 6 75-77 Pacific Highway  
Email: leon.gower@edconsulting.com.au  
Phone: +61412900931

Dear Leon Gower

The following is our response on behalf of each of the TPG carriers (listed below) to your Before You Dig Australia enquiry – Sequence 259536195

It is provided to you on a confidential basis under the following conditions and must be shredded or securely disposed of after use.

### Assets Affected: 2 South Street Kogarah

Carriers (each a “TPG carrier”) and assets affected:

PIPE Networks

### Location:

According to our records, the underground assets in the vicinity of the location stated in your enquiry are **AFFECTED**. Please read the below information and disclaimers in addition to the any attached plans provided prior to any construction activities.

### IMPORTANT INFORMATION

- The information provided is valid for 30 days from the date of this response. If your work site area changes or your construction activity is beyond 30 days please contact Before You Dig Australia on 1100 or [www.1100.com.au](http://www.1100.com.au) to re-submit a new enquiry.
- Due to the nature of underground assets and the age of some assets and records, our plans are indicative of the general location only and may not show all assets in the location. You should not solely rely on these plans when undertaking construction works. It is also inaccurate to assume depth or that underground network conduit and cables follow straight lines, and careful on-site investigations are essential to locate an asset's exact position prior to excavation. It is your responsibility to locate and confirm the exact location of our infrastructure using non-destructive techniques. We make no warranty or guarantee that our plans are complete, current or error free, and to the maximum extent permitted by law we exclude all liability to you, your employees, agents and contractors for any loss, damage or claim arising out of or in connection with using our plans.
- Please note that some of our conduits carry electrical cables and gas pipes. Please exercise extreme care when working within the vicinity of these conduit and take into account the minimum clearance distances under Duty Of Care below.
- You (and your employee and contractors) must not open, move, interfere, alter or relocate any of our assets without our prior approval.
- **Note** It is a criminal offence under the *Criminal Code Act 1995 (Cth)* to tamper or interfere with communication facilities owned by a carrier. Heavy penalties may apply for breach of this prohibition, and any damages suffered, or costs incurred by us as a result of such unauthorised works may be claimed against you.

### **DAMAGE**

- You must report immediately any damage to our network on **1800 786 306** (24hrs). We will hold you liable and seek compensation for any loss or damage to our network, our property and our customers that is caused by or arises out of your activities.

### **DUTY OF CARE**

You have a duty of care to carefully locate, validate and protect our assets when carrying out works near our infrastructure. For construction activities that may impact on or interfere with our network, you will need to call us on **1800 786 306** to discuss a suitable engineering solution, lead time and cost involved. The below precautions must be taken when working in the vicinity of our network:

- Contact us on **1800 786 306** to discuss and obtain relevant information and plans on our infrastructure in a particular location if the information provided in this response is insufficient.
- Physically locate and mark on-site our network infrastructure using non-destructive techniques i.e. pot holing or hand digging every 5 metres prior to commencing any construction activities. Assets located must be marked to AS5488 standard. **NO CONSTRUCTION WORK IS ALLOWED UNTIL THIS STEP IS COMPLETED.** You must use an approved telecommunications accredited locator, or we can provide a locator for you at your expense. If we provide you with a locator, and this locator attended the site and is proven to be grossly negligent in physically locating and marking our infrastructure, then to the extent any TPG carrier is liable for this locator's negligence, acts and omissions, the total liability aggregated for all TPG carriers is limited, at our option, to attend the site and re-mark the infrastructure or to pay for a third party to re-mark the infrastructure.
- If you require us to locate or monitor our infrastructure, please allow five business days' notice for us to respond.
- Ensure all information, including our network requirements and any associated plans provided by us are kept confidential and remain on-site throughout your construction works.

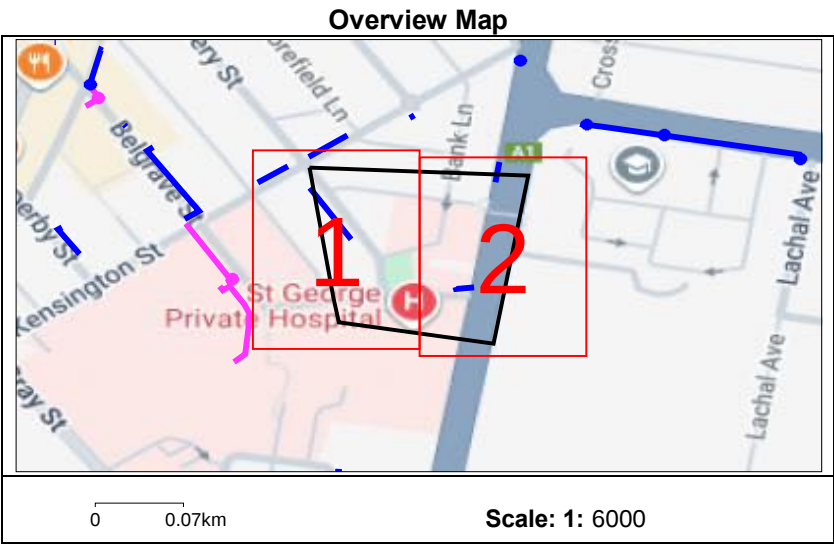
- Use suitably qualified and supervised professionals, particularly if you are working near assets that contain electricity cables or gas pipes.
- Ensure the below minimum clearance distances between the construction activities and the actual location of our assets are met. If you need clearance distances for our above ground assets, or if the below distances cannot be met, call **1800 786 306** to discuss.

**Minimum assets clearance distances.**

- 300mm when laying asset inline, horizontal or vertical.
  - 1000mm when operating vibrating equipment. Eg: vibrating plates. No vibrating equipment on top of asset.
  - 1000mm when operating mechanical excavators or jackhammers/pneumatic breakers.
  - 2000mm when performing directional bore in-line, horizontal and vertical.
  - No heavy vehicle over 3 tonnes to be driven over asset with less than 600mm of cover.
- Reinstate exposed TPG network infrastructure back to original state.

**PRIVACY & CONFIDENTIALITY**

- Privacy Notice – Your information has been provided to us by Before You Dig Australia to respond to your Before You Dig Australia enquiry. We will keep your personal information in accordance with TPG’s privacy policy, see [www.tpg.com.au/about/privacy](http://www.tpg.com.au/about/privacy).
- Confidentiality – The information we have provided to you is confidential and is to be used only for planning and designing purposes in connection with your Before You Dig Australia enquiry. Please dispose of the information by shredding or other secure disposal method after use. We retain all intellectual property rights (including copyrights) in all our documents and plans.



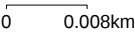
TPG Telecom Limited



**Enquiry Number:** 259536195

**Map Sheet:** 1

**Scale:** 1: 750



**LEGEND**

BYDA Work Area 

|                    |                                                                                       |                              |                                                                                       |
|--------------------|---------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------|
| AAPT/PowerTel Pit  |  | TransACT Pit                 |  |
| AAPT/PowerTel Duct |  | TransACT Duct                |  |
| DDA Pit            |  | SOUL Pattinson Telecoms Pit  |  |
| DDA Duct           |  | SOUL Pattinson Telecoms Duct |  |
| Agile/Adam Pit     |  | PIPE Networks Pit            |  |
| Agile/Adam Duct    |  | PIPE Networks Duct           |  |

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**Enquiry Number:** 259536195

**Map Sheet:** 2

**Scale:** 1: 750

0 0.008km

N

**LEGEND**

BYDA Work Area

|                    |   |                              |   |
|--------------------|---|------------------------------|---|
| AAPT/PowerTel Pit  | ● | TransACT Pit                 | ● |
| AAPT/PowerTel Duct | — | TransACT Duct                | — |
| DDA Pit            | ● | SOUL Pattinson Telecoms Pit  | ● |
| DDA Duct           | — | SOUL Pattinson Telecoms Duct | — |
| Agile/Adam Pit     | ● | PIPE Networks Pit            | ● |
| Agile/Adam Duct    | — | PIPE Networks Duct           | — |

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