



## Jetty Road Rezoning – Stage 2 Infrastructure Servicing Assessment

32-70 McDermott Road, Curlewis  
91-125 Coriyule Road, Curlewis

Ref No: 13588-02

Prepared For: Curlewis Bellarine Pty Ltd &  
The Moss Family

Due: October 2021

## Contact Information

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## Document Information

Prepared for Curlewis Bellarine Pty Ltd  
Proposal Name Jetty Road Rezoning – Stage 2,  
Curlewis  
File Reference 13588-02 Jetty Road Rezoning -  
Stage 2 ISA.docx  
Job Reference 13588-02  
Date 20 October 2021  
Version Number 1

## Author(s)



  
Civil Engineer

Effective Date 20 October 2021

## Approved By

  
Date Approved 20 October 2021

## Document History

Version	Effective Date	Description of Revision	Prepared by	Reviewed by
1	20/10/2021	Infrastructure Servicing Assessment		

Front Cover Image – 91-125 Coriyule Road, Drysdale (Courtesy of MetroMap)

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# 1 Introduction

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This Infrastructure Servicing Assessment (ISA) has been prepared at the request of Curlewis Bellarine Pty Ltd and the Moss Family to show a high-level servicing strategy and advice for the proposed subdivision within the Jetty Road North Urban Growth Area. This report is to be used to support the planning permit application by addressing the infrastructure servicing requirements associated with the subdivision of the properties.

## 1.1 Existing Conditions and Locations

The land for the proposed development is currently situated within the Jetty Road Urban Growth plan which has been endorsed by City of Greater Geelong since June 2007. This plan, as shown in Figure 1-1, outlines the servicing requirements and framework that should be adopted for future development of land within the Jetty Road Growth Area.

The development comprises of three separate land parcels – Property 3, 4 & 5.

Property 3: 32-70 McDermott Road (North)

Property 4: 32-70 McDermott Road (South)

Property 5: 91-125 Coriyule Road

These properties are situated approximately 16km east of Geelong. Property 3 & 4 combine for a land parcel size of 26.12ha while Property 5 is 25.90ha as indicated in Figure 1-2. The entire development is bounded by McDermott Road along the west and Tivoli Road and Greenvale Drive to the east. Property 5 also abuts the Bellarine Rail Trail and Curlewis Golf Club to the south. The subject site has predominately been used for farming and consists of low-lying grasses and trees scattered through the site.

The surrounding roads can be described as below:

- Coriyule Road - Gravel Council local road with moderately defined road side swales
- McDermott Road - Gravel Council local road with moderately defined road side swales
- Greenvale Drive - Sealed Council road bounded by kerb and channel.
- Tivoli Road - Sealed Council road bounded by kerb and channel.

The high point of the site is located at the north-east corner of the development and is approximately 58 AHD and the low point of the site is at the western boundary on Coriyule Road and is approximately 37 AHD. The southern property is expected to drain north to this low point as well.

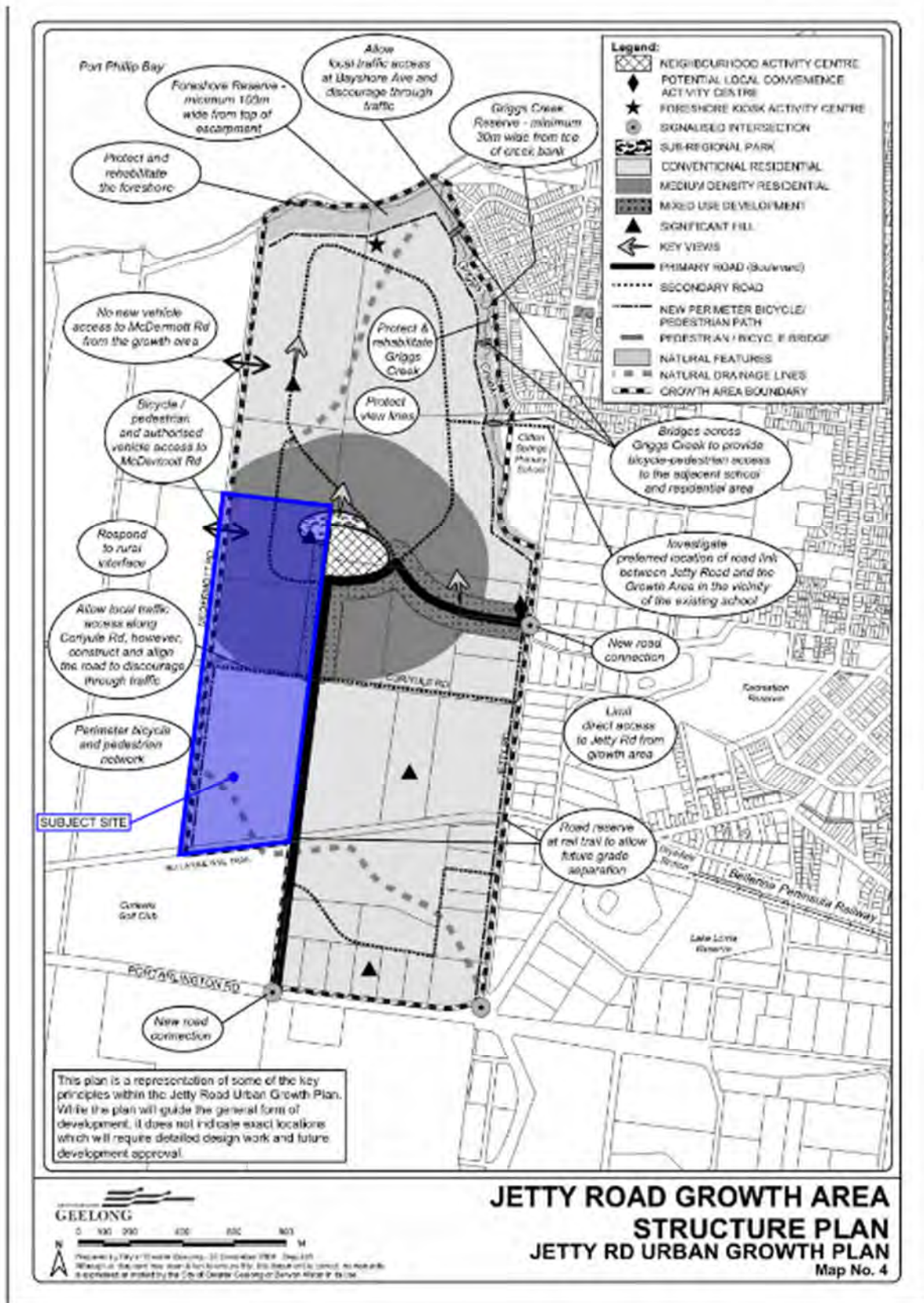


Figure 1-1 Jetty Road Growth Area Structure Plan

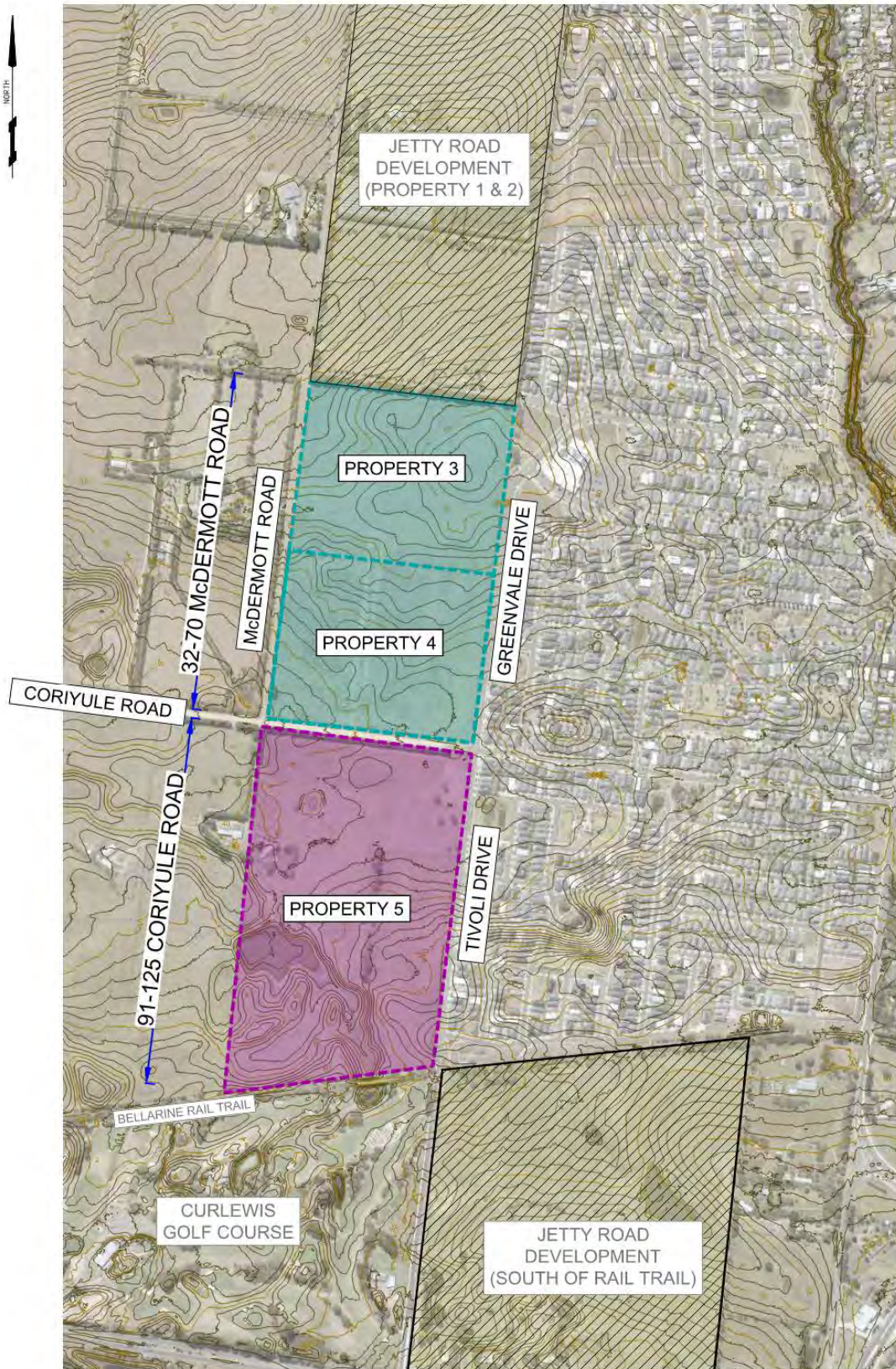


Figure 1-2 Locality plan

## 2 Overall Development Plan

The Overall Development Plans (ODP) includes 825 lots that are predominately medium density and conventional residential lots. Properties 3 & 4 will be divided into 417 lots and Property 5 will comprise of 408 lots.

There are seven areas set aside for unencumbered public open space reserves. This is inclusive of reserves that run along the western boundary of the site, one of which provides an open space between McDermott Road and the proposed allotments. Below is a snapshot of the ODP, refer to Appendix A for a detailed plan with staging details and development summary.

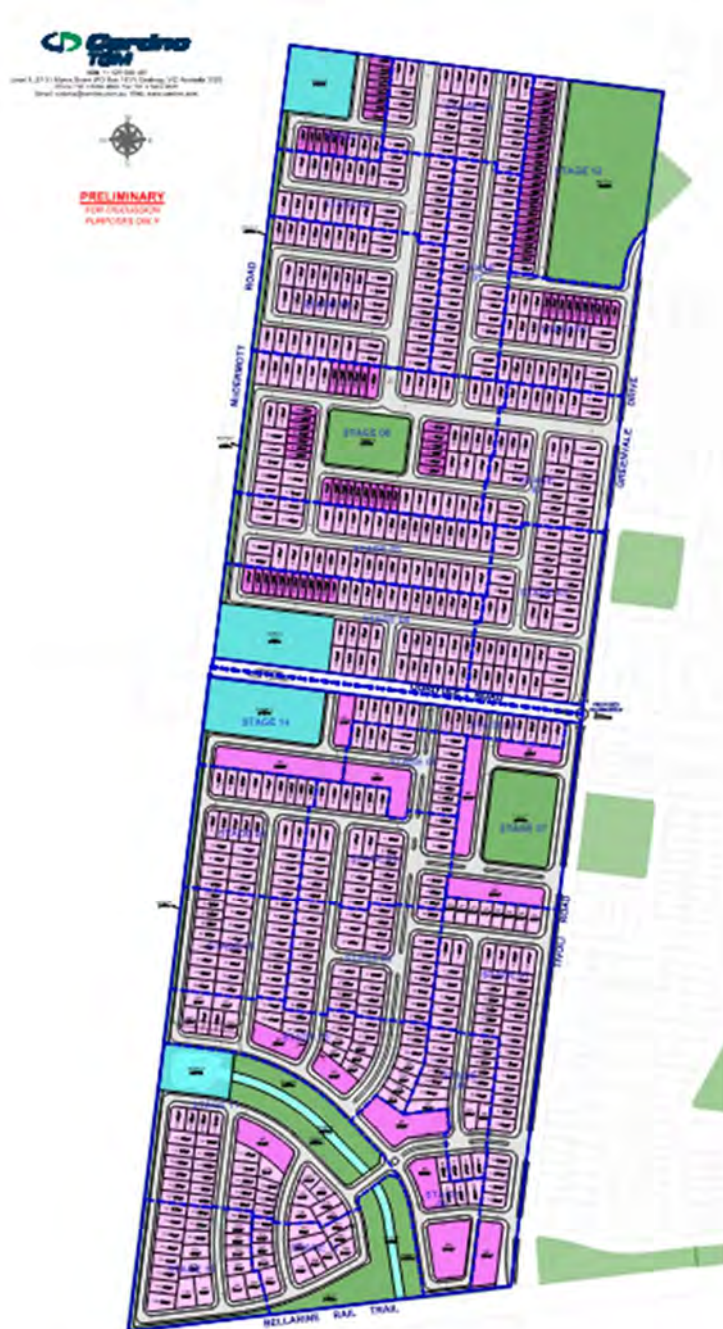


Figure 2-1 Overall Development Plan

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## 3 Servicing

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### 3.1 Access

The main access to the site will be from Tivoli Road as it connects the development to the Portarlington Highway. Tivoli Road will provide three of the seven access points along the eastern boundary, one will be from the proposed round-about on Coriyule Road and the others being from Greenvale Drive. The access from Greenvale Drive in the north-east will involve traffic merging with the existing Greenvale Drive.

Coriyule Road is located centrally within the development and will provide access to both the north and south properties. Pedestrian access is proposed from the Bellarine Rail Trail and no direct access has been proposed from McDermott Road.

### 3.2 Drainage

Drainage servicing advice has been excluded from this report. Refer to the following reports for details regarding drainage infrastructure, detention and treatment strategies proposed to service this development.

- CardnoTGM Pty Ltd: Jetty Road Rezoning – Stage 2 Flood Study (Version 6), June 2020
- Water Technology Pty Ltd: Jetty Road Rezoning – Stage 2 Stormwater Management Strategy, August 2021

### 3.3 Sewer

The majority of the proposed development drains to the existing Clifton Springs No.7 Pump Station on Coriyule Road (Refer to Catchment C in Figure 3-1).

Barwon Water has advised that a small portion of the northern lots in the proposed development fall to the north (Catchment A) and east (Catchment B) and will need to be investigated further during detailed design stages.

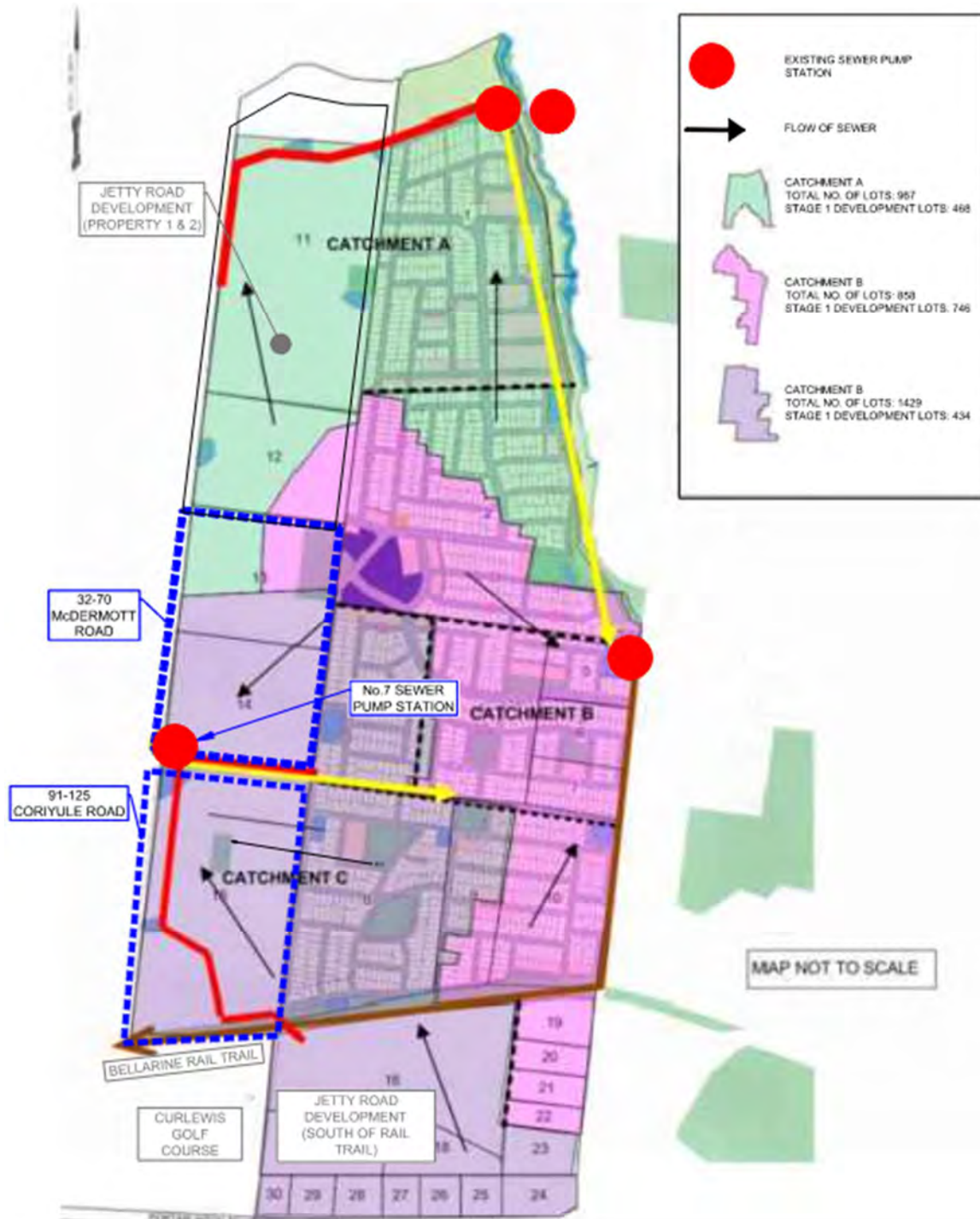


Figure 3-1 Indicative sewer catchments - Jetty Road UGA

As part of the development south of Coriyule Road, a trunk sewer has been conceptually graded by Barwon Water to command the land to the south of Coriyule Road, as well as the land to the south of the Rail Trail. This trunk main was initially designed to cater for 729 lots to fall via gravity to the existing No.7 Pump Station. This alignment is not reflective of the internal sewer within Property 5, but confirms the lots in the southern parcel of land can be serviced by gravity sewer. Refer to Figure 3-3 on the following page for the conceptual horizontal alignment.

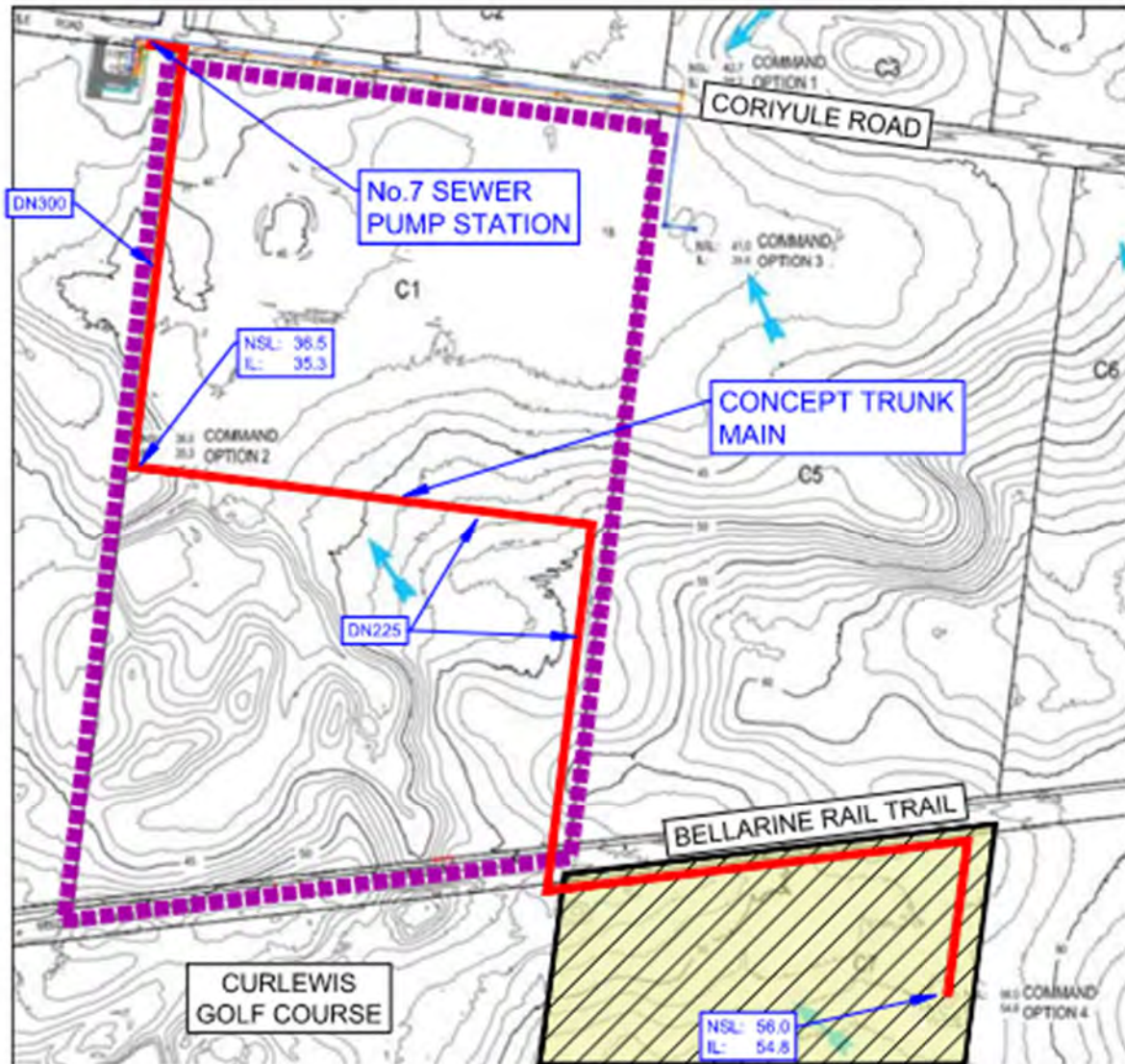


Figure 3-2 Concept south trunk sewer and levels

Below is the horizontal alignment Barwon Water has conceptually designed for the trunk main that corresponds to the ODP.



Figure 3-3 Trunk sewer horizontal alignment

Refer to **Barwon Water’s – Servicing Advice** in appendix B for more information.

### 3.4 Potable Water

Potable water supply to The Jetty Road growth area is supplied by gravity from the Clifton Springs Tank located on Anderson Road. The proposed development will be serviced by a series of DN100, DN150, DN225 and DN300 water mains and has been conceptually designed by Barwon Water as seen in Figure 3-4 below.

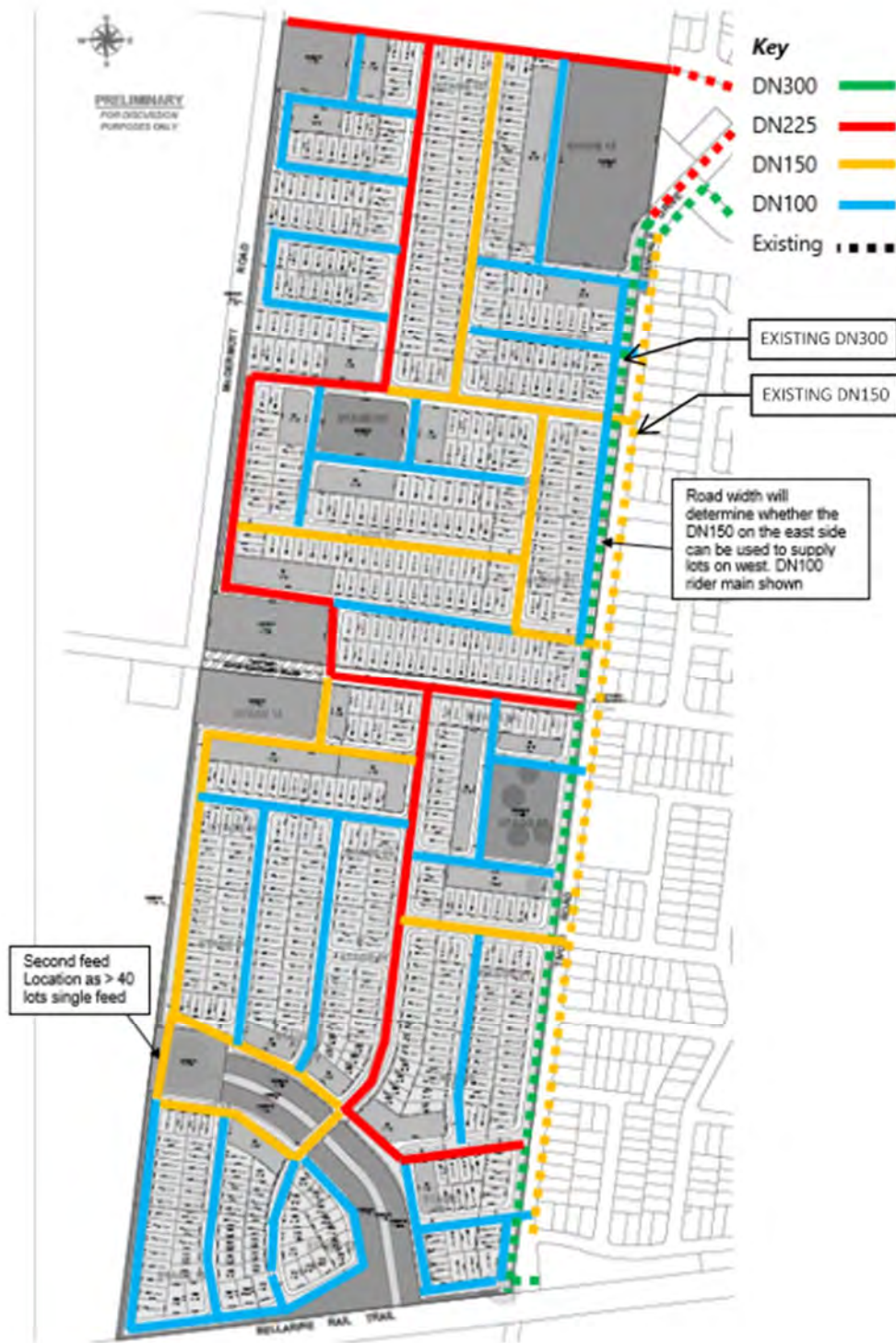


Figure 3-4 Potable water servicing advice - Barwon Water

Refer to **Barwon Water’s – Servicing Advice** in appendix B for more information.

### 3.5 Electricity

Powercor have advised that the existing electrical distribution network can be augmented and extended in order to supply the proposed development

Powercor also mentioned that a new zone substation would be required based on the works being stage proportionate to the development.

The developer contribution for this work will be assessed at each stage of the development in line with Powercor’s connection policy.

DBYD electricity location plans show underground electrical assets along the east side of Tivoli Road and into Greenvale Drive. These assets cover the entire eastern extents of the proposed development and it is expected that augmentation and extension from these assets will service the development.

There is overhead electrical along the northern side of Coriyule Road and the west side of McDermott Road. Further consultation is required with electrical design engineers and Powercor to determine the most suitable servicing methodology. Refer Figure 3-5 below for overall layout of existing electrical assets.

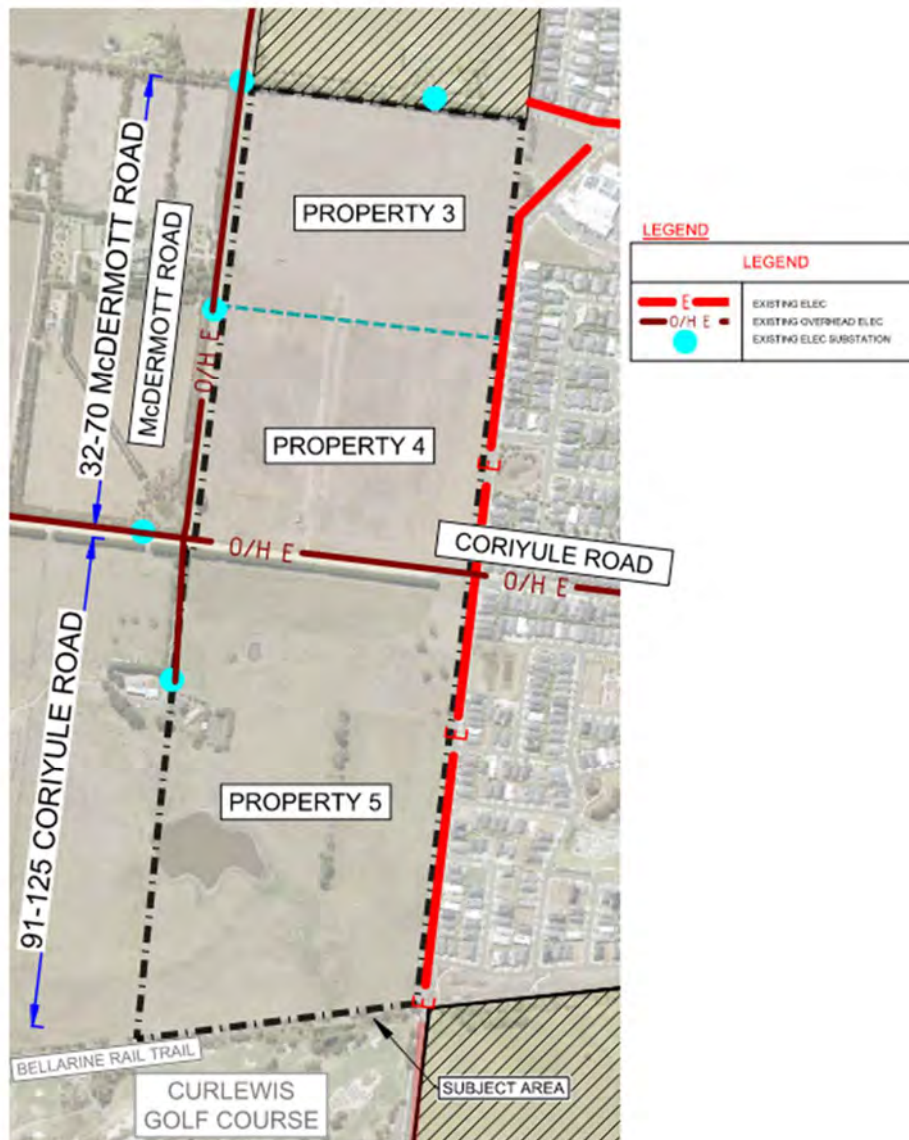


Figure 3-5 Existing electrical assets

Refer to **Powercor’s – Servicing Advice** in appendix C for more information.

### 3.6 Gas

Preliminary advice from Ausnet states there is sufficient supply available to service the proposed development. The supply will be extended from the existing 125mm gas mains that run along Coriyule Road and Greenvale Road.

AusNet service location plans indicate the 125mm gas main on Coriyule Road terminates at the eastern boundary of the proposed development. This gas main will be extended to McDermott Road and is expected to supply the majority of the internal gas network. The 125mm gas main running along Greenvale Drive & Tivoli Road will also provide connection points along the eastern extents of the proposed development as required.

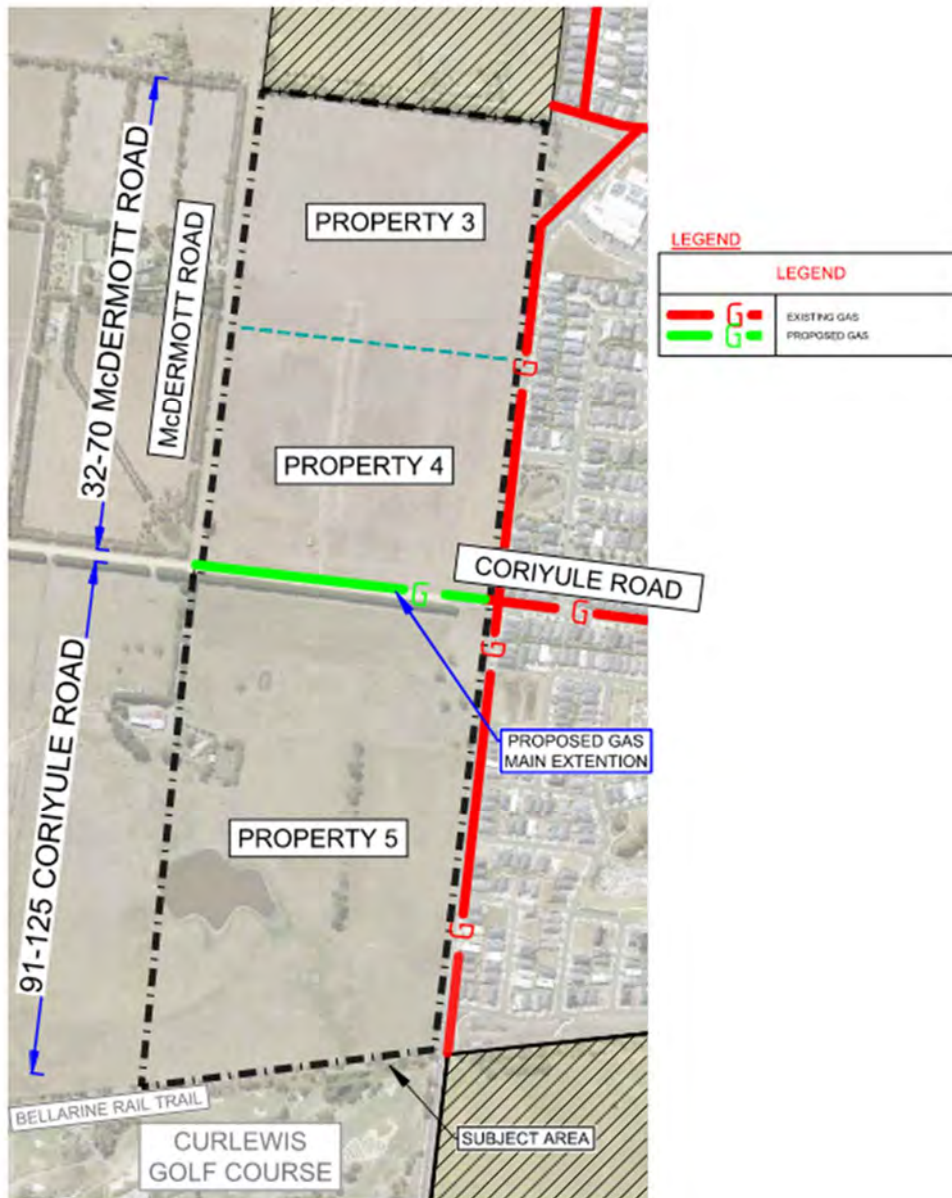


Figure 3-6 Existing and proposed gas assets

Refer to **Ausnet's – Servicing Advice** in appendix D for more information.

### 3.7 Telecommunications

Preliminary advice from NBN state that they previously received an application for 91-125 Coriyule Road several years ago and extended their fixed line boundary to include this area (Refer purple hatch in Figure 3-7 below). The stages north of Coriyule Road have not been considered in the fixed line boundary at this stage but NBN has confirmed they will be built in to the program once each of the properties are formally registered. NBN has also stated that it is highly unlikely there will be additional backhaul charges but this will be confirmed once they are formally assessed.

Service location plans show an NBN cable on Coriyule Road that connects the development to the east to Newcombe Road (Refer Figure 3-7). There is also a cable along the west side of McDermott Road. Further consultation with telecommunication authorities will be required to determine the most suitable servicing methodology.

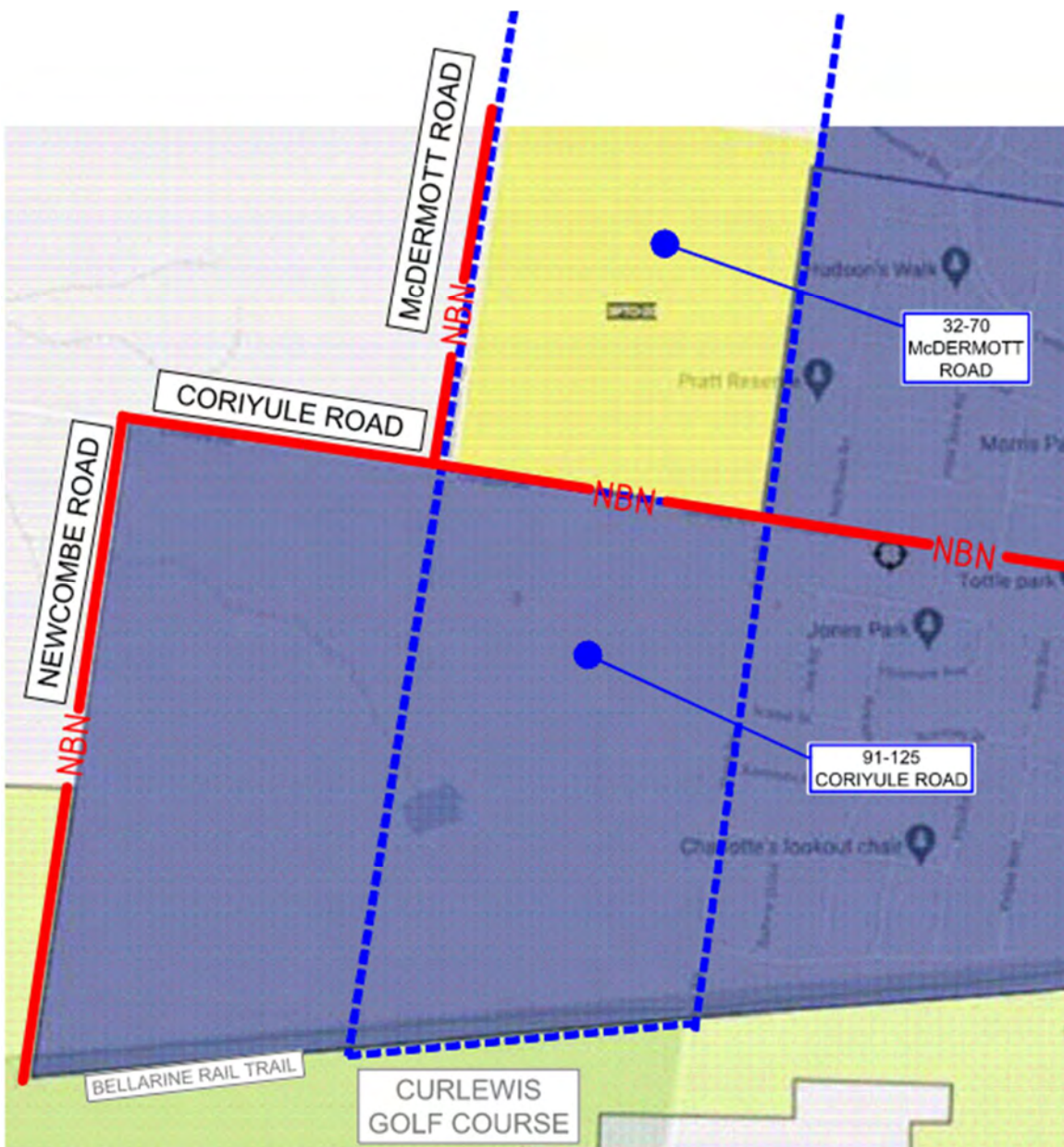


Figure 3-7 Existing NBN fixed line boundary

Refer to **NBN's – Servicing Advice** in appendix E for more information.

## Appendix A – Overall Development Plan

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**PRELIMINARY**  
FOR DISCUSSION  
PURPOSES ONLY

**JETTY ROAD  
STAGE 2  
PROPERTIES 3, 4 & 5**  
Curlewis

SCALE 1:1250 (@A1)  
DATE 19/10/2021  
REVISION -  
REF 13588-06

**LEGEND**

- SITE BOUNDARY
- STAGE BOUNDARY
- MEDIUM DENSITY
- CONVENTIONAL RESIDENTIAL
- UNENCUMBERED OPEN SPACE
- ENCUMBERED OPEN SPACE
- DRAINAGE RESERVE

**DEVELOPMENT SUMMARY**

**PROPERTIES No.4 & 5**

<b>TOTAL AREA</b>	<b>26.12 HA</b>
Encumbered Open Space	1.23 HA
<b>NET DEVELOPABLE AREA</b>	<b>TOTAL 24.89 HA</b>
Unencumbered Public Open Space	2.84 HA (11.4%)
Road Reserves	7.17 HA

**LOT AREAS**

0m <sup>2</sup> - 200m <sup>2</sup>	6
200m <sup>2</sup> - 300m <sup>2</sup>	79
300m <sup>2</sup> - 400m <sup>2</sup>	256
400m <sup>2</sup> - 500m <sup>2</sup>	79
	<b>TOTAL 420</b>

**STAGE DETAILS**

STAGE 01	Conventional Residential Medium Density	38
STAGE 02	Conventional Residential Medium Density	31
STAGE 03	Conventional Residential Medium Density	21
STAGE 04	Conventional Residential Medium Density	32
STAGE 05	Conventional Residential Medium Density	37
STAGE 06	Conventional Residential Medium Density	29
STAGE 07	Conventional Residential Medium Density	31
STAGE 08	Conventional Residential Medium Density	47
STAGE 09	Conventional Residential Medium Density	26
STAGE 10	Conventional Residential Medium Density	28
STAGE 11	Conventional Residential Medium Density	14
STAGE 12	Conventional Residential Medium Density	2
		<b>TOTAL 420</b>

OVERALL LOT DENSITY (PER NDA) 16.9 HA

**PROPERTY No.5**

<b>TOTAL AREA</b>	<b>25.90 HA</b>
ENCUMBERED LAND	1.10 HA
Drainage Reserve	0.31 HA
Encumbered Open Space	0.31 HA
<b>ENCUMBERED LAND</b>	<b>TOTAL 1.71 HA</b>

**NET DEVELOPABLE AREA 24.49 HA**

Unencumbered Public Open Space	2.54 HA (10.4%)
Road Reserves	7.95 HA

**LOT AREAS**

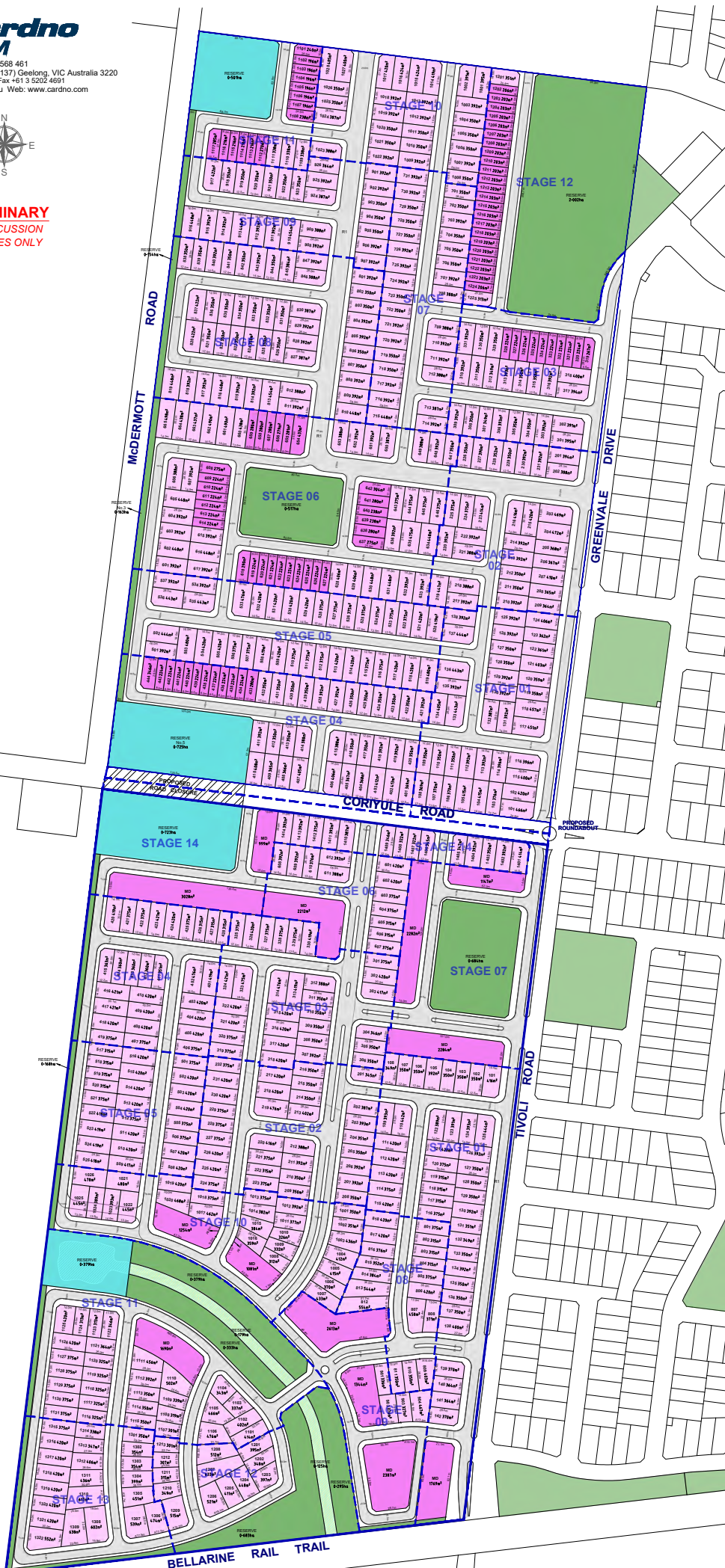
0m <sup>2</sup> - 200m <sup>2</sup>	0
200m <sup>2</sup> - 300m <sup>2</sup>	0
300m <sup>2</sup> - 400m <sup>2</sup>	184
400m <sup>2</sup> - 500m <sup>2</sup>	101
500m <sup>2</sup> - 600m <sup>2</sup>	8
600m <sup>2</sup> +	4
	<b>TOTAL 297</b>

**STAGE DETAILS**

STAGE 1	Conventional Residential Medium Density	42
STAGE 2	Conventional Residential Medium Density	8
STAGE 3	Conventional Residential Medium Density	32
STAGE 4	Conventional Residential Medium Density	0
STAGE 5	Conventional Residential Medium Density	30
STAGE 6	Conventional Residential Medium Density	28
STAGE 7	Conventional Residential Medium Density	12
STAGE 8	Conventional Residential Medium Density	35
STAGE 9	Conventional Residential Medium Density	18
STAGE 10	Conventional Residential Medium Density	4
STAGE 11	Conventional Residential Medium Density	23
STAGE 12	Conventional Residential Medium Density	26
STAGE 13	Conventional Residential Medium Density	12
STAGE 14	Conventional Residential Medium Density	8
		<b>TOTAL 417</b>

OVERALL LOT DENSITY (PER NDA) 17.0 HA

Medium Density total area	2.41 HA
Potential Lots	120
Yield	50 Lots per HA
Conventional Residential total area	11.59 HA
Potential Lots	297
Yield	25 Lots per HA



## Appendix B – Barwon Water Servicing Advice

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Our Ref: L014273

Your Ref:

Enquiries to: Natalie Clifford - Ph: 1300 656 007

17 August 2021

Cardno

By Email: jack.wilson@cardno.com.au

Dear Sir/Madam,

**PRELIMINARY SERVICING ADVICE**

**RE: 91-125 Coriyule Rd and 2-70 McDermott Rd Curlewis  
Servicing advice request as of 23 July 2021**

We refer to your request for servicing advice regarding the above specified land.

Please note that this is just preliminary advice based on the information you provided to Barwon Water.

Any information given in this preliminary servicing advice or otherwise by BW is not binding upon BW and you shall not undertake any commitment based on any information given until a formal execution of a Developer Deed or a Private Works Deed.

Preliminary advice is as follows:

**Potable Water**

The Jetty Road growth area is supplied by gravity from the Clifton Springs Tank. In line with the Jetty Road Potable Water Infrastructure Servicing Plan, the new development will be serviced by a series of DN225, DN150 and DN100 water mains. The conceptual placement of these is illustrated in Figure 1.



Figure 1 – Water main alignment

### Sewer

The majority of this site drains to the existing Clifton Springs No.7 Pump Station on Coriyule Road. There does appear to be a small section of land at the north end of this site which drains north and east. This would need to be confirmed during design. Figure-2 below show the indicative sewer catchments.



Figure 2 – Indicative Sewer Catchments – Jetty Road UGA

As part of the Jetty Road Infrastructure Sequencing Plan, a trunk sewer is required in the southern parcel of land to connect to the pump station. This sewer is also required to pick up the land south of of the rail trail. Indicatively approximately 729 lots will drain via this sewer. During the design of the pump station this sewer was conceptually graded to command this land. The concept is shown in Figure 3 below including indicative levels.



Figure 3 – Concept south trunk sewer and levels

This concept was developed before the subdivision layout was known. When considering the proposed layout, it appears preferential to follow the drainage corridor as shown in figure 4. Based on the number of lots and grade of the sewer, it is likely that the section that runs south of the pump station to the reserve is DN300, with the remaining section DN225. The diameter should be confirmed by the consultant in accordance with the WSAA Gravity Sewerage Code.



Figure 4 – Trunk sewer alignment

If you have any questions regarding this letter please contact Barwon Water's representative listed above.

Yours sincerely,

Manager Enterprise Project Delivery

## Appendix C – Powercor Servicing Advice

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20 August 2021

Our Reference: 500000286561  
Your Reference: 13588-06

CardnoTGM  
TGM GC Subdivisions  
PO BOX 1137  
GEELONG VIC 3220

**PROPOSED DEVELOPMENT: CORIYULE RD/GREENVALE DR - CURLEWIS**

We thank you for your inquiry of 23 July 2021. I can advise that Powercor's existing electrical distribution network can be augmented and extended to supply the proposed development.

This work can / will be staged proportionate to the development, up to and including a new Zone Substation.

The developer contribution for this work will be assessed at each stage of the development in line with Powercor's connection policy.

Yours Faithfully

Michael Bowden  
Senior Project Delivery Lead

Telephone: (03) 5440 5882

## Appendix D – AusNet Servicing Advice

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**Jack Wilson**

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**From:** Gas New Estates <gas.newestates@ausnetservices.com.au>  
**Sent:** Wednesday, 18 August 2021 9:31 AM  
**To:** [REDACTED]  
**Subject:** RE: Jetty Road North (Stage 2) - Servicing advice

Hi Jack,

We referred this to our Network Planning Engineer and he has advised that at this time sufficient supply is available to service the proposed development. Supply can be extended from existing 125mm mains along Greenvale Dr and Coriyule Rd.

I hope this assists

Cheers

[REDACTED]  
Project Manager  
Gas New Estates



**AusNet Services**  
308 Hyde Street  
Yarraville Victoria 3013 Australia

[REDACTED]  
[www.ausnetservices.com.au](http://www.ausnetservices.com.au)

## Appendix E – NBN Servicing Advice

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## Jack Wilson

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**From:** Joseph Teoh <josephteoh@nbnco.com.au>  
**Sent:** Wednesday, 18 August 2021 8:28 AM  
**To:** Jack Wilson  
**Cc:** Peter Preece; Leigh Prossor; Angelo Magarelli; Nicole Dixon; Chris Marshall  
**Subject:** RE: Jetty Road North (Stage 2) - Servicing advice

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

### NBN Classification - Commercial

Hi Jack,

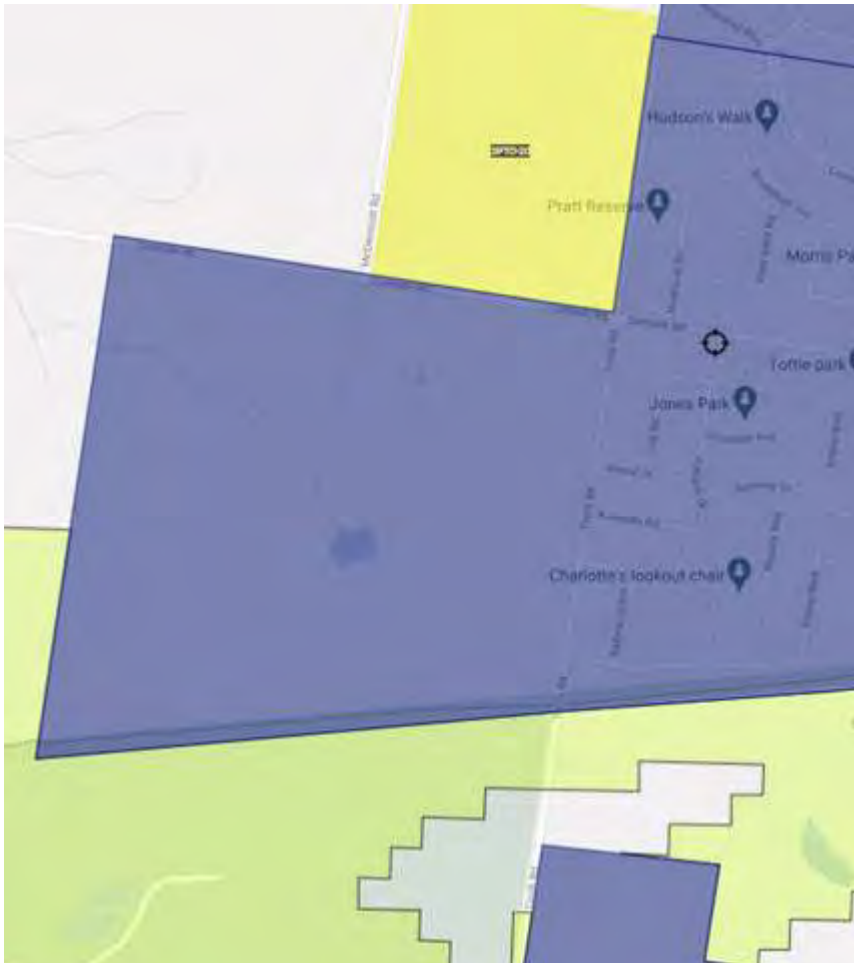
Apologies for the delay, I thought I sent this through.

There's no problem with **nbn** servicing this development.

We received an application from a developer several years ago and extended our fixed line boundary to have this area included. That particular development did not proceed, but it was marked as a growth area.

The stages to the north of Coriyule Road have not been factored in, however we can build this into our program once each of the properties are formally registered.

See below area in blue:



At this stage, it is highly unlikely there will be additional backhaul charges, however I can reconfirm once they are formally assessed.

Once they have been registered, please let me know and I can provide a brief on other areas we may be able to assist on. Eg. Supporting Proposed Traffic Management Devices

If you have any further questions, please let me know.

Thank you

**Kind Regards,**

**Joseph Teoh**

Senior Account Manager (VIC/TAS) – New Developments

**M** +61 437 757 480 | **E** [joseph.teoh@nbnco.com.au](mailto:joseph.teoh@nbnco.com.au)

