

Infrastructure Servicing Assessment

Lara Farms C453- Rennie
St, Lara

November 2024

Loetis Pty Ltd
Version: RevC





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1 Background

1.1 Introduction

Loetis has been engaged by Lara Farms Pty Ltd to complete an Infrastructure servicing assessment (ISA) to accompany the rezoning application for the subdivision of a collection of properties known as 'Lara Farms'.

These properties are individually identified as

- 785-805 Princes Highway, Lara (Part)
- 705-765 Princes Hwy, Lara

Collectively, these properties will be herein referred to as the 'subject site'.

The subject site is currently undergoing a rezoning application.

- Proposed planning scheme amendment C453 proposes to rezone 785-805 Princes Highway (Part), 705-765 Princes Hwy, Lara (Part) and 610 Rennie Street Lara (Part) for industrial / commercial purposes.

This report is intended to be read in conjunction with and support this application, noting that there is a neighbouring application to rezone the adjacent properties under rezoning application C444. These two sites have shared stormwater catchments and proposed treatment assets.

It is noted that earlier reports commissioned by Lara Farms Pty Ltd were prepared by Planit Consulting and accompanied an earlier version of the planning application documents. This report supersedes these earlier applications, however, in part draws and expands on some of the works previously undertaken by Planit Consulting.

1.2 Project Background

The subject site is approximately 75 hectares in overall size and is situated in the southeast corner of the Lara Township. This subject site falls within the City of Greater Geelong municipality and is currently zoned Farm Zone (FZ).

Proposed planning scheme amendment C453 proposes to rezone 785-805 Princes Highway (Part), 705-765 Princes Hwy, Lara (Part) and 610 Rennie Street Lara (Part) to industrial 1 and 3 zones. This land area covers approximately 75Ha of land.

The overall site extent and a concept development plan is detailed in Figure 1 below.

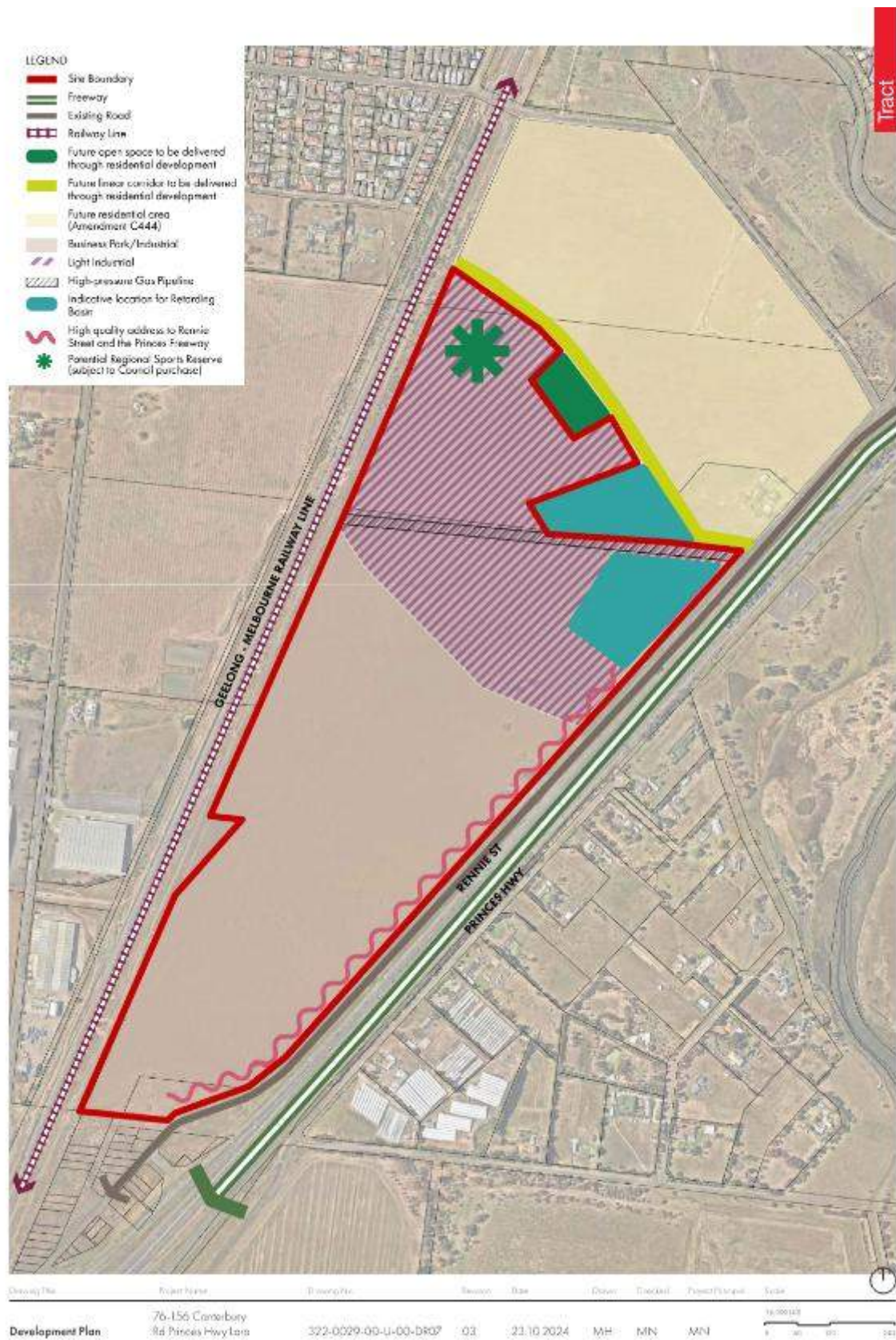


Figure 1 -Proposed Development Site

1.3 Site Description

The site is surrounded by Rennie Street to the South-East, railway to the North-West, and local farmlands to the North-East and South-West and generally bounded by:

- 76-156 Canterbury Road, Lara to the north.
- Rennie Street to the South.
- Railway corridor to the Norther-West and West.

The rezoning is proposed to occupy approximately 83 Ha of the southern area of the farmland, a major part of which has been identified under the Lara Structure Plan for industrial zoning.

1.4 Received Information

Loetis has undertaken an online search using Before You Dig (BYD), receiving responses from the following organisations.

- Powercor Australia Ltd
- City of Greater Geelong
- AusNet Gas Services Pty Ltd
- Barwon Water
- Communications Providers:
 - Telstra VICTAS
 - NBN Co VicTas
- APA
- Viva Energy (Fuel Pipeline)

Following receipt of the above, requests have been made to the relevant service authorities and or specialist consultants to provide further servicing advice from the following organisations.

- Barwon Water
- NBN Co VicTas
- Flint Power (Electrical)
- Ratio (Traffic Impact Assessment)

1.5 Limitations

This report is based on interpretation and assessment of data provided by third parties. Loetis cannot be held responsible for the accuracy of third-party data, our conclusions and recommendations extending from this report may change if the data is amended or updated after the time of publication.

2.1 Access

Direct access to the site can be made from the surrounding road reserve of Rennie Street.

A separate traffic assessment (TIA) has been prepared by Ratio to inform all access and traffic treatment requirements for the proposed development. Please refer to this TIA for all access information.

2.2 VicTrack

A VicTrack reserve exists on the western boundary of the site which contains the Geelong-Melbourne rail line.

No development works are explicitly required within the rail reserve as part of this proposed rezoning, however it is noted that as outlined below in the sewer servicing section, it has been identified by Barwon Water that the sewer rising main for the site will need to traverse the rail corridor to the south of the subject site.

Any works that overlap into the VicTrack reserve will also require separate review, engineering and approvals as per typical VicTrack approval guidelines.

2.3 Drainage

A stormwater management plan (SMP) has been prepared by Loetis for the subject site, detailing stormwater management strategy. This SMP also includes, in conjunction an assessment of impacts on the downstream receiving waterways and a Flood Impact Assessment by Venant Solutions.

Please refer to the separate reports for all stormwater and drainage related requirements.

2.4 Sewer

Servicing advice from Barwon Water has advised that there are no nearby sewer assets on the eastern side of the railway corridor or south of Hovels Creek, and servicing by new sewer pump stations would be necessary.

Barwon Water has suggested *'that the proposed rezoning area requires a new sewer pump station and a sewer raising main to connect to BW sewer network at the MH GID617772, along the Rennie St and Manda St. This proposed sewer alignment differs from the previous sewer advice provided by BW'.*

The proposed connecting MH location (MH GID617772) is located at the intersection of Heales Road and Forrest Road South in Corio.

The below figure provided by Barwon Water outlines the proposed sewer pump station location and the indicative alignment of the proposed sewer rising main connection locations for the subject site.

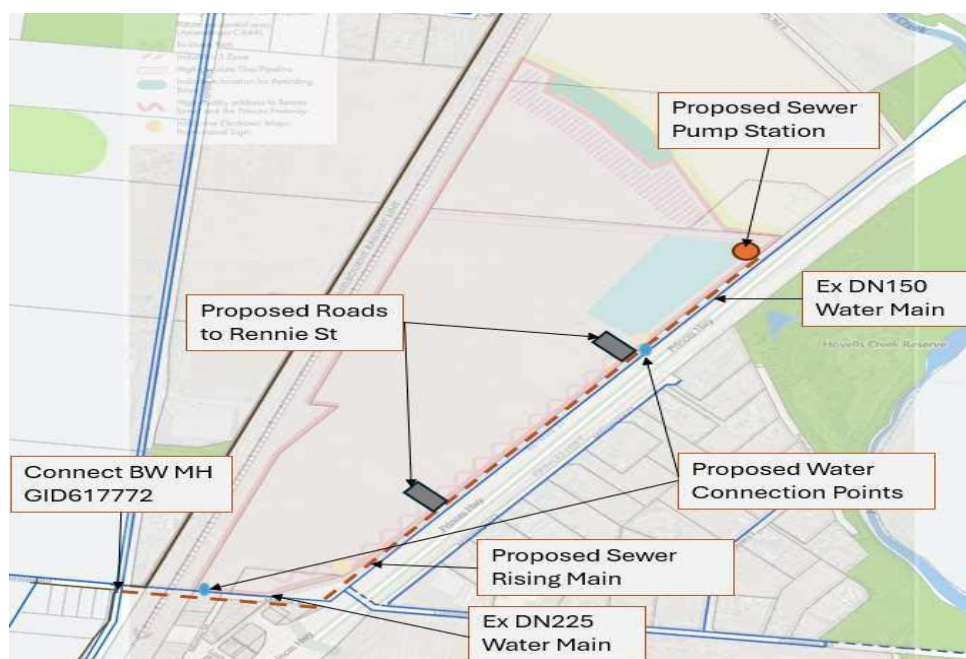


Figure 2 – Barwon Water Sewer Advice

Sizing and delivery of the pump station will be confirmed during detailed design. The rising main will need to be constructed within existing road reserves and or easements and designed around existing utilities where applicable.

Staging of the proposed development will need to consider infrastructure delivery of the pump station and rising main, design infrastructure will be required in the first stage of the development.

A copy of the Barwon Water servicing advice is provided in Appendix A.

2.5 Potable Water

Barwon Water have confirmed that the existing DN150 in Rennie Street and the DN22mm watermain located directly to the south of the subject site, will be adequate to provide water supply for the development and be able to maintain the desired minimum test pressure of 30m.

Staging with the residential development will need to consider infrastructure delivery of the water main connections. The below figure demonstrates the expected water supply feed in.

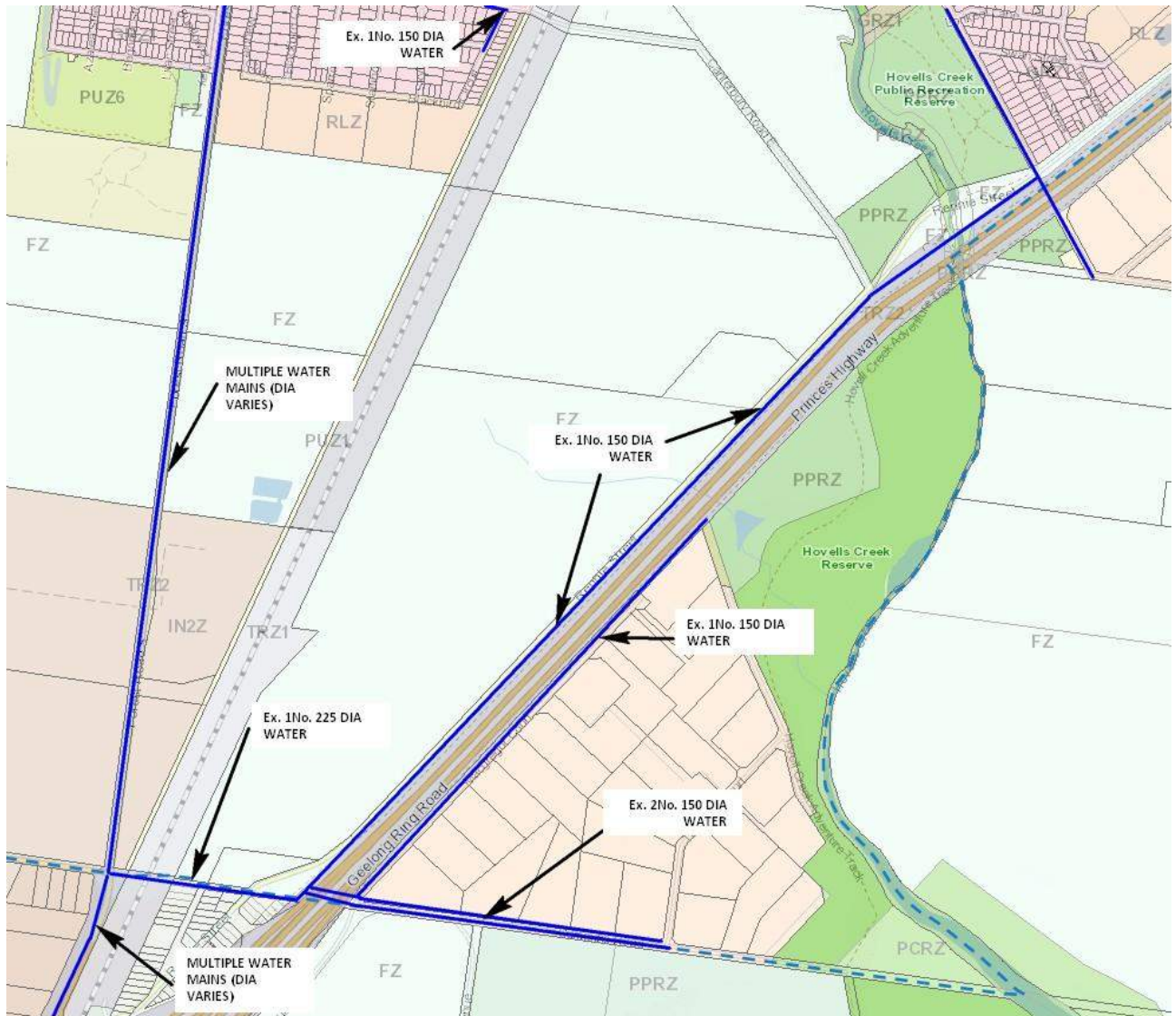


Figure 3 – Barwon Water Potable Water Service Advice

A copy of the Barwon Water servicing advice is provided in Appendix A.

2.6 Recycled Water

Barwon Water has not provided servicing advice for recycled water and it is not expected that any infrastructure will need to be provided. The Lara catchment is outside of the proposed area for provision of recycled water reticulation.

2.7 Electricity

The electrical service supply in the region is provided by Powercor. Service advice was sought from Flint Power to provide options for electrical supply to the residential and industrial development.

Flint Power provided an assessment of the existing supply to the site which is presented in Appendix B.

2.8 Gas Reticulation

As per the Victorian government announcement in mid-2023, as of 1 January 2024, gas reticulation is no longer to be provided to new estates and new residences.

Notwithstanding, the following assessment has been made from BYDA information and will need to be re-assessed upon formal recommendations provided by Ausnet. Noting that commercial and industrial developments can still be connected, it is understood that in this development is not proposed to be connected to gas at this time.

Should this decision be revised, according to the BYDA data received from AusNet Gas Services and as illustrated in Figure 8(a) to (c), there is an existing gas network located in the residential development to the North-West. The size of the existing assets is relatively small, and it is anticipated that it may not meet the required loading for this type of development, however there is no statutory requirement for gas to be provided.

An existing high-pressure gas line asset also exists within the site. This asset is a high-pressure gas transmission line, located in an existing easement and is governed by APA Group. No servicing will be available from this asset.

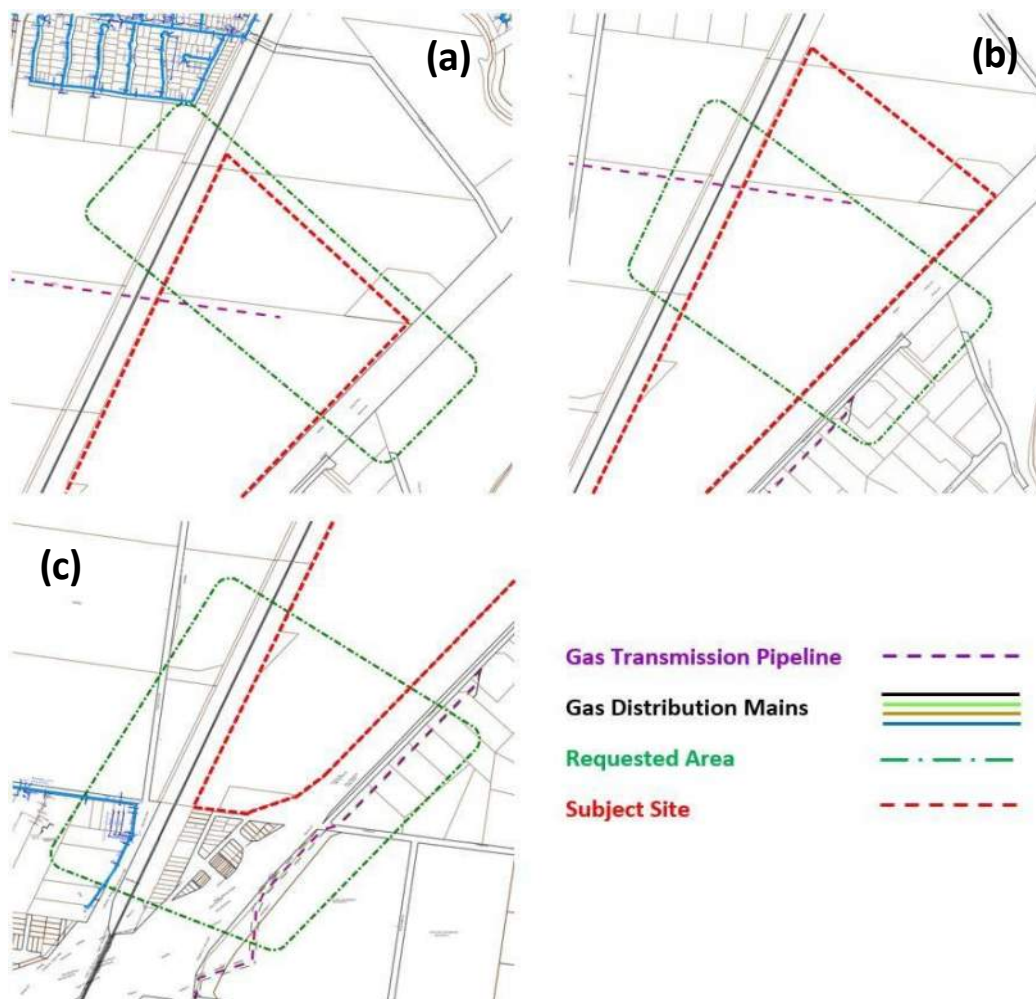


Figure 4 – Gas assets in the vicinity of the subject site

2.9 High Pressure Gas Transmission (APA Group)

As mentioned in Section 2.8, there is an existing high-pressure gas line asset which runs east / west through the northern portion of the subject site. This asset is a high-pressure gas transmission line, located in an existing easement and is governed by APA Group.

APA Group have been consulted and a Safety Management Study (SMS) has been undertaken for the proposed development. This SMS assesses risks associated with the gas main and the proposed development and outlines protection measures to ensure acceptable levels of safety are maintained at all times.

Figure 5 below is an extract from the BYA records.

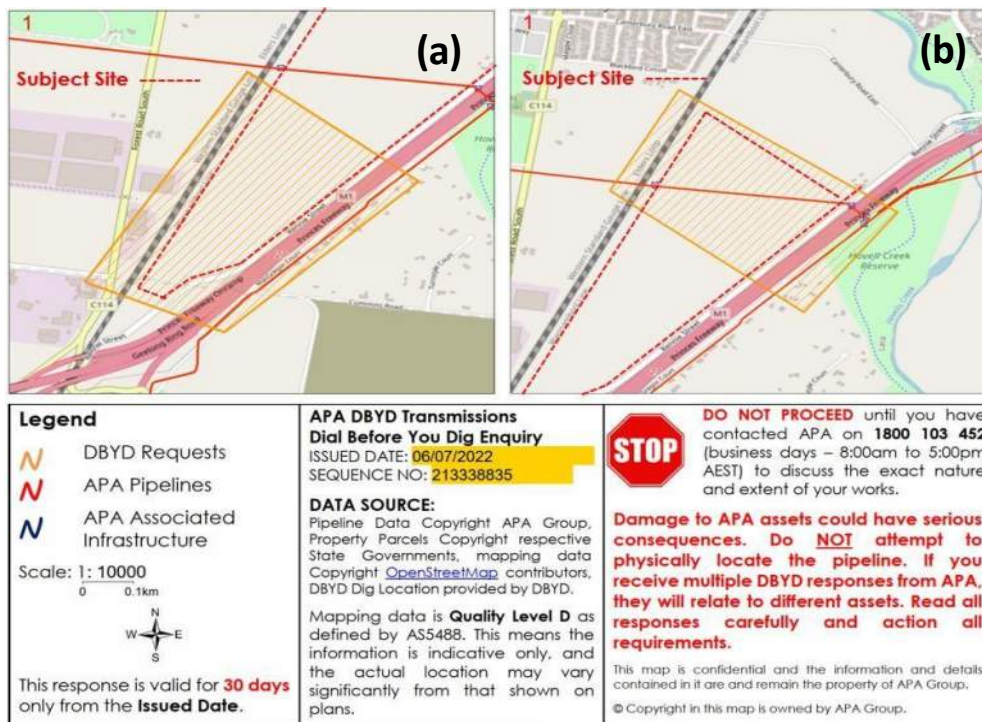


Figure 5 – APA Group BYDA information

2.10 Hydrocarbon Pipeline (Viva Energy)

Before You Dig advice received from Viva Energy indicates that there are high pressure hydrocarbon (fuel) pipelines in the vicinity of the subject site. It should be noted that due to the large area of the proposed development, BYDA information was obtained for two adjacent smaller areas as depicted in Figure 6(a) and 6(b).

Figure 10(c) is a zoomed-in area representing tile number 3 of Figure 5(b), and it shows that an existing WOPL 200mm High Pressure Oil Pipeline is located on the east side of Rennie Street clear of the proposed development.

All works within the pipeline corridor require a Viva Energy Right of Way (ROW) permit. The pipeline location and alignment will need to be proved under the supervision of a Pipeline Surveillance Inspector. Similarly, any mechanical work within 3m of the pipeline will be subject to approval from Viva Energy.

Preliminary discussions are ongoing with Viva, with a Safety Management Study also programmed to be undertaken at the appropriate time for the Viva assets.

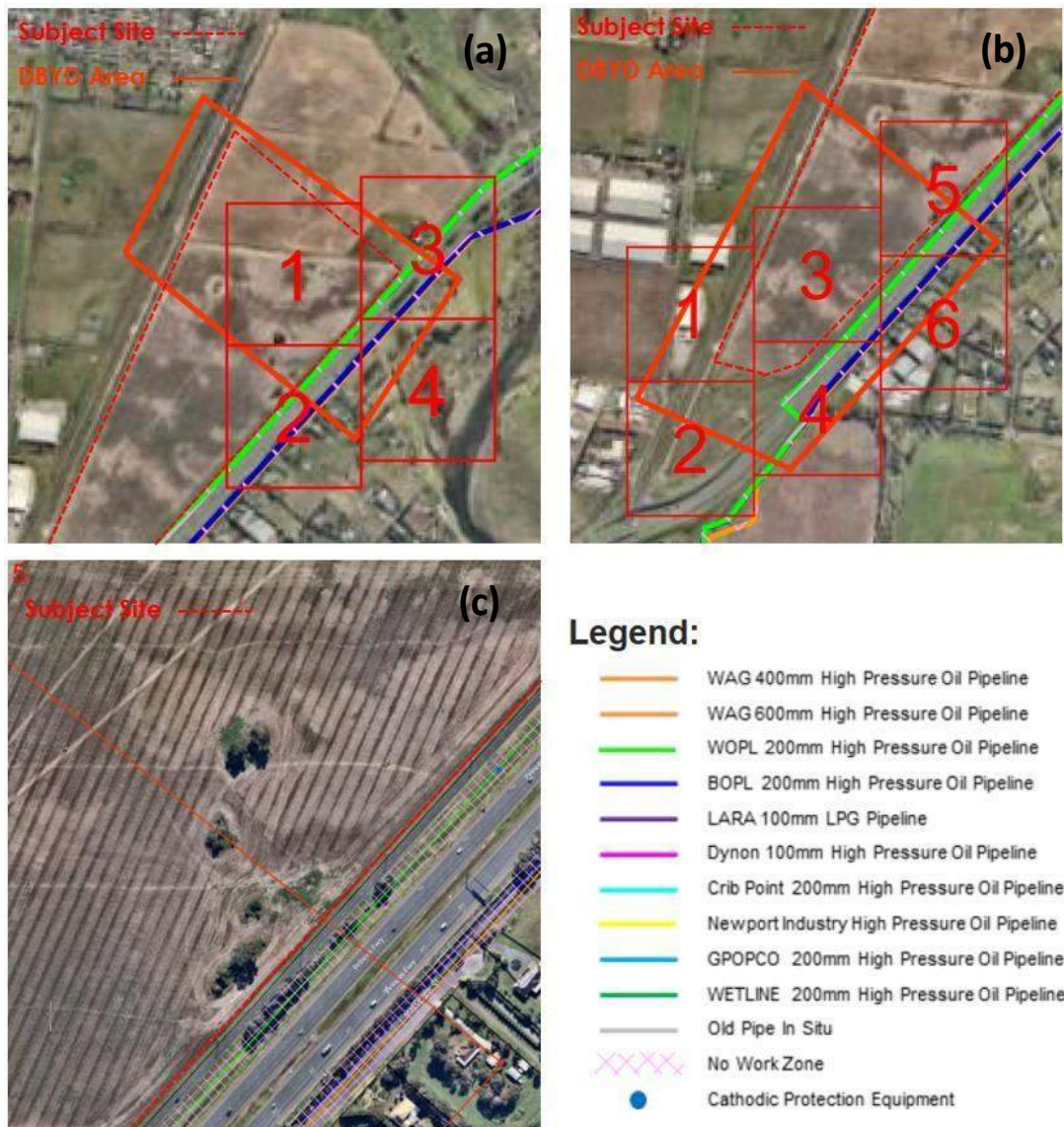


Figure 6 – Viva Energy BYDA information

2.11 Telecommunications

Servicing advice from the NBN has identified that they have an existing fixed line boundary highlighted in purple adjacent to the subject site.

Preliminary advice from the NBN has confirmed that the existing infrastructure has the capability of servicing the proposed development. The extent of extension of any existing assets will be dependent on the location of any proposed access to the development.

A copy of the NBN response is enclosed in Appendix C to this report.

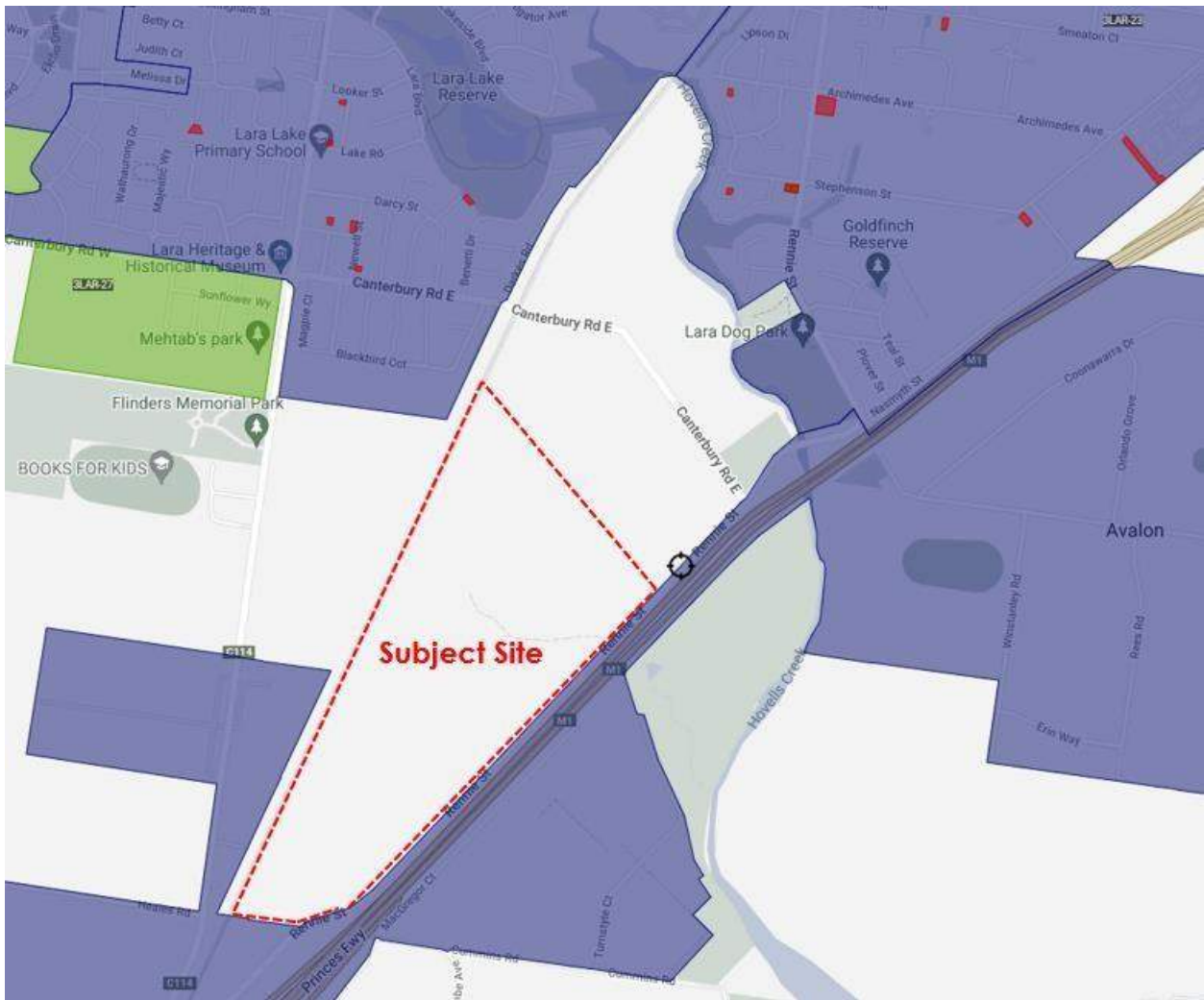


Figure 7 – NBN servicing advice



3 Conclusion & Recommendations

The subject site at 785-805 Princes Highway (Part), 705-765 Princes Hwy, Lara (Part) and 610 Rennie Street Lara is well accessed and serviced via existing and proposed roads and authority service assets with ready connection to electrical, communications drainage, potable water and sewer networks.

As such, it is considered that there are no major infrastructure servicing constraints on the land developed. Subject to the final development proposal and supply requirements, there may be some upgrades required to existing infrastructure which can be considered as part of further detailed assessments.

The following table summarises the serviceability of the subject site.

Service	Authority	Serviceability
Access	City of Greater Geelong	Yes
Drainage	City of Greater Geelong	Yes
Sewer Reticulation	Barwon Water	Yes
Potable Water Reticulation	Barwon Water	Yes
Recycled Water Reticulation	Barwon Water	No
Electrical	Powercor	Yes
Gas	Ausnet	Available but no connection proposed
Telecommunications	NBN Co & Telstra	Yes
High Pressure Gas	APA	N/A
Hydrocarbon	Viva	N/A



Appendix A – Barwon Water Preliminary Servicing Advice



Barwon Water Ref: A26132890
 CoGG Ref: C453

1 February 2024

Coordinator Strategic Implementation
 City of Greater Geelong Council

Dear COGG,

Re: Planning Scheme Amendment C453 – Lara Business Park, 705-765 Princes Hwy, and a portion of 785-805 Princes Highway - Rezoning

I write in response to your email dated 19 January 2024, regarding the above-mentioned Amendment C453, which seeks to rezone the subject area from Farming Zone to Industrial 2 and 3 zones (IN2Z and IN3Z) as well as the Design & Development Overlay Schedule 50 to the land affected by the amendment.

Barwon Water (BW) has previously provided high level servicing advice in relation to above mentioned area in various occasions. The subject area occupies approximately 83Ha of the southern area of the farmland and has been identified for potential growth opportunity in Lara Structure Plan and Lara South Investigation Area by COGG.

BW has reviewed the referral documents for the planning scheme amendment C-453 in relation to drinking water and sewerage services for the subject area. As per the Infrastructure Servicing Assessment Report prepared by Planit Consulting Pty Ltd, the subject area is located within the 1 km buffer to Geelong Ring Road Employment Precinct (GRREP) and proposed to have a Specialised Activity Centre. As per the land usage described in the Victorian Planning Scheme 33.03 Industrial 3 Zone, BW assumes that the subject area will have a high-water usage of 5000 l/ ha/ day. The following table depicts the future water and sewerage demand for the proposed rezoning area:

Table 1 - Water Demand for the proposed rezoning area

Area (Ha)	Usage (H/L)	Usage L/Ha/d	Water			Sewer		
			Usage (ML/d)	ADD (L/s)	PDD (L/s)	Usage (ML/d)	ADWF (L/s)	PWWF (L/s)
83	High	5000.00	0.42	4.80	9.61	0.33	3.84	7.69

Water Supply

BW advises that the current water infrastructure has sufficient capacity to meet the peak demand for drinking water in the specified area, maintaining a desired minimum pressure of 30 m. The proposed development site can access drinking water through an existing DN150

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AC main located in Rennie St and DN225 AC main located in Manda St. BW supports and endorses the suggested alternatives described in the Infrastructure Assessment Reports prepared by Planit Consultants.

Sewer Supply

BW suggests that the proposed rezoning area requires a new sewer pump station and a sewer raising main to connect to BW sewer network at the MH GID617772, along the Rennie St and Manda St. This proposed sewer alignment differs from the previous sewer advice provided by BW. BW supports to connect the proposed rezoning area with the BW sewer system as shown the image below.



Figure 1 - Recommended Water and Sewer connections

Based on the comments above, Barwon Water supports amendment C453. If you have any further enquiries, please contact Rhys Bennett, Network Planning Co-ordinator on 52262328.

Integrated Water Management

In our role as Barwon Region IWM Chair, Barwon Water has an interest in integrated water management across the region.

The impact of increased stormwater volumes on receiving waterbodies from new development is an emerging topic of concern throughout the region. This includes at Torquay North and the Karaaf Wetland, Avalon Employment Precinct and Limeburner's Bay and Avalon Coastal Reserve, and the impact of the Growth Areas North West of Geelong and

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Bannockburn on the Moorabool and Barwon rivers, as well as Lake Connewarre and Limeburner's Bay.

This development will add further stormwater volume to Hovell's Creek and Limeburner's Bay and thus, in accordance with EPA Guidance note 1739.1 *Urban Stormwater Management Guidelines*, opportunities to reduce that volume should be explored.

Summary

Inline with the advice above, Barwon Water does not object to Amendment C453.

Yours Faithfully,

Co-ordinator Network Planning

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Appendix B – Lara Farms – Flint Power Electrical Report

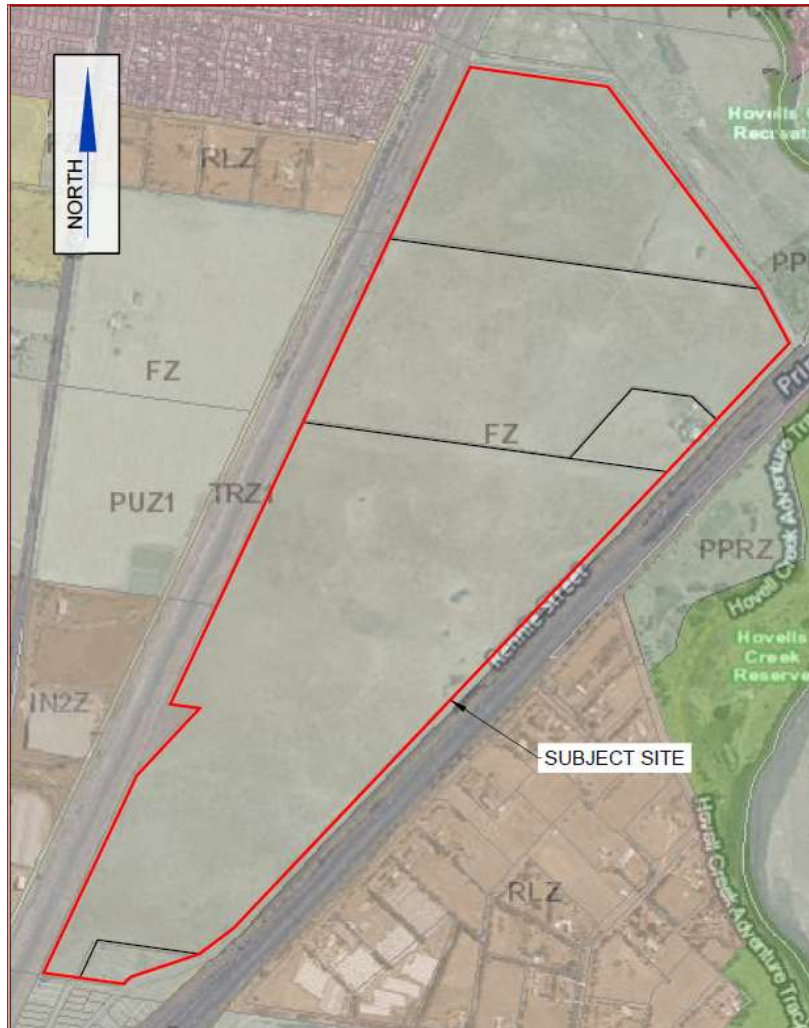
LARA FARMS

ELECTRICAL REPORT

76-156 Canterbury Road East (SPI 3C-15B\PP5452),

785-805 Princes Highway (SPI 1\TP156147),

705-765 Prices Highway Lara (SPI 2\LP98249)



Introduction

This report is to provide preliminary advice on the current electricity supply surrounding properties: 76-156 Canterbury Road East (SPI 3C-15B\PP5452), 785-805 Princes Highway (SPI 1\TP156147), 705-765 Prices Highway Lara (SPI 2\LP98249) and what will be required to obtain formal Powercor advice on the quantity of supply that can be granted without assets being upgraded, and what upgrades will need to be done to adequately supply the entire development.

It is acknowledged that the property layouts are not finalised and we are talking in general terms and it is expected that there will be numerous changes before the development is settled.

Summary of key data

Residential Load

Expected approximate number of residential Lots 800 (as provided by civil consultant). This residential development would be classified as medium density (more than 5 lots per hectare).

There will be no Gas, the current electrical allocation per lot is 5.5kVA as defined in Powercor standard DA411, Southern region.

Medium density developments inside the Southern region allows for 51 customers per 315kVA Kiosk Substations (SS) as defined in PCA1 standard DA431.

Total load 4,400 kVA. Let's say 4,500kVA (4.5MVA)

RESIDENTIAL	
LOTS	800
"Southern" kVA per Lot	5.5
Customers per 315kVA SS	51
Number of kiosks	16
TOTAL LOAD - kVA	4400

Industrial Load

Expected number of Industrial Lots 350-400 (as provided by civil consultant). Industrial electrical allocation per Lot is 25kVA.

Total load 10,000 kVA (10MVA)

Powercor has a preference to use 315kVA substation over 500kVA, however in industrial development they are inclined to use 500kVA. Below is an indication of the likely number of kiosk subs. In reality it is more likely to be a combination of both 315 & 500 kVA substations.

INDUSTRIAL 500kVA Subs	
LOTS	400
kVA per Lot	25
Customers per 500kVA SS	20
Number of kiosks	20
TOTAL LOAD - kVA	10000

INDUSTRIAL 315kVA Subs

LOTS	400
kVA per Lot	25
Customers per 315kVA SS	12
Number of kiosks	34
TOTAL LOAD - kVA	10000

Total load for residential and Industrial = 14,500kVA (14.5MVA)

Overview of Supply Capacity

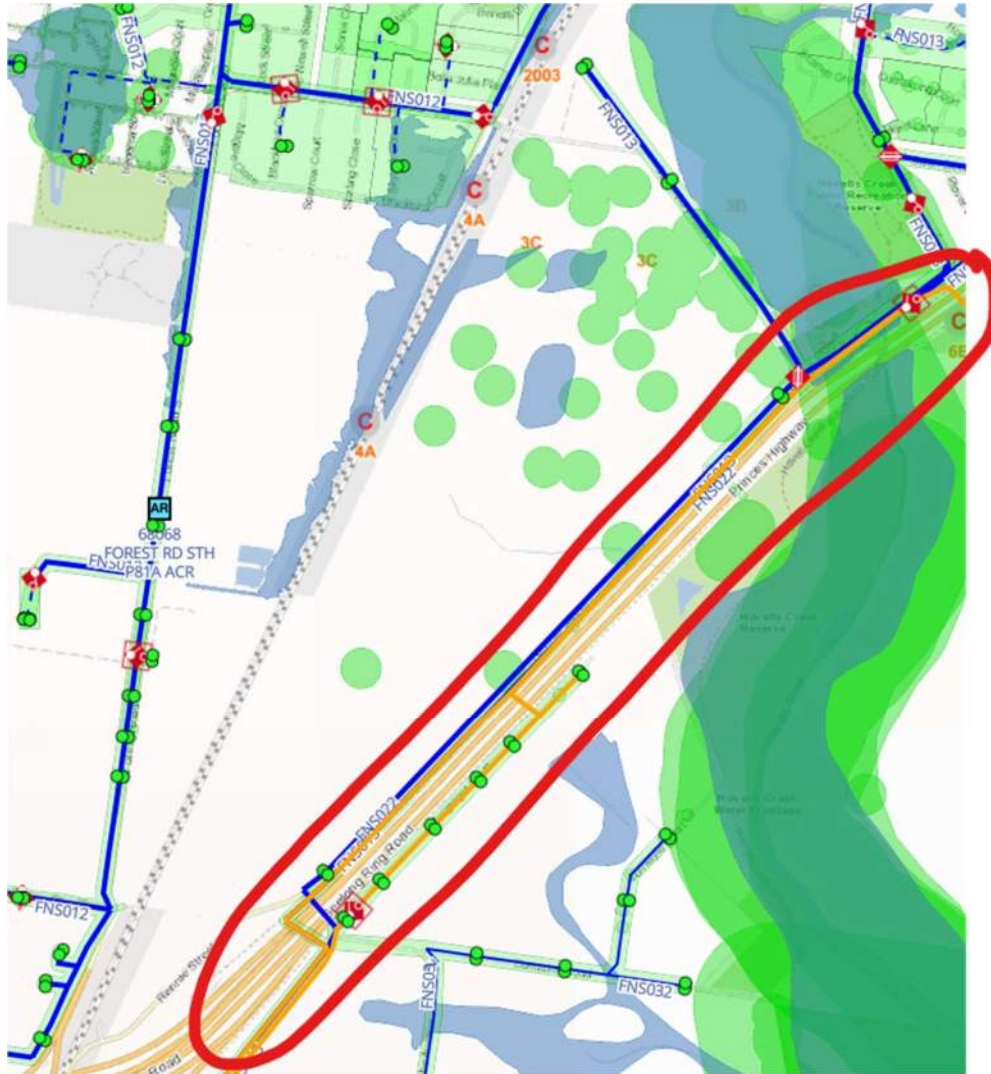
Based on the above information and with the Powercor tools we have available, we can confirm the following.

There are 2 existing 22kV HV feeders that pass the proposed development on the Princes Freeway side which are approx. 5km from the Ford North Zone Substation (FNS). The site has feeder FNS013 Rennie Street property frontage and feeder FNS022 in the road reserve of Rennie Street and the Princes Freeway.

Feeder FNS022 has been highlighted as being in the process of upgrading the conductors to 19/4.75 AAC.

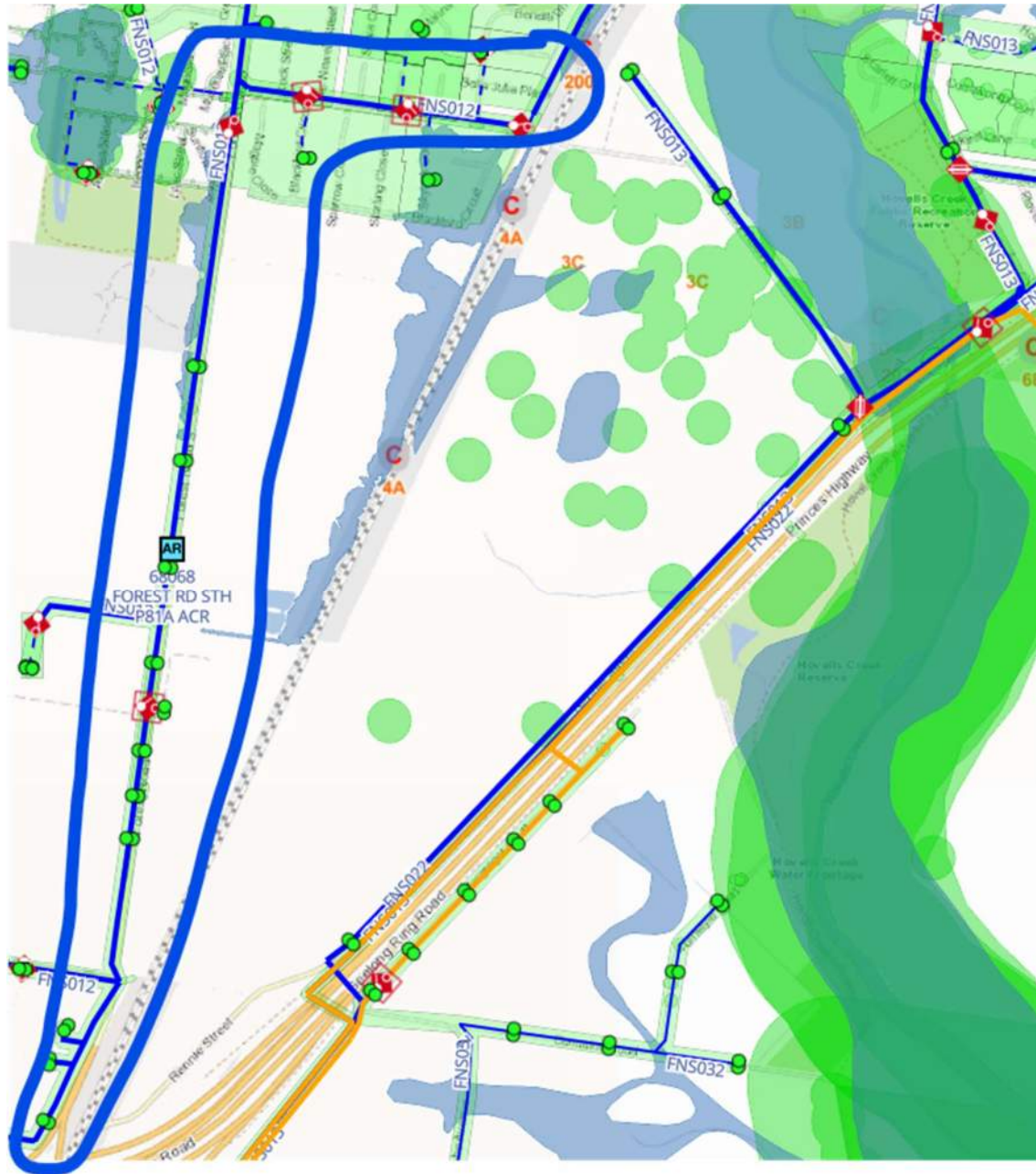
We anticipate that the existing infrastructure will have capacity to supply the initial stages of this development. We have engaged with Powercor to commence investigation into the initial and ultimate supply arrangement. We expect that any supply upgrades will be delivered as the project progresses.

Route of FNS022 Princes Freeway side of development (red)



Route of FNS012 railway side of development (blue)

Feeder FNS012 lays west of this development and may be accessed if needed. However, on the negative side the feeder would require upgrading and also involve a Railway crossing. Rail crossings take some time and are difficult to obtain. However, it is an option to be considered.



Summary

The information highlighted here has been provided as a guide only based on information available at the time of report. We have requested a meeting with Powercor to enter discussions on the available capacity in the surrounding Network and if / or when any upgrades would be required. We anticipate meeting with Powercor to discuss capacity in the coming weeks. It should be noted that upgrades can sometimes be years in the planning and delivery, however it is anticipated that the development will be delivered incrementally over a significant number of years as well.

If you would like any further clarification don't hesitate to contact me.

Regards



Appendix C – Lara Farms – NBN Preliminary Servicing Advice

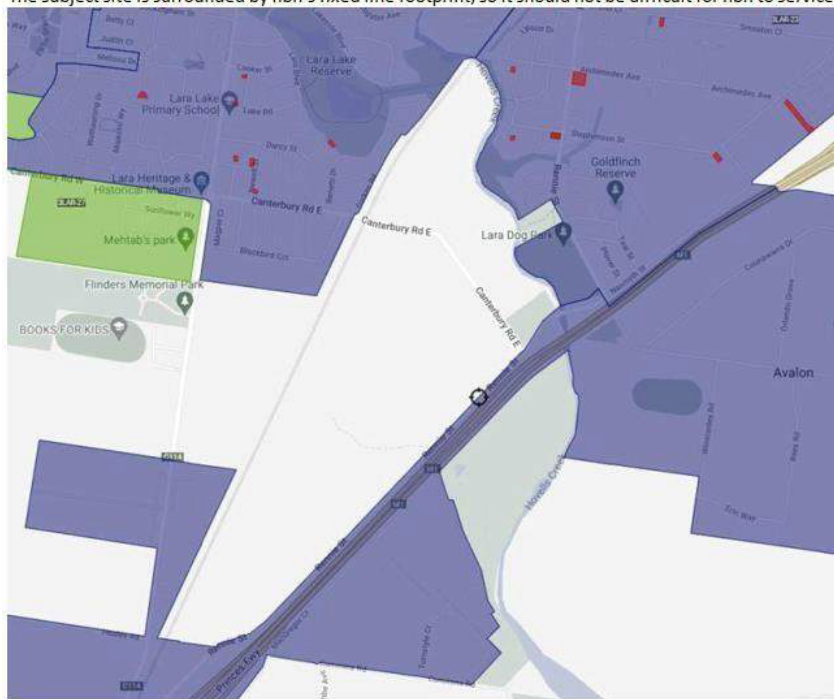
From:
Sent:
To:
Subject: RE: Request for Servicing Advice - 705-765 Princess Highway and 610 Rennie Street, Lara

NBN Classification - Commercial

Hi Sara,

Thanks for the email.

The subject site is surrounded by nbn's fixed line footprint, so it should not be difficult for nbn to service.



Due to nbn's constantly evolving network, we will only be able to provide definitive advice and commitments once the development is formally registered, assessed and an agreement put in place.

At this stage, I cannot see any major red flags to this one.

Hope this helps.