

# 159-167 Darley Street West, Mona Vale

Infrastructure and Utilities Assessment





Prepared for Intrec Management 08 July 2021



### **Document Information**

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3		Updated proposed developmen	t yields	



## **Executive Summary**

Service	Summary of Servicing Strategy
Potable Water	It is anticipated that there will be sufficient capacity in this water main to service the proposed development and that no lead-in potable water main would need to be constructed and/or upgrade to existing DN100 potable water main would be required, however a feasibility application should be made to Sydney Water to confirm the capacity of the existing infrastructure.
Wastewater	There are two existing wastewater mains which currently service the subject site A DN150 main runs along the site's frontage to Darley Street West and there is a second DN150 main which runs through the rear of the property with severa maintenance holes and maintenance shafts located where the main changes direction.
	It is anticipated that there will be sufficient capacity in these two wastewater mains to service the proposed development, and connection to one or both of these mains would be possible to service the development and that no upgrades to the existing infrastructure would be required, however a feasibility application should be made to Sydney Water to confirm the capacity of the existing infrastructure.
Electricity	There are existing Ausgrid electrical assets fronting the subject site, including underground HV cables and overhead LV cables. It is anticipated that a new padmount substation would likely be required to service the proposed development, however a feasibility application should be made to Ausgrid to confirm the capacity of the existing infrastructure. The anticipated point o connection to service the site is to connect to the underground HV network at the frontage of the development, cutting in to the existing HV cable network. There are additional spare conduits fronting the site, should additional cable be required to be brought in to service the development.
Telecommunications	The site is currently serviced with telecommunications infrastructure provided by Telstra and NBN is available in the area.
Gas	There is an existing 23mm nylon 300kPa medium pressure gas main which fronts the subject site on the western side of Darley Street West. The existing nylor main sits within a steel pipe for protection.
	It is anticipated that there will be sufficient capacity in this main to service the proposed development and that no upgrade to the existing gas main would be required, however an application should be made to Jemena to confirm the capacity of the existing infrastructure.



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### 1 Introduction

Enspire Solutions Pty Limited (Enspire) has been engaged by Intrec Management Pty Ltd (Intrec) to prepare an Infrastructure and Utilities Assessment in relation to the subject site located at 159-167 Darley Street West in Mona Vale, NSW.

The scope of this report is to review the capacity constraints of existing utility services in the area surrounding the subject site and identify the preferred servicing strategy to support future residential development of Intrec's landholding.

The subject site is located within the Northern Beaches LGA and is sited opposite the Bayview Golf Club west of Pittwater Road. The site comprises five (5) parcels of land with a total site area of approximately 6,230m<sup>2</sup>. The land subject of this investigation includes:

- Lot 1 DP 11108
- Lot 2 DP 11108
- Lot 3 DP 11108
- Lot 4 DP 11108
- Lot 5 DP 11108

Refer to Figure 1 below for the site locality plan.



**Figure 1 – Site Locality Plan** Source: NearMap 2021





#### **1.1** Scope of Investigation

The scope of work of this report includes undertaking a review of existing services information in relation to the subject site for the following:

- Potable Water and Wastewater: Sydney Water
- Electricity: Ausgrid
- Telecommunications: Telstra & NBN Co
- Gas: Jemena

This report presents the preferred servicing strategy for each of the abovementioned services. At this stage, limited stakeholder engagement has been undertaken due to the development's current status in the rezoning pathway. However, Intrec is continuing to progress discussions with relevant stakeholders to confirm service delivery strategies to facilitate development of the subject site.

#### 1.2 Limitations

Enspire has prepared this report for the exclusive use of Intrec for this project only and for the purposes as described in this report. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of Enspire, does so entirely at its own risk and without recourse to Enspire for any loss or damage. In preparing this report limited authority engagement has been undertaken and Enspire recommends that the servicing of the site should be verified with each service Authority by submitting the relevant applications and completing the detailed planning and design processes required by each authority.

This report aims to faithfully convey the outcomes of investigations, meetings and discussions in order to accurately and adequately define the opportunities and constraints of the site. This investigation has not sought to accommodate all potential constraints for the proposed development.





### 2 Utility Infrastructure Capability Assessment

#### 2.1 Proposed Development

This investigation has been undertaken based on an indicative development concept masterplan prepared by Intrec and its consultant team. The masterplan proposes three two-storey townhouses and two separate two-storey residential flat buildings comprising 28 one, two and three bedroom apartments. In addition, basement parking will be constructed to provide off-street parking for the residential flat buildings.

Intrec are proposing to rezone the subject site from R2 – Low Density Residential land to R3 – Medium Density Residential land in order to develop approximately 41 dwellings on site.

### 2.2 Utilities Infrastructure

#### 2.2.1 Potable Water

There is an existing DN100 potable water main which fronts the subject site on the western side of Darley Street West.

It is anticipated that there will be sufficient capacity in this water main to service the proposed development and that no lead-in potable water main would need to be constructed and/or upgrade to existing DN100 potable water main would be required, however a feasibility application should be made to Sydney Water to confirm the capacity of the existing infrastructure.

A Section 73 certificate application to Sydney Water will be necessary to commence the overall planning process. Sydney Water will issue a Notice of Requirements and a Developers Agreement to outline the servicing requirements for the proposed development.

Figure 2 below indicates the location of the existing potable water main fronting the subject site.





Figure 2 – Existing Potable Water Servicing Infrastructure

Source: DBYD February 2021, Sydney Water response

### 2.2.2 Wastewater

There are two existing wastewater mains which currently service the subject site. A DN150 main runs along the site's frontage to Darley Street West and there is a second DN150 main which runs through the rear of the property with several maintenance holes and maintenance shafts located where the main changes direction.

It is anticipated that there will be sufficient capacity in these two wastewater mains to service the proposed development, and connection to one or both of these mains would be possible to service the development and that no upgrades to the existing infrastructure would be required, however a feasibility application should be made to Sydney Water to confirm the capacity of the existing infrastructure. These existing DN150 wastewater mains drain in a northerly direction and connect to an existing DN1350 trunk wastewater main which runs through the adjacent Bayside Golf Course development.

Depending on the final development built form, it may be necessary to adjust the existing location of the wastewater infrastructure located to the rear of the subject site. An application to adjust/deviate this existing main to Sydney Water would then be necessary to commence the overall planning process.

A Section 73 certificate application to Sydney Water will be necessary to commence the overall planning process. Sydney Water will issue a Notice of Requirements and a Developers Agreement to outline the servicing requirements for the proposed development.



Figure 3 below indicates the location of the existing wastewater infrastructure which currently services the subject site.



**Figure 3 – Existing Wastewater Servicing Infrastructure** Source: DBYD February 2021, Sydney Water response

#### 2.2.3 Electrical Servicing

There are existing Ausgrid electrical assets fronting the subject site, including underground HV cables and overhead LV cables. There are also existing spare ducts in Darley Street West which could be used to extend the existing network from nearby Ausgrid assets to provide sufficient supply for the proposed development.

It is anticipated that a new padmount substation would likely be required to service the proposed development, however a feasibility application should be made to Ausgrid to confirm the capacity of the existing infrastructure. The anticipated point of connection to service the site is to connect to the underground HV network at the frontage of the development, cutting in to the existing HV cable network. There are additional spare conduits fronting the site, should additional cable be required to be brought in to service the development.

An application to Ausgrid will be necessary to commence the overall planning process. Ausgrid will issue a Connection Offer and Design Brief outlining the servicing requirements for the proposed development.

Figure 4 below indicates the location of the existing HV infrastructure and potential connection point to extending the HV network to supply the proposed development.





#### Figure 4 – Existing Ausgrid HV Electrical Infrastructure

Source: DBYD February 2021, Ausgrid response

#### 2.2.4 Telecommunications

The site is currently serviced with telecommunications infrastructure provided by Telstra and NBN is available in the area.

NBN Co is the wholesale provider of broadband access predominately to retail service providers though two service categories, fixed line and wireless. Therefore, the provision responsibility in the area would be upon NBN Co as the provider of last resort for fibre optic broadband.

A future application to NBN Co will be required to provide an optic fibre connection to the proposed development and NBN Co will formally confirm the details of the provision of the NBN services to the development.

Figure 5 below indicates the location of the existing telecommunications infrastructure which currently services the subject site.





Figure 5 – Existing Telstra Telecommunications Infrastructure Source: DBYD February 2021, NBN Co response

#### 2.2.5 Gas

There is an existing 23mm nylon 300kPa medium pressure gas main which fronts the subject site on the western side of Darley Street West. The existing nylon main sits within a steel pipe for protection.

It is anticipated that there will be sufficient capacity in this main to service the proposed development and that no upgrade to the existing gas main would be required, however an application should be made to Jemena to confirm the capacity of the existing infrastructure.

An application to Jemena will be necessary to commence the overall planning process. Jemena will then provide a Formal Natural Gas Connection Offer.

Figure 6 below indicates the location of the existing gas main fronting the subject site.



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**Figure 6 – Existing Jemena Gas Infrastructure** Source: DBYD February 2021, Jemena response

### 3 Conclusion

This report summarises the current status of utilities and anticipated servicing requirements to meet the needs of the development. This report has been prepared to support a planning proposal to rezone land at 159-167 Darley Street West, Mona Vale.

The assessment has reviewed the provisions for potable water, wastewater, electricity, gas and telecommunications to service the site. All service reviews undertaken in this report indicate the proposed development can be serviced.