





Report

Hydraulic Services Infrastructure Assessment

Prepared for 45 McLaren Pty Limited



QUALITY ASSURANCE STATEMENT

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DOCUMENT CONTROL

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1. Introduction

Calibre Professional Services Pty Ltd has been engaged by 45 McLaren Pty Limited to prepare a Hydraulic Services Infrastructure Assessment to accompany a Planning Proposal Submission to North Sydney Council for a proposed mixed-use development located at 45 McLaren Street, North Sydney (the Site).

The Site has a frontage to McLaren St to the North, Walker St to the East, Harnett St to the West and is bounded by Residential lots to the South. This report comprises of Calibre Professional Service's review of Authority Services located adjacent and within the proposed development and services information received from each Authority.

2. Scope of Services

Service	Authority
Sewer	Sydney Water
Water	Sydney Water
Stormwater	North Sydney Council
Gas	Jemena

3. Project Description

The reference design for the Planning Proposal for this site provides for a mixed-use development comprising sixteen (16) storeys of residential apartments, three (3) levels of commercial/retail spaces and four (4) levels of basement car parking.

4. Existing Authority Infrastructure Services

4.1 Sewer

Information received by Sydney Water via Dial Before you Dig (DBYD) on 20/08/2020 indicates two (2) sewer mains located adjacent to the site. The distribution network is characterised by:

- A concrete encased 225mm dia. PVC sewer main beyond the southern boundary of our site, within the neighbouring property's (SP 85010). This sewer main runs generally parallel to the southern boundary. The sewer main connects to a 225mm SGW (Salt Glazed Wall) sewer main, which then connects to a sewer maintenance hole within Walker Street.
- Further, a 225mm dia. Vitrified Clay (VC) located within Walker Street, generally 7-8m away from the Eastern side of the site.

Based on the aforementioned plans, the property connection to the Sydney Water network is via the concrete encased sewer pipe along the Southern boundary of our site.

4.2 Water

Information received by Sydney Water via DBYD on 20/08/2020 shows three (3) water mains located adjacent to the site. The distribution network is characterised by:

- 100mm dia. CICL located within Harnett Street, approximately 10m away from the Western side boundary, running generally parallel towards McLaren St.

- 150mm dia. DICL located within McLaren Street, approximately 12m away from the Northern side boundary, running generally parallel towards Walker Street.
- 200mm dia. DICL located within Walker Street, approximately 18m away from the Eastern side boundary, at the South-East side of 150 Walker St (neighbouring property).

In accordance with the current national WSA code (Water Services Association), Sydney Water will require the developer to provide minimum size reticulation mains of 150mm diameter for 4 storey and above high density residential and 200mm diameter for 8 storeys and above. Current Sydney Water policy requires these mains to be provided at the developers cost. Sydney Water will require the individual developers to lodge a Section 73 Application for each Development Application.

Based on our experience, the 200mm DICL will need to be extended up to our boundary for connection to the Sydney Water network.

4.3 Stormwater

Information received by North Sydney Council via DBYD on 20/08/2020 and subsequent information found via North Sydney Council's LGA interactive map by Cadcorp, shows a stormwater network characterised by an existing 900 dia. stormwater pipe located inside the site boundary running from the western boundary to the southern boundary. Upstream from this 900-dia. stormwater pipe is a junction pit, with a 750-dia. pipe as the inlet. This junction pit is within the site boundary. A kerb inlet pit along Harnett St has a vertical drop pipe which connects to the 750-dia. pipe below.

Towards the south-western corner of the site, within Harnett St is a Kerb inlet pit consisting of 2 x 3.6m Lintels supported by structural steel beams. This pit has a 450-dia. inlet pipe towards the south, and a 750-dia. outlet pipe, which runs along the Southern boundary of the site, within the neighbour's boundary. Both the 750-dia. pipe and 900 dia. pipe connect to a pit along the southern boundary, with the outlet being a 900 x 1550 culvert running inside the neighbour's boundary to the South.

Subject to Authority (North Sydney Council) approval application and detail design, realignment of the stormwater network to the perimeter wall along the western and southern boundary within the basement levels and install a stormwater easement (approximately 2.5m width) in accordance with North Sydney Council requirements is proposed. The development stormwater connection shall be made outside the property boundary via the stormwater pit located within the walkway between 45 McLaren Street & 150 Walker Street (South-East Corner of our site).



Photo consisting of stormwater pit with 2 x 3.6m lintels within Harnett St

4.4 Gas

Gas servicing infrastructure exists within the northern verge of McLaren St and within the western and eastern verge of Walker St. The distribution network is characterised by:

- 75mm dia. Nylon Bore main inserted into 4-inch (Nominal Bore) Cast iron pipe, 7 kPa Low pressure gas main within the northern verge of McLaren St (unknown distance from building/property line).
- 75mm dia. Nylon Bore main inserted into 4-inch (Nominal Bore) Cast iron pipe, 7 kPa Low pressure gas main within the eastern verge of Walker St (unknown distance from building/property line).
- 75mm dia. Nylon Bore main inserted into 4-inch (Nominal Bore) Cast iron pipe, 7 kPa Low pressure gas main within the western verge of Walker St (generally 1m from the building/property line).

5. Hydraulic Services Infrastructure Assessment Summary

Based on the available Authority information provided we would assess that there is availability of each of the aforementioned services for connection/extension to the proposed development.

Formal submission for approval to connect/ extend from each of the services will be required to the relevant Authority as design development and layouts progress.

We note applications to Authority may result in their requirement of Asset upgrade and/or extension. Calibre recommends during concept design and at pre DA stage an application be made with:

1. Sydney Water Corporation for their review of water and sewer mains assets including:
 - Water main Pressure and Flow Statement
 - Feasibility Statement (Pre Section 73 Notice of Requirements)

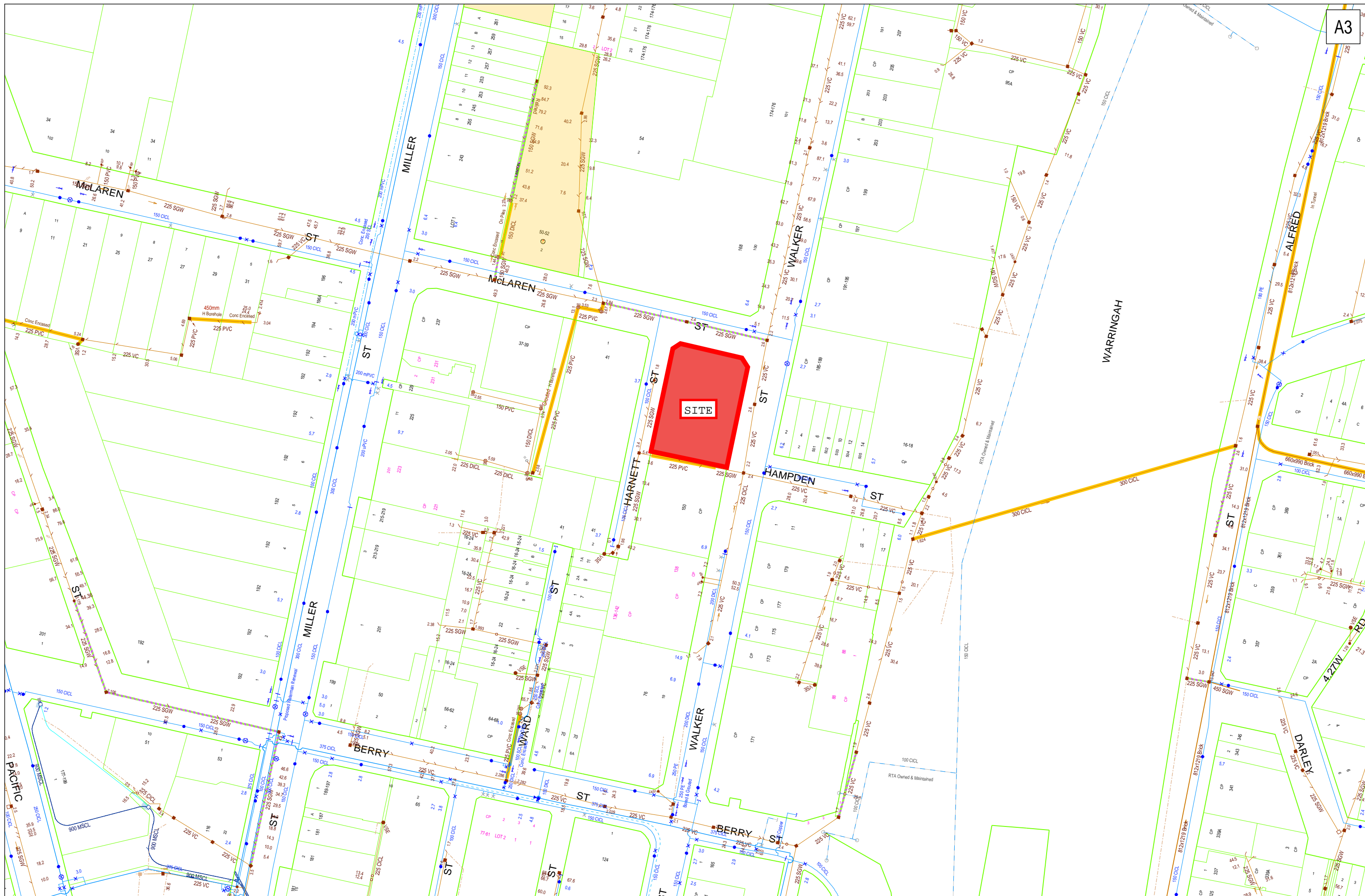
It should be noted that Sydney Water will not accept a Notice of Requirement (NOR) or Section 73 application without either a development consent or complying development certificate.

2. Jemena for their review of the gas assets including:
 - A Gas Availability check via an application for connection

The diversion of the existing stormwater drainage will require approval by North Sydney Council and we recommend that during the concept and pre-DA stages of the project that discussions are undertaken with Council to determine the requirements of the design so it can be documented and approved as part of the Development Application process.

Based on the current information and the investigation undertaken in preparing this report in support of the Planning Proposal Submission Calibre see no issues with the proposed development being undertaken on the Site.

Appendix A DBYD Supplied Sewer & Water Plan



DBYD Address:
45 McLaren Street
North Sydney NSW 2060

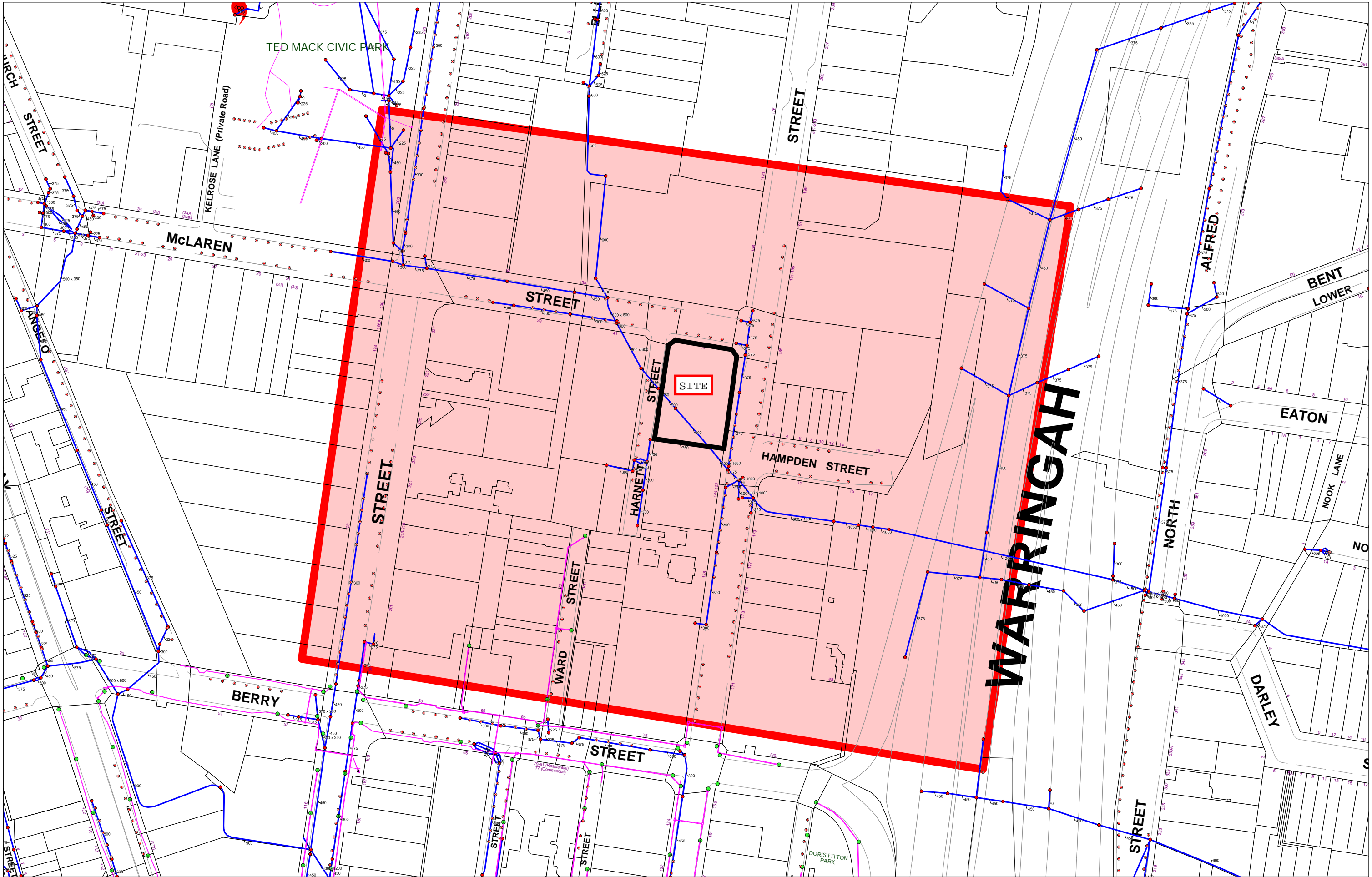
DBYD Job No: 20102041
DBYD Sequence No: 100961922

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SYDNEY WATER CORPORATION

Scale: 1:1500
Date of Production: 20/08/2020

Plan 2 of 3
0m 9m 18m 27m 36m
N
1m

Appendix B DBYD Supplied Stormwater Plan



North Sydney Council

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Further details can be obtained by calling (02) 9936 8100 or e-mail dbyd@northsydney.nsw.gov.au.

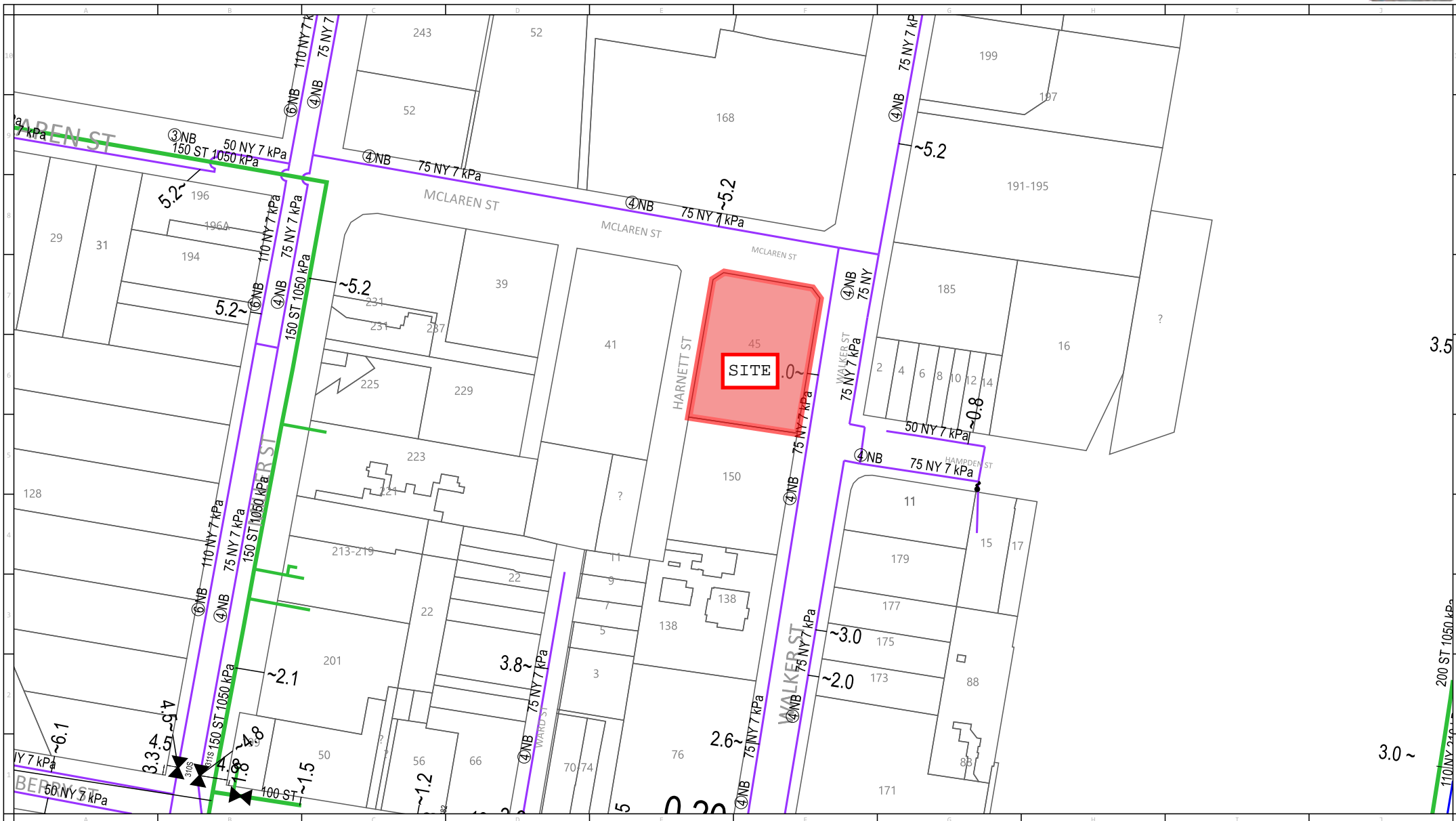
NORTH SYDNEY COUNCIL STORMWATER DRAINAGE/ UNDERGROUND POWER AND LIGHTPOLE FOOTINGS/ PARKING METER SENSORS

LEGEND	
Drainage Pipe	Gross Pollutant Trap
Drainage Pit	Litter Basket
Conduit / Cable	Distribution Board
Parking Meter Sensors	NSC Multi-Purpose Pole (Footing / Pole)

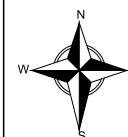
Job Number:	20102041
Seq Number:	100961912
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Date:	20:08:20
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Appendix C DBYD Supplied Gas Plan



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



Scale: 1:2000

Issue Date: 20/08/2020

DBYD Seq No: 100961921

DBYD Job No: 20102041

0m 10m 20m 30m 40m 50m 60m 70m 80m



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.

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