Infrastructure Delivery, Management & Staging Plan

2A GREGORY PLACE, HARRIS PARK

Revision

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1. Introduction

This Infrastructure Delivery, Management & Staging Plan report has been prepared at the request of **2A Gregory Place Pty Ltd** for the State Significant Development SSD-31179510, for a concept proposal for an affordable housing and build-to-rent development comprising approximately 483 dwellings within three freestanding four to eight storey buildings, at 2A Gregory Place, Harris Park.

The Infrastructure Delivery, Management and Staging Plan report is written in accordance with the Planning Secretary's Environmental Assessment Requirements (SEARS). In order, the objective of this report is to:

- Assess the impacts of the development on existing utility providers and infrastructure within the site's proximity
- Identify any potential upgrades to existing on-site and off-site infrastructure services
- Provide an infrastructure delivery and staging plan and documentation of any coordination, funding and delivery

SEARs Reference	SEARs Description	
21. Infrastructure	 In consultation with relevant service providers: 	
Requirements and Utilities	 Assess the impacts of the development on existing utility infrastructure and service provider assets surrounding the site. 	
	 Identify any infrastructure upgrades required in-site and off-site to facilitate the development and any arrangements to ensure that the upgrades will be implemented on time and be maintained. 	

2. Overview

The proposed development is a proposed build-to-rent (BTR) residential development at 2A Gregory Place, Harris Park in the City of Parramatta local government area (LGA).

The project includes approximately 483 dwellings across a total of 48,685sq.m of total gross floor area at an FSR of 2.5:1 within three (3) freestanding building forms that are arranged into an orthogonal layout of five fingers that vary in height from 4-8 storeys. The scheme incorporates 13,210m² (67.10%) of landscaped area on the ground plane, comprising courts, passages, accessways, parks and the Clay Cliff Creek channel walk. The three buildings are arranged on a common podium over a proposed two-level basement.

The application seeks consent for a Concept approval at this stage, to confirm the building footprints, massing, elevations, and access and movement arrangements. The application does not seek consent for development.



Figure 1 – site locality

3. Site Services

The following table (table 1) identifies the affect assets identified through the DBYD portal

Table 1 – Local Infrastructure Authority

Туре	Authority	Contact
Electricity	Endeavour Energy	(02) 9853 4161
Gas	Jemena Gas West	1300 880 906
Communication	NBN Co NSW Act	1800 687 626
Water	Sydney Water	13 20 92
Communication	Telstra	1800 653 935
Transportation	Transport for NSW	(02) 8837 028

Further information on these local authorities and the impacts of the SSD will be addressed in the following section.

4. Existing Infrastructure

4.1 Existing Power Infrastructure

The supply authority for the site is Endeavour Energy.

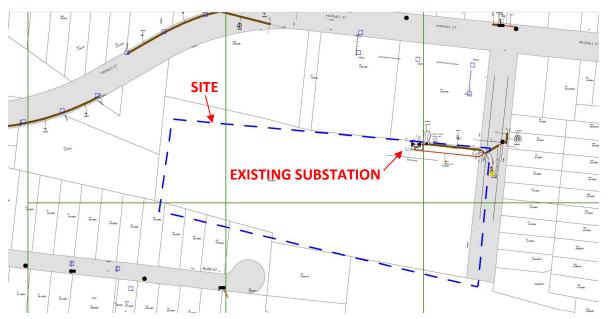


Figure 2 – Endeavour Energy Assets Surrounding the Site

The electrical infrastructure assets surrounding the site form part of the local Endeavour Energy distribution network for the local area and mainly consists of HV/LV feeders that supply power to the site as well as the local neighbourhood. The existing site is supplied through the existing onsite kiosk substation located along the northern boundary of the site, accessed through the north-eastern driveway off Gregory Place.

The proposal is currently a concept proposal, with the detailed design proceeding in the subsequent stages. It is recommended that with the commencement of the detailed design of the first stage, the relevant information is sought from Endeavour Energy in respect to the extent that the existing substation supplies neighbouring properties.

Based on the current drawings, it appears that the existing substation is located outside the proposed basement. IN order to maintain supply to the existing customers, the new chamber substation proposed is required to be established and existing customers cut over prior to demolition and removal of the existing substation.



Figure 3 – Existing substation in relation to the existing site

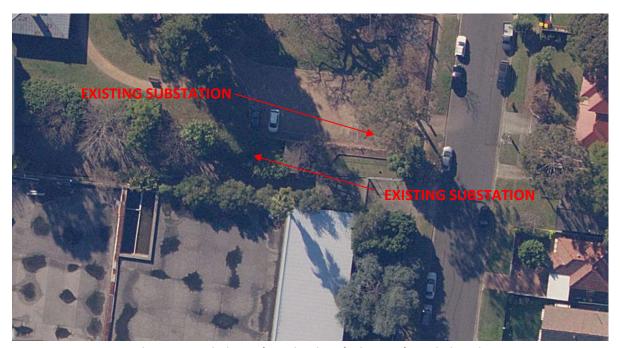


Figure 4 – Existing substation in relation to the existing site



Figure 5 – Existing substation in relation to the existing site

4.2 Existing Communications Infrastructure

Existing communications infrastructure is serving the site through the Telstra network.

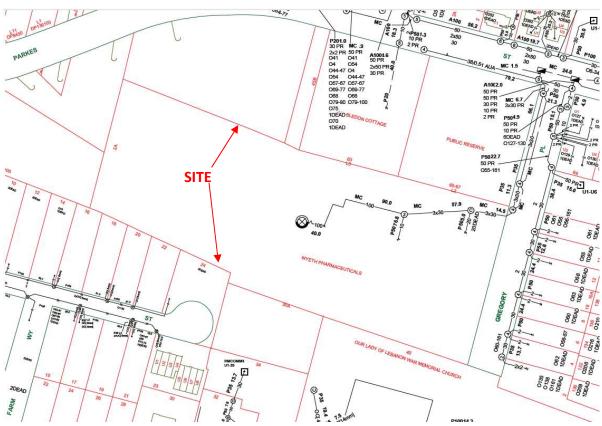


Figure 6 – Existing Telstra infrastructure

These services will be disconnected and made redundant as part of the new development works and replaced with new lead-ins.

4.3 Wastewater (Sewer)

The site is in the Sydney Water catchment for sewer infrastructure.

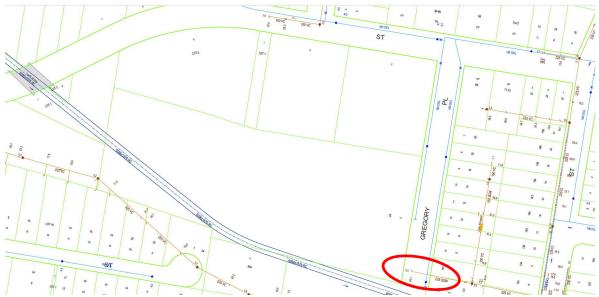


Figure 7 – Existing Site Sewer infrastructure

The site is currently serviced via a 225mm Salt Glazed Ware pipe which feeds into a 225mm Vitrified Clay pipe, at the south-eastern corner of the site.

An authority junction is located at the end of the pipe. It is anticipated that this will be the primary site connection.

A feasibility study would typically be issued to Sydney Water to confirm the connection point. However, in discussions with a Water Service Coordinator, the response time is currently over 8 months, due to the impacts of the COVID-19 pandemic on staffing and an increase in development demand.

The proposal is currently a concept proposal, with the detailed design proceeding in the subsequent stages. Considering the above, it is recommended that with the commencement of the detailed design of the first stage, a Notice of Requirements is sought from Sydney Water. This will confirm the connection point.



Figure 8 – South-Eastern Connection

4.4 Potable Water

The site is in the Sydney Water catchment for potable water infrastructure.

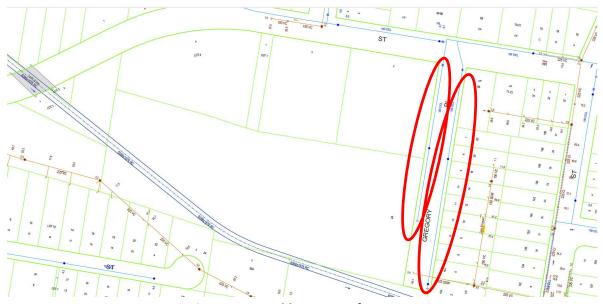


Figure 9 – Potable Water Infrastructure

The site is currently serviced via a 150mm Cast Iron Cement Lined water main located on the Western side of Gregory Place and a 100mm Cast Iron Cement Lined water main located on the Eastern side of Gregory Place.

The site is currently serviced by from the 150mm main.

The Water Services Association Australia (WSAA) stipulates those developments of 8 stores or more may require a minimum supply water main of 200mm. This is determined through Sydney Water.

A feasibility study would typically be issued to Sydney Water to confirm the water supply. However, in discussions with a Water Service Coordinator, the response time is currently over 8 months, due to the impacts of the COVID-19 pandemic on staffing and an increase in development demand.

The proposal is currently a concept proposal, with the detailed design proceeding in the subsequent stages. Considering the above, it is recommended that with the commencement of the detailed design of the first stage, a Notice of Requirements is sought from Sydney Water. This will confirm the water supply provisions.

It is noted that rainwater reuse is proposed to satisfy 80% of the apartments which will reduce the potable water demand.

4.5 Gas

The site is in the Jemena catchment for natural gas infrastructure.

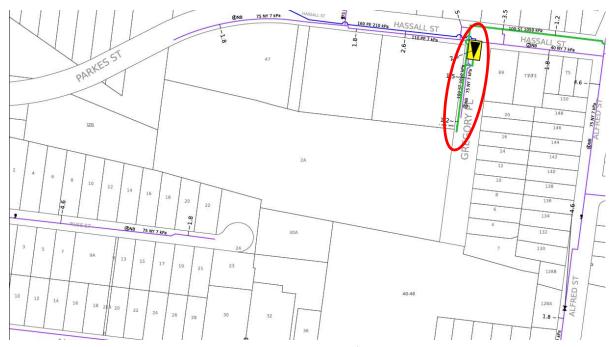


Figure 10 – Natural Gas Infrastructure

The site was serviced via a 100mm steel high pressure gas main with a pressure of 1050kPa, which is currently isolated.

The service enters Gregory Place solely to service the site due to its past industrial uses.

Should the proposal seek connect to gas, the existing supply can be reinstated through consultation with the supply authority.

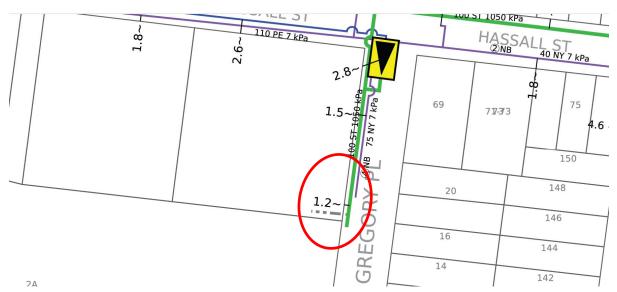


Figure 11 – Natural Gas Infrastructure



Figure 12 – Natural Gas Infrastructure

4.6 Wastewater (Stormwater)

The site is within the City of Parramatta LGA who manages and maintains the stormwater network. The area of Harris Park is also serviced by Sydney Water stormwater channels.

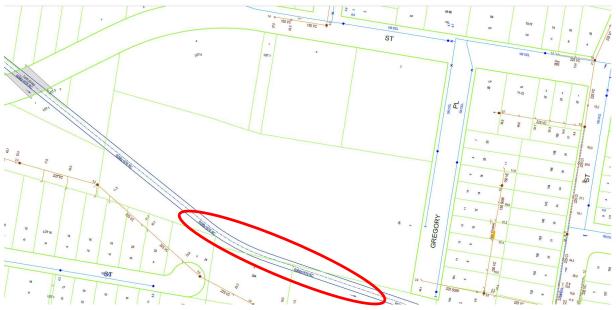


Figure 13 – Sydney Water stormwater Infrastructure

The site is bisected along the southern boundary by an open 6096mm wide x 1676mm high reinforced concrete channel.

It will be proposed to discharge the stormwater directly into the channel following adequate water treatment.

4.7 Road Infrastructure

The DBYD returned Transport for NSW infrastructure in the vicinity of the site. A review of the provided plans identified that the infrastructure relates to the signalised intersection of Purchase Street and Hassall Street. This intersection is approximately 70m from our northern boundary and not impacted by the proposal.

5. Proposed Infrastructure

5.1 New Power Infrastructure

The proposed concept has identified a location for a chamber substation.

The final size of the substation will be finalised with the detailed design and the power demand of the relevant systems (vertical transportation, air conditioning, ventilation, cooking, etc). Based on similar projects, It is anticipated that the maximum demand will require a triple transformer substation.



Figure 14 - Proposed Location of new Chamber Substation

An application for connection is required to confirm the above.

The new chamber substation will be delivered with the first stage of the project (see appendix 1 for staging plan), and prior to the decommissioning of the existing substation.

All costs associated with these works will be borne by the project.

5.2 New Power Infrastructure

In accordance with the policy on communications in new developments, where a project is within an NBN Co serviced area, NBN Co is the provider of last resort.

A search of the NBN Co website identified that NBN infrastructure is being rolled out in the area and is planned to be ready from June 2022, depending on the work required to permit premises to connect.

The technology used in the area roll out is Fire to the Curb (FTTC).

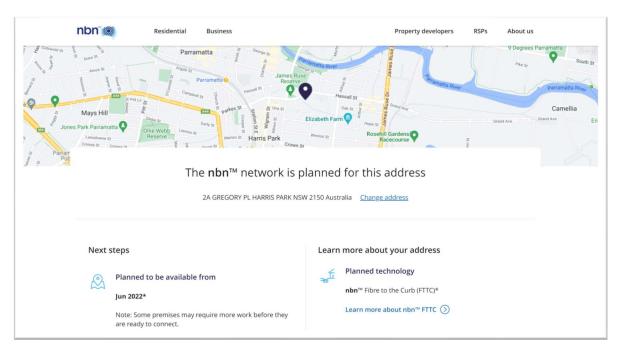


Figure 15 – NBN Co Website Screenshot

The proposal is at concept stage and the indicative basement design has not identified a dedicated NBN services room, however there appears to be ample space to accommodate a dedicated room during the detailed design stage.

It is anticipated that the network will enter the basement and run aerially into the service room. From there it will run aerially in the basement and up dedicated risers in each core of each building.

5.2 New Sewer Infrastructure

The requirement for new sewer infrastructure will be confirmed by Sydney Water upon the issuing of their Notice of Requirements (NOR).

Any required amplification of the mains and or encasements will be delivered with the first stage of the project (see appendix 1 for staging plan).

All costs associated with these works will be borne by the project.

5.2 New Potable Water Infrastructure

The requirement for new potable water infrastructure will be confirmed by Sydney Water upon the issuing of their Notice of Requirements (NOR).

Any required amplification or upgrading of the mains and will be delivered with the first stage of the project (see appendix 1 for staging plan).

All costs associated with these works will be borne by the project.

5.2 New Gas Infrastructure

The proposal is currently a concept proposal, with the detailed design proceeding in the subsequent stages. Considering the above, it is recommended that with the commencement of the detailed design of the first stage, consultation be undertaken with Jemena once the projects natural gas demand is determined.

Any required modification to the network will be delivered with the first stage of the project (see appendix 1 for staging plan).

All costs associated with these works will be borne by the project.

APPENDIX 1 – STAGING PLAN (PREPARED BY STANISIC ARCHITECTS)

