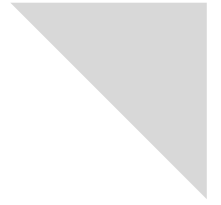




**ROWE**  
GROUP  
DESIGN

# LOCAL STRUCTURE PLAN

PRECINCT 2A – PICTON INDUSTRIAL PARK  
SOUTHERN PRECINCT



# APPENDIX 7

ENGINEERING SERVICING REPORTS



**ROWE**  
GROUP  
DESIGN

Lots 103, 110 and 603 Harris Rd,  
Picton East

# Engineering Servicing Report

Civil, Electrical and Communications Engineering Report

Prepared for: Harris Road Pty Ltd c/- Rowe Group

Attention: Mr Rod Dixon

Date: 12<sup>th</sup> of November 2019

Prepared by: Richard Martin

Ref: 44260

Wood & Grieve Engineers now part of Stantec

PO Box 1276, 10 / 44-48 Queen St, Busselton WA 6280

Tel: +61 8 9754 4244 Email: busselton@wge.com.au www.wge.com.au

\\WGE-BUS-FS-01\PROJECTS\44260\PROJECT DOCUMENTATION\CIVIL\DOCUMENTS & REPORTS\SERVICING REPORT\CI-RE-ESR-001A.DOCX



WOOD & GRIEVE ENGINEERS

NOW PART OF



# Revision

Revision	Date	Comment	Prepared By	Approved By
001a	7/10/2019	Final Report	L. Sutherland / R. Fowler	R. Martin
002	12/11/2019	Updated Local Structure Plan	L. Sutherland	R. Martin

# Contents

1.	Introduction	1
2.	Sewerage Reticulation	3
3.	Water Reticulation	4
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7.	Communications	9

**Appendix A Local Structure Plan**

**Appendix B Water Corporation Correspondence**

**Appendix C ATCO Gas Correspondence**

**Appendix D Aqwest Correspondence**

**Appendix E Department of Mines, Industry  
Regulation and Safety Correspondence**

**Appendix F Arc Infrastructure Correspondence**

# 1. Introduction

## 1.1 General

Wood & Grieve Engineers now part of Stantec (WGE/STC) has been engaged by Harris Road Pty Ltd to prepare this report in support of structure plans for the proposed subdivision of Lots 103, 110 and 603 Harris Road, Picton East within the Shire of Dardanup.

This report discusses the following engineering and infrastructure items necessary to service the proposed development:

- Sewer Reticulation
- Water Reticulation
- Gas Reticulation
- Rail Infrastructure
- Power Reticulation
- Communications

This report outlines the existing, and future servicing strategies that are expected to be required should the Picton East Structure Plan be implemented.

The information presented in this report is based on preliminary advice from the relevant service authorities and their available strategic planning information which is current only at the time of enquiry.



## 1.2 Site Location, Topography, and Existing Features

The Site comprises existing Lots 103, 110, and 603 Harris Road within the Shire of Dardanup and totals approximately 73Ha. The Site is generally bounded by Columbus Road to the west, Harris Road to the south, Martin-Pelusey Road to the east, and freehold land to the north.

The majority of the southern portion of the Site is relatively flat at approximately RL13m AHD to RL14m AHD. An elevated area (ranging from approximately RL16m AHD to RL22m AHD) exists in the northern area of the Site, running parallel with the northern and western boundaries of Lot 603. A number of water bodies exist within Lot 603 at the base of the elevated area, and in the south-eastern corner of Lot 110.

A number of existing Water Corporation open drains traverse Lots 103 and 603. Water Corporation's myWorld Esinet system identifies these drains as:

- East Picton Main Drain 710
- East Picton Sub-section C 708
- East Picton Sub-section D 709
- East Picton Sub-section E 710

The flatter areas of the Site are generally clear of significant vegetation. The elevated area and the south-east corner of Lot 603 are relatively densely vegetated.

An existing rail line, operated by Arc Infrastructure, runs immediately adjacent the north-west corner of the Site. Aerial imagery indicates a number of existing structures within Lot 603. Lot 110 contains a large warehouse and sealed hardstand area along with a number of smaller structures and a sealed entrance from Harris Rd.



Figure 1: Site Boundary (Aerial Imagery: Nearmap, September 2019)



## 2. Sewerage Reticulation

Currently, no sewerage infrastructure exists within close proximity to the Site, with the nearest existing gravity sewers being over 3km away to the north-west. The Water Corporation was contacted to determine what planning is currently in place for the provision of sewerage services to the Site. Correspondence with the Water Corporation is included as Appendix B, and an extract of the Water Corporation's long term sewer planning for the areas is provided below.

The Water Corporation's long term sewer planning indicates the site grades into two future wastewater pump station (WWPS) catchment areas, with the southern boundary of Lot 603 generally forming the catchment area boundary. Water Corporation has advised that neither of these two proposed WWPSs are planned to be constructed within the next 5 years. Additionally, Water Corporation's long term sewer planning indicates the two proposed WWPSs will pump to future gravity sewers within catchments of other proposed WWPSs that are also yet to be constructed.

Based on the above, it is unlikely that gravity sewerage infrastructure will be available to the Site for many years, and accordingly it is understood that initial development of the Site will require the utilisation of Aerobic Treatment Units (ATUs).

A detailed site assessment will be undertaken prior to development to confirm the suitability of the existing soil profile and groundwater levels for onsite effluent disposal. Approval to install an ATU system must be sought from the Shire, and/or Department of Health, depending on the particulars of the proposal. ATU systems must, as a requirement of health legislation, be serviced regularly by Department of Health approved service persons. Details of ATU systems that have been approved for use in Western Australia can be found on the Department of Health website.

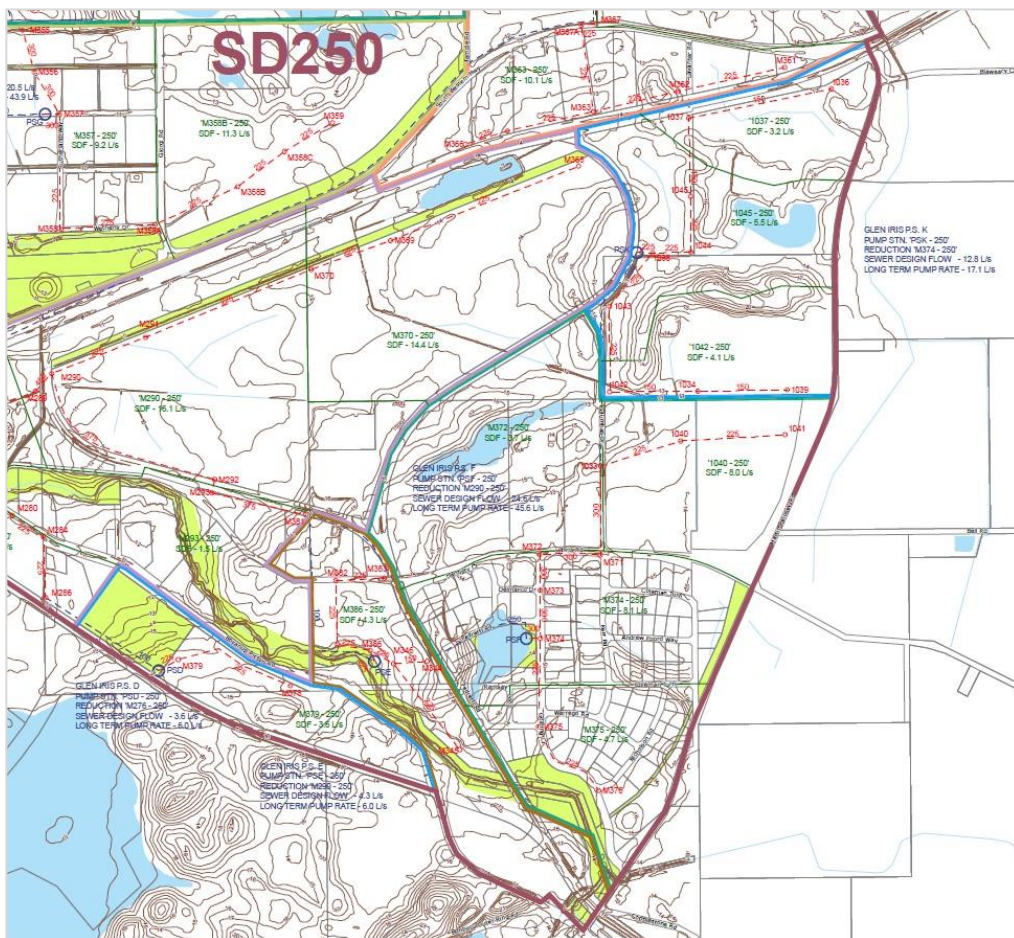


Figure 2: Water Corporation Long Term Sewer Planning



### 3. Water Reticulation

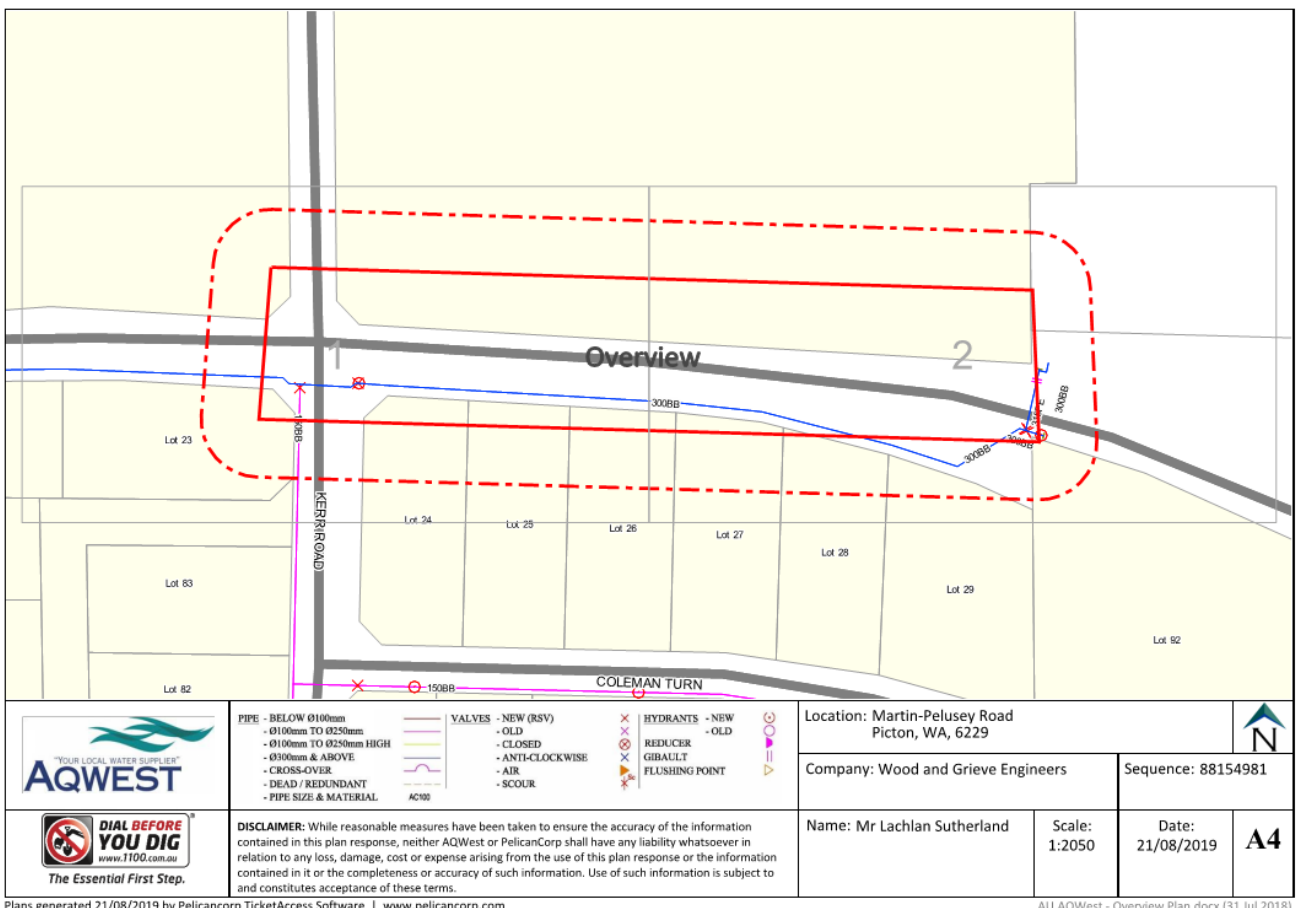
The proposed subdivision falls into an area currently licensed and operated by Aqwest. Provision of reticulated water as part of the sites development will be a WAPC condition of subdivision approval.

Aqwest currently has a DN300 water main within the Harris Road reserve as seen in figure 3. Aqwest was contacted to determine whether their existing potable water network has capacity to service the Site with potable water. This Site would be serviced via connection to this existing DN300 main. Correspondence with Aqwest is included as Appendix D.

Aqwest advised that the existing DN300 water main within the Harris Road reserve has capacity to service the Site without need for any network upgrades or reinforcements.

The existing DN300 water main will need to be extended approximately 200m to the intersection of Harris Road and Martin Pelusey Road to service lots along the front of Harris Road. Extension of the network with reticulated mains into the proposed development will be required to service all other lots and will need the approval of Aqwest. Aqwest confirmed that all works will be at the developer’s expense.

It was noted in a previous servicing report by MPM Development Consultants in 2014 that, although there was capacity to service the Site via the existing DN300 main and provide sufficient water pressure for drinking purposes in accordance with their license requirements, this pressure may not be sufficient for lot purchasers to meet Department of Fire and Emergency Services (DFES) requirements for their future structures/development on lots. It is therefore likely that individual lot purchasers may be required to install tanks and pumps on their site for fire-fighting purposes.



Plans generated 21/08/2019 by PelicanCorp TicketAccess Software | www.pelicanCorp.com

AU.AqWest - Overview Plan.docx (31 Jul 2018)

Figure 3 Dial Before you Dig - Aqwest infrastructure

## 4. Gas Reticulation

ATCO Gas (ATCO) operates a reticulated gas network adjacent the Site, consisting of:

- A DN110 high pressure polyethylene (PE) gas 350kPa main within the Harris Road reserve adjacent the site (operating at reticulation pressure), and
- A DN150 high pressure steel 1900kPa gas main on the eastern side of Martin-Pelusey Road (operating at transmission pressure)

ATCO was contacted to determine whether their existing gas infrastructure has the capacity to service the Site with reticulated gas. ATCO has confirmed that the DN110 pressure main within Harris Road reserve has the capacity to service the proposed development. A fee would be charged to the Developer for the installation of gas infrastructure, which could be reduced if the Developer provides a common trench. Correspondence with ACTO Gas can be found in Appendix C.

ATCO also advised that a direct connection to the existing DN150 steel gas main would be possible to reinforce the network if gas demand within the development turned out to be relatively high. This would require the construction of costly pressure reduction infrastructure and the developer would be required to contribute to the cost.

Provision of reticulated natural gas as part of the development of the Site is unlikely to be a WAPC condition of subdivision, and therefore its installation is at the discretion of the developer.

The Department of Mines, Industry Regulation and Safety (DMIRS) was contacted with regard to the proposed extension of the Dampier to Bunbury Natural Gas Pipeline (DBNGP) from Bunbury to Albany. DMIRS confirmed that the Site overlaps an investigation corridor for the proposed extension. An extract from DMIRS's online mapping system is provided below with the Site shown in red, and the DBNGP extension investigation corridor shown in blue. It is recommended that, if not already undertaken, further discussions are held with DMIRS to determine what, if any, impact this investigation corridor has on the proposed development.

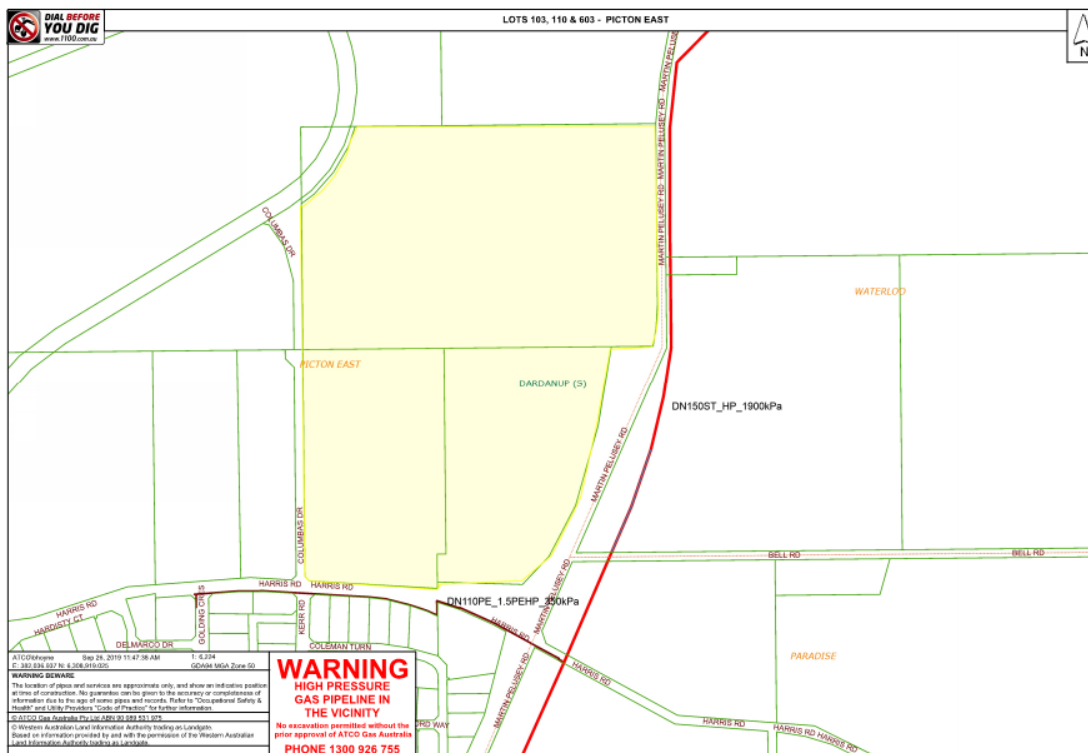


Figure 4 ATCO gas network



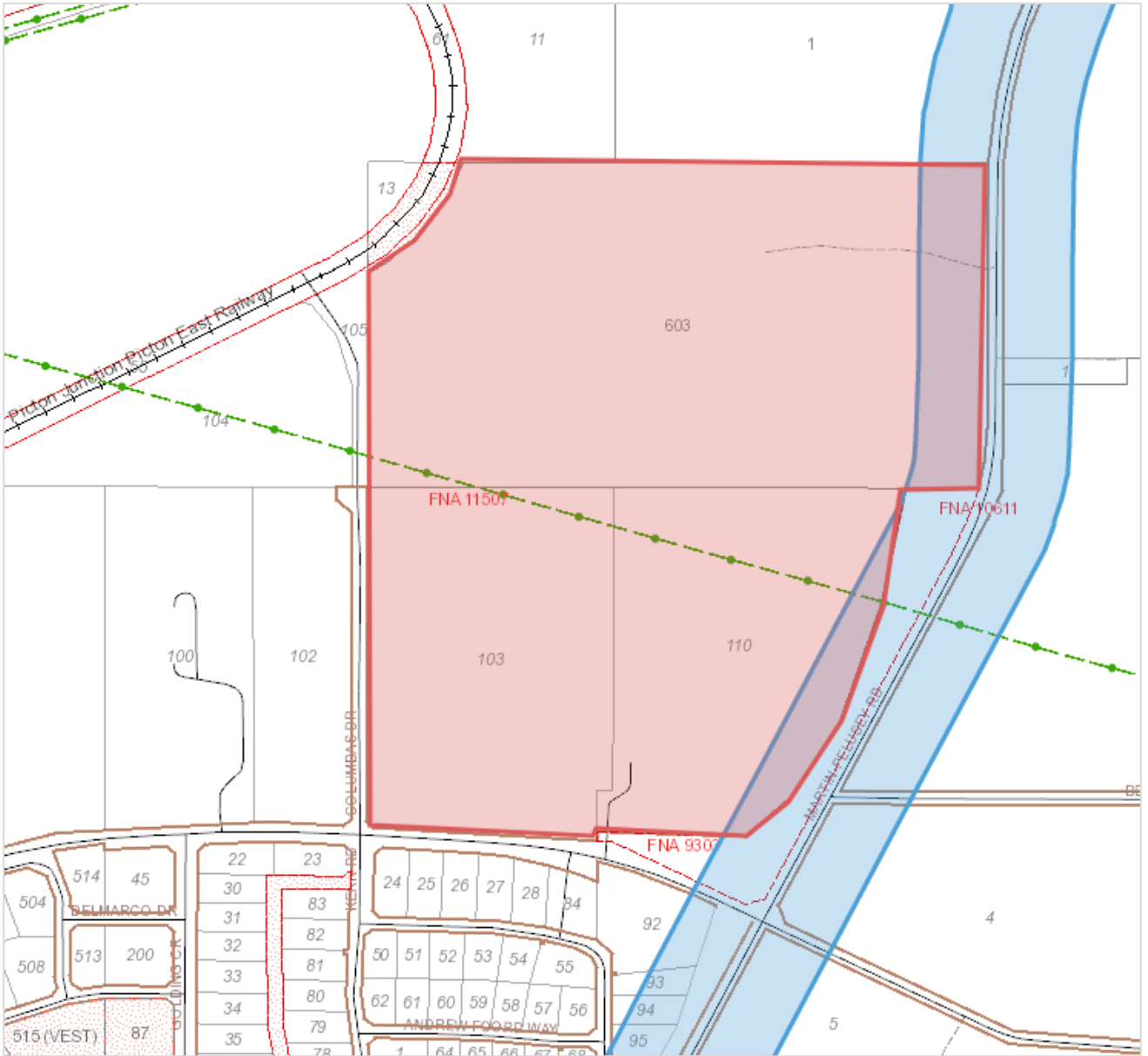


Figure 4: Proposed DBNGP Extension Investigation Area (blue) over the Site (red)

## 5. Rail Infrastructure

Arc Infrastructure operates a rail line that runs along the north-west boundary of the Site. This line is part of the Boyanup Loop near Picton Junction and services the South-West region.

After a telephone conversation with an Arc Infrastructure Property Specialist, WGE/STC were advised that there are currently no plans to widen the rail reserve in this area.

Currently, Arc Infrastructure undertakes routine maintenance and re-sleepering of the infrastructure. The proposed POS buffer indicated on the structure plan appears more than sufficient to meet Arc Infrastructure's requirements.

Correspondence with Arc Infrastructure can be found in Appendix F.

Arc Infrastructure provided the following requirements for the protection of their assets:

- Fencing along the rail reserve boundary will be required where it is adjacent the development
- Dust suppression during construction and restricting dust creating activities by industrial land users within the vicinity of the track will be required

Arc Infrastructure advised that this rail line currently operates 24/7, and as such, development of the Site can cause no disruptions to the rail line operation.

A rail crossing exists adjacent the Site on the western side where the rail line crosses Columbus Drive. This rail crossing is outside the Site's structure plan area, and as such, it is considered unlikely that any upgrades or reconfiguration of this rail crossing would be imposed as a condition of subdivision of the Site.



## 6. Power Reticulation

### 6.1 General

Western Power requires that commercial/industrial lots are provided with 200 kVA/ha power supplies. Based on this, the proposed development presents a total power demand of approximately 11.7MVA. Based on the initial structure plan in revision 001a, the installed capacity will in all likelihood be 14MVA, as lots larger than 1.11ha require a transformer on or adjacent that lot.

### 6.2 Off-site works

The Western Power network capacity mapping tool indicates that there is sufficient capacity (10-15MVA) in the Picton Zone substation (2020 forecast) so it is unlikely that any major substation upgrades will be required.

Based on Western Power Distribution Facilities Information System (DFIS), there is no high voltage (HV) take-off point in the area surrounding the proposed subdivision. This will in all likelihood require that one or possibly two HV lines will need to be constructed from the nearest suitable connection point to the subdivision. We are unable to confirm the extent and cost of these works without formal feasibility information from Western Power.

There is also an existing overhead HV transmission line that traverses the site from West to East. Based on the current concept plan, this line does not align with the proposed road reserves and will have to be relocated. We are unable to advise on the likely cost and implications of this relocation without submitting a formal feasibility study application to Western Power.

### 6.3 Internal power

Based on the standard Western Power load allowances (200 kVA/ha), the proposed subdivision presents an overall power demand of approximately 12 MVA. To service this power demand, as well as to allow for interconnection with the surrounding and future networks, a total of 5 high voltage ring main units and 14 x 1000 kVA transformers will be required.

Ring main units and transformers will be located to minimise high voltage and low voltage cable lengths, and each lot will be serviced using a uni pillar situated on the specific lot. Whilst this report is based on standard load allowances, we note that it is the developer's responsibility to allow sufficient power to lots that are likely to exceed the standard allowance.

Street lighting will need to be designed to AS1158 Cat P3/4 and will require utilising standard Western Power poles and fittings (non-decorative).



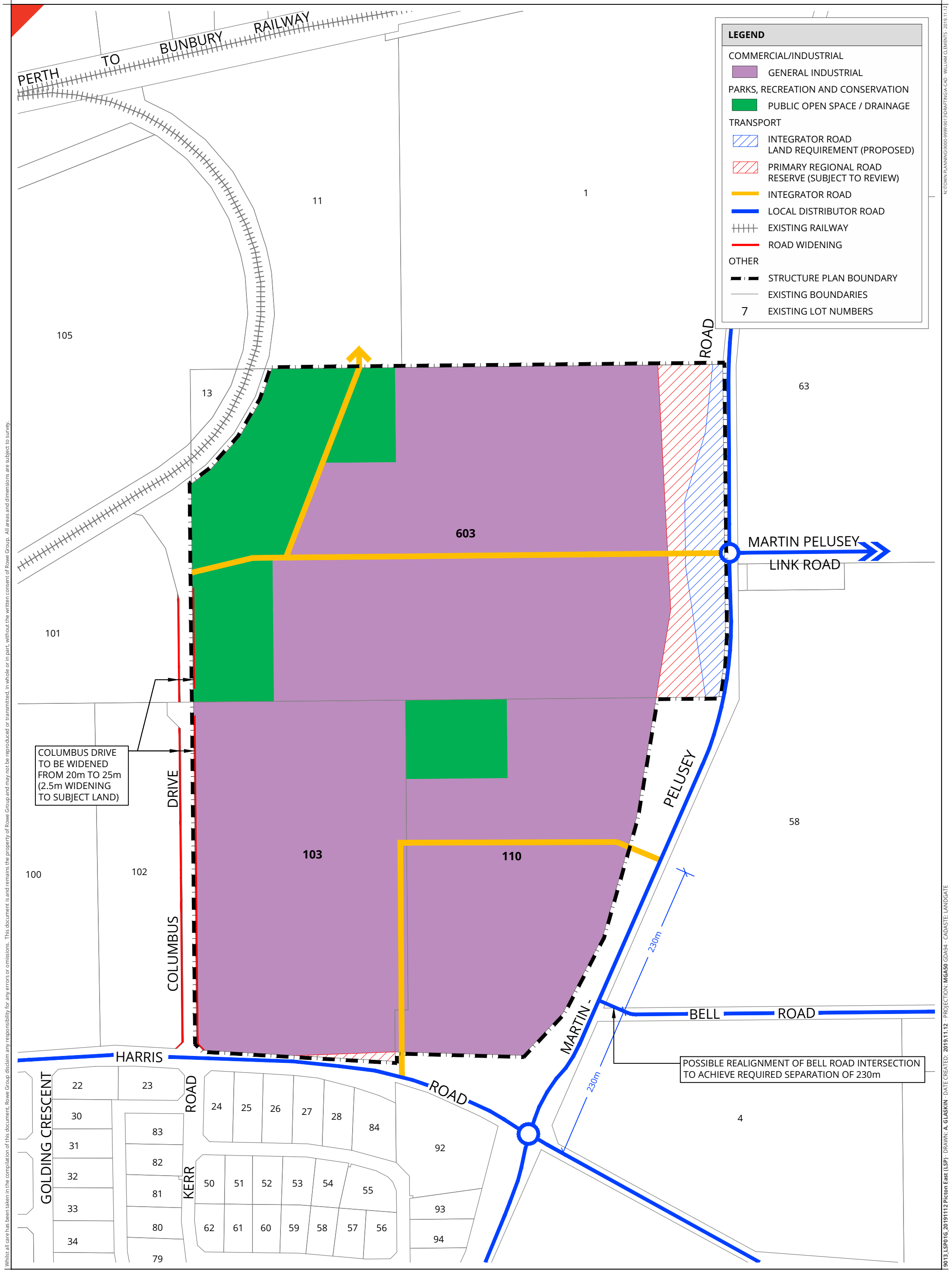
## 7. Communications

The proposed development will require the installation of a fibre ready pit and conduit network to NBN/Telstra requirements. The pit and conduit network will link up with existing communications infrastructure in Harris and Martin Pelusey Roads from where Telstra/NBN will install fibre optic or copper cabling to the development.

# Appendix A

## Local Structure Plan





LEGEND	
COMMERCIAL/INDUSTRIAL	
	GENERAL INDUSTRIAL
PARKS, RECREATION AND CONSERVATION	
	PUBLIC OPEN SPACE / DRAINAGE
TRANSPORT	
	INTEGRATOR ROAD LAND REQUIREMENT (PROPOSED)
	PRIMARY REGIONAL ROAD RESERVE (SUBJECT TO REVIEW)
	INTEGRATOR ROAD
	LOCAL DISTRIBUTOR ROAD
	EXISTING RAILWAY
	ROAD WIDENING
OTHER	
	STRUCTURE PLAN BOUNDARY
	EXISTING BOUNDARIES
7	EXISTING LOT NUMBERS

COLUMBUS DRIVE TO BE WIDENED FROM 20m TO 25m (2.5m WIDENING TO SUBJECT LAND)

POSSIBLE REALIGNMENT OF BELL ROAD INTERSECTION TO ACHIEVE REQUIRED SEPARATION OF 230m

**LOCAL STRUCTURE PLAN**  
 LOTS 103, 110 AND 603  
 PICTON EAST



0 125 m  
 SCALE @ A3: 1:5000  
 9013-LSP-01-G



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N:\TOWN PLANNING\9013\9013\DRAWING\CA-D - WILLIAM CLEMENTS - 2019.11.12  
 9013\_LSP-01-G\_20191112 Picton East (LSP) - DRAWN: A. GLASWIN - DATE CREATED: 2019.11.12 - PROJECTION: MGA50 GDA94 - CADASTE: LANDGATE



# Appendix B

## Water Corporation Correspondence



**From:** Kevin Purcher <Kevin.Purcher@watercorporation.com.au>  
**Sent:** Thursday, 5 September 2019 1:43 PM  
**To:** Lachlan Sutherland  
**Subject:** Lot 103 Martin - Pelusey Road Picton

**Categories:** Filed by Newforma

Hi Lachlan

In regards to your query on the Wastewater Planning for the area please note.

The planning is attached below.

The area is remote from any sewerage. As you can see the subject area is covered by two pump station catchments.

These pump stations are not planned to be constructed in the next 5 years.

I hope that helps. Please note that the planning could change in the future.



**Kevin Purcher**  
Snr Plnr - Land Planning  
Development Services

E Kevin.Purcher@watercorporation.com.au  
T (08) 9420 2385



watercorporation.com.au

.....



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# Appendix C

## ATCO Gas Correspondence



**From:** Hoyne, Ben <Ben.Hoyne@atco.com>  
**Sent:** Thursday, 26 September 2019 2:56 PM  
**To:** Lachlan Sutherland  
**Subject:** Re: Lots 103, 110 and 603 Picton East - Servicing Advice

Hi Lachlan

Short answer is: Yes, there would be a charge for reticulating the estate however, the price would lower if a common trench approach is being factored in for this project.

I'll pull together a cost estimate for you, this'll cover of both scenarios.

Thanks, Ben

Kind regards,

**Ben Hoyne**  
**Business Development Mgr**  
**ATCO Gas Australia**  
**m: 0419 787 599**  
**e: [ben.hoyne@atco.com](mailto:ben.hoyne@atco.com)**

On 26 Sep 2019, at 12:08 pm, Lachlan Sutherland <[Lachlan.Sutherland@wge.com.au](mailto:Lachlan.Sutherland@wge.com.au)> wrote:

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Hi Ben,

Thanks for the confirmation that the 350kPa main would have capacity to service the industrial development and for you call earlier today.

Can you please confirm if there would be any cost to the developer to extend the 350kPa network into the development or would ATCO install this at their cost ? We understand any reinforcement from the 1900kPa main would require contribution from the developer.

Thanks,

**Lachlan Sutherland**  
Civil Graduate Engineer

Office: +61 8 9754 4244  
Direct: +61 8 9717 6107  
[Lachlan.Sutherland@wge.com.au](mailto:Lachlan.Sutherland@wge.com.au)

Wood & Grieve Engineers now part of Stantec  
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Busselton Western Australia 6280

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**From:** Hoyne, Ben <[Ben.Hoyne@atco.com](mailto:Ben.Hoyne@atco.com)>  
**Sent:** Thursday, 26 September 2019 11:57 AM

**To:** Lachlan Sutherland <[Lachlan.Sutherland@wge.com.au](mailto:Lachlan.Sutherland@wge.com.au)>  
**Subject:** Lots 103, 110 and 603 Picton East - Servicing Advice

Hi Lachlan

Thanks for your time earlier.

To provide you with further info, please see response from our asset services team below. Essentially, the southern end of the development (Harris Road) is abutting 350kPa and the Eastern side (Martin Pelusey Road) has availability to 1900kPa. Supporting map attached for your records.

If you require any further info on this project or any others that require natural gas, please don't hesitate to make contact.

Kind regards, Ben

**Ben Hoyne**

Business Development Manager  
Gas, Australia

**E:** [ben.hoyne@atcogas.com.au](mailto:ben.hoyne@atcogas.com.au)

**T:** +61 8 6163 5061 **M:** +61 419 787 599

**A:** 81 Prinsep Road, Jandakot 6164

**W:** [atcogas.com.au](http://atcogas.com.au)

<image002.png>

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**From:** Asset Services <[Asset.Services@atco.com](mailto:Asset.Services@atco.com)>  
**Sent:** Thursday, 26 September 2019 9:56 AM  
**To:** Hoyne, Ben <[Ben.Hoyne@atco.com](mailto:Ben.Hoyne@atco.com)>  
**Subject:** Light Industrial Development - Picton/Dardanup

Hi Ben,

This is in regards to the light industrial development north of the PEHP MAOP 350kPa fronting 252 Harris Rd, EAST PICTON. The MAOP 350kPa network will have the capability to supply this development. Besides, this development is alongside the HP network and will be easy to reinforce in the future, if need be.

Please do let me know if you have further questions.

Regards,

**Mabel See**

Asset Planning Engineer  
Gas, Australia

**E.** [mabel.see@atco.com](mailto:mabel.see@atco.com)

**T.** +61 8 6163 5042

**A.** 81 Prinsep Road, Jandakot WA 6164

W. [atcogas.com.au](http://atcogas.com.au)

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# Appendix D

## Aqwest Correspondence



**From:** Adam Gornall <Adam.Gornall@aqwest.com.au>  
**Sent:** Thursday, 3 October 2019 11:53 AM  
**To:** Lachlan Sutherland  
**Cc:** Phil Dixon  
**Subject:** Lots 103, 110 and 603 Picton East - Servicing Advice

Good Morning Lachlan,

Aqwest has run some rough hydraulic modelling scenarios based off of the number of proposed lots and have found that the current water mains infrastructure should be sufficient. The current water main stops at the start of the proposed sub-division so a mains extension of approx. 200m to Martin Pelusey Road will be required to service the front lots along Harris Rd. The water mains to be installed through-out the sub-division will need to be approved by Aqwest. All works will be at the developers expense.

If you require any further information, please let us know.

Regards

**Adam Gornall**

Coordinator Water Distribution

Tel: 08 9780 9511 | Mob: 0417 559 547

Post: PO Box 400 Bunbury WA 6231 | Office: 5 MacKinnon Way Bunbury WA 6230 | [www.aqwest.com.au](http://www.aqwest.com.au) | Find us on Facebook <https://www.facebook.com/aqwestbunbury/>



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## Appendix E

# Department of Mines, Industry Regulation and Safety Correspondence



**From:** LAW, Walter <Walter.LAW@dmirs.wa.gov.au>  
**Sent:** Wednesday, 18 September 2019 4:29 PM  
**To:** Rhys Fowler  
**Cc:** BENNETT, John  
**Subject:** Bunbury - Albany gas pipeline corridor.

**Categories:** Filed by Newforma

Hi Rhys

On 9 September 2019, you emailed DMIRS with your query on an area of land in Picton fronting Martin Pelusey Rd and Harris Rd. Your email was forwarded to me recently. That area overlaps an investigation corridor for the proposed extension of the DBNGP from Bunbury to Albany. This information is available on the DMIRS Tengraph online system.

Regards

**Walter Law** | Manager Petroleum Facilities  
Resource and Environmental Compliance Division

**Department of Mines, Industry Regulation and Safety**

100 Plain Street East Perth WA 6004

**Tel: +61 8 9222 3319 | Mob: 0413 627 523**

[walter.law@dmirs.wa.gov.au](mailto:walter.law@dmirs.wa.gov.au) | [www.dmirs.wa.gov.au](http://www.dmirs.wa.gov.au)



Government of **Western Australia**  
Department of **Mines, Industry Regulation and Safety**

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# Appendix F

## Arc Infrastructure Correspondence



**From:** Anna Kijak <Anna.Kijak@arcinfra.com>  
**Sent:** Thursday, 29 August 2019 2:31 PM  
**To:** Lachlan Sutherland  
**Subject:** RE: Lots 103, 110 and 603 Picton East - Servicing Advice

**Categories:** Filed by Newforma

Hi Lachlan,

I have received your email from the Arc Communications Team, thank you for your query.

The section of rail identified in the sketch you have provided is part of the Boyanup loop near Picton Junction.

In this area of the Arc Network, our SouthWest Maintenance Team is planning on conducting routine maintenance (including re-sleepering) in the near term.

Rail traffic through this area is currently scheduled daily, however may increase in the next 5 years due to prospective business development in the SouthWest.

We welcome Wood and Grieve Engineers proposal for development in the adjacent land.

Kind regards,

Anna Kijak  
Property Contracts Specialist

Arc Infrastructure  
Level 3, 1 George Wiencke Drive, Perth Airport, WA, 6105  
GPO Box S1411, Perth WA 6845

T – (08) 9442 8815  
E – [Anna.Kijak@arcinfra.com](mailto:Anna.Kijak@arcinfra.com)  
W – [arcinfra.com](http://arcinfra.com)

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**From:** Lachlan Sutherland <[Lachlan.Sutherland@wge.com.au](mailto:Lachlan.Sutherland@wge.com.au)>  
**Sent:** Thursday, 29 August 2019 12:12 PM  
**To:** Communications <[Communications@arcinfra.com](mailto:Communications@arcinfra.com)>  
**Cc:** Rhys Fowler <[Rhys.Fowler@wge.com.au](mailto:Rhys.Fowler@wge.com.au)>  
**Subject:** Lots 103, 110 and 603 Picton East - Servicing Advice

Hi,

We are currently assisting with servicing investigations into an area of land within the Shire of Dardanup as identified in the attached sketch. Unfortunately a proposed subdivision layout is not available for this land, however the current proposal is for general industrial (and a smaller area of light industrial).

As seen in the above sketch, Arc Infrastructures railway cuts in the northwest corner of the land. We'd like to determine whether Arc infrastructure has any plans or intentions of upgrades of the rail

network in this area. We'd welcome any other comments Arc Infrastructure may have or anything specific that should be considered.

Any queries please let us know. Your earliest advice would be greatly appreciated.

Kind Regards,



**Lachlan Sutherland**

Civil Graduate Engineer

D: (08) 9717 6107

T: (08) 9754 4244

E: [Lachlan.Sutherland@wge.com.au](mailto:Lachlan.Sutherland@wge.com.au)

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---

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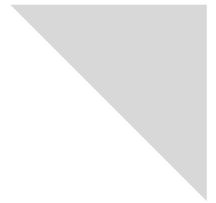


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# APPENDIX 8

PLANNING FRAMEWORK – SCHEDULE OF LSP  
ASSESSMENT IN RELATION TO THE *PICTON INDUSTRIAL  
PARK SOUTHERN PRECINCT DSP*



**ROWE**  
GROUP  
DESIGN



**Planning Framework:  
Schedule of LSP Assessment in relation to the Picton Industrial Park Southern Precinct District Structure Plan (WAPC, Oct. 2018)**

District Planning (DSP Report Section and statement)	Local Structure Planning Phase (Manner in which Local Structure Plan (LSP) complies)	Subdivision & Development Phase (Detailed Design matters)
<b>4. Subdivision and Development Requirements</b> <b>4.1 Proposed land use and zoning</b>		
1 Subdivision and development shall generally be in accordance with the DSP and be approved by the WAPC.	The LSP provides for industrial subdivision and development consistent with the DSP.	Subdivision will ultimately be assessed against the approved Picton 2A LSP.
2 Subsequent variations to the DSP may include minor adjustments to road configurations, lot densities and open space boundaries, provided that the variation does not change the intent or configuration of the DSP and is subject to the approval of the WAPC.	A minor variation to the DSP is proposed to accommodate additional Public Open Space not identified on the DSP. This POS area provides for retention of remnant vegetation.  <u>The enclosed plan illustrates the additional open space areas.</u>  No other variations to the DSP proposed.	Subdivision implementation will formally create the POS reserve.
3 Prior to subdivision and development in Precincts 1, 2 or 3 applicants are to lodge a local structure plan for adoption by the responsible local authority (or authorities) for these specific areas and endorsement by the WAPC. Where land is currently not zoned in local planning schemes or the GBRS for future industrial use, but is identified as being suitable in the DSP, then amendments to the local town planning scheme and the GBRS will be required.	A <i>Local Structure Plan - Precinct 2A Picton Industrial Park</i> and associated <i>Request for Lifting of Industrial Deferment</i> report have been prepared for the land.	
4 The applicant will be required to prepare the following management plans to support local structure plans, if applicable: <ul style="list-style-type: none"> <li>• Fauna habitat surveys to identify habitat for the Western Ringtail Possum and red-tailed Black Cockatoos and management plans for the Western Ringtail Possum to the satisfaction of the Department of Biodiversity, Conservation and</li> </ul>	Management plans and timing of requirements are outlined in the EAMS accompanying the Precinct 2A LSP (See Table 6 - Emerge, 2019): <ul style="list-style-type: none"> <li>• The EAMS confirms the assessment of fauna habitat and retention opportunities and the provision of additional POS identified to retain vegetation &amp; habitat in the northwest portion of the site;</li> </ul>	Tasks relating to subdivision and development: <ul style="list-style-type: none"> <li>• Confirm layout retains POS as appropriate with other tree retention opportunities;</li> <li>• If required (independently) obtain and implement licences pursuant to Federal EPBC Act and State Biodiversity Conservation Act.</li> </ul>



<p>Attractions and Commonwealth Department of the Environment and Energy.</p> <ul style="list-style-type: none"> <li>• Management plans for wetlands and remnant vegetation must be developed concurrently with a bushfire management plan to ensure that the plans align. These plans are to be implemented by the developer at the time of subdivision.</li> <li>• Programs for fill and draining of the land at the subdivision stage are to demonstrate that existing vegetation will be protected where possible and not impact upon water quantity and quality of wetlands.</li> <li>• A foreshore management plan for Ferguson River shall be developed concurrently with the bushfire management plan to ensure that the plans align. These plans are to be implemented by the developer at the time of subdivision.</li> <li>• A bushfire risk assessment/management plan in conjunction with the Department of Fire and Emergency Services and the respective local governments, shall be developed and must take account of long-term revegetation outcomes associated with any wetlands and remnant vegetation management plans and the Ferguson River foreshore management plan.</li> <li>• A local water management strategy for local structure plan areas must be prepared to the satisfaction of the Department of Water and Environmental Regulation, in consultation with the local</li> </ul>	<ul style="list-style-type: none"> <li>• N/A - No wetlands identified within the LSP.</li> <li>• See subdivision note.</li> <li>• N/A</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> <li>• Confirm layout retains POS as appropriate with other tree retention opportunities;</li> <li>• N/A</li> <li>• Complete detailed BAL assessment and BMP to be reviewed / updated as appropriate to reflect detailed subdivision design.</li> <li>• Confirm detailed subdivision design remains consistent with LWMS. Preparation of Urban Water Management Plan (UWMP) to be condition of subdivision approval.</li> </ul>
<ul style="list-style-type: none"> <li>• A Bushfire Management Plan has been prepared and accompanies the Precinct 2A LSP per WAPC Guidelines. BMP demonstrates compliant BAL assessment and access.</li> </ul>	<ul style="list-style-type: none"> <li>• An LWMS has been prepared and accompanies the Precinct 2A LSP. The LWMS provides spatial allocation of drainage requirements.</li> </ul>	<ul style="list-style-type: none"> <li>• Confirm detailed subdivision design remains consistent with LWMS. Preparation of Urban Water Management Plan (UWMP) to be condition of subdivision approval.</li> </ul>



<p>authorities, Department of Biodiversity, Conservation and Attractions and Water Corporation.</p>	<p>Industrial lots should be connected to the following urban services:</p> <ul style="list-style-type: none"> <li>• Reticulated potable water;</li> <li>• Sewer;</li> <li>• Underground power</li> <li>• Telecommunications</li> </ul> <p>In the case of sewer connection, consideration may be given to an exemption from the provision of reticulated sewerage, where the proponent can demonstrate on-site domestic waste water can be managed in accordance with the draft Government Sewerage Policy (Department of Planning 2016). Despite approximately only half of the DSP area being within a sewage sensitive area, on the basis that the entire site drains to the Leschenault Estuary Management Area and is within an intervention sub catchment of the Leschenault Estuary Water Quality Improvement Plan (Department of Water 2012), it is recommended that all on-site domestic wastewater systems to be secondary treatment systems, such as aerobic treatment units.</p>	<p>The Precinct 2A LSP confirms the availability of all urban services as follows:</p> <ul style="list-style-type: none"> <li>• Reticulated Water – Available</li> <li>• Sewer – Not Available – see note below</li> <li>• Underground Power – Available</li> <li>• Telecommunications – Available</li> </ul> <p>Variance in reticulated sewer availability is acknowledged by the DSP and addressed in the Precinct 2A LSP.</p>	<p>Reconfirm availability of services at subdivision design staged. Detailed service extension, alignment and connectivity to be documented as conditions of approval.</p> <p>Demonstration of site suitability for ATU's in the absence of reticulated sewer (should it remain remote at the time of future subdivision) to be confirmed having regard to final lot layout and anticipated land use mix.</p>
<p>5</p>	<p>The Precinct 2A LSP confirms the availability of reticulated gas.</p>	<p>The Precinct 2A LSP confirms the availability of reticulated gas.</p>	<p>Reconfirm availability at subdivision design stage.</p>
<p>6</p>	<p>Whilst it is preferred that all lots should be connected to a reticulated gas supply. At the time of subdivision the developer is to undertake investigations into the feasibility of connecting industrial lots to a reticulated gas supply.</p>	<p>The DSP identified these matters as warranting consideration prior to subdivision or development. As such, the Precinct 2A LSP is not required to undertake review at this LSP stage. The LSP provides a</p>	<p>The need for review of these matters in specific relation to the Precinct 2A LSP area can be considered at subdivision stage having regard to the extent of development existing</p>
<p>7</p>	<p>Prior to subdivision or development developers shall prepare a strategy to the satisfaction of the local authorities, Main</p>	<p></p>	<p></p>



<p>Roads WA and the WAPC to ensure that the necessary preparation and funding for the following works are provided for:</p> <ul style="list-style-type: none"> <li>• an intersection at Columbas Drive (Precinct 2) and Harris Road</li> <li>• a limited number of intersections with South Western Highway from Precinct 1</li> <li>• an internal district distributor road system, including the north/south realigned Martin Pelusey Road and its intersection with Harris Road</li> <li>• the improvement of Harris Road and other internal distribution roads as indicated on the DSP map to the status of an integrator road</li> <li>• upgrading of the existing at-grade level crossing, including automatic boom gates and lights, which provides access from Columbas Drive to the land within Precinct 2 within the rail loop before occupation of industrial units within this loop</li> <li>• the provision of an at-grade level crossing, meeting the requirements of the Public Transport Authority, to provide access to the land in Precinct 2 within the rail loop from Harris Road before occupation of industrial units within the loop.</li> </ul>	<p>road layout consistent with the DSP. The following additional comments are made:</p> <ul style="list-style-type: none"> <li>• the intersection of Columbas Drive and Harris Road is recognised in the LSP and reviewed in the accompanying Transport Assessment (Ulloth 2019). This includes provision for widening of Columbas Drive to accommodate future upgrading. No requirements exist to upgrade or expand the intersection at this time beyond already planned upgrades by MRWA and the Shire.</li> <li>• N/A</li> <li>• The road network shown on the LSP is consistent with the DSP and current MRWA wider network planning. This is documented in the Ulloth 2019 report.</li> <li>• No requirements exist to upgrade or expand the intersection at this time beyond already planned upgrades by MRWA and the Shire.</li> <li>• No requirements exist to upgrade the at-grade rail level crossing at the end of Columbas Drive at this time. The future extension of Columbas Drive, if provided for in the adjoining balance Precinct 2 LSP would be required to review this requirement at that time having regard to then existing and planned industrial development and traffic.</li> <li>• N/A</li> </ul>	<p>and proposed at that time, which may be some years from now.</p>
<p>8 Local planning schemes to identify the need or otherwise for development plans to be prepared, to the satisfaction of the local government(s), for areas which may require intersection treatments for</p>	<p>There is no requirement for development plans or matters to be included in scheme. The intersection of Harris Road and Columbas Drive is existing. The LSP provides for widening of Columbas Drive in accordance with the Traffic Report. One new road intersection to Harris Road is proposed but would be constructed by the subdivider.</p>	<p>Subdivision design to confirm Columbas Drive widening and intersection and new intersection.</p>



<p>accesses onto Harris Road, South Western Highway and Martin Pelusey Road.</p> <p>9 No industrial lots are permitted to directly back onto areas of remnant vegetation, wetlands or the Ferguson River. Sufficient setback will be required between all new development abutting native remnant vegetation, taking account of any revegetation and/or changes to buffers/foreshores as a result of development of management plans for remnant vegetation, wetlands or the Ferguson River.</p>	<p>No areas associated with wetlands or the Ferguson River exist within the LSP. The LSP area has been assessed in an associated EAMS report (Emerge 2019) and one area is identified for remnant vegetation retention. This area is identified for retention as POS in the northwest corner of the LSP and is provided with road frontage. This area is in excess of and was not identified for retention in the DSP.</p> <p>While the Precinct 2A LSP does not show a lot layout a Concept Plan is included as supporting information and no lots are identified within this as backing onto the one area of remnant vegetation within the POS. The balance of the LSP area is expected to be cleared for industrial development in accordance with the LSP and while every opportunity for tree retention <u>within lots</u> will be reviewed, this would be at detailed subdivision design stage.</p>	<p>Confirm retention of POS including remnant native vegetation with road edge.</p> <p>Review opportunities for tree retention as part of detailed subdivision design and/or lot development.</p>
<p>10 Proposed land uses are to be generally consistent with Industry 2030 (WAPC, 2000), which identifies a range of lot sizes and land uses for both light and general industry in this area. Lots for light industry will generally be smaller (up to 1000 square metres) and located in more prominent parts of the DSP area and lots for general industry will normally be catering for larger-scale industries or those where it is beneficial to have a separation from more sensitive land uses to ensure the amenity of the area is not compromised.</p>	<p>The LSP contemplates general industrial use in accordance with TPS3 and the Industry 2030 strategy.</p>	<p>Confirm land use consistency at detailed development stage based on proposed development.</p>
<p>11. Local structure plans will need to be supported by the design guidelines and policy measures approved by the Shire of Dardanup and City of Bunbury prior to any subdivision or development in their respective local government areas. The following design objectives will need to be considered in any design guidelines prepared for land within the DSP area:</p>	<p>The LSP can be supported by either Design Guidelines or the use of a Local Development Plan(s) to guide future development within the LSP area. Depending on the final nature and scale of development, and land use mix these options would be considered at subdivision stage.</p>	<p>A requirement for either Design Guidelines or a Local Development Plan(s) would be considered at subdivision stage and if appropriate included as a condition of subdivision approval.</p> <p>The LDP if required could be prepared to include:</p> <ul style="list-style-type: none"> <li>• Irregular shaped lots</li> <li>• Lots abutting drainage/POS reserves</li> <li>• Lots adjacent to Martin-Pelusey Road</li> </ul>



<ul style="list-style-type: none"> <li>• creation of high quality built form solutions, providing functional and attractive industrial streetscapes and efficient use of land</li> <li>• modern distinctive architectural design, building form, streetscape, signage and landscaping contributing to a sense of place within the area</li> <li>• efficient use of energy, wastewater re-use, stormwater harvesting and water sensitive design</li> <li>• high quality unified and functional landscaping that complement the buildings, integrate with the retained natural environment and demonstrate best practice urban water management principles.</li> </ul>		<p>The LDP and/or guidelines could consider the application of the DSP identified items at that time when the likely pattern of development is known.</p>
<p><b>4.2 Requirements for individual precincts</b></p> <p><b>Precinct 2</b></p> <p>A local structure plan (or plans) shall be prepared for all or part of the precinct prior to any further subdivision to specifically ensure that the following issues are addressed:</p> <ul style="list-style-type: none"> <li>• the integration of future development on land located within the rail loop with the remainder of the precinct, with highway access via at-grade crossings, subject to the agreement of the Public Transport Authority and the WAPC</li> <li>• the protection of significant remnant vegetation and the management of the Resource Enhancement wetland on Lot 200 in accordance with the EPA s16 (e) advice</li> <li>• buffers of a requisite distance between industrial lots and any remnant vegetation, taking into account any revegetation and/or changes to buffers/foreshores as a result of development or management</li> </ul>	<p>The <i>Local Structure Plan Precinct 2A – Picton Industrial Park Southern Precinct</i> has been prepared for the eastern part of Precinct 2.</p> <p>The LSP responds to DSP items as follows:</p> <ul style="list-style-type: none"> <li>• Land within the rail loop does not form part of the LSP. The LSP acknowledges the future potential connection of Columbas Drive to service rail loop land and the Traffic Assessment Report (Ulloth, 2019) considers the broader movement network in this context.</li> <li>• An area of remnant vegetation not identified for retention in the DSP is proposed as Public Open Space on the Precinct 2A LSP. The retention of this vegetation reflects the recommendations of EAMS report (Emerge 2019) prepared in support of the LSP.</li> <li>• A road interface, providing a formal edge to the proposed open space encompassing vegetation, has been provided for in the LSP. There are no identified wetlands or foreshore reserves in the LSP.</li> </ul>	<p>Detailed subdivision design to confirm consistency with the approved LSP in relation to movement, vegetation retention/POS, Harris Road access and lot sizes.</p>



<ul style="list-style-type: none"><li>plans for wetlands and remnant vegetation</li><li>intersection modifications for the three southern access roads to Harris Road</li><li>lot sizes to be generally in accordance with those prescribed in Industry 2030, with a minimum of 3000 square metres and the remainder a variety of lot sizes up to 100 hectares. Larger lots will be considered where it can be demonstrated that the proposed land use will comply with the cumulative impact assessment for the noise, odour and risk modelling for the Preston Industrial Park</li><li>access onto both Harris Road and the re-aligned Martin-Pelusey Road to be controlled through the use of an internal road system with a limited number of access points. General condition 7 of Section 4.1 will apply if any additional highway access points are identified.</li></ul>		
	<ul style="list-style-type: none"><li>Access to Harris Road and intersection arrangements has been reviewed in the Traffic Assessment Report (Uloth, 2019). The recommendations of this are reflected in the LSP.</li><li>The LSP does not propose specific lot sizes but includes a Concept Plan demonstrating a range of general industrial lots can be created at subdivision with sizes in accordance with the Industry 2030 range.</li><li>Access to Martin-Pelusey Road and Harris Road (and intersection arrangements) has been reviewed in the Traffic Assessment Report (Uloth, 2019). The recommendations of this are reflected in the LSP.</li></ul>	



