



---

# ATTACHMENTS

---

## **Ordinary Meeting of Council**

**Tuesday 22 September 2015**

6.00pm

City of Albany Council Chambers

ORDINARY COUNCIL MEETING  
ATTACHMENTS –22/09/2015

## TABLE OF CONTENTS

Attachment	Report No.	Description	Page No.
<b>A</b>	<b>ED</b>	<b>Economic Development Committee Nil</b>	
<b>B</b>	<b>CS</b>	<b>Community Services Committee Nil</b>	
<b>C</b>	<b>PD</b>	<b>Planning &amp; Development Committee</b>	
	PD091	<ul style="list-style-type: none"> <li>Reconsideration of Development Application-Telecommunications Infrastructure-Lot 105, 241 Robinson Road, Robinson</li> </ul>	1
	PD092	<ul style="list-style-type: none"> <li>Approval of Local Development Plan-Lot 1 and 2 Frenchman Bay Road, Frenchman Bay</li> </ul>	124
	PD093	<ul style="list-style-type: none"> <li>Adoption of Yakamia/Lange Structure Plan</li> </ul>	179
	PD094	<ul style="list-style-type: none"> <li>Initiation of Scheme Amendment-Lot 5 Lowanna Drive, Lots 9 and 110 George Street and Lot 16 South Coast Highway, Gledhow</li> </ul>	218
	PD095	<ul style="list-style-type: none"> <li>Adoption of Scheme Amendment-Lots 105 and 106 Nanarup Road, Lower King</li> </ul>	245
	PD096	<ul style="list-style-type: none"> <li>Adoption of Scheme Amendment-Lot 11 on Diagram 42859 Nanarup Road, Nanarup</li> </ul>	317
	PD097	<ul style="list-style-type: none"> <li>Planning and Building Reports August 2015</li> </ul>	383
<b>D</b>	<b>CSF</b>	<b>Corporate Services &amp; Finance Committee</b>	
	CSF192	<ul style="list-style-type: none"> <li>Financial Activity Statement-July 2015</li> </ul>	398
	CSF193	<ul style="list-style-type: none"> <li>List of Accounts for Payment-August 2015</li> </ul>	407
	CSF194	<ul style="list-style-type: none"> <li>Delegated Authority Reports</li> </ul>	425
	CSF196	<ul style="list-style-type: none"> <li>Proposed Land Sale-CONFIDENTIAL</li> </ul>	430
<b>E</b>	<b>WS</b>	<b>Works &amp; Services Committee</b>	
	WS085	<ul style="list-style-type: none"> <li>Mount Elphinstone to Central Business District Cycle Link Feasibility Study</li> </ul>	431
	WS086	<ul style="list-style-type: none"> <li>Advertise Use of Reserve 30463 for Motocross</li> </ul>	485
<b>F</b>	<b>BFA</b>	<b>Bush Fire Advisory Committee</b>	
	BFA005	<ul style="list-style-type: none"> <li>New Kalgan Fire Station</li> </ul>	507





13 July 2015

Chief Executive Officer  
City of Albany  
102 North Road  
**ALBANY WA 6331**

Dear Sir/Madam

**PROPOSED TELECOMMUNICATIONS FACILITY:  
LOT 105 (241) ROBINSON ROAD, ROBINSON WA 6330**

In October last year, nbn co limited(**nbn**<sup>TM</sup>) lodged a Development Application with the City of Albany for a proposed fixed wireless network facility at the above location to provide high speed broadband service to Robinson.

Following on from Council's decision to issue a notice of refusal for the Development Application in March this year **nbn** made an application on 7 May 2015 under section 252(1) of the *Planning and Development Act 2005* for the State Administrative Tribunal to review and set aside the Council's decision (and grant development approval for fixed wireless broadband telecommunications infrastructure at 241 Robinson Road, Robinson). As part of the Tribunal process associated with this application, the Council requested NBN Co investigate alternative sites in the area. **nbn** now writes to you to advise that it has concluded a comprehensive assessment of the alternative site candidates in the surrounding area.

We understand that Council has received a number of enquiries from the local community querying the location of the proposed facility and wanting to understand what other sites have been considered. We are also aware that some residents in the community have questioned why a fixed wireless facility must be located at the nominated location within Robinson.

**nbn** endeavours to strike a balance between providing valuable services and minimising any visual impact on the community and local environment.

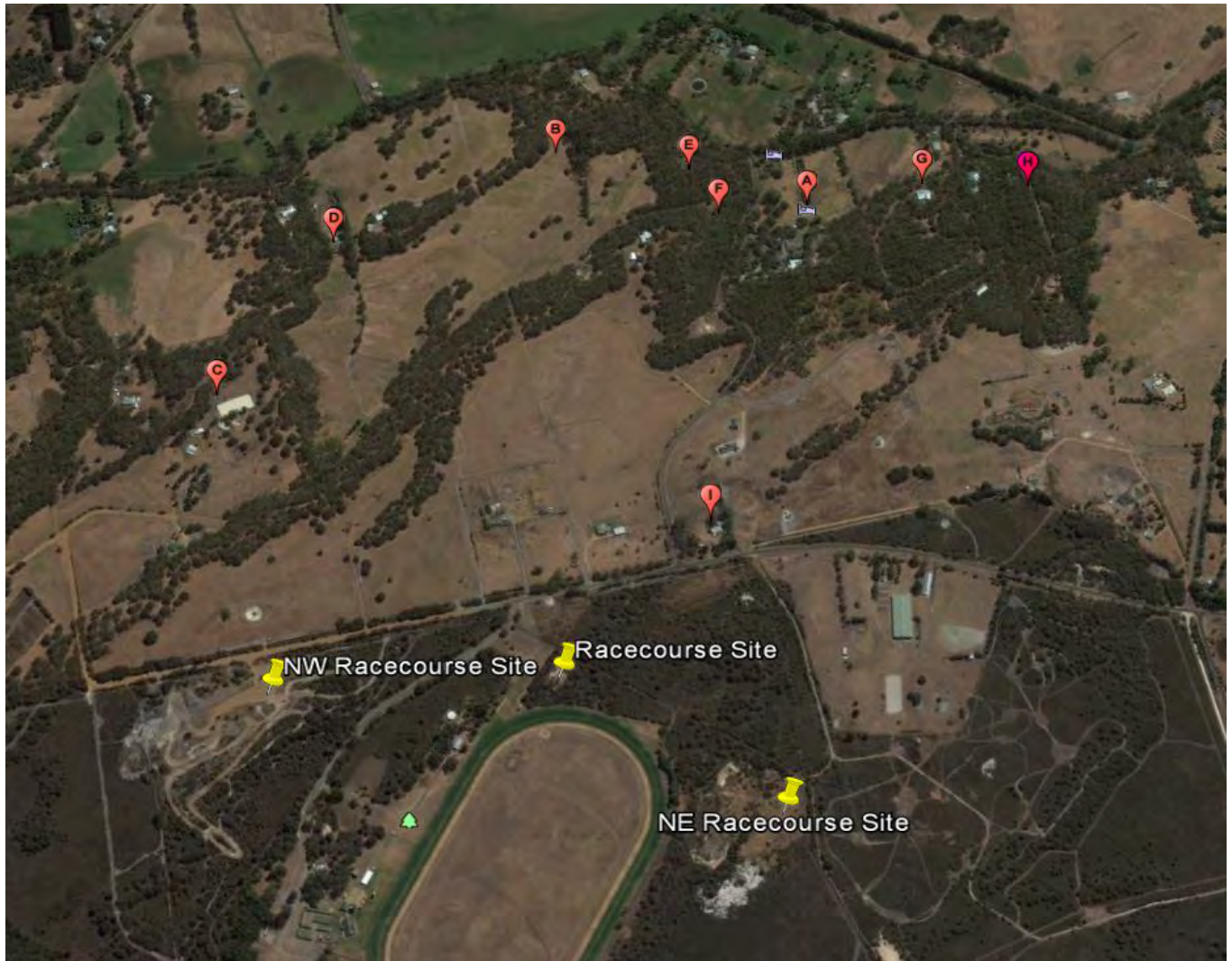
Like all radio antennas, the **nbn** fixed wireless facilities must be elevated above their surroundings to provide reliable, unbroken communications. As a rule, **nbn** does not design the network to require excessively large, visually dominating structures where avoidable. They must also be placed in a relatively central location, to allow the community to evenly share the broadband provided by the three panel antennas.

Locations that are either not close, or not relatively central to the *majority* of the community cannot provide a reliable **nbn** broadband service.

While **nbn** does seek to offset its proposed facilities from surrounding residences as much as possible, relocating beyond the periphery of a community will significantly compromise both the amount and the quality of the service the facility can provide, making these "outside" locations technically unfeasible.

**Alternative Site Assessment**

The map below identifies the nine (9) locations that were initially investigated by **nbn** as part of the site scoping and selection process and a further three (3) site candidates in and around the racecourse land to the south of Roberts road.



The outcome of this assessment for each of the nine (9) candidates initially investigated at the site scoping and site selection stage last year was also included in the Development Application that was submitted to Council late last year.

The table below provides an updated assessment of all twelve (12) site candidates. Town Planning, Property and Radio Frequency Engineering inputs have all been incorporated as part of this review.

Candidate and Location	Technical Assessment	Planning Assessment
<b>A.</b> 27 Racecourse Rd, Robinson (Lot 24 on Plan 3568)	The assessment considered the establishment of a proposed 40m monopole on the subject land.  Preliminary and high level desktop	The site is zoned Rural Residential and is located in generally a low density rural residential setting. Despite several attempts, the owners of this property were uncontacted and non-responsive the



Candidate and Location	Technical Assessment	Planning Assessment
	<p>assessment concluded that coverage objectives could be satisfied with a proposal from this site.</p>	<p>time of site scoping and selection last year.</p> <p>The site potentially is a suitable candidate from a planning perspective given its generally central location however the subject land is fairly open with screening and natural vegetation only really evident around the perimeter of the subject site.</p> <p>The overall financial feasibility of the candidate cannot be determined given the absence of vital commercial considerations such as power and access costs, security of tenure and other unknown site specific civil considerations.</p>
<p><b>B.</b> 101 Robinson Road, Robinson (Lot 101 on Plan 40892)</p>	<p>The assessment considered the establishment of a proposed 40m monopole on the subject land.</p> <p>Nominal and high level desktop assessment concluded that coverage objectives could potentially be satisfied with a proposal from this site subject to further site investigation to confirm actual height and location</p>	<p>The site is zoned Rural Small Lot Holdings and is located in generally a low density rural residential setting. Noting at the time of scoping the site was zoned Rural Residential prior to City of Albany Planning Scheme No 1 change gazetted on 28<sup>th</sup> of April 2014.</p> <p>The subject land is fairly open to the south with vegetation present towards the north and eastern boundaries of the lot.</p> <p>The owners of this property were not interested in a proposal on their land and as such <b>nbn</b> did not proceed any further with investigations on the subject site.</p>
<p><b>C.</b> 28 Sand Pit Road, Robinson (Lot 21 on Plan 3568)</p>	<p>The assessment considered the establishment of a proposed 40m monopole on the subject land.</p> <p>The site is located on the outer parameter on the western area of the search area.</p> <p>Given the candidate is located on the fringe of the search area and there is vegetation on the elevated areas of the site on the eastern side of the property this would require further site investigation to confirm actual height and location and whether the service objectives could be efficiently achieved from</p>	<p>The site is zoned Rural Small Lot Holdings residential and is located in generally a low density rural residential setting. Noting at the time of scoping the site was zoned Rural Residential prior to City of Albany Planning Scheme No 1 change gazetted on 28<sup>th</sup> of April 2014.</p> <p>Despite several attempts, the owners of this property were uncontactable and non-responsive the time of site scoping and selection last year.</p> <p>The overall financial feasibility of the candidate cannot be determined given the absence of vital commercial considerations such as location and establishment costs</p>



Candidate and Location	Technical Assessment	Planning Assessment
	<p>this location.</p> <p>Nominal and high level desktop assessment concluded that coverage objectives could potentially be satisfied with a proposal from this site however is likely to offer an inferior service and level of coverage compared to the subject site particularly to the serviceable premises to the east.</p>	<p>for power and access, security of tenure and other unknown site specific civil considerations. Without the ability to confirm and understand these mandatory requirements the site was not pursued further.</p>
<p><b>D.</b> 379 Robinson Road, Robinson (Lot 9 on Plan 3568)</p>	<p>The assessment considered the establishment of a proposed 40m monopole on the subject land.</p> <p>Nominal and high level desktop assessment concluded that coverage objectives could potentially be satisfied with a proposal from this site subject to further site investigation to confirm actual height and location</p>	<p>The site is zoned Rural Small Lot Holdings residential and is located in generally a low density rural residential setting. Noting at the time of scoping the site was zoned Rural Residential prior to City of Albany Planning Scheme No 1 change gazetted on 28<sup>th</sup> of April 2014.</p> <p>The owners of this property were not interested in a proposal on their land and as such <b>nbn</b> did not proceed any further with investigations on the subject site.</p>
<p><b>E.</b> 325 Racecourse Road Robinson (Lot 103 on Plan 40892)</p>	<p>The assessment considered the establishment of a proposed 40m monopole on the subject land.</p> <p>Nominal and high level desktop assessment concluded that coverage objectives could potentially be satisfied with a proposal from this site subject to further site investigation to confirm actual height and location</p>	<p>The site is zoned Rural Small Lot Holdings residential and is located in generally a low density rural residential setting. Noting at the time of scoping the site was zoned Rural Residential prior to City of Albany Planning Scheme No 1 change gazetted on 28<sup>th</sup> of April 2014.</p> <p>Despite several attempts, the owners of this property were uncontactable and non-responsive the time of site scoping and selection last year.</p> <p>The site location is highly vegetated and significant clearing would have been required in order to establish an area suitable for the <b>nbn</b> compound.</p> <p>The overall financial feasibility of the candidate cannot be determined given the absence of vital commercial considerations such as location and establishment costs for power and access, security of tenure and other unknown site specific civil considerations. Without the ability to confirm and understand these mandatory</p>





Candidate and Location	Technical Assessment	Planning Assessment
		requirements the site was not pursued further.
<b>F.</b> 52 Racecourse Road, Robinson (Lot 5 on Plan 3568)	<p>The assessment considered the establishment of a proposed 40m monopole on the subject land.</p> <p>Nominal and high level desktop assessment concluded that coverage objectives could potentially be satisfied with a proposal from this site subject to further site investigation to confirm actual height and location</p>	<p>The site is zoned rural residential and is located in generally a low density rural residential setting.</p> <p>The site location is highly vegetated and significant clearing would have been required in order to establish an area suitable for the <b>nbn</b> compound.</p> <p>The owners of this property were not interested in a proposal on their land and as such <b>nbn</b> did not proceed any further with investigations on the subject site.</p>
<b>G.</b> 245 Robinson Road (Lot 104 on Plan 40893)	<p>The assessment considered the establishment of a proposed 40m monopole on the subject land.</p> <p>Nominal and high level desktop assessment concluded that coverage objectives could potentially be satisfied with a proposal from this site subject to further site investigation to confirm actual height and location.</p>	<p>The site is the closest candidate to the subject site. It is zoned rural residential and is located in generally a low density rural residential setting.</p> <p>Despite several attempts, the owners of this property were uncontacted and non-responsive the time of site scoping and selection last year.</p> <p>It is noted that the frontage to this lot is fairly sparse and as such any potential site located in this specific location would have a significantly greater visual amenity impact than the subject site.</p> <p>The rear of the property is also reasonably vegetated and would mean that if a location was selected around this area clearing would also be required in order to establish and locate <b>nbn's compound</b>.</p> <p>The overall financial feasibility of the candidate cannot be determined given the absence of vital commercial considerations such as location and establishment costs for power and access, security of tenure and other unknown site specific civil considerations. Without the ability to confirm and understand these mandatory requirements the site was not pursued further.</p>



Candidate and Location	Technical Assessment	Planning Assessment
<b>H. Subject Site:</b>  241 Robinson Road, Robinson (Lot 105 on Plan 40893)	<p>The assessment considered the establishment of a proposed 40m monopole on the subject land.</p> <p>High level desktop assessment and further modelling predictions on serviceability to the surrounding area concluded that coverage objectives could be satisfied with a proposal from this site. This has been confirmed by subsequent on site visits.</p>	<p>The site is zoned rural residential and is located in generally a low density rural residential setting.</p> <p>The location of the proposed facility itself is well set back from the nearest road and is well screened by natural vegetation in the form of mature trees. The nearest residential dwelling is that of the property owners which is located approximately 84m from the proposed facility. The closest neighbouring dwelling is setback approximately 176m from the proposed facility.</p> <p>Tenure has been finalised and the detailed civil components of power and access costs have all been assessed and determined to be feasible.</p>
<b>I. 224 Roberts Road,</b> Robinson (Lot 33 on Plan 3568)	<p>The assessment considered the establishment of a proposed 40m monopole on the subject land.</p> <p>Nominal and high level desktop assessment concluded that coverage objectives could potentially be satisfied with a proposal from this site subject to further site investigation to confirm actual height and location</p>	<p>The site is zoned Rural Small Lot Holdings and is located in generally a low density rural residential setting. Noting at the time of scoping the site was zoned Special Rural Residential prior to City of Albany Planning Scheme No 1 change gazetted on 28<sup>th</sup> of April 2014.</p> <p>The owners of this property were not interested in a proposal on their land and as such <b>nbn</b> did not proceed any further with investigations on the subject site.</p>
<b>NW Racecourse Site</b>	<p>Nominal and high level desktop assessment indicated a required antenna height of approximately and just over 43m would be required in this location to provide coverage to the surrounding premises in the area. This would mean a lattice structure would be required in this instance.</p> <p>Service objectives could potentially be satisfied with a proposal from this site however the site is considered an inferior technical solution to the current candidate as it does not provide</p>	<p>Site is under a Management Order to the City of Albany and would potentially require an excision of land from the Department of Lands to allow for the creation of a new lot for telecommunications use. Notwithstanding the requirement to confirm tenure either via the City of Albany or through the Department of Lands, the excision process is likely to take in excess of 12 months to finalise.</p> <p>Establishment and upgrade costs for power and access are unknown and so is the duration for securing and finalising</p>



Candidate and Location	Technical Assessment	Planning Assessment
	balanced coverage and performance to the intended coverage area and is likely to services less end users than the current proposal particularly.	tenure for this site.  Given the technical requirements for servicing the surrounding premises, a 45m lattice tower would be required in this location. This is a bulkier and taller structure to the current proposed candidate as is considered to have a higher visual amenity impact to the surrounding area particular along Roberts Road.
<b>NE Racecourse Site</b>	<p>Nominal and high level desktop assessment indicated a required antenna height of approximately and just over 43m would be required in this location to provide coverage to the surrounding premises in the area. This would mean a lattice structure would be required in this instance.</p> <p>Service objectives are only partially achieved with a proposal from this site. Coverage and performance to the north in particular is inferior to the subject site.</p> <p>Projected coverage from this site indicates a large number of premises will not be able to be serviced by a facility in this location and as such is not considered a viable technical solution.</p>	<p>This site located on 261 Roberts Rd (Lot 7083) is owned by the Albany Racing Club and the land is the subject of a Crown Grant in Trust and which has conditions but are not aware of the conditions and <b>whether these impact the Racing Club's</b> ability to grant direct tenure on the land.</p> <p>Establishment and upgrade costs for power and access are unknown and so is the duration for securing and finalising tenure for this site.</p> <p>Given the technical requirements for servicing the surrounding premises, a 45m lattice tower would be required in this location. This is a bulkier and taller structure to the current proposed candidate as is considered to have a higher visual amenity impact to the surrounding area particular along Roberts Road.</p>
<b>Racecourse Site</b>	<p>Nominal and high level desktop assessment indicated a required antenna height of approximately and just over 43m would be required in this location to provide coverage to the surrounding premises in the area. This would mean a lattice structure would be required in this instance.</p> <p>Service objectives could potentially be satisfied with a proposal from this site however the site is considered an inferior</p>	<p>This site located on 261 Roberts Rd (Lot 7083) is owned by the Albany Racing Club and the land is the subject of a Crown Grant in Trust and which has conditions but are not aware of the conditions and <b>whether these impact the Racing Club's</b> ability to grant direct tenure on the land.</p> <p>Establishment and upgrade costs for power and access are unknown and so is the duration for securing and finalising tenure for this site.</p> <p>Given the technical requirements for</p>



Candidate and Location	Technical Assessment	Planning Assessment
	technical solution to the current candidate as it does not provide balanced coverage and performance to the intended coverage area and is likely to services less end users than the current proposal particularly.	servicing the surrounding premises, a 45m lattice tower would be required in this location. This is a bulkier and taller structure to the current proposed candidate as is considered to have a higher visual amenity impact to the surrounding area particular along Roberts Road.

## Conclusion

Having assessed and carefully considered all the site candidates listed in the above table, **nbn** believes it has fulfilled Council's request that we consider potential alternative sites.

Whilst a number of candidates are able to achieve an appropriate level of coverage to service the surrounding area, **nbn** contends that as evidenced above, on balance there is no single site that from a planning perspective is superior or even technically and commercially equivalent.

**nbn** appreciates that visual impact is also an important consideration and maintains that the visual impact from the proposed candidate is acceptable and reasonable.

Furthermore **nbn** submits that any suggestion to site a facility in another location would not result in a reduction in amenity and visual impact to the surrounding community. Rather it would merely transfer the potential impacts from one location to another, and would result in a more disproportionate visual impact on adjoining residences in that vicinity.

In our view this does not strike a better balance between amenity and service provision. For this reason, **nbn** continues to propose a network design that has residents in Robinson connecting to the fibre network via a proposed 40m fixed wireless monopole at the subject site.

Yours faithfully

George Tzakis  
Manager – Fixed Wireless Site Acquisition  
**nbn™**



## Albany NBN Mast

---

*Visual Amenity Impact Assessment*

EDIT 3. 13.07.2015

*Prepared by: EPCAD pty ltd Landscape Architects and Environmental Planners*

*Prepared for: NBN*

**Document Control**

EPCAD reports are prepared for a specific purpose for specific client requirements. EPCAD is not liable for any loss or damage incurred by any person relying on such reports or advice, except where they are created by EPCAD expressly for that person.

Nothing in these terms shall be taken as excluding, limiting or modifying any term, condition or warranty implied by any applicable act of parliament that cannot be so affected. To the extent that such a term, condition or warranty is implied, the liability of EPCAD for breach of that term, condition or warranty is, where permitted, limited at the option of EPCAD to:

- The supplying of the relevant goods or services again; or
- The payment of the cost of having the relevant goods or services supplied again.

<b>Job Number</b>	B0727
<b>Document Title</b>	Albany NBN Mast: Visual Amenity Impact Assessment
<b>File Name</b>	B0727_Visual Impact Assessment_Issue3
<b>Author</b>	EPCAD pty ltd
<b>Client</b>	NBN

Issue	Issued to	Date	Reviewed	Approved
1	NBN	13.07.2015	RB/HM	HM

<b>1</b>	<b>Contents</b>	
2	Executive Summary .....	5
3	Introduction.....	6
3.1	Capabilities.....	6
3.1.1	Curriculum Vitae.....	6
3.2	Glossary of Terms Featured in this Report .....	8
4	Visual Landscape Evaluation .....	9
4.1	Scope and Context.....	9
4.2	Site Description .....	10
4.2.1	Significant Site Features .....	11
4.3	District Landscape Area .....	13
4.3.1	District Landscape Character.....	13
4.3.2	Viewing Experience and Values: How is the District Landscape Viewed .....	13
5	Visual Impact Assessment.....	14
5.1	The Proposed NBN Mast .....	14
5.2	Key Views.....	14
5.2.1	Public Amenity.....	14
5.2.2	Private Amenity .....	15
5.3	Likely Changes in the Landscape .....	15
5.3.1	Anticipated Short Term Effects .....	15
5.3.2	Anticipated Mid-Term Effects .....	15
5.3.3	Anticipated Long-Term Effects.....	15
6	Key Locations & Assessment of Changes .....	17
6.1	Scope .....	17
6.1.1	Panorama 1;.....	18
6.1.2	Panorama 2.....	19
6.1.3	Panorama 3.....	20
6.1.4	Panorama 4.....	21
6.1.5	Panorama 5.....	22
6.1.6	Panorama 6.....	23
6.1.7	Panorama 7 .....	25
6.1.8	Panorama 8.....	26
6.1.9	Panorama 9.....	27
6.1.10	Panorama 10.....	28
6.1.11	Albany Yacht Club.....	29
6.1.12	Albany Wind Farm, Albany.....	31
6.1.13	Princess Royal Drive, Boardwalk .....	33
6.2	Conclusions.....	35
7	Visual Management Objectives.....	36

7.1.1	Proposed Visual Management Measures .....	36
8	Figure 2 .....	37
9	Figure 3 .....	38
10	Appendices – Planning Report, Proposed Fixed Wireless Facility .....	39

## 2 Executive Summary

EPCAD were commissioned on behalf of NBN Co Ltd to conduct a Visual Impact Assessment in relation to the installation of a 40m high NBN Tower. This installation includes three panel antennas attached to the circular headframe, two parabolic dish antennas installed approximately 3m from the top of the monopole, an outdoor ancillary equipment cabinet and a 2.4 metre high chain link fence. The assessment was carried out to determine the structure's possible impacts on the public amenity within the locale of Robinson, Albany, and on a wider scale, tourist destinations within Greater Albany.

To determine these impacts, a thorough Site Survey and Desktop Analysis were conducted. The Desktop Study included analysis of maps; both aerial and local tourist maps and an analysis of the photographic evidence taken during the Site Survey. The Site Survey included a thorough drive of the immediate surrounds, and a visit to key tourist destinations to ascertain whether any portion of the proposed development would be visible from publically accessible locations.

It was determined that the ground level structures associated with the proposed monopole would not be seen from any publically accessible location, due to the dense vegetation surrounding the intended site. From several locations along public roads, it was determined that the top section, most likely to be 10-20m of the monopole, would be viewed protruding from above the line of trees along the horizon.

Publicly, the NBN Mast will be viewed by both pedestrians and people in vehicles, travelling on the surrounding roads. Those within vehicles, assumed to be travelling at the differing road speed limits of between 80km/h and 100km/h, would observe fleeting glimpses of the top section of the monopole due to the roadside and remnant vegetation. Pedestrians would be afforded longer and more protracted views of the top section of the monopole.

Privately, it was inconclusive whether any portion or section of the monopole would be seen from private blocks adjacent to the proposed site, as access is restricted. From the desktop analysis of topographical and vegetative layouts, it is inferred that there will be views of the mast protruding from ground level from within these private locales.

It was determined that to mitigate the possible obtrusiveness of the monopole, the vegetation surrounding the site needs to be maintained, so as to continue to screen the ground level components, and to assist in screening the majority of the monopole itself. Furthermore, the colour of the monopole should be a muted tone, to aid with the blending of the monopole into the surrounding landscape. This suggested mitigating factor had already been determined, according to the Planning Report – Proposed Fixed Wireless Facility as supplied by Daly International Pty Ltd.

The effect of the proposed NBN Mast will be limited to nearby surrounding properties. Its visual impact on publically accessible areas and locations will be minimal as it is generally screened from view by topography and vegetation, and it will be a minor element within a broad landscape.

### 3 Introduction

EPCAD have been commissioned on behalf of NBN Co Ltd to assess the visual implications of the proposed installation of a 40m high NBN Tower, including three panel antennas attached to the circular headframe at the top of the monopole, two parabolic dish antennas installed approximately 3m from the top of the monopole, and an outdoor equipment cabinet, all to be enclosed in a 2.4 metre high chain link fence on a Private Lot located at 241 Robinson Road, Albany.

This study has been undertaken under the instruction on behalf of NBN in response to the refusal of NBN's development application by the City of Albany at its Council Meeting held on the 24<sup>th</sup> of March, 2015.

In order to inform the refused development application, an in depth site selection process was undertaken to determine an appropriate location for the NBN Mast (Daly International Pty Ltd October, 2014). This process matched potential site locations against four determined key factors;

- Town Planning considerations (such as zoning, surrounding land uses, environmental significance and the possibility of visual impact);
- The ability of the site to provide acceptable coverage levels to the area;
- Construction feasibility; and
- The ability for NBN Co to secure a lease agreement with the landowner.

The Daly Report was used to inform the basis of our Desktop research.

#### 3.1 Capabilities

EPCAD undertakes the rigorous assessment of landscape and visual impacts and provides information for the integration of developments in sensitive environments. We have been appointed by the private sector and public authorities to provide expert evidence at Public Inquiries, Court and Tribunals using our experience and knowledge of leading techniques in Australia and overseas.

Our senior staff include a number of individuals that are experienced and skilled in thorough assessments and are able to provide advice that informs planning decisions. As an expert witness, we have provided visual impact analysis on a range of projects from "high bay warehousing" and large retail developments to coastal resorts and residential developments. Evidence has been prepared based upon extensive Zones of Visual Influence (ZVI) studies utilising both desktop analysis and site verification.

Evidence prepared for the Euro 5 Distribution Centre, Mars Pedigree High Bay Warehouse centre and a number of wind farms, set standards on the assessment of reflected colour and structures in the broader environment. EPCADs UK office provided training workshops to the planning bar and planning lawyers on visual impact.

Projects include the visual and landscape assessment and environmental integration of a number of high profile projects including the northern urban expansion of Geraldton requiring an extensive study to define impacts and effects on notable landscapes including the Moresby Range, Lawrence Wines Margret River, various developments on the banks of the Swan River and proposed extensions to urban land in Albany that may affect the amenity of National Parks and significant places.

##### 3.1.1 Curriculum Vitae

HOWARD MITCHELL MIEnvSc MLI. AILA. DipLA  
Director

Howard, is an environmental planner, landscape architect and urban designer. Howard qualified in Britain and has extensive experience in environmental integration and urban design. Howard was one of the urban design team members responsible for the development of Europe's largest new city, Milton Keynes, and has been the master plan team leader of several new settlements.

He has been involved in a number of large and controversial developments including major infrastructure planning and development initiatives. The scale and nature of much of his work has led to experience in the production of environmental impact assessments and the giving of evidence at Public Inquiries, Court and Tribunals.

As an expert witness, he has provided visual impact analysis on a range of projects from “high bay warehousing” and large retail developments to resort and residential developments. Evidence has been prepared based upon extensive Zones of Visual Influence (ZVI) studies utilising both computer modelling and site verification. Evidence prepared for the Euro 5 Distribution Centre, Mars Pedigree High Bay Warehouse centre and a number of wind farms, set standards on the assessment of reflected colour and structures in the broader environment. EPCADs UK office provided training workshops to the planning bar and planning lawyers on visual impact. His recent work has included the visual and landscape assessment and environmental integration of a number of high profile projects ranging from coastal resorts to urban expansion in Western Australia.

Howard has retained a commitment to education and continued professional development, lecturing and running professional workshops and seminars on new settlement/urban design, environmental planning and environmental legislation in the United Kingdom, America and Australia. He presently is a member of the Masters External Advisory Panel (EAP) providing advice to the International Water Centre (IWC), Masters of Integrated Water Management courses and also the Water Sensitive Cities program, a joint initiative by Australia’s four leading universities.

ROBIN BURNAGE BA (Hons) Dip LA CMLI AILA  
Associate Director

Robin has over 20 years of wide ranging construction industry experience. His work at EPCAD benefits from his project management and design skills and applied them across all sectors of change in the environment ensuring effective delivery of quality places. His depth of understanding of urban redevelopment and construction has been instrumental to the successful creation of EPCAD’s major projects. He has been responsible for numerous acclaimed successful urban landscapes for new communities, street activation, regeneration projects and large scale public art installations.

Robin’s early career as a civil engineer in London established his construction knowledge that underpinned his growth as a landscape architect working in Australia and the UK. Prior to joining EPCAD he was a director of a UK based practice where he managed large scale urban design and construction projects including masterplanning, design of new settlements, town centre regeneration, urban renewal projects, and landscape engineering works. Designing for people and getting it built is Robin’s thing.

Robin has holidayed in Albany for the past 10 years. This has given Robin an intimate knowledge of the local surrounds. He has conducted Visual Impact Assessments in the UK, and also contributed to a Visual Impact Assessment within Albany that impacted a local National Park.

SHADRA COOPER  
Landscape Architect

Shadra joined EPCAD in November 2014 after completing her Bachelor of Landscape Architecture at the University of Western Australia. During her time at University, Shadra developed a keen interest in the graphic and artistic nature of Landscape Architecture and subsequently had several art pieces both shown and sold at a local Art Gallery.

She has rapidly gained experience and confidence in the demands of a busy studio and brings fresh new thoughts to our collaborative working style.

Having family living in Denmark, Shadra has travelled to and holidayed in Albany for the past 24 years, giving her a familiar knowledge of the immediate surrounds of the area.

### **3.2 Glossary of Terms Featured in this Report**

EPCAD/The landscape architect: EPCAD Pty Ltd, Landscape Architects and Planners; Author of this report and conductor of this Visual Amenity Impact Assessment.

NBN: NBN co ltd; client for which this assessment was conducted for.

The site/ the proposed location/the proposed site/subject site: The site as identified by the client for the location of the monopole (Figure 1).

The NBN Mast/Monopole/NBN Monopole/mast/proposed monopole/NBN Tower: The proposed development for which this report has been written.

ODP: Overall Development Plan

Wind Farm: Albany Wind Farm

Yacht Club: Albany Yacht Club

ZVI: Zone of Visual Influence or 'seen area'



## 4 Visual Landscape Evaluation

### 4.1 Scope and Context

Guidance for undertaking a Visual Landscape Evaluation is provided by the state planning authority, Department of Planning & Western Australian Planning Commission within *Visual Landscape Planning in Western Australia; November 2007* (VLPWA).

This study has been undertaken in accordance with the following principles, as set out in the VLPWA;

- a) Determine Visual management objectives;
- b) Describe the proposed development;
- c) Describe the potential visual impacts;
- d) Develop visual management measures; and
- e) Prepare final recommendations and options for monitoring.

With these principles, the following two methods were used to inform this report;

- a) Desktop study of cartographic and photographic material
- b) Site Survey by an experienced Senior Landscape Architect and a Landscape Architect

The Desktop study included the analysis of local mapping and aerial imagery to assess the general land uses, vegetation layout and topography of the local area around the subject site. This was conducted at two different scales. The first analysis was conducted within a 2km radius around the subject site. This analysis took into consideration topographical elements, vegetation placement, public access and areas within the immediate vicinity of the proposed site.

The secondary mapping exercise took into consideration tourist destinations, as described in local tour guide maps. The purpose of this exercise was to gauge the likelihood of being able to discern the monopole from commonly accessed public areas. This gauge was based upon distance and surrounding topographical features. This area was within a 7km radius of the subject site. This distance was established based on the proximity of major local tourist destinations in the vicinity of the site and the Albany CBD that would potentially have a sightline to the site.

Based upon the desktop analysis, the locations where the monopole was likely to be viewed from were determined, and the route for the Site Survey was planned. The Site Survey was conducted over a day by an experienced Senior Landscape Architect and a Landscape Architect. This involved an extensive analysis of the views to the proposed monopole location from surrounding road ways, including Robinson Road, Racecourse Road, Manni Road, Roberts Road, Monroe Crescent, Lower Denmark Road, Knights Road and Gledhow S Road.

An initial vehicular based visual assessment was undertaken covering all of these roads, to first understand the site, paying particular attention to vegetation patterns and topographical elements. On the vehicular based visual assessment, at locations where the vegetation and topography provided views towards the subject site, photographs were taken and the location marked accurately on an aerial image. A final vehicular based visual survey was undertaken to correlate the photos taken and to take further notes documenting the direction of the subject site in relation to the road, surrounding vegetation and its estimated height, manmade structures that could be seen from the same location, dwellings and sheds and topographical elements including valleys, ridges and hills, all of which compiled the inherent character of the landscape.

A further desktop study was conducted on the images and accompanying notes to ascertain the visual impact the monopole would have upon the perceived views taken during the Site Survey. Factors used to determine the visual impact included;

- The surrounding vegetation – was the vegetation tall enough to hide all, or more than 50% of the monopole;
- Topographical elements such as hills, ridges and valleys; did these provide screening for the monopole, did it mean the viewer, from these particular locations were looking up or down at the proposed monopole;
- Other manmade structures – were there manmade structures within the same field of view, were they bigger or smaller than the proposed monopole, and were they a more obvious element within the landscape than the monopole was going to be.

These principles along with the Site Survey and Desktop Study were used to ascertain the local, intermediate and wider community visual assets and characteristics, and to evaluate the likely effects of the Fixed Wireless Telecommunications Facility within the context of the overall landscape, its character and value.

The photographic equipment used to take the images in this report was a Canon EOS 500D with an EFS 18-200mm lens. Images were taken without magnification.

### **4.2 Site Description**

The site as identified in Figure 1 Location Plan (241 Robinson Road, Robinson, WA) is bounded to the north by Robinson Road, Rural Residential lots are located to the east and west, parks and recreation reserves are located south west, and rural small holding land uses located to the north of Robinson Road. (Daly International Pty Ltd October, 2014)

Located approximately 4km south-west of the Albany Town site. The Lot has a North/South aspect. The surrounding district consists of large properties predominantly made up of “hobby farms”, with large individual dwellings and outbuildings. This also includes ancillary buildings made necessary by the farming practices conducted through the district area.

Topographically, the area consists of undulating low hills, providing elevated spaces along with shallow valleys. This undulating topography means that clear views to the interior of the property proposed for the monopole location is limited to isolated locations along adjacent public roads, dependent on density of roadside and adjacent vegetation.

There is a significant amount of retained vegetation in the vicinity, with several large mature gum trees that hide the elevated portions of land. This vegetation acts as a significant screen for the private residences within the area providing enclosure and privacy. Apart from the remnant vegetation, there are large swathes of typical road reserve plantings, including but not limited to; hedges, Eucalypts, exotic plant species and weeds. This intermittent roadside vegetation acts as additional screening for the private land holdings. The intermittency of the roadside vegetation, means that there are several locations along the surrounding roads (as shown in the Panoramas) that provide views into the interior of private Lots.

The landscape surrounding the subject site includes a variety of manmade items such as power transmission lines and poles, streetlights and an existing transmission tower structure. This significant structure is located at Lot 56 Cuming Road, Gledhow, as determined in the secondary Desktop Study. These interventions within the landscape remind the viewer that the area around the subject site, although rural is not a pristine landscape, and in fact has been manipulated by man through several decades of agrarian practice within the locale.

The landscape surrounding the proposed location can only be perceived from the local roads as public footpaths are not provided in the area. The lack of footpaths means local pedestrians use the roads. The roadside vegetation along all roads that were surveyed, along with the pockets of remnant vegetation, prevents open vistas of the site, there by only being granted glimpses of the surrounding landscape. These glimpsed views are achieved to the side, and as such tend to be perpendicular to the line of travel. There are portions of roads where roadside vegetation is limited, thereby granting

more views into private residential lots, for example along Roberts Road to the south of the subject site. The speed limit on all surrounding roads are between 80km/h and 100km/h, amplifying the effectiveness of roadside vegetation screening and thereby reducing views into the interior private Lots.

Figure 1 – Location Plan



#### 4.2.1 Significant Site Features

The most significant features observed within the private Lot, that is intended to be the location of the proposed NBN mast, include the dwelling and existing vegetation.

The mature trees on site vary in height and are estimated to be between 20m and 40m tall, creating a dense screen across the subject Site.

The adjacent roads are also lined with mature Eucalypts, with heights up to 30m tall, again creating a secondary vegetative screen.

The locale surrounding the intended Site comprises remnant vegetation and manmade landscapes and objects. Due to these manmade elements, the landscape has been manipulated, and is therefore not a natural viewscape.

Significant elements within the landscape include an approximately 60m tall transmission tower structure located within 14km to the North of the Site, on Lot 55 Cuming Road, Gledhow, WA, the Albany Wind Farm can be sighted from some key locations in the vicinity of the proposed site and the two telecommunication towers that are atop Mount Melville in Albany City Centre.

## REPORT ITEM PD091 REFERS

Other manmade structures include power poles and power lines, Street Signs, Bitumen roads, Bollards and individual dwellings.

### **4.3 District Landscape Area**

#### **4.3.1 District Landscape Character**

The dominant characteristics that comprise the district landscape character can be summarised as;

- Rolling topography;
- Large mature Eucalypts and other endemic vegetation;
- Livestock including sheep, cattle and horses within the paddocks fronting the roads;
- A matrix of large lots separated by mature boundary plantings; and
- Open grassed paddocks.

These elements make up the rich landscape that is only publically viewed from the surrounding road infrastructure.

In addition to the elements summarised above, manmade elements punctuate the landscape; The Albany Wind Farm can be seen from several points within the local premise of the proposed site. Silhouetted on top of a ridge in the distance, the Wind Turbines provide a point of difference within the landscape. In the opposite direction, one can see the two telecommunications towers situated on Mount Melville located in Albany. This places direct sight lines to three significant manmade objects from the local constraints of the area surrounding the proposed site.

#### **4.3.2 Viewing Experience and Values: How is the District Landscape Viewed**

In publicly accessible locations the landscape character is experienced from surrounding roads on a local scale and from locations recognised as tourist destinations on a wider scale. Tourist destinations include local recreation points, lookouts and marked walking trails. The area is viewed by pedestrians from high points and lookouts from tourist destinations and from lower elevations when on adjacent roads. From a vehicle, the proposed monopole is sighted from adjacent roads. As the roads are often flanked by dense vegetation to a height typically between 15 and 30m, immediate or close-up views are limited in number and location. The site is almost always viewed from a distance, with the perimeter vegetation restricting views to internal areas.

## 5 Visual Impact Assessment

### 5.1 The Proposed NBN Mast

An outline of the proposed site has been provided by Daly International Pty Ltd.

The proposed NBN Mast will be a 40m high unpainted, muted tone (grey) monopole, along with radio and transmission telecommunications equipment, ancillary equipment cabinet(s), three panel antennas attached to the circular headframe at the top of the monopole, two parabolic dish antennas installed approximately 3m from the top of the monopole and all shall be enclosed within a secured (2.4m high chain link) fenced compound, measuring approximately 124m<sup>2</sup>. This will be situated on an elevated area of land within a privately owned, Rural Residential Block.

The proposed height of the NBN Mast has been designed by NBN in order to provide the required function for which the structure is intended.

The Mast and associated fenced ground mounted plant will provide fixed Wireless Internet for the locale of Robinson, under the proposed NBN upgrade.

### 5.2 Key Views

#### 5.2.1 Public Amenity

Views to the proposed site are limited from publically accessible locations. The compound for the monopole is inaccessible to the public, and not viewable from any publically accessible location. The only component of the monopole that will be viewable by the public from publicly accessible locations will be the upper section of the mast, either protruding above or through the surrounding vegetation.

Along Robinson Road, there are limited points where someone within the public realm will catch glimpses of the upper section of the monopole. These particular locations are along a stretch of road, where the speed limit is set at 80km/h, and as such these glimpses would be fleeting, when viewed from a moving vehicle. Pedestrians, will be afforded more time to be able to view the monopole. Along the section of Robinson Road, directly south of the Lot where the proposed site is situated, a viewer would be able to see the top section of the monopole. (Refer to Panorama 7.) This particular view is one of the limited enclosed views of the monopole. The roadside vegetation is tall, and dense, framing views to the monopole, where the vegetation is cleared.

At the intersection of Racecourse Road and Robinson Road there is a key line of sight towards the proposed site for the monopole. This is where vegetation has been cleared for safety reasons at the intersection. As traffic will stop in this location, both drivers and passengers in vehicles will be afforded more time to potentially register the monopole in the surrounding landscape. Along the remainder of Racecourse Road, both dense roadside vegetation and remnant vegetation within private residential lots almost completely obscure lines of sight towards the proposed location. It is unlikely there will be any view of the monopole from vantage points along this road. At the south end of Racecourse Road the viewer is able to see the top of an existing mast. In a south-east direction the Albany Windfarm is visible from the road. The very top of the proposed NBN Mast may be seen protruding above the line of trees.

Due to a newly constructed road, located approximately 540m to the South of the subject site, there are areas where roadside vegetation has been cleared. This provides opportunities to potentially view the top section of the proposed monopole. One particular location (Refer to Panorama 1) gives a straight view line directly towards the proposed site. With the clearing of vegetation within this area, the viewer is likely to see the top possibly 5-10m of the monopole. At the truncation of the road as topographically it is lower, the dense vegetation to the north would screen the monopole from view of the public realm.

Along Roberts Road, approximately 1.3km to the south west, adjacent to the Albany Racecourse, there would likely be continuous glimpsed views of the proposed monopole. This is due to the open

paddocks with minimal remnant vegetation and little fence line plantings. (Refer to Panorama 2). Continuing along Roberts Road there will be definite partial views of the top of the proposed pole, however, there are existing pole like structures already within the landscape that can be viewed from this vantage point. For example; an existing transmission tower estimated to be approximately 60m tall (located at Lot 55 Cuming Road, Gledhow), power transmission poles and street lights. This particular area within the local landscape is more obviously manipulated with the clearing of the firebreak that is situated directly perpendicular to Roberts Road. This fire break is also the location of a long line of power poles.

On the corner of Roberts Road and a private track, from the Public Realm the viewer can observe the two towers atop Mount Melville in Albany City Centre located due east, along with the top of Mount Clarence. This is along with two large existing monopole like structures, and several power poles lining the road. From here, you may see possible, occasional glimpses of the proposed NBN Mast (Refer to Panorama 10).

Along Manni Road (Refer to Panorama 3), it is likely a viewer within the Public realm will be able to see the top section of the proposed mast. This will appear as a mute tone, grey pole punctuating the sky above the tree lined horizon.

## 5.2.2 Private Amenity

As the location for the proposed site is surrounded by private residences and access is restricted, some assumptions had to be made based on the inability to access those sites.

Residents and visitors of the dwelling on the Lot that has granted the lease will in all likelihood be able to see the monopole.

Given the topographical characteristics of the adjacent private lots, it is likely that those lots on higher elevations would be granted sporadic views of the monopole. Surrounding private lots would see the top section of the mast. However, large existing swathes of mature remnant vegetation would screen the base, which would include the fenced ground mounted plant and a large portion of the mast, from these adjacent blocks.

## 5.3 Likely Changes in the Landscape

Landscape is not a static amenity and is continuously changing. For example, with agriculture being the predominant land use within the local area differing agricultural uses will continuously change the surrounding landscape. Along with the necessary clearing of vegetation for agricultural business, these create larger changes within the landscape. The qualities of the landscape are therefore subjective. The concept of 'landscape' is a cultural construct and its enjoyment of perception is affected by changes. However, there are no known other significant developments proposed for this locality.

### 5.3.1 Anticipated Short Term Effects

The site itself will have very little change. The construction of the NBN Mast requires minimal vegetation clearing. This means the current dense screen of local vegetation will not be significantly reduced. What little vegetation is cleared will eventually re-grow.

Access to the location is via the existing firebreak access track of Robinson Road. This means there will be minimal need for clearing vegetation for an access track, requiring no major impacts during construction.

### 5.3.2 Anticipated Mid-Term Effects

Little to no foreseeable midterm effects.

### 5.3.3 Anticipated Long-Term Effects

Little to no foreseeable long term effects within the broader landscape. However, the vegetation surrounding the site for the proposed site will continue to grow, and will continue to further screen the monopole.

The existence of a mast, fabricated from low reflective materials, within a landscape of mature trees and rolling topography, will widely be considered as just another vertical manmade component of the character of the areas.



## **6 Key Locations & Assessment of Changes**

### **6.1 Scope**

During the on site assessment, it was determined that there were two main potential tiers of sightline to the monopole location, based on whether one could see the proposed monopole from the local surrounding public domain, and whether it was discernible from the tree lined horizon from tourist locations. A local view and a tourist view were the subject of the investigation. The following chapter assesses local viewpoints identified during the Site Visit as possible locations where the proposed monopole may be sighted from. Refer to Figure 2.

In terms of views towards the proposed site for the NBN Mast from iconic tourists locations, three key locations were selected; Albany Wind Farm, Albany Yacht Club and Princess Royal Drive Boardwalk. Refer to Figure 3 for locations.

Comments and assessments are based on experience and professional opinions and refer to the possible impact, and ability to lessen the impact of the NBN Mast on the visual qualities and characteristics of the district landscape.

## Local Views

### 6.1.1 Panorama 1;

This view appears as a straight trajectory down the newly constructed road forming part of a new rural subdivision. This view looks directly towards the proposed site of the NBN Mast. This location is located approximately 540m south-west of the proposed site.

#### 6.1.1.1 *The key characteristics of this panorama are;*

- Straight, newly constructed asphalt road;
- The expanse of sky;
- The dense plantings of large mature trees; and
- Open grassed fields.

#### 6.1.1.2 *Other important features in this view are;*

- The for sale signs on the proposed lots, which are temporary;
- Timber post and guideline wire fencing along the road;

#### 6.1.1.3 *Changes likely to occur in this view are;*

- The top of the monopole would be seen from the road above the tree line; and
- The vegetation along the horizon is estimated to be between 20 and 30m tall, it is estimated that the mast would project 10-20m above the line of vegetation.
- Construction of residential dwellings



The red line indicates approximate location of the proposed NBN Mast within the Panorama, located behind the trees. The red line *does not* indicate height or width of the proposed NBN Mast within the landscape.



Location and direction of Panorama, this extract is not to scale. (Extract from Figure 2)

### 6.1.2 Panorama 2

Taken from Roberts Road adjacent to the Albany Racecourse. This location is located approximately 1.3km south-west of the proposed site.

#### 6.1.2.1 *The key characteristics of this panorama are;*

- Undulating hills;
- Dense mature remnant vegetation;
- Little to no roadside vegetation of any significant height;
- Isolated dwellings; and
- A large existing pole in the distance.

#### 6.1.2.2 *Other important features in this view are;*

- Timber post and guideline wire fencing line the road, depicting Lot boundaries;
- Newly planted vegetation on the side of the road;
- Power poles;
- Mount Melville along the horizon; and
- Isolated trees standing in the grassed field.

#### 6.1.2.3 *Changes likely to occur in this view are;*

- The monopole will be visible from this location;
- It is likely the viewer would see the top section of the proposed monopole along the horizon, rising above the dense tree line; and
- The vegetation along the horizon is estimated to be between 20-30m tall, the monopole is estimated to project 10-20m above the line of vegetation in this location.



The red line indicates the approximate location of the proposed NBN Mast within the Panorama, located behind the trees. The red line *does not* indicate height or width of the proposed NBN Mast within the landscape.



Location and direction of Panorama, this extract is not to scale. (Extract from Figure 2)



### 6.1.3 Panorama 3

- This panorama is a view from Manni Road, located 600m from the proposed site, to the south-east.

#### 6.1.3.1 *The key characteristics of this panorama are;*

- Large open grassed paddock;
- Large mature vegetation;
- Expansive sky; and
- Isolated large dwelling;

#### 6.1.3.2 *Other important features in this view are;*

- Grassed drainage swales along the roadside;
- Timber and guideline wire fencing along lot boundary;
- Street signs depicting the end of the road;
- Grey/green tones of the mature vegetation;
- Bitumen road;
- Curated gardens lining the private driveway to the isolated dwelling;
- The power lines punctuating the sky above the tree line; and
- The screen plantings surrounding the building.

#### 6.1.3.3 *Changes likely to occur in the view are;*

- The monopole would be visible from this location;
- The monopole would be visible from this location as a grey pole rising above the densely vegetated tree line; and
- The vegetation along the horizon is estimated to be between 20-30m tall, the monopole is estimated to project 10-20m above the line of vegetation in this location.



The red line indicates the approximate location of the proposed NBN Mast within the Panorama, located behind the trees and the dwelling. The red line *does not* indicate height or width of the proposed NBN Mast within the landscape.



Location and direction of Panorama, extract is not to scale. (Extract from Figure 2)

#### 6.1.4 Panorama 4

This panorama was taken from the end of Monroe Crescent. This particular location provides a main sight line towards the location of the proposed monopole. This location is located 600m south of the proposed site.

##### 6.1.4.1 *The key characteristics in this panorama are;*

- Red dirt private driveways;
- Several isolated large dwellings with associated out buildings;
- Large gates;
- Partly vegetated sand pile;
- Open grassed paddocks; and
- Large mature trees.

##### 6.1.4.2 *Other important features in this view are;*

- Electricity boxes in the foreground;
- Timber post and wire guideline fence running parallel to the road;
- Stands of mature trees planted as screens along lot boundaries; and
- Expansive sky.

##### 6.1.4.3 *Changes likely to occur in the view are;*

- The monopole will be visible from this location;
- This sight line provides an occasion where the viewer would be able to observe the top section of the proposed monopole; and
- The vegetation along the horizon is estimated to be between 20-30m tall, the monopole is estimated to project 10-20m above the line of vegetation in this location.



The red line indicates the approximate location of the proposed NBN Mast within the Panorama, located behind the trees and dwelling. The red line *does not* indicate height or width of the proposed NBN Mast within the landscape.



Location and direction of Panorama, extract not to scale. (Extract from Figure 2)



### 6.1.5 Panorama 5

The location from which this Panorama is taken is located approximately 390m to the south-east of the site.

#### 6.1.5.1 *The key characteristics in this panorama are;*

- The private driveway;
- Large, mature roadside vegetation acting as a screen;
- Open grassed paddocks; and
- Dense tree line.

#### 6.1.5.2 *Other important features in this view are;*

- The bright blue wheelie bin;
- The semi-permeable lot boundary fencing;
- Isolated street signs and letter boxes depicting the urbanisation of this particular locale;
- The asphalt road; and
- The grey/green tones of the surrounding vegetation.

#### 6.1.5.3 *Changes likely to occur in the view are;*

- Likely to be no changes to this view;
- The proposed monopole would be lost amongst the dense cover of trees and vegetation; and
- Not shown in this panorama, there are distance views to the Albany Wind Farm from this particular location.



The red line indicates the approximate location of the proposed NBN Mast within the Panorama, located behind the trees. The red line *does not* indicate height or width of the proposed NBN Mast within the landscape.



Location and direction of Panorama, extract not to scale. (Extract from Figure 2)

### 6.1.6 Panorama 6

This panorama was taken from a bend in the road along Robinson Road. This location is approximately 270m east of the proposed site.

#### 6.1.6.1 *The key characteristics in this panorama are;*

- Undulating topography;
- Large mature trees;
- Dense vegetative scrub; and
- Heavily vegetated drainage basin.

#### 6.1.6.2 *Other important features in this view are;*

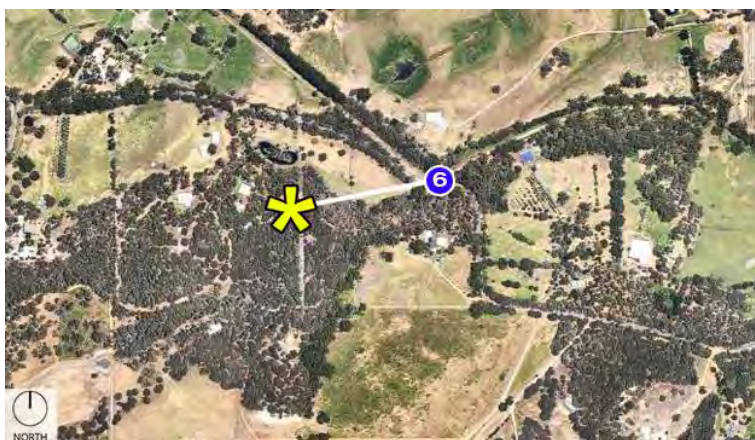
- The asphalt road truncating the landscape;
- The road barricade running parallel to the roadside;
- The timber bollards;
- The red of the dirt to the side of the road; and
- The grey/green tones of the vegetation.

#### 6.1.6.3 *Changes likely to occur in this view are;*

- The road acts as a direct sight line towards the proposed monopole;
- As the viewer is coming from a lower point than that which the monopole is proposed to be situated on, the viewer would get a view of the top section of the mast intermingled with the trees; and
- As the trees are sparser, than other areas of the immediate location, the monopole would be more obvious in amongst the landscape.



The red line indicates the approximate location of the proposed NBN Mast within the Panorama, located behind the trees. The red line *does not* indicate height or width of the proposed NBN Mast within the landscape.



Location and direction of Panorama, extract not to scale. (Extract from Figure 2)





### 6.1.7 Panorama 7

This panorama was taken from Robinson Road directly out the front of the Lot for which the NBN Mast is proposed to be located.

#### 6.1.7.1 The key characteristics in this Panorama are;

- Red bridge;
- Dense mature vegetation obscuring the interior of the Lot;
- The predominant species of trees in the foreground are *Agonis flexuosa*;
- The grassed open paddock; and
- The dense vegetation forming a tree line;

#### 6.1.7.2 Other important features in this view are;

- The timber post and wire fence depicting the lot boundary in the foreground; and
- The grey/green tones of the vegetation.

#### 6.1.7.3 Changes likely to occur in this view are;

- There will be definite views of the proposed monopole punctuating the sky above the tree line;
- As the trees screening the location of the proposed monopole are estimated to be between 20 and 30m tall, the monopole would protrude above the tree line by between 10 and 20m;
- This particular image represents the enclosed vista within this location; and
- This is the closest location within the public realm a viewer would be able to see the mast.



The red line indicates the approximate location of the proposed NBN Mast within the Panorama, located behind the trees. The red line *does not* indicate height or width of the proposed NBN Mast within the landscape.



Location and direction of Panorama, extract is not to scale. (Extract from Figure 2)

### 6.1.8 Panorama 8

This Panorama has been taken from a location approximately 280m north-west of the proposed site.

#### 6.1.8.1 *The key characteristics of this panorama are;*

- The large mature Eucalypts lining the road;
- The open grassed field;
- The dense mature vegetation to the background of the image, creating a dense tree line against the sky;
- Several large dwellings;
- Grassed hillocks in the background; and
- Undulating topography.

#### 6.1.8.2 *Other important features in the view are;*

- The horses;
- The shed located on the edge of the vegetation;
- The timber post and guideline wire fencing; and
- The grey/green tones of the vegetation.

#### 6.1.8.3 *Changes likely to occur in this view are;*

- The top section of the monopole would be seen protruding above the dense vegetative horizon;
- The vegetation along the horizon is estimated to be between 20 and 30m tall; and
- It would be located above the main shed (blue) in this particular view.



The red line indicates approximate location of the proposed NBN Mast within the Panorama, located behind the trees and dwellings. The red line *does not* indicate height or width of the proposed NBN Mast within the landscape.



Location and direction of Panorama, extract is not to scale. (Extract from Figure 2)



### 6.1.9 Panorama 9

This Panorama was taken from the corner of Roberts Road and a Private Track located approximately 1km from the subject site.

#### 6.1.9.1 *The key characteristics in this panorama are;*

- Large mature trees lining the road;
- Open, grassed, undulating fields;
- The dam/body of water in the background;
- Asphalt road; and
- The stands of edible fruiting trees that are heavily curated.

#### 6.1.9.2 *Other key features in this view are;*

- The slim timber post and guideline wire fencing along the road side;
- The shed located near the road;
- The street signs along the road; and
- The large dwelling located at the bend of the road in the distance.

#### 6.1.9.3 *Changes likely to occur in this view are;*

- From the public realm, the viewer would only see the top section of the proposed monopole; and
- The proposed monopole would appear as a thin grey pole punctuating the sky above the tree line, by approximately 10-20 metres.



Red line indicates approximate location of the proposed NBN Mast within the Panorama, located behind the trees. The red line *does not* indicate height or width of the proposed NBN Mast within the landscape.



Location and direction of Panorama (extract from Figure 2)

#### 6.1.10 Panorama 10

This panorama was taken from the end of a local traffic only dirt road. The road acted as an arrow straight towards the proposed site for the NBN Mast.

##### 6.1.10.1 *The key characteristics in this panorama are;*

- Open grassed field;
- Private dirt drive way;
- Power and telecommunications lines;
- Large mature trees;
- Dense belt of vegetation in the background; and
- Expansive sky.

##### 6.1.10.2 *Other important features in this view are;*

- The vegetation planted along fence lines;
- The bright green of the grass compared to the grey/greens of the native vegetation; and
- Fence lines depicting Lot boundaries.

##### 6.1.10.3 *Changes likely to occur in this view are;*

- It is likely that someone within the public realm will be able to see the very top section of the mast; and
- It would appear as a thin grey pole punctuating the sky, approximately 10 to 20m above the existing tree line, which is estimated to be between 20 and 30m tall.



The red line indicates the approximate location of proposed NBN Mast within the Panorama. The red line *does not* indicate height or width of the proposed NBN Mast within the landscape.



Location and direction of Panorama, extract not to scale. (Extract from Figure 2)

## Albany Yacht Club

### 6.1.11 Albany Yacht Club

Panorama 11 is an expansive view looking north-west towards the site from the Albany Yacht Club. This has been compiled from multiple photographs. It represents a typical view as the viewer scans the horizon expanding the field of view. The Yacht Club is located 6.3km from the subject site. For location refer to Figure 3.

#### 6.1.11.1 . *The key characteristics of this panorama are;*

- This foreground of this view is dominated by human activity, or evidence of, including the sailing club, marina and jetty facilities, boat ramp, car parks and sea wall;
- The most commanding feature in this scene is the water body of Princess Royal Harbour as it extends to the far horizon; and
- The expansive open skies.

#### 6.1.11.2 *Other important features in this view are;*

- The boats moored at the dock;
- The blue/grey of both the sky and the water;
- The large mature eucalypts situated by the Yacht Club; and
- The grassed slopes surrounding the Yacht Club.

#### 6.1.11.3 *Changes likely to occur in this view are;*

- There is an extremely slight chance of being able to see the proposed monopole in the far distance;
- This would appear as a very thin grey pole in amongst dense grey/green vegetation;
- The vegetation along the horizon is estimated to be between 20 and 30m tall, therefore the proposed monopole would protrude between 10 and 20m above the height of the trees; and
- It would be hardly discernible from the dense vegetation along the horizon. It would require the viewer to be searching for it along the coast line to be able to see it in any significant detail.



The red line indicates the approximate location of the proposed NBN Mast within the Panorama. The red line *does not* indicate the height or width of the proposed NBN Mast within the landscape.





Location and direction of Panorama. (Refer to Figure 2 for other locations.)

## Albany Locality

### 6.1.12 Albany Wind Farm, Albany

Panorama 12 is an expansive view looking from Albany Wind Farm north-east towards Albany City Centre. This panorama has been compiled from several photographs, and represents a typical view of the surrounding landscape when visiting the Wind Farm. The Albany Wind Farm is located 5.15 km from Albany City Centre. For location refer to Figure 3.

#### 6.1.12.1 *The key characteristics of this panorama are;*

- The rolling topography covered in low growing dense vegetation;
- The Wind Turbines that stand at 65m tall (Synergy 2015)
- The expansive sky; and
- The Southern Ocean.

#### 6.1.12.2 *Other important features of this view are;*

- The grey/green tones of the dense vegetation covering the slopes;
- The sun beginning to set directly over the peninsula;
- The strip of land in the far distance to the left of the frame; and
- The Albany City Centre just visible between the land formations.

#### 6.1.12.3 *Changes likely to occur in this view are;*

- Very little change is likely to occur in this view;
- If the tower is at all discernible, it would be lost in amongst the dense vegetation, as the viewer would be looking from above; and
- The viewer's eyes would more likely be drawn to other notable landmarks in the view, for example the Wind Turbines which are a more obvious feature within the landscape.



The red line indicates the approximate location of proposed NBN Mast within the Panorama. The red line *does not* indicate height or width of the proposed NBN Mast within the landscape.





Location and direction of Panorama. (Refer to Figure 2 for other locations.)



### 6.1.13 Princess Royal Drive, Boardwalk

Panorama 13 is an expansive panorama that has been compiled from several photographs and represents a typical view as perceived by both locals and tourists from the end of the boardwalk looking north-east towards the Albany Entertainment Centre. This panorama was taken 5.1km from the subject site. For location refer to Figure 3.

#### 6.1.13.1 *The key characteristics of this panorama are;*

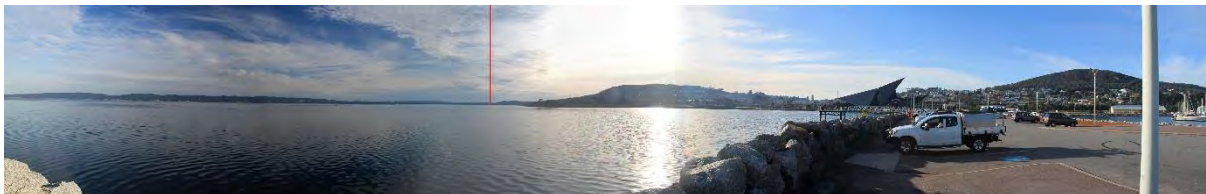
- The heavily industrialised foreground hosts a number of very large-scale buildings, including the newly built Entertainment Centre (opened in December 2010 (Council 2015));
- The continuous land mass in the far distance;
- Mount Melville; and
- The Princess Royal Harbour body of water.

#### 6.1.13.2 *Other important features of this view are;*

- Along the shoreline in the far distance, numerous individual buildings can be seen dotted in the landscape as small white punctuations;
- The rock sea wall in the foreground;
- The tall light posts lining the jetty;
- The boats in the marina; and
- The expansive sky above the harbour.

#### 6.1.13.3 *Changes likely to occur in this view are;*

- Very little, the monopole, which may be seen, even from this great distance, would appear as a very slim pole situated in amongst dense mature vegetation, which would almost entirely obscure the mast; and
- As the vegetation along this horizon is estimated to be between 20 and 30m tall, the mast would protrude by between 10 and 20m above this line of the horizon; and
- It is not likely to be discernible within the context of the scale of view.



The red line indicates the approximate location of proposed NBN Mast within the Panorama. The red line *does not* indicate height or width of the proposed NBN Mast within the landscape.



Location and direction of Panorama. (Refer to Figure 2 for other locations.)

## 6.2 Conclusions

- The site itself, including the lower portion of the 40 metre high monopole, radio and transmission telecommunications equipment and the ancillary equipment cabinet surrounded by a secured 2.4 metre high chain link fence; cannot be seen from any publically accessible areas;
- The existing landscape screens the proposed site from view, meaning that if any of the proposed NBN Mast is viewed from the public realm, it would only be a section of the top of the pole;
- The existing landscape character already includes a diverse range of manmade elements including agricultural buildings and infrastructure, power poles, fence lines and other tall manmade structures. The introduction of the NBN Mast will add another man made element to this landscape. Nor would the NBN Mast be a feature that would dominate within the landscape;
- The top of the monopole will be viewed from selective points within the immediate locality of the proposed site, however it will be seen from the surrounding roads, which have speed limits of between 80km and 100km/h, indicating that any views would be fleeting glimpses between the road side vegetation;
- Retained vegetation directly around the proposed site will be important to maintain the screen of vegetation that currently exists within the Lot of the proposed site;
- From Albany Yacht Club and Princess Royal Drive Boardwalk, the monopole will be visible, but only as a slim barely discernible pole amongst dense mature vegetation. This is due to the relatively large distance of these tourist destinations from the proposed site;
- From Albany Wind Farm, as the viewer would be looking down onto the poles location it would be extremely difficult, if not impossible to make out the pole, as it would be lost amongst the surrounding vegetation;
- The pole would have very little visual impact on the surrounding public domain as there are already several significant manmade structures within the immediate locale;

The effects of the proposed NBN Mast will be limited to nearby surrounding properties. Its visual impact on the surrounding publically accessible areas will be minimal as it is generally screened from view by existing vegetation, both remanent and installed by man or will be a minor element within a broad landscape.

## **7 Visual Management Objectives**

### **7.1.1 Proposed Visual Management Measures**

#### **7.1.1.1 Landscape Response**

- Maintain the existing vegetation surrounding the proposed site for the NBN Mast, as this will continue to grow and further screen the monopole;
- As there is very little requirement for clearing of vegetation during construction, the majority of the mature vegetation will act as an instant screen; and
- There is a possibility for some further planting of local endemic species to further screen the proposed monopole;

#### **7.1.1.2 Development Response**

- The pole should be an unobtrusive colour. NBN Co Ltd have proposed that it is intended for the pole to be unpainted, muted tone (grey), which will blend with the immediate vegetation and sky.



8 Figure 2





9 Figure 3



**10 Appendices – Planning Report, Proposed Fixed Wireless Facility**



National  
Broadband  
Network

# Planning Report Proposed Fixed Wireless Facility

241 Robinson Road  
Robinson WA 6330

**NBN Site Reference**  
**NBN 6KAZ-6ALN-51-01-ALBANY**

*The contents of this document reflect NBN Co's current position on the subject matter of this document. It is provided solely to explain information relevant to NBN Co's planning proposal. The contents of this document should not be relied upon as representing NBN Co's final position on the subject matter, except where stated otherwise. Any dates provided are indicative only, are subject to change and are dependent upon a number of factors.*

Prepared on behalf of NBN Co Limited  
By Daly International Pty Ltd  
October 2014



## Contents

Executive Summary .....	4
<b>1 INTRODUCTION .....</b>	<b>5</b>
<b>2 BACKGROUND.....</b>	<b>6</b>
2.1 NBN Co and the National Broadband Network .....	6
2.2 What is Fixed Wireless and how is it different to Mobile Broadband? .....	6
2.3 The Fixed Wireless Network – Interdependencies .....	6
<b>3 SITE SELECTION .....</b>	<b>9</b>
3.1 Identification of areas requiring Fixed Wireless coverage.....	9
3.2 Site Selection Parameters .....	9
3.3 Candidate Sites .....	10
<b>4 SUBJECT SITE &amp; SURROUNDS .....</b>	<b>13</b>
<b>5 THE PROPOSAL.....</b>	<b>16</b>
5.1 Facility and Equipment Details.....	16
5.1.1 Equipment to be Installed .....	16
5.1.2 Access and Construction Details.....	16
5.1.3 Utility Service Details .....	17
5.1.4 Construction and Noise .....	17
<b>6 CURRENT PLANNING CONTROLS .....</b>	<b>18</b>
6.1 Commonwealth Legislation .....	18
6.1.1 The Telecommunications Act 1997 .....	18
6.2 State Legislation – .....	18
6.2.1 Planning and Development Act 2005 .....	18
6.2.2 State Planning Policy 5.2 Telecommunications Infrastructure .....	18
6.2.3 Guidelines for the Location, Siting and Design of Telecommunications Infrastructure .....	18
6.2.4 Visual Landscape Planning in Western Australia.....	18
6.3 Local Legislation .....	21
6.3.1 Local Policies.....	21
6.3.2 Zoning .....	21
6.3.3 Bushfire Protection .....	22
6.3.4 Objectives of the Zone.....	23
6.3.5 Coastal Development .....	24
6.3.6 Vegetation Protection and Revegetation .....	24
6.3.7 Local Rural Strategy .....	24
6.3.8 Provisions Applicable to Particular Zones .....	26
6.3.9 Schedule 4- Rural Residential Zone (cl5.5.13).....	31
<b>7 OTHER ENVIRONMENTAL CONSTRAINTS AND OPPORTUNITIES.....</b>	<b>34</b>
7.1 Heritage .....	34

7.2	Electrical Interference and Grounding of the Facility.....	34
7.3	Erosion, Sedimentation Control and Waste Management.....	34
7.4	Flora and Fauna Study .....	34
7.5	Endangered Species.....	35
7.6	Social and Economic Impacts.....	35
7.7	Public Safety .....	35
7.7.1	Radiofrequency Emissions .....	35
7.7.2	Access .....	36
7.8	The Public Interest and the Benefits of Telecommunications.....	36
7.8.1	Other Benefits of Reliable Broadband Services.....	36
7.9	Aviation Safety .....	36
<b>8</b>	<b>CONCLUSION.....</b>	<b>38</b>
<b>9</b>	<b>APPENDICES.....</b>	<b>39</b>
	Appendix 1 – Copy of Title .....	39
	Appendix 2 – Site Photographs .....	40
	Appendix 3 – Proposed Plans.....	41
	Appendix 4 – ARPANSA EME Report .....	42
	Appendix 5 -Response State Planning Policy 5.2 .....	43

## Executive Summary

Proposal	<p>NBN Co propose to install a new fixed wireless facility at 241 Robinson Road, Robinson, comprised of the following:</p> <ul style="list-style-type: none"> <li>▪ 40m high monopole;</li> <li>▪ 2 X parabolic dish antennas;</li> <li>▪ 3 X panel antennas on a circular headframe;</li> <li>▪ 1 x outdoor cabinets (and 1 x future) at ground level; &amp;</li> <li>▪ Ancillary equipment associated with operation of the facility, including cable trays, cabling, safe access methods, bird proofing, earthing, electrical works and air-conditioning equipment.</li> </ul>	
Purposes	<p>The proposed facility is necessary to provide NBN fixed wireless coverage to the Robinson region.</p>	
Property Details	<p><i>Lot &amp; Plan No:</i> 105 on DP 40893  <i>Street Address:</i> 241 Robinson Road, Robinson, WA  <i>Overall Site Area:</i> 6.1648 ha approx.  <i>Property Owner:</i> Algean Pty Ltd</p>	
Town Planning Scheme	<p><i>Council:</i> City of Albany Council  <i>Zones:</i> Rural Residential (29)  <i>Use Definition:</i> Telecommunications facility</p>	
Applicable Planning Policies	Relevant State & Local Planning Policies	Complies
	<i>State Planning Policy 5.2 Telecommunications Infrastructure</i>	Yes
Application	<p>Use and development of the land for the purposes of construction &amp; operation of a Telecommunications Facility (Fixed Wireless facility)</p>	
Applicant	<p>NBN Co Limited (NBN Co)  c/- Daly International  Level 1, 1002 Hay Street  PERTH WA 6872  Contact: Rochelle Barclay  Our Ref: 6ALN-51-01- ALBA</p>	



## 1 INTRODUCTION

NBN Co has engaged Ericsson as the equipment vendor and project manager to establish the infrastructure required to facilitate the fixed wireless component of the National Broadband Network (NBN). Ericsson has in turn engaged Daly International to act on its behalf in relation to the establishment of the required fixed wireless network infrastructure.

The NBN is an upgrade to Australia's existing telecommunications network. It is designed to provide Australians with access to fast, affordable and reliable internet and landline phone services. NBN Co plans to upgrade the existing telecommunications network in the most cost-efficient way using best-fit technology and taking into consideration existing infrastructure.

To support the Fixed Wireless component of this network, NBN Co requires a fixed wireless transmission site to provide fixed wireless internet coverage to Robinson and to serve as a key communications anchor point for another NBN Fixed Wireless facility in the area of Little Grove.

An in-depth site selection process was undertaken in the area prior to confirming the site as the preferred location. This process matched potential candidates against four key factors, namely:

- Town planning considerations (such as zoning, surrounding land uses, environmental significance and visual impact);
- The ability of the site to provide acceptable coverage levels to the area;
- Construction feasibility; and
- The ability for NBN Co to secure a lease agreement with the landowner.

This application seeks planning consent for:

- a 40 metre high monopole;
- radio and transmission telecommunications equipment; and
- ancillary equipment cabinet(s).

Located at 241 Robinson Road, legally known as Lot 105 on deposited plan 40893.

This submission will provide assessment in respect of the relevant planning guidelines, and demonstrates site selection on the basis of:

- The site is designed so as to be appropriately located & sited so as to minimise visual impact on the immediate & surrounding area;
- The site is designed to achieve the required coverage objectives for the area;
- The proposal is designed to operate within the regulatory framework of Commonwealth, State and Local Government; and
- The facility is designed to operate within all current and relevant standards and is regulated by the Australian Communications and Media Authority.

This planning report provides details of the proposed installation, assesses its compliance with the relevant planning instruments, draws a number of conclusions regarding likely impacts in terms of key relevant issue areas and recommends that the proposal be approved.

## 2 BACKGROUND

### 2.1 NBN Co and the National Broadband Network

NBN Co is the organisation responsible for overseeing the upgrade of Australia's existing telecommunications network and for providing wholesale services to retail service providers. The NBN is designed to provide Australians with access to fast, affordable and reliable internet and landline phone services.

NBN Co plans to upgrade the existing telecommunications network in the most cost-efficient way using best-fit technology and taking into consideration existing infrastructure. The NBN's fixed wireless network will use cellular technology to transmit signals to and from a small antenna fixed on the outside of a home or business, which is pointed directly towards the fixed wireless facility.

NBN Co's fixed wireless network is designed to offer service providers with wholesale access speeds of up to 25Mbps for downloads and 5Mbps for uploads.<sup>1</sup>

### 2.2 What is Fixed Wireless and how is it different to Mobile Broadband?

The NBN's fixed wireless network, which uses advanced technology commonly referred to as LTE or 4G, is engineered to deliver services to a fixed number of premises within each coverage area. This means that the bandwidth per household is designed to be more consistent than mobile wireless, even in peak times of use.

Unlike a mobile wireless broadband service where speeds can be affected by the number of people moving into and out of the area, the speed available in a fixed wireless network is designed to remain relatively steady.

### 2.3 The Fixed Wireless Network – Interdependencies

Although fixed wireless facilities are submitted to Council as standalone developments from a planning perspective, they are highly interdependent. Each fixed wireless facility is connected to another to form a chain of facilities that link back to the fibre network. This is called the 'transmission network'.

The transmission network requires line of sight from facility to facility until it reaches the fibre network. The fixed wireless network will remain unconnected without the transmission network and a break in this chain can have flow on effects to multiple communities.

A typical fixed wireless facility will include three panel antennas mounted above the surrounding area. Each antenna is designed to cover a set area to maximise signal strength. These network antennas communicate to a small antenna installed on the roof of each customer's home or business.

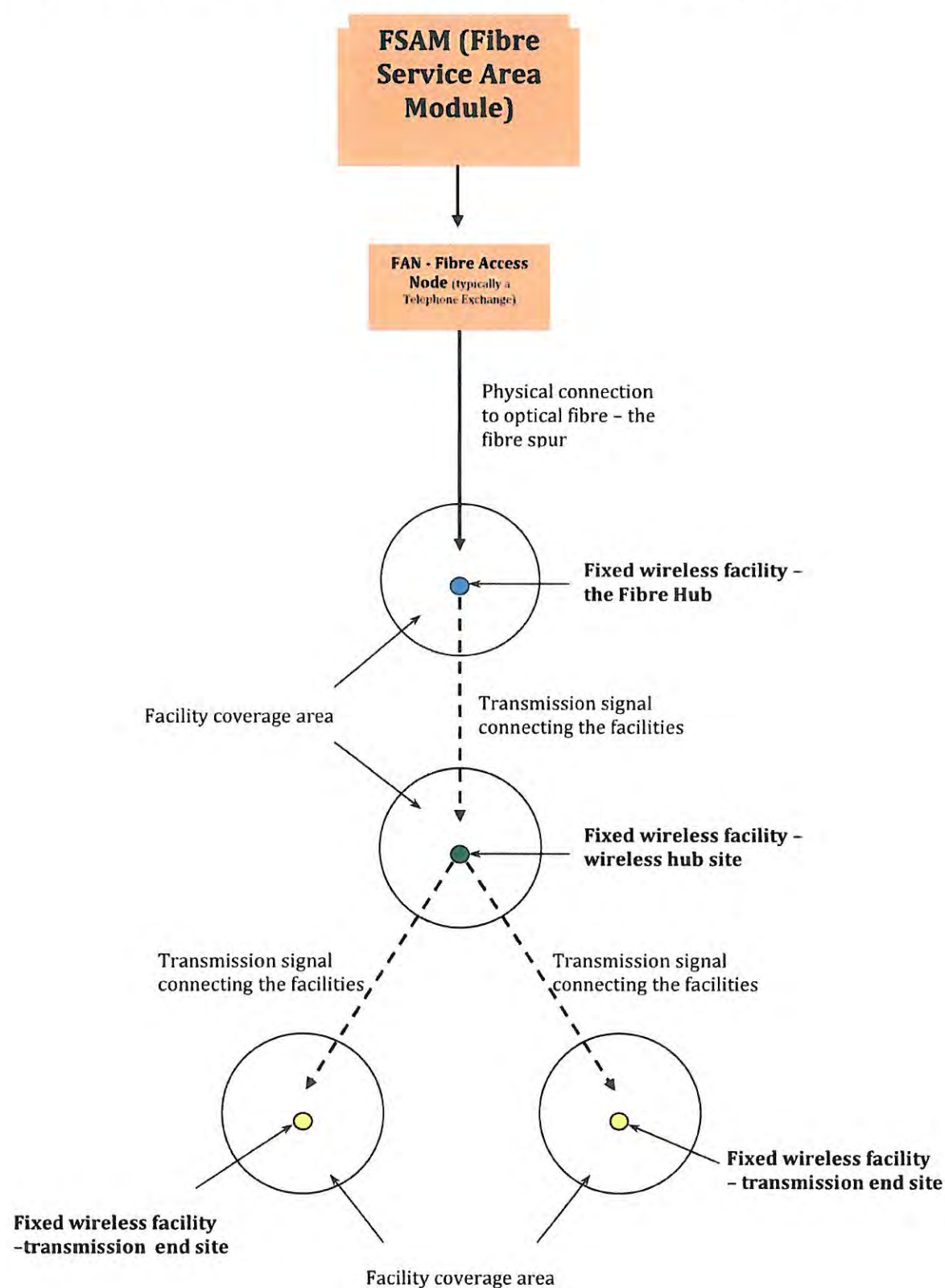
---

<sup>1</sup> NBN Co is designing the NBN to provide these speeds to our wholesale customers, telephone and internet service providers. End user experience including the speeds actually achieved over the NBN depends on some factors outside NBN Co's control like equipment quality, software, broadband plans and how the end user's service provider designs its network.

The proposed Fixed Wireless facility at Robinson is a fibre-link site. It has been designed not only to provide fixed wireless internet services to surrounding premises, but is also designed to be a Fibre Hub “the critical connection point between the fibre network and the Little Grove adjoining Fixed Wireless facilities via the transmission network”.



The character of the Fixed Wireless network is visually demonstrated through Figure 1 below.



**Figure 1: The fixed wireless network**

### 3 SITE SELECTION

Planning for a new fixed wireless broadband facility is a complex process. NBN Co conducts a rigorous multi-stage scoping process, as outlined below.

#### 3.1 Identification of areas requiring Fixed Wireless coverage

NBN Co's Fixed Wireless locations are determined by a number of factors including the availability of both the NBN Co Fibre transit network and the availability of Point of Interconnect (POI) facilities to allow for the installation of NBN Co fibre equipment. NBN Co uses a number of methods to identify those parts of Australia that require Fixed Wireless coverage. When an area is identified as requiring Fixed Wireless coverage, investigations are undertaken to determine the measures required to provide this coverage.

NBN Co has identified a requirement to provide a Fixed Wireless facility at Robinson. The facility is designed to provide Fixed Wireless internet services to dwellings in the Robinson area, in addition to serving as a key communications link for another NBN Fixed Wireless facility in the Little Grove area.

#### 3.2 Site Selection Parameters

NBN Co generally identifies an area where the requirement for a Fixed Wireless facility would be highest, a 'search area.' A preliminary investigation of the area is then generally undertaken, in conjunction with planning and property consultants, radiofrequency engineers and designers in order to identify possible locations to establish a facility.

Generally speaking, new sites must be located within, or immediately adjacent to, the identified search area in order to be technically feasible. However, while the operational and geographical aspects of deploying new facilities are primary factors, there are also many other issues that influence network design, which have to be resolved in parallel.

Some of the issues that may be considered include visual amenity, potential co-location opportunities, the availability and suitability of land as well as a willing site provider, occupational health and safety, construction issues (including structural and loading feasibility and access for maintenance purposes), topographical constraints affecting network line of site, legislative policy constraints, environmental impacts, and cost implications.

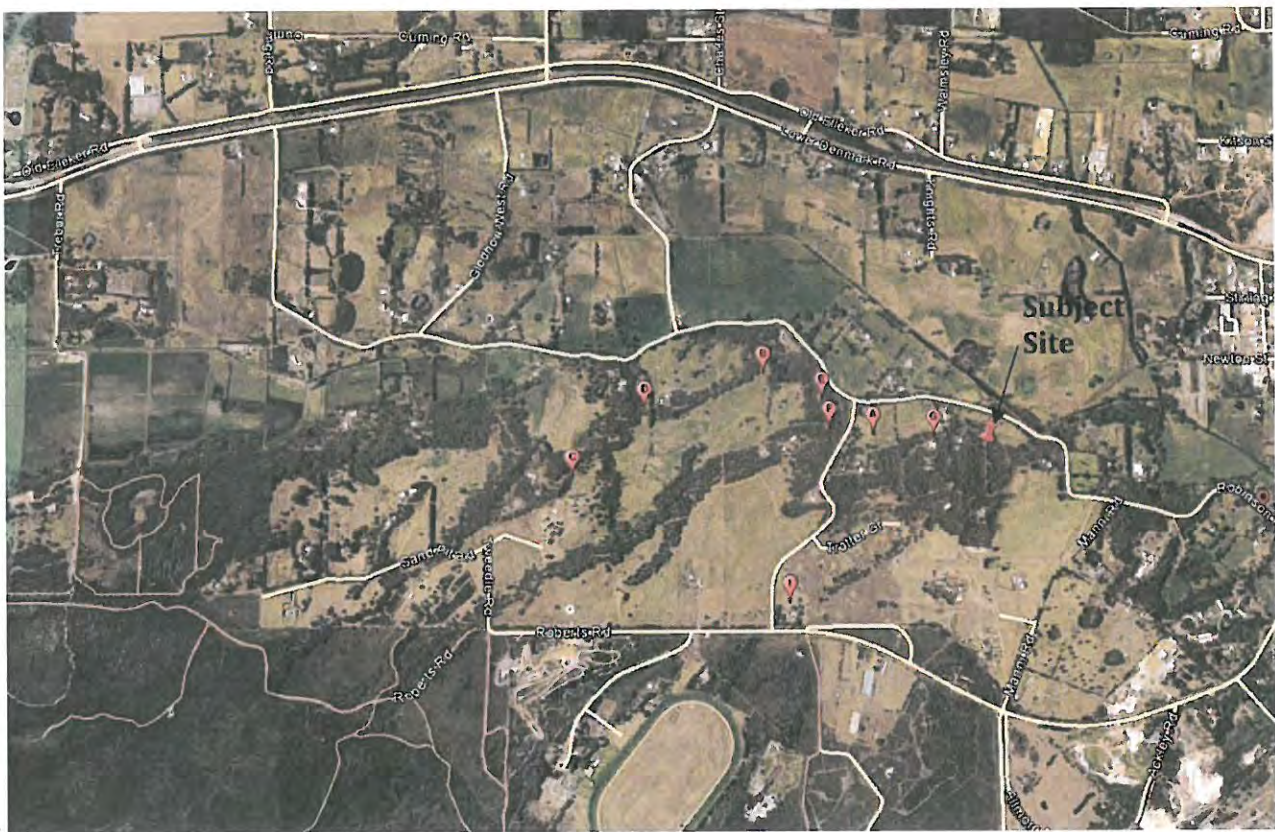
The number, type and height of facilities required to complete the Fixed Wireless network are largely determined by the above operational, geographical and other factors discussed that influence final network design. These compounding factors often severely restrict the available search area within which a facility can be established to provide Fixed Wireless internet services to a local community.



### 3.3 Candidate Sites

Following the identification of the search area, a number of candidate sites were examined. Each candidate was assessed based on the ability to meet the coverage objectives and site considerations detailed above. A total of nine (9) candidates were selected for in-depth investigation, as per **Figure 2** on the following page.

NBN Co endeavors to avoid locating search areas in close proximity to residential localities and potentially sensitive land uses, where practicable. The Robinson area is comprised predominantly of rural residential; parks and recreation; and rural small holding land uses. As such, NBN Co considers that the Robinson area provides an appropriate location for a facility, given the appropriate separation from higher-density residential and other sensitive land uses.



**Figure 2 – NBN Co Candidate Sites (from Google Earth)**

A summary of the candidates that were proposed is set out below, including a description of the opportunities and constraints that each site afforded.

Candidate	Address and Lot Number	Facility Type	Description
A	27 Racecourse Road, Robinson (Lot 24 on Plan 3568)	New 40 m monopole	NBN Co investigated establishing a new 40 metre monopole at 27 Racecourse Road, Robinson.  The owners of this site were contacted twice and no response

			was received.
<b>B</b>	101 Robinson Road, Robinson (Lot 101 on Plan 40892)	New 40 m monopole	NBN Co investigated establishing a new 40 metre monopole at 101 Robinson Road, Robinson.  The owners of this site were not interested in the proposal.
<b>C</b>	28 Sand Pit Road, Robinson (Lot 21 on Plan 3568)	New 40 m monopole	NBN Co investigated establishing a new 40 metre monopole at 28 Sand Pit Road, Robinson.  The owners of this site were contacted twice and no response was received.
<b>D</b>	379 Robinson Road, Robinson (Lot 9 on Plan 3568)	New 40 m monopole	NBN Co investigated establishing a new 40 metre monopole at 379 Robinson Road, Robinson.  The owners of this site were not interested in the proposal.
<b>E</b>	325 Robinson Road, Robinson (Lot 103 on Plan 40892)	New 40 m monopole	NBN Co investigated establishing a new 40 metre monopole at 325 Robinson Road, Robinson.  The owners of this site were contacted twice and no response was received.
<b>F</b>	52 Racecourse Road, Robinson (Lot 5 on Plan 3568)	New 40 m monopole	NBN Co investigated establishing a new 40 metre monopole at 52 Racecourse Road, Robinson.  The owners of this site were not interested in the proposal
<b>G</b>	245 Robinson Road, Robinson (Lot 104 on Plan 40893)	New 40 m monopole	NBN Co investigated establishing a new 40 metre monopole at 245 Robinson Road, Robinson.  The owners of this site were contacted twice and no response was received.
<b>H</b>	<b>Subject Site: 241 Robinson Road, Robinson (Lot 105 on Plan 40893)</b>	New 40 m monopole	<b>NBN Co investigated establishing a new 40 metre monopole at 241 Robinson Road, Robinson.</b>  <b>The owners of this site have agreed and have signed a lease.</b>
<b>I</b>	224 Roberts Road, Robinson (Lot 33 on Plan 3568)	New 40 m monopole	NBN Co investigated establishing a new 40 metre monopole at 224 Roberts Road, Robinson.  The owners of this site were not interested in the proposal.



### 3. 4 Site Selection

This section has provided an overview of the process and particulars relating to site selection. Candidate H - 241 Robinson Road, Robinson (Lot 105 on DP 40893) is considered the ideal candidate site for the location of the proposed NBN fixed wireless facility for the following reasons:

- The proposed site has been particularly targeted to provide the optimal required quality of service as required by NBN Co across the Robinson region;
- The proposed facility is located in a rural residential area, on an elevated area of the site to minimize the tower height; existing vegetation will adequately screen the tower;
- The site provides sufficient spatial separation from sensitive land uses with the nearest dwellings located approximately 84 metres and 176 metres from the proposed site;
- The surrounding landscape includes mature dense vegetation and other street furniture such as streetlights, power lines; railway infrastructure amongst other visual clutter. In this way, the tower will not be a distinctive introduction to the surrounding landscape. Furthermore, the existing vegetation is expected to provide partial screening and soften the scale of the proposal.

## 4 SUBJECT SITE & SURROUNDS

The telecommunications facility is proposed to be located at 241 Robinson Road, Robinson. The land is formally described as Lot 105 on Plan 40893. The land is presently improved by a detached dwelling and ancillary structures. The site is irregular in shape and has a total area of approximately 6.1648 hectares. Access to the property is via an existing access track from Robinson Road (please refer to the Proposal Plans contained in **Appendix 3- Proposed Plans**).

The subject site is zoned Rural Residential (29) (Please refer to the Zoning Map in **Section 6.3.2** of this report). The surrounding area consists predominantly of rural residential (located east and west) parks and recreation (located south west); and rural small holding land uses (located to the north). The nearest dwelling is setback 84 metres (owners dwelling) and the closest neighbouring dwelling setback approximately 176 metres. **Figure 3** on the following page depicts the subject site in the context of the surrounding area. This image shows the low-density rural residential character of the surrounding area.

Where possible, NBN Co endeavours to co-locate with existing telecommunications facilities if it is feasible to do so. As per data from the Mobile Carriers Forum (MCF) National Site Archive, there are no suitable telecommunications sites within the Albany area. Accordingly, co-location could not be achieved in this instance.



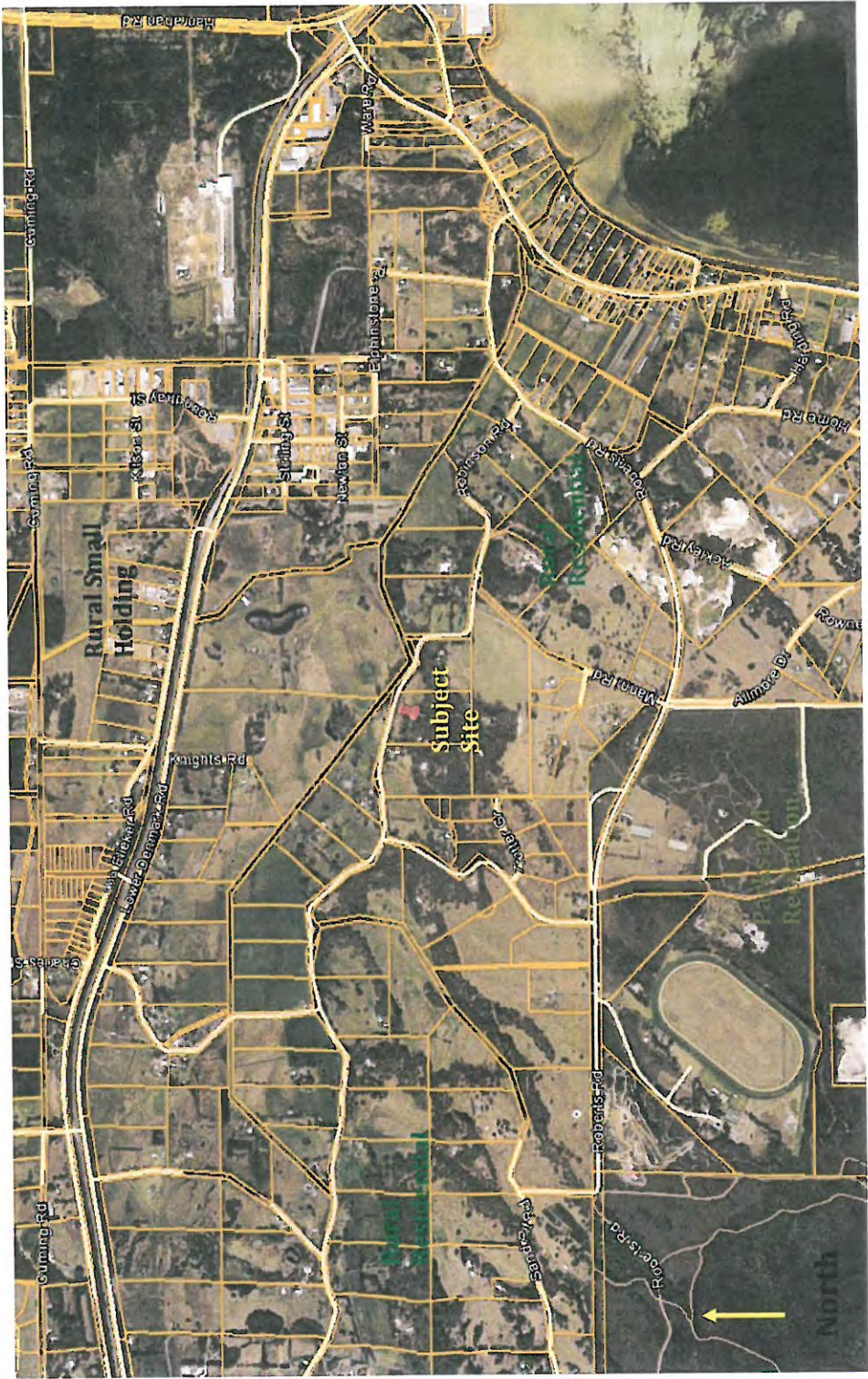


Figure 3 – Aerial Photo of subject site, illustrating surrounding context (Courtesy of Google Maps)



**Figure 4;** and **Figure 5** below depict the proposed location of the NBN Fixed wireless facility within the site, and the view from the proposed location looking towards Robinson Road. More site photos are included in **Appendix 2- Site Photographs**, and include a Photomontage illustrating the proposed facility as it would appear in the landscape.



**Figure 4 – Proposed location of the NBN Wireless Facility compound**



**Figure 5 – View from proposed facility location towards Robinson Road**



## 5 THE PROPOSAL

### 5.1 Facility and Equipment Details

#### 5.1.1 Equipment to be Installed

Approval is sought for the development of a telecommunications facility, comprising a forty (40) metre high monopole, associated radio transmission telecommunications equipment and ancillary components including an outdoor cabinet enclosed within a secure compound which measures approximately 124 m<sup>2</sup> in area.

The proposed NBN Fixed Wireless facility at Robinson is also intended to operate as a transmission hub site within the network, serving as a key communications receiving point for another NBN fixed wireless broadband station in the wider Albany region.

The proposed monopole will feature a circular headframe at the top of the monopole accommodating three (3) x panel antennas measuring approximately 1077 mm x 300mm x 115mm. Two (2) parabolic dish antennas will also be installed at approximately 37 metres on the monopole and will be 600mm in diameter. (Please refer to **Appendix 3 – Proposed Plans** for further details.)

#### 5.1.2 Access and Construction Details

The proposed NBN compound will be accessed via the existing firebreak access track off Robinson Road and part of the proposal includes an upgrade to this track (Please refer to **Appendix 3 – Proposed Plans** for further details).

NBN Co considers the site access to be appropriate given the NBN Co facility will not be a significant generator of traffic. Once operational, the facility should require once annual maintenance visits, but would remain unattended at all other times. As the facility is expected to generate minimal trips per year, it is anticipated that traffic interference will be negligible.

During the construction phase, it is planned that a truck will be used to deliver the equipment and a crane will be utilised to lift most of the equipment into place. Any traffic impacts associated with construction are expected to be of a short-term duration and are not anticipated to adversely impact on the surrounding road network. In the unlikely event that road closure will be required, NBN Co will apply to the relevant authorities for permission.

The facility and all ancillary components are proposed to be constructed over the one title. A copy of title is provided as **Appendix 1**. Plans indicating the details of the proposal form part of the documentation of this application. Additional photos of the site and proposed development plans are provided as **Appendices 2 & 3** respectively.

### 5.1.3 Utility Service Details

The facility will be powered by a proposed underground power cable from existing western power pole (#448738) to the proposed NBN equipment shelter.

### 5.1.4 Construction and Noise

Noise and vibration emissions associated with the proposed facility are expected to be limited to the construction phase outlined above. Noise generated during the construction phase is anticipated to be of short duration and accord with the standards outlined in the relevant EPA guidelines. Construction works are planned only to occur between the hours of 7.00am and 6.00pm.

There is expected to be some low level noise from the ongoing operation of air conditioning equipment associated with the equipment shelter, once installed. Noise emanating from the air conditioning equipment is expected to be at a comparable level to a domestic air conditioning installation, and should generally accord with the background noise levels prescribed by relevant guidelines.

A total construction period of approximately ten weeks (including civil works and network integration and equipment commissioning) is anticipated. Construction activities will involve four basic stages:

- Stage 1 (Week 1) – Site preparation works, including field testing, excavation and construction of foundations;
- Stage 2 (Weeks 2, 3 and 4) – Construction of the mast;
- Stage 3 (Weeks 5 and 6) – Construction of the equipment shelter and fences;
- Stage 4 (Weeks 7 – 10) – Installation of antennas and radio equipment, as well as equipment testing.

Once operational, the facility is designed to function on a continuously unstaffed basis and will typically only require maintenance works once a year, for approximately one day per year.



## 6 CURRENT PLANNING CONTROLS

### 6.1 Commonwealth Legislation

#### 6.1.1 The Telecommunications Act 1997

Schedule 3 of the *Telecommunications Act 1997* (Cth) empowers Carriers to install low-impact facilities without participating in the planning approval process. The *Telecommunications (Low Impact Facilities) Determination 1997* (Cth) defines which facilities are low-impact facilities. As the proposed monopole cannot be defined as a low-impact facility, the Commonwealth power does not apply. As such, unless a State or Territory exemption applies, a planning permit is required.

*It is noted that Rural areas are identified as areas of settlement with the highest level of priority for the siting of a low-impact facility within The Telecommunications Act 1997.*

### 6.2 State Legislation –

#### 6.2.1 Planning and Development Act 2005

The proposal is subject to the provisions of the *Planning and Development Act 2005*. This Act controls development within Western Australia through the application of environmental planning instruments. It is those instruments that document whether or not development is permissible, either with or without development consent, or prohibited.

#### 6.2.2 State Planning Policy 5.2 Telecommunications Infrastructure

This policy provided a framework for the preparation, assessment and determination of applications for planning approval of telecommunications facilities within the context of the planning system of Western Australia. Planning Policy 5.2 states that ‘telecommunications infrastructure should be located, sited and designed in accordance with 15 Guiding Principles’. Please refer to **Appendix 5 – Response State Planning Policy 5.2** for compliance with the provisions of this policy.

#### 6.2.3 Guidelines for the Location, Siting and Design of Telecommunications Infrastructure

The guidelines provide advice on the location, siting and design of telecommunications infrastructure to assist local government in planning for telecommunications facilities at the local level and are designed to be read in conjunction with Telecommunications Infrastructure Statement of Planning Policy 5.2, any town planning scheme for the particular area, and any local planning policies relevant to telecommunications infrastructure. These guidelines were taken into consideration when selecting this site.

#### 6.2.4 Visual Landscape Planning in Western Australia

The Visual Landscape Planning Manual for Western Australia provides advice to state agencies, local governments, developers and the community on techniques for incorporating visual landscape planning into the planning system. The manual has been developed by the Department

for Planning and Infrastructure with the assistance of a working group including the Department of Environment and Conservation (DEC) and Main Roads WA. The manual provides visual landscape planning methods: explains the techniques of visual landscape evaluation and visual impact assessment in detail. Part 3 of the manual provides guidelines for location, siting and design: considers land uses and developments that may give rise to potential impacts on different landscapes and measures to address these impacts.

An assessment of the report against these guidelines follows to assist council planners in their assessment of this application.

#### **Guideline**

##### **1. Location**

- a. *Assess the potential location of the tower and comply with management standards for the area.*
- b. *When locating and siting telecommunication towers avoid significant features, travel routes and recreation areas where possible.*
- c. *Locate towers where there is similar infrastructure in the surrounding landscape and proposed construction area.*
- d. *High points in the landscape vary in their prominence as viewed from different locations. Where possible choose higher points that appear less prominent from key views and/or travel routes.*
- e. *To reduce impacts on key views, there are two options: locating further up a slope is better for short distance views, and for long distance views choose locations back from the top of the ridge or further down the slope (Figure 3.24)*

#### **Response:**

NBN Co identifies an area where the proposed facility is likely to provide maximised service to the community (a 'search area') and undertakes a preliminary investigation in conjunction with its planning and property consultants, radiofrequency engineers and designers in order to identify possible locations and options to locate a facility. Generally speaking, new sites must be located within, or immediately adjacent to, the identified search area in order to be feasible. However, while the operational and geographical aspects of deploying new facilities are primary factors, there are also many other critical issues that influence network design, and these have to be resolved in parallel. Some of the issues which need to be considered are visual amenity, potential co-location opportunities, the availability and suitability of land and a landowner willing to lease land, construction issues (including structural and loading feasibility and access for maintenance purposes), topographical constraints, legislative policy constraints, environmental impacts and cost implications. The number, type and height of facilities required to complete the fixed wireless network are largely determined by the above operational, geographical and other factors discussed that influence final network design. These compounding factors often severely restrict the available search area within which a facility can be established. The chosen location for the site has been selected after careful consideration of nine (9) candidate sites.

In order to achieve coverage objectives for the area and considering the willingness of land owners, the chosen site was the best possible location for the siting of the facility. Corridors of intermittent vegetation screen the views from Robinson Road and other local roads in the road network.

The proposed tower is sited on an elevated portion of the site. To provide council with a clearer understanding of the proposal, **Appendix 2- Site Photographs** includes a photomontage as a visual representation of the proposed facility taken from a viewpoint on Robinson Road. The

photomontage demonstrates that the location of this facility does not detract from the current visual amenity. The addition of this tower will significantly increase local telecommunications coverage and access.

#### Guideline

##### 2. *Siting*

- a. *Avoid siting towers directly on a focal area (ie the focus of the view), particularly where they are in line with travel route line-of-sight.*
- b. *Keeping the towers away from potential focal areas will reduce the overall visual impact*
- c. *Towers that are sited sufficiently away from travel routes can be completely screened from view. This is possible and is the most desirable option.*
- d. *Minimise the height of the tower by assessing the local topography or height of buildings for the proposed area. Choose the site that minimises the height of the tower most effectively.*
- e. *Siting telecommunication towers close to objects of a similar scale (whether they are natural, such as trees, or built features such as other infrastructure) will reduce their prominence and hence their potential visual impact.*
- f. *Siting towers on existing buildings; there are many designs and strategies to site towers on existing buildings to reduce the overall visual impact.*

#### Response:

The chosen location for the site has been selected after careful consideration of nine (9) candidate sites as discussed in the preceding response. The proposed site is not in direct line of sight on main travel routes, and is largely screened by existing vegetation. Due to the site's elevation the height of the tower has been able to be kept considerably smaller than other similar facilities. There are no existing structures or buildings that could be used for co-location. However the proposed facility has the capacity for the co-location of further facilities. Please refer to **Appendix 2- Site Photographs** for a visual representation of the proposed facility.

#### Guideline

##### 3. *Design*

- a. *Use an appropriate colour scheme to harmonise with the surrounding landscape in any given situation (natural, rural, built areas).*
- b. *Using colour will reduce glare and reflectivity. If the towers are not painted, the steel is more reflective in the light and will draw more attention.*
- c. *Avoid clutter on individual towers. Combine all additional elements in the most streamlined way possible.*
- d. *Combine several towers that are in the same location. This avoids duplication and consolidating the facilities on to one tower reduces the overall visual impact on multiple towers in one location.*
- e. *Reduce the visible bulk of the entire structure. Lattice web towers are usually less intrusive than solid towers. This applies with wide to slim design tower regards to the overall design of telecommunication towers, check height requirements in the proposed construction area. Towers can often come in standard sizes and may be taller in height than necessary. Minimise height wherever possible.*
- f. *Camouflage towers: this technique is popular, and if designed sensitively can be very effective in reducing potential visual impact.*

#### Response:



The materials and colours used have been chosen to remain complimentary to the surrounding landscape. In our experience, if the monopole remains unpainted (dull grey colour), over time fades to best blend with the uniform colours of the site's rural setting This facility presents an opportunity for future colocations of similar infrastructure. Any such co-location would be dependent on structural capabilities and other operators coverage objectives.

The development application has considered the Visual Landscape Planning Guidelines for Telecommunications Infrastructure and it is considered that the proposal remains consistent with the provisions for location; siting and design.

### 6.3 Local Legislation

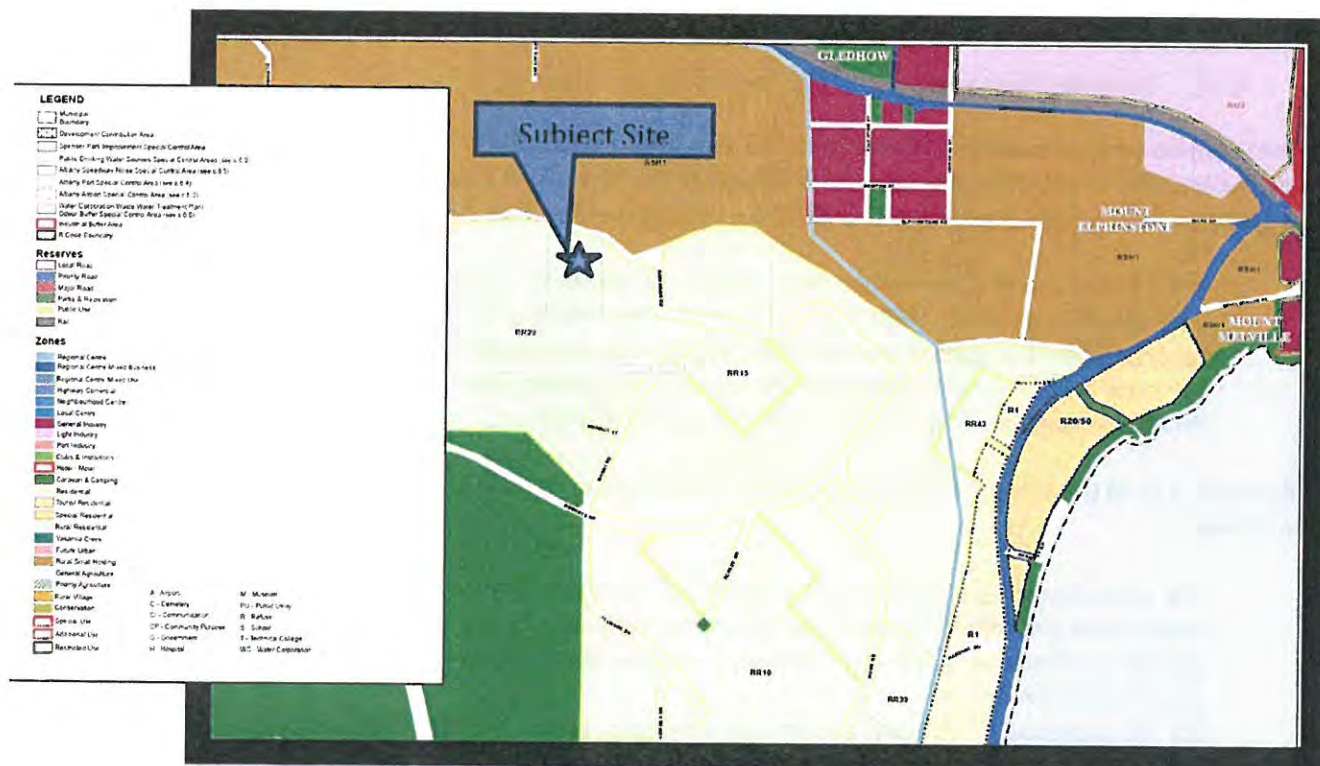
The City of Albany Planning Scheme No. 1 (from herein referred to as 'the scheme') gazetted on the 28<sup>th</sup> of April 2014 is administered by the City of Albany is the applicable local planning instrument for this application.

### 6.3.1 Local Policies

Notwithstanding that there are a range of local planning policies applicable in the council jurisdiction, none of these policies currently apply to this development application.

### 6.3.2 Zoning

The scheme identifies the site for the proposed facility 241 Robinson Road, Robinson as Rural Residential 29. **Figure 6 below** provides the planning scheme map and legend identifying the site as Rural Residential 29.



**Figure 6 – City of Albany Planning Scheme No. 1 Map 3 (Courtesy of City of Albany)**

Schedule 1 of the Planning Scheme defines telecommunications as:

*'Land used to accommodate any part of the infrastructure of a Telecommunications network. It includes any telecommunications line, equipment, apparatus, telecommunications tower, mast, antenna, tunnel, duct, hole, pit, pole, or other structure or thing used, or for use in or in connection with a Telecommunications network'.*

The use is not listed in the zoning table, which identifies that the use must comply with clause 5.5.13 and Schedule 14. The scheme dictates that:

*If a person proposes to carry out on land any use that is not specifically mentioned in the Zoning Table and cannot reasonably be determined as falling within the type, class or genus of activity of any other use category, the Local Government may:*

*(a) Determine that the use is consistent with the objectives of the particular zone and is therefore permitted;*

*(b) Determine that the use may be consistent with the objectives of the particular zone and thereafter follow the advertising procedures of clause 9.4 in considering an application for planning approval; or*

*(c) Determine that the use is not consistent with the objectives of the particular zone and is therefore not permitted.*

Accordingly, this report will assess the proposal against clause 5.5.13 and Schedule 14, and it is understood that Council will advertise the application in accordance with the procedures of clause 9.4.

### 6.3.3 Bushfire Protection

There are no current maps that identify the site as a bushfire hazard zone. It is understood from discussions with Council that the site will be subject to Bushfire prone mapping once this mapping is approved by the State Government. Section 5.4 of the scheme states the following:

*5.4.1.2 The Local Government may require all planning proposals (including scheme amendments, structure plans and subdivisions) to include a fire hazard assessment and report prepared in accordance with the methodology and classifications (as determined by the Local Government) contained in the Western Australian Planning Commission Bushfire Protection policies and guidance at the time of application.*

Section 5.4.13 of the scheme outlines a number of provisions pertaining to fire protection measures:

*The Local Government shall require all planning proposals to incorporate appropriate fire protection measures which may include:*

*(a) The requirements of the City's Annual Fire Regulation Notice (as amended from time to time);*

*(b) The provision of an adequate fire fighting water supply and equipment including, but not limited to, fire hydrants, standpipes and hose connections;*

*(c) The provision of fire access tracks for access and egress of 2WD vehicles and access for emergency service vehicles;*



*(d) Fire prevention and suppression measures to be implemented by all landowners on land to which the development relates, including the implementation of building protection zones and hazard separation zones, collectively forming the low fuel zone; and incorporation of construction standards for buildings including those in AS 3959 – Construction of Buildings in Bushfire Prone Areas (as updated from time to time) and the Building Codes of Australia.*

The site will be accessed via an existing firebreak track and given the nature of the proposed facility as a non-habitable structure with no risk to loss of life, no further fire protection measures are considered necessary.

#### 6.3.4 Objectives of the Zone

The zone objectives are reiterated below with a response that demonstrates how the proposal is compliant with each provision; or, identifying that the provision is not relevant to the proposal.

*(a) Create small rural land holdings for residents who wish to enjoy a residential lifestyle within a rural landscape and environment; and*

#### **Response:**

No further subdivision is proposed and accordingly the application remains compliant with this provision.

*(b) Provide for residential and limited incidental land uses which:*

*(i) Are compatible with the preservation and protection of environmentally sensitive areas such as remnant vegetation and groundwater protection areas;*

*(ii) Do not visually detract from the landscape and the visual amenity of the locality;*

*(iii) Allow for uses and developments that are fit for purpose and minimise any onsite or off-site impacts such as soil erosion, nutrient loss, drainage and potential land use conflicts; and*

*(iv) Are located in close proximity to existing urban areas and can enjoy appropriate urban servicing to the lots including rubbish disposal, reticulated water, community facilities and fire infrastructure.*

#### **Response:**

(a) (i) The site is not listed as an environmentally sensitive area and is not identified as a groundwater protection area. Accordingly the proposal remains compliant with this provision.

(ii) The proposal has been sited to be screened from view by both existing vegetation on site and in addition vegetation in the local area provides further screening whilst travelling on the local road network. Please refer to **Section 6.2.4** and **Appendix 5- Response to State Planning Policy 5.2** for more information relating to protection of visual amenity.

(iii) Please refer to Section 6.3.2 for information relating to the designation of the use in this zone. The use is not listed and council reserves the right to advertise the proposal. It is noted that the consideration of this proposal against higher order documents including the *Telecommunications Act*- where a rural zone is considered ideal for telecommunications facilities; and *State Planning Policy 5.2 Telecommunications Infrastructure* – where the siting of this facility is considered appropriate indicate that from a state and national planning perspective this use is ideally situated in this type of zone.

The compound is proposed to be constructed above ground, with no significant earthworks or disturbance to the soil proposed. The hardstand area is minimal and will not significantly impact on drainage in the area. The size of the compound is insignificant in comparison to the size of the site and is located centrally on the site. Accordingly, there is no land use conflict.

(iv) It is considered that the proposal will contribute to the ability of residents in the Robinson locale to access appropriate urban servicing, of which telecommunications is now considered fundamental.

#### 6.3.5 Coastal Development

Section 5.3.2 of the scheme identifies that *'in assessing any land use or development proposals in the vicinity of the coast, the Local Government shall have due regard to the recommendations of Southern Shores 2001-2021– A Strategy to Guide Coastal and Marine Planning and Management in the South Coast Region of Western Australia'*. It is understood that council may request information relating to an assessment of this proposal against the document. Any such request will be adhered to in the assessment process.

#### 6.3.6 Vegetation Protection and Revegetation

For the construction of the NBN fixed wireless facility, minimal vegetation clearing is required. The Environmental Protection- (Clearing of Native Vegetation) Regulations 2004 (Prescribed Clearing Section 51c- item 1) states that

*Clearing of a site for the lawful construction of building or other structure on a property, being clearing which does not together with all other limited clearing on the property in the financial year in which the clearing takes place, exceed 5ha, if-*

- (a) the clearing is to the extent necessary; and*
- (b) the vegetation is not riparian vegetation.*

This item no. 1 provides an exemption for the clearing proposed for the site, provided that any relevant approvals are obtained (planning approval and building approval); and additionally, that the site is not listed as having native vegetation (environmentally sensitive area).

The site is mapped as an environmentally sensitive area. Based on this premise, no vegetation clearing permit will be required upon successful attainment of planning approval and building permit.

#### 6.3.7 Local Rural Strategy

Under the previous planning scheme, The Local Rural Strategy planning map lists this site as being in Visual Management Area A. The provisions from this strategy are listed below and accompanied by a response.



**(b) Siting of Development**

All development including dwelling houses, outbuildings, rainwater tanks and extractive industries shall be sited such that they:-

- (i) Do not detract from significant views;
- (ii) Are not located on ridge tops (to avoid silhouetting against the skyline);
- (iii) Are preferably not located on slopes greater than 1 in 10; and
- (iv) Are sympathetic to existing landscape elements.

**Response:**

Please refer to section 6.2.4 for a response to (b) (i) and (b) (iv). The proposal is not situated on a ridge top and the portion of the site chosen to accommodate the development is flat.

**(c) Building Design, Materials and Colours**

Buildings shall be sympathetic to existing landscape elements in terms of their design, materials and colour.

**Response:**

Please refer to section 6.2.4 for a response to (c).

**(d) Infrastructure, Driveways and Firebreaks**

- (i) Roads shall be constructed to minimum design standards with a minimum of cut and fill;
- (ii) Roads, driveways, firebreaks and other infrastructure shall follow the contours of the land and be located such that they minimise cut and fill and do not form visible straight lines;
- (iii) Areas of cut and fill should be revegetated immediately following construction to minimise their visibility; and
- (iv) Rural residential development should be serviced with underground power where it is practical to do so.

**Response:**

The access route proposed is the existing firebreak. Once constructed, the facility will be serviced once a year. In addition, this is not a public facility and accordingly, the proposed access is considered sufficient. The access is already constructed and accordingly provision (d) (iii) is not applicable. Provision (iii) is not applicable. The proposed cabling will be underground as show in the proposed plans (**Appendix 3**).

**(e) Clearing of Native Vegetation**

Clearing of native vegetation for buildings, infrastructure and essential firebreaks shall be confined to the absolute minimum necessary for open space and garden areas, infrastructure installation and fire protection.

**Response:**

Will comply with this provision.

**(f) Signs**

Signs along highways should not distract from the visual amenity of an area, and where deemed essential for safety, tourism or information reasons should be so designed and located that they harmonise with their surroundings.

**Response:**

Signage does not form a part of this proposal and hence this provision does not apply.

**6.3.8 Provisions Applicable to Particular Zones**

This section lists the provisions that apply in particular to the rural residential zone. Each provision is addressed with a response.

**5.5.13.2.1 Building Design, Material and Colours**

- (a) A dwelling and/or outbuilding shall not exceed 7.5 metres in height, which is measured vertically from the natural ground level.*
- (b) All dwellings, outbuildings and other structures (such as water tanks) shall be designed and constructed of material which allows them to blend into the landscape of the site.*
- (c) In order to reduce glare from a building (including a water tank) and to protect visual amenity, the use of reflective materials and finishes and white/off-white colours shall not be permitted.*
- (d) Building design is to be responsive to the existing landform, minimising cut and fill and the use of retaining walls.*
- (e) Where deemed necessary by the Local Government due to fire hazards and/or threat in a particular area, all buildings are to be designed in accordance with AS 3959 – Construction of Buildings in Bushfire Prone Areas or any document superseding it.*

**Response:**

Provisions (a) and (e) are not applicable. No habitable dwellings are proposed as a part of this application. Complies with Provisions (b); (c); and (d).

**5.5.13.2.2 Fire Protection**

- (a) In the event of there being any variations or conflict between a Fire Management Plan endorsed by a Local Government for a specific Rural Residential zone and the following fire protection provisions, the requirements of the endorsed Fire Management Plan shall prevail.*
- (b) All buildings shall be sited to allow for the development of a low fuel zone around the building and any other necessary fire protection measures to be implemented to the satisfaction of the Local Government.*
- (c) The required width depends on the slope of the land between the building and the bush fire hazard and minimum distances of a low fuel zone are:*

- Land between 0° to 10°
  - Land between 10° to 20°
  - Land between 15° to 20°
- (d) Where buildings are located on a negative slope (i.e. downhill from a bush fire hazard) a minimum of 20 metres is required.
- (e) The low fuel zone must be maintained in a low fuel state and fulfil the following conditions:
- (i) Bush fire fuels must be maintained below 100 millimetres in height;
  - (ii) Trees and branches which may fall onto a house must be removed; and
  - (iii) Lower branches of remaining trees must be trimmed.

**Response:**

The proposal is for a non-habitable Class 10b facility. Please refer to **Section 6.3.3** for a discussion on Bushfire protection.

**5.5.13.2.3 Modifications to Designated Building Envelopes/Setbacks**

- The Local Government may permit variations to the position of a designated building envelope and/or building setback, where it is satisfied that the modification:*
- (a) *Is consistent with the objectives for the zone;*
  - (b) *Preserves areas of remnant vegetation, creek lines and other areas of environmental significance;*
  - (c) *Provides sufficient area for the development of any low fuel zone and/or hazard separation area on the lot;*
  - (d) *Is required due to the topography or shape of the lot; and*
  - (e) *Will have no adverse impact on the amenity of existing residences on adjoining lots.*

**Response:**

Provisions (a)- (e) are not applicable. No variations to setbacks are proposed as a part of this application.

**5.5.13.2.4 Fencing**

- (a) *No boundary fencing shall be constructed of fibre cement, metal sheeting or wooden picket or similar materials; and*
- (b) *Where boundary fencing is permitted by the Local Government it shall be of rural construction comprising posts and wire or similar materials.*
- (c) *The Local Government shall only approve the keeping of stock, animals and/or any Rural Pursuit activity if confined to existing cleared areas of a lot. The Local Government will require fencing to contain any livestock and protect remnant vegetation and/or exclusion areas as a condition of approval.*

**Response:**

Provisions (a)- (b) are not applicable- there is no boundary fencing proposed. A chainlink security fence is proposed to secure the facility however this fencing is not located proximate to any boundaries. Provision (c) not applicable. No keeping of animals is proposed as a part of this application.

**5.5.13.2.5 Remnant Vegetation Protection and Clearing Controls**

- (a) *No clearing of any remnant vegetation shall occur except for:*
  - (i) *Any clearing authorised by a clearing permit obtained from the relevant State Government authority and any clearing exempt in accordance with Schedule 6 or Regulation 5 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 of the Environmental Protection Act 1986.*
  - (ii) *That clearing required to establish any low fuel buffer, firebreak and/or to comply with the requirements of the Bush Fires Act 1954 (as amended);*
  - (iii) *Trees that are dead, diseased or dangerous and present an imminent danger to*



residents;

(iv) *Clearing within a designated building envelope required to construct an approved building and curtilage;*

(v) *It is to gain vehicular access to an approved dwelling and/or building envelope; and*

(vi) *An area of up to one metre in width for the purpose of erecting and maintaining a fence line is required and approved by the Local Government. In these areas the City of Albany LPS 1 Page 44*

*land shall be slashed with a view to preventing soil erosion.*

(b) *Clearing of remnant vegetation for any purpose other than the above exceptions, shall require the planning approval of the Local Government and as a condition of granting approval, the Local Government may require the planting and maintenance, for a period of at least three years, of endemic native trees of species and in locations approved by the Local Government.*

**Response:**

Please refer to **Section 6.3.6**, the clearing required to construct the proposal is considered to be exempt from the requirement to obtain a vegetation clearing permit.

**5.5.13.2.6 Tree Planting**

*In order to enhance the rural amenity of the area and minimise the visual impact from the developments in the zone, the Local Government may require as a condition of any planning approval the planting and ongoing maintenance of such trees and/or groups of trees and species as specified by the Local Government.*

**Response:**

The proposed facility has been sited in a location that will be adequately set back from any significant view points in the surrounding landscape. Moreover, the existing natural vegetation is anticipated to provide partial screening to the monopole as well as soften the scale and bulk of the facility on the surrounding rural residential surrounds. Additionally, a slimline structure (i.e. monopole) of minimal height necessary to achieve the required coverage objectives has been chosen as opposed to a large scale lattice tower in order to minimise any likely visual/aesthetic impacts on the rural amenity.

**5.5.13.2.7 Dams, Soaks and Bores**

*No dams, soaks and/or bores shall be constructed on any lots unless the Local Government has granted planning approval. All applications for the construction of a dam, soak or bore shall:*

(a) *Be supported by a hydrological report demonstrating that water collection or abstraction planned will not be to the detriment of water collection on adjoining properties; and*

(b) *Ensure that existing stream flows are maintained for downstream users and to support other water dependent environments.*

*Note: Within any proclaimed groundwater area under the Rights in Water and Irrigation Act 1914, any bore/soak/well or taking of groundwater, requires the approval of the relevant State Government authority.*

**Response:**

Provisions (a)- (b) are not applicable. No dams, soaks or bores are proposed.

**5.5.13.2.8 Keeping of Animals**

*The following provisions apply to the keeping of animals (excluding domestic animals or pets):*

(a) *Planning approval is required for the keeping of hooved and/or large non-domesticated animals or pets, for example but not limited to, horses, cows, sheep and camels.*



*(b) Where, in the opinion of the Local Government, the continued presence of any animal(s) on any portion of land is likely to cause or is causing:*

- *Damage to natural vegetation;*
- *Water pollution;*
- *Dust pollution;*
- *Soil erosion; or*
- *Any other form of land degradation,*

*notice may be served on the owner of the said portion of land requiring the immediate removal of those animal(s) and/or rehabilitation of the land specified in the notice.*

*(c) Domestic pets which do not pose a threat to native flora and/or fauna may be kept within the zone under the following conditions:*

*City of Albany LPS 1 Page 45*

- *All pets shall be confined within the building envelope or similar at all times unless kept on a leash by a responsible person; and*
- *Cats and rabbits are considered to pose a threat to native flora and/or fauna and shall be confined inside buildings.*

**Response:**

Provisions (a)- (c) are not applicable. No keeping of animals form part of this application.

**5.5.13.2.9 Effluent Disposal**

*On-site disposal is required to service all dwellings and shall be responsibility of the individual landowner in accordance with clause 5.8.2.*

**Response:**

This provision does not apply. No new habitable dwellings form part of this application.

**5.5.13.2.10 Water Supply**

*Where available, a reticulated water supply from a licensed water service provider shall be provided to each lot.*

**Response:**

This provision does not apply. No new habitable dwellings form part of this application.

**5.5.13.2.11 Electricity Supply**

*To enhance the visual amenity of the zone, the Local Government will request the Western Australian Planning Commission to impose a condition at the time of subdivision for the provision of underground power to the lots.*

**Response:**

This provision does not apply. No new lots form part of this application.

**5.5.13.2.12 Stormwater Management and Drainage**

*Any surface water discharge must be controlled through appropriate drainage systems to avoid erosion and pollution while still maintaining the natural flow of discharge at predevelopment levels. Hence:*

- (a) The proposed drainage systems (including irrigation runoff) should be designed to reduce nutrient export whilst still maintaining the natural flow; and*
- (b) All stormwater drainage within the development is to be designed in accordance with the principles of best management practice as outlined in the Department of Water Stormwater Management Manual for Western Australia (2004-07).*

**Response:**

The hardstand area of the compound is minimal in comparison to the lot size. Accordingly this provision is not considered relevant.

**5.5.13.2.13 Road and Battleaxe Access**

- (a) The Local Government will require the construction of subdivisional roads and/or upgrading of existing roads to their specifications and satisfaction and may request the Western Australian Planning Commission to impose a condition at the time of subdivision requiring these works or a monetary contribution accordingly.*
- (b) The Local Government will require the construction of battleaxe legs to their specifications and satisfaction and may request the Western Australian Planning Commission to impose a condition at the time of subdivision requiring these works accordingly.*

**Response:**

No new lots are proposed to be created and accordingly the impact on the local traffic network is negligible. Therefore this provision is considered irrelevant.

**5.5.13.2.14 Notification of Prospective Purchasers and Successors in Titles**

- (a) The Local Government shall require the subdivider advise all prospective purchasers of a lot within the Rural Residential zone of:*
  - (i) The general scheme provisions that apply to the Rural Residential zone;*
  - (ii) Any special provision contained within Schedule 14 that applies to the land; and*
  - (iii) Any other planning matter that may affect the use and enjoyment of the land such as buffer areas, surrounding land uses or other planning proposals to be implemented such as the Albany Ring Road.*
- City of Albany LPS 1 Page 46*
- (b) The Local Government may request the Western Australian Planning Commission to impose a condition at the time of subdivision which requires a notification to be placed on the Certificate of Title for all lots to advise prospective purchasers accordingly.*

**Response:**

No new lots are proposed to be created. Therefore this provision is considered irrelevant.

**5.5.13.3 Rezoning of Land**

- Prior to considering any additional land to be rezoned to Rural Residential, the Local Government will require the proponent submit a detailed proposal that addresses the following matters:*
- (a) Compliance with the outcomes and recommendations of the Albany Local Planning Strategy;*
  - (b) Fire hazard assessment and Fire management Plan;*
  - (c) Land capability and suitability assessment,*
  - (d) Protection and enhancement of the natural environment;*
  - (e) Protection and enhancement of visual amenity;*
  - (f) Provision of infrastructure and services;*
  - (g) Impacts on adjacent land uses;*
  - (h) Any potential for site contamination;*
  - (i) Effluent disposal;*
  - (j) Location of building envelopes; and*
  - (k) Preparation of a Guide Plan for the subdivision showing proposed roads and connectivity between proposed/future and existing developments, lots, recreation areas and location of building envelopes.*

**Response:**

This application does not include any application for rezoning and therefore this provision is not applicable.

**6.3.9 Schedule 4- Rural Residential Zone (cl5.5.13)**

1. Subdivision shall generally be in accordance with the Subdivision Guide Plans as endorsed by the CEO, with any minor variations approved by the Western Australian Planning Commission –

(a) Subdivision Guide Plan RR29;

(b) The plan for Lots 45, 111 & 118 Manni Road, Lots 115-117 Monroe Court and Lot 33 Roberts Road, reference number ATK ALB-2-03b, dated 26/05/2010; and

(c) The plan for Lots 5 and 80 Racecourse Road and Lots 81, 82 and 9000 Roberts Road, reference 14214-01H dated 10/01/12.

**Response:**

This application does not include any application for creation of new lots and therefore Provisions 1 (a)- (c) are not applicable.

2. In respect of land within –

(a) The Subdivision Guide Plan referred to in 1(a) (above), the minimum lot size shall be not less than 1.5 hectares (lots wholly outside the WHPZ) and two hectares (lots wholly within the WHPZ) with an average lot size of two hectares; and

(b) The Subdivision Guide Plan referred to in 1 (b) (above), the minimum lot size shall be not less than three hectares with an average lot size of four hectares.

**Response:**

This application does not include any application for creation of new lots and therefore Provisions 2 (a)- (b) are not applicable.

3. The following land uses are 'P' permitted uses:

- Single House

4. The following land uses are 'D' discretionary uses:

- Ancillary Accommodation;
- Home Occupation;
- Industry – Cottage;
- Public Utility; and
- Rural Pursuit (which shall be limited to existing cleared and pastured land only).

**Response:**

Please refer to **Section 6.3.2 – Zoning** which identifies the application of the proposed use in the zoning table.

5. All buildings, structures and water storage systems and low fuel zones shall be located outside of any development/dwelling exclusion areas and/or vegetation protection areas as shown on the subdivision Guide Plan and shall achieve the following minimum setbacks:

(a) 40 metres from any front boundary; and

(b) 15 metres from all other lot boundaries.

**Response:**

There is no subdivision guide plan for this site and accordingly this provision is not applicable.



6. In addition to Clause 5.5.13.2.8 (i), the keeping of horses, sheep, goats, poultry and other grazing animals shall be subject to the prior approval of the Local Government and these animals shall be restricted to fenced areas of the lot to the satisfaction of the Local Government. No animal houses (for example pens, stables, cowshed, pig sty, fowl house and poultry sheds) shall be located within the 300m Public Water Bore (Well Head Protection Zone) Buffer. The Owner/Tenant shall be responsible for the maintenance of stock proof fencing to protect native vegetation and revegetation areas. The keeping of livestock/animals is restricted as recommended under the relevant legislation, policies and guidelines of the relevant government authority. Animal numbers shall not exceed the stocking rates recommended by the relevant State Government authority. The keeping of animals shall not result in the removal or damage of significant vegetation and trees, water pollution or result in soil degradation and dust pollution.

**Response:**

This no provision not applicable. No keeping of animals is proposed.

7. Buildings, tanks and structures shall not be constructed within any 'Development Exclusion Area' designated on the Subdivision Guide Plan.

**Response:**

There is no subdivision guide plan for this site and accordingly this provision is not applicable.

8. In regard to lots located wholly or partially within either the 100 metre or 300 metre Public Water Bore (Well Head Protection Zone) Buffer(s) as illustrated on the Subdivision Guide Plan referred to in 1(a), buildings, tanks and structures shall be located—

- Wholly outside of the 100 metre Buffer; and
- So as to maximise separation to Public Water Bore(s) on those lots wholly within the 300 metre Buffer; and
- Wholly outside of the 300 metre Buffer, on those lots that straddle the 300 metre Buffer (with the exception of proposed Lot 11).

**Response:**

There is no subdivision guide plan for this site and accordingly this provision is not applicable.

9. Where lot boundaries traverse existing vegetation and/or ridgelines, as shown on the Subdivision Guide Plan referred to in 1.1(a), they shall be demarcated by the use of bollards, or other means/method considered suitable by the Local Government, so as to minimise the removal of vegetation.

**Response:**

There is no subdivision guide plan for this site and accordingly this provision is not applicable.

10. In addition to Clause 5.8.2, in regard to land identified within the Subdivision Guide Plan referred to in 1(a) –

- Effluent disposal systems are not permitted within the 100 metre Public Water Bore Buffer, as illustrated on the Subdivision Guide Plan;
- Conventional effluent disposal systems are not permitted within the 300 metre Public Water Bore (Well Head Protection Zone) Buffer, as illustrated on the Subdivision Guide Plan; and
- In regard to lots located wholly or partially within either the 100 metre or 300 metre Public Water Bore (Well Head Protection Zone) Buffer(s) as illustrated on the Subdivision Guide Plan, alternative effluent disposal systems shall be located:
  - Wholly outside of the 100 metre Buffer;

- So as to maximise separation to Public Water Bore(s) on those lots wholly within the 300 metre Buffer; and
- Wholly outside of the 300 metre Buffer, on those lots that straddle the 300 metre Buffer (with the exception of proposed Lot 11).

11. Any habitable structures on Lot 8 Racecourse Road on Subdivision Guide Plan shall be designed and constructed in accordance with AS 3959 – Construction of Buildings in Bushfire Prone Areas to withstand BAL-19 and provided with a building protection/hazard separation zone of not less than 31 metres, in accordance with Planning for Bush Fire Protection Guidelines Edition 2 or any document superseding it.

**Response:**

This provision is not applicable. The site is located at 241 Robinson Road (there is no subdivision guide plan) and no habitable dwellings form part of the application.

12. In regard to land identified within the 200 metre Sand Extraction Area Buffer shown on the Subdivision Guide Plan referred to in 1(a), subdivision/residential development shall not be permitted unless –

- (a) The sand extraction use is discontinued to the Local Government's satisfaction; or
- (b) Appropriate means of mitigating the impacts of dust and noise associated with sand extraction activities are implemented to the Local Government's satisfaction. Means of mitigating the impacts of dust and noise impacts may include but not be limited to –

- earth bunding;
- tree/shrub planting;
- solid wall construction

and all means of mitigation are to be subject to environmental engineering certification to the Local Government's satisfaction.

**Response:**

There is no subdivision guide plan for this site and accordingly this provision is not applicable.

13. The subdivider shall rehabilitate the former sand extraction area in the north-western corner of Lot 7 on Subdivision Guide Plan reference 14-214-01H with planting of trees and shrubs at a density and distribution to the satisfaction of the Local Government's, prior to the transfer of a lot(s) to a new owner.

**Response:**

This application does not include any application for subdivision, and the site is not located on a subdivision guide plan and therefore these provisions are not applicable.

## 7 OTHER ENVIRONMENTAL CONSTRAINTS AND OPPORTUNITIES

### 7.1 Heritage

In order to determine any possible natural or cultural values of state or national significance associated with the site, a search was conducted through the relevant Heritage Registers:

- World Heritage Properties
- National Environment register
- Vegetation
- Aboriginal Heritage
- Native Title

### 7.2 Electrical Interference and Grounding of the Facility

The NBN fixed wireless network is licensed by the Australian Communications and Media Authority (ACMA) for the exclusive use of the OFDMA2300 frequency band. As NBN Co is the exclusive licensee of this sub-band, emissions from NBN Co equipment within the frequency band should not cause interference.

Filters will also help to ensure that each facility meets the ACMA specifications for emission of spurious signals outside the NBN Co frequency allocations. NBN Co intends to promptly investigate any interference issues that are reported.

The facility is also designed to be grounded to the relevant Australian Standards – that is, the facility will be ‘earthed’.

### 7.3 Erosion, Sedimentation Control and Waste Management

All erosion and sediment control mitigation measures will be detailed in construction plans and will be designed to comply with the Building Code of Australia and local Council standards. In addition, NBN Co’s contractors will be informed that they must comply with the ‘NBN Construction Specification’ that requires contractors to undertake the necessary erosion and sediment control measures in order to protect the surrounding environment. On completion of the installation, NBN Co intends to restore and reinstate the site to an appropriate standard. No waste which requires collection or disposal should be generated by the operation of the facility.

### 7.4 Flora and Fauna Study

In order to determine any possible natural Flora and Fauna significance associated with the site, an EPBC Act Protected Matters search was conducted. This report assesses a large area surrounding the site and the report identified that there may be threatened and migratory species of mammals and birds within the vicinity of the site. It is considered that the proposed facility is negligible in size and will not significantly impact on the habitat of the fauna identified as possibly being in the area. A more extensive and localized analysis of the flora was undertaken using the



native vegetation map viewer and the site is not considered an environmentally sensitive area. Please refer to **Section 6.7.3** for further detail.

## 7.5 Endangered Species

In order to determine any possible natural Flora and Fauna significance associated with the site, an EPBC Act Protected Matters search was conducted. This report assesses a large area surrounding the site and the report identified that there may be threatened and migratory species of mammals and birds within the vicinity of the site. It is considered that the proposed facility is negligible in size and will not significantly impact on the habitat of the fauna identified as possibly being in the area.

## 7.6 Social and Economic Impacts

Access to fast internet is an essential service in modern society. Initially, small to medium business customers accounted for a significant part of the demand for broadband technology, but internet services have now been embraced by the general public. Usage of internet services continues to widen as new technologies become progressively more affordable and accessible for the wider community.

The proposed development should provide significantly enhanced fixed wireless internet coverage to the locality of Robinson. This is expected to be of particular benefit for residential dwellings in the locality.

The new NBN is designed to provide the community with access to fast and reliable internet services. A reliable internet service is important to help promote the economic growth of communities, and the facility is anticipated to have significant social and economic benefits for the local community.

## 7.7 Public Safety

### 7.7.1 Radiofrequency Emissions

In relation to public safety and specifically Electromagnetic Emissions (EME) and public health, NBN Co operates within the operational standards set by the Australian Communication and Media Authority (ACMA) and Australian Radiation Protection and Nuclear Safety Agency (ARPANSA). ARPANSA is a Federal Government agency incorporated under the Health and Ageing portfolio and is charged with the responsibility for protecting the health and safety of both people and the environment from the harmful effects of radiation (ionising and non-ionising).

All NBN Co installations are designed and certified by qualified professionals in accordance with all relevant Australian Standards. This helps to ensure that the NBN Co facility does not result in any increase in the level of risk to the public.

This facility is to be operated in compliance with the mandatory standard for human exposure to EME – currently the Radio communications (Electromagnetic Radiation Human Exposure) Standard 2003. The EME Report associated with this site is attached in Appendix 4. The report shows that the maximum predicted EME will equate to 0.022% of the maximum exposure limit. This is substantially less than 1% of the maximum allowable exposure limit (where 100% of the limit is still considered to be safe).

Moreover, all NBN Co equipment has the following features, all of which help to minimise the

amounts of energy used and emitted:

- Dynamic/Adaptive Power Control is a network feature that automatically adjusts the power and hence minimises EME from the facility.
- Varying the facility's transmit power to the minimal required level, minimising EME from the network, and
- Discontinuous transmission, a feature that reduces EME emissions by automatically switching the transmitter off when no data is being sent.

#### 7.7.2 Access

The proposed facility will have restrictions aimed at preventing public access, including a secured compound fence with a locked gate and warning signs placed around the facility.

### 7.8 The Public Interest and the Benefits of Telecommunications

The proposed NBN Co facility is expected to have significant benefit for residents in the Robinson area. NBN Co believes that the public interest would be served by approval of the proposal, given benefits for enhanced internet coverage in the area. The facility is expected to have benefits for local residents and businesses within the district.

#### 7.8.1 Other Benefits of Reliable Broadband Services

There are numerous other benefits of telecommunications connectivity, as follows:<sup>5</sup>

- There are many potential educational benefits justifying the implementation of the NBN. Curriculum and data sharing, increased availability and accessibility of research materials, and virtual classroom environments are good examples. Such elements are particularly beneficial within a tertiary education context.
- Businesses can, through internet usage, increase efficiency through time, resource and monetary savings. Improved internet services effectively remove physical distance and travel time as a barrier to business.
- Improvements to internet services may also be of benefit for local employees, by enabling telecommuting and home business. The telecommuting trend is heavily reliant on access to fast internet services, and is anticipated to continually increase in popularity.

The public benefits of access to fast internet have been widely acknowledged for many years. Reliable internet access is now more than ever an integral component of daily life, so much so that its absence is considered a social disadvantage.

### 7.9 Aviation Safety

The Civil Aviation Safety Authority (CASA) has been contacted and at this stage has no specific requirements for the proposal. The structure will be Registered as a Tall Structure with the RAAF in accordance with CAAP 92-1 at the time of Building Licence. Albany airport has been contacted

<sup>5</sup> End user experience including the speeds actually achieved over the NBN depends on some factors outside NBN Co's control like the end user's equipment quality, software, broadband plans and how the end user's service providers designs its network.

regarding the proposal and once received, any requirements from Albany airport will be forwarded to council.



## 8 CONCLUSION

NBN Co considers that the proposed facility, comprising a 40 metre high monopole with attached antennas and equipment shelter has been sited in the most appropriate location whilst ensuring adequate coverage is achieved.

The facility has been strategically sited and designed to minimise visibility within the surrounding environment as much as practicable. In this regard NBN Co considers that the proposal satisfies the requirements of the Code, whilst also addressing coverage deficiencies within the local area.

NBN Co considers that the proposal is also consistent with the stated objectives of the City of Albany Planning Scheme. It is considered that the proposal will provide an important community benefit to Robinson by providing coordinated and open access shared communication infrastructure, and therefore greatly improved fixed wireless internet coverage within the local area.

WESTERN



AUSTRALIA

REGISTER NUMBER <b>105/DP40893</b>	
DUPLICATE EDITION <b>1</b>	DATE DUPLICATE ISSUED <b>2/3/2005</b>

**RECORD OF CERTIFICATE OF TITLE**  
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME **2587**      FOLIO **55**

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 105 ON DEPOSITED PLAN 40893

**REGISTERED PROPRIETOR:**  
(FIRST SCHEDULE)

ALGEAN PTY LTD OF POST OFFICE BOX 1363, ALBANY

(AF J173709 ) REGISTERED 4 FEBRUARY 2005

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE)

1. G412215 MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA REGISTERED 5.3.1997.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.

\* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.  
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP40893 [SHEET 1].  
PREVIOUS TITLE: 1415-92.  
PROPERTY STREET ADDRESS: 241 ROBINSON RD, ROBINSON.  
LOCAL GOVERNMENT AREA: CITY OF ALBANY.





## 9 APPENDICES

### Appendix 1 – Copy of Title

## Appendix 2 – Site Photographs



**View from Robinson Road towards proposed site**



**Photomontage: View from Robinson Road towards proposed site of proposed NBN Fixed Wireless Facility**

[illegible]



## SITE INFORMATION:

1. SITE ADDRESS  
24/1 ROBINSON ROAD  
ROBINSON  
WA 6330
2. GENERAL  
THE CONTRACTOR SHALL COMPLY WITH ALL RELEVANT NBN CONSTRUCTION STANDARDS, AUSTRALIAN STANDARDS AND SPECIFICATIONS.
3. SITE ACCESS  
FROM ALBANY HEAD SOUTH ONTO YORK STREET AND GO UP TO PRINCESS-ROYAL DRIVE. TURN RIGHT ONTO PRINCEMAN BAY ROAD AND GO APPROXIMATELY 2.4km. TURN LEFT ONTO FRENCHMAN BAY ROAD AND GO APPROXIMATELY 1.1km. TURN RIGHT ONTO ROBINSON ROAD AND GO APPROXIMATELY 800m. TAKE THE 2nd RIGHT TO STAY ON ROBINSON ROAD AND GO 1.7km. FOLLOW THE GRAVEL ACCESS TRACK ON LEFT AND GO 70m. TAKE LEFT TURN AND GO 100m ON THE GRAVEL TRACK. TURN LEFT AND CONTINUE ON GRAVEL TRACK FURTHER 40m. TURN RIGHT TO CONTINUE ON SANDY FIRE BREAK APPROX. 35m. PROPOSED NBN SITE IS ON RIGHT. NBN ACCESS ON SANDY FIRE BREAK (APPROXIMATELY 35m) REQUIRES UPGRADE, FEW SHRUBS REMOVAL AND PRUNING OF TREE BRANCHES. 4WD IS REQUIRED TO ACCESS NBN SITE.
4. EQUIPMENT  
PROPOSED NBN OUTDOOR CABINETS TO BE INSTALLED WITHIN NBN COMPOUND.  
ALL ANTENNAS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND INSTALLATION INSTRUCTIONS.
5. STRUCTURE  
PROPOSED NBN 40m HIGH MONOPOLE.
6. ANTENNA ACCESS  
ANTENNA ACCESS VIA LADDER AND FALL ARREST OR EWP (BY QUALIFIED RIGGER PERSONNEL ONLY).
7. EXISTING SERVICES  
THE CONTRACTOR SHALL IDENTIFY AND CONFIRM THE LOCATION OF ALL RELEVANT EXISTING SERVICES AS REQUIRED PRIOR TO THE COMMENCEMENT OF WORKS.
8. EXISTING SITE HAZARDS  
THE FOLLOWING HAZARDS ARE PRESENT ON SITE:  
- SLIP, TRIP AND FALLS  
- SUN EXPOSURE  
- WEATHER / LIGHTNING  
- EXISTING OVERHEAD POWER LINE  
- FALLING TREE BRANCHES  
- SPIDER/SNAKE  
- DRIVING ON SANDY FIREBREAK
9. ELECTRICAL SUPPLY  
TO BE CONFIRMED.

10. TRANSMISSION LINK  
REFER TO ANTENNA TABLE ON DRG. 6ALN-51-01-ALBA-A1.
11. SITE SPECIFIC INFORMATION  
-NBN CONTRACTOR SHALL SUPPLY AND INSTALL A NEW COMMON METER PANEL/ MAIN SWITCHBOARD.  
-PRIOR TO THE COMMENCEMENT OF WORKS, THE NBN CONTRACTOR SHALL CONFIRM ACCESS IS SUITABLE FOR CONSTRUCTION WORKS, INCLUDING IN WET CONDITIONS.  
-HIGH VOLTAGE NETWORK AUGMENTATION REQUIRED.  
-RETAINING WALL REQUIRED.  
-35m ACCESS UPGRADE IS REQUIRED.  
-VEGETATION REMOVAL REQUIRED. NUMBER OF TREES TO BE CONFIRMED.  
-CIVIL CONTRACTOR TO ARRANGE ISOLATION, IF REQUIRED FROM EXISTING OVERHEAD POWER LINE FOR CRANE SETUP AND OTHER ACTIVITIES.
12. SITE SIGNAGE REQUIREMENTS  
- GENERIC SITE SIGNAGE. REFER TO SECTION 15.4 OF NBN RAN MANUAL.  
- EME SIGNAGE. REFER TO DRG. NBN-STD-0025.
13. DIAL BEFORE YOU DIG  
DBYD JOB NUMBER - TBC  
ENQUIRY DATE: TBC  
CONTRACTOR SHALL REVALIDATE AND VERIFY AT THE TIME OF CONSTRUCTION.

## 15. WIND PARAMETER

SITE TOPOGRAPHIC DATA									
REGION = IBC									
	N	NE	E	SE	S	SW	W	NW	
H (m)									
Lu (m)									
X (m)									
Tc									

11. SITE SPECIFIC INFORMATION

-NBN CONTRACTOR SHALL SUPPLY AND INSTALL A NEW COMMON METER PANEL/ MAIN SWITCHBOARD.

-PRIOR TO THE COMMENCEMENT OF WORKS, THE NBN CONTRACTOR SHALL CONFIRM ACCESS IS SUITABLE FOR CONSTRUCTION WORKS, INCLUDING IN WET CONDITIONS.

-HIGH VOLTAGE NETWORK AUGMENTATION REQUIRED.

-RETAINING WALL REQUIRED.

-35m ACCESS UPGRADE IS REQUIRED.

-VEGETATION REMOVAL REQUIRED. NUMBER OF TREES TO BE CONFIRMED.

-CIVIL CONTRACTOR TO ARRANGE ISOLATION, IF REQUIRED FROM EXISTING OVERHEAD POWER LINE FOR CRANE SETUP AND OTHER ACTIVITIES.

12. SITE SIGNAGE REQUIREMENTS

- GENERIC SITE SIGNAGE. REFER TO SECTION 15.4 OF NBN RAN MANUAL.

- EME SIGNAGE. REFER TO DRG. NBN-STD-0025.

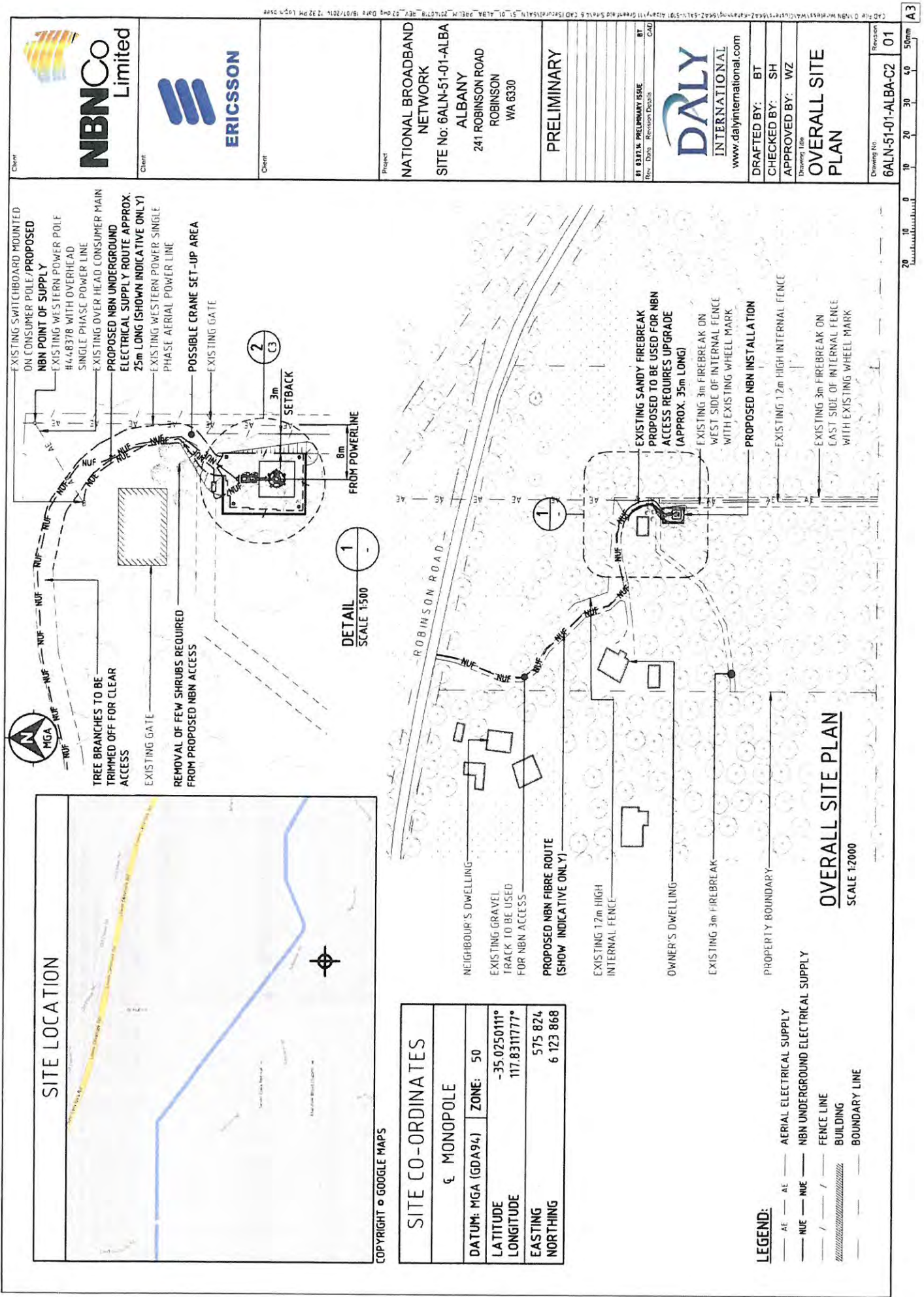
13. DIAL BEFORE YOU DIG

DBYD JOB NUMBER - TBC

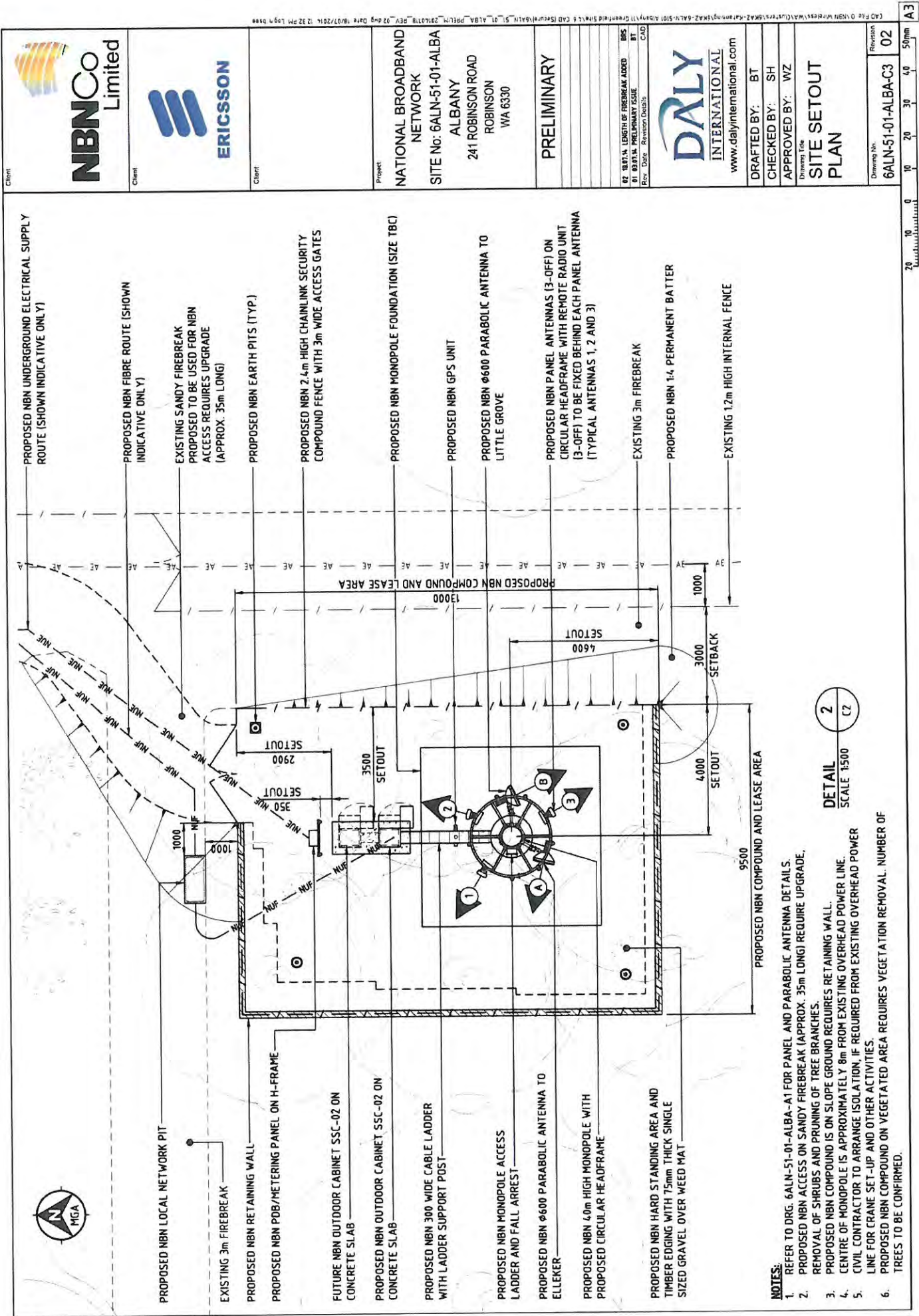
ENQUIRY DATE: TBC

CONTRACTOR SHALL REVALIDATE AND VERIFY AT THE TIME OF CONSTRUCTION.

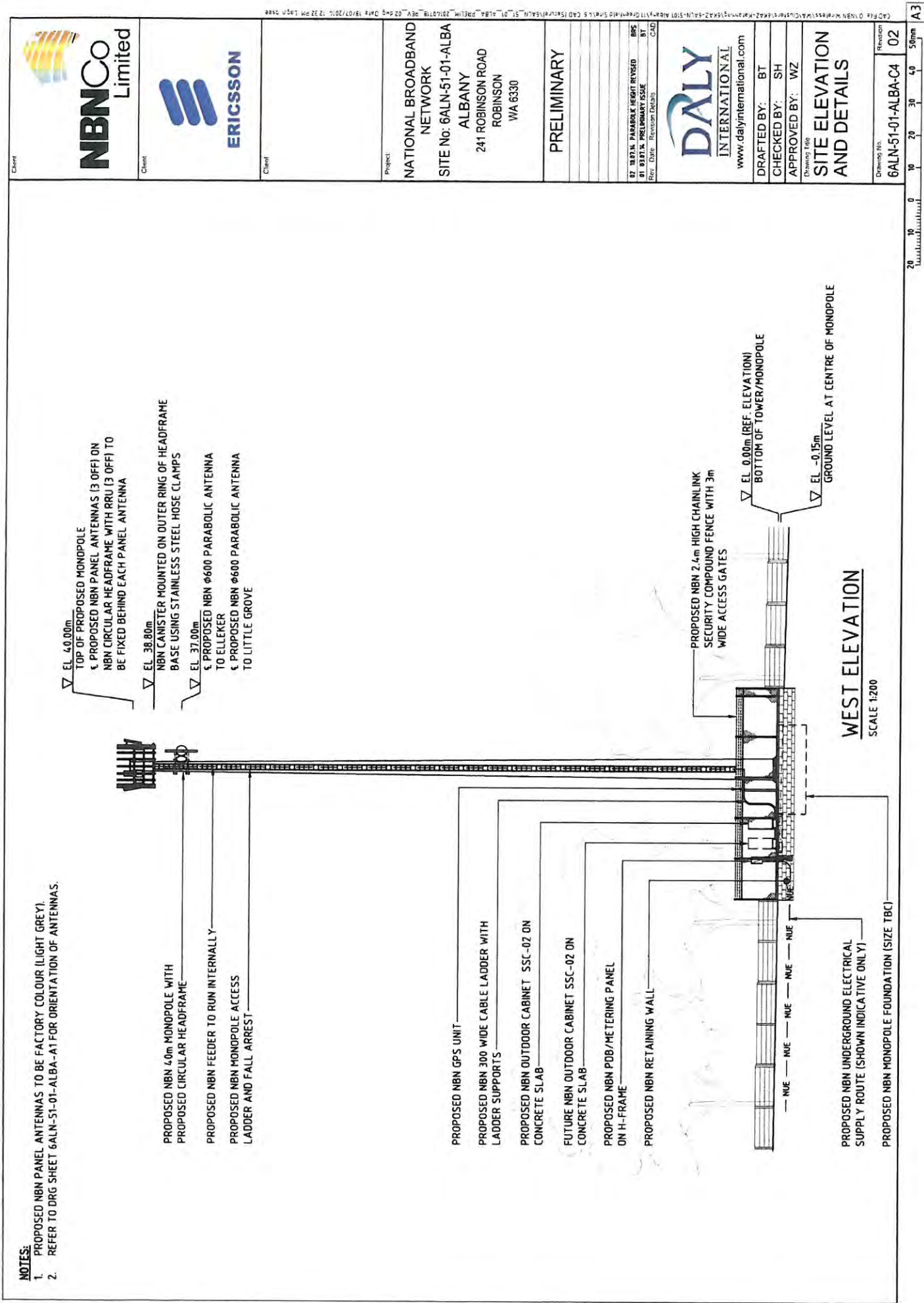
Client	 <b>NBN Co</b> Limited	 <b>ERICSSON</b>	Client	NATIONAL BROADBAND NETWORK SITE No: 6ALN-51-01-ALBA ALBANY 241 ROBINSON ROAD ROBINSON WA 6330	PRELIMINARY	BY: CAD	 <b>DAILY</b> INTERNATIONAL www.dailyinternational.com	DRAFTED BY: BT	Drawing No. 6ALN-51-01-ALBA-C1	Revision 01	
						61 DAILY PRELIMINARY ISSUE Rev. D26 Revision Details		CHECKED BY: SH			Approved By: WZ
						Drawing Title					
						SITE SPECIFIC NOTES					











ANTENNA DETAIL										MAIN FEEDER DETAIL				RRU DETAIL		RF TAIL	
SECTOR	SYMBOL	TYPE	DIMENSION HxWxD	HEIGHT	AZIMUTH (TN)	MECH DOWN TILT	ELEC TILT	DESTINATION	QUANTITY RAU	TYPE	OVERALL LENGTH	CANISTER HEIGHT	CANISTER TO RRU LENGTH	TYPE	LOCATION	TYPE	LENGTH
1		ARGUS LLPX310F-V1	1077x300x115	4.00m	300°	2°	2°						4.5m	RRUS 61	BEHIND ANTENNA	H&S 1/2" BIRD PROOF LISCA CABLE	15m
2		ARGUS LLPX310F-V1	1077x300x115	4.00m	15°	2°	2°			H&S HYBRID ø19.6mm	50m	38.8m	4.5m	RRUS 61	BEHIND ANTENNA	H&S 1/2" BIRD PROOF LISCA CABLE	15m
3		ARGUS LLPX310F-V1	1077x300x115	4.00m	150°	2°	2°						4.5m	RRUS 61	BEHIND ANTENNA	H&S 1/2" BIRD PROOF LISCA CABLE	15m
A		PARABOLIC	ø600	37.00m	283°			ELLEKER	2 OFF	ERICSSON 7.6mm	4.0m						
B		PARABOLIC	ø600	37.00m	155°			LITTLE GROVE	1 OFF	ERICSSON 7.6mm	4.0m						
GPS		KRE 1012082/1	ø69 x 96	2.50m						ERICSSON 7.6mm	5m						

ANTENNA PLAN  
SCALE 1:50

Client

Client

Project

NATIONAL BROADBAND  
NETWORK

SITE No: 6ALN-51-01-ALBA  
ALBANY  
241 ROBINSON ROAD  
ROBINSON  
WA 6330

PRELIMINARY

### Appendix 3 – Proposed Plans



Appendix 4 – ARPANSA EME Report



## Environmental EME Report

### Albany 241 Robinson Road, ROBINSON WA 6330

This report provides a summary of Calculated RF EME Levels around the wireless base station

**Date 28/8/2014**

**RFNSA Site No. 6330018**

### Introduction

The purpose of this report is to provide calculations of EME levels from the existing facilities at the site and any proposed additional facilities.

This report provides a summary of levels of radiofrequency (RF) electromagnetic energy (EME) around the wireless base station at Albany 241 Robinson Road ROBINSON WA 6330. These levels have been calculated by Ericsson using methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

The maximum EME level calculated for the proposed systems at this site is 0.022% of the public exposure limit.

### The ARPANSA Standard

ARPANSA, an Australian Government agency in the Health and Ageing portfolio, has established a Radiation Protection Standard specifying limits for general public exposure to RF transmissions at frequencies used by wireless base stations. The Australian Communications and Media Authority (ACMA) mandates the exposure limits of the ARPANSA Standard.

### How the EME is calculated in this report

The procedure used for these calculations is documented in the ARPANSA Technical Report "Radio Frequency EME Exposure Levels - Prediction Methodologies" which is available at <http://www.arpansa.gov.au>.

RF EME values are calculated at 1.5m above ground at various distances from the base station, assuming level ground.

The estimate is based on worst-case scenario, including:

- wireless base station transmitters for mobile and broadband data operating at maximum power
- simultaneous telephone calls and data transmission
- an unobstructed line of sight view to the antennas.

In practice, exposures are usually lower because:

- the presence of buildings, trees and other features of the environment reduces signal strength
- the base station automatically adjusts transmit power to the minimum required.

Maximum EME levels are estimated in 360° circular bands out to 500m from the base station.

These levels are cumulative and take into account emissions from all mobile phone antennas at this site.

The EME levels are presented in three different units:

- volts per metre (V/m) – the electric field component of the RF wave
- milliwatts per square metre (mW/m<sup>2</sup>) – the power density (or rate of flow of RF energy per unit area)
- percentage (%) of the ARPANSA Standard public exposure limit (the public exposure limit = 100%).

### Results

The maximum EME level calculated for the proposed systems at this site is 0.9 V/m; equivalent to 2.17 mW/m<sup>2</sup> or 0.022% of the public exposure limit.

## Radio Systems at the Site

There are currently no existing radio systems for this site.

It is proposed that this base station will have equipment for transmitting the following services:

Carrier	Radio Systems
NBN Co	LTE2300 (proposed)

## Calculated EME Levels

This table provides calculations of RF EME at different distances from the base station for emissions from existing equipment alone and for emissions from existing equipment and proposed equipment combined.

Distance from the antennas at Albany 241 Robinson Road in 360° circular bands	Maximum Cumulative EME Level – All carriers at this site					
	Existing Equipment			Proposed Equipment		
	Electric Field V/m	Power Density mW/m <sup>2</sup>	% ARPANSA exposure limits	Electric Field V/m	Power Density mW/m <sup>2</sup>	% ARPANSA exposure limits
0m to 50m				0.35	0.32	0.0032%
50m to 100m				0.4	0.43	0.0043%
100m to 200m				0.42	0.48	0.0048%
200m to 300m				0.88	2.064	0.021%
300m to 400m				0.9	2.17	0.022%
400m to 500m				0.86	1.94	0.019%
<b>Maximum EME level</b>				0.9	2.17	0.022
				320.13 m from the antennas at Albany 241 Robinson Road		

## Calculated EME levels at other areas of interest

This table contains calculations of the maximum EME levels at selected areas of interest that have been identified through the consultation requirements of the Communications Alliance Ltd Deployment Code C564:2011 or via any other means. The calculations are performed over the indicated height range and include all existing and any proposed radio systems for this site.

Additional Locations	Height / Scan relative to location ground level	Maximum Cumulative EME Level All Carriers at this site Existing and Proposed Equipment		
		Electric Field V/m	Power Density mW/m <sup>2</sup>	% of ARPANSA exposure limits
No locations identified				



## RF EME Exposure Standard

The calculated EME levels in this report have been expressed as percentages of the ARPANSA RF Standard and this table shows the actual RF EME limits used for the frequency bands available. At frequencies below 2000 MHz the limits vary across the band and the limit has been determined at the Assessment Frequency indicated. The four exposure limit figures quoted are equivalent values expressed in different units – volts per metre (V/m), watts per square metre (W/m<sup>2</sup>), microwatts per square centimetre (μW/cm<sup>2</sup>) and milliwatts per square metre (mW/m<sup>2</sup>). Note: 1 W/m<sup>2</sup> = 100 μW/cm<sup>2</sup> = 1000 mW/m<sup>2</sup>.

Radio Systems	Frequency Band	Assessment Frequency	ARPANSA Exposure Limit (100% of Standard)
LTE 700	758 – 803 MHz	750 MHz	37.6 V/m = 3.75 W/m <sup>2</sup> = 375 μW/cm <sup>2</sup> = 3750 mW/m <sup>2</sup>
WCDMA850	870 – 890 MHz	900 MHz	41.1 V/m = 4.50 W/m <sup>2</sup> = 450 μW/cm <sup>2</sup> = 4500 mW/m <sup>2</sup>
GSM900, LTE900, WCDMA900	935 – 960 MHz	900 MHz	41.1 V/m = 4.50 W/m <sup>2</sup> = 450 μW/cm <sup>2</sup> = 4500 mW/m <sup>2</sup>
GSM1800, LTE1800	1805 – 1880 MHz	1800 MHz	58.1 V/m = 9.00 W/m <sup>2</sup> = 900 μW/cm <sup>2</sup> = 9000 mW/m <sup>2</sup>
LTE2100, WCDMA2100	2110 – 2170 MHz	2100 MHz	61.4 V/m = 10.00 W/m <sup>2</sup> = 1000 μW/cm <sup>2</sup> = 10000 mW/m <sup>2</sup>
LTE2300	2302 – 2400 MHz	2300 MHz	61.4 V/m = 10.00 W/m <sup>2</sup> = 1000 μW/cm <sup>2</sup> = 10000 mW/m <sup>2</sup>
LTE2600	2620 – 2690 MHz	2600 MHz	61.4 V/m = 10.00 W/m <sup>2</sup> = 1000 μW/cm <sup>2</sup> = 10000 mW/m <sup>2</sup>
LTE3500	3425 – 3575 MHz	3500 MHz	61.4 V/m = 10.00 W/m <sup>2</sup> = 1000 μW/cm <sup>2</sup> = 10000 mW/m <sup>2</sup>

## Further Information

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is a Federal Government agency incorporated under the Health and Ageing portfolio. ARPANSA is charged with responsibility for protecting the health and safety of people, and the environment, from the harmful effects of radiation (ionising and non-ionising).

Information about RF EME can be accessed at the ARPANSA website, <http://www.arpansa.gov.au>, including:

- Further explanation of this report in the document "Understanding the ARPANSA Environmental EME Report"
- The procedure used for the calculations in this report is documented in the ARPANSA Technical Report; "Radio Frequency EME Exposure Levels - Prediction Methodologies"
- the current RF EME exposure standard  
Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), 2002, 'Radiation Protection Standard: Maximum Exposure Levels to Radiofrequency Fields — 3 kHz to 300 GHz', Radiation Protection Series Publication No. 3, ARPANSA, Yallambie Australia.  
[Printed version: ISBN 0-642-79400-6 ISSN 1445-9760] [Web version: ISBN 0-642-79402-2 ISSN 1445-9760]

The Australian Communications and Media Authority (ACMA) is responsible for the regulation of broadcasting, radiocommunications, telecommunications and online content. Information on EME is available at <http://emr.acma.gov.au>

The Communications Alliance Ltd Industry Code C564:2011 'Mobile Phone Base Station Deployment' is available from the Communications Alliance Ltd website, <http://commsalliance.com.au>.

Contact details for the Carriers (mobile phone companies) present at this site and the most recent version of this document are available online at the Radio Frequency National Site Archive, <http://www.rfnsa.com.au>.



## Appendix 5 -Response State Planning Policy 5.2

This policy provides a framework for the preparation, assessment and determination of applications for planning approval of telecommunications facilities within the context of the planning system of Western Australia. Planning Policy 5.2 states that 'telecommunications infrastructure should be located, sited and designed in accordance with the following Guiding Principles'.

- *There should be a co-ordinated approach to the planning and development of telecommunications infrastructure, although changes in the location and demand for services require a flexible approach.*

NBN Co undertakes a carefully co-ordinated approach to the development of their network. Each site links into the wider National Broadband Network. The proposed site at Robinson will be linked to a proposed Telecommunications Facility at Little Grove. Therefore, locating at this site is imperative in order to provide fixed wireless broadband coverage to areas of Albany.

- *Telecommunications infrastructure should be strategically planned and co-ordinated, similar to planning for other essential infrastructure such as networks and energy supply.*

The complete National Broadband Network is strategically planned and individual sites are co-ordinated into the wider network much like other essential infrastructure. Whilst it is necessary for individual sites to achieve their coverage objectives it is essential that each site can be linked back into the network.

- *Telecommunications facilities should be located and designed to meet the communication needs of the community.*

The proposed facility seeks to provide fixed wireless broadband coverage to the Robinson area.

- *Telecommunications facilities should be designed and sited to minimise any potential adverse visual impact on the character and amenity of the local environment, in particular, impacts on prominent landscape features, general views in the locality and individual significant views.*

The proposal is appropriately located in a Rural Residential area well away from sensitive land uses. In order for the facility to provide fixed wireless broadband to an area west of the Albany townsite, a height of 40 m is required. NBN Co have sought to minimise the visual bulk of the facility through the use of a monopole structure. The proposed monopole is a structure that has a small profile and is considered the least visually intrusive design option for a new base station and minimises the visual impact of a telecommunications structure in this area.

- *Telecommunications facilities should be designed and sited to minimise impacts on areas of natural conservation value and places of heritage significance or where declared rare flora are located.*

A desktop study of this site indicated that the area is not subject to any natural conservation or places of heritage significance.



- *Telecommunications facilities should be designed and sited with specific consideration of water catchment protection requirements and the need to minimise land degradation.*

Prior to the commencement of work NBN Co contractors will undertake such measures as deemed necessary by Council to effectively protect water catchments within the immediate area.

- *Telecommunications facilities should be designed and sited to minimise adverse impacts on the visual character and amenity of residential area.*

The proposed monopole is the least visually intrusive design option for a new base station in this location and minimises the visual impact of a telecommunications structure in the area. The monopole will remain unpainted (dull grey colour), which has over time been demonstrated to most successfully blend with the uniform colours of the site's rural setting.

- *Telecommunications cables should be placed underground, unless it is impractical to do so and there would be no significant effect on visual amenity or, in the case of regional areas, it can be demonstrated that there are long-term benefits to the community that outweigh the visual impact.*

The proposed site will be linked to the wider network via an NBN underground optical fibre cable and also to a proposed Telecommunications Facility at Little Grove via a parabolic microwave dish thereby negating the requirement for overhead cabling.

- *Telecommunications cables that are installed overhead with other infrastructure such as electricity cables should be removed and placed underground when it can be demonstrated and agreed by the carrier that it is technically feasible and practical to do so.*

This principle does not apply to the subject of this application.

- *Unless it is impractical to do so telecommunications towers should be located within commercial, business, industrial and rural areas and areas outside identified conservation areas.*

The proposed site is located within a Rural Residential which is considered a rural setting as per the recommendations of this principle.

- *The design and siting of telecommunications towers and ancillary facilities should be integrated with existing buildings and structures, unless it is impractical to do so, in which case they should be sited and designed so as to minimise any adverse impact on the amenity of the surrounding area.*

There are no structures or buildings of sufficient height within the surrounding area that could facilitate NBN infrastructure. Therefore, the proposed site is considered to be the optimum planning solution in terms of impact upon amenity.

- *Co-location of telecommunications facilities should generally be sought, unless such an arrangement would detract from local amenities or where operation of the facilities would be significantly compromised as a result.*

Co-location of facilities has been investigated. There are no structures within the surrounding area that could facilitate NBN infrastructure. Where co-location is not viable, there is a need to provide a purpose built structure.

- *Measures such as surface mounting, concealment, colour co-ordination, camouflage and landscaping to screen at least the base of towers and ancillary structures, and to draw attention away from the tower, should be used, where appropriate, to minimise the visual impact of telecommunications facilities.*

The proposed facility will be sited amongst existing mature vegetation which will aid in screening the facility and will reduce the visual impact of the facility.

- *Design and operation of a telecommunications facility should accord with the licensing requirements of the Australian Communications Authority, with physical isolation and control of public access to emission hazard zones and use of minimum power levels consistent with quality services.*

Telecommunications facilities include radio transmitters that radiate electromagnetic energy (EME) into the surrounding area. The levels of these electromagnetic fields must comply with safety limits imposed by the Australian Communications and Media Authority (ACMA, previously ACA). All NBN Co installations are designed to operate within these limits (**Appendix 4 – ARPANSA EME report**).

- *Construction of a telecommunications facility (including access to a facility) should be undertaken so as to minimise adverse effects on the natural environment and the amenity of users or occupiers of adjacent property, and ensure compliance with relevant health and safety standards.*

During construction, NBN Co contractors will endeavour to minimise the impact of their works on the amenity of nearby residents and on the surrounding environment. Following construction, maintenance (excluding emergency repair work) activities should not interfere with the amenity of users. All Health and Safety standards will be adhered to.







Area Plan

1:8000



<b>PD073: DEVELOPMENT APPLICATION – TELECOMMUNICATIONS INFRASTRUCTURE –LOT 105, 241 ROBINSON RD, ROBINSON</b>
---

<b>Land Description</b>	: Lot 105, 241 Robinson Road, Robinson WA 6330
<b>Proponent</b>	: Daly International
<b>Owner</b>	: Algean PTY LTD
<b>Business Entity Name</b>	: NIL
<b>Attachments</b>	: Area Plan Schedule of Submissions
<b>Supplementary Information &amp; Councillor Workstation:</b>	: Letters of submission from the public
<b>Report Prepared by</b>	: Senior Planning Officer (A Bott)
<b>Responsible Officer</b>	: Director Development Services (D Putland)

<b>Responsible Officer's Signature:</b>	
---	--

**STRATEGIC IMPLICATIONS**

1. Council is required to exercise its quasi-judicial function in this matter.
2. This is a statutory planning matter that is assessed against the Local Planning Scheme No.1 (LPS1) and any relevant planning policies. As such there are no strategic implications. Notwithstanding this, the most relevant strategic document is the Albany Local Planning Strategy (ALPS).
3. The item relates to the following Strategic Objective of the Albany Local Planning Strategy (ALPS):

**6.4.4 Telecommunications:** *"To encourage the extension and maintenance of high quality telecommunications for the whole Albany district"*

**In Brief:**

- Council is asked to consider a proposal for Telecommunications Infrastructure at Lot 105, 241 Robinson Road, Robinson WA 6330.
- The proposal has been advertised to the public, with 7 letters of representation received. All of the submissions objected to the proposal. A petition containing 89 signatures against the proposal was also received. The objections are discussed later in the report
- Staff recommend that Council approve the proposal subject to conditions.

**RECOMMENDATION**

**PD072: RESOLUTION**

**VOTING REQUIREMENT: SIMPLE MAJORITY**

**MOVED: COUNCILLOR SUTTON**

**SECONDED: COUNCILLOR GREGSON**

**THAT:**

- a. Council resolves to **ISSUE** a Notice of Planning Scheme Consent **REFUSAL** for Telecommunication Infrastructure at 241 Robinson Road, Robinson.
- b. **THAT** Council support the provision of NBN in the area but not in the current proposed location.

**CARRIED 11-0**

**Councillor's Reason:**

The proposal to site the tower at 241 Robinson Road will have an adverse visual impact on the character and amenity of the local environment.

**PD073: COMMITTEE RECOMMENDATION**

**MOVED COUNCILLOR WILLIAMS**

**SECONDED COUNCILLOR SUTTON**

**THAT** Council resolves to **ISSUE** a Notice of Planning Scheme Refusal for Telecommunication Infrastructure at 241 Robinson Road, Robinson; subject to the following conditions:

- (1) Prior to occupancy of use, unless varied by a condition of approval or a minor amendment to the satisfaction of the City of Albany, all development shall occur in accordance with the stamped, approved plans.
- (2) A construction management plan shall be submitted for approval in writing and implemented to the satisfaction of the City of Albany.
- (3) Stormwater from the lot shall be managed to the satisfaction of the City of Albany.
- (4) Lighting devices are to be positioned and shielded so as not to cause any direct, reflected or incidental light to encroach beyond the property boundaries, in accordance with Australian Standard AS4282/1997.
- (5) Prior to commencement of development a schedule of materials and colours to be used on the structures hereby approved shall be submitted for approval by the City of Albany.

**CARRIED 6-2**

**Record of Vote**

Against the Motion: Councillors Gregson and Goode



**PD073: COMMITTEE RECOMMENDATION**  
**VOTING REQUIREMENT: SIMPLE MAJORITY**

THAT Council resolves to ISSUE a Notice of Planning Scheme Refusal for Telecommunication Infrastructure at 241 Robinson Road, Robinson; subject to the following conditions:

- (1) Prior to occupancy of use, unless varied by a condition of approval or a minor amendment to the satisfaction of the City of Albany, all development shall occur in accordance with the stamped, approved plans.
- (2) A construction management plan shall be submitted for approval in writing and implemented to the satisfaction of the City of Albany.
- (3) Stormwater from the lot shall be managed to the satisfaction of the City of Albany.
- (4) Lighting devices are to be positioned and shielded so as not to cause any direct, reflected or incidental light to encroach beyond the property boundaries, in accordance with Australian Standard AS4282/1997.
- (5) Prior to commencement of development a schedule of materials and colours to be used on the structures hereby approved shall be submitted for approval by the City of Albany.

**PD073: RESPONSIBLE OFFICER RECOMMENDATION**

THAT Council resolves to ISSUE a Notice of Planning Scheme Consent for Telecommunication Infrastructure at 241 Robinson Road, Robinson; subject to the following conditions:

- (1) Prior to occupancy of use, unless varied by a condition of approval or a minor amendment to the satisfaction of the City of Albany, all development shall occur in accordance with the stamped, approved plans.
- (2) A construction management plan shall be submitted for approval in writing and implemented to the satisfaction of the City of Albany.
- (3) Stormwater from the lot shall be managed to the satisfaction of the City of Albany.
- (4) Lighting devices are to be positioned and shielded so as not to cause any direct, reflected or incidental light to encroach beyond the property boundaries, in accordance with Australian Standard AS4282/1997.
- (5) Prior to commencement of development a schedule of materials and colours to be used on the structures hereby approved shall be submitted for approval by the City of Albany.

## BACKGROUND

4. The City has received an application for Planning Scheme Consent for Telecommunication Infrastructure at Lot 105, 241 Robinson Rd, Robinson WA 6330.
5. The subject site is located approximately 4.7km West of the Albany CBD
6. The subject site is 6.16Ha in area and is zoned Rural Residential No.29 under (LPS1). The site is currently developed with a single dwelling and associated outbuilding.
7. The top of the proposed monopole tower telecommunications will be 40m above natural ground level.

8. The proposed Telecommunication Infrastructure is a component of the National Broadband Network's (NBN) wireless network.
9. Telecommunication Infrastructure is a use listed within LPS1, but is not specifically identified as a permissible use for this zone through Schedule 14 of LPS1. Although not listed for the zone, it is also not prohibited. As such, Telecommunication Infrastructure is considered as an 'A' use, meaning the use is not permitted unless the Local Government has exercised its discretion by granting planning approval after giving special notice in accordance with clause 9.4.
10. During the advertising period a total of 7 submissions were received. All objected or raised concerns regarding the proposal. A petition against the proposal was also lodged. The petition contains 89 signatures.
11. The proposal has been assessed against LPS1 and *State Planning Policy 5.2 – Telecommunications Infrastructure*.
12. When determining telecommunications infrastructure, it is necessary to assess the impact on amenity against the overall public benefit of the infrastructure.
13. It is acknowledged that the proposal will detract from view scapes from a number of properties within the area.
14. Taking into consideration the nature of public submissions against the significant public benefit of the proposal, it is recommended that the application be approved.

### DISCUSSION

15. The proposal consists of one 40m high monopole. The monopole services two parabolic antennas (located at 37m) and three panel antennas. In addition to the monopole, it is proposed to install two outdoor equipment cabinets within a fenced area of 96m<sup>2</sup>.
16. The proposed infrastructure and compound are proposed to be located centrally on lot 105, setback 125m from Robinson Rd, 96m from the western boundary and 88m to the western boundary.
17. The proposal was initially scheduled to be advertised for a 21 day period with an advertisement appearing in the public notices section of a local paper on 16 October, 2014. Concerns were raised regarding the timeframe to make a submission. The closing date for submissions was consequently extended until 6 December, 2014. The issues raised are covered and addressed in the following section of the report.
18. A number of submissions make reference to the community consultation undertaken by the applicant prior to lodging a Planning Scheme Consent with the City of Albany.
19. The matters raised in the submissions will be discussed in further detail below. In brief, amenity was the main concern raised consistently throughout the submissions, particularly the perceived impact on views of significance and the natural amenity of the area.
20. When assessing impacts on amenity, it is necessary to determine the level of existing amenity within the immediate area and secondly, within wider the locality.
21. The assessment of landscape this report has been undertaken in reference with the Western Australian Planning Commission's *Visual Landscape Planning in Western Australia – a manual for assessment, siting and design*.

22. The existing amenity for Robinson Rd can be classified as typical Rural Residential area defined by sections open paddock and a thick vegetation belt on the south side of Robinson Rd. The overall locality to the south of the subject site is primarily defined by relatively cleared smaller sized Rural Residential properties. The locality to the north is defined by larger cleared rural small holding lots. Overall it can be considered an area of Rural amenity.
23. The notion of relocating the proposed infrastructure to an alternative location within the area was a consistent comment throughout the consultation process. As a response to these comments, the City of Albany contacted the applicant and enquired if there was scope to review other locations. The applicant advised that a number of sites were reviewed as part of the pre application process. However, they wish to proceed with the site selected.
24. The potential for detrimental health effects from the proposed tower was also regularly raised. It is necessary to note that the City is not a regulatory body in respect to electromagnetic energy (EME). The Federally established Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) enforce the *Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300GHz*. The EME report submitted by the applicant states that the maximum calculated EME level from the site will be 0.028% of the maximum public exposure level.
25. Decreased property values were raised during the consultation process. Property values are not within the matters to be considered under LPS1 and therefore are not a valid planning consideration.

#### GOVERNMENT & PUBLIC CONSULTATION

26. The proposal was advertised to residents within a 1km radius of the site from 16 October, 2014 to 6 December 2014. A notice was also placed in the local newspaper in accordance with clause 9.4 of LPS1.
27. A total of 7 public submissions were received following the initial advertising period. 7 objected to the application. A petition objecting to the proposal was also submitted. The petition contains 89 signatures. below is a summary of those submissions:
  - The proposal will detrimentally affect the amenity of the area;
  - Proposal conflicts with historical status;
  - Detrimental to tourism values;
  - The proposal will detrimentally affect views of significance within the area;
  - Property values will be negatively affected;
  - Detrimental health affects;
  - Insufficient public consultation was undertaken by the NBN Co;
28. The content of the submissions is summarised in more detail in the attached schedule of submissions, with officers providing responses to the matters raised.



**STATUTORY IMPLICATIONS**

29. The subject land is zoned Rural Residential under the City of Albany Local Planning Scheme No. 1 (LPS1).
30. Telecommunications Infrastructure is classified as an 'A' use under City of Albany Local Planning Scheme No. 1.
31. The proposal has been assessed against the objectives of the Rural Residential area under Clause 4.2.17 of LPS1.
32. The proposal has been assessed against the following relevant matters to be considered under clause 10.2 of LPS1:
  - (b) The requirements of orderly and proper planning including any relevant proposed new town planning scheme or amendment, or region scheme or amendment, which has been granted consent for public submissions to be sought;*
  - (c) Any approved statement of planning policy of the Western Australian Planning Commission;*
  - (i) The compatibility of a use or development with its setting;*
  - (n) The preservation of the amenity of the locality;*
  - (o) The relationship of the proposal to development on adjoining land or on other land in the locality including but not limited to the likely effect of the height, bulk, scale, orientation and appearance of the proposal;*
  - (x) The potential loss of any community service or benefit resulting from the planning approval;*
33. Voting requirements for this item is **SIMPLE MAJORITY**.

**POLICY IMPLICATIONS**

34. The proposal has been assessed against the Western Australian Planning Commission's *State Planning Policy 5.2 - Telecommunications Infrastructure* (SPP 5.2). SPP 5.2 provides guiding principles for the assessment of telecommunication infrastructure.
35. The SPP 5.2 provides guiding principles for the location, siting and design of telecommunications infrastructure.

Comment in reference to the guiding principles for the location, siting and design of telecommunications infrastructure are as follows;

***There should be a co-ordinated approach to the planning and development of telecommunications infrastructure, although changes in the location and demand for services require a flexible approach.***

The option of reassessing other suitable sites was raised during the consultation process. The applicant was made aware of this notion after the consultation period had ended. The applicant advised the City that the subject site was the location which was determined to be best suited and this would not be reviewed.

***Telecommunications infrastructure should be strategically planned and co-ordinated, similar to planning for other essential infrastructure such as transport networks and energy supply.***

The proposal forms a component of the National Broadband Network. Telecommunications infrastructure is identified within the Albany Local Planning Strategy.

***Telecommunications facilities should be located and designed to meet the communication needs of the community.***

The application proposes to provide wireless internet coverage Robinson area. Over recent years there have been a number of new rural residential subdivisions within the area which have increased demand for broadband services. The applicant has stated that they have selected the site based on technical parameters and the necessary land access agreement being in obtained.

***Telecommunications facilities should be designed and sited to minimise any potential adverse visual impact on the character and amenity of the local environment, in particular, impacts on prominent landscape features, general views in the locality and individual significant views.***

Given the height of the proposed tower, the tower will be able to be seen from nearby properties and Robinson Rd. The applicant has provided a photo merge which shows that the large setback from the Robinson Rd screens the lower half of the tower. As discussed earlier, the existing level of amenity is defined by the rural nature of the area.

***Telecommunications facilities should be designed and sited to minimise adverse impacts on areas of natural conservation value and places of heritage significance or where declared rare flora are located.***

The application proposes to remove a vegetation to establish a cleared area for the telecommunication infrastructure. It is proposed to utilise an existing firebreak. The site does not contain any registered places of heritage significance.

***Telecommunications facilities should be designed and sited with specific consideration of water catchment protection requirements and the need to minimise land degradation.***

The proposal is located within a water protection area within LPS1. Given the nature of the proposal it will not detrimentally affect groundwater. The proposed removal of vegetation would be required to be appropriately managed to avoid erosion.

***Telecommunications facilities should be designed and sited to minimise adverse impacts on the visual character and amenity of residential areas.***

The applicant has proposed a monopole rather than a lattice style tower as it is less obtrusive. It is also proposed to leave the infrastructure unpainted in a grey colour. Notwithstanding these measures, there will be an impact on the amenity of the area, primarily on views from surrounding properties and from Robinson Rd.

***Telecommunications cables should be placed underground, unless it is impractical to do so and there would be no significant effect on visual amenity or, in the case of regional areas, it can be demonstrated that there are long-term benefits to the community that outweigh the visual impact.***

The subject area has not been identified as being feasible for cable connection as part of the NBN rollout.

***Telecommunications cables that are installed overhead with other infrastructure such as electricity cables should be removed and placed underground when it can be demonstrated and agreed by the carrier that it is technically feasible and practical to do so.***

This guiding principle is not applicable in this situation.

***Unless it is impractical to do so telecommunications towers should be located within commercial, business, industrial and rural areas and areas outside identified conservation areas.***

The general area is zoned Rural Residential and Rural Small Holding. There are no business, industrial or rural zoned land within the operating area of the telecommunications infrastructure.

***The design and siting of telecommunications towers and ancillary facilities should be integrated with existing buildings and structures, unless it is impractical to do so, in which case they should be sited and designed so as to minimise any adverse impact on the amenity of the surrounding area.***

In this situation there are no existing buildings or telecommunication infrastructure to utilise. As mentioned previously, while measures have been taken to reduce visual impact, there will still be a level of impact on the existing amenity of the area.

***Co-location of telecommunications facilities should generally be sought, unless such an arrangement would detract from local amenities or where operation of the facilities would be significantly compromised as a result.***

There are no existing facilities which would allow co location to occur while still meeting the operational requirements for the infrastructure.

***Measures such as surface mounting, concealment, colour co-ordination, camouflage and landscaping to screen at least the base of towers and ancillary structures, and to draw attention away from the tower, should be used, where appropriate, to minimise the visual impact of telecommunications facilities.***

The applicant has proposed leaving the monopole unpainted in an effort to reduce visual impact. The proposed tower is well setback from Robinson Rd and other boundaries. The setback serves to screen the lower section of the tower from adjoining properties and Robinson Rd

***Design and operation of a telecommunications facility should accord with the licensing requirements of the Australian Communications Authority, with physical isolation and control of public access to emission hazard zones and use of minimum power levels consistent with quality services.***

As stated earlier, the City is not the responsible authority in applying the abovementioned requirements. If approved these details are subject to separate licensing requirements.

***Construction of a telecommunications facility (including access to a facility) should be undertaken so as to minimise adverse effects on the natural environment and the amenity of users or occupiers of adjacent property, and ensure compliance with relevant health and safety standards.***

Any development would be subject to a construction management plan which would be required to address and mitigate potential amenity impacts i.e. (dust, noise, traffic).



36. The City of Albany Rural Planning Strategy provides policy in respect to visual resource protection. It is necessary to note that the Rural Planning strategy is dated 1996. Many of the provisions are now addressed in greater detail in SPP 5.2. Notwithstanding this, the following provisions are applicable;

#### **Siting**

- *Do not detract from significant views;*
- *Are not located on ridge tops;*
- *Are preferably not located on slopes greater than 1 in 10;*
- *Are sympathetic to existing landscape elements.*

37. In response to the above, the proposal will impact the views from private properties in the surrounding area. As mentioned previously it is necessary to consider the overall public benefit of the proposal against the any amenity impact. The proposal is not located on a ridge top and the slope on the site is not greater than 1 in 10. The applicant has proposed to leave the monopole unpainted in order to reduce the visual impact of the proposal.

#### **Clearing of native Vegetation**

- *Clearing of native vegetation for buildings, infrastructure and essential firebreaks shall be confined to the absolute minimum necessary for open space and garden areas, infrastructure installation and fire protection.*

38. The proposal does propose minimum clearing to facilitate the infrastructure. Unlike a dwelling which is subject to bushfire clearing requirements, the proposal does not require fuel load reduction round the facility.

### **RISK IDENTIFICATION & MITIGATION**

39. The risk identification and categorisation relies on the City's Enterprise Risk Management Framework.

<b>Risk</b>	<b>Likelihood</b>	<b>Consequence</b>	<b>Risk Analysis</b>	<b>Mitigation</b>
<b>Community.</b> Approving the proposed use could allow additional infrastructure to be attached to the tower without requiring City of Albany approval.	<i>Likely</i>	<i>Moderate</i>	<i>Medium</i>	<i>Consult with telecommunications providers when queried on the site and advise of community concerns regarding additional infrastructure.</i>
<b>Community.</b> If not approved the NBN may not build a tower in the area.	<i>Likely</i>	<i>Moderate</i>	<i>Medium</i>	<i>Lobby the NBN to seek an alternative site in the area.</i>

### **FINANCIAL IMPLICATIONS**

40. There are no financial implications related to the item.

### **LEGAL IMPLICATIONS**

41. The proponent has the right to seek a review of the Council's decision, including any conditions attached to an approval. The City of Albany may be required to defend the decision at a State Administrative Tribunal hearing.

**ENVIRONMENTAL CONSIDERATIONS**

42. The property is approximately 80% vegetated. The vegetation forms a 200m wide belt from racecourse rd to Robinson rd.
43. The site is classified as a protected drinking water area.
44. There are no additional environmental controls on the property other than those contained within LPS1. It is the applicants responsibility to ensure all obligations under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* are fulfilled.

**ALTERNATE OPTIONS**

45. Council has the following alternate option in relation to this item:

THAT Council resolves to ISSUE a Notice of REFUSAL of Planning Scheme Consent for Telecommunication Infrastructure at 241 Robinson Road, Robinson.

**SUMMARY CONCLUSION**

46. The proposal has been assessed against LPS1 and the State policy relating to telecommunications infrastructure.
47. In determining the application it is necessary to consider the impact on amenity against the long term benefit of a secured high speed broadband service.
48. It is recommended the application be approved subject to conditions.

<b>Consulted References</b>	:	<ol style="list-style-type: none"> <li>1. Local Planning Scheme No. 1</li> <li>2. Albany Local Planning Strategy 2010</li> <li>3. WA Planning Commission (WAPC) State Planning Policy 5.2</li> <li>4. Visual Landscape Planning in Western Australia – a manual for assessment, siting and design</li> </ol>
<b>File Number (Name of Ward)</b>	:	A42985 (Vancouver Ward)
<b>Previous Reference</b>	:	

**Local Planning Scheme No. 1**  
**Application: P2130446**  
**Proposal: Telecommunciation Infrastrucutre**  
**Schedule of Submissions for 241 Robinson Road, Robinson WA 6330**

No.	Submission	Officer Comment
1.	<ol style="list-style-type: none"> <li>1. The proposal will negatively impact on the existing level of amenity of the area and will be highly visible.</li> <li>2. Concerns regarding vegetation removal.</li> <li>3. The proposal has the potential to cause negative health effects.</li> <li>4. The proposal risks negatively impacting on property values.</li> </ol>	<ol style="list-style-type: none"> <li>1. Concerns noted. The impact on amenity is specifically assessed within the statutory framework. Amenity and views are identified as a factor to be assessed within WA Planning Commission (WAPC) State Planning Policy 5.2. The WAPC landscape planning manual is used in reference to determining landscape values.</li> <li>2. There are no additional vegetation controls on the site other than those contained within LPS1. The applicant has obligations under to the Department of Environmental Regulation for a clearing permit if required. The vegetation proposed to be removed is minimal and considered appropriate.</li> <li>3. The City is not a regulatory body in respect to electromagnetic energy (EME). The Federally established Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) enforce the Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300GHz. The EME report submitted by the applicant states that the maximum calculated EME level from</li> </ol>



No.	Submission	Officer Comment
		<p>the site will be 0.028% of the maximum public exposure level.</p> <p>4. Concerns noted. Property values are not an applicable planning consideration in the assessment of the application.</p>
2.	<ol style="list-style-type: none"> <li>1. <b>Oppose the application</b></li> <li>2. <b>Did not receive an invitation to attend the NBN Co public forum, the NBN consultation has not contact us.</b></li> <li>3. <b>The proposal will negatively impact visual amenity.</b></li> <li>4. <b>Negative impact on property values.</b></li> <li>5. <b>Health risks associated with living near a telecommunication tower</b></li> </ol>	<ol style="list-style-type: none"> <li>1. Opposition noted.</li> <li>2. Noted. The community consultation undertaken by the applicant has no statutory standing in the scope of this report.</li> <li>3. The amenity and landscape issues of the proposal are discussed within the report and are assessed against State Planning Policy 5.2.</li> <li>4. Concerns noted. Property values are not an applicable planning consideration in the assessment of the application.</li> <li>5. The City is not a regulatory body in respect to electromagnetic energy (EME). The Federally established Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) enforce the Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300GHz. The EME report submitted by the applicant states that the maximum calculated EME level from the site will be 0.028% of the maximum public</li> </ol>

No.	Submission	Officer Comment
		exposure level.
3.	<ol style="list-style-type: none"> <li>1. Did not receive an invitation to attended the NBN Co public forum, the NBN consultation has not contact us.</li> <li>2. The proposed tower does not fit with the special rural zoning and will negatively impact visual amenity.</li> <li>3. Property devaluation</li> <li>4. Potential of negative health impacts.</li> </ol>	<ol style="list-style-type: none"> <li>1. Noted. The community consultation undertaken by the applicant has no statutory standing in the scope of this report.</li> <li>2. Telecommunication infrastructure is an "A" use under LPS1. The impact of the proposed tower on the landscape of the area is a matter of assessment under WA Planning Commission (WAPC) State Planning Policy 5.2. The WAPC landscape planning manual is used in reference to determining landscape values.</li> <li>3. Concerns noted. Property values are not an applicable planning consideration in the assessment of the application.</li> <li>4. The City is not a regulatory body in respect to electromagnetic energy (EME). The Federally established Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) enforce the Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300GHz. The EME report submitted by the applicant states that the maximum calculated EME level from the site will be 0.028% of the maximum public exposure level.</li> </ol>

No.	Submission	Officer Comment
5.	<ol style="list-style-type: none"> <li>1. <b>Oppose the application</b></li> <li>2. <b>Refer to State Planning policy 5.2</b></li> <li>3. <b>The Karri is unique to the area and do not need to be disturbed by bulldozers and vehicles.</b></li> <li>4. <b>Robinson rd was once referred to as the old bean track and is one of the first market garden areas.</b></li> <li>5. <b>The City is required to have due regard to State Planning Policy.</b></li> </ol>	<ol style="list-style-type: none"> <li>1. Concerns noted</li> <li>2. The proposal is subject to an assessment against the City of Albany statutory framework. This includes assessment against WA Planning Commission (WAPC) State Planning Policy 5.2.</li> <li>3. It is proposed to minimise all clearing. A condition requirement the submission of a construction management plan has been applied. The applicant has obligations under to the Department of Environmental Regulation for a clearing permit if required. The vegetation proposed to be removed is minimal and considered appropriate.</li> <li>4. Noted. The City of Albany Local Planning Scheme requires reference to State and Local heritage listings. There are no listings for the site.</li> <li>5. Noted, the City of Albany adheres to these requirements. In the instance State Planning Policy 5.2 is the applicable policy.</li> </ol>
6.	<ol style="list-style-type: none"> <li>1. <b>Express strong disapproval for the proposed site.</b></li> <li>2. <b>Construction would destroy the historical significance of the area.</b></li> </ol>	<ol style="list-style-type: none"> <li>1. Opposition noted.</li> <li>2. Noted. The City of Albany Local Planning Scheme requires reference to State and Local heritage</li> </ol>

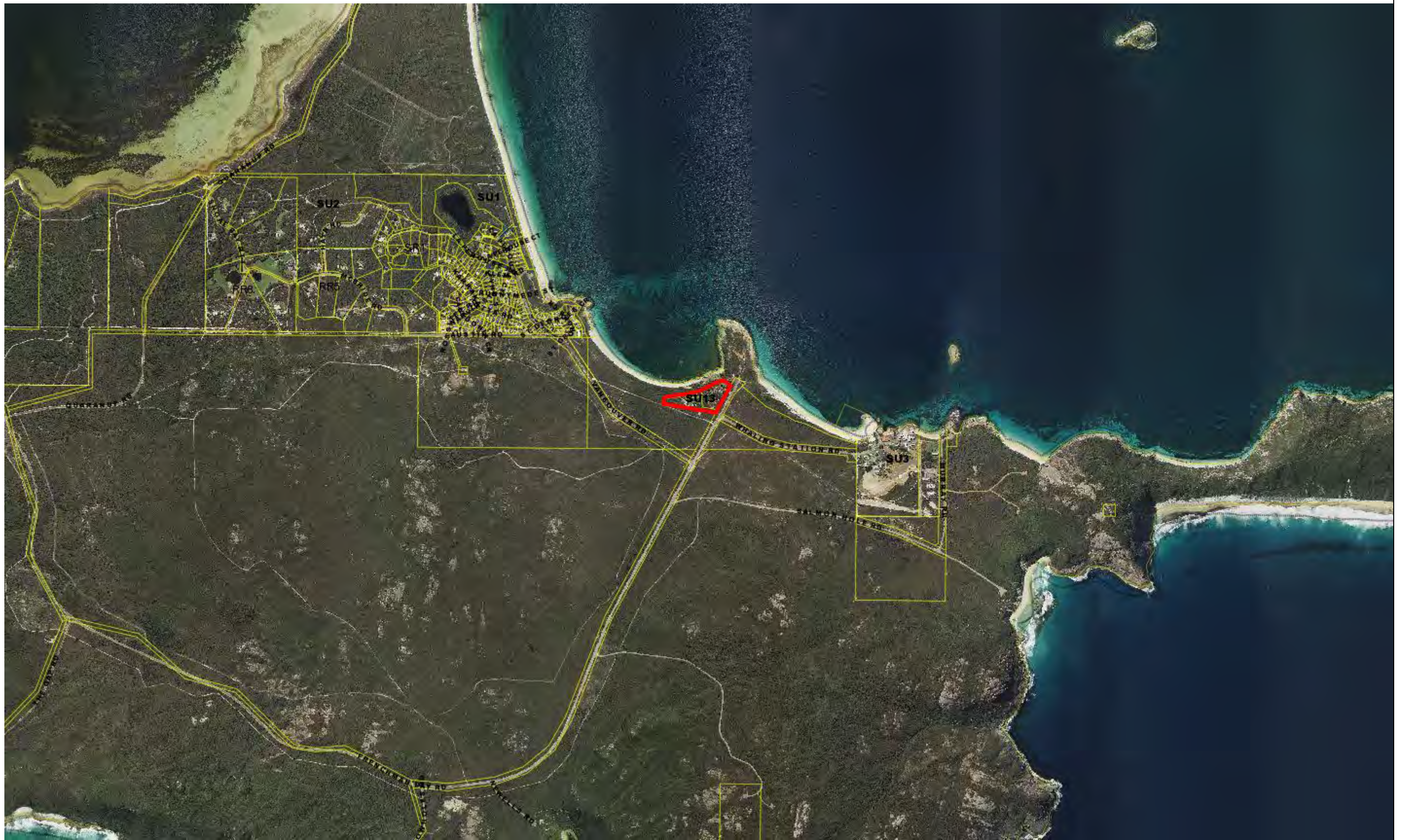
No.	Submission	Officer Comment
	3. Will detrimentally affect the amenity of the area.	<p>listings. There are no listings for the site.</p> <p>3. The amenity and landscape issues of the proposal are discussed within the report and are assessed against State Planning Policy 5.2. The WAPC landscape planning manual is used in reference to determining landscape values.</p>
7.	1. Support the proposal	Support noted.
8.	<p>1. Did not receive correspondence from the City of Albany on the matter.</p> <p>2. Request for further consultation.</p>	<p>1. Noted. Letters were sent out within a 1km radius from the site. The respondent's property is just outside of this radius. The 1km radius was used to compensate for the larger lot size in the area.</p> <p>2. City of Albany consultation has been undertaken in accordance with LPS1. The area and time of consultation was extended beyond the regular statutory limits in this instance. The community consultation undertaken by the applicant has no statutory standing in the scope of this report.</p> <p>3. of the proposal are discussed within the report and are assessed against State Planning Policy 5.2.</p> <p>4. The proposal does not interfere with groundwater any more than a dwelling. Telecommunications infrastructure is listed as a compatible use under the land use controls.</p> <p>4. Concerns noted. Property values are not an</p>



No.	Submission	Officer Comment
		<p>applicable planning consideration in the assessment of the application.</p> <p>5. Noted. The community consultation undertaken by the applicant has no statutory standing in the scope of this report.</p> <p>6. Water quality is addressed within LPS1 through water protection areas. The Telecommunications infrastructure is listed as a compatible use under the land use controls. Any other groundwater concerns will need to be direct to Department of Water.</p> <p>7. The misuse of the internet is not a planning consideration and as is not within the scope of assessment.</p>
9. (Petition 89 signatures)	<ol style="list-style-type: none"> <li>1. <b>Oppose the application</b></li> <li>2. <b>The area is historical important previously Robinson Rd was referred to as the 'old bean track'</b></li> <li>3. <b>The area has a high level of visual amenity. The proposal will negatively impact the current level of visual amenity. The proposal will be clearly visible from Mt Melville and Robinson Rd.</b></li> <li>4. <b>The lowered visual amenity would impact on the perception of the Robinson rd area would impact on the tourism values of the area.</b></li> <li>5. <b>Potential access issues for adjoining properties during</b></li> </ol>	<ol style="list-style-type: none"> <li>1. Opposition noted</li> <li>2. Noted. The City of Albany Local Planning Scheme requires reference to State and Local heritage listings. There are no listings for the site.</li> <li>3. The proposal is subject to an assessment against the City of Albany statutory framework. This includes assessment against WA Planning Commission (WAPC) State Planning Policy 5.2. The WAPC landscape planning manual is used in reference to determining landscape values.</li> <li>4. Concerns relating to tourism values are noted.</li> </ol>

No.	Submission	Officer Comment
	<p>construction.</p> <p>6. The proposal is located in close proximity to residences. The health effects of the proposal cannot be guaranteed. The proposal risks negatively affecting property values within the area.</p> <p>7. The proposal is not consistent with State Planning Policy 5.2.</p> <p>8. There are more suitable locations for the proposal in less significant locations.</p>	<p>5. If supported, a condition requiring a construction management plan has been recommended.</p> <p>6. Concerns regarding property values noted. Property values are not an applicable planning consideration in the assessment of the application.</p> <p>7. Noted. The proposal has been assessed by the City of Albany against State Planning Policy 5.2.</p> <p>8. In response to concerns raised the City of Albany contacted NBN regarding the potential to revisit sites or review alternate locations. NBN advised that this site met technical parameters and that access had been secured. On this basis they advised that they would be proceeding with the subject site.</p>













**FRENCHMAN  
BAY RETREAT**  
Development Guide Plan  
Lot 1 & 2 on Diagram 77269  
Frenchman Bay Road  
FRENCHMAN BAY








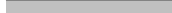


Harley Dykstra<sup>®</sup>

## PLANNING & SURVEY SOLUTIONS

DRAWN BdR 17/08/2015			CHECKED HD 17/08/2015			DRAWING No 20164-03H.dgn		
REV	DESCRIPTION	DATE	SCALE AT A3 1:1000					
F	Parking Modifications	10/10/2014	0 10 20 30 40					
G	Council Modifications	19/02/2015	ALL DISTANCES ARE IN METRES					
H	Council Modifications	17/08/2015						

126

## LEGEND

- LEGEND**
-  20m Wide Fire Setback
  -  Single Story Development Setback
  -  Foreshore Boundary
  -  Physical Processes Setback Line
  -  65m Vancouver Spring Setback
  -  Holiday Accommodation Units (Two Storey)
  -  Potential additional Holiday Accommodation Units (See Plan Note 1)
  -  2m Wide Dual-Use Path
  -  Unencumbered Development Area
  -  Reception / Caretaker / Kiosk / Restaurant / Alfresco

**ALBANY OFFICE:**  
116 Serpentine Road, ALBANY WA 6330  
T: 08 9841 7333 F: 08 9841 3643  
E: [albany@harleydykstra.com.au](mailto:albany@harleydykstra.com.au)  
W: [www.harleydykstra.com.au](http://www.harleydykstra.com.au)  
Offices also at Bunbury, Busselton, Kelmescott and Perth

**COPYRIGHT:**

This document is and shall remain the property of HARLEY DYKSTRA. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited

**NOTE:**  
This plan has been prepared for planning purposes. Areas, Contours and Dimensions shown are subject to survey.





**Local Planning Scheme No. 1**  
**Application: Local Development Plan (LDP1)**  
**Schedule of Submissions for Lot 1 and 2 Frenchman Bay Road, Frenchman Bay**

No.	Submission	Officer Comment
1.	<p><u>Production Bore Construction and Pumping Performance Details</u></p> <p>An on-site production bore was drilled in about 1988 to supply the caravan park, because the water supply from Vancouver Dam had become contaminated and was not always a reliable source of water supply, given lot boundary changes. There are no construction details for the production bore</p> <p>For a secure groundwater supply for the proposed development, it is obviously undesirable to rely on a supply from a production bore for which there are no construction or yield details.</p> <p>Designing a water supply system for a multi-million dollar development, based on unknown production bore and aquifer details, is not sound engineering/scientific practise and will not guarantee a secure and long-term groundwater supply to the development</p> <p><u>Aquifer Characteristics and Geometry</u></p> <p>Findings from the geotechnical report suggest that a perched</p>	<p>A number of the points covered in the submission deal with technical matters relating to on-site water abstraction and on-site effluent disposal.</p> <p>The Local Development Plan itself does not have the power to vary Scheme provisions. In relation to water supply, the Scheme requires that all development on the land shall be connected to reticulated water. The Water Corporation has confirmed this requirement.</p> <p>Legal advice has confirmed that the proponent could seek a variation to this provision as part of a future development application.</p> <p>If the proponent were to apply for on-site water abstraction to serve the development, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p>

No.	Submission	Officer Comment
	<p>aquifer system (PAS) may underlie the site.</p> <p>Little is known about the deeper aquifer intersected by the production bore, but based on currently available data there is no doubt that it will need careful management.</p> <p>Because of the physical setting of the site near the ocean, the potential for seawater intrusion is real.</p> <p><u>Groundwater Quality</u></p> <p>Recent chemical analysis of Vancouver Spring water has shown that while the groundwater in the PAS is fresh and has low mineralisation; it is non-potable due to elevated concentrations of coliform bacteria. High concentrations of coliforms also appear to be also present in groundwater from the deeper aquifer, which supplies the nearby Frenchman Bay ablution block. On the above discussion, the groundwater under the site is probably not potable and will need treatment before it can be ingested by humans.</p> <p><u>Sewage Effluent Disposal</u></p> <p>The DGP states that an on-site tertiary sewage treatment system is allowable for the development because the proposed number of 'residential equivalent units' is less than 25 (Country Sewerage Policy). It also states that such systems can require on-site irrigation disposal of excess effluent (grey water</p>	<p><u>Groundwater Quality</u></p> <p>Comments in relation to the recent analysis of Vancouver Spring are noted. Regarding water supply, the Scheme requires that all development on the land shall be connected to reticulated water. If the proponent were to apply for on-site water abstraction to serve the development, they would have to demonstrate that the water is potable or can be suitably treated. The provision of an on-site water supply would constitute a variation to the Scheme and the City and State Government agencies would be under no obligation to support such a variation.</p> <p><u>Sewage Effluent Disposal</u></p> <p>The Department of Health has advised that the number of overall units (including caretakers and commercial unit) be reduced to 25.</p> <p>Concerns regarding potential environmental impacts from on site</p>



No.	Submission	Officer Comment
	<p>containing nutrients) – presumably through irrigation and sub-surface drain fields</p> <p>The disposal of sewage effluent on and under the site has the potential to cause significant environmental impacts.</p> <p>The City should also be aware that if the proposed dwellings have 3 bedrooms each, there could be nearly 200 people staying on the site at peak holiday times, plus the patrons and staff of the proposed restaurant. Both the water supply system and the sewage treatment system will have to be designed to cater for this 'load'.</p> <p>With the current level of scientific understanding of the subsurface site characteristics, we feel that the environmental impacts of both groundwater pumping and sewage effluent disposal need to be properly quantified before the DGP progresses any further.</p> <p>The proponent (and perhaps the City?) will probably argue that all of the scientific shortcomings described in this submission can be addressed during the later stages of the approval process. The City should insist that additional scientific studies (mainly groundwater-related) are completed before this DGP can be properly assessed.</p>	<p>effluent disposal are noted.</p> <p>If a development application was to propose on-site effluent disposal, it would be necessary to demonstrate that no environmental or hydrological impacts would occur on the site or on the surrounding area. Such a proposal would be subject to Department of Health approval.</p> <p>Details of loading form a component of an effluent disposal management plan. It is a requirement for the proponent to provide an effluent disposal management plan in support of a development application, detailing the effluent load for all units (including restaurant).</p> <p>As mentioned above, effluent disposal is a matter that would be dealt with at the development stage.</p> <p>The City of Albany acknowledges that both the site and surrounding area are environmentally sensitive. Effluent disposal is subject to planning control under Schedule 4 – Special Use Zone No. SU13, provision 7 of <i>Local Planning Scheme No.1</i>. Many of the issues raised within this submission are matters that the proponent will be required to address in an effluent disposal management plan.</p>

No.	Submission	Officer Comment
2.	<p>This submission focuses on the proposed use of permanent residential (and unrestricted stay) units on a property designated solely for tourism purposes.</p> <p>We consider that the proposed permanent residential (and unrestricted stay) units on the subject property should not be allowed because on this Local Strategic Site and Special Use Zone (SU13), such land uses are not allowed in <i>Local Planning Scheme No. 1</i> (LPS1).</p> <p>The land comprising Lots 1 and 2 Frenchman Bay Road is categorised as Special Use Zone 13 (SU 13) in Schedule 4 of LPS1. The purposes set out against the land are listed as “caravan park, caretakers dwelling, holiday accommodation and shop”. The list does not include permanent residential or unrestricted stay units.</p> <p>The Frenchman Bay Association (FBA) was actively involved in the consultation process associated with the production of the new town planning framework, LPS 1, which was promulgated on 28 April 2014. We paid particular attention to the conditions for Special Use Zone 13 (pages 1271-2) and we assumed that any future development proposal would need to comply fully with these conditions or alternatively, the Council would need to approve any amendment to LPS1, prior to their considering a non-conforming development proposal.</p>	<p>Noted.</p> <p>The City of Albany sought legal counsel and advice from the Department of Planning on whether ‘unrestricted stay’ units could be approved on the site. The advice received stated that only land uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed ‘unrestricted stay’ accommodation to ‘Holiday Accommodation’ or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard ‘Holiday Accommodation’ units.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add ‘unrestricted stay accommodation’ as a permissible land use within ‘Special Site’ zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before ‘unrestricted stay’</p>

No.	Submission	Officer Comment
	<p>Our members were surprised to discover in the LDP1 report that the proposed development contained several fundamental variations to the conditions specified in SU 13 and that the arguments to support such variations were quite inadequate.</p> <p>In the first FBA submission to City officers, we outlined in detail the deficiencies in the LDP1 relating to the water supply and the effluent disposal arrangements that are loosely described and not based on scientific fact.</p> <p>At an FBA Special General Meeting held last week, an overwhelming majority of those present formally resolved to oppose the proposal in the advertised LDP1 for permanent residential/unrestricted stay units on Lots 1 &amp; 2 Frenchman Bay Road, on the grounds that they:</p> <ul style="list-style-type: none"> <li>• Are not permitted under LPS1;</li> <li>• Are inconsistent with the <i>Albany Local Planning Strategy</i>; and</li> <li>• Are not permitted under the <i>Significant Tourist Sites</i> policy.</li> </ul>	<p>units could be approved on the site.</p> <p>Legal advice has confirmed that the Local Development Plan itself cannot vary Scheme provisions pertaining to water supply and effluent disposal. However, the proponent can seek a variation to Scheme provisions as part of a future development application. On this basis, the adoption of the draft Local Development Plan does not alter the requirements pertaining to water supply and effluent disposal as set out in <i>Local Planning Scheme No. 1</i>. In the interests of clarification, only the Local Development Plan is approved by Council, not the accompanying planning report.</p> <p>Previous submission noted and discussed above.</p> <p>FBA Special General Meeting outcome noted. In response to legal advice and community feedback, the applicant has removed the proposed unrestricted stay units from the proposal.</p> <p>The decision was made to advertise the Local Development Plan to the public including the proposed 'unrestricted stay' units in the interests of transparency, as these form part of the landowners' ultimate aspiration for the site.</p>



No.	Submission	Officer Comment
	<p>It seems to us that neither City officers, nor the Council, have been provided with sufficient information to resolve whether to approve LDP1 – with or without conditions. We feel that it would be a serious error to give the go ahead or approve the LDP1 on such inadequate information, because it does not form an adequate guide for future tourism development on this site.</p>	<p>All future development on the site is required to be in accordance with an adopted Local Development Plan. The proposed Local Development Plan is compliant with the physical setback parameters prescribed in Schedule 4 – Special Use Zone No. SU13, provisions 3, 4 and 13 of <i>Local Planning Scheme No. 1</i>. The provisions contained within Schedule 4 – Special Use Zone No. SU13 provide additional control over the development of the site. A number of these provisions will require the preparation of plans for assessment by the City of Albany and relevant State Government agencies at the development stage.</p>
3.	<p>There are four concrete applications/proposals in the LDP that call for comment. They are:</p> <ol style="list-style-type: none"> <li>1) The application for on-site water supply.</li> <li>2) The application for on-site sewage and wastewater treatment.</li> <li>3) The proposal for 10 permanent residential units/unrestricted</li> </ol>	<p>Points of submission noted.</p>

No.	Submission	Officer Comment
	<p>stay units.</p> <p>4) The proposal for staged construction in the ratio of 1 permanent residential/unrestricted stay unit for every 2 completed holiday units.</p> <p><u>The application for on-site water supply.</u></p> <p>Under Condition 8 of SU 13 of <i>Local Planning Scheme No. 1</i> (the LPS) the use of a reticulated water supply is expressed to be mandatory. This appears, however, to be misleading, for I am advised that Condition 8 is no more than a scheme standard and that as such the Council has a discretion, under Clause 5.2 of the LPS, to approve the proponents application. While this may be true, Council's discretion is not absolute. In exercising it the Council must comply with Clause 5.2.2, which requires prior public consultation, and Clause 5.2.3, which requires a rational consideration of relevant matters listed in Clause 10.2.</p> <p>My response to the proponent's application, therefore, is that the City's planning department should not present it to Council for approval until:</p> <p>i) all the information impliedly required by Clauses 5.2.3 and 10.2 of the TPS has been sought from and provided by the proponents and referred to the relevant government agency;</p> <p>ii) the relevant government agency has made and</p>	<p>Legal advice has confirmed that the Local Development Plan itself cannot vary Scheme provisions pertaining to water supply. However, the proponent can seek a variation to Scheme provisions as part of a future development application. On this basis, the adoption of the draft Local Development Plan does not alter the requirements pertaining to water supply as set out in <i>Local Planning Scheme No.1</i>. In the interests of clarification, only the Local Development Plan is approved by Council, not the accompanying planning report.</p> <p>Noting the above, the proponent would have the ability to apply for an on-site water supply at the development stage. The submission is correct in outlining the City of Albany's obligations with regard to the application of discretion over such Scheme provisions during the development application process.</p> <p>In summation, the approval of a Local Development Plan does not vary the provisions of Schedule 4 – Special Use Zone No. SU13.</p>

No.	Submission	Officer Comment
	<p>communicated its findings to the City of Albany; and</p> <p>iii) the City's planning department has made those findings and the reasons for them available to Councillors for their consideration. The failure to proceed in this way would, in my view, be contrary to the principles of orderly and proper planning.</p> <p><u>The application for on-site sewage/wastewater treatment.</u></p> <p>Under Condition 7 of SU 13 of the LPS the use of a reticulated sewerage/wastewater disposal system is also expressed to be mandatory. Unlike Condition 8, Condition 7 expressly confers on Council a discretion to approve the on-site treatment of sewage/wastewater. Again, this is not an absolute discretion. Its exercise is circumscribed by Clauses 5.2.3 and 10.2 of the LPS as well as by Condition 7 itself which provides that Council may only exercise its discretion to approve an application for on-site sewage/wastewater disposal if the on-site treatment system is appropriate to the scale of the proposed development and is acceptable to the relevant government agency.</p> <p>One need look no further than the requirements of Condition 7 itself to know that a rational decision to support or oppose the proponents application, whether by a member of the public, or by a government agency, or by Council, is not possible on the information supplied in the LDP. The LDP provides no details on the treatment system to be installed. Nor does it provide</p>	<p>The Local Development Plan itself does not approve a private on-site effluent disposal system. Schedule 4 – Special Use Zone No. SU13, provision 7 of <i>Local Planning Scheme No. 1</i> provides the proponent with the ability to apply for the installation of a private on-site effluent disposal system.</p> <p>An effluent disposal management plan would be required to demonstrate that no environmental or hydrological impacts would occur on the site or on the surrounding area. Any such proposal would be subject to Department of Health approval.</p> <p>Department of Health comments regarding the number of units permitted under the draft <i>Country Sewerage Policy</i> have been applied and the Plan amended accordingly.</p> <p>As mentioned above, effluent disposal would be considered at the development stage, in accordance with Schedule 4 – Special Use Zone No. SU13, provision 7 of <i>Local Planning Scheme No. 1</i>. A detailed effluent disposal management plan would be required to respond to the density of development contained within a future development application.</p>



No.	Submission	Officer Comment
	<p>relevant information on the scale of the proposed development, for scale of the proposed development refers not to the number of units proposed to be constructed on the site, but the number of people who will be generating sewage and wastewater on the site on any day on which the completed development is operating at maximum capacity. To arrive at this figure the proponents need to disclose the number of beds per unit, the number of employees who will be working on the site, and the number of patrons capable of being served in the proposed kiosk/cafe. This they have not done.</p> <p>The City's planning department should not present it to Council for approval until:</p> <ul style="list-style-type: none"> <li>i) all the information required by Condition 7 and Clauses 5.23 and 10.2 has been sought from and provided by the proponents and referred to the relevant government agency;</li> <li>ii) the relevant government agency has made and communicated its findings to the City of Albany; and</li> <li>iii) the City's planning department has made those findings and the reasons for them available to Councillors for their consideration. The failure to proceed in this way would, in my view, be contrary to the principles of orderly and proper planning.</li> </ul>	<p>As outlined above, Schedule 4 – Special Use Zone No. SU13, provision 7 would have to be addressed as part of a future development application. At the time of assessment, an effluent management plan would be required to satisfy the requirements of the Department of Health and the City of Albany. Sub-clause 5.2.3 of <i>Local Planning Scheme No. 1</i> is not applicable in this instance, as Schedule 4 – Special Use Zone No. SU13, provision 7 provides the City with the ability to approve an alternative treatment system. Details of the method of effluent disposal and an associated effluent disposal management plan would be required to accompany any future development application. The Department of Health's comments regarding effluent disposal, which were received during the public advertising and referral process, have been provided to Council and are discussed in the report item.</p>

No.	Submission	Officer Comment
	<p><u>The proposal for 10 permanent residential units/unrestricted stay units.</u></p> <p>I have described this proposal in the alternative because of the ambiguity in the document that has been advertised. Although the City has called the document a Local Development Plan (the LDP) the proponents have called it an Application for Development Guide Plan. Respondents to the advertisement do not know whether they are to respond to the whole document or just to the Development Guide Plan (the DGP) appended to the document. The ambiguity needs to be resolved because throughout the text of the document the proponents propose 10 permanent residential units but in the appended DGP they propose 10 unrestricted stay units.</p> <p>Notwithstanding the comments above, I submit that, whether the proposal is one for permanent residential units or one for unrestricted stay units, it is not permitted under the Local Planning Scheme (the LPS). It is submitted that Clause 4.7.2 is mandatory and that a purpose under this clause may not be treated as if it were a scheme standard capable of variation by Council at its discretion under Clause 5.2 of the LPS. The Council, therefore, has no jurisdiction to approve the proposal, but must reject it on the ground that the use of the land for permanent residential/unrestricted stay purposes is not permitted by the LPS.</p>	<p>The City of Albany sought legal counsel and advice from the Department of Planning on whether 'unrestricted stay' units could be approved on the site. The advice received stated that only land uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed 'unrestricted stay' accommodation to 'Holiday Accommodation' or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard 'Holiday Accommodation' units.</p> <p>The decision was made to advertise the Local Development Plan to the public including the proposed 'unrestricted stay' units in the interests of transparency, as these form part of the landowners' ultimate aspiration for the site.</p>

No.	Submission	Officer Comment
	<p><u>The proposal for staged construction in the ratio of 1 residential unit for every 2 completed holiday units.</u></p> <p>Since, under the LPS, Council does not have a discretion to approve the proposal for 10 residential/unrestricted stay units on the Frenchman Bay site, it clearly does not have a discretion to approve this staged construction proposal.</p>	<p>The removal of the 'unrestricted stay' units from the Local Development Plan following the receipt of legal advice is outlined above.</p>
4.	<p>Without adequate hydrogeological studies, there is also no guarantee that the aquifer can supply the required groundwater to the development. No characteristics of the aquifer are known, and it may not be capable of supplying the necessary water demand. The aquifer occurs below sea level and is therefore susceptible to contamination from sea water during pumping, which could gradually cause salinisation of the water supply.</p> <p>If the bore and aquifer both fail to provide adequate water to the development, what's plan B?</p> <p>This question was partially answered at the Information Session I attended. The Planning Consultant advised me that the Proponents were looking at a different water supply system.</p>	<p>Legal advice has confirmed that the Local Development Plan itself cannot vary Scheme provisions pertaining to water supply. However, the proponent can seek a variation to Scheme provisions as part of a future development application. On this basis, the adoption of the draft Local Development Plan does not alter the requirements pertaining to water supply as set out in <i>Local Planning Scheme No.1</i>. In the interests of clarification, only the Local Development Plan is approved by Council, not the accompanying planning report.</p> <p>If the proponent were to apply for on-site water abstraction to serve the development, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p>



No.	Submission	Officer Comment
	<p>The revised water supply system being considered comprises:</p> <ul style="list-style-type: none"> <li>• A non-standard connection to the mains water pipeline at Goode Beach;</li> <li>• Rainwater harvesting and storage; and</li> <li>• Using the existing bore only as a backup water supply.</li> </ul> <p>This type of combined water supply system design has a much better chance of success than relying on a single bore with unknown characteristics.</p> <p>In my opinion, the LDGP should not be allowed to proceed any further without 'front end' hydro geological studies that need to be completed in order to quantify the sustainable groundwater supply from both the bore and the aquifer.</p> <p><u>Effluent Disposal</u></p> <p>The proposed development has been sized in such a way that with an assumed occupancy rate, on-site sewage treatment is allowed under the <i>Country Sewerage Policy</i>. There is no doubt that connecting to the mains sewerage system at Little Grove is the safest way to handle and treat the sewage from the development, but I do realise that the cost of doing this is</p>	<p>Comments regarding the proponents' revised water supply system are noted.</p> <p>As stated previously, if the proponent were to apply for on-site water abstraction to serve the development, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p> <p>Comment noted.</p> <p>The Local Development Plan itself does not approve a private on-site effluent disposal system. Schedule 4 – Special Use Zone No. SU13, provision 7 of <i>Local Planning Scheme No. 1</i> provides the proponent with the ability to apply for the installation of a private on-site effluent disposal system.</p> <p>An effluent disposal management plan would be required to</p>

No.	Submission	Officer Comment
	<p>prohibitive and that it would seriously impact on the viability of any development on this site.</p> <p>At the Information Session, the Planning Consultant described to me the sophisticated systems that are available to treat sewage. While I have no doubt that there are such systems available, it is the disposal of the excess grey water effluent from these systems that is of more concern to me. In addition, in the report there is no mention of:</p> <ul style="list-style-type: none"> <li>• The size of such a system and the assumed treatment requirements, especially during peak holiday periods; and</li> <li>• The amount of grey water effluent that needs sub-surface disposal.</li> </ul> <p><u>Financial Arguments and Planning</u></p> <p>Throughout the LDGP report there are various reasons given why the project would not be financially viable if any aspects of the proposed design are varied.</p> <p><u>LPS1 and Prime Tourism Sites</u></p> <p>I cannot understand why the City appears ready and willing to discount or disregard pre-existing policy statements, such as the Strategic Tourism Policy, that recommend against combined residential/tourist accommodation developments on</p>	<p>demonstrate that no environmental or hydrological impacts would occur on the site or on the surrounding area. Any such proposal would be subject to Department of Health approval.</p> <p>Comment noted.</p> <p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local</p>

No.	Submission	Officer Comment
	<p>tourism sites. I feel that the proposed permanent residential (and unrestricted stay) units on the subject property should not be allowed because on this Local Strategic Site and Special Use Zone (SU13), such land uses are not allowed in <i>Local Planning Scheme No. 1</i> (LPS1).</p> <p><u>Permanent Residential and/or Unrestricted Stay Units</u></p> <p>Why is permanent residential being proposed (and even being considered by the City) when it is not allowed on this Special Use Zone (SU 13), as outlined in LPS1? This may be the first attempt to try and get the City to apply to change LPS1 – the thin end of the wedge and the possible end of prime tourism spots around Albany. The current situation is obvious from the following conditions taken from LPS1. From these you can conclude that it is illegal to construct permanent residential/unlimited stay units on the site.</p> <p>I was therefore surprised to discover in the LDGP report that the proposed development contained several fundamental variations to the conditions specified in SU 13 and that the arguments to support such variations were generally inadequate. These issues seemed to make no difference to the Planning and Development Committee, who recommended to Council that the LDGP should be approved for advertising and Council subsequently agreed. These decisions were completely against the permitted development conditions outlined in LPS1 and this implies that neither the City nor the Council want to work within the LPS1 conditions outlined for</p>	<p>Development Plan.</p> <p>The decision was made to advertise the Local Development Plan to the public including the proposed ‘unrestricted stay’ units in the interests of transparency, as these form part of the landowners’ ultimate aspiration for the site.</p> <p>The item was only put forward for advertising. As mentioned above, the proponent has the ability to apply to vary provisions contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> as a component of a future development application. The indicated variations were advertised in order to receive community feedback on the various aspects of proposal.</p>



No.	Submission	Officer Comment
	<p>this site. So why did we bother to gazette LPS1? If this is the case, I feel that we have little chance of maximising the tourism potential of our area.</p> <p><u>Opposition to Permanent Residential and/or Unrestricted Stay Units on Prime Tourism Sites</u></p> <p>I continue to believe that this site is worthy of a high-class tourism development and should not just morph into another suburb by including permanent residential (or unrestricted stay) units.</p> <p>Owners of the short-stay units are only allowed to occupy the units for 3 months a year, but no one polices this restriction. Every time I ask a City official about this, the answer is that there are by-laws that cover this matter. But I have been unable to get a 'straight answer' on this issue and have not yet found out who is supposed to police this under these conditions, it is quite feasible that the proposed Frenchman Bay development will gradually morph into a suburb-like environment with very few vacancies available to tourists, because all unit owners will want to live in this beautiful spot permanently. I know I would.</p>	<p>Opposition and concerns in relation to unrestricted stay noted.</p> <p>It is acknowledged that it can be difficult to police the conditions restricting occupancy on older tourist accommodation developments. However, current management conditions are applied to development approvals and require a third party to be appointed as property manager on all developments. The managers are then legally obligated to apply the conditions of the development approval, including those that restrict the length of stay permitted. Under such schemes, even the owners of a unit are required to book their own personal use of the premises through the managing body.</p>

No.	Submission	Officer Comment
5.	<p>I am against the 'unrestricted' stay component of holiday accommodation – in my opinion this will only lead to permanent occupation – adding clauses to the strata-title to prevent this is just a folly – and leads to the question who will police and enforce the clauses. In this case I do not believe anyone will accept this responsibility and as such you are providing permanent villas for occupation and for this reason I object to this component.</p> <p>Should the argument regarding financial viability be the only reason for providing 'unrestricted' stay accommodation, it further enhances the reason not to proceed with the development as it is obvious that the developer is reliant on – selling these villas to people who want exclusive access and ownership i.e. a holiday home, probably at a reduced cost to doing so in a current residential area such as Goode Beach, yet live in a prime location in Albany. It would also lead one to question the developers' commitment in maintaining the reduced number of short stay accommodation.</p> <p>In addition to the above the area is deemed a Tourist Accommodation Site – yet the provision of allowing unrestricted access is to ensure accommodation for those seeking to stay for longer periods, including over winter, and that the development is occupied year round. These people 'seeking to stay for longer periods, including over winter' are not tourists by the City's own statement, after Easter and winter are off peak tourist times. Also what void in the market does it fill if winter is off peak, there would be ample tourist</p>	<p>The City of Albany sought legal counsel and advice from the Department of Planning on whether 'unrestricted stay' units could be approved on the site. The advice received stated that only land uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed 'unrestricted stay' accommodation to 'Holiday Accommodation' or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard 'Holiday Accommodation' units.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p>

No.	Submission	Officer Comment
	accommodation in the City precinct.	
6.	<p>It seems to me that the developer has paid little or no attention to Water supply. They contend that as there is a bore adjacent to the site this indicates that water will be available, despite the bore being of unknown depth, drawing water from an aquifer of unknown size and producing water that is currently unfit for drinking.</p> <p>At the very least council should require some sort of study to determine the nature of the aquifer, including any environmental effects of drawing water from it.</p> <p><u>Permanent Occupation.</u></p> <p>This is a matter of great concern to me. It is recognised by most authorities that this is a special site. In their wisdom they have determined that it is to be used solely for tourist accommodation, a use a majority of people would fully agree. That the developers say it is uneconomic without permanent occupation may well be correct, but for Council this is irrelevant. The financial capacity of the developers, or the commercial viability of the proposal, is solely the concern of the developer, not Council. Commercial factors are not relevant to the planning process and shouldn't be taken into consideration. The planning process so far has determined that the best use for the site is solely tourist accommodation with no permanent occupation, and without valid relevant reasons should not be changed. If you take the long term view eventually a proposal will come up that is commercially viable. It may not be in my lifetime but eventually it will happen. So I think Council would be doing a great disservice to future</p>	<p>If the proponent were to apply for on-site water abstraction to serve the development, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p> <p>The City of Albany sought legal counsel and advice from the Department of Planning on whether 'unrestricted stay' units could be approved on the site. The advice received stated that only land uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed 'unrestricted stay' accommodation to 'Holiday Accommodation' or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard 'Holiday Accommodation' units.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a</p>

No.	Submission	Officer Comment
	generations if they allow a developers' short term commercial gain, to take precedence over good planning.	Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.
7.	Such a development will change the wonderful peace and serenity of Frenchman Bay, of which many people enjoy as it is in its natural state. To develop in this way will be the ruination of the area as we all know it. The impact of this development will be immense in a negative way on the natural beauty of the environment we have on our doorstep. How can the building of this not have a negative impact? It will be a catastrophe on the peace and tranquillity of Frenchman Bay, why change what is good, why does everything have to be developed? I cannot think of a worse scenario for Frenchman Bay than to develop in this way. We live in a beautiful place, let it stay this way.	Objection to the proposal noted.  The zoning of the site and the associated development controls create a development right over the lots. However, the development controls and Local Planning Policies in place are designed to control the form of development that takes place.
8.	As a rate payer in Goode Beach I disagree to the permanent residential aspects of the proposal.  What are the noise cut off times for such a facility and if the facility will be given dispensation to operate on Sundays and public holidays?	Objection noted. 'Unrestricted stay' has been removed from the proposal.  Noise emanating from premises is controlled by the <i>Environment Health (Noise) Regulations</i> . However, this matter would also be considered as a component of any future development application. Operating on Sundays and public holidays would be subject to future development approval.



No.	Submission	Officer Comment
9.	<p>I offer qualified support to the provision of a local shop</p> <p>Concerns arise from the following;</p> <p>Water supply – There is no convincing data available that sufficient water for such an intensive development could come from the aquifer. Will use of the aquifer cause depletion of the supply to the Vancouver spring.</p> <p>There is no consideration of the heritage of the site.</p> <p>Overall preference would be for a shop and better opportunities for visitors.</p>	<p>Support for a shop is noted.</p> <p>If the proponent were to apply for on-site water abstraction to serve the development, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p> <p>Heritage concerns are noted.</p>
10.	<p>I cannot support the proposal allowing permanent Residential/Unrestricted stay units. The rules set by Council clearly state the area are zoned for holiday accommodation.</p> <p>As a resident of Goode Beach I am required to abide by various rules which apply to the area.</p>	<p>The City of Albany sought legal counsel and advice from the Department of Planning on whether 'unrestricted stay' units could be approved on the site. The advice received stated that only land uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed 'unrestricted stay' accommodation to 'Holiday Accommodation' or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard 'Holiday Accommodation' units.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western</p>

No.	Submission	Officer Comment
		<p>Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p>
11.	<p>I oppose the plan to include 10 permanent residential/unrestricted stay units on the grounds that they are not permitted under <i>Local Planning Scheme No. 1</i>.</p> <p>My understanding is that the land comprising lots 1 &amp; 2 Frenchman Bay Road is categorised as Special Use Zone 13 in Schedule 4 of the abovementioned scheme.</p> <p>The list of permitted land uses in Schedule 4 does not include permanent residential or unrestricted stay units and furthermore they do not fall within the definition of "Holiday Accommodation" as defined in Schedule 1.2 of that scheme.</p> <p>A considerable amount of time and money was spent in developing the Local Planning Scheme for specific purpose of protecting Special Use Zones and restricting the types of permitted developments, so that they may be enjoyed by future generations of locals and tourists alike. The argument that the units are required in order to make the development viable must therefore be invalid and should not be considered by Council.</p> <p>I trust council will act in accordance with <i>Local Planning Scheme No. 1</i> and reject this proposal.</p>	<p>Opposition noted.</p> <p>The City of Albany sought legal counsel and advice from the Department of Planning on whether 'unrestricted stay' units could be approved on the site. The advice received stated that only land uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed 'unrestricted stay' accommodation to 'Holiday Accommodation' or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard 'Holiday Accommodation' units.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p>

No.	Submission	Officer Comment
12.	<p>In particular I would emphasise my opposition to the inclusion of residential/long term stay units such inclusion being inconsistent with the local planning scheme and hence should automatically be disallowed. In my view planning applications that are inconsistent with current schemes should not be allowed simply because of increased financial returns to the developer. For the City to approve an application that was inconsistent with its own scheme would not only make a mockery of the rationale for existing schemes, but would open the door for other development applications that are contrary to other schemes.</p> <p>I would also note what I consider a fundamental flaw in logic on p 45 and elaborated on p 49 with respect to calculating effluent loading. Whilst occupancy rates will vary throughout the year, the calculation of system capacity/load must be based on the maximum occupancy even if that occurs for only a limited time. Such a fundamental flaw suggests that other components of the report could be similarly flawed.</p>	<p>Opposition noted.</p> <p>The City of Albany sought legal counsel and advice from the Department of Planning on whether 'unrestricted stay' units could be approved on the site. The advice received stated that only land uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed 'unrestricted stay' accommodation to 'Holiday Accommodation' or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard 'Holiday Accommodation' units.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p> <p>Regarding occupancy rates, the Department of Health has provided advice that the total number of units, including caretakers and commercial units, would have to be reduced to 25 to comply with the provisions of the draft <i>Country Sewerage Policy</i>.</p>

No.	Submission	Officer Comment
13.	<p>I am in favour of a sensitive and stylish development that fits in with the local environment and enhances the site. I note that the current proposal is smaller in scale than previous.</p> <p>I do not support the inclusion of permanent residential units on the site. The site represents an opportunity to develop a high quality tourism operation.</p>	<p>Comments noted.</p> <p>Opposition to 'unrestricted stay' units is noted. The proponent has now amended the Local Development Plan to remove the 'unrestricted stay' units.</p>
14.	<p>I am in strong opposition to the LDP1 as proposed on the following grounds:</p> <ol style="list-style-type: none"> <li>1. I do not believe that a change of zoning to permit permanent residences ("unrestricted stay") units should be permitted.</li> <li>2. I believe there is insufficient detailed planning regarding provision of water, power and waste/sewerage management.</li> <li>3. I am concerned about impact on the surrounding National Park and beaches.</li> </ol> <p>Whilst I am not fundamentally opposed to the development of environmentally sensitive, well managed, quality tourist accommodation (of which there is a shortage in Albany), I am strongly opposed to the current submission. It reeks of a commercial/money making venture and not a true commitment to appropriate development of this unique property in accordance with the needs of the City of Albany, taking into</p>	<p>Opposition noted.</p> <p>The City of Albany sought legal counsel and advice from the Department of Planning on whether 'unrestricted stay' units could be approved on the site. The advice received stated that only land uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed 'unrestricted stay' accommodation to 'Holiday Accommodation' or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard 'Holiday Accommodation' units.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western</p>



No.	Submission	Officer Comment
	consideration the opinions of local residents.	<p>Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p> <p>If the proponent were to apply for on-site water abstraction and effluent disposal to serve the development, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p>
15.	<p>Opposition to the proposals solely on the basis that the inclusion of unrestricted stay is against Councils own policies in the area.</p> <p>Should Council's legal advice be that unrestricted stay is permitted, then I would have no objection to the development proceeding to the next stage of the approval process.</p>	<p>Opposition and the grounds of opposition are noted.</p> <p>The City of Albany sought legal counsel and advice from the Department of Planning on whether 'unrestricted stay' units could be approved on the site. The advice received stated that only land uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed 'unrestricted stay' accommodation to 'Holiday Accommodation' or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard 'Holiday Accommodation' units.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a</p>

No.	Submission	Officer Comment
		Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.
16.	<p>Major concerns with the waste water and sewerage disposal of this development. Ideally we would like the system to be connected to the infill sewerage system. Other than that the highest quality and functioning system should be installed.</p> <p>The use of a bore as a water source. How can it be relied upon when the water available is unknown?</p> <p>Where is the location of the water treatment plant and storage tank going to be?</p>	<p>Concerns noted.</p> <p>The Local Development Plan itself does not approve a private on-site effluent disposal system. Schedule 4 – Special Use Zone No. SU13, provision 7 of <i>Local Planning Scheme No. 1</i> provides the proponent with the ability to apply for the installation of a private on-site effluent disposal system.</p> <p>An effluent disposal management plan would be required to demonstrate that no environmental or hydrological impacts would occur on the site or on the surrounding area. Any such proposal would be subject to Department of Health approval.</p> <p>Schedule 4 – Special Use Zone No. SU13, provision 8 of <i>Local Planning Scheme No. 1</i> requires all development on the land to be connected to reticulated water. The proponent does have the ability to apply for a variation to this provision at the development stage. However, if the proponent were to apply for on-site water abstraction to serve the development, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p>

No.	Submission	Officer Comment
		Tank locations would be provided as a component of any future development application.
17.	<p>The draft plan is not in accordance with the Scheme, which requires development to compromise of tourist accommodation only.</p> <p>I am in favour of a development on the site provided;</p> <ul style="list-style-type: none"> <li>• Design gives consideration to environmental aspects and does justice to the pristine site.</li> <li>• The development has maximum aesthetic appeal.</li> <li>• Development complies with the Scheme.</li> <li>• The supply of potable water and on effluent disposal is fully reviewed by the department of Health.</li> <li>• The City can fully satisfy itself that the proponents are financially capable of developing the site.</li> <li>• The development is of an up market category which would attract the appropriate type of tourist and not end up as a "White elephant".</li> </ul> <p>It would be terrific to have a restaurant and shop.</p>	<p>The City of Albany sought legal counsel and advice from the Department of Planning on whether 'unrestricted stay' units could be approved on the site. The advice received stated that only land uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed 'unrestricted stay' accommodation to 'Holiday Accommodation' or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard 'Holiday Accommodation' units.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p> <p>If the proponent were to apply for on-site water abstraction and effluent disposal to serve the development, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on</p>

No.	Submission	Officer Comment
		<p>groundwater, aquifers and the surrounding environment.</p> <p>Concerns regarding design are noted. The <i>Frenchman Bay Tourist Development Site</i> policy would guide the design and built form of any future development on the site.</p>
18.	<p>Barely 12 months has passed since the City launched the Local Planning Scheme to guide development into the future. The draft Local Planning Scheme went through several iterations and there was considerable public consultation. I took part in this process. The City has now advertised the Local Development Plan (LDP) for Lots 1 and 2 Frenchman Bay Road, even though the LDP openly acknowledges that the row of ten permanent residential units that form a component of the LDP contravenes conditions applying specifically to SU13 in Albany's new town planning scheme. SU13 is one of the most controversial sites in Albany. Over the past decade or so, on two earlier occasions, it was explicitly determined that only holiday accommodation would be permitted on the site.</p>	<p>The City of Albany sought legal counsel and advice from the Department of Planning on whether 'unrestricted stay' units could be approved on the site. The advice received stated that only land uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed 'unrestricted stay' accommodation to 'Holiday Accommodation' or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard 'Holiday Accommodation' units.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p> <p>The decision was made to advertise the Local Development Plan to the public including the proposed 'unrestricted stay' units in the interests of transparency, as these form part of the landowners'</p>



No.	Submission	Officer Comment
	<p>The LDP is seeking to relax conditions that apply to SU13 that are specified in the ALP Scheme. Hence the LDP should be evaluated according to the extent that it has made a very strong case to amend the Local Planning Scheme in regard to each variation. In my view (see below) it has not done so. Only after the LDP has made the case can the actual plan for the site be assessed. How can anyone fairly assess the whole LDP in the absence of this critically important evidence?</p> <p>The proponents are hoping to provide the maximum number of units that are allowed on the site. Reference to the <i>Country Sewerage Policy</i> indicates that 25 units would be permitted on the site without connection to a reticulated sewer. In order to justify the building of 31 units on the site the LDP puts forward an argument based on the likely average occupancy. However, the effluent disposal system and the water supply must be able to meet the demands of the maximum occupancy. It seems likely that for some months of the year all the units will be fully occupied. Unless this capacity is provided then there is a risk that during the hottest months of the year the site will become smelly and unhygienic; as well. Water restrictions might need to be imposed.</p>	<p>ultimate aspiration for the site.</p> <p>The Local Development Plan itself does not approve on-site water abstraction or a private on-site effluent disposal system. Schedule 4 – Special Use Zone No. SU13, provisions 7 and 8 of <i>Local Planning Scheme No. 1</i> provide the proponent with the ability to apply for on-site water abstraction and the installation of a private on-site effluent disposal system.</p> <p>The Department of Health has provided advice that the total number of units, including caretakers and commercial units, would have to be reduced to 25 to comply with the provisions of the draft <i>Country Sewerage Policy</i>.</p> <p>If a development application was to include the provision of a private on-site effluent disposal system, an effluent disposal management plan would be required to demonstrate that no environmental or hydrological impacts would occur on the site or on the surrounding area. Any such proposal would be subject to Department of Health approval.</p>

No.	Submission	Officer Comment
	<p>Two main arguments are advanced in the LDP in favour of a mixed development. The first is that a strata-titled permanent residence is necessary in order to make the whole development economically viable. That may be so but there is no information to demonstrate that this is the case other than the assertion in the LDP that it is necessary. There have been other strata titled holiday accommodation ventures that have not required permanent residential units to make the development viable.</p> <p>Ratio of Permanent residential units to holiday units.</p> <p>Significance of the site – the site is identified as one of five Local Strategic sites under the <i>Significant Tourist Accommodation Sites</i> policy.</p>	<p>Comment Noted. As mentioned previously, the ‘unrestricted stay’ units have been removed from the Local Development Plan.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add ‘unrestricted stay accommodation’ as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before ‘unrestricted stay’ units could be approved on the site.</p> <p>Again, the ‘unrestricted stay’ units have been removed from the Plan.</p> <p>The significance of the site within the local planning framework is acknowledged.</p>
19.	<p>The proposed Local Development Plan is disappointing. It aims to provide very little accommodation for very few tourists. Only one kind of accommodation is proposed, in contrast to the diversity formerly provided.</p> <p>Much better use could be made of the site by diversifying the nature and quantity of accommodation. This should cater for a range of budgets and thereby enable a much larger number of</p>	<p>Comment Noted.</p> <p>Comment Noted.</p>

No.	Submission	Officer Comment
	<p>tourists to benefit from the location. More tourists would provide more benefits for the economy and vibrancy of the Albany region.</p>	
20.	<p>The proposed inclusion of permanent residential accommodation on the site is completely unnecessary in the regional context and diminishes the tourist value of the location.</p> <p>The only proposed real tourist accommodation is also to be sold off privately and individually, and the buyers would be allowed to live there for up to 3 months a year. They could hardly be considered casual tourists. Would they be obliged to rent out these temporary homes to tourists during the rest of the year? If not then this could hardly be called tourist accommodation. But if they were obliged to rent their holiday homes to casual tourists during the rest of the year, would this be a sound economic proposition? Probably not, as it would be most likely that the owners would want to be in residence during peak holiday times, and for much of the rest of the year there would be few tourists. Meanwhile, the owners would have to pay strata fees for the upkeep of the whole site, including a proposed restaurant/bar and kiosk that may or may not be occupied, and the permanent residents who occupy 1/3 of the site.</p>	<p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan.</p> <p>Local Planning Scheme No. 1 allows for 'Holiday Accommodation' to be occupied by the same person or persons for a maximum of three months within any 12 month period. On tourist strata applications, it is currently a requirement for a managing agent to be appointed. In such instances, even the owners of a unit are required to book their own personal use of the premises through the managing body.</p>

No.	Submission	Officer Comment
	<p>The proponents statement on page 8 that development of the site would not be viable without a third of the accommodation being permanent residential is unreasonable. The statement suggests that the developers are more interested in obtaining an immediate profit and then abandoning the project than in maximising the tourist potential of the site over a long period of time. With less greed, the site could again be viable as a caravan park and camp site, perhaps with the addition of chalets.</p> <p>The Development Guide Plan indicates that connecting the site to mains water is expensive and so proposes to obtain water from groundwater below the site and to dispose of effluent into this same porous ground. These two issues are clearly critical for the physical viability of the proposed development. Yet knowledge of how much groundwater might be available and the quality of this groundwater is unknown. Modern technology could treat the effluent to such a degree that it could be returned to the groundwater and the water supply, but the groundwater supply is beyond human control. Until the groundwater situation has been fully investigated, it is clearly a</p>	<p>Comment noted. As mentioned previously, the 'unrestricted stay' units have been removed from the Plan.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p> <p>The Local Development Plan itself does not approve on-site water abstraction or a private on-site effluent disposal system. Schedule 4 – Special Use Zone No. SU13, provisions 7 and 8 of <i>Local Planning Scheme No. 1</i> provide the proponent with the ability to apply for on-site water abstraction and the installation of a private on-site effluent disposal system.</p> <p>If the applicant were to apply for on-site water extraction and private on-site effluent disposal, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not</p>



No.	Submission	Officer Comment
	waste of time to discuss proposals for buildings to accommodate a finite number of people when the amount of groundwater available is almost completely unknown. The presence of Vancouver Spring and information from several bore holes indicates that there is groundwater below the site, but the quantity and seasonal variations are completely unknown.	cause any detrimental impacts on groundwater, aquifers and the surrounding environment.
21.	<p>Concerned that the tranquil beauty of this area, which is surrounded by the Torndirrup National Park, will be placed under threat by LDP1.</p> <p>Although the proponents for the development have submitted plans for an on-site water supply and sewage treatment plant, in my view they have provided insufficient detail to give confidence that their proposals will work successfully without placing the local environment at risk.</p> <p>I also fail to understand how the LDP1 which proposes ten "Unrestricted Stay Units" does not violate the Special Use Zone 13 (SUZ13) status of Lots 1 and 2. Surely it is obvious that Unrestricted Stay Units equate to Residential Units for</p>	<p>Concerns noted.</p> <p>The Local Development Plan itself does not approve on-site water abstraction or a private on-site effluent disposal system. Schedule 4 – Special Use Zone No. SU13, provisions 7 and 8 of <i>Local Planning Scheme No. 1</i> provide the proponent with the ability to apply for on-site water abstraction and the installation of a private on-site effluent disposal system.</p> <p>If the applicant were to apply for on-site water extraction and private on-site effluent disposal, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p> <p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan.</p>

No.	Submission	Officer Comment
	which the land is not zoned.	
22.	<p>Various aspects and consequences of the proposed draft development plan no. 1 (LDP1) such as sewerage &amp; effluent treatment, on-site water supply, fire protection measures &amp; noise and light pollution, management and control are not adequately covered in the proposal. These aspects need to be detailed before the public can make informed assessments of the proposal. I understand other responders to the proposal have already highlighted some of these problems.</p> <p>The proposed 'unrestricted stay units' (which can only be alternative terminology for permanent occupancy) are not in fact allowed under the current land use zoning of the Local Planning Scheme. In any case, tourism would not benefit from having permanent residents: what is required is a limited number of well designed, eco-style units set in a natural, unobtrusive setting, taking advantage of the superb site in an aesthetic manner and in harmony with the existing Goode Beach suburb and scenery.</p>	<p>The Local Development Plan itself does not approve on-site water abstraction or a private on-site effluent disposal system. Schedule 4 – Special Use Zone No. SU13, provisions 7 and 8 of <i>Local Planning Scheme No. 1</i> provide the proponent with the ability to apply for on-site water abstraction and the installation of a private on-site effluent disposal system.</p> <p>If the applicant were to apply for on-site water extraction and private on-site effluent disposal, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p> <p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan. Comments regarding preferred eco development are noted.</p>
23.	<p>The density of the development is not appropriate for the area and would have great impact on the aesthetics of this beautiful and rare area on the South coast reducing the attraction to local and international tourists.</p> <p>Frenchman Bay is of great historic and cultural value and should be preserved rather than subject to a large-scale</p>	Concerns regarding density are noted.

No.	Submission	Officer Comment
	<p>development.</p> <p>There will be an unacceptable impact on the fragile dune area environment with clearing of vegetation adjacent to Vancouver and small spring areas and impact on local wildlife adjacent to the National Park.</p> <p>A sewage treatment plant and grey water/gardens in the area above a popular swimming bay puts the enclosed bay at risk of nitrogen and phosphorous leakage that could lead to eutrophication and algal bloom that would wreck the amenity for everyone.</p> <p>The enclosed bay between the granite headlands could fill up with a toxic red tide phytoplankton bloom in summer with fish kills and loss of sea grass.</p> <p>There are small aggregates of red phytoplankton bloom between the whaling station and Bald head in Summer and it does not need any encouragement to move into Frenchman Bay.</p> <p>The area is not designated for permanent residential or unrestricted stay units.</p>	<p>The subject site has a designation under Local Planning Scheme No. 1 that allows for development, subject to conditions. Any clearing of vegetation is controlled by the Department of Environmental Regulation.</p> <p>If the applicant were to apply for on-site water extraction and private on-site effluent disposal, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p> <p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan.</p>
24.	The proposal to allow permanent residents (unrestricted stay units) at this site is contrary to the City's own planning guidelines for significant tourist sites. This area needs to be	In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local

No.	Submission	Officer Comment
	<p>protected so that both local and visiting tourists can enjoy the natural area, and its historic sites unimpeded by inappropriate development.</p> <p>The size of the current proposal is likely to cause significant damage to the marine and coastal environment through water pollution (seepage of treated sewage into the aquifer) and through excess run-off from the development (no biological, marine biological or fluid engineering data has been provided with this proposal). Where will the run-off go? How deep is the below surface aquifer? Which marine species need to be protected?</p> <p>Until significant marine surveys (of water quality, and marine species) have been conducted to establish a baseline from which any future damage can be recorded and mitigated, no proposal should be permitted to proceed.</p> <p>No detailed flora or fauna surveys have been included in this proposal. Are there pitcher plants, noisy scrub birds, or other rare species present in the largely undisturbed portion of the escarpment immediately south of the beachfront? If so, will they be protected or moved to another location?</p> <p>Little reference has been made to the historic significance of this site to early European exploration and even earlier Menang occupation of this site. This proposal shows little</p>	<p>Development Plan.</p> <p>If the applicant were to apply for on-site water extraction and private on-site effluent disposal, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p> <p>As outlined above, an applicant would be required to demonstrate that there we would be no impacts on groundwater, aquifers and the surrounding environment.</p> <p>Any clearing of vegetation is controlled by the Department of Environment Regulation. Department of Environment Regulation may require flora and fauna surveys to be undertaken, prior to any clearing being permitted.</p> <p>While the history of the site is acknowledged, the site does not have any formal Heritage designation. Any development would be</p>



No.	Submission	Officer Comment
	<p>understanding of the need to protect the extreme heritage values associated with this site. Any re-development of Lots 1 &amp; 2 Frenchman Bay should be serious in its determination to protect these values.</p> <p>No provision has been made to provide camping spaces (tent sites) or camper van sites (for Britz vans, etc.) to alleviate the problem of illegal camping which currently regularly occurs here. Clearly there is a need for low cost short-term visitors' amenities, so that tourists can use the site in a socially responsible and environmentally sensitive manner. Rather than the 50 proposed dwellings, 10 holiday units together with 15 camping sites would be much more likely to limit further environmental disturbance or historic degradation of this area. It would also be more suitable for the seasonal nature of tourism on the south coast</p> <p>The pristine natural attributes, the historical heritage area and marine environment of this area deserve the highest possible protection. Lessons should be learnt from unsuccessful disturbance of coastal environments at Emu Point and the marina at Whaleworld. A conservative approach which guarantees protection of the natural attributes of the area is necessary.</p>	<p>required to be sympathetic to the surrounding environment.</p> <p>Concerns regarding the lack of diversity within the proposal are noted. The statutory controls for the site do not stipulate the type of holiday accommodation required.</p> <p>Any future development application for the site would have to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental environmental impacts. Clause 10.2 of <i>Local Planning Scheme No. 1</i> allows the City of Albany to request such information to accompany a development application.</p>
25.	We were advised that no permanent residential development at all, other than a possible caretaker accommodation would be supported or permitted. The site was zoned specifically for	The City of Albany sought legal counsel and advice from the Department of Planning on whether 'unrestricted stay' units could be approved on the site. The advice received stated that only land

No.	Submission	Officer Comment
	<p>Tourism. Now it appears that Council are to consider the new owners current proposal which is to be afforded approximately one third Residential Status. The developer has even proposed strata title for these residential sites. This is completely against all relevant planning schemes, strategy, policy and plans in relation to development of the site. It would also yield the developer an enormous profit.</p> <p>Further, it has now been brought to public notice that this plan was prepared by the developer not Albany City Council.</p> <p>The developer's proposal also states that the project is to be considered as a 'Retreat'. This appears utter nonsense. There are no "Retreat" services offered. A kiosk, playground, gazebo and a boat parking area are site amenities. We also note that there appears no visitor parking for the units. Only the kiosk area.</p>	<p>uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed 'unrestricted stay' accommodation to 'Holiday Accommodation' or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard 'Holiday Accommodation' units.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p> <p>The plan was prepared by the proponent.</p> <p>Comments noted. Parking requirements are set by <i>Local Planning Scheme No. 1</i> and would be assessed as a component of a future development application.</p>

No.	Submission	Officer Comment
	<p>This pristine and very beautiful property affords a wonderful opportunity to provide a high quality class retreat. Something that Albany can be really proud of, one that would attract the most discerning of tourists and visitors. Not another chalet unit style get up or holiday park with one third Permanent Residential Status.</p> <p>Why should the goal posts be changed so dramatically just to support one developer? The Local Planning Scheme the Albany and the Tourists Accommodation Planning Strategy, the <i>Significant Tourist Sites</i> policy and the <i>Frenchman Bay Tourist Development Site</i> policy will all count for nothing if this plan is to succeed as proposed particularly in relation permanent residential aspect.</p>	<p>The statutory controls for the site do not stipulate the type of holiday accommodation required.</p> <p>The decision was made to advertise the Local Development Plan to the public including the proposed 'unrestricted stay' units in the interests of transparency, as these form part of the landowners' ultimate aspiration for the site.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p>
26.	I do not support this draft Local Development plan as I have serious concerns for the following reasons:	Opposition noted.

No.	Submission	Officer Comment
	<p>It has proposed permanent residential housing.</p> <p>It appears to be based on weak technical assumptions and seemingly unrealistic population criteria for water supply and effluent discharge.</p> <p>The site has been designated a Local Strategic Site and a Significant Tourist Site. This is rightly so as it is part of, and has, a world class coastal outlook and popular beach adjacent to a National Park, and as such should be for the benefit of all who wish to visit and be a source of pride for the Albany community. This is recognised by existing City of Albany management documents. Allowing 10 of 30 properties, which would take up approximately half of the area, for private ownership for a potential privileged few is wrong in principal and inconsistent with the City of Albany's own local planning strategy, scheme and policies.</p> <p>Permanent residential housing is not a tourist component of the development.</p> <p>The proposal appears to be presenting a permanent residential land development in the guise of a tourist facility development. The fact that permanent residency has been included in a tourist development elsewhere in the south west, does not mean that it is appropriate for this site.</p> <p>The Frenchman Bay and Goode Beach communities do not need more permanent residential houses (10) in the market.</p>	<p>Concerns regarding 'unrestricted stay' units within Goode Beach are noted. In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan.</p> <p>The City of Albany sought legal counsel and advice from the Department of Planning on whether 'unrestricted stay' units could be approved on the site. The advice received stated that only land uses contained within Schedule 4 – Special Use Zone No. SU13 of <i>Local Planning Scheme No. 1</i> can be approved on the site. Consequently, the proponent was invited to change the proposed 'unrestricted stay' accommodation to 'Holiday Accommodation' or alternatively, remove the units from the plan. The proponent elected to transfer the units to standard 'Holiday Accommodation' units.</p> <p>The decision was made to advertise the Local Development Plan to the public including the proposed 'unrestricted stay' units in the interests of transparency, as these form part of the landowners' ultimate aspiration for the site.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a</p>



No.	Submission	Officer Comment
	<p>I have a concern that peak water demand has not been fully considered. The number of units to be serviced appears to be based on 70% occupancy over a year. This criterion may be acceptable for calculations for financial returns but does not seem acceptable for detailed design. We know that there will be times when there will near 100% occupancy in the summer or in times of special events and it would seem that it is this full occupancy that should be considered for design of the supply system including the source aquifer.</p> <p>There appears to be a weak technical assumption that there is sufficient yield and overall capacity from an aquifer that has been used before against different design criteria. In addition it is my understanding that there would be significant investigative work to be undertaken to verify that the aquifer is capable of supplying either the 70% occupancy or the peak occupancy water supply criteria.</p> <p>The concern regarding the occupancy criteria for design for water supply applies for effluent discharge i.e. it would seem that 100% occupancy should be used as the design criteria. In addition it would seem that it is essential that additional investigative hydrogeological and hydrological work should be undertaken to define the attributes of the aquifer, surface and subsurface drainage, and establish that they are capable dealing with 100% occupancy effluent discharge without</p>	<p>subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p> <p>Concerns regarding on-site water abstraction and effluent disposal are noted. The Local Development Plan itself does not approve on-site water abstraction or a private on-site effluent disposal system. Schedule 4 – Special Use Zone No. SU13, provisions 7 and 8 of <i>Local Planning Scheme No. 1</i> provide the proponent with the ability to apply for the installation of a private on-site effluent disposal system.</p> <p>If the proponent were to apply for on-site water abstraction and private on-site effluent disposal to serve the development, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p>

No.	Submission	Officer Comment
	<p>pollution or cross contamination of the aquifer.</p> <p>Retention of vegetation. Notwithstanding the formal environmental process that would be expected to be undertaken, I have a concern that the site will be cleared without consideration of retaining trees. The developer will want to maximise views for the benefit on and around the property boundary.</p> <p>Visual Impact. It should be considered that this development will be seen from all points of the compass: from the ocean; from Frenchman Bay Road, descending into the area; from the west, near Vancouver Point overlooking Whaler's Beach, (a world class vista); and from the East by everybody leaving Discovery Bay. The overall visual impact should be a serious consideration.</p> <p>Restaurant. It is not clear whether there is a kiosk, café and restaurant included in the proposed development or one or two of these.</p> <p>It has not been clear what the status is of the document that has been advertised and how it fits in the approval process.</p>	<p>Any clearing of vegetation is controlled by the Department of Environment Regulation. Department of Environment Regulation may require flora and fauna surveys to be undertaken, prior to any clearing being permitted. The City of Albany would also want to maximise the amount of vegetation retained on the site, while ensuring that any development is adequately protected from bushfire.</p> <p>The <i>Frenchman Bay Tourist Development Site</i> policy sets requirements for the built form of any development on the site and this would be assessed as a component of any future development application.</p> <p>All of the land uses described can be accommodated within the 'Restaurant' land use, as defined in <i>Local Planning Scheme No. 1</i>.</p> <p>The application is for a Local Development Plan. The plan has been prepared by the proponent. As with all applications, the plan is advertised under the City of Albany letterhead. Public</p>

No.	Submission	Officer Comment
	<p>All these management documents appear to defend the principal that there should be no permanent housing on tourist sites, and that there should be short term accommodation. I cannot agree with the Council Officer's advice to the City of Albany in his report that 'the proposal is consistent with the strategic direction set in the ALPS'. This appears to be incorrect and misleading advice.</p> <p>There has been a lot of work done in the past to establish sensible and considered strategies, schemes and policies and these should not be dismissed or varied without the same level of consideration.</p> <p>I am concerned about the comment made in the Council Officer's report regarding exercising the quasi-judicial function of the Council.</p>	<p>advertising is not undertaken by the proponent.</p> <p>The <i>Albany Local Planning Strategy</i> is a strategic document that informs <i>Local Planning Scheme No. 1</i> and Local Planning Policies. The Officer's recommendation to Council to advertise the proposal was made on the basis of a tourism outcome. The recommendation was simply that the proposal was sufficient for public advertising.</p> <p>The decision was made to advertise the Local Development Plan to the public including the proposed 'unrestricted stay' units in the interests of transparency, as these form part of the landowners' ultimate aspiration for the site.</p> <p>Council is a quasi- judicial decision making body. This statement is in all Planning and Development Council items.</p>
27.	<p>I do not support the proposal to relax the requirements for connection to reticulated water and sewer:</p> <p>It is inappropriate to rely on an old disused caravan park bore for a sustainable secure potable water supply</p> <p>Water usage within the proposed development is likely to be far higher than for the old caravan park. The proponent has quantified water disposal at 13,000 litres per day (ref 5.4.3). However, again no hydrology data has been presented to help</p>	<p>Objection in relation to Scheme requirements regarding water and sewer connections is noted.</p> <p>Concerns regarding on-site water abstraction and private on-site effluent disposal are noted.</p> <p>The Local Development Plan itself does not approve on-site water abstraction or a private on-site effluent disposal system. Schedule 4 – Special Use Zone No. SU13, provision 7 of <i>Local Planning Scheme No. 1</i> provides the proponent with the ability to apply for</p>

No.	Submission	Officer Comment
	<p>understand the quantity or quality of water in the aquifer, the replenishment rate, or the flow behaviour of effluent on this site. So for 5.4.1 and 5.4.2, there is no data provided.</p> <p>Reticulated water supply is readily available at nearby Goode Beach and presumably also at the adjacent Whale World/Discovery Bay site.</p> <p>There is a risk of salt-water incursion and/or contamination from on-site effluent disposal that at any time could put at risk the availability of adequate potable water supply.</p> <p>The unknown and unqualified behaviour of on-site effluent disposal places at risk the long-term health of the near shore marine environment of unique sea-grass meadows and the amenity of the public park and picnic area of the Frenchman Bay precinct.</p> <p>I do not support the proposal to increase the number of unsewered units from 25 to 30. There is no evidence to support a relaxation of the <i>Country Sewerage Policy</i>. Concerned of pollution of the near-shore marine environment.</p> <p>Horizontal dispersion of effluent on-site may result in discharge of effluent from the north-facing escarpment, affecting the amenity of the public recreational picnic area and potentially damaging the marine environment.</p> <p>No hydrology data has been presented to help understand the movement or flow behaviour of effluent. I am concerned at the</p>	<p>on-site water abstraction and the installation of a private on-site effluent disposal system.</p> <p>If the proponent were to apply for on-site water abstraction to serve the development, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p> <p>The Department of Health has provided advice that the total number of units, including caretakers and commercial units, would have to be reduced to 25 to comply with the provisions of the draft <i>Country Sewerage Policy</i>.</p> <p>Concerns regarding potential environmental impacts from private on-site effluent disposal are noted.</p> <p>If the proponent were to apply for private on-site effluent disposal to serve the development, this would have to be supported by an</p>



No.	Submission	Officer Comment
	<p>risk of localised eutrophication.</p> <p>The local soil types have a poor nitrate and phosphate retention capacity.</p> <p>The proponents have identified a need to dispose of 13,000 Litres of effluent per day, and suggested the use of ATU systems with a designated dispersal zone of 3,750m<sup>2</sup> located on the northern aspect of the accommodation units. This location is the most sensitive area for the risk of horizontal effluent dispersal from the north-facing escarpment or into the nearshore marine environment.</p> <p>I am concerned that the existing proposal will not be completed if allowed to be a staged construction. The development should be undertaken as a single stage construction project to allay the conflicting impacts of simultaneous ongoing construction activities and tourism enterprises.</p> <p>I am concerned that the proponents' proposal is simply an attempt to 'value-add' with no genuine intention to actually develop. This property has been subject to a series of speculative ownership plays. There is no information within any of the documentation as to the past performance or previous tourism accommodation development experience of the proponents. I request that Council incorporate a 'sunset clause' requiring development to be substantially underway or completed within a certain time frame.</p>	<p>effluent disposal management plan to demonstrate that no environmental or hydrological impacts would occur on the site or on the surrounding area. Any such proposal would be subject to Department of Health approval.</p> <p>The City of Albany does not have the ability to enforce that a development be completed as a single construction project. However, the City of Albany could potentially apply a planning condition on any future Planning Scheme Consent, requiring the provision of a staging plan.</p> <p>All Planning Scheme Consents must be commenced within two years of the date of issue. If the development has not substantially commenced by the expiration of this time period, the approval would lapse and a new approval would have to be obtained before development could commence.</p>

No.	Submission	Officer Comment
	I wish to register my disappointment with the standard and content of the Agenda Briefing Notes.	Comment noted.
28.	<p>As residents of Goode Beach we are absolutely opposed to this development proposal and would be outraged if this should go through the planning process and be built.</p> <p>This proposal is not appropriate for the location, it is too big, there should be no permanent residential dwellings, it will spoil what is a beautiful natural landscape, and has absolutely NO benefits for the local community or for Albany. The only people to benefit will be the developers themselves, which of course is usually the case! And once this site is ruined by them it will be ruined forever.</p>	<p>Opposition noted.</p> <p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan.</p> <p>The <i>Frenchman Bay Tourist Development Site</i> policy sets requirements for the built form of any development on the site and this would be assessed as a component of any future development application.</p>
29.	<p>This development should go ahead as soon as possible providing legalities are met.</p> <p>It is imperative that the development is made in such a way that it is respectful to the visual aspect of the environment.</p> <p>It would be great for social facilities such as a restaurant or coffee shop to be in the area.</p>	<p>Support Noted.</p> <p>The <i>Frenchman Bay Tourist Development Site</i> policy sets requirements for the built form of any development on the site and this would be assessed as a component of any future development application.</p>
30.	Under current conditions no development has been successful. Better to loosen those restrictions and achieve some	<p>Support Noted.</p> <p>The <i>Frenchman Bay Tourist Development Site</i> policy sets</p>

No.	Submission	Officer Comment
	<p>development rather than none at all.</p> <p>Development will employ local people in both the development and operational phases.</p> <p>Goode Beach will benefit from more local facilities.</p> <p>As long as development does not impose too much upon visual amenity from Vancouver Road it should go ahead.</p> <p>Scaremongering and NIMBY-ism have no place in the decision-making process.</p>	<p>requirements for the built form of any development on the site and this would be assessed as a component of any future development application.</p>
31.	<p>I have no objection to the proposed Frenchman Bay.</p> <p>I believe the development would be beneficial to the residents of the Goode Beach Community with the inclusion of a Kiosk and restaurant.</p> <p>I believe that the propose development would not be significantly different in terms of environmental impact to the previous development on the site.</p>	<p>Support Noted.</p> <p>Any future development application would have to be accompanied by appropriate studies to demonstrate that no environmental or hydrological impacts would occur on the site and surrounding area as a result of the development.</p>
32.	<p>It will give the area a shot in the arm for further development</p> <p>It will add weight to the internet users requests to be upgrade</p>	<p>Support Noted.</p> <p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local</p>

No.	Submission	Officer Comment
	<p>the service.</p> <p>The inclusion of a kiosk and restaurant will enhance the quality of life at Goode Beach</p> <p>Units would provide an alternative housing market in the area.</p> <p>There is no deep sewerage at a number of blocks at Goode beach or Discovery bay.</p> <p>We support the application.</p>	Development Plan.
33.	We see no problem development preceding with 10 private residences and the remaining 20 used for Tourism.	<p>Support Noted.</p> <p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan.</p>
34.	This sort of development would be welcome, but without the proposed unrestricted stay units.	<p>Support Noted.</p> <p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan.</p>
35.	<p>I would like to support the proposed development.</p> <p>It may also reduce the amount of unauthorised camping that occurring in the nearby car park.</p>	Support Noted.
36.	<p>We favour the development, which we consider could become a prime tourist destination.</p> <p>The city policy does preclude residential development.</p>	<p>Support Noted.</p> <p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan.</p>



No.	Submission	Officer Comment
	Council should amend the policy or deny the current proposal.	It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.
37.	No objection – good plan.	Support Noted.
38.	No objection.	Support Noted.
39.	No objection.  A portion of the site should be dedicated to caravans.	Support Noted.  The statutory controls for the site do not stipulate the type of holiday accommodation required.
40.	I think this will be a great development for Albany. It will be great to see this area put to use.	Support Noted.

No.	Submission	Officer Comment
41.	<p>I support the development.</p> <p>The Frenchman bay and peninsula should be shared.</p> <p>The shop was previously well utilised.</p>	Support Noted.
42.	<p>Increase tourism development in Albany.</p> <p>Job creation will occur.</p> <p>Permanent units will provide the opportunity for downsizing.</p> <p>A shop and cafe will be of benefit for the area.</p> <p>Better to have something built than the current eyesore</p> <p>People have the right to build on their land within Council rules without Locals saying no.</p>	<p>Support Noted.</p> <p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p> <p>The public advertising process is a component of the assessment procedure.</p>
43.	<p>We support the draft plan in the context that it will have no negative impact upon our lifestyle at Goode Beach. If anything it will enhance the area in terms of real estate values, the provision of better amenities and the possibility long needed public services for the area together with maybe providing</p>	<p>Support Noted.</p> <p>Any future development application would have to be accompanied by appropriate studies to demonstrate that no environmental or hydrological impacts would occur on the site and surrounding area</p>

No.	Submission	Officer Comment
	<p>resources to preserve the parkland reserve at Frenchman By which was once the site of the former Norwegian Whaling Station.</p> <p>We with confidence rely upon the relevant authorities to work through the issues of effluent and water supply for which there are ways to overcome. I do not have a problem with part of the development being utilised for longer term accommodation.</p>	<p>as a result of the development.</p>
44.	<p>We support both options offered for short and long term accommodation.</p> <p>Long term accommodation will also provide a draw for visitors.</p> <p>We believe the business of Discovery Bay will benefit from the nearby development.</p> <p>We trust that the relevant agencies will work with the developer in an attempt to resolve planning issues surrounding this project.</p>	<p>Support Noted.</p> <p>Any future development application would have to be accompanied by appropriate studies to demonstrate that no environmental or hydrological impacts would occur on the site and surrounding area as a result of the development.</p>
45.	<p>We notice the development proposes both Restricted and Unrestricted stay units. We recognise that for developments to be financially viable nowadays it is necessary to include Unrestricted residences such that a more permanent occupancy is possible.</p> <p>Since the old caravan park has been removed the nearest</p>	<p>Support Noted.</p> <p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan.</p> <p>It should be noted that the proponent has the ability to apply for a</p>

No.	Submission	Officer Comment
	<p>kiosk where a paper or other small sales facilities is at Little Grove a good drive away. Having a kiosk will be great and hopefully will also provide a selection of coffee, etc. to this otherwise lonely beach walking location</p> <p>Seeing the development comprises low density single units this has enabled a great deal of open space around the development in keeping with the ambiance and amenity of the area.</p> <p>The development kept the nearest unit is at least 140m from the Vancouver Spring, which should maintain no possibility of influence over the spring.</p>	<p>Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p> <p>The public advertising process is a component of the assessment procedure.</p> <p>Any future development application would have to be accompanied by appropriate studies to demonstrate that no environmental or hydrological impacts would occur on the site and surrounding area as a result of the development.</p>
46.	<p>I wish to comment initially on the effect of water disposal on the site from the intended Resort development toilets and bathwater. In 1962 we needed a source of water for household purposes and established a bore on what is now Lot 216 La Perouse Road. This supplied water to ourselves and some of the early Goode Beach residents up to 1975 when the Water Corporation provided a reticulated supply. In 2003 a bore was sunk on Lot 65 (7 Klem Road) to service 4 neighbouring lots in the Klem Road/Fynd Street area. This bore was sunk to a depth of 25 metres from a ground level of 14 metres (AHD).</p> <p>Located above this bore and draining into the water basin were 38 septic tanks with a further five tanks located within the basin. The water from the bore was analysed in a</p>	<p>Comments regarding test results are noted.</p> <p>If the proponent were to apply for on-site water abstraction to serve the development, this would have to be supported by appropriate studies and on-site testing to demonstrate to both the City and relevant State Government agencies that it would not cause any detrimental impacts on groundwater, aquifers and the surrounding environment.</p>



No.	Submission	Officer Comment
	<p>microbiological test in May.</p> <p>I note that the number of resort units proposed is 30, which is somewhat less than the sample of 43 quoted above. It could be reasonably suggested that the impact on the local resort water table would provide a similar or lesser level of analysed content to that above. The MPL assessment of the suitability of the tested Goode Beach bore on lot 65 for household use was that it was "quite adequate".</p> <p>As regards the proposal to develop both restricted and unrestricted stay units in the proposed resort, I can quote my experience with a similar layout of a unit I owned for some 10 years in Cairns in Queensland. That development contained some 89 short-term lettable units managed by a body corporate under a Community Titles Scheme. Also within the freehold land title were some 48 units in a separate Community Titles Scheme with a permanent residential section known as Marlin Cove Mahogany Village (Residential Estate). Both groups were within the same parcel of land, had common road access, common bore water supply and reticulation and were built to the same architectural designs; viz groups of four to eight two storey units. Both contributed to the same maintenance requirements as regards common property and as far as I was aware in my ten years there the system worked well. I cannot see that some very similar arrangement could not be satisfactory for the Frenchman Bay site, allowing for the differences in the Planning and Land ownership structures between Queensland and Western Australia.</p> <p>In the 50 years we lived at Goode Beach we had the benefit of</p>	<p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan.</p> <p>It should be noted that the proponent has the ability to apply for a Local Planning Scheme amendment to add 'unrestricted stay accommodation' as a permissible land use under Schedule 4 – Special Use Zone No. SU13. Any such amendment would be subject to initiation by Council, a public advertising and referral process, adoption by Council and final approval by the Western Australian Planning Commission and Minister for Planning. If a Local Planning Scheme amendment was to be successful, a subsequent review of, or variation to the <i>Significant Tourist Sites</i> policy would also have to be sought by the proponent before 'unrestricted stay' units could be approved on the site.</p> <p>The public advertising process is a component of the assessment procedure.</p>

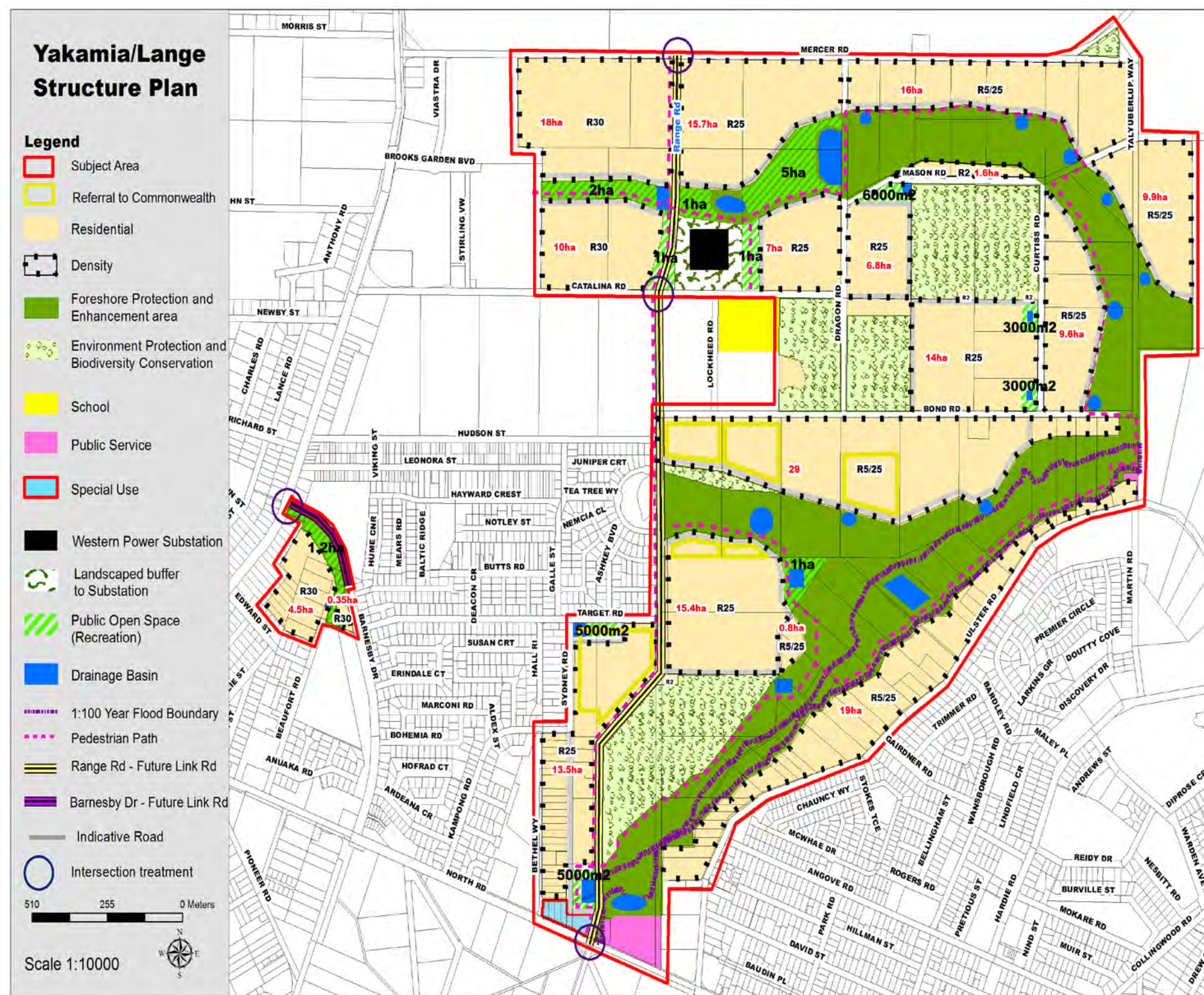
No.	Submission	Officer Comment
	<p>the availability of a dining room at the then Caravan Park and the proposed resort will be a welcome replacement of this. Sunday lunches at the caravan park were a great favourite with many Goode Beach residents. The addition of the proposed kiosk will help to replace the small shop at the caravan park. This of course will also be an added attraction to those many weekend and weekday tourists and Albany locals who make use of the beach, boat ramp, toilet block and parking areas. In short I consider that this development, of what is one of the most outstanding sites in WA, can only be of benefit to the City of Albany. The city is crying out for four star tourist development and it is time that Albany is in a position to provide a reasonable tourist comparison with other coastal areas in both Western Australia and the Eastern States.</p>	<p>Support of the proposed restaurant and kiosk is noted.</p>
<p>47. (Pro forma x 28)</p>	<p>I have reviewed the plan that is intended to guide the future redevelopment of the Old Frenchman Bay Caravan Park Site and I support the general layout, intensity and built form that is shown on the plan, as I believe it to be of a scale and design that is responsive and sensitive to the physical and environmental attributes of the site. I am supportive of both the short stay holiday accommodation component and the unrestricted stay component, and understand that the project must be financially feasible if it is to make a real contribution to tourism in the locality and the region, so that this tourist site can be reactivated with a high standard of accommodation and other facilities that will also provide a wider support for residents and the local tourism industry.</p>	<p>Support Noted.</p> <p>In response to legal advice and community feedback, the proponent has removed the 'unrestricted stay' units from the Local Development Plan.</p> <p>The <i>Frenchman Bay Tourist Development Site</i> policy sets requirements for the built form of any development on the site and this would be assessed as a component of any future development application.</p>



## SCHEDULE OF COMMENTS

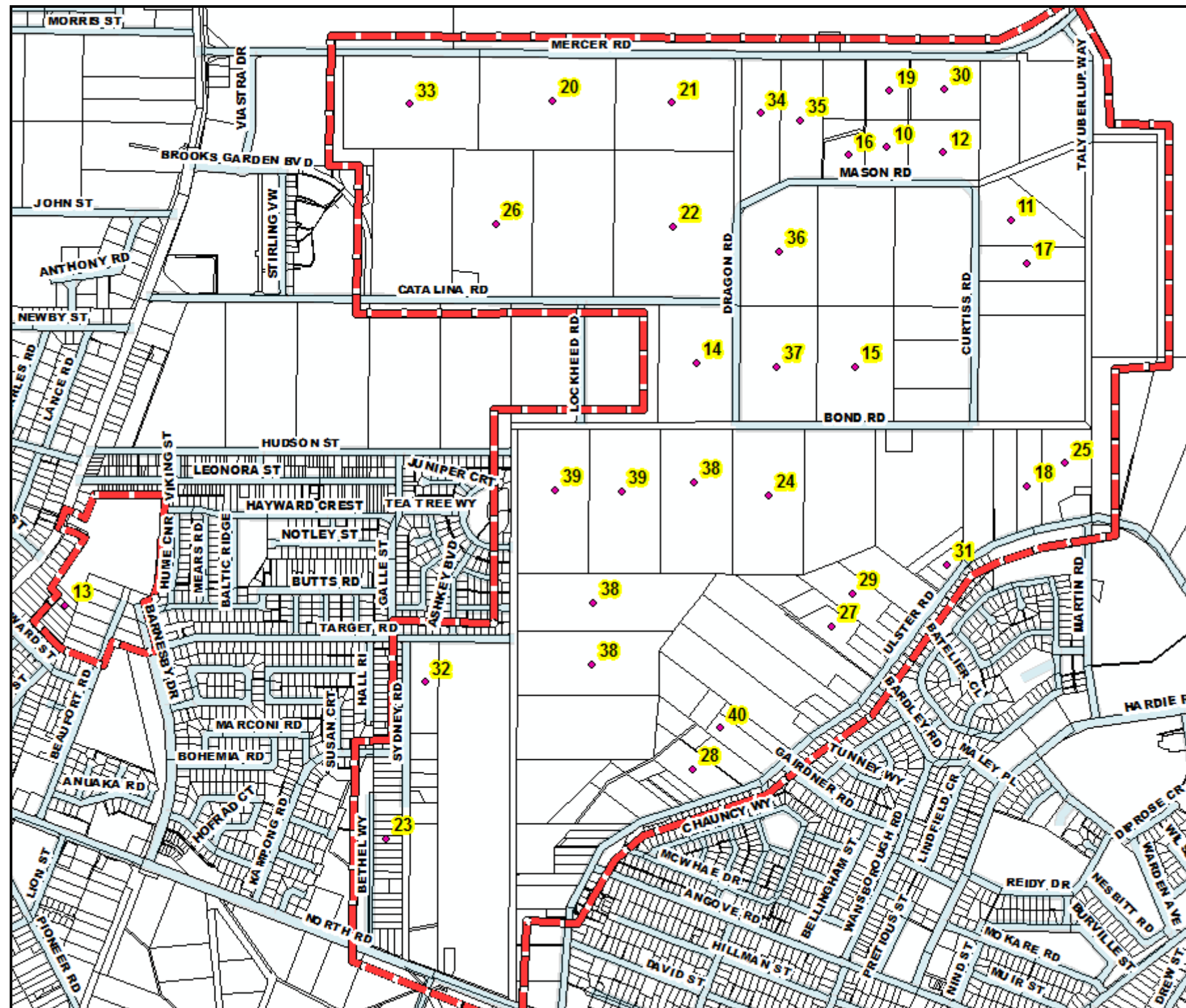
# Yakamia/Lange Structure Plan

## Advertised Plan

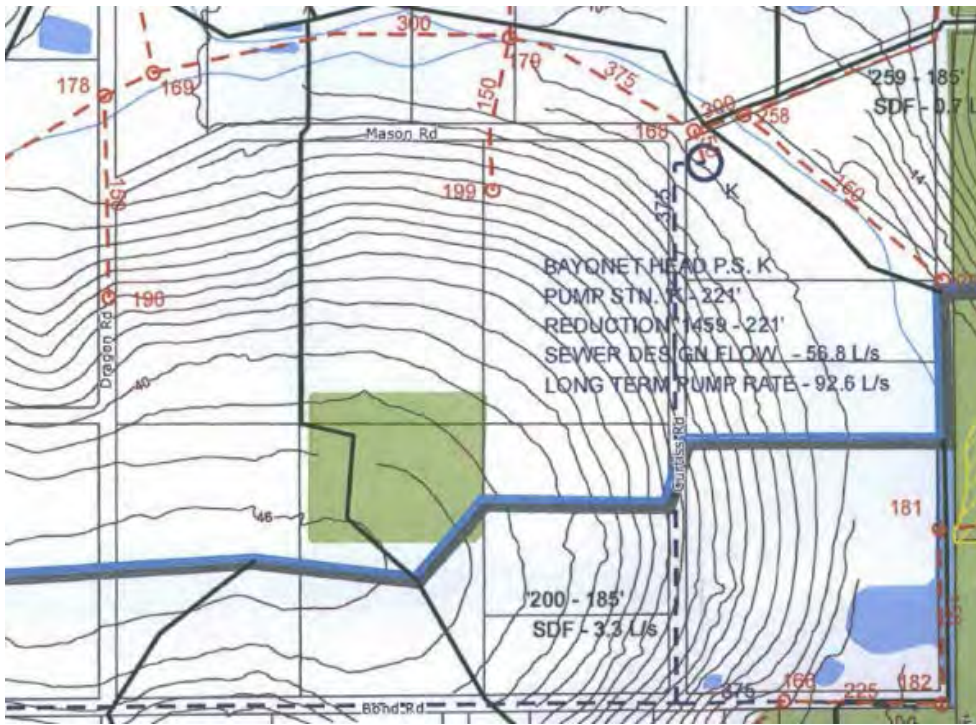
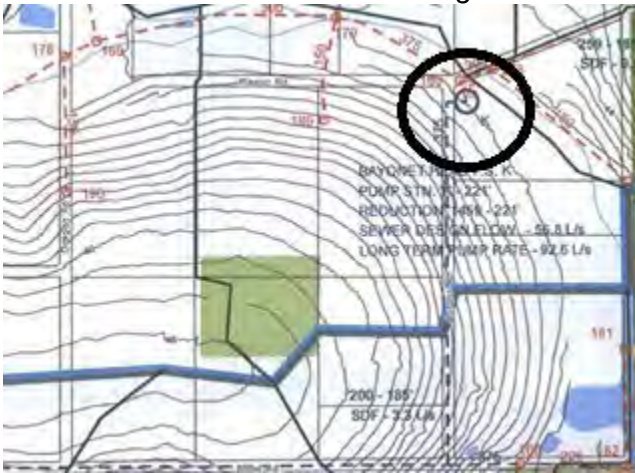




## Properties/Comment





No	Submission	Comment - Landholder	Recommendation - COA
1	Main Roads Western Australia	<p><b>Barnesby Drive to Chester Pass Road Intersection</b></p> <p>1. The proposed connectivity via Barnesby Drive to Chester Pass Road would increase conflict points on Chester Pass Road and would have a substantial impact on properties adjacent to this intersection.</p> <p>Main Roads considers the connection of Barnesby Drive to Hudson Street and the connection Hudson Street to Catalina Road as a solution in providing connectivity. This would negate the need for the Barnesby Drive/Chester Pass Road intersection.</p>	<p><b>Barnesby Drive to Chester Pass Road</b></p> <p>1. The City requested MRWA to consider a left in and out connection between Chester Pass Road and Barnesby Drive.</p> <p>Main Roads agreed that this may work subject to a dedicated left turn pocket into the proposed Barnesby Drive intersection and an acceleration lane from the intersection onto Chester Pass Road, heading toward the roundabout.</p> <p>Recommend that the structure plan is changed such that connection to Barnesby Drive is restricted to left out and left in only.</p>
		<p><b>Contributions</b></p> <p>1. Amend point 'g)', page 57 of the draft structure plan.</p>	<p><b>Contributions</b></p> <p>1. Delete point 'g)', page 57 of the draft structure plan, which reads:</p> <p><i>The Barnesby/Chester Pass Road intersection (approximate value - \$1.5million) is to be funded by Main Roads WA and the City of Albany.</i></p>
2	Telstra	<p><b>Telstra Infrastructure</b></p> <p>1. Landowners/developers will need to submit applications for network extensions prior to construction. Applications will need to be made to the National Broadband Network for development or subdivision of more than 100 lots.</p>	<p><b>Telstra Infrastructure</b></p> <p>1. Include the following commentary within structure plan:</p> <p><i>Prior to future subdivision and/or development proposing more than 100 lots, applications will need to be made to the National Broadband Network.</i></p>
3	Water Corporation	<p><b>Staging of Development</b></p> <p>1. The area will need to be developed in a logical and orderly manner from west to east. Leapfrogging the urban front will likely incur costs for the developers in the construction of temporary wastewater infrastructure and the extension of water reticulation mains.</p> <p><b>Pump Station</b></p> <p>1. Servicing relies on the construction of a major waste pumping station shown in following plan. Provision will need to be made for a suitable odour buffer around the pumping station.</p> 	<p><b>Staging and Development</b></p> <p>1. Include the following commentary within the structure plan:</p> <p><i>The area will need to be developed in a logical and orderly manner from west to east. Leapfrogging the urban front will incur costs for the developers in the construction of temporary wastewater infrastructure and the extension of water reticulation mains.</i></p> <p><b>Pump Station</b></p> <p>1. Annotate on the structure plan map, the approximate location of a Waste Water Pumping Station and advise the following within the structure planning text:</p> <p><i>The structure plan indicates the location of a future Waste Water Pumping Station (WWPS) and associated mains infrastructure. The location is approximate and has been based on land form and the need to maximise the catchment coverage of the pump station. The exact location of future WWPS will be determined at the subdivision stage in liaison with the Water Corporation. The required size of the WWPS site and the configuration of any odour buffer around the WWPS will also be detailed at the subdivision stage.</i></p>  <p><i>The ultimate pump rate of a WWPS has been planned to be in the order of 92 litres/second. The WWPS will therefore be built as a 'Type 90' WWPS, which requires an odour buffer of 30m radius measured from the centre of the WWPS wet well. A 'Type 90' WWPS site typically requires an area of 2,000-3,000m<sup>2</sup> (sometimes</i></p>

			<p><i>smaller). The size and configuration (usually rectangular) of the WWPS site will be based on the amount of underground emergency storage vessels required for that location. The site for the future WWPS will need to be created at the subdivision stage and transferred to the Water Corporation.</i></p>
		<b>Ulster Road</b> 1. The existing gravity sewer along Ulster Road is unlikely to be able to serve the proposed R5/R25 area along the northern side of Ulster Road.	<b>Ulster Road</b> 1. Change elements within the structure plan such that the areas adjacent to Ulster Road can only be developed to a minimum lot size of 3000m <sup>2</sup> (deep sewer not required), being consistent with current scheme requirements.
		<b>Cost Sharing</b> 1. Landowners/developers bounded by Chester Pass Road, Edward Street and Beaufort Road will need to coordinate and share the cost of sewerage extensions to service higher density development. A detailed plan should include a servicing report examining sewerage options and layouts.	<b>Cost Sharing</b> 1. Include the following commentary within structure plan:  <i>Landowners/developers bounded by Chester Pass Road, Edward Street and Beaufort Road will need to coordinate and share the cost of sewerage extensions to service higher density development. A detailed plan should include a servicing report examining sewerage options and layouts.</i>
		<b>Reticulated Water</b> 1. While the Water Corporation has made allowances for water servicing to the Yakamia area, the Corporation has not prepared a detailed water distribution and reticulation layout. Water reticulation mains of 200mm diameter and a water main along Catalina Rd of 250mm will be required.	<b>Reticulated Water</b> 1. Include the following commentary within structure plan:  <i>While the Water Corporation has made allowances for water servicing to the Yakamia area, the Corporation has not prepared a detailed water distribution and reticulation layout. Water reticulation mains of 200mm diameter and a water main along Catalina Rd of 250mm will be required.</i>
4	Department of Education	<b>Primary School</b> 1. The expected yield of development (2,700 dwellings) will generate a need for an additional primary school. The primary school site identified within the Catalina Structure Plan along with the existing Yakamia Primary School will provide educational facilities for the anticipated student yield.	<b>Primary School</b> 1. No additional comments or requirements required.
5	Department of Parks and Wildlife	<b>Fauna</b> 1. The structure plan states that the subject area contains habitat for the EPBC listed Black Cockatoo, namely Carnaby's Black Cockatoo ( <i>Calyptorhynchus latirostris</i> ) and Western Ringtail Possum ( <i>Pseudocheirus occidentalis</i> ). The structure plan needs to include the following: <ul style="list-style-type: none"> <li>• EPBC listed Baudin's Black Cockatoo (<i>Calyptorhynchus baudinii</i>) and the Forest Red-tail Black Cockatoo (<i>Calyptorhynchus banksii naso</i>), which are known to occur; and</li> <li>• Southern Brown Bandicoot or Quenda (<i>Isodon obesu/us</i>), which is listed as priority 5 'conservation dependent'.</li> </ul>	<b>Fauna</b> 1. Identify within the structure plan, the following species as being known to occur in the structure plan area: <ul style="list-style-type: none"> <li>• EPBC listed Baudin's Black Cockatoo (<i>Calyptorhynchus baudinii</i>) and the Forest Red-tail Black Cockatoo (<i>Calyptorhynchus banksii naso</i>); and</li> <li>• Southern Brown Bandicoot or Quenda (<i>Isodon obesu/us</i>), which is listed as priority 5 'conservation dependent'.</li> </ul>
		<b>Priority Species</b> 1. The plan correctly states that the subject area contains no listed threatened flora. However priority flora <i>Boronia crassipes</i> (P3), <i>Laxmania jamesii</i> (P3) and <i>Leucopogon altemifo/ius</i> (P4) are recorded from the area and should be mentioned.	<b>Priority Species</b> 1. Make mention within structure plan of the following priority species as being evident within the area:  <i>Priority flora: Boronia crassipes (P3), Laxmania jamesii (P3) and Leucopogon altemifo/ius (P4).</i>
		<b>Albany Regional Vegetation Survey</b> 1. Section 2.2 on page 23 lists the "Previous Reports and Studies" that have played a part in guiding the development of the Yakamia/Lange Structure Plan. The List should include the <i>Albany Regional Vegetation Survey 2010</i> .	<b>Albany Regional Vegetation Survey</b> 1. Make reference to the following report within section 2.2: <i>Albany Regional Vegetation Survey 2010</i> .
		<b>Typha</b> 1. Page 28 should provide notes for clarification regarding ARVS unit 68 Typha orientalis sedgeland in that it is only mapped where it occurs as a mosaic with remnant vegetation (see page 185 ARVS 2010), as Typha is an introduced weed.	<b>Typha</b> 1. Include the following within the structure plan:  <i>Typha is only mapped where it occurs as a mosaic with remnant vegetation (see page 185 ARVS 2010), as Typha is an introduced weed.</i>
6	Department of Planning	<b>Structure of Document</b> 1. A date on the front page is recommended to assist with version control.	<b>Structure of Document</b> 1. Include a date on the front page of the document to assist with version control.


		<ol style="list-style-type: none"> <li>2. The implementation section should be included in the statutory section.</li> <li>3. Some figures contradict each other, for example, the 100 year ARI is inconsistent between Plan 6 (Existing flood extent and Key Reporting Locations) and Plan 9 (Opportunities and Constraints Plan).</li> <li>4. Plans throughout document should have an associated legend and be referenced in the text of document.</li> <li>5. It is recommend the Opportunities and Constraints plan be provided up front in the document and discussed as this plan has informed the content and development of the Structure plan.</li> <li>6. The structure plan should include references to the scheme where relevant.</li> <li>7. The water management strategy section should be in the background/explanatory section, rather than implementation section.</li> <li>8. Page numbering and clause numbering could be improved.</li> <li>9. The statutory section should outline all provisions and standards which have statutory effect and should not include any explanations, description or supporting information – this needs to be in the background section.</li> <li>10. The endorsement page refers to Scheme 1A and Scheme 3 and should refer to Local Planning Scheme No 1.</li> <li>11. Please refer to the Planning website, <a href="http://www.plannin.wa.gov.au/publications/823.asp">http://www.plannin.wa.gov.au/publications/823.asp</a> with regard to Structure Plan digital data and mapping standards for the structure plan map.</li> </ol>	<ol style="list-style-type: none"> <li>2. Move implementation section of structure plan document to statutory section.</li> <li>3. Delete Plan 6.</li> <li>4. Noted. Some plans are sourced without a legend and therefore not practical to apply a legend.</li> <li>5. Include commentary relating to Opportunities and Constraints plan up front in the document as components of this plan have been used to inform the content and development of the structure plan.</li> <li>6. Make reference within the structure plan to the scheme where relevant.</li> <li>7. Move the water management strategy section to the background/explanatory section, rather than implementation section. Included as an appendix.</li> <li>8. Make corrections for page and clause numbering.</li> <li>9. Move any explanations, description or supporting information from the statutory section of the document to an appendix.</li> <li>10. Change the endorsement page so that it refers to Local Planning Scheme No 1 and not Scheme 1A and Scheme 3.</li> <li>11. Refer to <a href="http://www.planning.wa.gov.au/dop_pub_pdf/Structure_Plan_Digital_Data.pdf">http://www.planning.wa.gov.au/dop_pub_pdf/Structure_Plan_Digital_Data.pdf</a>  Changes made to structure plan map to match planning commission requirements.</li> </ol>
		<p><b>Operation/Implementation</b></p> <ol style="list-style-type: none"> <li>1. It should be clarified at the front of the structure plan report that this is a statutory structure plan for land zoned Future Urban as it is a requirement of the scheme and is prepared under the scheme (reference scheme clauses). Once endorsed by the WAPC it will have statutory effect.</li> <li>2. At 1.8 Implementation, it states there are a number of steps to be taken prior to implementation. This is incorrect. Once the structure plan is endorsed in accordance with sub-clause 5.9.1.5.10 the structure plan comes into effect. If further investigation is required, the following statement is suggested; for example, An application for subdivision to create more than three lots shall be accompanied by the following water management plan, bush fire hazard assessment , etc</li> <li>3. It is unnecessary to rezone the Future Urban land to Residential. Sub-clause 5.9.1.8.5 of <i>Local Planning Scheme No. 1</i> states for land within the Future Urban zone, unless otherwise specified by the structure plan, the reserves, zones and uses shall have the same force and effect as if enacted as part of the scheme. If the land was rezoned to residential the structure plan would have no effect or head of power.</li> <li>4. As the structure plan technically only applies to the Future Urban zoned land, it needs to be specific in stating how it applies over the Rural and Yakamia Creek zoned land.</li> <li>5. The density code over the Yakamia Creek zone area should be removed as the minimum lot size for this land of 3000m<sup>2</sup> is specified in LPS 1 and the structure plan cannot vary that.</li> </ol>	<p><b>Operation/Implementation</b></p> <ol style="list-style-type: none"> <li>1. Clarify at the front of the structure plan report that this is a statutory structure plan for land zoned Future Urban as it is a requirement of the scheme and is prepared under the scheme (reference scheme clauses). Once endorsed by the WAPC it will have statutory effect.</li> <li>2. Review section 1.8 of the structure plan.</li> <li>3. Include sub-clause 5.9.1.8.5 of <i>Local Planning Scheme No. 1</i> within the structure plan.</li> <li>4. Specify how the structure plan applies to the General Agriculture and Yakamia Creek zoned land. Land zoned General Agriculture will need to be rezoned to Future Urban prior to supporting subdivision. The Yakamia Creek zone is not expected to change due to servicing constraints and for consistency with scheme requirements (min lot size of 3000m<sup>2</sup>).</li> <li>5. Change the density code within the structure plan for the Yakamia Creek zone to make consistent with the scheme (min lot size of 3000m<sup>2</sup>).</li> <li>6. Finalise road and POS contributions as part of the structure plan. Amend section 1.8 to reflect this requirement.</li> <li>7. Recommend changing designations to make consistent with model Scheme and Liveable Neighbourhood terminology.</li> <li>8. Include a land use permissibility information within the structure plan. Make</li> </ol>

		<p>6. At 1.8 Implementation it states contribution planning reviews are required. Road and POS contributions plans should be finalised as part of the structure plan.</p> <p>7. It is recommended the reserves be designated 'Future' Foreshore Protection and Enhancement Area and 'Future' Public Open Space. As the structure plan is a statutory instrument over this land, designating privately owned land as Reserve may bring about claims for compensation.</p> <p>8. The structure plan should contain either a land use table or state land use permissibility.</p> <p>For example; for areas designated residential on the structure plan map, land use permissibility and development requirements are the same as for the Residential zone contained in Local Planning Scheme No 1.</p> <p>9. Include reference or identify on the structure plan map that Rural zoned lots are required to be rezoned prior to subdivision.</p>	<p>consistent with the scheme.</p> <p>9. Make reference in the structure plan text and map for General Agriculture zone properties to be rezoned prior to supporting subdivision.</p>
		<p><b>Roads</b></p> <p>1. Previous advice from Main Roads is that they have concerns regarding the intersection of Barnesby Drive and Chester Pass Road. This issue will need to be clarified with Main Roads.</p> <p>2. Plan 19 is outdated.</p> <p>3. The structure plan document could be more succinct as to which roads need constructing, upgrading, widening, and intersection treatments rather than various statements throughout the document. At Transport Recommendations on page 43, only Mercer Road and Catalina Road are identified for upgrading however, on page 58 Sydney Road is also identified for upgrading. We would anticipate that other roads in the Structure plan area such as Bond Road and Dragon Road, for example, would also need upgrading.</p> <p>4. At 9. g) on page 57, it states the Barnesby/Chester Pass Road intersection is to be funded by Main Roads and City of Albany. Why would this not be included in the contribution plan?</p> <p>5. At 9. n) on page 58, it states lots fronting Sydney Street are to provide financial contribution towards upgrading/construction. Would Sydney Street be included in the contribution plan to receive a contribution from other lots in the vicinity?</p> <p>6. A road contribution plan should be finalised as part of the structure plan process including construction of new Range Road, Barnesby Drive, east west link road, upgrades (Sydney Street, Mercer Road, Catalina Road, Bond Road, Dragon Road) and intersections (including Barnesby/Chester Pass Road) and a per lot contribution calculated. The structure plan, as advertised, could be more succinct with regard to what is required and who contributes.</p> <p>7. The numbers on Plan 20 on page 38 are to be added together, for example it is approximately 30 000 vehicles using Range Road, not 15 000 as stated in the text on page 38.</p> <p>8. Plan 35 on page 59 indicates no connection to Barnesby Drive. Beaufort Road needs to connect to Barnesby Drive to provide efficient school access and this should be indicated on the plan.</p>	<p><b>Roads</b></p> <p>1. The structure plan is to be changed to reflect Main Roads requirements.</p> <p>2. Delete Plan 19.</p> <p>3. The structure plan is to clarify which roads need constructing, upgrading, widening, and intersection treatments.</p> <p>4. The structure plan is to be changed to reflect Main Roads requirements. Any requirements for funding are to be in accordance with a contribution plan. Modify structure plan to reflect outcomes from liaison with MRWA and contribution plan.</p> <p>5. The structure plan is to clarify lot contributions for Sydney Street. At the time of subdivision or development, lots fronting Sydney Street are to either:</p> <ul style="list-style-type: none"> <li>• <i>Develop half the width of Sydney Street for the section fronting the Lot; or</i></li> <li>• <i>Provide a financial contribution valued at the cost of developing half the width of Sydney Street for the section fronting the Lot.</i></li> </ul> <p>6. The structure plan is to be modified to concisely define what is required and who contributes (per lot) for road infrastructure (contribution plan). The contribution plan is to include: construction of new Range Road, Barnesby Drive, east west link road, upgrades (Sydney Street, Mercer Road, Catalina Road, Bond Road, Dragon Road) and intersections (including Barnesby/Chester Pass Road).</p> <p>7. Make corrections for vehicle movements (p38). The vehicle numbers given are a tally of vehicles travelling in one direction and not as a total (both ways).</p> <p>8. Modify structure plan to show Beaufort Road connecting to Barnesby Drive.</p>
		<p><b>Sewer</b></p>	<p><b>Sewer</b></p>



		<p>1. The Water Corporation has previously advised, in correspondence to the city of Albany dated 30 October 2014, that provision has been made for wastewater planning provided the area is developed in a logical and orderly manner. Given this advice, any new lot created in the Yakamia/Lange structure plan area should be connected to reticulated sewer; with the exception of land currently zoned Yakamia Creek as this land cannot be serviced. The R-Code densities displayed on the structure plan map will need to be updated to reflect this; i.e. the split density codings. A statement should also be included in the statutory section that all new lots must be connected to reticulated sewer. Ambiguous wording throughout the document that references on site effluent disposal and development not requiring connection to deep sewer should also be removed.</p>	<p>1. Make the following changes to the structure plan;</p> <ul style="list-style-type: none"> <li>a) With the exception of land currently zoned Yakamia Creek, any new lot created in the Yakamia/Lange structure plan area shall be connected to reticulated sewer;</li> <li>b) Delete split density coding;</li> <li>c) Apply a minimum density of 3000m<sup>2</sup> for the Yakamia Creek zone;</li> <li>d) Remove any ambiguous wording throughout the document that reference on site effluent disposal and development not requiring connection to deep sewer.</li> </ul>
		<p><b>POS</b></p> <p>1. The POS contribution schedule should be reviewed and expanded so it is clear what each lot is contributing; whether contribution is land or cash; if land contribution is more or less than 10%; and which lots are to be reimbursed.</p> <p>2. The school site has been included in Table 3 - potential land use; however it is not in the structure plan area.</p>	<p><b>POS</b></p> <p>1. Review and expand the POS schedule so it is clear what each lot is contributing.</p> <p>2. Delete the school site from Table 3.</p>
		<p><b>Wetlands and Foreshore Protection</b></p> <p>1. A 50m wetland buffer should be indicated on structure plan map.</p> <p>2. The drainage basins identified within the floodway boundary should be deleted. DOW have previously advised these are not appropriate within the floodway.</p> <p>3. It seems a portion of the Special Use zone lot along North Road is located within floodway. This should be removed and the floodway boundary be reinstated.</p> <p>4. At 8 a) on page 55 it states water management is to occur in accordance with recommendations made in the Yakamia/Lange Water Management Strategy and Arterial Drainage plan. These recommendations should be included in the structure plan under the implementation section as criteria to be addressed at subdivision/development stage. This will ensure the recommendations are endorsed by Council and the WAPC.</p> <p>5. Lots at the eastern end of Bond Road have a portion identified for Residential however are identified on the Opportunities and Constraints Plan as relatively constrained as they are within the boundary of the wetland.</p>	<p><b>Wetlands and Foreshore Protection</b></p> <p>1. Recommend including within the structure plan, a 50m buffer to water courses.</p> <p>2. The drainage basins identified within the floodway boundary are to be deleted.</p> <p>3. Remove the special use designation over floodplain and reinstate flood boundary.</p> <p>4. Include recommendations from the Yakamia/Lange Water Management Strategy and Arterial Drainage plan in the structure plan at 8 a) on page 55.</p> <p>5. Noted. Lots at the eastern end of Bond Road have a portion identified for Residential however are identified on the Opportunities and Constraints Plan as relatively constrained as they are within the boundary of the wetland. The Opportunities and Constraints Plan is overly conservative. The boundary to the wetland is based on a generic distance and not necessarily reflective of the site which rises steeply from the wetland and therefore is very unlikely to flood.</p>
		<p><b>Special Use Area</b></p> <p>1. It is unclear why a Special Use area is identified. The special uses listed, with the exception of 'Office', can be considered by Council in the Residential zone. It is recommended the area that is not within the floodway is identified as Future Commercial and included in the review of the Activity Centres policy, with a clause in the structure plan prohibiting development of Commercial uses until the activity centres review is undertaken, and that development is to be in accordance with the recommendations of the activity centres review.</p>	<p><b>Special Use Area</b></p> <p>1. Remove the special use designation and replace with residential.</p>
		<p><b>Bushfire</b></p> <p>1. Plan 17 Fire mapping shows a 100m buffer to all areas of extreme bush fire hazard, and leaves little land unaffected by bush fire constraints. Currently the plan implies that residential development may occur alongside areas of extreme bush fire hazard. All land within 100m of extreme bush fire hazard needs to have a bush fire level assessment undertaken and have a BAL assigned. A note should be included on the structure plan map that subdivision and/or development is subject to a bushfire assessment and not necessarily all land can be developed.</p>	<p><b>Bushfire</b></p> <p>1. Recommend highlighting on structure plan, areas subject to fire risk.</p>
		<b>Environmental Protection Lots</b>	<b>Environmental Protection Lots</b>

		<ol style="list-style-type: none"> <li>1. The structure plan report should include discussion as to what the 'environmental protection and biodiversity conservation' designation means. 'Private Conservation' may be a more appropriate name. At section 22 on page 61 the provisions indicate that subdivision of these lots can be considered. These provisions should be removed as these lots are not identified for further subdivision. The structure plan, in identifying these lots as 'no further subdivision' and related provisions sufficiently protects the vegetation and there is a need for a conservation covenant.</li> <li>2. The structure plan states at paragraph b) under land use permissibility on page 46 that areas delineated as 'Environmental Protection and Biodiversity Conservation' will be reserved for 'Parks and Recreation.' This may bring about compensation claims for the private landowners and is unnecessary if modifications suggested in first point above are made.</li> <li>3. The R2 designations on these lots are unnecessary.</li> <li>4. As stated previously, a bushfire hazard assessment would need to be undertaken prior to development of a single house on these lots.</li> <li>5. It should be clarified in the document that clearing for development on these lots requires assessment with regard to the quality of the vegetation even though it may be considered exempt clearing under the <i>Environmental Protection (Clearing of Native Vegetation) Regulations 2004</i>.</li> <li>6. What is a protection notice as referenced at section 22.c)?</li> </ol>	<ol style="list-style-type: none"> <li>1. Change the term 'environmental protection and biodiversity conservation' to reflect model planning terminology.</li> <li>2. The term 'Environmental Protection and Biodiversity Conservation' is to be changed to reflect the model planning terminology.</li> <li>3. Delete the R2 designations on the 'Environmental Protection and Biodiversity Conservation'.</li> <li>4. A note is to be included in the structure plan saying that subdivision and/or development is subject to a bushfire assessment.</li> <li>5. Include the following requirement/advice within the structure plan:  <i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.</i></li> <li>6. Change wording in structure plan as follows:  Replace 'protection notice' with 'conservation notice'.</li> </ol>
		<p><b>Referral to Commonwealth</b></p> <ol style="list-style-type: none"> <li>1. Several lots are identified on the structure plan map as 'referral to Commonwealth' however there is no guidance in the structure plan report as to what this means or what is involved.</li> <li>2. On 1 January 2015 a unilateral agreement between the State and Commonwealth came into effect to allow the state to conduct environmental assessments on behalf of the Commonwealth, removing duplication including the need for a separate Commonwealth assessment. The agreement does not cover approvals and it is the understanding that where approval is required (ie clearing, development) then the Commonwealth is still the decision making authority under the EPBC Act.</li> <li>3. Designations will need to be reviewed and possibly go to private conservation.</li> </ol>	<p><b>Referral to Commonwealth</b></p> <ol style="list-style-type: none"> <li>1. Provide notification on structure plan to advise requirements for referrals to Commonwealth in accordance with Biodiversity Act – as follows:  <i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.</i></li> <li>2. Noted.</li> <li>3. Recommend changing designation of environmentally sensitive areas to 'Conservation' with a requirement for a conservation notice to be placed on the title.</li> </ol>
		<p><b>Western Power Site</b></p> <ol style="list-style-type: none"> <li>1. The buffer and screening to the substation should be contained within Western Power's lot, rather than impact on neighbouring lots. POS should not be ceded from neighbouring land to provide a buffer.</li> <li>2. It is suggested that investigation and discussions occur with Western Power to relocate the substation site, as this would appear to be an incompatible use in a new urban area.</li> </ol>	<p><b>Western Power Site</b></p> <ol style="list-style-type: none"> <li>1. Modify the structure plan to show a buffer to the substation within Western Power's lot, rather than on neighbouring lots. Delete/relocate the POS areas shown around the substation.</li> <li>2. Western Power is maintaining the need to develop its site at Lot 36 Catalina Road for substation purposes within a 10-25 year period. The City undertook discussions with Western Power and the following comments were made: <ul style="list-style-type: none"> <li>• The Structure Plan should highlight the zone substation and buffer separation, with provision in the Structure Plan text for establishing the required buffer separation.</li> <li>• There is sufficient capacity within the Catalina Road site to accommodate the substation and a considerable buffer within the property boundaries. A zone substation needs 1.4 hectare with a buffer of 20 metres around the perimeter of the substation. The Catalina Road site is approximately 91,500 sq metres.</li> <li>• With respect to concerns raised about the location of a substation near a school, there are examples of new schools located near substations e.g. Star of the Sea Primary School is located next to Rockingham Substation. In some examples schools</li> </ul> </li> </ol>

			<p><i>near substations have designed the school so that ovals and other recreational areas are nearest the substation with classrooms and utility areas furthest away. The majority of the concern is based around Electromagnetic Fields and the following websites contain the latest and best information on Electromagnetic Fields:</i></p> <p><i>ARPANSA website – <a href="http://www.arpansa.gov.au/radiationprotection">www.arpansa.gov.au/radiationprotection</a></i>  <i>World Health Organization – <a href="http://www.who.int/en">www.who.int/en</a></i></p> <p><i>The following is an example of a substation with a size, fencing and landscaping expected to be developed at Lot 36 Catalina Rd (source – Western Power):</i></p> 
		<p><b>ARVS</b></p> <p>1. The <i>Albany Regional Vegetation Survey</i> has been a significant study over the subject land and further discussion should be included in the background section of the document. ARVS should be mentioned under major planning influences at 1.4.</p>	<p><b>ARVS</b></p> <p>1. Include the following information within the structure plan document:</p> <p><i>The Albany Regional Vegetation Survey (ARVS) report has been endorsed as a key information source. The ARVS report was produced to increase the understanding of regional flora and vegetation in the Albany region.</i></p> <p><i>The major findings of the survey include:</i></p> <ul style="list-style-type: none"> <li>• 35% (44,093 ha) of the original extent of vegetation remains within the survey area.</li> <li>• 19% of this remnant vegetation occurs within formal conservation reserves (IUCN I-IV) and 39% in other Crown reserves.</li> <li>• Identification of 67 native vegetation units, of which 19 units do not appear to have been described previously.</li> <li>• Many units only occur as small patches, with 49 units each having an area of less than 1% (&lt;440ha) of the remnant vegetation within the ARVS area.</li> <li>• Over 50% of units occur at their range limit in the area, reflecting the location of the ARVS area at the junction of three bio-geographic regions.</li> <li>• Over 25% of units are likely to be restricted to the survey area with four units likely to have &lt;30% pre-clearing extent remaining.</li> <li>• Over 800 species were recorded during the survey including six Declared Rare Flora, 43 Priority listed species and 19 species occurring beyond their previously known distribution.</li> <li>• <i>Phytophthora</i> dieback, hydrological change, weed invasion, fire, land clearing and grazing were identified as the major threats.</li> </ul>
		<p><b>City of Albany Local Planning Scheme 1</b></p> <p>1. Particular clauses of the scheme should be referenced where applicable; for example ,</p> <ul style="list-style-type: none"> <li>• clause 4.2.3 requirement to prepare structure plan for future urban zoned land;</li> <li>• clause 5.3.6.1 setbacks from water courses;</li> <li>• clause 5.3.7.1 land subject to flooding; and</li> </ul>	<p><b>City of Albany Local Planning Scheme 1</b></p> <p>1. Make reference in the structure plan to clauses in the City's LPS1 including the following:</p> <ul style="list-style-type: none"> <li>• Clause 4.2.3 requirement to prepare structure plan for future urban zoned land;</li> <li>• Clause 5.3.6.1 setbacks from water courses;</li> <li>• Clause 5.3.7.1 land subject to flooding; and</li> </ul>

		<ul style="list-style-type: none"><li>• clause 5.9 structure plan preparation and adoption.</li></ul>	<ul style="list-style-type: none"><li>• Clause 5.9 structure plan preparation and adoption.</li></ul>				
		<b>Local Development Plans</b> 1. At clause 3 on page 46, the structure plan refers to local development plans being prepared prior to any subdivision or development. WAPC Policy DC2.2 Residential Development refers to local development plans only being required when creating lots less than 260m <sup>2</sup> . Is this the intent or background to clause 3? Subdivision of land coded R30 doesn't necessarily mean the lots proposed will be 260m <sup>2</sup> .	<b>Local Development Plans</b> 1. Change clause 3 on page 46, such that local development plans are prepared prior to any subdivision or development of lots less than 260m <sup>2</sup> .				
		<b>Contaminated Sites</b> 1. Lot 4743 (No 102) and Lot 100 (No 120) are classified as contaminated site - remediated for restricted use however there is no mention of this in the structure plan.	<b>Contaminated Sites</b> 1. An Environmental Opportunities and Constraints Plan developed for the City by environmental consultants, Aurora Environmental concluded that:  <i>Lots 100 and 4743 have been remediated and are suitable for their current land uses.</i>  <i>Recommendation:</i> <i>No action required for identified sites unless there is a proposal to change the land use to a more sensitive type (e.g. residential).</i>				
7	Western Power	<b>Substation</b> 1. Western Power retains the need to develop its site owned at Lot 36 Catalina Road, Albany for substation purposes within a 10-25 year period.  2. Further develop buffering separation and development requirements and provisions for future subdivision and development affected by substation development. All subdivision and development shall be designed and constructed to protect Western Power infrastructure and interests from potential land use conflict.  3. Where subdivision/development applications adjoin or affect Western Power interests they should be referred for comment prior to approval by the local authority to ensure no land use conflict.	<b>Substation</b> 1. The City undertook discussions with Western Power. Western Power is maintaining the need to develop its site at Lot 36 Catalina Road for substation purposes within a 10-25 year period. Retain Lot 36 Catalina Road for substation purposes.  2. Illustrate landscaping and roads around substation to enhance buffer.  3. Include following advice within the structure plan:  <i>Where subdivision/development applications adjoin or affect Western Power interests they should be referred for comment prior to approval by the local authority to ensure no land use conflict.</i>				
		<b>Land Swap</b> 1. Western Power is willing to consider any land swap opportunities which can be facilitated by the City of Albany that may better balance the needs of the City and Western Power. However, Western Power will retain its current plans to develop on Lot 36 Catalina Road, Albany unless a suitable alternative can be facilitated by the City.	<b>Land Swap</b> 1. The City researched Crown land stocks and determined that there are no available alternatives in the locality. Retain Lot 36 Catalina Road for substation purposes.				
		<b>132kV Transmission Line</b> 1. 132kV transmission line entries to the currently proposed substation are required from the existing Albany substation at L123 Albany Highway to ensure that future works planned for new and existing road networks in the area facilitate these future line entries. Transmission line entries to the proposed substation development being identified on the draft structure plan in accordance with alignments to be determined in consultation with Western Power. Works associated with new distribution lines and the upgrading of existing lines (including increasing capacity and undergrounding) will be at the developer's cost. Electrical design will be to the satisfaction of Western Power - refer to <a href="http://www.westernpower.com.au/idd/Undergrounddistributionschemes.html">http://www.westernpower.com.au/idd/Undergrounddistributionschemes.html</a>  and  <a href="http://www.westernpower.com.au/documents/WADistributionConnectionsManual.pdf">http://www.westernpower.com.au/documents/WADistributionConnectionsManual.pdf</a>	<b>132kV Transmission Line</b> 1. Noted. Include the following at section 20 of the structure plan:  <i>Transmission line entries to the proposed substation development will be considered at the time of rezoning and subdivision proposals in consultation with Western Power. Works associated with new distribution lines and the upgrading of existing lines (including increasing capacity and undergrounding) will be at the developer's cost. Electrical design will be to the satisfaction of Western Power.</i>  2. Include the following within the structure plan:  <i>Western Power requires the following (Table 1) minimum clearance requirements for transmission lines and overhead distribution lines for infill and new development/subdivision applications:</i> <table border="1"><tr><td colspan="2">Table 1</td></tr><tr><td></td><td>Clearance (horizontal and vertical from centre of line)</td></tr></table>	Table 1			Clearance (horizontal and vertical from centre of line)
Table 1							
	Clearance (horizontal and vertical from centre of line)						




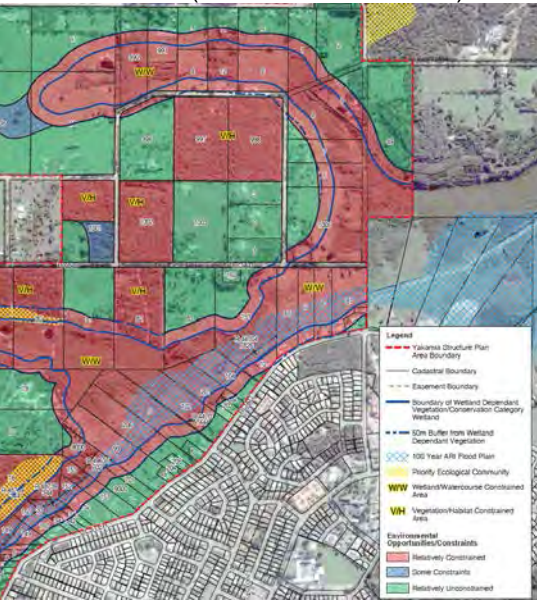
		<div>2. Western Power requires that the minimum clearance requirements for transmission lines and overhead distribution lines for structure plans, infill and new development/subdivision applications within the jurisdiction to ensure appropriate protection of the asset. See clearance requirements below in Table 1.</div> <table><tr><th colspan="3">Table 1</th></tr><tr><th></th><th colspan="2">Clearance (horizontal and vertical from centre of line)</th></tr><tr><td>Transmission</td><td>330kV</td><td>35.0m</td></tr><tr><td></td><td>132kV</td><td>10.0m</td></tr><tr><td></td><td>66kV</td><td>8.0m</td></tr><tr><td>Distribution</td><td>&lt;33kV</td><td>3.0m</td></tr></table> <div>3. The local distribution power network may require modification, upgrading and the construction of new assets as infill and new subdivision/development proposals progress. Works of this nature are customer funded, as part of the subdivision and development process.</div>	Table 1				Clearance (horizontal and vertical from centre of line)		Transmission	330kV	35.0m		132kV	10.0m		66kV	8.0m	Distribution	<33kV	3.0m	<table><tr><td>Transmis sion</td><td>330kV</td><td>35.0m</td></tr><tr><td></td><td>132kV</td><td>10.0m</td></tr><tr><td></td><td>66kV</td><td>8.0m</td></tr><tr><td>Distributi on</td><td>&lt;33kV</td><td>3.0m</td></tr></table> <div>3. Include the following within the structure plan:  The local distribution power network may require modification, upgrading and the construction of new assets as infill and new subdivision/development proposals progress. Works of this nature are customer funded, as part of the subdivision and development process.</div>	Transmis sion	330kV	35.0m		132kV	10.0m		66kV	8.0m	Distributi on	<33kV	3.0m
Table 1																																	
	Clearance (horizontal and vertical from centre of line)																																
Transmission	330kV	35.0m																															
	132kV	10.0m																															
	66kV	8.0m																															
Distribution	<33kV	3.0m																															
Transmis sion	330kV	35.0m																															
	132kV	10.0m																															
	66kV	8.0m																															
Distributi on	<33kV	3.0m																															
8	Department of Water	<div><b>General</b><div>1. The DoW is supportive of the measures contained within the draft structure plan that will protect and restore Yakamia Creek. The DoW supports the requirements for additional water management planning - foreshore and stormwater - at subdivision stage. The additional water management planning needs to be consistent with the Yakamia/Lange Structure Plan Water Management Strategy.</div><div>2. Page 32 refers to the stormwater sampling that the DoW conducted in 2011. It is good to include a summary of the results however the reference to site codes (YAK001- YAK1) is a bit meaningless unless a map of the sample sites is included. That level of detail is not required for a high level planning document such as this, so the Dow recommends removal of the reference.</div><div>3. Page 58 (p) notes that as a condition of development Lot 9000 Beaufort Rd is required to relocate and develop the arterial drain to the satisfaction of the City. The DoW has no objection to the requirement for relocation given the highly modified nature of Yakamia Creek at that location. The DoW requests that the word arterial drain be replaced with Yakamia Creek and that DoW should be consulted during this process.</div><div>4. Page 62 Section 23 Monitoring. This section should clarify who is responsible for monitoring. i.e. "At subdivision stage, the developer will need to develop a monitoring program to gather baseline information ..."</div><div>5. The DoW queries the designation of the previous 'Yakamia Creek' zone to R5/25, when the structure plan states (pg 44) that "Water Corporation have advised that sewer is not available to the areas located between the areas located between Yakamia Creek and Ulster Rd." Without sewer, the maximum lot yield would be R5, (depending upon the land capability) in line with the Country Sewerage policy.</div></div> <div><b>Yakamia Creek Floodplain</b><div>1. The 'Water Recommendations ' (pg 33) suggests that 'special uses' and the new Range Rd will be supported within the floodway at North Rd. The DoW floodplain policy does not support any development in the floodway, due to the potential to increase the flood level upstream. In this instance, it would exacerbate the flooding over North Rd and potentially cause floodwaters to spill out to the eastern side of the creek. The main structure plan map is being disingenuous by omitting the floodplain boundary over the special uses lot. The floodway extends over the entire southern half of Lot 421. It would also appear that the construction of Range Road may also conflict with the 30m</div></div>	<div><b>General</b><div>1. Noted. The structure plan recommends that development complies with Yakamia/Lange Structure Plan Water Management Strategy.</div><div>2. Include a map to correspond with sample site results.</div><div>3. Replace the word arterial drain with Yakamia Creek and include notification that the DOW should be consulted during any process involving relocating the creek.</div><div>4. Include the following provision to ensure the developer is responsible for monitoring  At subdivision stage, the developer will need to develop a monitoring program to gather baseline information.</div><div>5. Change the density for the Yakamia Creek to a minimum of 3000m<sup>2</sup> lots - in line with the City's scheme.</div></div> <div><b>Yakamia Creek Floodplain</b><div>1. Modify the structure plan such that no development potential is shown for the southern portion of Lot 421, the area subject to flooding and Aboriginal Heritage exclusion (30m).</div><div>2. Noted. New flood mapping has been provided by the DOW (18/5/2015). Recommend including as a layer on structure plan map.</div></div>																														

		<p>Aboriginal heritage exclusion buffer to Yakamia Creek.</p> <p>2. As previously mentioned, the DoW is currently reviewing the Yakamia Creek floodplain mapping with the provision of new data that has been obtained with the LiDAR mapping. The DoW will make the new floodplain mapping available to the City of Albany as soon as it is finalised.</p>	
9	Office Environmental Protection Authority	<p><b>Letter 14 January 2014</b></p> <p>1. The OEPA considers that the area the subject of the Yakamia/Lange Structure Plan contains a number of significant environmental values, including:</p> <ul style="list-style-type: none"> <li>a) Priority 1 Ecological Community - Albany Vegetation Unit (AVU) 14 Banksia coccinea shrubland/ E. staeril Sheoak Open Woodland;</li> <li>b) vegetation in Very Good to Excellent condition which supports significant ecological communities and Threatened or Priority flora and fauna protected under State and Federal legislation;</li> <li>c) Yakamia Creek and its associated wetlands and tributaries which are classified as Conservation Category wetlands;</li> <li>d) consolidated areas of native vegetation containing multiple vegetation units (catena from upland to wetland) identified as having high conservation value in the Albany Regional Vegetation Survey (ARVS).</li> </ul> <p>The OEPA supports the draft Yakamia/Lange Structure Plan on the basis that the areas of significant environmental value, listed above, are situated in the following foreshore and/or vegetation protection areas, in the draft structure plan.</p> <ul style="list-style-type: none"> <li>• portion of Council's land south of the proposed link road Lot 4743 and adjoining property's east of Range Road (Lots 75 and 76);</li> <li>• properties south of Bond Road adjacent to Range Road and adjoining Yakamia Creek area (Lots 79, 80,81 and 82); and</li> <li>• vegetation on Lots 997, 1001 and 1002 north of Bond Road.</li> </ul> <p>2. Proposed modifications to foreshore and vegetation protection areas should be sent to the OEPA for comment.</p> <p>3. The Environmental Assessment by Aurora Environmental (5 March 2013) refers to the minimum extent of protection for an ecological community being 10%. However, EPA Position Statement No. 2 (EPA, 2000) Guidance for the Assessment of Environmental Factors states that at least 30% of the original extent of ecological communities should be retained to prevent unacceptable cumulative and potentially irreversible loss of biodiversity. The EPA's Guidance Statement 10 Level of assessment for proposals affecting natural areas within the System 6 Region and Swan Coastal Plain portion of the System 1 Region allows for a reduced area of representation in 'constrained areas' of 10%. Constrained areas may include urban, urban deferred and industrial zones. However, The OEPA considers that EPA Position Statement No. 2 (EPA, 2000) Guidance for the Assessment of Environmental Factors should prevail until such time as a 'constrained area' boundary has been identified around Albany in agreement between the OEPA and the Department of Planning.</p>	<p><b>Letter 14 January 2014</b></p> <p>1. Noted. The structure plan seeks to protect vegetation on:</p> <ul style="list-style-type: none"> <li>• Lot 4743 and adjoining property's east of Range Road (Lots 75 and 76);</li> <li>• Properties south of Bond Road adjacent to Range Road and adjoining Yakamia Creek area (Lots 79, 80,81 and 82); and</li> <li>• Vegetation on Lots 997, 1001 and 1002 north of Bond Road.</li> </ul> <p>2. Noted. The following condition is to be included in the structure plan:</p> <p><i>If a proposal is lodged for a property designated for private conservation, and it appears that the proposal is likely to have a significant effect on the environment, the local government will refer the proposal to the Environmental Protection Authority.</i></p> <p>3. Noted. Recommend undertaking the following as a requirement of subdivision or development:</p> <p><i>If a proposal is lodged for a property designated for private conservation, and it appears that the proposal is likely to have a significant effect on the environment, the local government will refer the proposal to the Environmental Protection Authority.</i></p>
		<p><b>Letter 7 July 2014</b></p> <p>1. The revised draft has removed a number of vegetated areas from the previous draft the OEPA commented on in January 2014. As you know, the OEPA has been supportive of the City of Albany developing a structure plan for the area because there is greater capacity to achieve good planning outcomes and an appropriate level of environmental protection at a more strategic scale. The OEPA supports the proposed outcomes in the most recent draft structure plan for Lot 4743 and Lots 79, 80, 81 and 82 which form part of the area zoned</p>	<p><b>Letter 7 July 2014</b></p> <p>1. Noted. Recommend changing the term 'environmental protection and biodiversity conservation' to reflect model planning terminology and include the following requirement/advice within the structure plan:</p> <p><i>If a proposal is lodged for a property designated for private conservation, and it appears that the proposal is likely to have a significant effect on the environment, the local government will refer the proposal to the Environmental Protection Authority.</i></p>


urban deferred. However, the remaining outstanding issue is the extent of vegetation clearing on the rural zoned Lots 997, 998, 1001 and 1002 which contains Albany Vegetation units (AVU's) 12 and 13 (Attachment 3) which may also provide habitat for State and Commonwealth listed Black Cockatoos. The OEPA would support the City of Albany retaining a consolidated portion on these lots for conservation purposes in accordance with the EPA's Bulletin No 20 Protection of naturally vegetated areas through planning and development (Attachment 4). Lots 997 and 998, which are adjacent to the creekline, may offer the best opportunity to achieve a suitable outcome.



*If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.*



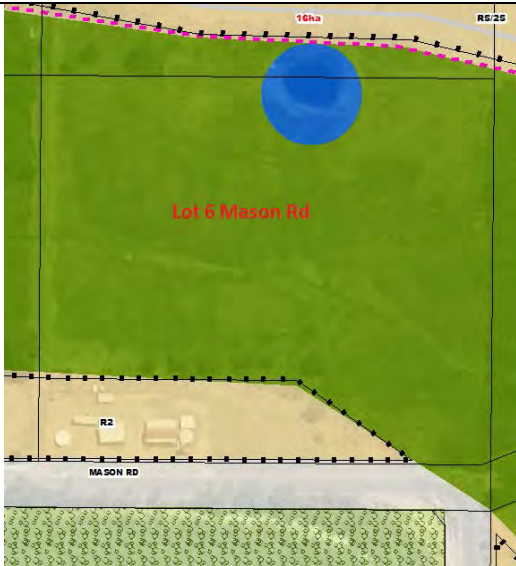

		<p><b>Letter 2 September 2014</b></p> <p>1. The OEPA is of the view that the creation of one building envelope at Lots 1001 and 1002 can meet the EPA's environmental objectives subject to the proposed lots being managed for conservation purposes. The OEPA recommends that provisions should be included in LPS No 1 in relation to Lots 1001 and 1002 limiting fencing and firebreaks in the conservation areas. The OEPA does not support further subdivision of Lots 997 and 998 as the bushland is described as being in 'Very Good' to 'Excellent Condition' (Keighery, 1994), is in close proximity to other areas of native vegetation and contains habitat for Black Cockatoos. The OEPA is of the view that development on Lots 997 and 998 should be restricted to one dwelling per lot as currently permitted under LPS No 1. Building envelopes should be located on the edges of the lots adjacent to the road to reduce fragmentation and impacts on the bushland.</p> <p>2. The OEPA notes that the proposed 5000m<sup>2</sup> building include building protection zones. Permitted buildings would need to be constructed to Australian Standard 3959. Recommended that the City discusses this aspect with the DOP and Department of Fire and Emergency Services to ensure that this is acceptable from a bushfire risk perspective.</p>	<p><b>Letter 2 September 2014</b></p> <p>1. Noted. The following conditions are to be included to address OEPA concerns:</p> <p><i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.</i></p> <p>2. Noted. Include requirements within structure plan around fire protection.</p>
10	<p>Lot 12 Mason Rd</p> 	<p><b>Framework</b></p> <p>1. Given the fragmented nature of landholdings within Yakamia, the presentation of an overall structure plan is required to provide a frame work to coordinate the provision and arrangement of future land use, subdivision and development, staging, servicing, transport networks, public open space, foreshore reserves and urban water management.</p> <p><b>Foreshore Buffer</b></p> <p>1. The foreshore buffer zone to creek is too excessive (The creek is only 1m wide). A 10m buffer is fair.</p>	<p><b>Framework</b></p> <p>1. Provide additional information within the structure plan around the provision and arrangement of future land use, subdivision and development, staging, servicing, transport networks, public open space, foreshore reserves and urban water management.</p> <p><b>Foreshore Buffer</b></p> <p>1. The extent of the foreshore buffer area to the creek came about from the following environmental study, which identifies a standard setback distance to watercourses: City of Albany (2013), Yakamia Structure Plan Area, Environmental Assessment (Aurora Environmental).</p> <p>Figure 12 - City of Albany (2013), Yakamia Structure Plan Area, Environmental Assessment (Aurora Environmental).</p>  <p>Standard setback distances to watercourses, as indicated by the draft structure plan may not be true to land characteristics (e.g. topography (steep/flat), height above sea level, historical events, flow velocity of water, width of creek, evidence of erosion and wetland dependent vegetation).</p>



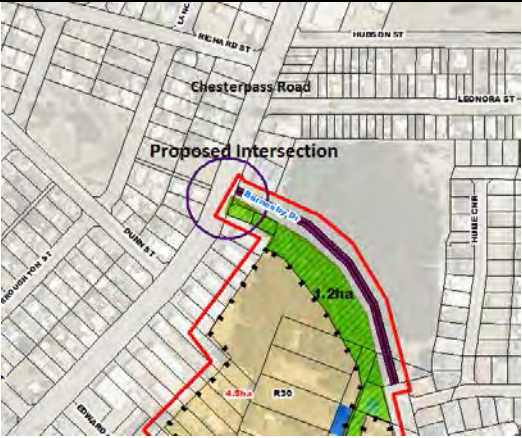


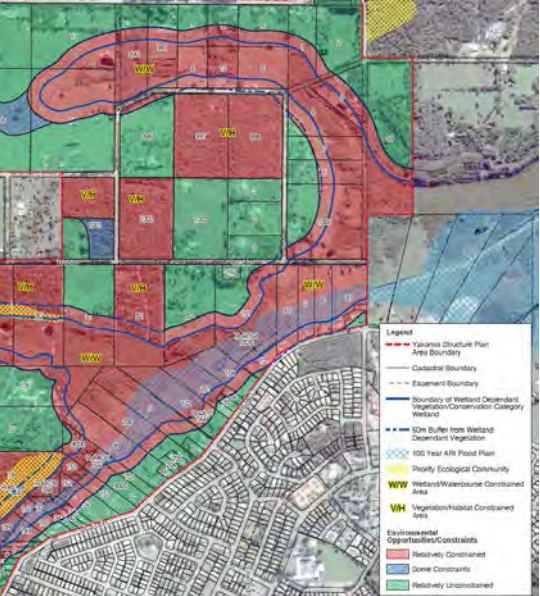
			<p>The City of Albany (2013), Yakamia Creek, Arterial Drainage Plan (Essential Environmental) identifies areas within the Yakamia catchment as being susceptible to various elements including flooding or erosion. For Lot 12 Mason Rd, the arterial drainage plan concludes the potential for erosion during a 5yr event and flood risk during a 1 in 100 year flood.</p> <p>City of Albany (2013), Yakamia Creek Arterial Drainage Plan – 1 in 100 year event.</p>  <p>The width and depth of the creek (1.5m) and the condition of vegetation (trees) suggests that low volumes of water travel through the precinct and that the land rarely floods.</p> <p>It is recommended that the section of creek (Lot 12 Mason Rd) is marginally reduced.</p>
		<b>Management of foreshore</b> 1. Due to the extent of the foreshore, management of the area would be a massive burden to the City.	<b>Management of foreshore</b> 1. Noted
		<b>Public Open Space Contribution</b> 1. A 10% POS contribution for development at an R5 (2000m <sup>2</sup> lots) density is too onerous.	<b>Public Open Space Contribution</b> 1. Change density to R25 as recommended by Department of Planning. In accordance with the <i>Planning and Development Act 2005</i> , properties with the potential to create more than two lots may be required to provide a POS contribution at the time of subdivision.
		<b>Fire</b> 1. We are concerned about the risk of fire due to vegetation in the vicinity. Retention of all vegetation places too much of an onus on the City and landholder to manage against fire.	<b>Fire</b> 1. Noted. As indicated in the structure plan, new development will need to protect itself against the risk of fire.
		<b>Dual Density coding</b>	<b>Dual Density coding</b>

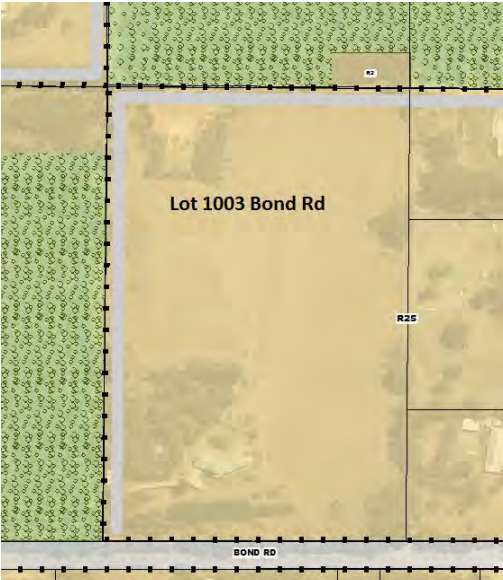
		1. The intent of dual residential density coding is unclear. If there is a choice and some land is developed to an R5 density, then viability of developing to a higher density is likely to be affected. We believe there is subdivision potential considering the size and location of the property – close to town.	1. Change density to R25 as recommended by Department of Planning.
11	<p>Lot 8 Curtiss Rd</p> 	<p><b>Foreshore Buffer</b></p> <p>1. The foreshore buffer zone to creek is too excessive. Some land identified as foreshore is developable. A 10m foreshore area either side of the creek is more practical.</p>	<p><b>Foreshore Buffer</b></p> <p>1. The City of Albany (2013), Yakamia Creek, Arterial Drainage Plan (Essential Environmental) shows a steady flow of water through Lot 8 Curtiss Road, with the potential for flooding (100yr flood event).</p>  <p>The extent of foreshore shown on the draft structure plan can be reduced due to the rise in gradient either side of the creek. The variation should only be marginal due to the potential for flooding.</p>
		<p><b>Public Open Space Contribution</b></p> <p>1. A 10% contribution is considered unnecessarily onerous if the area is to be developed at a density of R5.</p>	<p><b>Public Open Space Contribution</b></p> <p>1. Change density to R25 as recommended by Department of Planning. In accordance with the <i>Planning and Development Act 2005</i>, properties with the potential to create more than two lots may be required to provide a POS contribution at the time of subdivision.</p>
		<p><b>Foreshore – Weeds, Maintenance and Security (path).</b></p> <p>1. Who is going to maintain function of foreshore? Problem with weeds adjacent to creek. Security concern with persons walking through foreshore.</p>	<p><b>Foreshore – Weeds, Maintenance and Security (path).</b></p> <p>1. As noted in the structure plan, the foreshore is to be ceded to the Crown for its intended purpose (foreshore reserve, public open space) at the time of subdivision or development, free of cost and without payment of compensation by the Crown.</p> <p>2. As noted in the structure plan, subdivision and development will need to be designed to ensure surveillance (i.e. development of roads adjacent to foreshores).</p>
		<p><b>Fire</b></p> <p>1. We are concerned about the risk of fire due to vegetation in the vicinity. Retention of all vegetation places too much of an onus on developers and the City to manage risk.</p>	<p><b>Fire</b></p> <p>1. The foreshore and properties west of Curtiss Road are fire prone. Development within 100m of fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Prior to supporting subdivision, a bushfire attack level assessment will need to be undertaken. The structure plan makes requirements for fire management.</p> <p>2. Based on identified fire risk and legislative requirements, it is recommended that the</p>

			<p>following Yakamia/Lange Structure Plan conditions remain with minor amendments as follows:</p> <p><i>A detailed Fire Management Plan and Bushfire Attack Level assessment shall be prepared for any subdivision and/or development in areas within 100m of fire prone vegetation. These areas are generally defined by the 'Fire Risk' design element on the Structure Plan Map, and will require further refinement at future planning stages.</i></p> <p><i>Any subdivision and/or development within 100m of fire prone vegetation shall accord with an approved Fire Management Plan and Bushfire Attack Level assessment in accordance with the relevant bushfire planning and management frameworks of the WAPC and DFES, and any City of Albany fire management requirements.</i></p> <p><i>Where appropriate to do so, hazard separation areas are to be reduced and BAL building standards increased as a means to protect vegetation.</i></p> <p><i>Hazard separation areas are not to include riparian vegetation or areas beyond the boundaries of a lot.</i></p>
		<p><b>Dual Zoning</b></p> <p>1. The ability to economically provide sewer to the precinct will determine whether a high density can be achieved. If some land is developed at a low density without deep sewer, viability of developing will be affected. Yakamia is acknowledged as a key opportunity to consolidate urban development – close to the CBD.</p>	<p><b>Dual Zoning</b></p> <p>1. The structure plan currently recommends minimum lot sizes in this precinct of 2000m<sup>2</sup> (R5 – without deep sewer) or 300m<sup>2</sup> (R25 – with deep sewer). The Department of Planning has required that development in the Yakamia Structure Plan area (other than for the 'Yakamia Creek' zone properties) connect to deep sewer. Development/subdivision potential is unknown without a fire management plan and bushfire attack level assessment. It is recommended that an R25 density is designated with a condition for connection to deep sewer and compliance with a fire management plan and bushfire attack level assessment.</p>
12	Lot 6 Mason Rd	<p><b>Foreshore Buffer</b></p> <p>1. Foreshore buffer to creek is too excessive.</p>	<p><b>Foreshore Buffer</b></p> <p>1. The City of Albany (2013), Yakamia Creek, Arterial Drainage Plan (Essential Environmental) shows the potential for flooding and erosion at Lot 6 Mason Road. Due to a rising gradient, the extent of foreshore can be marginally reduced.</p>


				
		<b>Horticulture</b> 1. Our intent is to advertise the potential for horticulture farming within the foreshore area. The designation as a foreshore is to our detriment – financially.	<b>Horticulture</b> 1. Noted. A ‘foreshore’ is defined as “land adjoining or directly influencing a body of water that is managed to protect waterway and riparian values” (Water and Rivers Commission Foreshore Policy 1, 2002). The use of land adjacent to the creek for horticulture maybe to the detriment of the waterway and riparian values.	
		<b>Fire</b> 1. We are concerned about the risk of fire due to vegetation in the vicinity.	<b>Fire</b> 1. Noted. The vegetated foreshore area and vegetated properties south of Mason Rd are fire prone. In accordance with the Western Australian Planning Commission’s Planning for Bushfire Protection Guidelines – Edition 2, 2010, development within 100m of fire prone vegetation needs to accommodate fire protection measures including, a building protection zone, hazard separation measures and ember and flame attack measures.	
		<b>Vermin</b> 1. The future foreshore will increase vermin.	<b>Vermin</b> 1. Noted. The amount and diversity of flora and fauna is expected to increase, the result of enhancing the foreshore.	
13	Lot 5 Chesterpass Rd	<b>Proposed Intersection (Barnesby Drive/Chester Pass Road)</b> 1. The structure plan recommends that Barnesby Drive is connected to a corner and downhill section of Chester Pass Road. The purpose being to relieve congestion at the main Chester Pass roundabout. Given that Chester Pass Road is a heavy freight route, the location of the intersection is not appropriate. Trucks need to maintain speed through this section of road to get up the hill. An intersection at this location is fraught with danger.  2. A better option may be to connect Beaufort Road to Barnesby Drive to provide connection via Edward Street to Chester Pass Road.	<b>Proposed Intersection (Barnesby Drive/Chester Pass Road)</b> 1. Main Roads WA have agreed in principle to left in and left out treatments only. Recommend that the structure plan is changed such that connection to Barnesby Drive is restricted to left out and left in only.  2. Recommend indicating on the structure plan, the potential to connect Beaufort Rd to Barnesby Drive.	


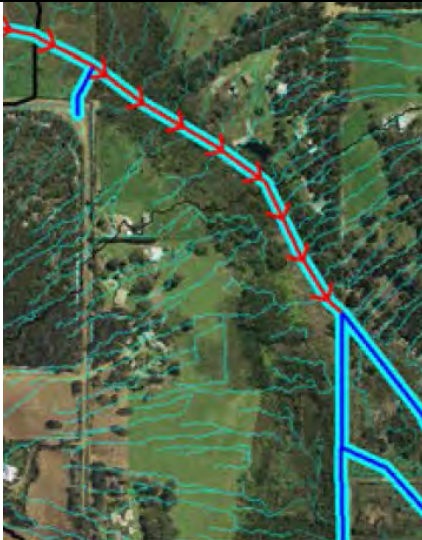





			
14	<p>Lot 1001 Catalina Road</p> 	<p><b>Residential (R25)</b></p> <p>1. The land demonstrates similar vegetation types and values to other properties within the YLSP area which have not been burdened with an 'Environment Protection and Biodiversity Conservation' classification. The selective nature of choosing properties for this classification is not a fair process and all landowners should be given the opportunity to seek relevant environmental approvals. Opportunities and constraints mapping included within the draft YLSP only identifies half of the property as being 'Relatively Constrained', with the remainder having 'Some Constraints' or being 'Relatively Unconstrained'. The following conclusions can be made regarding the representation of the vegetation type at the subject property (Afra/Emar/Ccal/Athe):</p> <ul style="list-style-type: none"><li>• It is well represented;</li><li>• Nearly 10% (preferred) is protected within conservation reserves;</li><li>• The vegetation type is common and widespread; and</li><li>• The property contains a small, relatively isolated pocket of this vegetation type in varying condition.</li></ul> <p>It is respectfully requested that the City of Albany consider the reclassification of Lot 1001 Catalina Road, Lange to 'Residential', with a density of 'R25' and subject to 'Referral to Commonwealth'.</p>	<p><b>Residential (R25)</b></p> <p>1. The Environmental Assessment (Aurora Environmental) has identified the southern half of Lot 1001 Catalina Road as having some constraints and the northern portion as being relatively constrained.</p>  <p>Recommend changing the structure plan for Lot 1001 Catalina Road to support development in the southern portion of Lot 1001 Catalina Road.</p>
		<p><b>Compensation</b></p> <p>1. The draft YLSP does not offer any compensation to landowners required to conserve vegetation. Furthermore, through the conservation covenant process, the landowners will be burdened for maintenance of the land.</p>	<p><b>Compensation</b></p> <p>1. Noted.</p>
		<p><b>Education Establishment</b></p> <p>1. The landowner has previously had a Planning Scheme Consent issued for the development of an 'Education Establishment'. Although they did not act on this approval, it is an indication that this land use is considered acceptable for the land. The intent of the landowner is to develop an 'Education Establishment'. This use does not require the full clearing of the property and vegetation can be incorporated into the future design to ensure that this occurs. This would be</p>	<p><b>Education Establishment</b></p> <p>1. Noted. The planning approval has expired and is therefore no longer valid. Since the previous approval, a new <i>Local Planning Scheme No. 1</i> has been endorsed with new provisions. Applications for planning approval are assessed in accordance with provisions of the new <i>Local Planning Scheme No. 1</i>, including the following:</p> <p><i>5.3.3 Vegetation Protection</i></p>


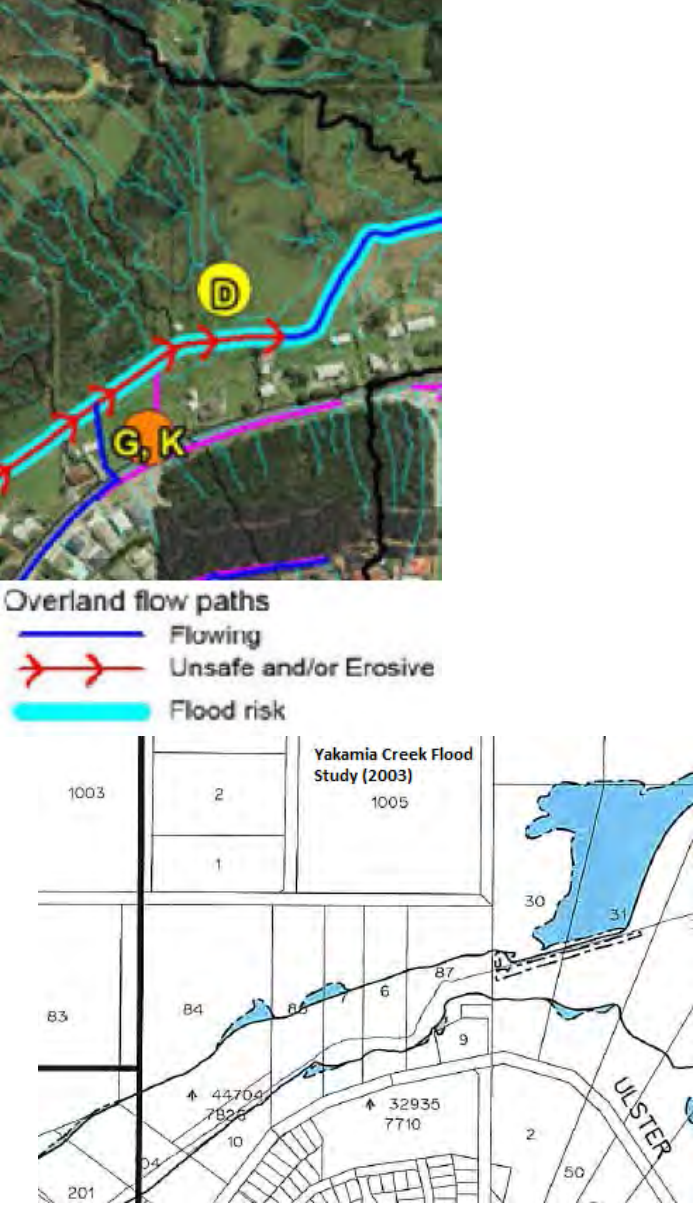
		well located, given the existing planned government primary school directly adjoining the western boundary.	<p><i>The Local Government may require the protection of existing vegetation on a site as a condition of planning approval to:</i></p> <ul style="list-style-type: none"> <li>a) <i>Protect a vegetation community;</i></li> <li>b) <i>Prevent land degradation;</i></li> <li>c) <i>Protect roadside vegetation;</i></li> <li>d) <i>Maintain local visual amenity and the natural setting;</i></li> <li>e) <i>Protect habitat, or a threatened species;</i></li> <li>f) <i>Assist to provide vegetated corridors to maintain fauna and flora linkages; or</i></li> <li>g) <i>Assist in the maintenance of water quality.</i></li> </ul>
15	Lot 1003 Bond Road 	<p><b>Environment/Biodiversity</b></p> <ol style="list-style-type: none"> <li>Understand that environment and biodiversity are important elements of planning, but would suggest it is way out of proportion.</li> </ol> <p><b>Fire</b></p> <ol style="list-style-type: none"> <li>Protected vegetation will always be an extreme bushfire hazard.</li> </ol> <p><b>POS</b></p> <ol style="list-style-type: none"> <li>Locate POS at northern part of Lot 1003 to border private conservation lot.</li> </ol>	<p><b>Environment/Biodiversity</b></p> <ol style="list-style-type: none"> <li>Noted. Recommend making modifications to reduce the amount of protected areas. For example, the width of foreshores has been reduced and some vegetated areas in degraded condition have been supported for development.</li> </ol> <p><b>Fire</b></p> <ol style="list-style-type: none"> <li>Noted. Recommend highlighting on the structure plan, areas subject to fire risk.</li> </ol> <p><b>POS</b></p> <ol style="list-style-type: none"> <li>Recommend locating POS at northern section of Lot 1003. The location of POS will be confirmed at the subdivision stage of development.</li> </ol>
16	Lot 4 Mason Road	<p><b>Foreshore Buffer</b></p> <ol style="list-style-type: none"> <li>Understand a need for a buffer around the creek but not to the extent proposed (80% of property). The creek that runs through my property is only 1m wide. Flooding occurred once over a twenty year period. The extent of buffer places a huge onus on the City for maintenance. A 10m buffer would be a fair outcome.</li> </ol>	<p><b>Environment/Biodiversity</b></p> <ol style="list-style-type: none"> <li>The City of Albany's <i>Yakamia Creek Arterial Drainage Plan 2013</i> (Essential Environmental) shows flood (100yr event) and erosive risk characteristics of the creek running through Lot 4 Mason Road. Any reduction in foreshore boundaries should be minimal. It is recommended that the structure plan is changed to illustrate a marginally reduced foreshore boundary.</li> </ol>

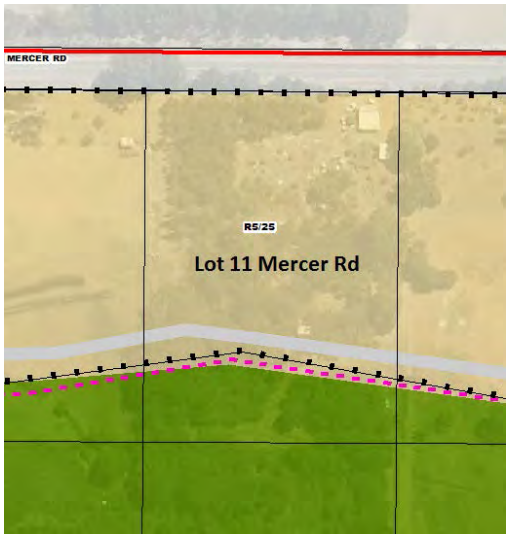


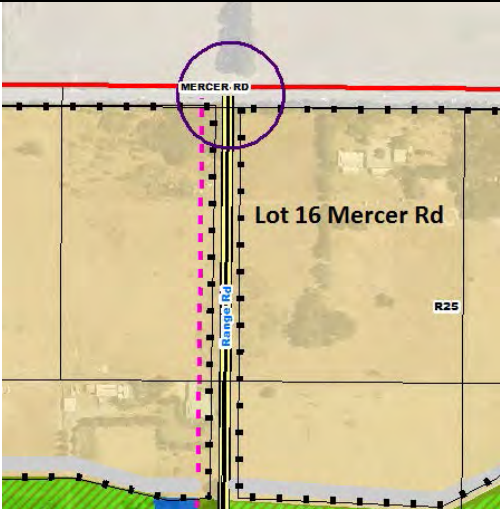
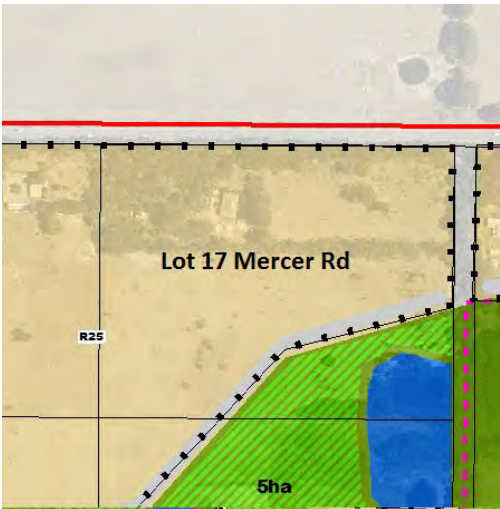


				
		<p><b>Fire</b></p> <p>1. Protected vegetation in the vicinity of residents in Mason Road is a fire hazard. This places onus on landholders to develop buildings to a higher standard and for City to manage fuel loads.</p>	<p><b>Fire</b></p> <p>1. Noted. The protection of riparian vegetation takes priority over clearing to accommodate development (refer to Regulation 5 of the Environmental Protection Regulations 2004). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.</p>	
		<p><b>Dual Density coding</b></p> <p>1. The intent of dual residential density coding is unclear. If there is a choice and some land is developed to an R5 density, then viability of developing to a higher density is likely to be affected.</p>	<p><b>Dual Density coding</b></p> <p>1. Uphold. In order to achieve viability, development needs to be at the R25 density and connected to deep sewer. The Department of Planning has required that development in the Yakamia Structure Plan area (other than for the ‘Yakamia Creek’ zone properties) connect to deep sewer.</p>	
		<p><b>Servicing</b></p> <p>1. Servicing in the area is unclear, particularly in relation to deep sewer.</p>	<p><b>Servicing</b></p> <p>1. As per comments made by the Department of Planning, development of more than one dwelling or subdivision to more than one lot will need to connect to deep sewer.</p>	
		<p><b>Public Open Space Contribution</b></p> <p>1. A 10% POS contribution is not appropriate if the land is developed at a density of R5 (2000m<sup>2</sup> lots).</p>	<p><b>Public Open Space Contribution</b></p> <p>1. As per comments made by the Department of Planning, an R25 density applies, meaning a POS contribution is appropriate in accordance with the <i>Planning and Development Act 2005</i>.</p>	
17	Lot 7 Curtiss Road	<p><b>Foreshore Buffer</b></p> <p>1. The extent of the foreshore reserve (150m width) is well in excess of that required for the creek and what the City is capable of managing. A 10m reserve on either side of the creek is more practical.</p>	<p><b>Foreshore Buffer</b></p> <p>1. The City of Albany’s <i>Yakamia Creek, Arterial Drainage Plan 2013</i> (Essential Environmental) shows flood (100yr event) and erosion risk characteristics of the creek running through Lot 7 Curtiss Road. Any reduction in foreshore boundaries should be minimal. It is recommended that the structure plan is changed to illustrate a marginally reduced foreshore boundary.</p>	

			 <div><p>Overland flow paths</p><p> Flowing</p><p> Unsafe and/or Erosive</p><p> Flood risk</p></div>
		<b>Public Open Space Contribution</b> 1. A 10% POS contribution for development at an R5 (2000m <sup>2</sup> lots) density is too onerous.	<b>Public Open Space Contribution</b> 1. As per comments made by the Department of Planning, an R25 density applies, meaning a POS contribution is appropriate in accordance with the <i>Planning and Development Act 2005</i> .
		<b>Fire</b> 1. Retention of all vegetation is a concern from a fire hazard perspective. Retention of vegetation places onus on landholders to develop buildings to a higher standard and for City to manage fuel loads.	<b>Fire</b> 1. Noted. The protection of riparian vegetation takes priority over clearing to accommodate development (refer to Regulation 5 of the <i>Environmental Protection Regulations 2004</i> ). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.
		<b>Dual Density coding</b> 1. The intent of dual residential density coding is unclear. If there is a choice and some land is developed to an R5 density, then viability of developing to a higher density is likely to be affected.	<b>Dual Density coding</b> 1. Agree. In order to achieve viability, development needs to be at the R25 density and connected to deep sewer. The Department of Planning has required that development in the Yakamia Structure Plan area (other than for the ‘Yakamia Creek’ zone properties) connect to deep sewer.
		<b>Servicing</b> 1. Servicing in the area is unclear, particularly in relation to deep sewer.	<b>Servicing</b> 1. As per comments made by the Department of Planning, development of more than one dwelling or subdivision to more than one lot will need to connect to deep sewer. It is recommended that additional information is provided in the structure plan around the development/staging of deep sewer.
18	Lot 7 Ulster Rd	<b>Foreshore Buffer</b> 1. The extent of the foreshore reserve is too excessive. A foreshore reserve of 30m either side of the creek is considered more reasonable.	<b>Foreshore Buffer</b> 1. The City of Albany's <i>Yakamia Creek, Arterial Drainage Plan 2013</i> (Essential Environmental) shows flood (100yr event) and erosion risk characteristics of the creek running through Lot 7 Ulster Road. The Department of Water <i>Yakamia Creek Flood Study 2003</i> indicates a floodplain evident over Lot 7 Ulster Road. Any reduction in foreshore boundaries should be minimal and not beyond flood boundaries.

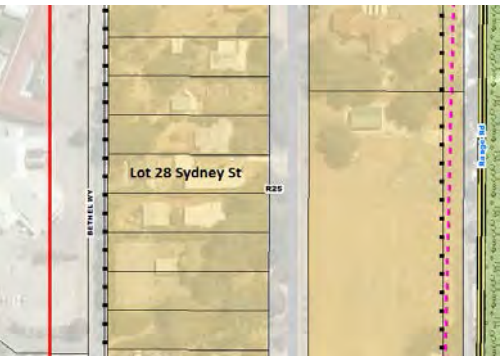



			 <p>Overland flow paths</p> <ul style="list-style-type: none"><li>Flowing</li><li>Unsafe and/or Erosive</li><li>Flood risk</li></ul> <p>Yakamia Creek Flood Study (2003)</p> <p>It is recommended that the structure plan is changed to illustrate a marginally reduced foreshore boundary to follow the floodplain boundary</p> <p><b>Management of foreshore</b></p> <p>1. Given the manner in which the Yakamia creek area is likely to be developed, i.e. in a piecemeal manner over many years, it is suggested the City access funding from State or Federal sources to prepare an overall foreshore management plan, which landholders can use for maintenance.</p> <p><b>Dual Density coding</b></p> <p>1. Clarification is required for density. The Western Australian Planning</p>
		<p><b>Management of foreshore</b></p> <p>1. South Coast Natural Resource Management in partnership with the Oyster Harbour Catchment Group developed a foreshore management plan for the Yakamia Creek. The aims of this management plan are to:</p> <ul style="list-style-type: none"><li>• Provide recommendations on appropriate management of Yakamia Creek/ drain by private landholders, the City of Albany and State Government agencies.</li><li>• Identify, and propose solutions for, key problem areas and issues.</li><li>• Inform environmental rehabilitation priorities for natural resource management stakeholders, the City of Albany and State Government agencies.</li><li>• Identify the next two to five rehabilitation sites for Yakamia Creek Living Stream Projects.</li></ul> <p>It is recommended that the foreshore management plan is noted in the structure plan under 'Previous Reports and Studies'.</p> <p><b>Dual Density coding</b></p> <p>1. Change elements within the structure plan such that the areas adjacent to Ulster</p>	

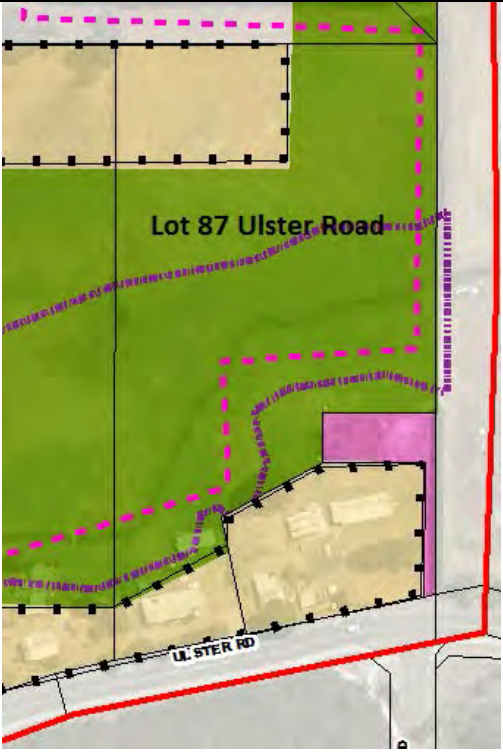
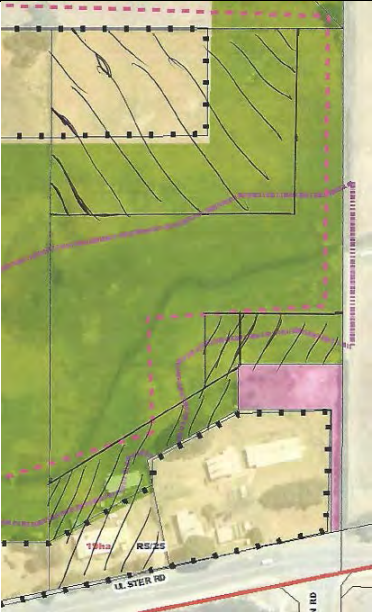
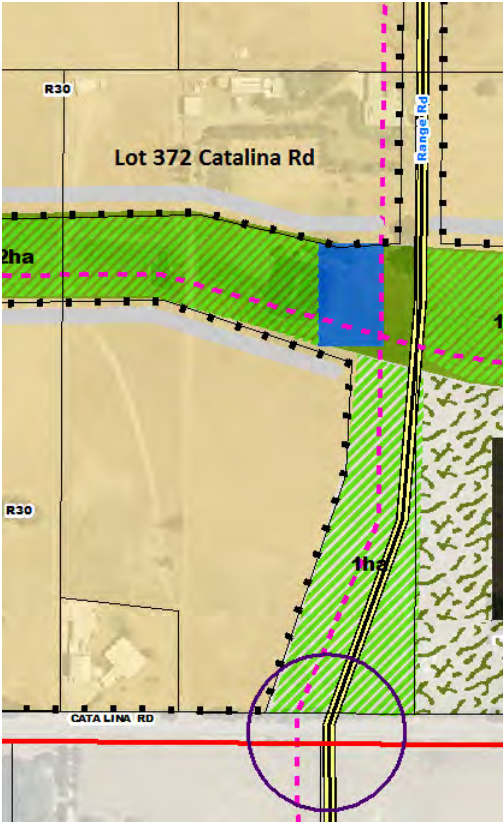

		Commission failed in its bid to require a recent subdivision in the 'Yakamia Creek' zone to connect to scheme sewer.	Road can only be developed to a minimum lot size of 3000m <sup>2</sup> (deep sewer not required), being consistent with current scheme requirements.
		<b>Public Open Space Contribution</b> 1. A POS contribution was not required for a recent subdivision in the 'Yakamia Creek' zone.	<b>Public Open Space Contribution</b> 1. Change the structure plan such that a contribution for POS is not required for properties adjacent to Ulster Road.
		<b>Fire</b> 1. Retention of all vegetation is a concern from a fire hazard perspective. Retention of vegetation places onus on landholders to develop buildings to a higher standard and for City to manage fuel loads.	<b>Fire</b> 2. Noted. The protection of riparian vegetation takes priority over clearing to accommodate development (refer to Regulation 5 of the <i>Environmental Protection Regulations 2004</i> ). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.
		<b>Servicing</b> 1. Servicing in the area is unclear, particularly in relation to deep sewer.	<b>Servicing</b> 1. Areas adjacent to Bond Road are required to connect to deep sewer (more than one dwelling). Areas adjacent to Ulster Road (south side of Yakamia Creek) are not required to connect to deep sewer.
19	Lot 11 Mercer Road 	<b>Foreshore Buffer</b> 1. As the creek runs through the neighbouring property (40-70m away) to the south, it is considered unnecessary for any land to be given up as foreshore.	<b>Foreshore Buffer</b> 1. Uphold. Modify foreshore boundary to follow southern property boundary. This is consistent with previous planning assessments undertaken at the subdivision stage.
		<b>Public Open Space Contribution</b> 1. A 10% POS contribution is unnecessarily onerous if developed to a density of R5.	<b>Public Open Space Contribution</b> 1. Recommend changing the density to R25. A POS contribution is required for an R25 density ( <i>Planning and Development Act 2005</i> ).
		<b>Fire</b> 1. Retention of all vegetation is a concern from a fire hazard perspective. Retention of vegetation places onus on landholders to develop buildings to a higher standard and for City to manage fuel loads.	<b>Fire</b> 1. Noted. The protection of riparian vegetation takes priority over clearing to accommodate development (refer to Regulation 5 of the <i>Environmental Protection Regulations 2004</i> ). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.
		<b>Dual Density coding</b> 1. Clarification is required for density. If there is a choice and some land is developed at an R5 density, then the viability of developing to a higher density is likely to be affected.	<b>Dual Density coding</b> 1. Recommend changing the density to R25 in keeping with Department of Planning comment.
		<b>Management of foreshore</b> 1. Given the manner in which the Yakamia creek area is likely to be developed, i.e. in a piecemeal manner over many years, it is suggested the City access funding from State or Federal sources to prepare an overall foreshore management plan, which landholders can use for maintenance.	<b>Management of foreshore</b> 1. South Coast Natural Resource Management in partnership with the Oyster Harbour Catchment Group is developing a foreshore management plan for the Yakamia Creek. The aims of this management plan are to: <ul style="list-style-type: none"><li>• Provide recommendations on appropriate management of Yakamia Creek/ drain by private landholders, the City of Albany and State Government agencies.</li><li>• Identify, and propose solutions for, key problem areas and issues.</li><li>• Inform environmental rehabilitation priorities for natural resource management stakeholders, the City of Albany and State Government agencies.</li><li>• Identify the next two to five rehabilitation sites for Yakamia Creek Living Stream Projects.</li></ul> It is recommended that the foreshore management plan is noted in the structure plan under 'Previous Reports and Studies'.
20	Lot 16 Mercer Road	<b>Framework</b> 1. Given the fragmented nature of landholdings within Yakamia, the presentation	<b>Framework</b> 1. Provide additional information within the structure plan around the provision and



		<p>of an overall structure plan is required to provide a framework to coordinate the provision and arrangement of future land use, subdivision and development, staging, servicing, transport networks, public open space, foreshore reserves and urban water management.</p> <p><b>Development Potential</b></p> <ol style="list-style-type: none"> <li>1. The excessive designation of foreshore reserve within the precinct is likely to deter landholders from proceeding to develop their land, which in turn could complicate cooperation and coordination of servicing in the area.</li> </ol> <p><b>Servicing</b></p> <ol style="list-style-type: none"> <li>1. It is unclear how sewer will be provided and staged. Further information at Plan 26 would assist in demonstrating how development can be staged.</li> </ol>	<p>arrangement of future land use, subdivision and development, staging, servicing, transport networks, public open space, foreshore reserves and urban water management.</p> <p><b>Development Potential</b></p> <ol style="list-style-type: none"> <li>1. Recommend reducing areas designated as 'Foreshore Protection and Enhancement' to comply with characteristics of the land (e.g. topography) and water (e.g. flow and flooding characteristics).</li> </ol> <p><b>Servicing</b></p> <ol style="list-style-type: none"> <li>1. Provide additional information to demonstrate potential staging of development.</li> </ol>
21	<p>Lot 17 Mercer Road</p> 	<p><b>Foreshore Buffer</b></p> <ol style="list-style-type: none"> <li>1. As a drainage line does not pass through the property, it is considered that there is no valid reason for any foreshore reserve to be taken from Lot 17.</li> </ol> <p><b>Development Potential</b></p> <ol style="list-style-type: none"> <li>1. The excessive designation of foreshore reserve within the precinct is likely to deter landholders from proceeding to develop their land, which in turn could complicate cooperation and coordination of servicing in the area.</li> </ol> <p><b>Servicing</b></p> <ol style="list-style-type: none"> <li>1. It is unclear how sewer will be provided and staged. Further information at Plan 26 would assist in demonstrating how development can be staged.</li> </ol>	<p><b>Foreshore Buffer</b></p> <ol style="list-style-type: none"> <li>1. Recommend modifying foreshore boundary outside of subject property.</li> </ol> <p><b>Development Potential</b></p> <ol style="list-style-type: none"> <li>1. Recommend reducing areas designated as 'Foreshore Protection and Enhancement' to comply with characteristics of the land (e.g. topography) and water (e.g. flow and flooding characteristics).</li> </ol> <p><b>Servicing</b></p> <ol style="list-style-type: none"> <li>1. Provide additional information to demonstrate potential staging of development.</li> </ol>
22	<p>Lot 18 Catalina Road</p> 	<p><b>Foreshore Buffer</b></p> <ol style="list-style-type: none"> <li>1. Given the creek only runs on a seasonal basis, the extent of foreshore reserve is considered unnecessarily extensive. The fact that the foreshore is proposed to be used for active public open space is contrary to the intent of the Town Planning Act. If part of it is to be used for POS then it should be designated as such, not as foreshore reserve.</li> </ol> <p><b>Power Station</b></p> <ol style="list-style-type: none"> <li>1. The power station designated on the neighbouring property should only be contemplated as a last resort and should accommodate a buffer within its own property boundaries.</li> </ol> <p><b>Servicing</b></p> <ol style="list-style-type: none"> <li>1. It is unclear how sewer will be provided and staged. Further information at Plan 26 would assist in demonstrating how development can be staged.</li> </ol>	<p><b>Foreshore Buffer</b></p> <ol style="list-style-type: none"> <li>1. Recommend modifying foreshore boundary to comply with characteristics of the land (e.g. topography) and water (e.g. flow and flooding characteristics).</li> </ol> <p><b>Power Station</b></p> <ol style="list-style-type: none"> <li>1. Recommend changing the structure plan such that the power station accommodates a buffer within its own property boundaries.</li> </ol> <p><b>Servicing</b></p> <ol style="list-style-type: none"> <li>1. Provide additional information to demonstrate potential staging of development.</li> </ol>
23	<p>Lot 28 Sydney Street</p> 	<b>Costs incurred to Subdivide</b>	<b>Costs incurred to Subdivide</b>




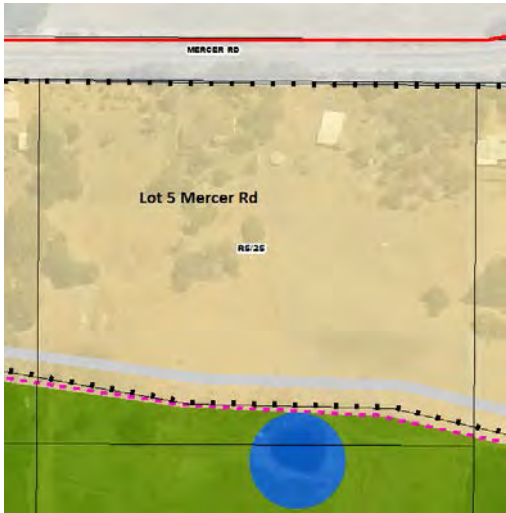
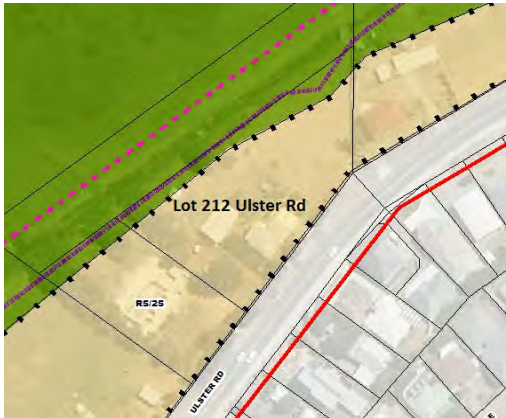
		1. Costs expected from subdivision are excessive. More information needs to be provided to explain what ratepayers may expect from costs incurred from subdividing.	1. Provide additional information to explain what costs landholders may expect as a result of subdivision.
24	Lot 82 Bond Road 	<b>Future Urban Zone</b> 1. Strongly object to any environmental protection measures base on the zoning of Future Urban. I was led to believe that the property could be developed with block sizes of 450-700m <sup>2</sup> .	<b>Future Urban Zone</b> 1. Dismiss. The property in question has been designated for urban development (R25). An area consisting of a foreshore with riparian vegetation exists and is required to be protected in accordance with state requirements. The subject area contains habitat for threatened species and therefore an application to clear vegetation may need to be made to the Commonwealth in accordance with the <i>Environmental Protection and Biodiversity Conservation Act</i> .
25	Lot 87 Ulster Road	<b>Foreshore Buffer</b> 1. A 30m buffer either side of the creek should be used as the benchmark for this section of creek. This is the norm for the area. The designation of a foreshore reserve down the eastern boundary is considered unnecessary given the distance from the creek. Plan 16 of the structure plan demonstrates how filling and building is acceptable within the flood fringe. This appears to be at odds with the excessive designation of foreshore reserve in the draft plan. The following is where we think the buffer should be:	<b>Foreshore Buffer</b> 1. Recommend reducing the extent of foreshore in the northern precinct based on land characteristics (topography). The foreshore boundary in the southern precinct of the subject lot is to stay the same due to flood characteristics.

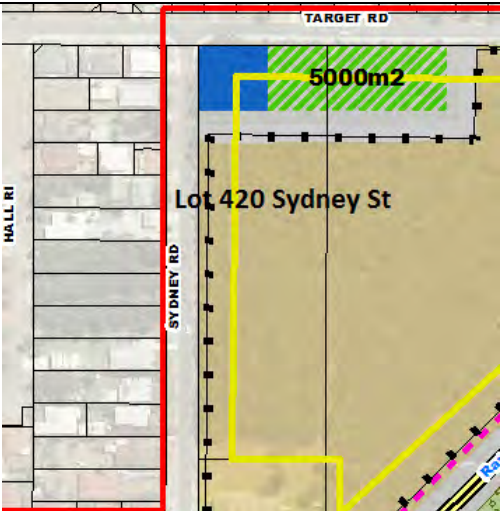



			
		<b>Sewer/Density/POS</b> 1. The majority of subdivision in this locality is choosing to develop larger un-sewered lots which will make the R25 option increasingly unlikely.	<b>Sewer/Density/POS</b> 1. Recommend changing the structure plan as follows: <ul style="list-style-type: none"><li>• The minimum size for properties adjacent to Ulster Road is 3000m<sup>2</sup>, which is in keeping with scheme provisions for the Yakamia Creek zone.</li><li>• Deep sewer and a contribution for POS is not required for this area.</li><li>• Areas to the north of the foreshore adjacent to Bond Road are to be developed to an R25 density (subject to connecting to deep sewer and providing a POS contribution).</li></ul>
26	Lot 372 Catalina Road 	<b>Range Road Alignment</b> 1. Range Road needs to be moved further into 'sub station' land for a better buffer to our home.	<b>Range Road Alignment</b> 1. Range Road has been aligned to comply with an endorsed structure plan (Catalina Structure Plan). The alignment for range Road will be defined by an engineer at the subdivision stage (refer to following endorsed Catalina Structure Plan showing endorsed road reserve): 
27	Lot 102 Ulster Road	<b>Foreshore</b>	<b>Foreshore</b>

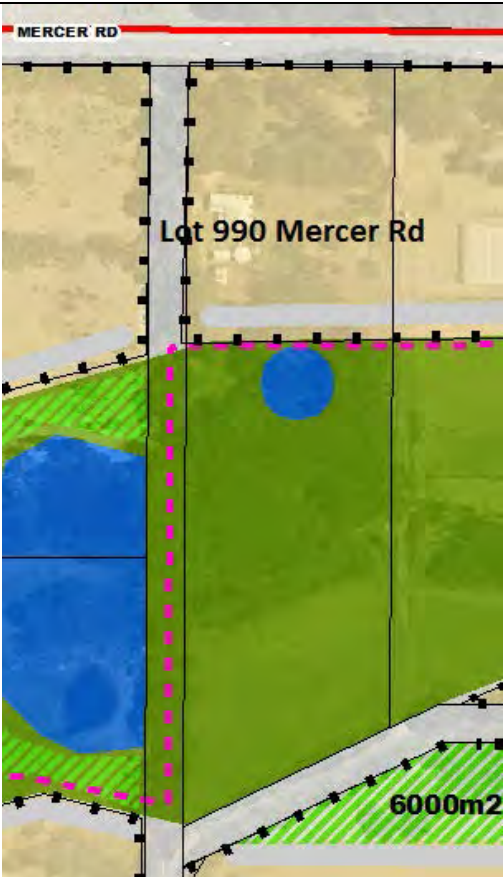
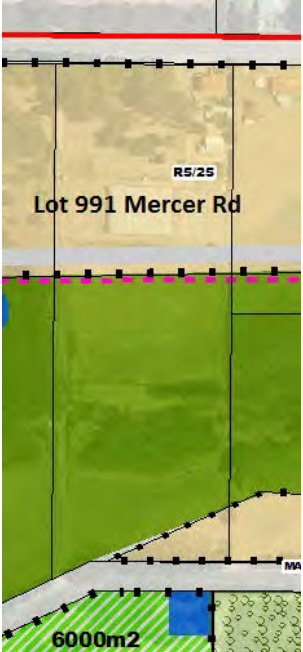
		1. A recent outcome of a State Administrative Tribunal decision designated 18% of the subject property for drainage, as opposed to 68% designated as foreshore under the draft structure plan. The width of the foreshore should be approximately 66m, which is consistent with other areas.	1. Recommend maintaining foreshore in keeping with flood boundaries and riparian vegetation.
		<b>Drainage</b> 1. The structure plan shows a large drainage basin within the foreshore area. Where drainage basins are required on an owners land over and above their own requirement, then it is fair that they be compensated.	<b>Drainage</b> 1. Recommend removing drainage basin from floodplain.
		<b>Management</b> 1. Where possible, makes sense for land owners to remain responsible for ongoing management of foreshore areas.	<b>Management</b> 1. Where land is subdivided, areas designated foreshore, are to be ceded to the Crown and managed by the City. The South Coast Natural Resource Management in partnership with the Oyster Harbour Catchment Group is developing a foreshore management plan for the Yakamia Creek. The aims of this management plan are to: <ul style="list-style-type: none"><li>• Provide recommendations on appropriate management of Yakamia Creek/ drain by private landholders, the City of Albany and State Government agencies.</li><li>• Identify, and propose solutions for, key problem areas and issues.</li><li>• Inform environmental rehabilitation priorities for natural resource management stakeholders, the City of Albany and State Government agencies.</li><li>• Identify the next 2 to 5 rehabilitation sites for Yakamia Creek Living Stream Projects.</li></ul> It is recommended that the foreshore management plan is noted in the structure plan under 'Previous Reports and Studies'.
		<b>Sewer</b> 1. Further clarification is required on the potential to provide scheme sewer.	<b>Sewer</b> 1. The structure plan is to be modified to state that connection to deep sewer is not mandatory for properties fronting Ulster Road.
		<b>POS</b> 1. Concern is also raised in relation to the requirement to provide cash-in-lieu in addition to ceding land free of cost for foreshore reserve.	<b>POS</b> 1. Recommend changing the structure plan such that POS as land or cash-in-lieu is not necessary for properties fronting Ulster Road.
28	Lot 152 Ulster Road 	<b>Foreshore</b> 1. The extent of foreshore illustrated is excessive. A 30m buffer either side of the creek should be used as the benchmark for this section of creek. Given the manner in which the Yakamia creek area is likely to be developed, ie in a piecemeal manner over many years, it is suggested the City access funding from State or Federal sources to prepare an overall foreshore management plan, which landholders can use for maintenance.	<b>Foreshore</b> 1. Recommend maintaining foreshore in keeping with flood boundaries and riparian vegetation.
		<b>Deep Sewer/Density/POS</b> 1. Insufficient information is provided regarding the ability to provide deep sewer. Clarification is required for density. If there is a choice and some land is developed at an R5 density, then the viability of developing to a higher density is likely to be affected. Concern is also raised in relation to the requirement to provide cash-in-lieu in addition to ceding land free of cost for foreshore reserve.	<b>Deep Sewer/Density/POS</b> 1. Recommend changing the density for properties adjacent to Ulster Road to minimum lot size of 3000m <sup>2</sup> in keeping with scheme provisions for the Yakamia Creek zone.  Connection to deep sewer and a contribution for POS is not required for this area.  Areas to the north of the foreshore adjacent to Bond Road are to be developed to an R25 density (subject to connecting to deep sewer and providing a POS contribution).
29	Lot 201 Ulster Road	<b>Foreshore</b> 1. The extent of foreshore illustrated is excessive. A 30m buffer either side of the creek should be used as the benchmark for this section of creek.	<b>Foreshore</b> 1. Recommend maintaining foreshore in keeping with flood boundaries and riparian vegetation.
		<b>Management</b> 1. Consideration should be given to ongoing management costs for the City who would be responsible for managing significant areas of reserve. Given the manner in which the Yakamia creek area is likely to be developed, ie in a	<b>Management</b> 2. Where land is subdivided, areas designated foreshore, are to be ceded to the Crown and managed by the City. The South Coast Natural Resource Management in partnership with the Oyster Harbour Catchment Group is developing a foreshore


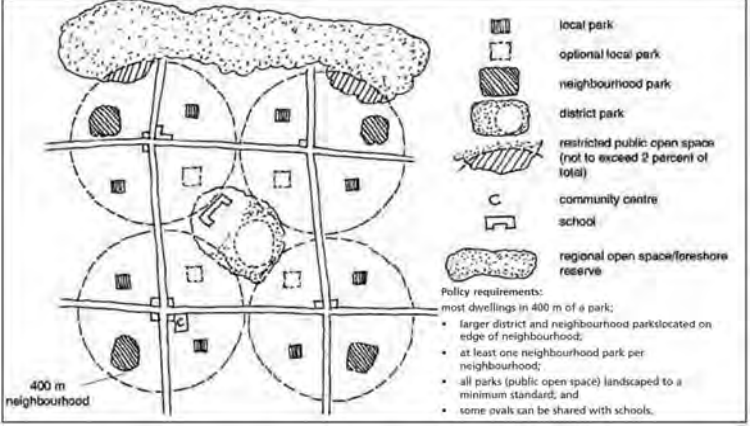


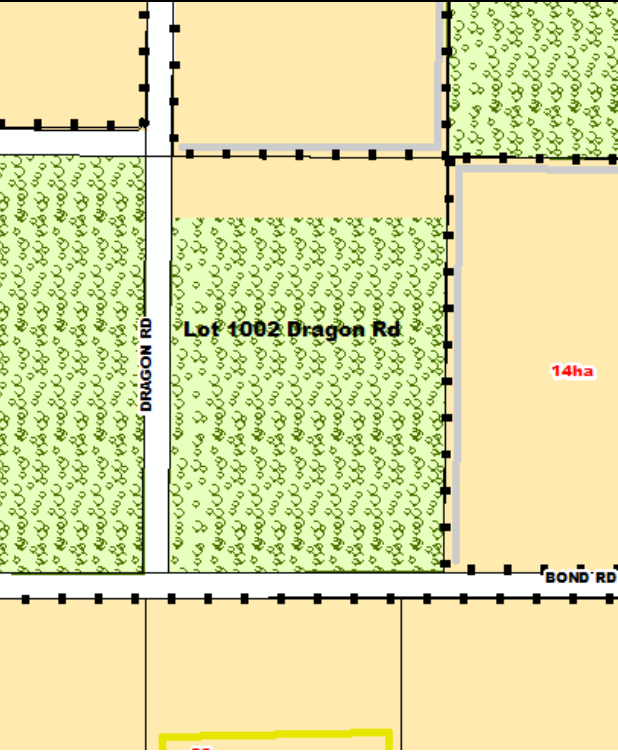
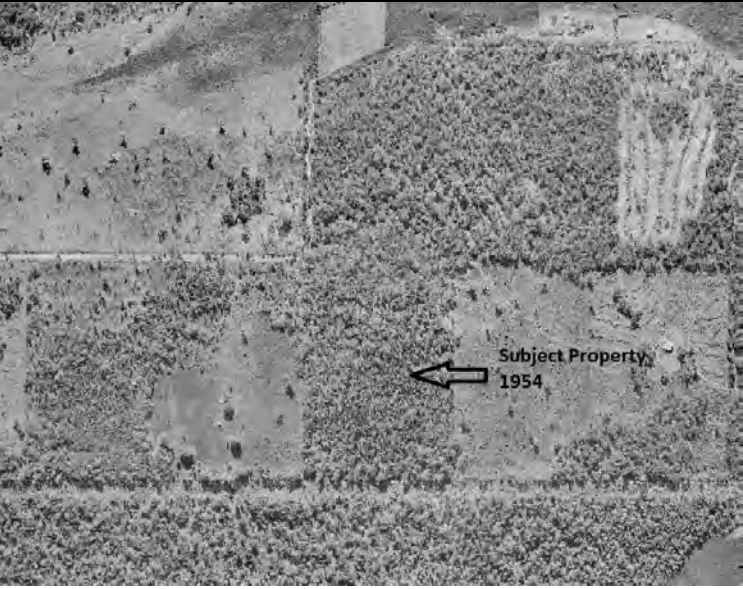

			piecemeal manner over many years, it is suggested the City access funding from State or Federal sources to prepare an overall foreshore management plan, which landholders can use for maintenance.	<p>management plan for the Yakamia Creek. The aims of this management plan are to:</p> <ul style="list-style-type: none"> <li>• Provide recommendations on appropriate management of Yakamia Creek/ drain by private landholders, the City of Albany and State Government agencies.</li> <li>• Identify, and propose solutions for, key problem areas and issues.</li> <li>• Inform environmental rehabilitation priorities for natural resource management stakeholders, the City of Albany and State Government agencies.</li> <li>• Identify the next 2 to 5 rehabilitation sites for Yakamia Creek Living Stream Projects.</li> </ul> <p>It is recommended that the foreshore management plan is noted in the structure plan under 'Previous Reports and Studies'.</p>
			<p><b>Density/POS</b></p> <p>1. Clarification is required for density. If there is a choice and some land is developed at an R5 density, then the viability of developing to a higher density is likely to be affected. Concern is also raised in relation to the requirement to provide cash-in-lieu in addition to ceding land free of cost for foreshore reserve.</p>	<p><b>Density/POS</b></p> <p>1. Recommend changing the density for properties adjacent to Ulster Road to minimum lot size of 3000m<sup>2</sup> in keeping with scheme provisions for the Yakamia Creek zone.</p> <p>Connection to deep sewer and a contribution for POS is not required for this area.</p> <p>Areas to the north of the foreshore adjacent to Bond Road are to be developed to an R25 density (subject to connecting to deep sewer and providing a POS contribution).</p>
30	<p>Lot 5 Mercer Road</p> 		<p><b>Water Supply</b></p> <p>1. The draft plan would impact on our current water supply. We would lose our dam which is used to provide water to our livestock and gardens.</p>	<p><b>Water Supply</b></p> <p>1. Recommend modifying the structure to show the foreshore boundary following the cadastre boundary.</p>
31	<p>Lot 212 Ulster Road</p> 		<p><b>Subdivision</b></p> <p>1. Neighbouring properties have rights of carriage over Lot 212 Ulster Road. The carriageway is 5m wide and any further subdivision and subsequent increased traffic will be unsafe due to poor line of site and impact on the amenity of our land.</p>	<p><b>Subdivision</b></p> <p>1. Recommend modifying the structure plan to limit the amount of subdivision to 3000m<sup>2</sup> lots in keeping with current scheme requirements.</p>
32	<p>Lot 420 Sydney Street</p>		<p><b>Referral to Commonwealth</b></p> <p>1. We are concerned regarding the label applied to our land being: 'Referral to Commonwealth'.</p>	<p><b>Referral to Commonwealth</b></p> <p>1. Species listed as being threatened in the <i>Environment Protection and Biodiversity Act 1999</i> have been known to inhabit the area.</p> <p>Include additional information within the structure plan to explain environmental issues.</p>

			<p>An overview of the Environment Protection and Biodiversity Act 1999, written by the Australian, Department of the Environment and Heritage states:</p> <p><i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister. An overview of the Environment Protection and Biodiversity Conservation Act 1999, written by the Australian, Department of the Environment and Heritage states:</i></p> <p><i>A person must not take an action that has, will have or is likely to have a significant impact on a matter of national environmental significance except:</i></p> <ul style="list-style-type: none"> <li><i>in accordance with an approval from the Commonwealth Environment Minister; or</i></li> <li><i>in accordance with an approval from another Commonwealth decision-maker under a management plan accredited by the Commonwealth Environment Minister for the purposes of a Ministerial declaration (declarations are explained on p.7); or</i></li> <li><i>in accordance with an approval from a State in accordance with a management plan accredited by the Commonwealth Environment Minister for the purposes of a bilateral agreement (bilateral agreements are explained on p.7).</i></li> <li><i>The unlawful taking of an action that has a significant impact on a matter of national environmental significance may attract a civil penalty of up to \$5.5 million or a criminal penalty of up to 7 years imprisonment.</i></li> </ul> <p><i>The Act provides for the listing of:</i></p> <ul style="list-style-type: none"> <li><i>nationally threatened native species and ecological communities;</i></li> <li><i>internationally protected migratory species; and</i></li> <li><i>marine species.</i></li> </ul>
33	<p>Lot 541 Mercer Road</p> 	<p><b>Structure Plan</b></p> <p>1. We are very much in favour of the plan.</p>	<p><b>Structure Plan</b></p> <p>1. Noted.</p>
34	<p>Lot 990 Mercer Road</p>	<p><b>Foreshore Buffer</b></p> <p>1. Give this is a tributary, the extent of foreshore is extreme. The area of foreshore shown also includes a cleared area adjacent to Mason Road. The foreshore should only be 10m either side of the creek.</p>	<p><b>Foreshore Buffer</b></p> <p>1. A site visit was conducted to confirm location of riparian vegetation and extent of topographies. Recommend modifying the foreshore boundaries in accordance with characteristics of the area.</p>
		<p><b>Public Open Space Contribution/Density</b></p> <p>1. A 10% POS contribution is unnecessarily onerous if developed to a density of R5. Clarification is required for density. If there is a choice and some land is developed at an R5 density, then the viability of developing to a higher density is likely to be affected.</p>	<p><b>Public Open Space Contribution</b></p> <p>1. Recommend changing the density to R25, meaning POS will need to be provided as land or cash in lieu.</p>

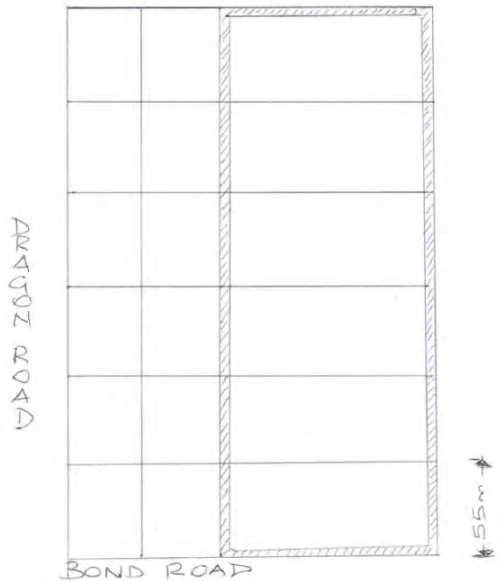




		<p><b>Fire</b></p> <ol style="list-style-type: none"> <li>Retention of all vegetation is a concern from a fire hazard perspective. Retention of vegetation places onus on landholders to develop buildings to a higher standard and for City to manage fuel loads.</li> </ol>	<p><b>Fire</b></p> <ol style="list-style-type: none"> <li>Noted. The protection of riparian vegetation generally takes priority over clearing to accommodate development (refer to Regulation 5 of the <i>Environmental Protection Regulations 2004</i>). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.</li> </ol>
35	<p>Lot 991 Mercer Road</p> 	<p><b>Foreshore Buffer</b></p> <ol style="list-style-type: none"> <li>Given this is a tributary, the extent of foreshore is extreme. The area of foreshore shown also includes a cleared area adjacent to Mason Road. The foreshore should only be 10m either side of the creek.</li> </ol> <p><b>Public Open Space Contribution/Density</b></p> <ol style="list-style-type: none"> <li>A 10% POS contribution is unnecessarily onerous if developed to a density of R5. Clarification is required for density. If there is a choice and some land is developed at an R5 density, then the viability of developing to a higher density is likely to be affected.</li> </ol> <p><b>Fire</b></p> <ol style="list-style-type: none"> <li>Retention of all vegetation is a concern from a fire hazard perspective. Retention of vegetation places onus on landholders to develop buildings to a higher standard and for City to manage fuel loads.</li> </ol>	<p><b>Foreshore Buffer</b></p> <ol style="list-style-type: none"> <li>Recommend changing the foreshore boundary to align with land characteristics (topography) and neighbouring property designations.</li> </ol> <p><b>Public Open Space Contribution/Density</b></p> <ol style="list-style-type: none"> <li>Recommend changing the density to R25, meaning POS will need to be provided as land or cash in lieu.</li> </ol> <p><b>Fire</b></p> <ol style="list-style-type: none"> <li>Noted. The protection of riparian vegetation takes priority over clearing to accommodate development (refer to Regulation 5 of the <i>Environmental Protection Regulations 2004</i>). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.</li> </ol>
36	<p>Lot 996 Dragon Road</p>	<p><b>Fire</b></p> <ol style="list-style-type: none"> <li>Object to the plan on the grounds of the bushfire risk, the result of vegetation protection.</li> </ol>	<p><b>Fire</b></p> <ol style="list-style-type: none"> <li>Noted. The protection of riparian vegetation takes priority over clearing to accommodate development (refer to Regulation 5 of the <i>Environmental Protection Regulations 2004</i>). Development within 100m of the fire prone vegetation will need to accommodate a building protection zone, hazard separation measures and ember and flame attack measures. Recommend highlighting on the structure plan, areas subject to fire risk.</li> </ol>

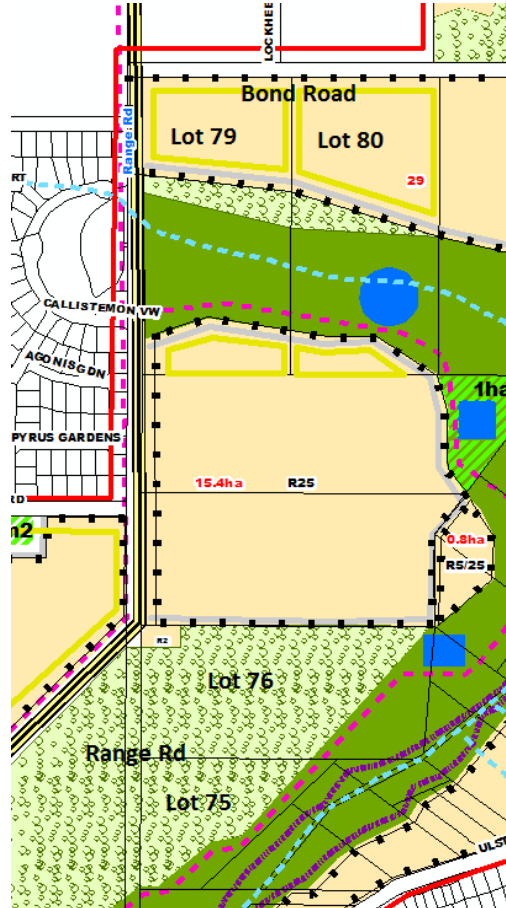

		<p><b>POS</b></p> <p>1. Public Open Space being taken off some blocks and not others.</p>	<p><b>POS</b></p> <p>1. A minimum contribution of 10% of a gross subdivisonal area must be given up free of cost by the developer/subdivider as land for public parkland and/or as cash to be used to develop public parkland and associated facilities.</p> <p>The Western Australian Planning Commission's <i>Liveable Neighbourhoods</i> 'Public Open Space Model' accomplishes at least two local parks and one neighbourhood park per 400m radius (neighbourhood). A district park is recommended for every four neighbourhoods.</p> 
		<p><b>Contributions/Roads</b></p> <p>1. Road infrastructure should be divided equally between blocks.</p>	<p><b>Contributions/Roads</b></p> <p>1. Recommend providing additional information within the structure plan to explain what costs landholders may expect as a result of subdivision. Recommend making cost contributions in accordance with the Western Australian Planning Commission's <i>State Planning Policy 3.6 – Development Contributions for Infrastructure</i>. This Policy has been developed to:</p> <ul style="list-style-type: none"> <li>Promote the efficient and effective provision of public infrastructure and facilities to meet the demands arising from new growth and development;</li> <li>Ensure that development contributions are necessary and relevant to the development to be permitted and are charged equitably among those benefiting from the infrastructure and facilities to be provided;</li> <li>Ensure consistency and transparency in the system for apportioning, collecting and spending development contributions;</li> <li>Ensure the social well-being of communities arising from, or affected by, development.</li> </ul>
		<p><b>Substation</b></p> <p>1. Disagree with a substation near a proposed school.</p>	<p><b>Substation</b></p> <p>1. Western Power has retained the need to develop its site owned at Lot 36 Catalina Road, Albany for substation purposes within a 10-25 year period.</p>
37	Lot 1002 Dragon Road	<p><b>Condition of Vegetation</b></p> <p>1. The subject property was originally cleared and is not natural bush.</p>	<p><b>Condition of Vegetation</b></p> <p>1. Aerial photographs going back 19 years and 64 years (1954 and 1996) illustrate vegetation over the subject property. Twenty year old regrowth is deemed to be remnant.</p>

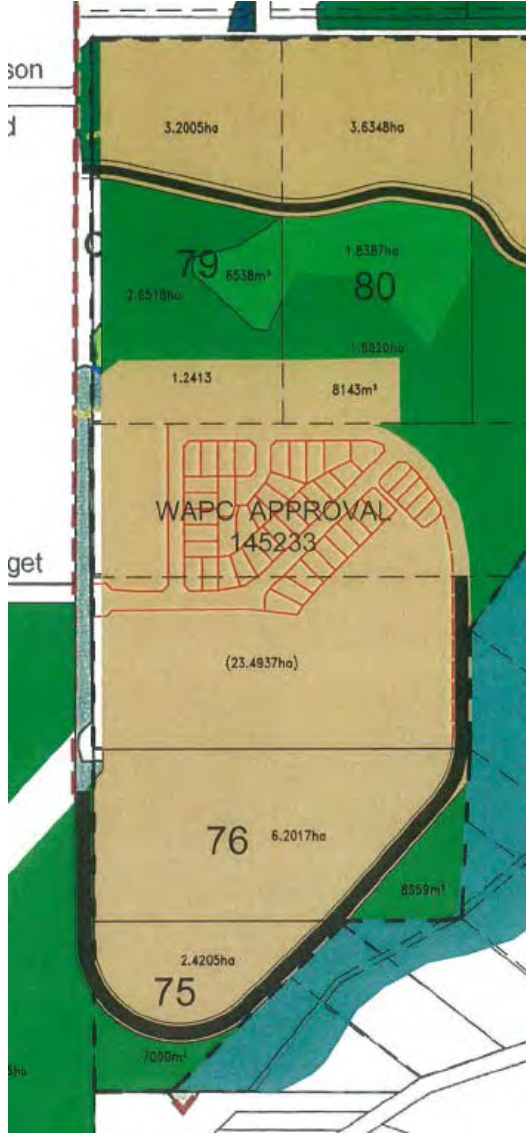
		 
	<p><b>Bush Blocks</b></p> <p>1. We have attached a plan for what we are seeking bearing in mind conservation that the City seeks. Our plan proposes six rural lifestyle bush blocks. This would leave 57% of the property protected and vegetated.</p>	<p><b>Bush Blocks</b></p> <p>1. Noted. The Office of the Environmental Protection Authority has recommended protection of the vegetation at the subject property. Recommend including the following notation within the structure plan:</p> <p><i>If a proposal is lodged for a property designated for private conservation, and it appears that the proposal is likely to have a significant effect on the environment, the local government will refer the proposal to the Environmental Protection Authority.</i></p> <p><i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.</i></p>



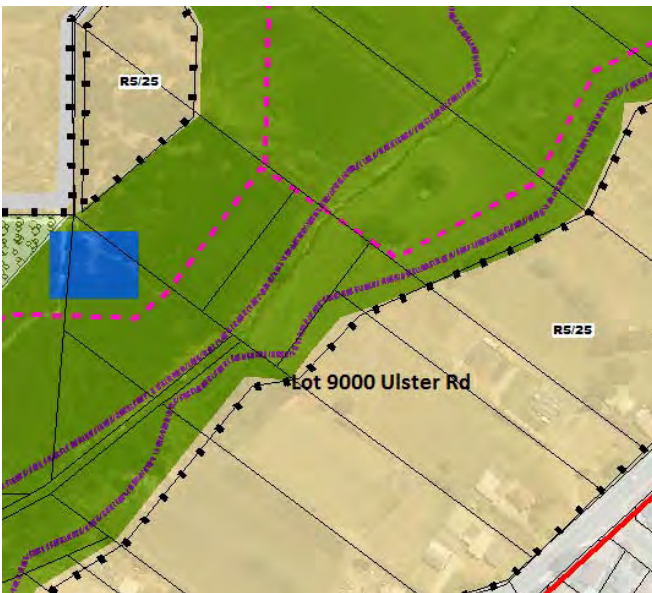
				
38	Lots 77 and 78 Range Rd and Lot 81 Bond Rd		<div><div><b>Foreshore/POS</b></div><div>1. The landholder objects land shown as foreshore (Lot 78), which has previously been given up as a condition of subdivision for POS. The structure plan then requires a cash contribution for POS, in addition to the foreshore being given up. This is not considered justifiable. Object to just under half of Lot 81 being designated for a foreshore reserve. The excessive foreshore makes it extremely unlikely that the land can be economically developed.</div></div> <div><div><b>Local Centre</b></div><div>1. A local centre needs to be identified at the intersection of Target Road and Range Road to service the predominantly residential area.</div><div></div></div> <div><div><b>Vegetation</b></div><div>1. It is unclear as to what criteria is used to determine whether or not to protect vegetation (e.g. vegetation that's poorly represented in the region, vegetation deemed to be in good to excellent condition and/or vegetation associated with Conservation Category wetland). An effective balance of development versus protecting vegetation needs to be achieved to enable development to occur.</div></div>	<div><div><b>POS</b></div><div>1. A site visit has concluded that the areas shown as foreshore have characteristics of a foreshore. A 'foreshore' is defined as; "land adjoining or directly influencing a body of water that is managed to protect waterway and riparian values" (<i>Water and Rivers Commission Foreshore Policy 1 2002</i>). The land is low lying and adjacent to a creek. The soil is wet under foot in the winter months and the vegetation includes Taxandria (Heath), which occurs in soil (clay loam) common to wet areas.</div><div>Recommend keeping the foreshore designations in keeping with characteristics.</div><div>Recommend keeping POS designation in keeping with previous Western Australian Planning Commission subdivision approval.</div></div> <div><div><b>Local Centre</b></div><div>1. Recommend not identifying a local centre until such time that a review of the <i>Albany Local Planning Strategy</i> is completed. This strategy will consider planning criteria around defining the appropriate location of commercial centres.</div></div> <div><div><b>Vegetation</b></div><div>1. Noted. Vegetation throughout the area is in good to excellent condition. The vegetation forms corridors, provides habitat to flora and is visually appealing.</div><div>In accordance with Local Planning Scheme 1 (Clause 5.3.3), the Local Government may require the protection of existing vegetation on a site to:<div>(a) Protect a vegetation community;</div><div>(b) Prevent land degradation;</div></div></div>



		<div>(c) Protect roadside vegetation;</div> <div>(d) Maintain local visual amenity and the natural setting;</div> <div>(e) Protect habitat, or a threatened species;</div> <div>(f) Assist to provide vegetated corridors to maintain fauna and flora linkages; or</div> <div>(g) Assist in the maintenance of water quality.</div> <div>The structure plan seeks to protect the vegetation in accordance with <i>Local Planning Scheme No. 1</i> and for the following reasons:</div> <div><div></div><div>Vegetation is adjacent to foreshores;</div><div>Vegetation forms a natural corridor with neighbouring vegetation;</div><div>The vegetation acts as a habitat for fauna;</div><div>Clearing of vegetation will substantially alter the character of the area and may cause land degradation such as erosion and water management issues.</div></div>																							
39	<div>Lots 79 and 80 Bond Rd and Lots 75 and 76 Range Rd.</div> <div></div>	<div><b>Vegetation</b></div> <div>1. The <i>Albany Regional Vegetation Survey</i> (ARVS) does not give an overall conservation status or rating for vegetation units. A threshold value was used in the ARVS being:</div> <div><div></div><div>30% being a threshold level; and</div><div>&lt;10% being an endangered level.</div></div> <div>The ARVS makes the following assessment on clearing:</div> <div><div></div><div>Units 12 and 59 – Unclear</div><div>Unit 13, 14, 46 and 47 – &lt;30%</div></div> <div><table><tr><th>Vegetation Code</th><th>Vegetation Unit Code</th></tr><tr><td>2</td><td>Atle</td></tr><tr><td>12</td><td>Afra/Emar/Ccal/Athe</td></tr><tr><td>13</td><td>Emar/Afra/E.sta</td></tr><tr><td>14</td><td>Booc/Esta/Afra</td></tr><tr><td>36</td><td>Clan</td></tr><tr><td>46</td><td>Eari</td></tr><tr><td>47</td><td>Hfir/Cgla/Egra</td></tr><tr><td>52</td><td>Mcut/Mpra/Alae</td></tr><tr><td>59</td><td>Tjun</td></tr><tr><td>68</td><td>Tori</td></tr></table></div> <div>Based on the ARVS assessment, clearing will take the extent of vegetation below thresholds. The impact of clearing from the subject landholdings (8-10ha) would have little impact on the percentage remaining given the extent of vegetation species remaining in the region (13,144ha).</div> <div>There is an argument that land within the City of Albany urban expansion area should be considered as a 'constrained area' as is the case for the Perth Metropolitan Region and parts of the Greater Bunbury Region. The target retention of vegetation types in constrained areas is 10%. All vegetation associations have a lot more than 10% remaining.</div>	Vegetation Code	Vegetation Unit Code	2	Atle	12	Afra/Emar/Ccal/Athe	13	Emar/Afra/E.sta	14	Booc/Esta/Afra	36	Clan	46	Eari	47	Hfir/Cgla/Egra	52	Mcut/Mpra/Alae	59	Tjun	68	Tori	<div><b>Vegetation</b></div> <div>1. Noted. The City is currently reviewing the <i>Albany Local Planning Strategy</i>, which may include criteria for clearing within a 'Constrained Area'.</div>
Vegetation Code	Vegetation Unit Code																								
2	Atle																								
12	Afra/Emar/Ccal/Athe																								
13	Emar/Afra/E.sta																								
14	Booc/Esta/Afra																								
36	Clan																								
46	Eari																								
47	Hfir/Cgla/Egra																								
52	Mcut/Mpra/Alae																								
59	Tjun																								
68	Tori																								

	<p>The EPA's <i>Environmental Protection Bulletin No. 13</i> states that for the quantitative determination of the impact of clearing on vegetation in the Albany region, the Vegetation Association data contained in Shepherd et al. 2002 and DAFWA 2005 should be used. On that basis the clearing of vegetation on the Ardross Yakamia landholdings would not impact on the 30% retention target for vegetation associations that occur on land.</p>	
	<p><b>Proposal</b></p> <p>1. We believe the structure plan is not a viable plan for development but rather a plan for vegetation protection. We contend that the process to get to where we are was not sufficiently inclusive of landowners. The following is a concept plan proposed for the development and conservation for Lots 79 and 80 Bond Rd and Lots 75 and 76 Range Rd.</p> 	<p><b>Proposal</b></p> <p>1. Noted. The development of the structure plan involved consulting with land holders and government agencies. The structure plan seeks to find a compromise between supporting some development in environmentally constrained areas and protecting some vegetation that's in good to excellent condition, forms a corridor, acts to provide a habitat to threatened species and is visually appealing. The Office of the Environmental Protection Authority has recommended protecting vegetation. Recommend including the following notation in the structure plan:</p> <p><i>If a proposal is lodged for a property designated for private conservation, and it appears that the proposal is likely to have a significant effect on the environment, the local government will refer the proposal to the Environmental Protection Authority.</i></p> <p><i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.</i></p>
	<p><b>Additional Work</b></p> <p>1. Prior to finalisation of the structure plan more detailed work needs to be done on:</p> <ul style="list-style-type: none"><li>• cost sharing arrangements for infrastructure;</li><li>• 'Referral to Commonwealth' (our understanding is that structure plans are not formally assessed by the EPA, therefore referral to commonwealth is unnecessary); and</li></ul>	<p><b>Additional Work</b></p> <p>1. Recommend including additional information within the structure plan around cost sharing arrangements. Recommend including the following additional information within the structure plan around referral to Commonwealth.</p> <p><i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) in a designated private conservation area that is likely to have a significant impact on a</i></p>

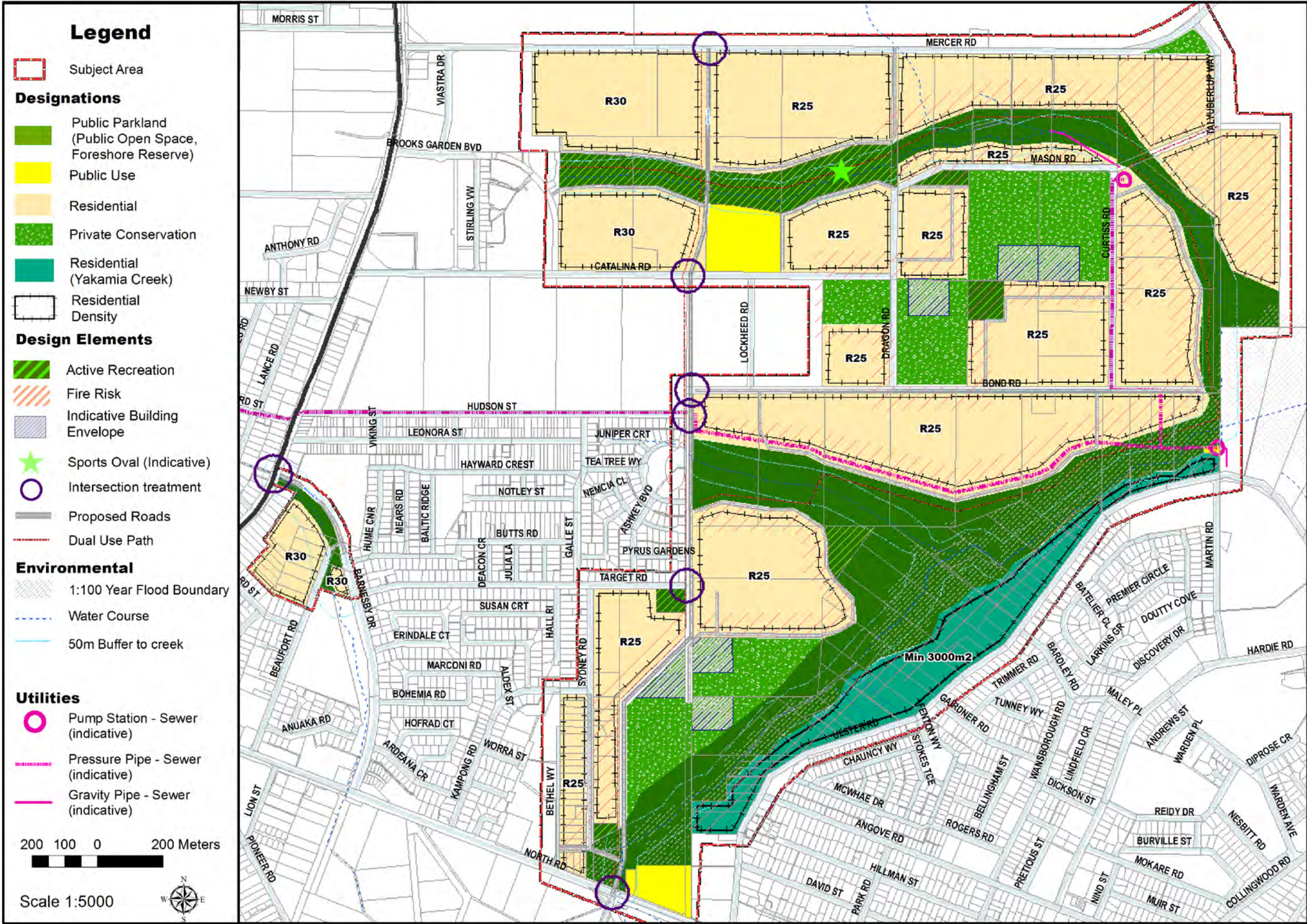


		<ul style="list-style-type: none"><li>• Determination of land designated as ‘Environmental Protection and Biodiversity Conservation’.</li></ul> <p>2. The WAPC structure plan preparation guidelines advise that ‘the local structure plan also identifies all land uses (as provided under the local planning scheme)’. Neither ‘Environment Protection and Biodiversity Conservation’ nor ‘Foreshore Protection and Enhancement Area’ are land uses identified in the Scheme as zones, reserves or anything else.</p> <p>3. It seems likely that contributions will be required from subdividers to pay for land and construction of distributor roads beyond the sites of the subdivisions themselves. In addition, the designation of whole parcels of land for conservation purposes means that the only means by which these purposes can be realistically achieved is through acquisition. For both of these reasons it appears a Development Contribution Plan is required and should be presented concurrently with the structure plan.</p>	<p><i>matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister prior to taking any action.</i></p> <p>Species listed as being threatened in the <i>Environment Protection and Biodiversity Act 1999</i> have been known to habituate the area. An overview of the <i>Environment Protection and Biodiversity Act 1999</i>, written by the Australian Department of the Environment and Heritage states:</p> <p><i>If a developer is proposing to take action (e.g. clearing of remnant vegetation) that is likely to have a significant impact on a matter of national environmental significance (e.g. Carnaby's Black Cockatoo), the developer may require approval from the Commonwealth Environment Minister. An overview of the Environment Protection and Biodiversity Conservation Act 1999, written by the Australian, Department of the Environment and Heritage states:</i></p> <p><i>A person must not take an action that has, will have or is likely to have a significant impact on a matter of national environmental significance except:</i></p> <ul style="list-style-type: none"><li>• <i>in accordance with an approval from the Commonwealth Environment Minister; or</i></li><li>• <i>in accordance with an approval from another Commonwealth decision-maker under a management plan accredited by the Commonwealth Environment Minister for the purposes of a Ministerial declaration (declarations are explained on p.7); or</i></li><li>• <i>in accordance with an approval from a State in accordance with a management plan accredited by the Commonwealth Environment Minister for the purposes of a bilateral agreement (bilateral agreements are explained on p.7).</i></li><li>• <i>The unlawful taking of an action that has a significant impact on a matter of national environmental significance may attract a civil penalty of up to \$5.5 million or a criminal penalty of up to 7 years imprisonment.</i></li></ul> <p><i>The Act provides for the listing of:</i></p> <ul style="list-style-type: none"><li>• <i>nationally threatened native species and ecological communities;</i></li><li>• <i>internationally protected migratory species; and</i></li><li>• <i>marine species.</i></li></ul>	
40	Lot 9000 Ulster Road		<p><b>Foreshore</b></p> <p>1. Contest the proposed size of the area of land to be designated as foreshore, particularly at the northerly end of the property where the topography rises. Suggest a reserve distance of 40m to the north of the creek.</p> <p><b>Density/POS</b></p> <p>1. Please confirm density and POS requirements.</p>	<p><b>Foreshore</b></p> <p>1. A site visit clearly indicated a change in land characteristics at around a 75m distance from the edge of the creek. Land between the creek and a distance of approximately 75m is subject to characteristics of a foreshore, such as, inundation of water, erosion and clay loam soils. Recommend maintaining the designated foreshore at approximately 75m from creek on northern side.</p> <p><b>Density/POS</b></p> <p>1. Recommend changing the structure plan to show the following:</p> <ul style="list-style-type: none"><li>• Minimum 3000m<sup>2</sup> lot development south of Yakamia Creek (connection to deep sewer not required).</li><li>• Connection to deep sewer is required for development on the north side of Yakamia Creek. The northern precinct may be developed to a density of R25.</li></ul>

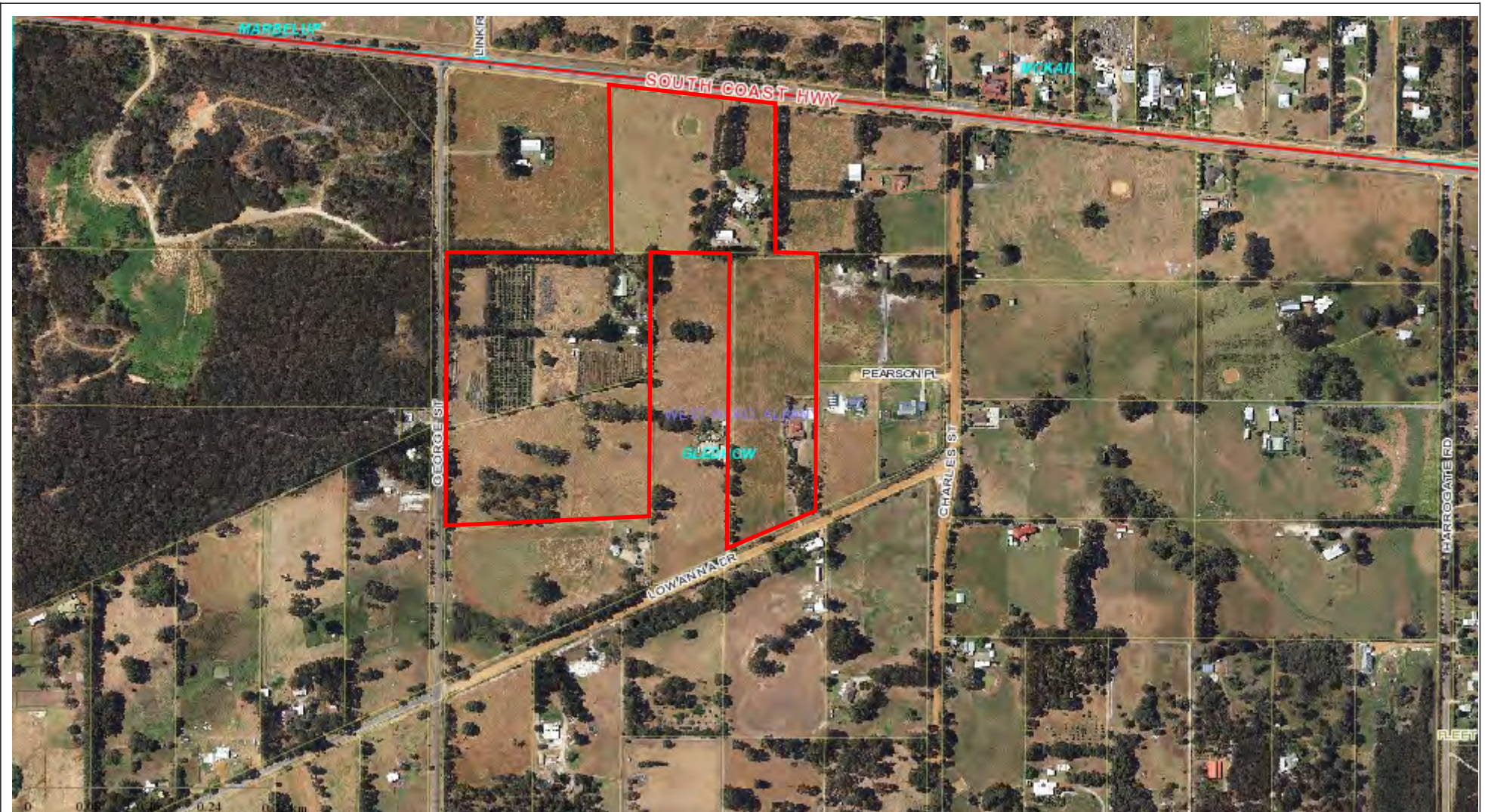




New Proposed Plan – Post Submissions







This map has been produced by the City of Albany using data from a range of agencies. The City bears no responsibility for the accuracy of this information and accepts no liability for its use by other parties. Reproduced by permission of Western Australian Land Information Authority, Copyright Licence SLIP 436-2014-1. [www.landgate.wa.gov.au](http://www.landgate.wa.gov.au)

Thursday, 20 August 2015

1:7500



## **Attachment 2 – Albany Local Planning Strategy Excerpts**

### **Section 8.3.1 Strategic Settlement Direction**

Section 8.3.1 *Strategic Settlement Direction* of the *Albany Local Planning Strategy 2010* (ALPS) sets the following strategic objective:

*“Facilitate and manage sustainable settlement growth for the urban area in the City of Albany”*

The ALPS sets out the following aims to achieve this objective:

*“The ALPS aims to contain the spread of fragmented urban and rural living areas in the City by:*

- *Providing for growth in urban areas, rural townsites and rural living areas as designated in ALPS.*
- *Minimising the development footprint on the landscape to help protect biodiversity and the environment.*
- *Promoting energy conservation.*
- *Providing greater housing choice.*
- *Minimising journey length from home to work/school/services and encouraging the use of public transport, cycling and walking.*
- *Reducing government expenditure on servicing current and future populations.”*

### **Section 8.3.5 Rural Living**

Section 8.3.5 *Rural Living* of the ALPS sets the following strategic objectives:

*“In the long term encourage the efficient use of existing rural living areas, based on land capability to maximise their development potential.”*

*“Ensure that future rural living areas are planned and developed in an efficient and co-ordinated manner by being located either adjacent to Albany as designated on the ALPS maps, or within existing rural townsites in accordance with Table 5 along with adequate services and community infrastructure.”*

The ALPS expands on this by stating that *“The strategy’s objectives for Rural Living areas are to:*

- *Discourage the creation of additional rural townsites for living purposes.*
- *Avoid the development of Rural Living areas on productive agricultural land, other important natural resource areas and areas of high bushfire risk, flooding and environmental sensitivity.*
- *Avoid the development of Rural Living areas on future and potential long-term urban areas.*
- *Provide compact growth of selected existing rural townsites in accordance with Table 4, based on land capability and available services and facilities.*
- *Minimise potential for generating land-use conflicts.”*

# **CITY OF ALBANY**

## **LOCAL PLANNING SCHEME No. 1**

### **AMENDMENT No. 9**

**AYTON BAESJOU**

P L A N N I N G

ABN: 15 061 140 172

11 Duke Street  
Albany WA 6330  
Ph 9842 2304 Fax 9842 8494



**MINISTER FOR PLANNING**

**PROPOSAL TO AMEND A LOCAL PLANNING SCHEME**

LOCAL AUTHORITY:	<b>CITY OF ALBANY</b>
DESCRIPTION OF LOCAL PLANNING SCHEME:	<b>LOCAL PLANNING SCHEME No. 1</b>
TYPE OF SCHEME:	<b>DISTRICT SCHEME</b>
SERIAL No. OF AMENDMENT:	<b>AMENDMENT No. 9</b>

**PROPOSAL:**

*To rezone Lot 5 Lowanna Drive, Lots 9 & 110 George Street and Lot 16 South Coast Highway, Gledhow from the 'General Agriculture' zone to the 'Rural Residential' zone.*

**LOCAL PLANNING SCHEME No. 1**

**AMENDMENT No. 9**

**CONTENTS**

1. RESOLUTION
2. REPORT
3. EXECUTION

**PLANNING AND DEVELOPMENT ACT 2005**

**RESOLUTION DECIDING TO AMEND A  
LOCAL PLANNING SCHEME**

**CITY OF ALBANY**

**LOCAL PLANNING SCHEME No. 1**

**DISTRICT SCHEME**

**AMENDMENT No. 9**

RESOLVED that the Council, in pursuance of Section 75 of the Planning and Development Act 2005, amend the above local planning scheme by:

*Rezoning Lot 5 Lowanna Drive, Lots 9 & 110 George Street and Lot 16 South Coast Highway, Gledhow from the 'General Agriculture' zone to the 'Rural Residential' zone.*

Dated this \_\_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_  
**CHIEF EXECUTIVE OFFICER**

**CITY OF ALBANY**

**LOCAL PLANNING SCHEME NO. 1**

**AMENDMENT NO. 9**

Lot 5 Lowanna Drive, Lots 9 & 110 George Street and  
Lot 16 South Coast Highway, Gledhow.

**PLANNING REPORT**



## Contents

<b>1. INTRODUCTION .....</b>	<b>1</b>
<b>2. BACKGROUND .....</b>	<b>1</b>
2.1 LOCATION, AREA & ZONING.....	1
LOCATION PLAN .....	1
2.2 SURROUNDING LAND USE AND ZONING.....	2
PLAN – SURROUNDING LAND USE AND ZONING .....	2
<b>3. PLANNING CONTEXT .....</b>	<b>3</b>
3.1 ALBANY LOCAL PLANNING STRATEGY .....	3
EXCERPT FROM ALBANY LOCAL PLANNING STRATEGY MAP 9B.....	3
3.2 LOCAL PLANNING SCHEME NO. 1 .....	4
<b>4. SITE DESCRIPTION .....</b>	<b>5</b>
PLAN: SITE CHARACTERISTICS .....	7
<b>5. SERVICES AND INFRASTRUCTURE .....</b>	<b>8</b>
5.1 ROADS .....	8
<b>6. OPPORTUNITIES AND CONSTRAINTS .....</b>	<b>11</b>
<b>7. DEVELOPMENT PROPOSAL.....</b>	<b>12</b>
SUBDIVISION GUIDE PLAN .....	13
<b>8. CONCLUSION .....</b>	<b>15</b>

## 1. INTRODUCTION

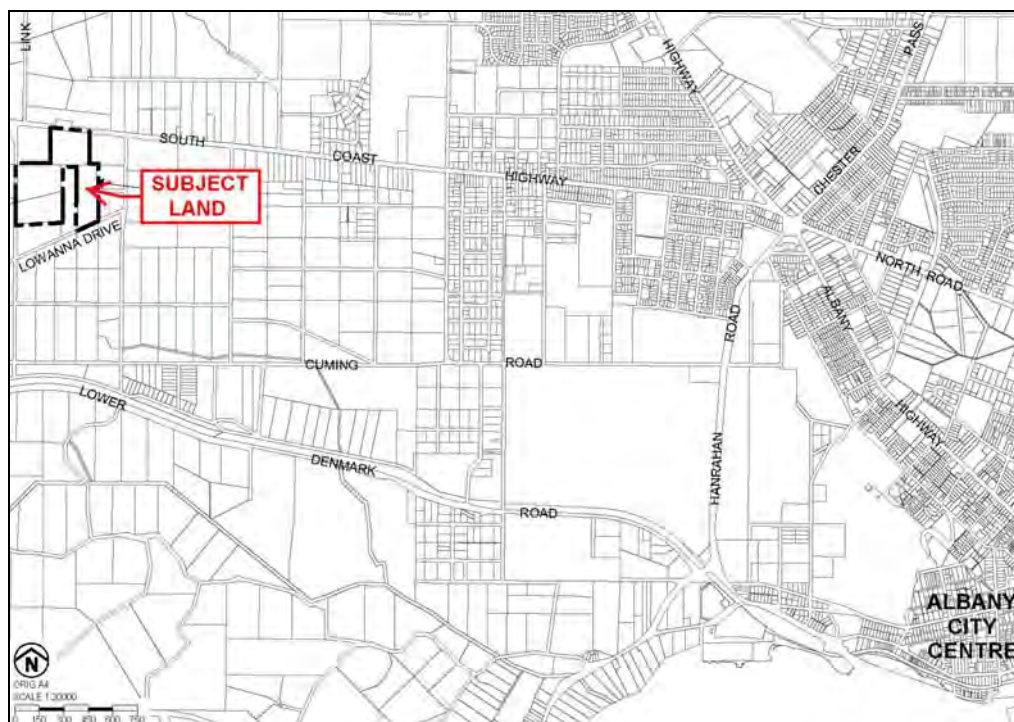
Following the designation of land located within the area bounded by Lowanna Drive, Charles Street, George Street and South Coast Highway for rural residential purposes, a number of landowners propose to rezone the land from 'General Agriculture' zone to the 'Rural Residential' zone.

The following report provides the background information, associated planning issues and justification in support of the rezoning.

## 2. BACKGROUND

### 2.1 Location, Area & Zoning

The subject land is located within the south east corner of South Coast Highway and George Street and bounded to the south by Lowanna Drive and to the east by Charles Street. The precinct is approximately 7.5km north west of the CBD. Refer Location Plan.



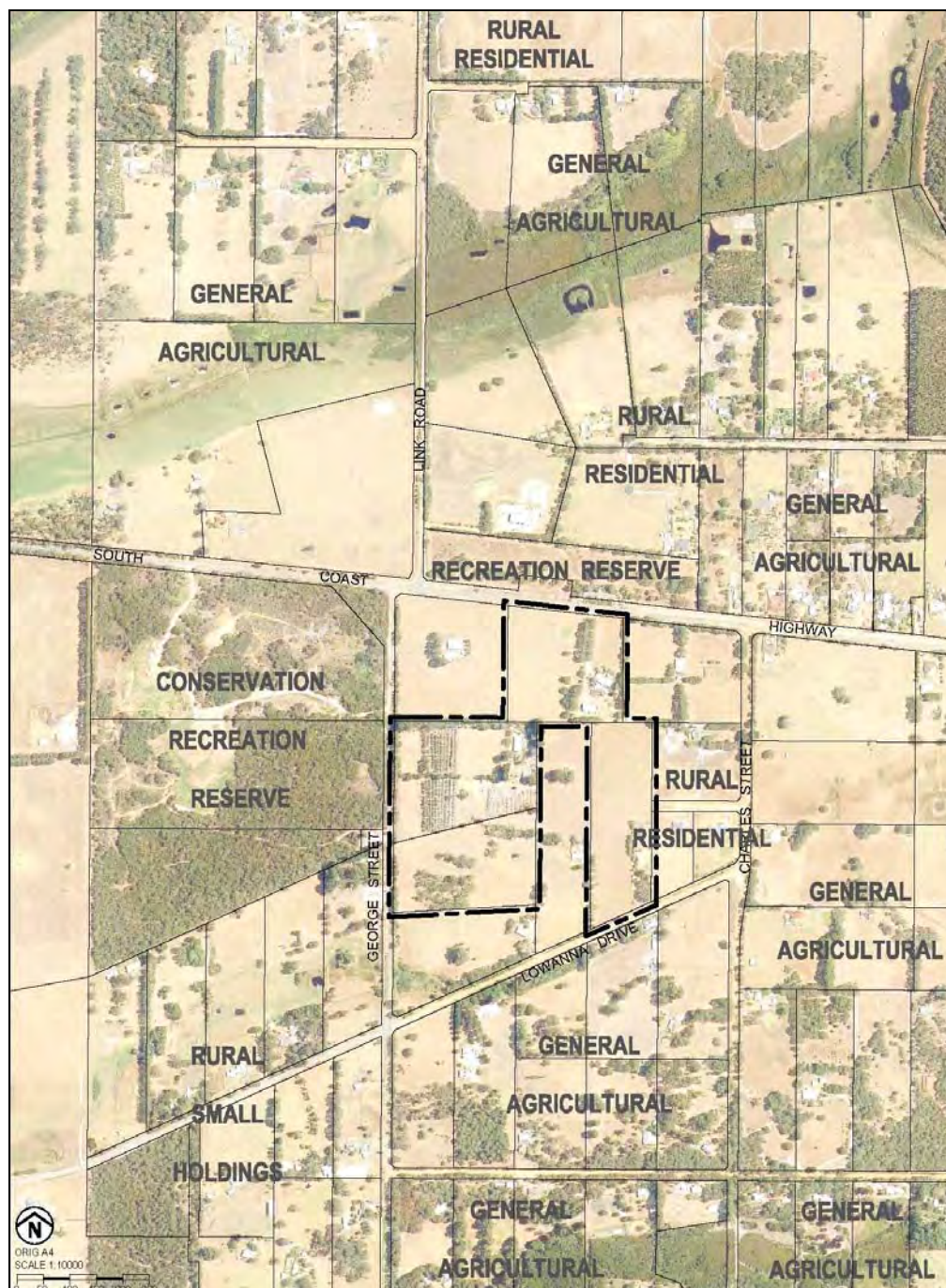
Location Plan

The precinct contains eight lots ranging in size from 4.1ha to 5.28 ha with an overall area of 31.5ha. All lots are currently zoned 'General Agriculture' under provisions of the City of Albany's Local Planning Scheme Number 1.

## 2.2 Surrounding Land Use and Zoning

Surrounding land use consists predominantly of rural small holdings which are used to agist cattle, sheep and horses. A reserve of the western side of George Street contains remnant vegetation and gravel excavations

In the south east corner of the precinct, approximately 4ha of land has previously been zoned 'Rural Residential' with a one hectare lot size. To the north of South Coast Highway a number of parcels of land have also been similarly zoned.



Plan – Surrounding Land Use and Zoning

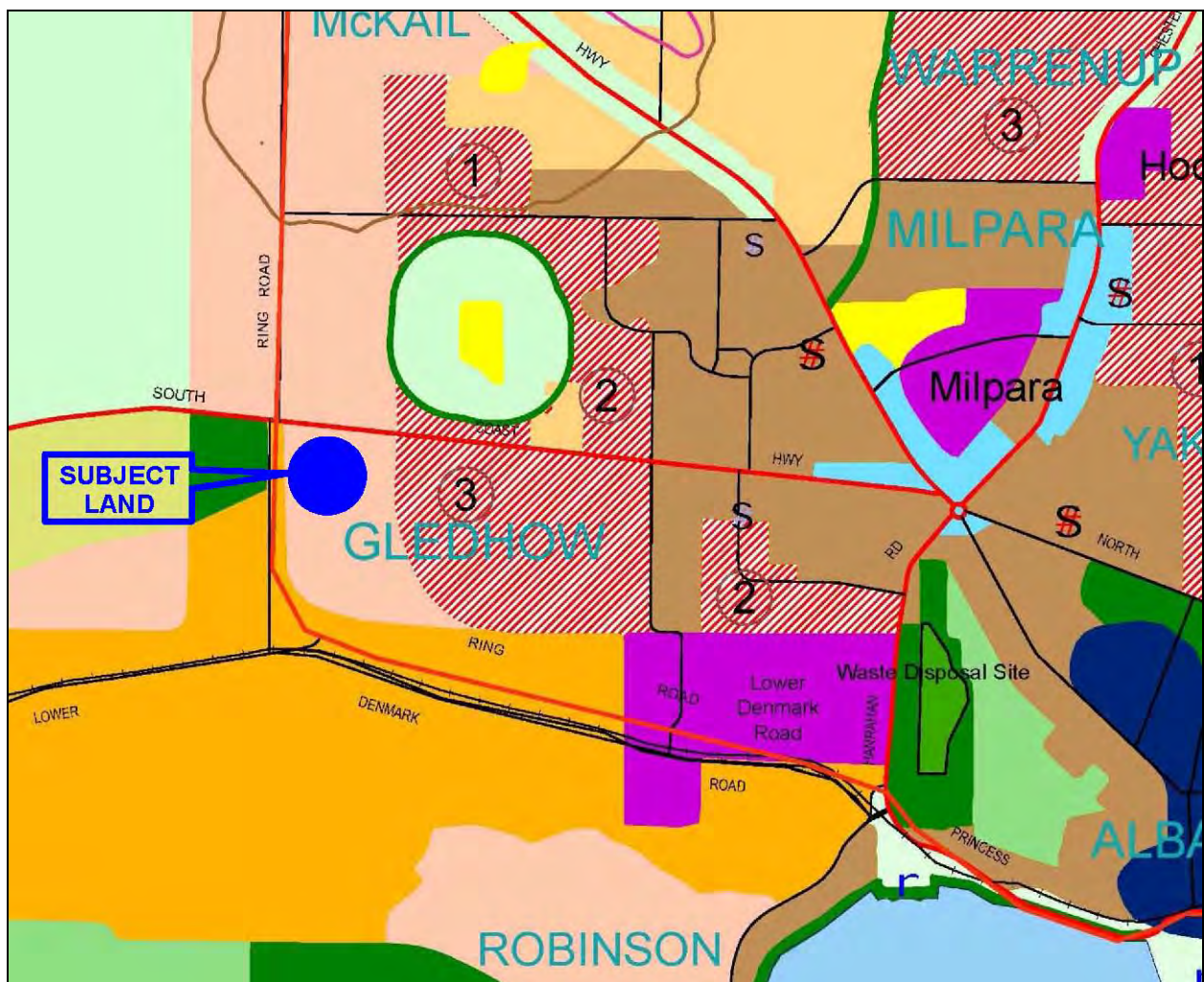


### 3. PLANNING CONTEXT

The Albany Local Planning Strategy and Local Planning Scheme No. 1 are the key documents which guide the future development and management of the subject land.

#### 3.1 Albany Local Planning Strategy

The Albany Local Planning Strategy (ALPS) designates the land as 'Rural Residential' and also depicts the conceptual alignment of the proposed Albany Ring Road which will run along the eastern side of Link Road and George Street.



Excerpt from Albany Local Planning Strategy Map 9B



### **3.2 Local Planning Scheme No. 1**

The City of Albany's Local Planning Scheme No. 1 (LPSNo.1) is the statutory scheme which determines the zoning of the land within the City and provides the development control provisions relating to the various zones. Section 5.5.13 of the Scheme sets out the provisions relating to the 'Rural Residential' zone. These include provisions relating to:

- Building Design, Materials and Colours.
- Fire Protection.
- Building Envelopes.
- Fencing.
- Remnant Vegetation Protection and Clearing Controls.
- Tree Planting.
- Keeping of Animals.
- Dams, Soaks and Bores.
- Effluent Disposal.
- Water Supply.
- Electricity Supply.
- Stormwater Management and Drainage.
- Roads and Battle-axe Access.
- Notification of Prospective Purchasers.

In addition to the comprehensive list of provisions noted above, the Scheme provides for special provisions relating to proposed areas of rural residential development to be incorporated into Schedule 14 of the Scheme Text.

#### 4. SITE DESCRIPTION

The northern portion of the precinct, predominantly Lots 15, 16 & 17 consist of a flat ridge top at 60 metres AHD which starts to fall gently to the west and south at George Street and to the south east at Charles Street. Lots 5, 110 and 9 encompass the mid slopes which fall away to the south with gentle slopes ranging from 1:14 to 1:17. The south west corner of the precinct falls moderately away to the south west at 1:12.5 to a low point of 32 metres AHD.

The area is well drained and with the exception of a minor drainage line which runs east west through the south west corner of Lot 9, there are no drainage lines, creeks or wetlands located within the area.

The whole area has been cleared and developed with pasture with only a small area of degraded parkland cleared remnant vegetation remaining on Lot 9. The only other vegetation consists of shelter belt and individual trees.

The predominant soil type within the area consists of sandy laterite gravel over deep yellow silt subsoil, which in places, have a clay induration layer in the upper 300mm. The clay enriched zone can cause reduced permeability. These soils are well known for their nutrient (particularly phosphorus) retaining qualities. They have high Phosphate Retention Indices (PRI) of 5-10 in the surface horizons and 20-50 in the sub soils.

The soils are generally suitable for conventional and alternative septic systems. Any conventional leach drains may require semi inversion and should be installed to City of Albany installation guidelines.

Table 1 below, summarises the soil properties in the area.

**Table 1.**

<b>Land Qualities</b>	<b>Local Soils (Dc)</b>	<b>Land Qualities</b>	<b>Local Soils (Dc)</b>
Water Erosion Risk	V Low	Soil Workability	Poor
Wind Erosion Risk	Mod	Nutrient Availability	Low
Microbial Purification Ability	Low	Nutrient Retention Ability	M High
Water Pollution Risk OF	Mod	Topsoil Nutrient Retention	Mod
Water Pollution Risk SD	Low	Moisture Availability	Mod
Ease of Excavation	Low	Rooting Condition	Mod
Inundation Risk	MH	Salinity Risk	NS
Flood Risk	N	Exposure Factor	Low
Foundation Soundness	Fair	Wind Erodibility	High
Slope Instability	N	Water Erodibility	Mod
Soil Absorption Ability	V Low	Soil Resistance	Mod
Subsoil Water Retention	High	Rain Acceptance	Mod

Source: COA Environmental Report 1992 – AGC Woodward-Clyde Pty Ltd

As a part of the East Gledhow Structure Plan Project a site and land capability assessment was completed for the subject land.

The relevant conclusions and recommendations are:

*Conclusions*

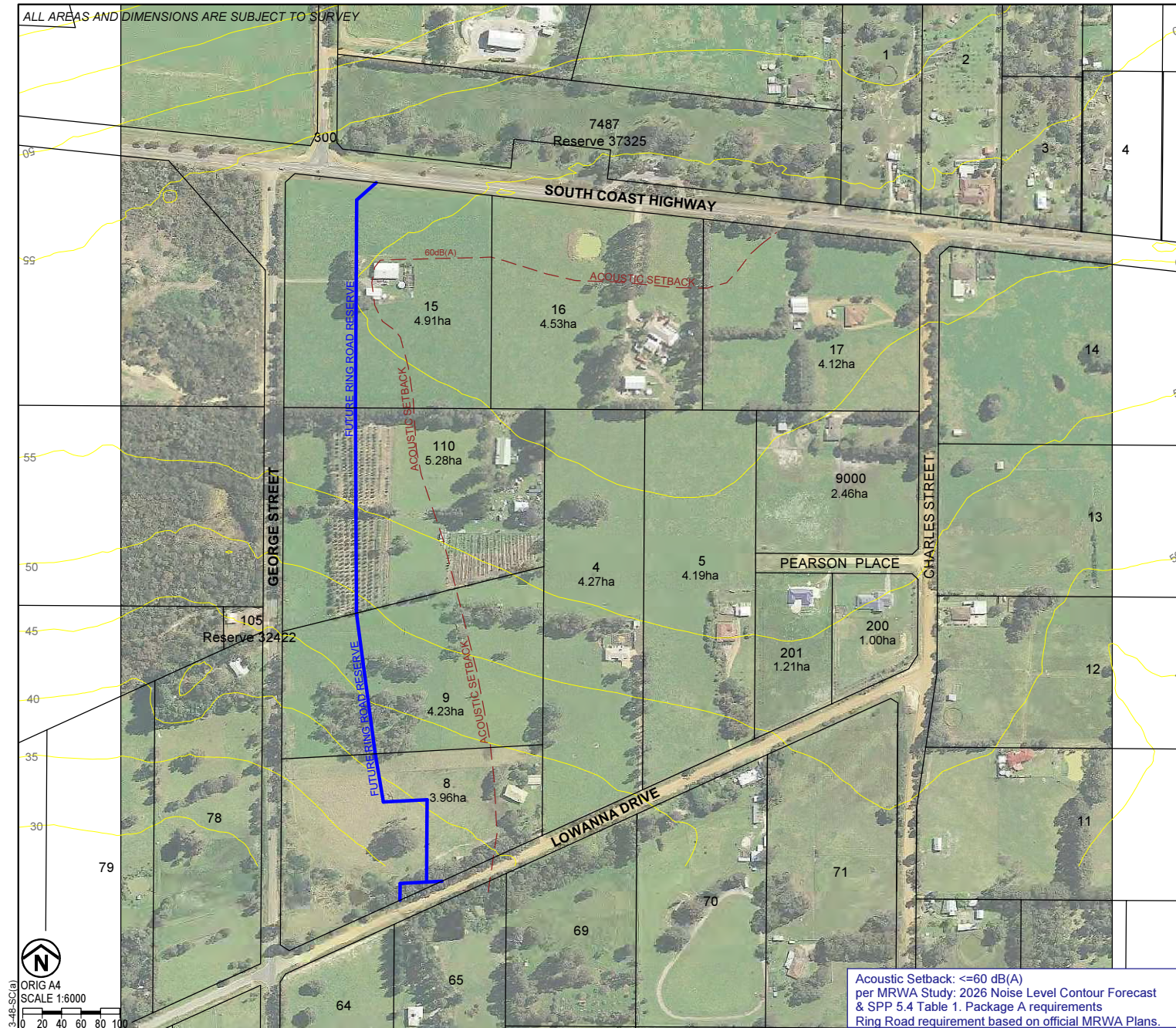
- *The risk of acid sulphate condition occurring on the Development Area is assessed as minimal to nil.*
- *The soils have good foundation stability and inconsistencies can be adequately managed through normal design and construction techniques.*
- *The remnant vegetation on the development area is very scattered with only one main area centres on Lots 10 & 26 in the central part, between Moortown and Balston Roads. Several small remnants occur along Sydney Street. (NB; All these areas are off site).*
- *The soils have inherently high phosphate retention and good ability for nitrogen management.*


*Recommendations*


- *Consider the use of rainwater tanks.*
- *Require onsite stormwater retention and disposal to soak wells on individual lots.*
- *Do not load water as large point sources behind retaining walls that are based on more clay rich subsoils between 0.5 – 1.0metres depth. It is better to distribute the water loading.*
- *Break the clay enriched subsoil horizon between 0.5 – 1.0 metres deep where soakwells, detention basins or other seepage devices are used, on soils north of Frederick Street.*
- *Use swale drains, shallow detention and infiltration basins that are landscaped into road verges and vegetated or park land wherever possible.*

Source: Landform Research East Gledhow Land Capability and Geotechnical Assessment 2009

# **SITE CHARACTERISTICS** Lowanna Drive & Charles Street Gledhow, City of Albany



 Future Ring Road  
Reserve Requirement

 Acoustic Setback

Landform & Soils:  
Plateau; Broad Crests  
Gravelly Yellow Duplex Soils  
(1992 COA Environmental Report)

**AYTON BAESJOU**  
PLANNING  
11 Duke Street  
Albany WA 6330  
Ph 9842 2304 Fax 9842 8494



## **5. SERVICES AND INFRASTRUCTURE**

### **5.1 Roads**

The subject land is currently serviced by George Street which has been constructed to a bitumen standard and runs down the western boundary; South Coast Highway, also to a bitumen standard along the northern boundary. In addition, Lowanna Drive and Charles Street run along the southern and eastern boundaries and are constructed to an all-weather gravel standard. The existing pocket of rural residential development on the corner of Lowanna Drive and Charles Street has a short cul de sac which runs off Charles Street and has been developed to an all-weather gravel standard.

In terms of access to the proposed development, the main constraint relates to the proposal to construct a regional 'ring road' which will run north and south through the area, immediately east of George Street. Preliminary land requirements to accommodate the ring road provided by the Main Roads WA (MRWA) indicate that between 73.6 to 105 metres of land will need to be acquired from properties abutting George Street. Additional land will also be required in the vicinity of George Street/ Lowanna Drive intersection.

Acoustic noise levels have also been prepared based on forecast long term road usage. This will require proposed housing to be additionally set back. Refer to plan showing the land requirements and acoustic setback.

The acoustic setback is drawn from MRWA modelling and ensures dwellings can be readily developed within the State Planning Policy 5.4 Noise Limit of 60dB(A) via the application of standard Deemed to Comply Package A requirements (reproduced below).

Area type	Orientation	Package A measures
<b>Indoors</b>		
Bedrooms	Facing road/rail corridor	<ul style="list-style-type: none"> <li>• 6 mm laminated glazing</li> <li>• Casement or awning windows</li> <li>• No external doors</li> <li>• Closed eaves</li> <li>• No vents to outside walls/eaves</li> <li>• Mechanical ventilation/airconditioning (see 4.5.3)</li> </ul>
	Side-on to corridor	<ul style="list-style-type: none"> <li>• 6 mm laminated glazing</li> <li>• Closed eaves</li> <li>• Mechanical ventilation/airconditioning</li> </ul>
	Away from corridor	No requirements
Living and work areas <sup>5</sup>	Facing corridor	<ul style="list-style-type: none"> <li>• 6 mm laminated glazing</li> <li>• Casement or awning windows</li> <li>• 35 mm (minimum) solid core external doors with acoustic seals<sup>6</sup></li> <li>• Sliding doors must be fitted with acoustic seals</li> <li>• Closed eaves</li> <li>• No vents to outside walls/eaves</li> <li>• Mechanical ventilation/airconditioning</li> </ul>
	Side-on to corridor	<ul style="list-style-type: none"> <li>• 6 mm glazing</li> <li>• Closed eaves</li> <li>• Mechanical ventilation/airconditioning</li> </ul>
	Away from corridor	No requirements
Other indoor areas	Any	No requirements
<b>Outdoors</b>		
Outdoor living area <sup>7</sup>	Facing corridor	<ul style="list-style-type: none"> <li>• Minimum 2.0 m high solid fence (e.g. Hardifence, pinelap, or Colorbond)</li> <li>• Picket fences are not acceptable</li> </ul>
	Side-on to corridor	
	Away from corridor	No requirements

<sup>5</sup> These deemed-to-comply guidelines adopt the definitions of indoor spaces used in AS 2107-2000. A comparable description for bedrooms, living and work areas is that defined by the Building Guide of Australia as a "habitable room". The Building Guide of Australia may be referenced if greater clarity is needed. A living or work area can be taken to mean any "habitable room" other than a bedroom. Note that there are no noise insulation requirements for utility areas such as bathrooms. The Building Guide of Australia describes these utility spaces as "non-habitable rooms".

<sup>6</sup> Glazing panels are acceptable in external doors facing the transport corridor. However these must meet the minimum glazing requirements.

<sup>7</sup> The Policy requires that at least one outdoor living area be reasonably protected from transport noise. The protected area should meet the minimum space requirements for outdoor living areas, as defined in the Residential Design Codes of Western Australia.

Specific management provision/s will be required within the scheme to ensure these policy measures apply to development on the affected lots.

## **5.2 Drainage**

The site drains to the south and south west. All lots are large enough to permit onsite management of stormwater generated from hard surfaces.

Road drainage is managed via low impact swale drains which also prove effective with the low density rural residential nature of the area.

## **5.3 Water Services (Potable & Effluent Disposal)**

Although reticulated water supplies exist in the Charles Street and Lowanna Drive road reserves, most lots satisfactorily rely on roof runoff and storage for potable supplies. This remains an option for future development.

There is no deep sewer available in the area and there are no plans for extension to the area. Lots rely on onsite treatment units, predominantly conventional septic tanks with alternating leach drains.

## **5.4 Power & Telecommunications Services**

The area is served by a network of existing overhead three and single phase HV distribution lines. Lot connections are in the main overhead, requiring undergrounding at the time of redevelopment.

The area has access to both landline and mobile telecommunications services.

## 6. OPPORTUNITIES AND CONSTRAINTS

Constraints include:

- Protection of the future ring road alignment for future acquisition.
- Protection of the future ring road acoustic buffer and ensuring development on adjoining lots are adequately set back and positioned so that high amenity outdoor living areas are created.
- The need for internal lot access roads/driveways with no direct access available from George Street. Access control for South Coast Highway.
- The existing fragmented nature of the area with lot sizes that constrain future subdivision options.

Opportunities include:

- Water, power and telecommunications services exist.
- Low density of development both existing and proposed.
- Local roads available to provide for future access. Ability to minimise and control access to South Coast Highway.
- Rural Residential zone and amenity already established in the area and can be readily extended to other lots in the precinct in future planning processes.
- Area is already serviced by local refuse collection services and school bus services.
- The area is within ideal proximities for local and regional services and facilities.
- Gentle slopes across the site and soil qualities couple with the low density of development to allow low impact onsite stormwater management and effluent disposal.



## **7. DEVELOPMENT PROPOSAL**

### **7.1 Zoning & Lot Size**

This proposal will transfer the lots from the General Agriculture zone to the Rural Residential zone. This action allows the adoption of a Subdivision Guide Plan and special provisions that will be used by council to guide the proposed limited subdivision of the land and the development of those few new lots.

Commensurate with Scheme requirements for the Rural Residential zone, the minimum lot size will be 1ha. This allows for a spacious residential environment continuing with the semi rural amenity of the area. It also guarantees sufficient lot are so as to support dwelling development and onsite management of storm and waste water.

### **7.2 Roads & Servicing**

Reticulated water connections can be provided on Charles Street and Lowanna Drive and underground power connections will be required for all new lots.

Lots will need to be provided with constructed road frontage. For lots fronting existing Charles Street and Lowanna Drive this should be by a road contribution made to council at the time of subdivision. In accord with established practice, this contribution should reflect 50% of the cost to council of upgrading the road frontage of the subject lot.

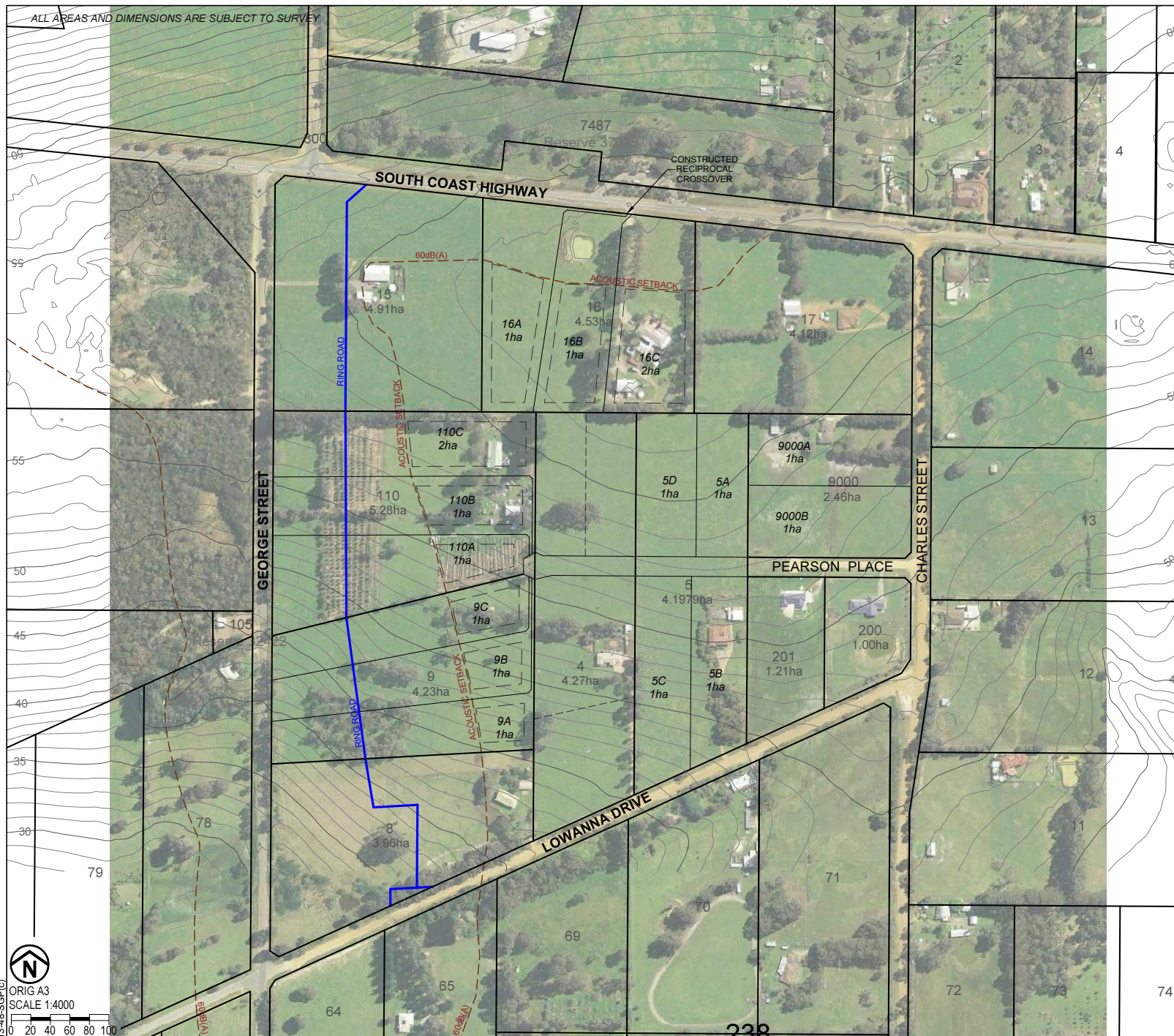
New internal roads will need to be wholly provided and constructed by subdividers at the time of the subdivision of accessing/fronting lots. This can be managed via coordination and agreement between adjoining subdividers or by individual extension and construction. Claims for proportional reimbursement may then be made by the constructing subdivider under s159 of the Planning and Development Act 2005 at the time of adjoining subdivision.

Where adjoining battleaxe legs are shown in the same ownership, reciprocal rights of access should be used so as to allow a single joint use driveway to be constructed.

# SUBDIVISION GUIDE PLAN

Lowanna Drive & Charles Street  
Gledhow, City of Albany

13-48-SGP(c)



## NOTES

1. No dwellings permitted west of.  
Acoustic Setback (Ref Provision 6a)
2. Ring Road Reserve to be acquired by MRWA.
3. Access restrictions apply to George Street and South Coast Highway.
4. Subdivision layout on Lot 4 as a guide only.
5. Access to Lots 16A, B & C via a single reciprocal crossover. Alternative access to the highway is not permitted

## LEGEND

- Existing Lot Boundaries
- Proposed Lot Boundaries
- Possible Future Lot Boundaries
- Dwelling Envelopes

ADOPTED BY RESOLUTION OF THE COUNCIL OF THE

OF

AT THE COUNCIL MEETING

ON THE DAY OF

CHIEF EXECUTIVE OFFICER

**AYTON BAESJOU**  
PLANNING

11 Duke Street  
Albany WA 6330  
Ph 9842 2304 Fax 9842 8494

### **7.3 Future Ring Road**

Regarding the future Ring Road and its impacts/requirements, the Subdivision Guide Plan and Special Provisions provide the following:

- Identification of the future Ring Road reserve for future acquisition when deemed necessary.
- Protection of the ring road setback and the acoustic setback as a residential development exclusion area and further protection of the lot and residential amenity by the application of established site layout policy.

### **7.4 Fire Safety**

The area is extensively cleared managed pasture and as a result has low hazard and risk levels. This couples with the future provision of street fire hydrants on extended water mains to ensure no special fire safety measures are necessary.

Council will continue to apply the general fire safety requirements of the Scheme and the annual notice, which includes requirements for:

- Property boundary firebreaks.
- Internal firebreaks around individual hazards (i.e. fuel/fodder storage).
- General site management - low fuel loadings.
- Installation and maintenance of 20m wide building protection zone/s.

### **7.5 Rural Residential Zone 22**

The scheme already includes Rural Residential Zone 22 in the locality. This zone has provisions requiring a Subdivision Guide Plan and other general rural residential subdivision and development control mechanisms such as lot size control, general setback requirements, permissible land uses and site activities, building envelope requirements. These are all sufficient to cover the proposed development.

As a result and to avoid the need to create another zone area within the Scheme, it is proposed to include the land within Rural Residential Zone 22. Along with the additional Subdivision Guide Plan it will only be necessary to include some additional provision/s relating to protection of the ring road reserve and its acoustic setback.

## **8. CONCLUSION**

The amendment/rezoning proposal is a simple one providing for a small number of low density rural residential lots to be developed to provide for a form of subdivision and development already established and popular in the locality. This is achieved whilst maintaining consistency with the Albany Local Planning Strategy and while providing for the protection of the future ring road and site sensitive development generally.

As a result, the proposal has clear merit and accords with principals of orderly and proper planning.



PLANNING AND DEVELOPMENT ACT 2005

CITY OF ALBANY

LOCAL PLANNING SCHEME No. 1

AMENDMENT No. 9

The City of Albany under and by virtue of the powers conferred upon it in that behalf by the Planning and Development Act 2005 hereby amends the above local planning scheme by:

- i. Rezoning Lot 5 Lowanna Drive, Lots 9 & 110 George Street and Lot 16 South Coast Highway, Gledhow from the 'General Agriculture' zone to the 'Rural Residential' zone.*
- ii. Including Lots Lot 5 Lowanna Drive, Lots 9 & 110 George Street and Lot 16 South Coast Highway, Gledhow within Rural Residential Zone No. 22 of Schedule 14.*
- iii. Including the following special provisions within Schedule 14; Rural Residential Zone No. 22:*
  - 6a. Dwellings on Lots 9 & 110 George Street and Lot 16 South Coast Highway, Gledhow shall be located within the Dwelling Envelope as shown on the Subdivision Guide Plan.*
  - 6b. On Lots 9 & 110 George Street and Lot 16 South Coast Highway, Gledhow the development of dwellings shall meet or exceed Package A Deemed to Comply measures within State Planning Policy 5.5 Implementation Guidelines.*
  - 6c. On Lots 9 & 110 George Street and Lot 16 South Coast Highway, Gledhow all buildings shall be set back a minimum of 20m from the future ring road reserve and South Coast Highway.*
  - 6d. All access to Lots 16a, 16b & 16c is to be via a single constructed crossover.*
- iv. Including the following plan as a Subdivision Guide Plan (13-48-SGP(c)) for Rural Residential Zone No. 22.*
- v. Amending the Scheme accordingly.*



SUBDIVISION  
GUIDE PLAN

Lowanna Drive & Charles Street  
Gledhow, City of Albany

13-48-SGP(c)

NOTES

- 1. No dwellings permitted west of. Acoustic Setback (Ref Provision 6a)
- 2. Ring Road Reserve to be acquired by MRWA.
- 3. Access restrictions apply to George Street and South Coast Highway.
- 4. Subdivision layout on Lot 4 as a guide only.
- 5. Access to Lots 16A, B & C via a single reciprocal crossover. Alternative access to the highway is not permitted

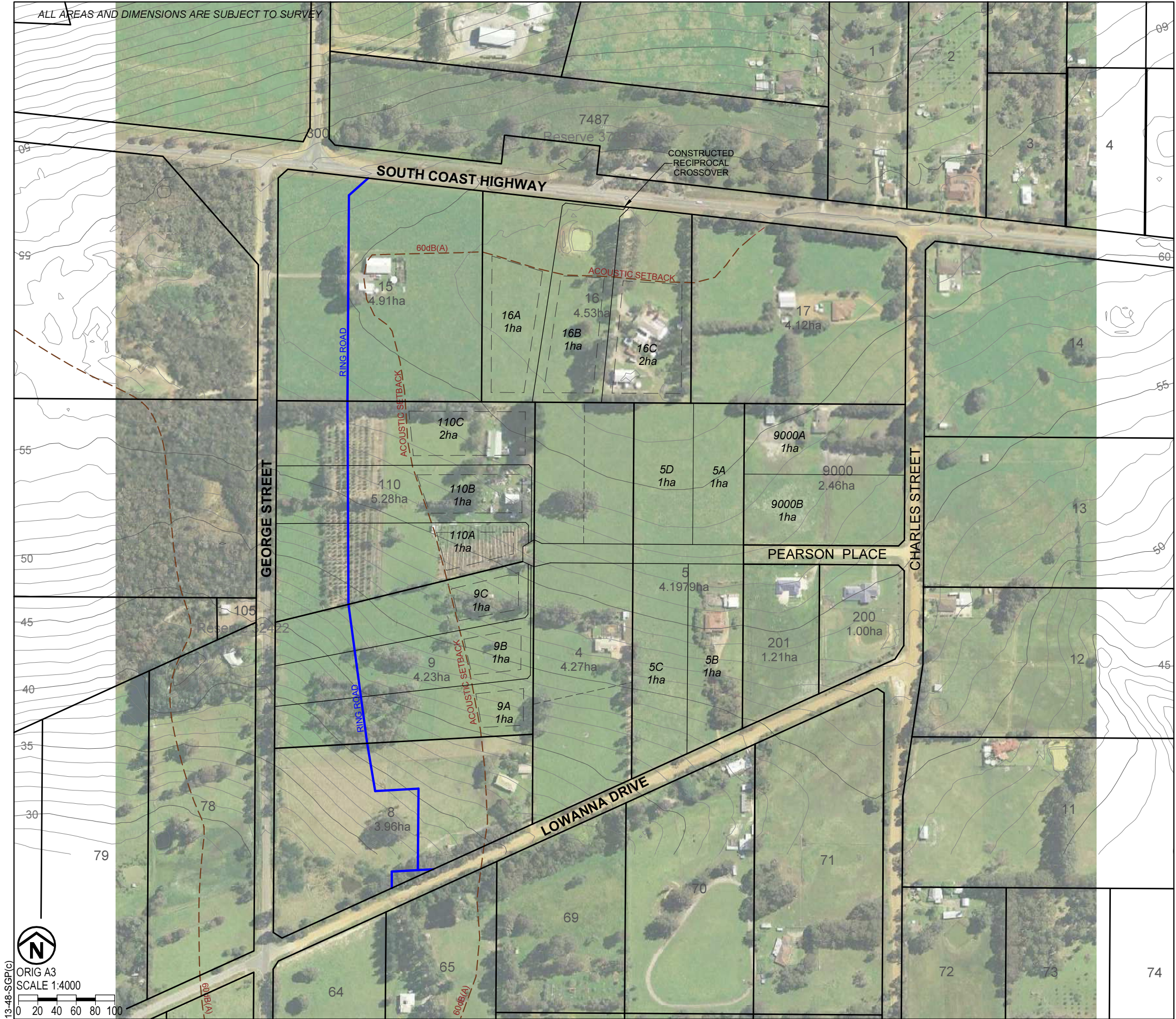
LEGEND

- Existing Lot Boundaries
- Proposed Lot Boundaries
- Possible Future Lot Boundaries
- Dwelling Envelopes

ADOPTED BY RESOLUTION OF THE COUNCIL OF THE  
\_\_\_\_\_ OF \_\_\_\_\_  
AT THE \_\_\_\_\_ COUNCIL MEETING  
ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_  
CHIEF EXECUTIVE OFFICER \_\_\_\_\_

AYTON BAESJOU  
PLANNING

11 Duke Street  
Albany WA 6330  
Ph 9842 2304 Fax 9842 8494










## Existing Zoning

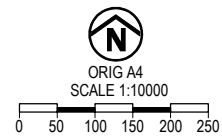


### LOCAL SCHEME RESERVES

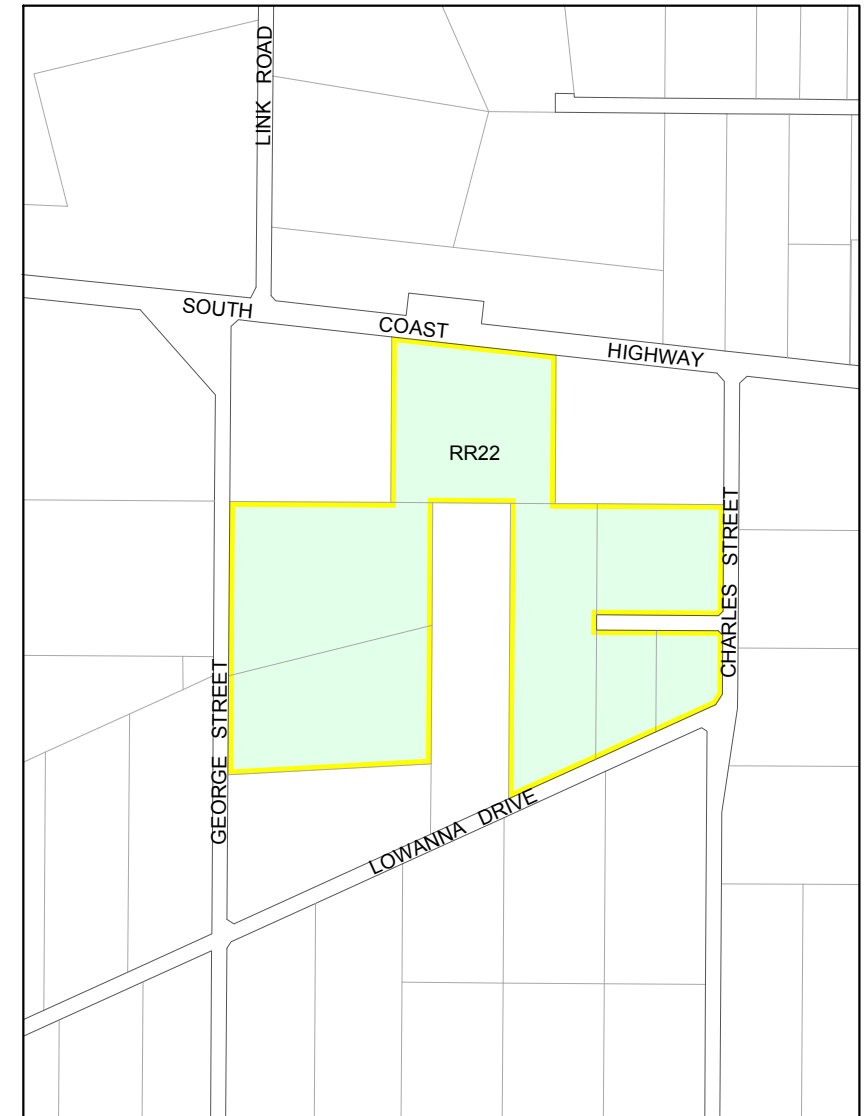
-  Parks & Recreation Reserve
-  Major Road Reserve

### ZONES

-  General Agriculture
-  Rural Residential
-  Rural Small Holding



## Proposed Zoning



## REPORT ITEM PD094 REFERS

### ADOPTION

Adopted by resolution of the Council of the City of Albany at the Meeting of the Council held on the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

\_\_\_\_\_  
**Mayor**

\_\_\_\_\_  
**Chief Executive Officer**

### FINAL APPROVAL

Adopted for final approval by resolution of the City of Albany at the Meeting of the Council held on the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_ and the Common Seal of the City of Albany was hereunto affixed by the authority of a resolution of the Council in the presence of:

\_\_\_\_\_  
**Mayor**

\_\_\_\_\_  
**Chief Executive Officer**

Recommended/Submitted for Final Approval

\_\_\_\_\_  
**Delegated Under S.16  
of the PD Act 2005**

\_\_\_\_\_  
**Date**

Final Approval Granted

\_\_\_\_\_  
**Minister for Planning**

\_\_\_\_\_  
**Date**





This map has been produced by the City of Albany using data from a range of agencies. The City bears no responsibility for the accuracy of this information and accepts no liability for its use by other parties. Reproduced by permission of Western Australian Land Information Authority, Copyright Licence SLIP 436-2014-1. [www.landgate.wa.gov.au](http://www.landgate.wa.gov.au)

Thursday, 20 August 2015

1:4000



## CITY OF ALBANY LOCAL PLANNING SCHEME No. 1

## AMENDMENT No. 6

## SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
1	Environmental Protection Authority Locked Bag 33 Cloisters Square PERTH WA 6850	The Environmental Protection Authority (EPA) considers that the proposed scheme amendment should not be assessed under Part IV Division 3 of the <i>Environmental Protection Act 1986</i> (EP Act) and that it is not necessary to provide any advice or recommendations.	Nil.	The submission is noted.
2	ATCO Gas 81 Prinsep Road JANDAKOT WA 6164	ATCO Gas Australia has no comments to make in regard to the proposal.	Nil.	The submission is noted.
3	Water Corporation PO Box 100 LEEDERVILLE WA 6902	The Corporation has no objection to the amendment.  An existing 200mm water supply main located in Nanarup Road feeds the area. The lots can be served via extension along Kula Road.	Nil.	The submission is noted.
4	Western Power Locked Bag 2520 PERTH WA 6001	No objection to the proposal.	Nil.	The submission is noted.
5	Department of Health PO Box 8172 PERTH BC WA 6849	No objection to the proposal.	Nil.	The submission is noted.
6	Department of Parks and Wildlife South Coast Region 120 Albany Highway	The Department of Parks and Wildlife has no objection to the proposed amendment and provides the following advice.	Nil.	The submission is noted.

## CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD095 REFERS

## AMENDMENT No. 6

## SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
	ALBANY WA 6330	<p>Parks and Wildlife support the transfer of a portion of Lot 106 to the 'Parks and Recreation' local scheme reserve to provide greater of the ecological corridor along the foreshore. The corridor will likely support the movement of a range of fauna including threatened species such as black cockatoo species and the Western Ring-tail Possum.</p> <p>These species are likely to utilise remnant vegetation within the proposed lots as depicted in the subdivision guide plan including area of good quality vegetation in the southern sections of Lot 106 and in parkland cleared areas in the balance of Lot 106 and Lot 105. The retention of the good quality vegetation and trees in parkland cleared area outside of building envelopes and low fuel setbacks will be important to maintain these habitat values. Parks and Wildlife consider that the current fire plan and subdivision guide plan adequately achieve this outcome.</p>		
7	Department of Water South Coast Region PO Box 525 ALBANY WA 6331	<p>The Department of Water provides the following comments.</p> <p><b>Oyster Harbour</b></p> <p>The subject sites are located adjacent to Oyster Harbour, a regionally significant waterway, with high ecological, social and economic values. The development of</p>	<p>The proposed subdivision guide plan includes a requirement that all building envelopes shall be located to the north of the 'low fuel link', as indicated. This will place the building envelopes within the cleared area to the northern extent of proposed Lots 7 and 8.</p>	<p>The submission is noted.</p> <p><b><u>Modifications required:</u></b></p> <p>The subdivision guide plan notations shall be updated as follows:</p> <p><i>"Lots where building envelopers are</i></p>

**CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD095 REFERS**  
**AMENDMENT No. 6**  
**SCHEDULE OF SUBMISSIONS AND MODIFICATIONS**

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		proposed Lots 7 and 8 should be restricted to the cleared areas at the north of the lots. This will minimise the amount of native vegetation cleared, providing a greater vegetative buffer to the harbour.	This notation highlights that the proposed updated subdivision guide plan still refers to provisions from former <i>Town Planning Scheme No. 3</i> . These notations should be updated to refer to the provisions contained within <i>Local Planning Scheme No. 1</i> , where still relevant.	<p><i>not to exceed 1200m<sup>2</sup> (refer Provision 5.5)</i>" shall be replaced by 'Lots where building envelopes shall not to exceed 1200m<sup>2</sup> (refer Provision 6)'.</p> <p><i>"All building envelopes are to be located north of the low fuel link (refer Provision 5.5)"</i> shall be replaced by 'All building envelopes shall be located north of the low fuel link'.</p> <p><i>"Subject to provision 6.4 &amp; 6.5 – No boundary fencing shall be permitted south of the low fuel link"</i> shall be replaced by 'No boundary fencing shall be permitted south of the low fuel link'.</p> <p><i>"Subject to provision 7.2 &amp; 14.0 – Invasive weeds to be controlled and areas incrementally revegetated"</i> shall be replaced by 'Subject to provision 10 – Invasive weeds shall be controlled and areas incrementally revegetated'.</p>
8		<b>Observation:</b> Access/egress to the Kalgan Heights residential development envelope has only one formal vehicular access road. This situation will remain unchanged with increased development proposed in	The subdivision has been designed with an 8m wide pedestrian access way linking the proposed extension to Kula Road to an existing right-of-way that runs to the south-east from	The submission is noted.



**CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD095 REFERS**  
**AMENDMENT No. 6**  
**SCHEDULE OF SUBMISSIONS AND MODIFICATIONS**

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
	6330	<p>Amendment No. 6.</p> <p><b>Comment/request:</b> Single access/egress to the development should be increased to at least two (2) roads. Furthermore, if increased to two roads BUT for emergency purposes only, this second egress point should be easily accessible and useable by ALL members of the Kalgan Heights precinct, or locality.</p> <p>A standard requirement of all developments should be a proportional contribution to Public Open Space.</p>	<p>Nanarup Road, along the western boundary of Lot 104. This connection will provide egress to residents of Kalgan Heights in an emergency situation.</p> <p>The Western Australian Planning Commission's <i>Development Control Policy 2.3 – Public Open Space in Residential Areas</i> does not require contributions to be made to public open space at the time of subdivision of 'Special Residential' zoned lots. Due to the large lot sizes in these areas and the lower population densities, the provision of public open space, other than that placed over foreshores, is not desirable, as it tends to be underutilised and creates a maintenance burden for the City.</p>	

## **Attachment 3 – Albany Local Planning Strategy Excerpts**

### **Section 8.3.1 Strategic Settlement Direction**

Section 8.3.1 *Strategic Settlement Direction* of the *Albany Local Planning Strategy 2010* (ALPS) sets the following strategic objective:

*“Facilitate and manage sustainable settlement growth for the urban area in the City of Albany”*

The ALPS sets out the following aims to achieve this objective:

*“The ALPS aims to contain the spread of fragmented urban and rural living areas in the City by:*

- *Providing for growth in urban areas, rural townsites and rural living areas as designated in ALPS.*
- *Minimising the development footprint on the landscape to help protect biodiversity and the environment.*
- *Promoting energy conservation.*
- *Providing greater housing choice.*
- *Minimising journey length from home to work/school/services and encouraging the use of public transport, cycling and walking.*
- *Reducing government expenditure on servicing current and future populations.”*

### **Section 8.3.5 Rural Living**

Section 8.3.5 *Rural Living* of the ALPS sets the following strategic objectives:

*“In the long term encourage the efficient use of existing rural living areas, based on land capability to maximise their development potential.”*

*“Ensure that future rural living areas are planned and developed in an efficient and co-ordinated manner by being located either adjacent to Albany as designated on the ALPS maps, or within existing rural townsites in accordance with Table 5 along with adequate services and community infrastructure.”*

The ALPS expands on this by stating that *“The strategy’s objectives for Rural Living areas are to:*

- *Discourage the creation of additional rural townsites for living purposes.*
- *Avoid the development of Rural Living areas on productive agricultural land, other important natural resource areas and areas of high bushfire risk, flooding and environmental sensitivity.*
- *Avoid the development of Rural Living areas on future and potential long-term urban areas.*
- *Provide compact growth of selected existing rural townsites in accordance with Table 4, based on land capability and available services and facilities.*
- *Minimise potential for generating land-use conflicts.”*

# **CITY OF ALBANY**

## **LOCAL PLANNING SCHEME No. 1**

### **AMENDMENT No. 6**

**MINISTER FOR PLANNING**

**PROPOSAL TO AMEND A LOCAL PLANNING SCHEME**

LOCAL AUTHORITY:	<b>CITY OF ALBANY</b>
DESCRIPTION OF LOCAL PLANNING SCHEME:	<b>LOCAL PLANNING SCHEME No. 1</b>
TYPE OF SCHEME:	<b>DISTRICT SCHEME</b>
SERIAL No. OF AMENDMENT:	<b>AMENDMENT No. 6</b>
PROPOSAL:	

- i. To rezone Lot 105 and a portion of Lot 106 Nanarup Road, Lower King, from the 'General Agriculture' zone to the 'Special Residential' zone (SR10).*
- ii. To transfer portion of Lot 106 Nanarup Road, Lower King, from the 'General Agriculture' zone to the 'Parks and Recreation' Reserve.*



**LOCAL PLANNING SCHEME No. 1**

**AMENDMENT No. 6**

**CONTENTS**

1. RESOLUTION
2. REPORT
3. EXECUTION

**PLANNING AND DEVELOPMENT ACT 2005**

**RESOLUTION DECIDING TO AMEND A  
LOCAL PLANNING SCHEME**

**CITY OF ALBANY**

**LOCAL PLANNING SCHEME No. 1**

**DISTRICT SCHEME**

**AMENDMENT No. 6**

RESOLVED that the Council, in pursuance of Section 75 of the Planning and Development Act 2005, amend the above local planning scheme by:

- i. Rezoning Lot 105 and a portion of Lot 106 Nanarup Road, Lower King, from the 'General Agriculture' zone to the 'Special Residential' zone (SR10).*
- ii. Transferring portion of Lot 106 Nanarup Road, Lower King, from the 'General Agriculture' zone to the 'Parks and Recreation' Reserve.*

Dated this \_\_\_\_\_ day of \_\_\_\_\_

---

**CHIEF EXECUTIVE OFFICER**

**CITY OF ALBANY**

**LOCAL PLANNING SCHEME NO. 1**

**AMENDMENT NO. 6**

**ADDITIONS TO SPECIAL RESIDENTIAL ZONE NO. 10  
LOTS 105 & 106 NANARUP ROAD, LOWER KING**

**PLANNING REPORT**

## Contents

<b>1. INTRODUCTION .....</b>	<b>1</b>
<b>2. BACKGROUND .....</b>	<b>1</b>
2.1 LOCATION, AREA & ZONING .....	1
LOCATION PLAN .....	1
EXTRACT FROM LPS 1 SCHEME MAP .....	2
2.2 SITE DESCRIPTION .....	2
2.3 SURROUNDING LAND USE AND ZONING .....	3
<b>3. PLANNING CONTEXT .....</b>	<b>4</b>
<b>4. SITE ASSESSMENT .....</b>	<b>6</b>
<b>5. SERVICES AND INFRASTRUCURE .....</b>	<b>7</b>
5.1 ROADS & ACCESS .....	7
5.2 POTABLE WATER SUPPLY .....	7
5.3 EFFLUENT DISPOSAL .....	7
5.4 POWER & TELECOMMUNICATION .....	7
5.5 SCHOOLS AND COMMUNITY FACILITIES .....	7
<b>6. PLANNING .....</b>	<b>8</b>
6.1 SUBDIVISION GUIDE PLAN AND ZONE PROVISIONS .....	8
CONCEPT PLAN .....	9
6.2 FIRE SAFETY .....	10
6.3 LANDSCAPE .....	10
6.4 CAPABILITY AND SITE ASSESSMENT .....	10
6.5 SERVICING .....	11
<b>7. CONCLUSION .....</b>	<b>12</b>

**APPENDIX A:** ENVIRONMENTAL REPORT – LAND ASSESSMENT PTY LTD

**APPENDIX B:** FIRE PLAN



## 1. INTRODUCTION

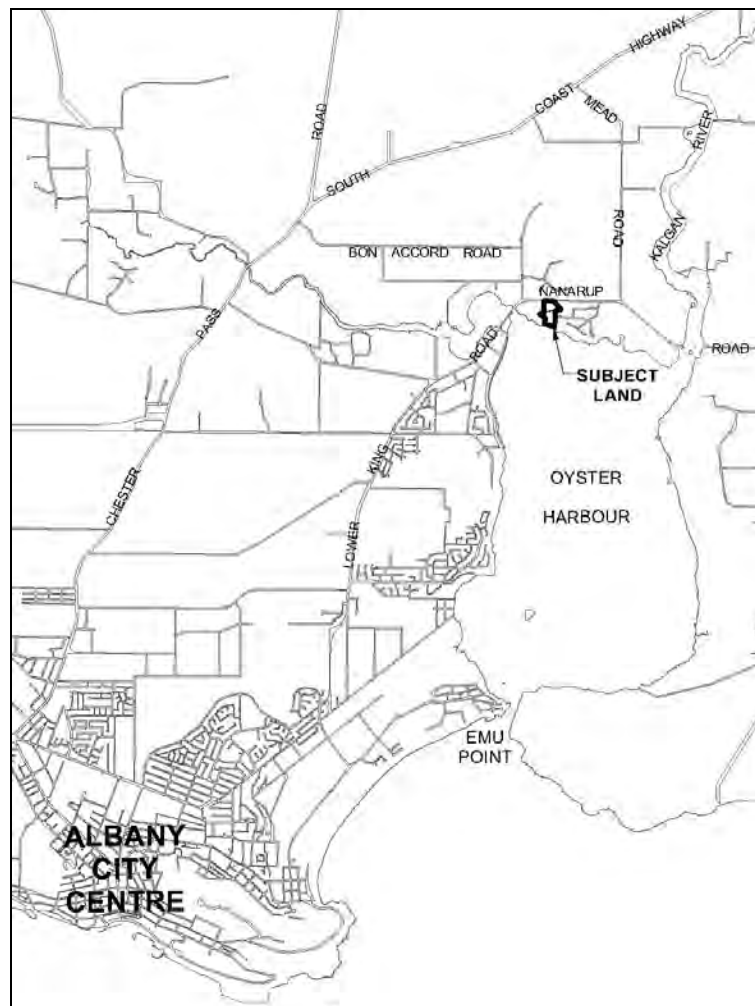
This Scheme amendment proposes to rezone Lots 105 & 106 Nanarup Road, Lower King, from the General Agriculture zone to the Special Residential zone and incorporate the land within Area No. 10 (SR10). A portion of Lot 106 is also to be transferred to the Parks and Recreation Reserve and serve as an addition to the adjoining reserve system.

This rezoning has been foreshadowed by the original rezoning and creation of Special Residential Zone Area No. 10 as well as the Albany Local Planning Strategy.

## 2. BACKGROUND

### 2.1 Location, Area & Zoning

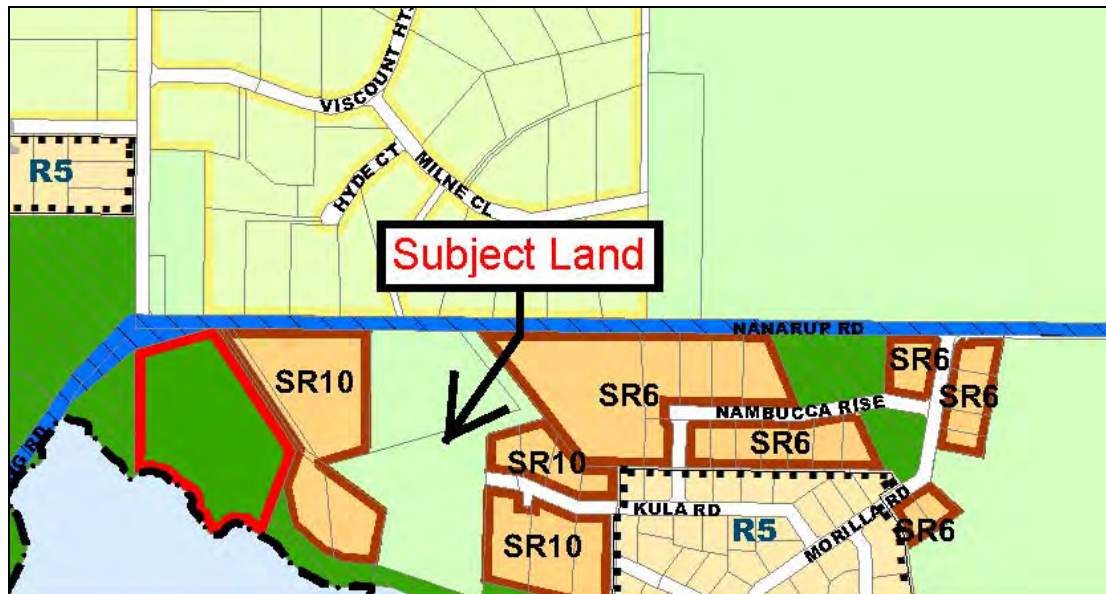
Lots 105 & 106 are situated 13km from the Albany City Centre and are accessed via Lower King Road and Nanarup Road.



Location Plan

Lot 105 is 2.73ha in area with Lot 106 comprising some 4.15ha.

Both lots are zoned General Agriculture and are surrounded by existing Special Residential development (east and west), the Oyster Harbour Foreshore (parks and recreation reserve to the south) and Nanarup Road and existing Special Rural development to the north.



Extract from LPS 1 Scheme map

## 2.2 Site Description

Lot 105 is mostly flat occupying a low hilltop at approx. 37mAHD. Lot 106 is located immediately south of Lot 105 and slopes gently to the south from approx. 35mAHD to 10mAHD flanking the Oyster Harbour Parks and Recreation Reserve.

Lot 105 and the northern majority of Lot 106 are open or attractively parkland cleared. The southernmost portions of Lot 106 are relatively good condition native regrowth of varying density and formation.

Both lots are currently used as high amenity rural retreats with well looked after landscaped parkland grounds. As well as substantial dwellings, both lots accommodate associated garaging and outbuildings. Lot 105 also accommodates a boutique hobby scale Textel Sheep Stud.

Both lots enjoy direct access to Nanarup Road via a long driveway (Lot 105) or a winding battleaxe (Lot 106).

### **2.3 Surrounding Land Use and Zoning**

Immediately north of Nanarup Road is the Sheringa Park Special Residential Estate accommodating lots from 1ha in size. This is an established and quality development providing high amenity house sites in a spacious environment.

To the east and west is Special Residential Zone Area No. 10 (SR10) accommodating established lots from 4000m<sup>2</sup> in area. Further east, this zone melds into the Kalgan Heights residential zone which provides quality high amenity house sites from 2000m<sup>2</sup> in size.

South of the subject land is the Oyster Harbour foreshore and the associated reserve (reserve width ranges from 25m to 40m with an average of 30m).

The subject land is therefore the only land zoned "General Agriculture" in the immediate area and is clearly an anomaly given both the established surrounding landuses and the size of the subject two lots.

### 3. PLANNING CONTEXT

The key planning documents that relate to the subject land are the City of Albany's Local Planning Strategy (ALPS) and Local Planning Scheme No. 1 (LPSNo.1).

Along with these documents some context is provided by the original creation of Special Residential Zone Area No. 10 in Amendment No. 131 to then Shire of Albany Town Planning Scheme No. 3.

The Albany Local Planning Strategy identifies the land within a rural residential/special residential precinct and shown the land as suitable for rezoning and special rural subdivision and development.

Local Planning Scheme No. 1 identifies the land as "General Agriculture" and notes in cl4.2.20, the objectives to:

- "(a) Provide for the sustainable use of land for agricultural and rural activities;*
- (b) Support complementary land uses where those land uses do not detract from adjoining agricultural and rural activities and are compatible with the character and amenity of the area;*
- (c) Prevent land uses and development within the zone that may adversely impact on the continued use of the zone for agricultural and rural purposes;*
- (d) Provide for value-adding opportunities to agricultural and rural products on-site; and*
- (e) Provide for tourism experiences where those developments do not impact upon adjoining agricultural and rural land uses."*

Clearly the zoning, context and the objective of the current zone does not match the on ground realities of the land.

The Local Planning Scheme Special Residential Zone best suits the land and its subdivision potential. Objectives are;

- "To provide for large, spacious residential lots which—*
- (a) Removes the land from rural development pressures;*
- (b) Preserves and enhances the landscape quality and visual amenity of the locality;*
- (c) Provides for the protection of remnant vegetation, significant fauna/flora values, rivers, foreshore areas, creek lines, floodplains;*
- (d) Incorporates appropriate levels of fire control and management;*



- (e) Promotes quality outcomes in built design and the siting and appearance of buildings;*
- (f) Incorporates community infrastructure to support the planned community;*
- (g) Ensures that on-site effluent disposal systems are appropriately sited and constructed to ensure all nutrients/waste is retained on site;*
- (h) Require revegetation with native species of areas within subdivisions to minimise visual impacts from surrounding properties and roads; and*
- (i) Minimises any potential land use conflicts with existing or planned surrounding uses.”*

Amendment No. 131 to TPS No. 3 rezoned surrounding land and provided for its subdivision and development to Special Residential standards. In doing so it foreshadowed the rezoning and subdivision of the subject land. To guide this process, specific measures were reviewed or incorporated into the scheme for adjoining land. This included:

- A 4000m<sup>2</sup> minimum lot size.
- A 75m wide building and effluent disposal system setback to the harbour (HWM).
- Minimise access to Nanarup Road.
- Continue foreshore widening as POS on the alignment identified by the widening provided by lots to the east and west.
- Provide for a PAW or similar link through the area for pedestrian/cycle and possibly emergency vehicle use.
- Provision of future road connections via transferrable rights of way from the interim turning heads on Kula Road and Nambucca Rise.
- Continue the 18m protection area/setback/widening for the Western Power overhead line.
- Link the established low fuel areas on the foreshore lots to the east and west so as to reduce risks for the wider area.

#### 4. SITE ASSESSMENT

Land Assessment PTY LTD has completed a detailed assessment of the site for the proposed Special Residential development. This is attached in Appendix A.

In summary;

- Small areas of potentially good horticultural land exists but are mitigated by the small usable area available and are further constrained by remnant vegetation, water supplies for irrigation and potential for conflict with surrounding residential development.
- The land has an overall moderate capability to sustain non sewerred special residential type development.
- Elevated areas and areas near Nanarup Road are open or parkland cleared while the southern slopes near the foreshore are less disturbed.
- Invasive Sydney Wattle and Pampas Grass was noted along with landowner control.
- Native vegetation complexes on site are (or were) noted as Marri/Jarrah/Peppermint Woodland in the north running through to Melaleuca Low Forest in the south.
- None of the vegetation units on site could be considered poorly reserved/protected on a local scale.
- Albany Greenways shows the vegetation on the southern portion of Lot 106 and that in the foreshore as part of a green corridor.
- Six landform/soil units were identified being; on upland areas, Uc2 Crest (shallow gravels), Uc3 Crest (pale shallow grey sand), and Us2 Upper slopes (shallow gravels); on slopes, Sm2 Upper slope (deep sandy gravel), Ss2 Mid slope (sandy duplex soils), Sm3 Lower slope (grey deep sands).
- Due to the nature of the site's geology and elevated topography, depth to groundwater would not be a limiting factor for unsewerred residential development.
- The sites exceeded minimum requirements for the key soil properties for unsewerred residential development (permeability, nutrient retention and soil depth).
- Capability for special residential development was found to be fair to high. The only areas found where development/dwelling construction should be avoided were localized adjacent to the foreshore and in the north west around some shallow laterite.

## **5. SERVICES AND INFRASTRUCURE**

### **5.1 Roads & Access**

For the existing two lots access is made via Nanarup Road with direct frontage for Lot 105 and a winding battleaxe leg driveway for Lot 106.

Additional road connections to this section of Nanarup Road has not favoured in previous development. As a result, access for the proposed development may be made by transferring the Rights of Way to extend Kula Road and Nambucca Rise to the development site. This action was foreshadowed by the previous planning in the area and the original provision of these rights of way.

In the extension of Kula Road it may be necessary to remove or relocate an existing garage/shed on Lot 106. This will be ratified following detailed survey.

### **5.2 Potable Water Supply**

Reticulated water supplies are available in Kalgan Heights and may be extended to the site.

### **5.3 Effluent Disposal**

Disposal of effluent on the two properties and in the wider area is by way of on-site effluent disposal systems as scheme sewer is not available.

In accord with the land assessment, new development will be required to utilise high performance nutrient retaining systems.

### **5.4 Power & Telecommunication**

The properties have access to power and telecommunication services which have been placed underground. There will be the need to continue the protection area/setback/widening adjacent to Nanarup Road which serves the Western Power HV Overhead Line.

### **5.5 Schools and Community Facilities**

Local, Neighbourhood and Regional services and facilities are readily accessible and available in Lower King, Bayonet Head and the Albany City Centre respectively.

Great Southern Grammar is located to the east of Kalgan Heights and is linked by a dedicated pathway system.

## 6. PLANNING

Clause 5.5.8.3 of Local Planning Scheme No.1 requires a number of issues to be addressed. These include:

- Compliance with the outcomes and recommendations of the Albany Local Planning Strategy;
- Land Capability and suitability assessment;
- Protection and enhancement of the natural environment;
- Protection and enhancement of visual amenity;
- Provision of infrastructure and services;
- Impacts on adjacent land uses;
- Any potential for site contamination;
- Effluent disposal;
- Location of building envelopes, development exclusion areas;
- Preparation of a Subdivision Guide Plan for the subdivision showing proposed roads and connectivity between proposed /future and existing developments, lots, recreation areas, location of building envelopes, as relevant.

In this case, the rezoning and future subdivision of Lots 105 & 106 represents infill development within established Special Rural Zone Area No. 10. As a result, not all scheme issues are relevant as they have been met or set by the establishment of the existing zone.

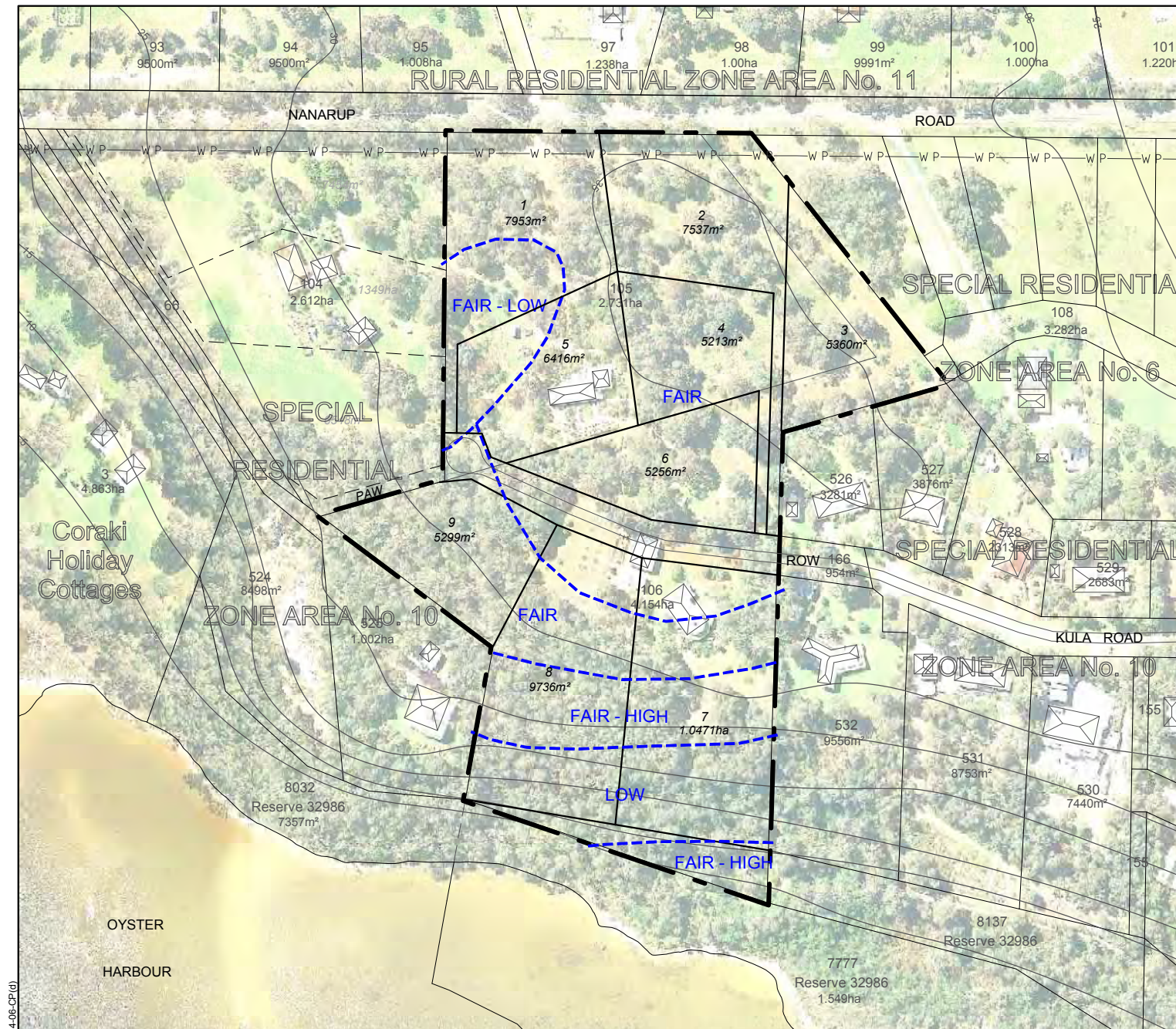
### 6.1 Subdivision Guide Plan and Zone Provisions

A subdivision layout is shown for the two lots overleaf. This plan will be used to update the Subdivision Guide Plan for the wider SR10 area.

Measures such as lot layout, access and servicing, Public Open Space and Pedestrian Access Way/s have carried through the requirements of the original zoning particularly in terms of providing for the PAW/Road link through the area for recreational and emergency use and the extension of the Public Open Space area adjacent to the Oyster Harbour foreshore and the provision of larger lots with large foreshore setbacks in the south and smaller lots in the more elevated flatter land.



**CONCEPT PLAN**  
 Lots 105 & 106 Nanarup Road  
 Lower King, City of Albany



**LEGEND**

- Subject Land
- Existing Lot Boundaries
- Proposed Lot Boundaries
- Future Possible Lot Boundaries
- Existing Buildings
- Landform Units (Refer to Land Assessment Report)
- Western Power

ORIG A4  
 SCALE 1:3000

0 10 20 30 40 50

## **6.2 Fire Safety**

A fire hazard assessment and fire management proposals are included as Appendix B. This plan ranks hazards and following liaison with Council's Fire/Emergency Management Officers notes fire safety requirements to be included in the development.

Requirements include:

- Hazard Separation Areas.
- Building Protection Zones.
- Dwelling construction to BAL 12.5 & 19 (AS 3959) on nominated lots.
- Modified perimeter fire break requirements.
- Onsite water for fire fighting purposes (ie, hydrant).
- Strategic fire break connection via PAW.
- Continuation of the east west Low Fuel Link.

## **6.3 Landscape**

The rezoning will extend the existing building height and colouring controls within SR10 across the new lots. This will couple with the low density of development proposed, retention of foreshore vegetation, the open parkland setting of the new lots and the density of roadside vegetation to ensure development fits in with the nature and context of the area.

## **6.4 Capability and Site Assessment**

A site and capability assessment is included within the Land Assessment Report (Appendix A). This assessment found minimal site constraints for the proposed low density residential so long as development is confined to the capable and suitable areas shown, the setbacks to Oyster Harbour are retained and high performance onsite effluent disposal devices are utilised.

Each lot has access to capable and suitable house sites and is capable of supporting onsite effluent disposal.

## **6.5 Servicing**

When the plan is fully implemented, both accesses to Nanarup Road can be decommissioned and all access will be via Nambucca Rise and Kula Road. With an allowance of approximately 5vpd per new lot, there will not be a significant impact on these existing access roads.

Battleaxe legs will be provided with reciprocal rights where necessary and the tuning head constructed so that the Pedestrian Access Way planned from adjoining Lot 104 can provide an emergency vehicle and pedestrian link from Nanarup Road near the Lower King Bridge/Coraki Park through to Kalgan Heights.

Site conditions and the extremely low density of development allow for the continued use of swale based infiltration for hard packed surfaces and swale or soak wells for structure runoff overflow.

Electrical power and telecommunications service the site with new connections required for the new lot. The Western Power HV Overhead Line adjacent to Nanarup Road will need to be protected by an extension of the protection measures established in existing areas of SR10.

Potable water supplies can be supplied via extensions of the existing reticulated network.

## **6.6 Existing Provisions**

The development contained within the new Subdivision Guide Plan is adequately covered by the existing general provisions of the scheme and the specific provisions applying to SR10. No modification appears necessary to account for the additional seven new house sites.

## **7. CONCLUSION**

The rezoning /amendment proposal is a simple one providing for nine lots to be incorporated into existing SR10.

This rezoning was foreshadowed in the original creation of SR10 and is provided for by the Albany Local Planning Strategy. The proposal is on the land surrounded by existing development and thus provides for a form of subdivision and development already established and popular in the locality.

This is achieved whilst maintaining a very low density of development and also providing for the continued protection of the foreshore and associated remnant vegetation, fire safety requirements and site sensitive development generally.

As a result, the proposal has clear merit and accords with the principals of orderly and proper planning.



## Appendix A

### **Land Capability Assessment**

Lots 105 & 106 Nanarup Road, Lower King

Land Assessment Pty Ltd

# **LAND CAPABILITY ASSESSMENT - Special Residential Development**

**Lots 105 & 106 Nanarup Road, Lower King  
City of Albany**

Prepared for

**AYTON BAESJOU PLANNING**

on behalf of

**Mr G Clark and Mr J Kennedy**

by

**Land Assessment Pty Ltd**



LA Report No 1403  
15 April 2014

**LAND ASSESSMENT PTY LTD**  
P.O. Box 117 SUBIACO, WA 6008  
Phone: (08) 9388 2427  
Email: [landass@iinet.net.au](mailto:landass@iinet.net.au)

## CONTENTS

	Page
<b>1.0 INTRODUCTION .....</b>	<b>1</b>
<b>2.0 NATURE AND CAPABILITY OF THE LAND .....</b>	<b>3</b>
2.1 Hydrology.....	3
2.2 Geology .....	3
2.3 Soil - Landscapes .....	4
2.4 Topography and Land Use .....	6
2.5 Vegetation and Conservation Values.....	6
2.6 Land Unit Mapping.....	7
2.7 Key Soil Properties for Un-sewered Development.....	12
2.8 Land Capability Assessment.....	13
<b>3.0 CONCLUSIONS .....</b>	<b>17</b>
3.1 Retention of significant vegetation .....	17
3.2 Minimising nutrient export. ....	17
3.3 Minimising visual impact. ....	18
3.4 Effect of land capability on plan of subdivision.....	19
<b>4.0 REFERENCES .....</b>	<b>20</b>
 <b>APPENDIX</b>	
A. Site Locations and Results Summary	
B. Soil Pit Descriptions	
C. Soil PRI Test Results	
 <b>Tables</b>	
1. Broad-Scale Land Capability Ratings	5
2. Summary of Soil PRI Test Results	12
3. Land Capability Assessment – Special Residential Development	15
 <b>Photos</b>	
1 – 12	9 -11
13	18
 <b>Figures</b>	
1a. Location Plan – over Scheme zoning map	2
1b. Location Plan – over aerial image	2
2. Geology	4
3. Soil-Landscape Mapping	4
4. Land Unit Mapping	8
5. Land Capability Mapping Assessment	14

## 1.0 INTRODUCTION

This report has been prepared for Ayton Baesjou Planning (on behalf of the landowners) as part of its submission to the City of Albany to initiate rezoning of Lots 105 and 106 Nanarup Road from 'Rural' to "Special Residential" and their subsequent subdivision to create lots of not less than a minimum 2000 m<sup>2</sup> in size.

The combined area of existing Lots 105 and 106 is approximately 6.9 ha and their location on the southern side on Nanarup Road in the Lower King locality is shown in Figures 1a and 1b.

The subject land has been identified within the Local Planning Strategy (City of Albany 2010) as being provisionally suitable for 'Special Residential' development. Adjacent land to the east and west is already zoned and used for that purpose.

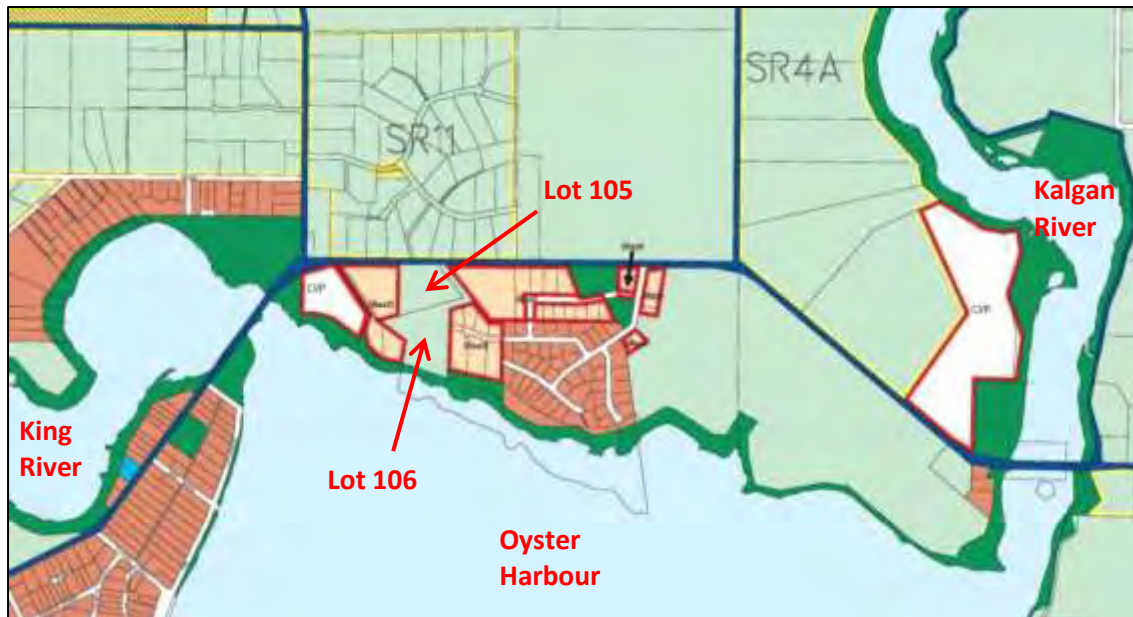
Under Town Planning Scheme No 3 (City of Albany 1980) Special Residential zones permit the creation of lots of between 2000 m<sup>2</sup> and 1 ha in suitable locations based on consideration of matters including appropriate physical and landscape conditions.

A proposed plan for subdivision needs to demonstrate that landform, vegetation and physical constraints have been taken into account in terms of the size and shape of proposed lots as well as road layout. This report seeks to address those requirements. It is based on a site inspection and soil survey conducted by Martin Wells of Land Assessment Pty Ltd during the period from the 17<sup>th</sup> to the 20<sup>th</sup> of March 2014, and an associated review of land resource and environmental planning and policy documents.

The capability of the land for Special Residential development (including on-site effluent disposal) has been assessed in general accordance with the methodology outlined in Department of Agriculture and Food publications (van Gool et al 2005, Wells and King 1989) and with due consideration of the requirements of the Draft Country Sewerage Policy (Government of Western Australia 1999).



**FIGURE 1a: LOCATION PLAN (over scheme zoning map)**



Source: Adapted from City of Albany Town Planning Scheme No 3 Map 19 of 33.

**FIGURE 1b: LOCATION PLAN (over aerial image)**



## 2.0 NATURE AND CAPABILITY OF THE LAND

### 2.1 Hydrology

The subject land is part of the catchment area to Oyster Harbour. This is a regionally significant estuary threatened by eutrophication due to excessive nutrient input mainly from agricultural areas in the catchment (Water and Rivers Commission 1997).

The topography of the lower portion of the Oyster Harbour catchment area is dominated by a gently undulating plain sloping towards the coast. This area is incised by the King and Kalgan Rivers as well as by numerous smaller drainage lines

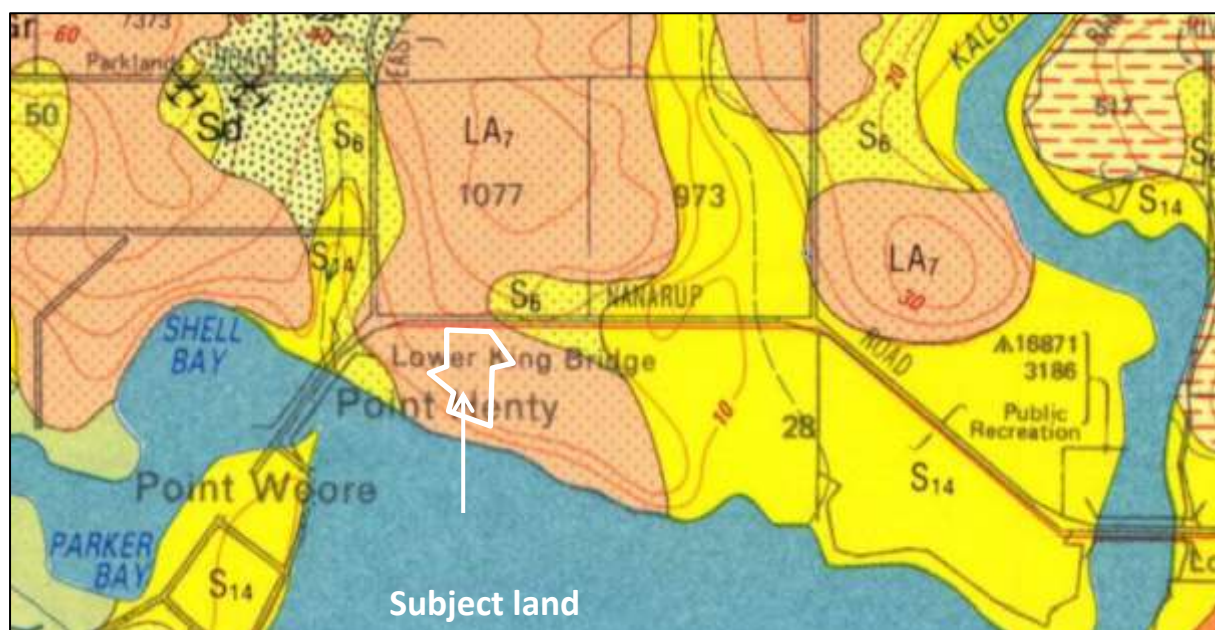
### 2.2 Geology

Geologically the area is underlain by Proterozoic rocks including granites and metamorphic gneiss which are exposed as hills along the coastal and near coastal fringe (Muhling and Brakel 1985). Tertiary marine sediments (Plantagenet group) lie above much of this basement rock, and a mantle of Cainozoic laterite extends over much of the gently undulating plain with Quaternary sand deposits in the valleys.

Environmental geology mapping, produced by the Geological Survey of Western Australia (Gozzard 1989), contains interpretive information for land use planning purposes. Figure 2 shows the geology of the subject area with Lots 105 and 106 occurring entirely within an area of Cainozoic laterite (LA<sub>7</sub>).

Gozzard (1989) describes the laterite as being *massive, friable to strongly indurated, vesicular, some sand content, and being developed on siltstone of the Plantagenet Group. It provides variable foundation conditions and is usually excavated by blasting*. These factors are described as providing *possible problems associated with the use of the land for septic tanks* (i.e. excavation difficulties and limited soil material for absorption and purification of liquid effluent)

**FIGURE 2: GEOLOGY**

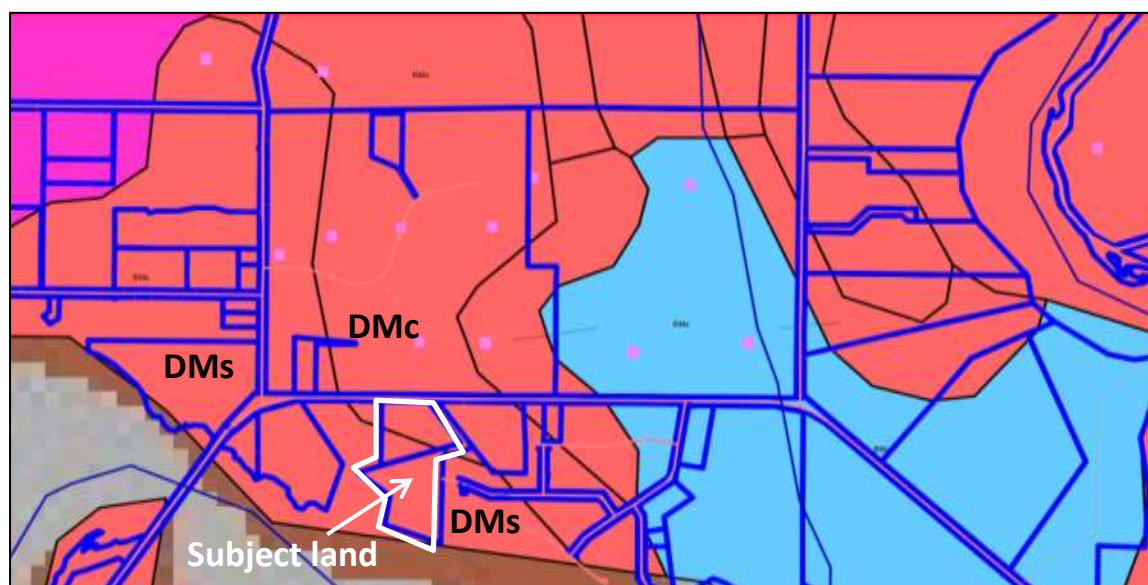


Source: Adapted from Environmental Geology Mapping Albany Sheet (Gozzard 1989).

### 2.3 Soil - Landscapes

A long history of weathering of the geological parent materials has resulted in a complex variety of soils and landforms as identified by CSIRO (Churchward et al 1988) and subsequently forming part of the Department of Agriculture and Food (DAFWA) soil-landscape mapping database from which broad-scale assessments of land use capability have been made. Figure 3 shows the relevant area.

**FIGURE 3: SOIL LANDSCAPE MAPPING**



Source: DAFWA (<http://spatial.agric.wa.gov.au/slip>) based on Churchward et al (1988).



**Legend to Figure 3.**

King (Kg) Soil Landscape System (Reddish brown colour) - *Dissected siltstone and sandstone terrain, on the southern edge of the Albany Sandplain Zone, with shallow gravels, sandy gravels, grey sandy duplex soils, and pale deep sands.*

DM -Dempster Subsystem - Ridges formed by dissection of lateritic plateau (upland plain)

**DMc**- Dempster crest phase - Sands and laterite on elongate crests;

**DMs**- Dempster slope phase - Sands and gravels on smooth slopes

DAFWA have produced land capability interpretations based on this broad-scale mapping. Due to the inevitable degree of variability of landform and soil conditions within any broad-scale mapping unit, the DAFWA assessments utilise the concept of 'proportional capability classes'. Instead of assigning a single specific (high, moderate or low) capability rating to all areas of a particular map unit, a proportional assessment is used. This expresses the capability more conservatively as a range (e.g. 50-70%) of the total area of a map unit is expected to contain land of a certain capability rating. Table 1 shows the assessment results for the Dempster (DMc and DMs) map units.

**TABLE 1. BROAD-SCALE LAND CAPABILITY RATINGS**

<b>Map Unit</b> (Dempster Subsystem)	<b>Perennial Horticulture</b> (incl vines)	<b>Annual Horticulture</b> (vegetables)	<b>Grazing</b>	<b>Cropping</b>	<b>Septic Tanks</b>
DMc	B1	B1	B2	C1	B2
DMs	A2	B1	B1	C2	B1

A1 = >70% has high capability; A2 = 50-70% high capability; B1 = >70% moderate to high capability; B2 = 50-70% moderate to high capability; C1= 50-70% low capability; and C2 = >70% low capability.

Essentially this broad-scale interpretation indicates the land is of moderate capability for un-sewered rural-residential development. For the sloping portions, unit DMs, this land could potentially be considered good horticultural land. However this is surpassed by the necessity to consider remnant vegetation, water supply for irrigation, and the identification of the subject land within the endorsed Local Planning Strategy (City of Albany 2010) as being provisionally suitable for non-agricultural land-use.



## 2.4 Topography and Land Use

The subject land encompasses part of a broad crest of gravelly lateritic terrain on the southern side of Nanarup Road that gives way to moderately steep slopes leading down to the northern edge of Oyster Harbour. It ranges in elevation from a maximum of approximately 35 m AHD within Lot 105, to around 12 m AHD within the footslope at the southern edge of adjacent Lot 106.

An existing residence occurs on each lot, and both lots contain modest areas of horticultural activity within the shallow gravelly soils and common surface laterite.

## 2.5 Vegetation and Conservation Values

As shown in Figure 1b and site photographs, the upland areas closest to Nanarup Road are parkland cleared, while the southern slopes descending to Oyster Harbour are apparently less disturbed\* and more substantially vegetated.

The Albany Regional Vegetation Survey, ARVS (Sandiford and Barrett 2010) identifies the more intact patches of the existing upland vegetation within Lots 105 and 106 as part of its vegetation unit 10 (Marri/Jarrah Forest/Peppermint Woodland). The southerly aspect slope within Lot 106 is shown as containing vegetation unit 36 (*Callistachys spp* thicket) leading down to vegetation unit 65 (Coastal *Melaleuca cuticularis* Low Forest) along the Oyster Harbour foreshore (outside of Lot 106).

Although the ARVS results indicate that vegetation units 10 (upland Marri, Jarrah etc) and 65 (Coastal Melaleuca – beyond Lot 106) have less than 10% of their ARVS extent occurring in conservation reserves, Sandiford and Barrett (2010) state that care needs to be used in interpreting this reservation status data. This is because significant areas of conservation reserve occur within the ARVS context area (a roughly 35 km radius of Albany encompassing about 209,000 ha) but outside the actual survey area (of around 125,400 ha).

Taking known vegetation occurrences in these reserves into account, none of the vegetation units within the subject land can be considered poorly reserved on a local scale. Notwithstanding this, the City's *Albany Greenways* (2002) project broadly identifies the vegetated slope within Lot 106 as part of an ecological corridor which extends around most of Oyster Harbour. Furthermore, action statements within the Local Planning Strategy (City of Albany 2010) indicate that clearing and location of building envelopes within the vegetated slope between the lateritic upland and Oyster Harbour would not be permitted.

\* Some rehabilitation activity involving removal of invasive Sydney Wattle (*Acacia longifolia*) has occurred, and there is also scattered Pampas grass (*Cortaderia spp*).

## 2.6 Land Unit Mapping

Given the broad scale of soil-landscape mapping depicted in Figure 3, some ‘on-ground’ variation can be expected in soil and landform conditions. More detailed survey and mapping of the site conditions was therefore undertaken as a basis for a ‘property-specific’ consideration of the capability of the land.

Soil and landform conditions within Lots 105 and 106 were surveyed in general accordance with the methodology outlined in Department of Agriculture and Food publications (van Gool et al 2005, Wells and King 1989). This involved examination of aerial photos followed by the field survey work during March 17 - 20. The soils were examined at fourteen preliminary soil hand auger observation sites (1 - 14) followed by a further eight, mainly shallow, pit sites (M N O, P, R, S, T and U) excavated by backhoe. Appendix A includes an aerial image with site locations and a results summary.

Sites, particularly for the excavated pits, were located to enable description of representative areas of each slope class and aerial photo pattern. The most likely areas for building envelopes were also considered given vegetation and landscape protection objectives expressed within the Local Planning Strategy (City of Albany 2010).

The soils were classified in accordance with the WA Soil Group nomenclature (Schoknecht 2002) and slope gradients were measured using a hand-held inclinometer correlated with available 2 m interval contour mapping. Site positions were recorded using a hand-held GPS unit.

Depth to groundwater was not able to be recorded as the watertable (perched or otherwise) was not encountered within any of the excavated pits. Furthermore, there are no bores within either Lot 105 or 106 from which depth to groundwater data might be obtained. Notwithstanding this, the nature of the geology and the elevated topography indicate that depth to groundwater would not be a limiting factor for unsewered ‘Special Residential’ development within Lots 105 and 106.

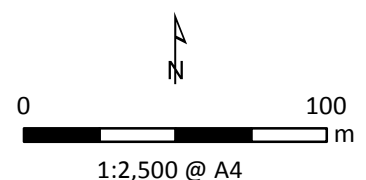
The results of the more-detailed mapping of land units (soil-landform types) are shown overleaf in Figure 4. The six delineated land units are described in the legend, and further appreciation of site conditions can be gained by reference to the photographs following Figure 4, as well as those accompanying the soil pit descriptions in Appendix B.





<b>Upland terrain</b>	Uc2	Crest; shallow gravels and common surface laterite
	Uc3	Crest; pale very shallow grey sand over laterite
	Us2	Upper slopes (< 5 % gradient); shallow gravels and common surface laterite.
<b>Slopes (to Oyster Harbour)</b>	Sm2	Upper slope; moderate gradient (10-15%); deep sandy gravel; some laterite.
	Ss2	Mid slope; moderately steep gradient (15 – 25%); sandy duplex soils.
	Sm3	Lower slope; moderate gradient (10-15%); grey deep sands.

**Figure 4:**  
**Land Units**







**Photo 1. Land unit Uc2** Crest with shallow gravels - Lot 105.



**Photo 2 Land unit Uc2** Common surface laterite - Lot 105.



**Photo 3. Unit Uc2** Laterite boulders, rather than extensive hardpan, enable permeability.



**Photo 4. Land unit Uc2** Crest with shallow gravels - Lot 106.





**Photo 5. Land unit Uc2** Remnants; mainly Marri & Jarrah upland vegetation



**Photo 7. Land unit Uc3** Lot 105. Crest with pale, very shallow, grey sands over laterite



**Photo 6. Land unit Us2** Lot 106 - inverted leach drains within house pad.



**Photo 8. Land unit Sm2** Upper, moderate slope with deep sandy gravel, Lot 106 site 9.





**Photo 9. Unit Sm2** Upper slope Lot 106; remnant Marri, Jarrah, Peppermint.



**Photo 10. Unit Ss2** Mid slope (moderately steep) - gradational vegetation.



**Photo 11. Unit Sm3** Lower slope Lot 106; *Callistachys spp* thicket.



**Photo 12.** Foreshore vegetation fringing Oyster Harbour (outside Lot 106).

## 2.7 Key Soil Properties for Un-sewered Development

### Permeability

The soil pit descriptions in Appendix B contain an estimated permeability (for the nominal 40 – 80 cm depth layer within the soil where, under natural conditions, a leach drain would be installed). Although restricted by shallow soil the ‘well drained’ permeability status is based on consideration of soil texture and structure in accordance with indicative rates listed in the relevant National Standards document, AS/NZS 1547 (Standards Australia & Standards New Zealand 2000).

### Ability to retain nutrients

Subsoil sampling was undertaken at pit sites M, O and R (see Appendix B) for PRI (Phosphorus Retention Index) analysis. The results are included in Appendix C and Table 2 below. The results show the soils, although shallow, are moderately adsorbing of phosphorus using criteria established by the Chemistry Centre of Western Australia (Allen and Jeffery 1990). They exceed the recommended minimum value of 5 under the *Consultation Draft of the Government Sewerage Policy* (Department of Health 2012).

**TABLE 2: SUMMARY OF SOIL PRI TEST RESULTS**

Site	Land unit	Field Texture (subsoil)	PRI	Category*
M	Uc2 (Lot 106)	Sand (gravelly)	12.5	Moderately adsorbing
O	Sm2 (Lot 106)	Loamy sand	9.5	Moderately adsorbing
R	Uc2 (Lot 105)	Loamy sand	5.5	Moderately adsorbing

\* Allen and Jeffery (1990).

### Soil Depth and Effect of Imported Material

It should be noted that the limited soil depth within most of the subject land will require leach drains to be either fully or partially inverted, and hence located within free draining soil material brought onto the site.

Commonly, yellow brown ‘builders sand’ is used to encompass leach drains in these situations where the natural soil is of inadequate depth. This material generally has a clayey sand texture and can be expected to have suitable permeability and a moderate to strongly adsorbing PRI to prevent excessive leaching of nutrients (phosphorous in particular) from on-site disposal of domestic effluent / wastewater.

## 2.8 Land Capability Assessment

Land capability' is a term used to express the ability of land to support a proposed change in use with minimal risk of degradation to its soil and water resources.

For Lots 105 and 106, the proposed change in land use is from 'Rural' to un-sewered rural-residential ('Special Residential') development. This new zoning category dictates minimum lot sizes of 2000 m<sup>2</sup>. The primary 'new' land use activity with potential to affect soil and water resources is the location of additional houses and their associated systems for on-site effluent disposal.

The capability of the land for the proposed form of development has been assessed in general accordance with the methodology outlined in Department of Agriculture and Food (DAFWA) publications - van Gool et al (2005) and Wells and King (1989). Specific site requirements under the existing Draft Country Sewerage Policy (Government of Western Australia 1999) relating to soil permeability and separation from groundwater and surface waterbodies are also considered.

A five class rating system from 'very high' capability (class one) to 'very low' capability (class five) is used here (albeit with intergrade categories). Land of 'very high' capability is considered to have few inherent physical land use limitations and minimal associated risk of land degradation. At the other end of the scale, 'very low' capability land is severely constrained by the inherent soil or landform conditions and there is an associated high risk of land or water degradation.

The capability assessment results for Lots 105 and 106 are shown in Figure 5 overleaf, and are further detailed in Table 3.





### Land Capability

- Fair to High - Minor Limitations
- Fair - Moderate Limitations
- Fair to Low - Moderate to Significant Limitations
- Low - Significant Limitations
- Very Low- Severe Limitations

### Land Units

**Labels in bold**  
Descriptions in Figure 4

### Limitations

Labels in brackets  
e erosion risk  
n nutrient retention (poor)  
x excavation difficulties (shallow depth to laterite)

**Figure 5:**  
**Land Capability**  
**Assessment for**  
**Special Residential**  
**Development**

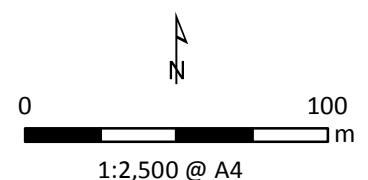


TABLE 3: LAND CAPABILITY ASSESSMENT – SPECIAL RESIDENTIAL DEVELOPMENT					
Land Unit	Description	Capability Rating	Major Limitations	Lesser Limitations	Comment / Planning Response
<b>Upland Terrain</b> (equivalent to DAFWA soil landscape - Dempster crests (DMc))					
<b>Uc2</b>	Crest (< 3%); shallow gravels and common surface laterite	<b>Fair</b>		Excavation difficulties, Minimal soil	<p><b>See Appendix B Soil Pit Sites M, R, S and U.</b></p> <p>Limited depth of natural soil and common surface lateritic stones and boulders.</p> <p>The underlying laterite is however relatively permeable (preferred drainage pathways), is usually underlain by nutrient retentive clay at &gt; 2m depth. There is also adequate separation from groundwater given elevated landscape position.</p> <p>In light of the above, conventional septic tanks with leach drains located within imported sand fill (inverted leach drain system) should be acceptable.</p>
<b>Uc3</b>	Crest (< 3%); pale very shallow grey sand over laterite	<b>Fair to Low</b>	Excavation difficulties, Minimal soil		<p><b>See Appendix B Soil Pit Site T.</b></p> <p>Shallower soil and possibly more competent underlying laterite, otherwise comments and planning response as for unit Uc2 above.</p>
<b>Us2</b>	Upper slopes (3 - 5 % gradient); shallow gravels and common surface laterite	<b>Fair</b>		Excavation difficulties, Minimal soil	<p><b>See Appendix B Soil Pit Site N.</b></p> <p>Comments and planning response as for unit Uc2 above.</p>



TABLE 3: LAND CAPABILITY ASSESSMENT – SPECIAL RESIDENTIAL DEVELOPMENT					
Land Unit	Description	Capability Rating	Major Limitations	Lesser Limitations	Comment / Planning Response
<b>Sloping Terrain</b> (equivalent to DAFWA soil landscape - Dempster slopes (DMs)).					
<b>Sm2</b>	Upper slope; moderate gradient (10-15%); deep sandy gravel; some laterite.	<b>Fair to High</b>		Excavation difficulties,	<p><b>See Appendix B Soil Pit Sites O and P.</b> Deeper gravelly soil than upland units, although lateritic stones and boulders within soil profile may still hinder excavation for leach drains.</p> <p>The underlying laterite is relatively permeable (preferred drainage pathways), and an uprooted tree shows it is underlain by nutrient retentive clay. Adequate separation from groundwater given elevated landscape position.</p> <p>Conventional septic tanks with leach drains partially located within imported sand fill (partially inverted leach drain system) should be acceptable.</p> <p>Much of this land unit encompasses remnant vegetation and it <u>might</u> be considered to intrude into the 'ecological corridor' delineated during the City's <i>Albany Greenways</i> (2002) project, and as reflected in its Local Planning Strategy (2010).</p>
<b>Ss2</b>	Moderately steep (15 – 25%) mid slope; sandy duplex soils.	<b>Low</b>	Erosion risk		All located within remnant vegetation and the broadly delineated 'ecological corridor'. <u>Not suitable</u> for building envelopes.
<b>Sm3</b>	Moderate (10-15%) lower slope; grey deep sands.	<b>Low</b>	Proximity to Oyster Harbour (Pollution risk)	Limited nutrient retention or microbial purification ability	As above for Ss3 (i.e. <u>not suitable</u> , particularly considering likely setback requirement).

### 3.0 CONCLUSIONS

Provisions within Town Planning Scheme No 3 (Schedule IV) relating to the adjacent *Nanarup Road Kalgan Heights* Special Residential Zone provide guidance on the key environmental planning matters in this portion of the City of Albany. They indicate the important environmental objectives associated with the rezoning of Lots 105 and 106 are retention of significant vegetation, and the minimisation of both nutrient export and visual impact. These matters, and the effect of the land capability assessment on the proposed rezoning and subsequent subdivision, are addressed as follows;

#### 3.1 Retention of significant vegetation

None of the vegetation units within the subject land can be considered poorly reserved on a local scale. Notwithstanding this, the vegetated slope within the southern portion of Lot 106 is part of an 'ecological corridor' which extends around most of Oyster Harbour (City of Albany 2010). This portion of Lot 106 should therefore be considered as containing vegetation of significance and hence it is unlikely that any clearing and location of building envelopes here would be permitted.

#### 3.2 Minimising nutrient export.

Potential sources of nutrients associated with 'Special Residential' land use and that might eventually find their way into Oyster Harbour are on-site effluent disposal systems and livestock excrement.

Soil PRI analysis shows the in-situ soil material is moderately adsorbing and exceeds (just) the recommended minimum value of 5 under the *Consultation Draft of the Government Sewerage Policy* (Department of Health 2012). Notwithstanding this, limited soil depth within most of the subject land will require leach drains to be either fully, or partially, inverted and hence located within free draining soil material brought onto the site. As this material is commonly free draining 'builders sand' (part of a house pad) with a clayey sand texture, it is likely that the nutrient retention ability of the site would be enhanced by this soil fill material.

Additional protection against nutrient loss from on-site effluent disposal systems might be provided through a condition requiring the use of Health Department approved alternative systems that have a phosphate removing capability. However this is considered unnecessary in light of the PRI values of the underlying in-situ soil material, and the likely application of a minimum 75 m setback for any building or effluent disposal system from the high watermark of Oyster Harbour.



A 75 m setback from Oyster Harbour is a specific provision (No 5.4) for the adjacent Nanarup Road Kalgan Heights Special Residential zone, and the keeping of livestock is not permitted without specific approval from Council. In view of the relatively poor shallow soils, the extent of existing tree cover in the parkland cleared upland areas, and the objective of minimising visual impact (through any additional clearing) it is suggested the keeping of livestock within lots created by rezoning and subdividing exiting Lot 105 and 106 would be inappropriate.

Given these conditions the potential for nutrient export associated with the proposed rezoning and subsequent subdivision is minimal.

### 3.3 Minimising visual impact.

The City of Albany Local Planning Strategy (2010) outlines the importance of considering visual impacts, particularly from recognised tourist routes. Lots 105 and 106 are partly bordered by Nanarup Road, although the effect of topography and roadside vegetation (see photo below) is such that only a minor portion of the northern boundary of existing Lot 105 affords views into the subject land.

Visual impacts can therefore be minimized through maintaining this roadside vegetation, and by extrapolation of the existing vegetation protection and building design, materials and colour provisions that currently apply to adjacent *Nanarup Road – Kalgan Heights* Special Residential zone.



Photo 13. View from Nanarup Rd at 'dog-leg' entrance to Lot 106 and showing vegetative screening of adjacent Lot 105.

### 3.4 Effect of land capability on plan of subdivision

A proposed plan for subdivision needs to demonstrate that landform, vegetation and physical constraints have been taken into account in terms of the size and shape of proposed lots as well as road layout.

Subject to avoiding location of building envelopes within the vegetated slope on the southern side of Lot 106 (i.e. within the designated 'ecological corridor') the remainder of Lot 106 and adjacent Lot 105 is however relatively uniform in relation to the capability of the land and hence exerts little influence over the pattern of subdivision or the position of access road/s.

To a varying degree, all lots created within this upland lateritic terrain will be affected by shallow soil and rock (laterite) outcrop. This presents a limitation to the installation of systems for on-site treatment and disposal of domestic effluent / wastewater. However this limitation is commonly addressed with conventional septic tanks linked to inverted or partially inverted leach drains that are contained within soil fill material (usually part of a house sand pad) so that effluent can pass through an appropriate depth of permeable soil for nutrient retention and microbial purification purposes.

Not forsaking the above, the best soil conditions for on-site effluent disposal occur within land unit Sm2 representing the upper portion of the slope on the southern side of Lot 106 where, although lateritic conditions are still present, the soils are generally deeper than on the upland crest. However, only limited areas in vicinity of pit sites O and P are clear of vegetation (see Appendix B photos).

Within existing Lot 105 the underlying laterite within land unit Uc3 appears more competent than in the other crest unit (Uc2). Although this can be addressed as described through inverted leach drains, development costs associated with excavation might be eased if, where practical, the configuration of newly subdivided lots enabled affected lots to encompass part of the adjacent Uc2 land type as a slightly better option for building.

In relation to agricultural land use capability the subject land is constrained by its existing small size, extent of vegetative cover, and the shallow gravelly soils. In addition, consideration of the potential loss of productive agricultural land would logically have formed part of the process of developing the City of Albany's Local Planning Strategy, under which the subject land is currently identified as having potential for Special Residential development rather than agriculture.

There is no indication from the site-specific land capability assessment to suggest that the earlier strategic planning decision to allow alienation of this small area from the agricultural land base was inappropriate.

#### 4.0 REFERENCES

Allen D.G. and Jeffery R.C. (1990) *Methods of Analysis of Phosphorus in Western Australian Soils*. Report on Investigation No 37, Chemistry Centre Perth.

Churchward H. M., McArthur W.M., Sewell P.L., and Bartle G. A. (1988) *Landforms and Soils of the South Coast and Hinterland, Western Australia: Northcliffe to Manypeaks*. CSIRO Division of Water Resources Divisional Report 88/1. April 1988.

City of Albany (2010) *City of Albany Local Planning Strategy* – endorsed by the Western Australian Planning Commission 15 June 2010.

City of Albany (1980) *City of Albany Town Planning Scheme No 3 Town Planning Scheme* – prepared by the Department of Planning. Gazetted 15 February 1980 and updated to January 2014.

Department of Agriculture and Food (2012) *Regional Soil Landscape Mapping – NRM Info* (Online) Available: <http://www.spatial.agric.wa.gov.au/slip>

Department of Health (2011) *Government Sewerage Policy – Consultation Draft* Department of Health, December 2011.

Government of Western Australia (1999) *Draft Country Sewerage Policy* – document endorsed by the Cabinet Committee on Waste Management and released for public comment by Environmental Health Service, Health Department of Western Australia Perth, Western Australia.

Gozzard J. R. (1989) Torbay Sheet 2427 IV. Environmental Geology Series, Geological Survey of Western Australia.

Muhling P.C. and Brakel A.T. (1985) *Mount Barker - Albany, Western Australia*. Sheet SI 50-11. 1:250 000 Geological Series - Explanatory Notes. Geological Survey of Western Australia, Perth.

Sandiford, E.M. and Barrett, S. (2010). *Albany Regional Vegetation Survey, Extent Type and Status*, A project funded by the Western Australian Planning Commission (EnviroPlanning “Integrating NRM into Land Use Planning” and State NRM Program), South Coast Natural Resource Management Inc. and City of Albany for the Department of Environment and Conservation. Unpublished report. Department of Environment and Conservation, Western Australia.

Schoknecht, N. (2002) *Soils Groups of Western Australia - a simple guide to the main soils of Western Australia. Edition 3*. Resource Management Technical Report 246. Agriculture Western Australia, Perth. June 2002.

Standards Australia & Standards New Zealand (2000) - AS/NZS 1547 - *On-site Domestic Wastewater Management* Standards Association of Australia. Homebush, N.S.W.

van Gool, D. Tille P, and Moore, G (2005) *Land Evaluation Standards for Land Resource Mapping. Guidelines for assessing land qualities and determining land capability in south-west Western Australia*. Resource Management Technical Report 298. Agriculture WA, Perth. December 2005.

Water and Rivers Commission (1997) *Survey of the River Foreshores in the Oyster Harbour Catchment 1997*. Water and Rivers Commission Report WRT 17.

Wells, M.R. and King, P.D. (1989) *Land Capability Assessment Methodology for Rural-Residential and Associated Agricultural Land Uses*. Land Resources Series No. 1. Western Australian Department of Agriculture, Perth.



## **APPENDIX A:**

### **SITE LOCATIONS & RESULTS SUMMARY**

## APPENDIX A: SITE LOCATIONS & RESULTS SUMMARY



Soil Site No <sup>1</sup>	Easting	Northing	Elevation m AHD	Soil landscape <sup>2</sup>	Landform <sup>3</sup>	Soil Group <sup>4</sup>	Other	LMU
Site 1	50 H 587283	6132838	35 m	Dc	Upland crest Slope 1-3%	Shallow gravel	Yellow brown shallow gravel with sandy matrix.	Uc2
Site 2	50 H 587259	6132824	35 m	Dc	Upland crest Slope 1-3%	Shallow gravel	Yellow brown shallow gravel with sandy matrix.	Uc2
Site 3	50 H 587238	6132898	34 m	Dc	Upland crest Slope 1-3%	Shallow gravel	Yellow brown shallow gravel with sandy matrix.	Uc2
Site 4	50 H 587137	6132820	32 m	Ds	Upland crest Slope 1 %	Pale shallow sand (over laterite)	Shallow grey sand over gravel / laterite.	Uc3
Site 5	50 H 587118	6132780	31 m	Ds	Upland crest Slope 1 %	Pale shallow sand (over laterite)	Shallow grey sand over gravel / laterite.	Uc3
Site 6	50 H 587117	6132764	31 m	Ds	Upland crest Slope 1-3%	Pale shallow sand (over laterite)	Shallow grey sand over gravel / laterite.	Uc3
Site 7	50 H 587211	6132732	33 m	Ds	Upland crest Slope 1-3%	Shallow gravel	Shallow gravel with sandy matrix.	Uc2
Site 8	50 H 587158	6132682	29 m	Ds	Gentle upper slope 3-5%	Shallow gravel	Shallow gravelly grey sand over gravel / laterite.	Us2

Soil Site No <sup>1</sup>	Easting	Northing	Elevation m AHD	Soil landscape <sup>2</sup>	Landform <sup>3</sup>	Soil Group <sup>4</sup>	Other	LMU
Site 9	50 H 587168	6132623	26 m	Ds	Moderate mid to upper slope 10-13%	Deep sandy gravel	Grey sand over yellow brown gravel with sandy matrix then laterite.	Sm2
Site 10	50 H 587224	6132615	26 m	Ds	Moderate mid to upper slope 10-13%	Deep sandy gravel	Grey sand over yellow brown gravel with sandy matrix then laterite.	Sm2
Site 11	50 H 587273	6132569	18 m	Ds	Mid slope 26 %	Sandy duplex soil	Reddish brown sand over gravel layer at approx. 30 cm then clay.	Ss2
Site 12	50 H 587271	6132532	10 m	Ds	Lower slope 10- 12%	Pale deep sand	Grey deep sand.	Sm3
Site 13	50 H 587215	6132541	12 m	Ds	Mid to lower slope 18-20%	Sandy duplex soil	Reddish brown sand over gravel layer and then clay.	Ss2
Site 14	50 H 587238	6132742	33 m	Ds	Upland crest Slope 1-3%	Shallow gravel	Yellow brown shallow gravel with sandy matrix.	Uc2
Pit M	50 H 587234	6132755	33 m	Ds	Upland crest Slope 1-3%	Shallow gravel	See Soil Pit Description	Uc2
Pit N	50 H 587145	6132695	29 m	Ds	Gentle upper slope 3-5%	Shallow gravel	See Soil Pit Description	Us2
Pit O	50 H 587162	6132621	26 m	Ds	Moderate mid to upper slope 10-13%	Deep sandy gravel	See Soil Pit Description	Sm2



Soil Site No <sup>1</sup>	Easting	Northing	Elevation m AHD	Soil landscape <sup>2</sup>	Landform <sup>3</sup>	Soil Group <sup>4</sup>	Other	LMU
Pit P	50 H 587222	6132611	26 m	Ds	Moderate mid to upper slope 10-13%	Deep sandy gravel	See Soil Pit Description	Sm2
Pit R	50 H 587241	6132890	34 m	Dc	Upland crest Slope 1-3%	Shallow gravel	See Soil Pit Description	Uc2
Pit S	50 H 587282	6132830	35 m	Dc	Upland crest Slope 1-3%	Shallow gravel	See Soil Pit Description	Uc2
Pit T	50 H 587130	6132801	32 m	Ds	Upland crest Slope 1 %	Pale shallow sand (over laterite)	See Soil Pit Description	Uc3
Pit U	50 H 587121	6132881	32 m	Dc	Upland crest Slope 1-3%	Shallow gravel	See Soil Pit Description	Uc2

**FOOTNOTES** **1. Sites** 1 – 14 are hand auger observations. Pits M – U are excavated soil pit observations. **2. Soil-landscape** units are from 1: 100 000 scale DAFWA mapping. **3. Landform** descriptors as described by van Gool et al (2005). **4. Soils** classified to WA Soil Groups (Schoknecht (2002)).

## **APPENDIX B**

### **SOIL PIT DESCRIPTIONS**

## APPENDIX B



### SOIL PIT DESCRIPTIONS





# REPORT ITEM PD095 REFERS



<b>Site Number: M</b> 50 587234E; 6132755 N	<b>Soil landscape mapping:</b> King System - Dempster slope Phase (Ds)	<b>Land unit:</b> Uc2
		
<b>Landform:</b> Upland crest (1-3% gradient)		
	<b>WA Soil Group:</b> <i>Shallow gravel</i>	
	<b>Depth</b> (cm)	<b>Description</b>
	0 – 5	Dark brown (7.5YR 3/2) <b>sand</b> , with common medium to coarse ferruginous gravels; apedal with earthy fabric; clear boundary to
	5 – 25	Strong brown (7.5YR 4/6) <b>sand</b> with many medium to coarse ferruginous gravels <b>loam</b> ; massive with earthy fabric; abrupt boundary to;
	25+	Laterite boulder (backhoe refusal).
<b>Indicative subsoil permeability and AS 1547:2000 drainage class:</b> (at 40 – 80 cm leach drain depth) Not applicable – below soil material. <b>Comment:</b> Common surface lateritic stones and boulders. Sand fill and septic tanks with inverted leach drains needed due to inadequate depth of natural soil. However, the underlying laterite is relatively permeable (preferred drainage pathways), is usually underlain by clay at > 2m depth, and there is adequate separation from groundwater given elevated position in landscape.		





<b>Site Number: N</b> 50 587145E; 6132695 N	<b>Soil landscape mapping:</b> King System - Dempster slope Phase (Ds)	<b>Land unit:</b> Us2
		
<b>Landform:</b> Gentle to upper slope (3-5% gradient)		
	<b>WA Soil Group:</b> <i>Shallow gravel</i>	
	<b>Depth</b>	<b>Description</b>
	0 – 5 cm	Very dark greyish brown (10YR 3/2 ) sand, few medium sized ferruginous gravels apedal with earthy fabric; clear boundary to;
	5 – 20	Yellowish brown (10YR 5/4) <b>sand</b> ; common medium to coarse sized ferruginous gravels massive with earthy fabric; abrupt boundary to;
	20+	Laterite boulder (backhoe refusal).
<b>Indicative subsoil permeability and AS 1547:2000 drainage class:</b> (at 40 – 80 cm leach drain depth) Not applicable – below soil material.. <b>Comment:</b> Common surface lateritic stones and boulders. Sand fill and septic tanks with inverted leach drains needed due to inadequate depth of natural soil. However, the underlying laterite is relatively permeable (preferred drainage pathways), is usually underlain by clay at > 2m depth, and there is adequate separation from groundwater given elevated position in landscape.		



<b>Site Number: O</b> 50 587162E; 6132621 N	<b>Soil landscape mapping: King System</b> - Dempster slope Phase (Ds)	<b>Land unit: Sm2</b>
		
<b>Landform:</b> Moderate mid to upper slope (10-13% gradient)		
	<b>WA Soil Group: <i>Deep sandy gravel</i></b>	
	<b>Depth</b>	<b>Description</b>
	0 – 10 cm	Very dark greyish brown (10YR 3/2) <b>sand</b> ; common medium to coarse sized ferruginous gravels; apedal with earthy fabric; clear boundary to;
	10 – 40	Dark yellowish brown (10YR 4/6) <b>loamy sand</b> ; common coarse sized ferruginous gravels or cobbles; massive with earthy fabric; clear boundary to
	40 – 100	Yellowish brown (10YR 5/6) <b>loamy sand</b> ; common medium to coarse sized ferruginous gravels; massive with earthy fabric; abrupt boundary to
100+	Laterite boulder (backhoe refusal).	
<b>Indicative subsoil permeability and AS 1547:2000 drainage class:</b> (at 40 – 80 cm leach drain depth) > 3.0 m/day (Well drained). <b>Comment:</b> Few surface lateritic stones and boulders. These may also occur within soil profile and hinder excavation for leach drains. Partially inverted leach drains recommended. Adequate separation from groundwater given elevated position in landscape.		





<b>Site Number: P</b> 50 529300E; 6130088N	<b>Soil landscape mapping:</b> King System - Dempster slope Phase (Ds)	<b>Land unit:</b> Sm2
		
<b>Landform:</b> Moderate mid to upper slope (10-13% gradient)		
	<b>WA Soil Group:</b> <i>Deep sandy gravel</i>	
	<b>Depth</b>	<b>Description</b>
	0 – 10cm	Very dark greyish brown (10YR 3/2) <b>sand</b> ; common medium to coarse sized ferruginous gravels; apedal with earthy fabric; clear boundary to;
	10 – 40	Dark yellowish brown (10YR 4/6) <b>loamy sand</b> ; common coarse sized ferruginous gravels or cobbles; massive with earthy fabric; gradual boundary to;
	40 – 100	Yellowish brown (10YR 5/6) <b>loamy sand</b> ; common medium to coarse sized ferruginous gravels; massive with earthy fabric; abrupt boundary to;
100+	Laterite boulder (backhoe refusal).	
<b>Indicative subsoil permeability and AS 1547:2000 drainage class:</b> (at 40 – 80 cm leach drain depth) > 3.0 m/day (Well drained). <b>Comment:</b> Few surface lateritic stones and boulders. These may also occur within soil profile and hinder excavation for leach drains. Partially inverted leach drains recommended. Adequate separation from groundwater given elevated position in landscape.		


<b>Site Number: R</b> 50 587241E; 6132890N	<b>Soil landscape mapping:</b> King System - Dempster crest Phase (Dc)	<b>Land unit:</b> Uc2
		
<b>Landform:</b> Very gently undulating crest (1-3 % gradient)		
	<b>WA Soil Group:</b> <i>Shallow gravel</i>	
	<b>Depth</b>	<b>Description</b>
	0 –5 cm	Very dark greyish brown (10YR 3/2) <b>sand</b> ; common medium sized ferruginous gravels apedal with earthy fabric; clear boundary to;
	5 - 40	Yellowish brown (10YR 5/4) <b>loamy sand</b> ; massive with earthy fabric; many medium to coarse sized ferruginous gravels; massive with earthy fabric; abrupt boundary to :
<b>Indicative subsoil permeability and AS 1547:2000 drainage class:</b> (at 40 – 80 cm leach drain depth) Not applicable – below soil material. <b>Comment:</b> Few surface lateritic stones and boulders. Sand fill and septic tanks with inverted leach drains needed due to inadequate depth of natural soil. However, the underlying laterite is relatively permeable (preferred drainage pathways), is usually underlain by clay at > 2m depth, and there is adequate separation from groundwater given elevated position in landscape.		



<b>Site Number: S</b> 50 587282E; 6132830N	<b>Soil landscape mapping:</b> King System - Dempster crest Phase (Dc)	<b>Land unit:</b> Uc2
 <p><b>Landform:</b> Very gently undulating crest (1 - 3 % gradient)</p>		
	<b>WA Soil Group:</b> <i>Shallow gravel</i>	
	<b>Depth</b>	<b>Description</b>
	0 –5 cm	Very dark greyish brown (10YR 3/2) <b>sand</b> ; common medium sized ferruginous gravels apedal with earthy fabric; clear boundary to;
	5 - 50	Yellowish brown (10YR 5/4) <b>loamy sand</b> ; massive with earthy fabric; many medium to coarse sized ferruginous gravels; abrupt boundary to;
	50 +	Laterite boulder (backhoe refusal).
<b>Indicative subsoil permeability and AS 1547:2000 drainage class:</b> (at 40 – 80 cm leach drain depth) Not applicable – below soil material. <b>Comment:</b> Few to common surface lateritic stones and boulders. Sand fill and septic tanks with inverted leach drains needed due to inadequate depth of natural soil. However, the underlying laterite is relatively permeable (preferred drainage pathways), is usually underlain by clay at > 2m depth, and there is adequate separation from groundwater given elevated position in landscape.		

<b>Site Number: T</b> 50 587130E; 6132801N	<b>Soil landscape mapping:</b> King System - Dempster slope Phase (Ds)	<b>Land unit:</b> Uc3
		
<b>Landform:</b> Crest (1 % gradient)		
	<b>WA Soil Group:</b> <i>Pale shallow sand (over laterite)</i>	
	<b>Depth (cm)</b>	<b>Description</b>
	0 – 15	Grey (10YR 6/1) <b>sand</b> , apedal single grain with earthy fabric; very few medium sized ferruginous gravels; clear boundary to;
	15 – 25	Yellowish brown (10YR 5/4) <b>sand</b> ; massive with earthy fabric; common medium sized ferruginous gravels; abrupt boundary to;
	25 +	Laterite boulder (backhoe refusal).
<b>Indicative subsoil permeability and AS 1547:2000 drainage class:</b> (at 40 – 80 cm leach drain depth) Not applicable – below soil material. <b>Comment:</b> Few surface lateritic stones and boulders. Sand fill and septic tanks with inverted leach drains needed due to inadequate depth of natural soil. However, the underlying laterite is relatively permeable (preferred drainage pathways), is usually underlain by clay at > 2m depth, and there is adequate separation from groundwater given elevated position in landscape.		



<b>Site Number: U</b> 50 587121E; 6132881N	<b>Soil landscape mapping:</b> King System - Dempster crest Phase (Dc)	<b>Land unit:</b> Uc2
		
<b>Landform:</b> Very gently undulating crest (1 - 3 % gradient)		
	<b>WA Soil Group: <i>Shallow gravel</i></b>	
	<b>Depth</b>	<b>Description</b>
	0– 8cm	Very dark greyish brown (10YR 3/2) <b>sand</b> ; common medium to coarse sized ferruginous gravels; apedal with earthy fabric; clear boundary to;
	8– 45	Dark yellowish brown (10YR 4/6) <b>sand</b> ; common coarse sized ferruginous gravels or cobbles; apedal with earthy fabric; abrupt boundary to;
	45 +	Laterite boulder (backhoe refusal).;
<b>Indicative subsoil permeability and AS 1547:2000 drainage class:</b> (at 40 – 80 cm leach drain depth) Not applicable – below soil material. <b>Comment:</b> Few to common surface lateritic stones and boulders. Sand fill and septic tanks with inverted leach drains needed due to inadequate depth of natural soil. However, the underlying laterite is relatively permeable (preferred drainage pathways), is usually underlain by clay at > 2m depth, and there is adequate separation from groundwater given elevated position in landscape.		

## **APPENDIX C**

### **SOIL PRI TEST RESULTS**





ANALYSIS REPORT

Generated: 4/04/2014 3:25:21 PM

Lab No	WPSI4166	WPSI4167	WPSI4168	WPSI4169	WPSI4170	WPSI4171	WPSI4172
Name	C4	FB	GB	MB	OB2	RB	IIB
Code	31/3/14	31/3/14	31/3/14	31/3/14	31/3/14	31/3/14	31/3/14
Customer	MARIN WELLS	MARIN WELLS	MARIN WELLS	MARIN WELLS	MARIN WELLS	MARIN WELLS	MARIN WELLS
Depth	0-10	0-10	0-10	0-10	0-10	0-10	0-10
Phosphorus Retention Index	0.5	0.7	78.9	12.5	9.5	5.5	115.3

## Appendix B

### **Fire Plan**

Lots 105 & 106 Nanarup Road, Lower King

**FIRE PLAN****Lots 105 & 106 Nanarup Road****Lower King City of Albany**

---

Fire Plan & Assessment, Notes and Inclusions, refer plan attached.

**Notes:**

- Subject land is within an area of existing development containing residential lots ranging from 2000m<sup>2</sup>. Lots on subject land range up to 4000m<sup>2</sup>.
- Development on adjoining lots and the associated low fuel and hazard separation areas establish the southern extent of the low fuel area for the subject land.
- All cleared and parkland cleared areas north of the low fuel link/ Lot 7-9 firebreak are to be maintained in a low fuel/hazard reduced state. Implemented at subdivision and maintained by landowners (ie annual slashing/pruning).

**Measures:**

- Access. Road access via constructed road extension (Kula Road). Battleaxe legs to be constructed where shown (Lots 1-5).
- On subdivision of adjoining Lot 104, strategic firebreak within 8m wide Pedestrian Access Way will extend from the new Kula Road extension up to Nanarup Road.
- Interim SFB link to be provided to Nanarup Road via Lot 2 access leg. To be decommissioned when Lot 104 link is provided.
- Firebreaks. Perimeter firebreak to be provided as shown on plan for Lots 7-9.
- Water Supplies. Hydrant to be provided on extension to water main on Kula Road, preferably at turning head.
- Hazard Separation. All land north of low fuel link/ Lot 7-9 firebreak to be maintained as a hazard separation area in a low fuel condition.
- Building Protection Zone. All dwellings to be provided with a minimum 20m wide Building Protection Zones.
- 30m BPZ required to southern edge of BPZ on Lots 7, 8 & 9.
- BAL Construction. Lots 1 – 6, BAL12.5 applies. Lots 7, 8 & 9, BAL 19 applies.
- As condition of subdivision, developer to provide road access, fire water point, constructed battleaxes, perimeter fire break & cleared and parkland cleared areas in a low fuel state.
- Arrangements to be made to the satisfaction of Council to ensure prospective purchasers, in the transfer of lots, are aware of the Homeowners Bushfire Survival Manual, the scheme provisions, this Fire Plan and the landowner responsibilities to:
  - Design and construct within identified building envelopes to BAL 12.5/19 as appropriate.
  - Maintain perimeter firebreak where it crosses individual lots and provide appropriate gates where fenced.
  - Slash or otherwise appropriately maintain Building Protection Zones and Hazard Separation Areas in a low fuel state.

# FIRE PLAN

## Lots 105 & 106 Nanarup Road

### Lower King, City of Albany

REPORT ITEM PD095 REFERS

**AYTON BAESJOU**  
P L A N N I N G  
11 Duke Street  
Albany WA 6330  
PH 9842 2304 Fax 9842 8494

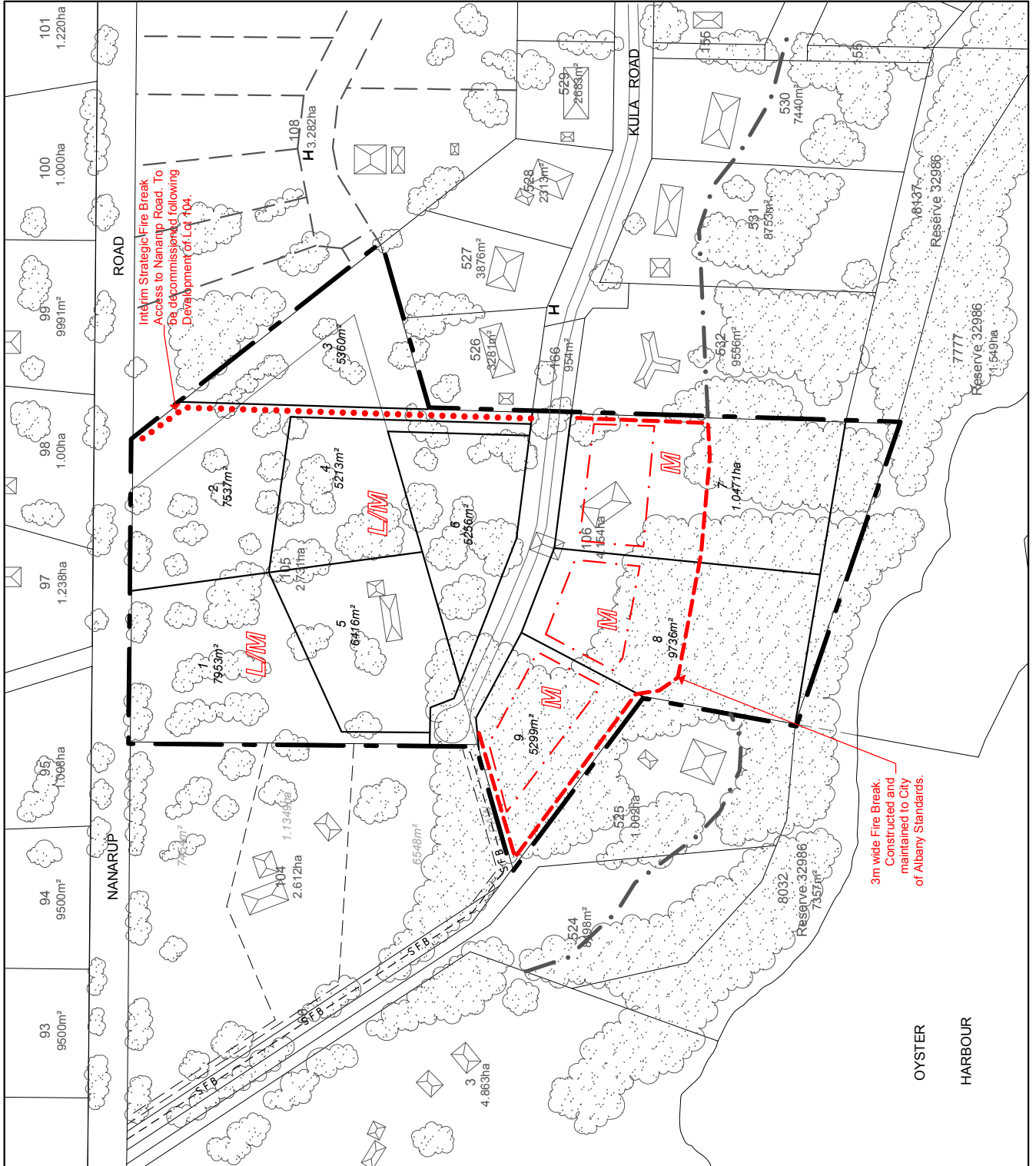
**LEGEND**

- Subject Land
- Existing Vegetation
- Existing Buildings
- Existing Hydrants
- Existing Low Fuel Link
- Proposed Low Fuel Link
- Strategic Fire Break
- Interim Strategic Fire Break
- Indicative Building Envelope
- Low to Moderate Fire Hazard
- Moderate Fire Hazard

ORIG A4  
SCALE 1:3000  
0 10 20 30 40 50

#### BAL Construction & Building Protection Zone Requirements

- Lots 1 - 6 BAL 12.5
- Flat open woodlands / parkland.
- 20m Building Protection Zone to be provided.
- Building Location free within setback constraints.
- Lots 7 - 9 BAL 19
- 5° slope to woodland.
- 30m Building Protection Zone to be provided.
- Building Envelopes Defined.





**PLANNING AND DEVELOPMENT ACT 2005**

**CITY OF ALBANY**

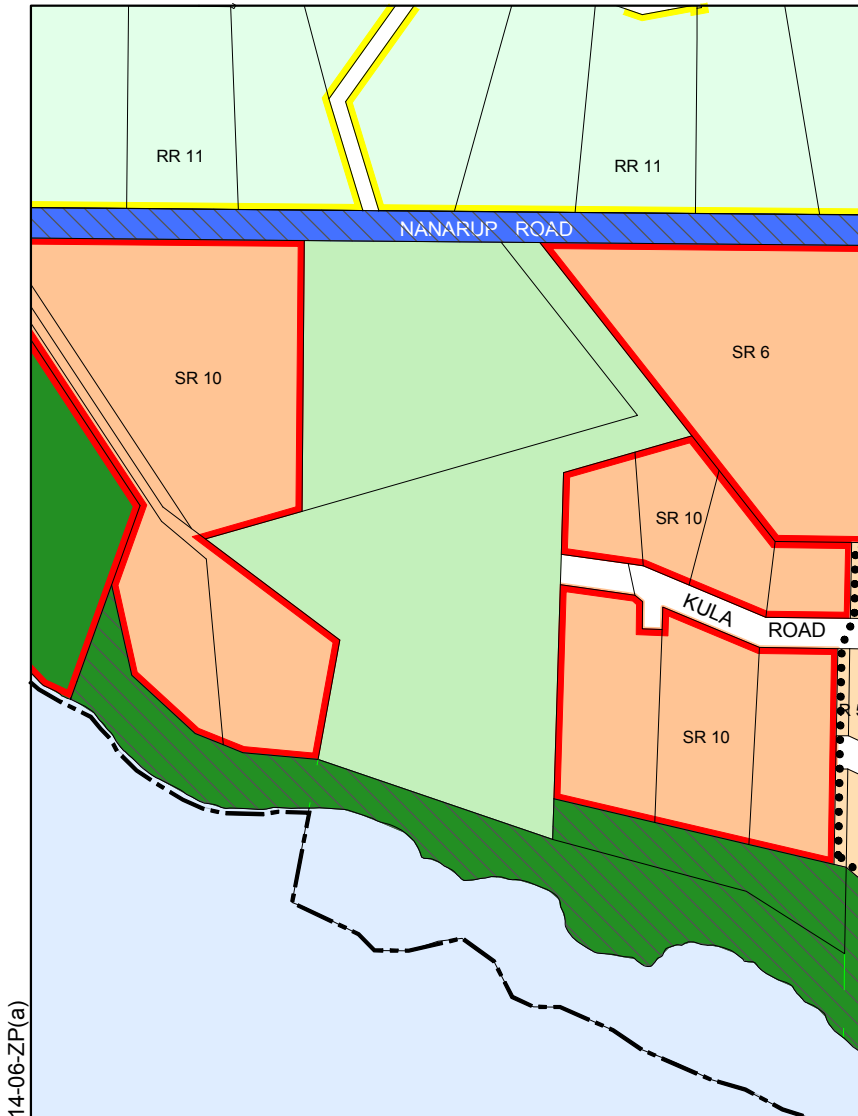
**LOCAL PLANNING SCHEME No. 1**

**AMENDMENT No. 6**

The City of Albany under and by virtue of the powers conferred upon it in that behalf by the Planning and Development Act 2005 hereby amends the above local planning scheme by:

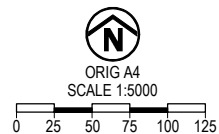
- i. Rezoning of Lot 105 and a portion of Lot 106 Nanarup Road, Lower King, from the 'General Agriculture' zone to the 'Special Residential' zone (SR10).*
- ii. Transferring a portion of Lot 106 Nanarup Road, Lower King, from the 'General Agriculture' zone to the 'Parks and Recreation' Reserve.*
- iii. Including Lots 105 & 106 Nanarup Road, Lower King, within Schedule 15 – Special Residential Zones Area No. 10.*
- iv. Amending the Scheme Maps accordingly.*

## Existing Zoning

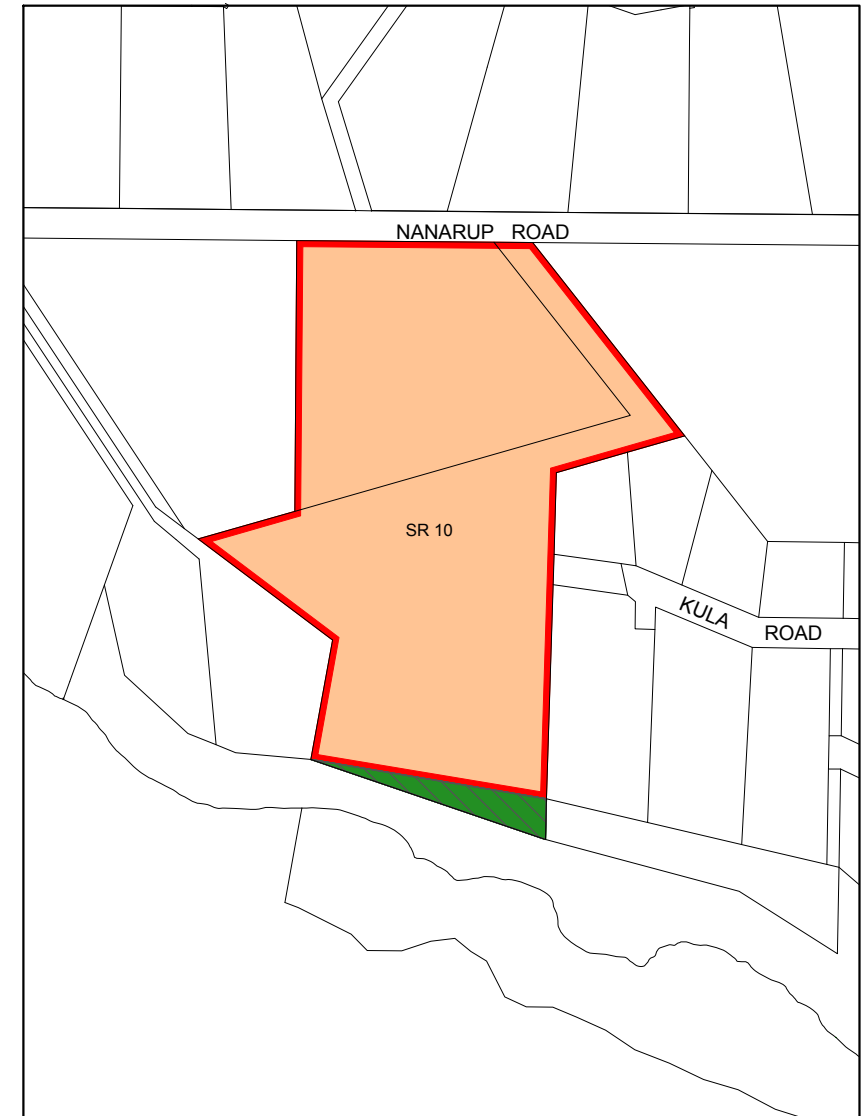


### LEGEND

- Municipal Boundary
- R Code Boundary
- LOCAL SCHEME RESERVES**
  - Parks & Recreation
  - Priority Road
- ZONES**
  - Residential
  - Special Residential
  - Rural Residential
  - General Agriculture
  - Caravan & Camping



## Proposed Zoning













CITY OF ALBANY  
LOCAL PLANNING SCHEME No. 1  
AMENDMENT NUMBER 6

**AYTON BAESJOU**  
PLANNING

11 Duke Street  
Albany WA 6330  
Ph 9842 2304 Fax 9842 8494

## LEGEND

-  Subject land
-  Foreshore Reserve
-  Existing Structures
-  Existing Vegetation
-  Proposed Revegetation
-  100m High Water Mark
-  Low Fuel Link
-  8m wide Pedestrian Access Way  
(Emergency Access / Strategic Fire Break)
-  Right of Way
-  Areas of Dense Invasive Weed Cover

● Lots where the keeping of stock may be considered.

▲ Lots where building envelopes are not to exceed 1200m<sup>2</sup> refer Provision 5.5).

## NOTES:

- All building envelopes are to be located north of the low fuel link (refer Provision 5.5).
- Uniform fencing on lot boundaries to Council's satisfaction.
- No direct access from Lot 104 to Nanarup Road.
- Subject to provision 6.4 & 6.5 - No boundary fencing shall be permitted south of the low fuel link.
- Subject to provision 7.2 & 14.0 - Invasive weeds to be controlled and areas incrementally revegetated.



SCALE 1:2 000  
DATE Sept.'97

**AYTON, TAYLOR & BURRELL**  
Consultants in Town Planning and Civic Design  
11 Duke Street, Albany, Western Australia 6330  
Phone 08 9842 2304 Fax 08 9842 1340

# SUBDIVISION GUIDE PLAN

## Special Residential Area No. 10

### Lot 4, 104, 105, 106 & 107 Nanarup Road Kalgan Heights

Original Plan Sept '97  
Updated Sept 2014  
LPS 1 Amendment No. 6

ADOPTED BY RESOLUTION OF THE COUNCIL OF THE  
\_\_\_\_\_ OF \_\_\_\_\_  
AT THE \_\_\_\_\_ COUNCIL MEETING  
ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_  
CHIEF EXECUTIVE OFFICER \_\_\_\_\_

**ALL AREAS AND  
DIMENSIONS  
SUBJECT TO SURVEY**

## REPORT ITEM PD095 REFERS

### ADOPTION

Adopted by resolution of the Council of the City of Albany at the Meeting of the Council held on the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

\_\_\_\_\_  
**Mayor**

\_\_\_\_\_  
**Chief Executive Officer**

### FINAL APPROVAL

Adopted for final approval by resolution of the City of Albany at the Meeting of the Council held on the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_ and the Common Seal of the City of Albany was hereunto affixed by the authority of a resolution of the Council in the presence of:

\_\_\_\_\_  
**Mayor**

\_\_\_\_\_  
**Chief Executive Officer**

Recommended/Submitted for Final Approval

\_\_\_\_\_  
**Delegated Under S.16  
of the PD Act 2005**

\_\_\_\_\_  
**Date**

Final Approval Granted

\_\_\_\_\_  
**Minister for Planning**

\_\_\_\_\_  
**Date**





This map has been produced by the City of Albany using data from a range of agencies. The City bears no responsibility for the accuracy of this information and accepts no liability for its use by other parties. Reproduced by permission of Western Australian Land Information Authority, Copyright Licence SLIP 436-2014-1. [www.landgate.wa.gov.au](http://www.landgate.wa.gov.au)

Thursday, 20 August 2015

1:4000



## CITY OF ALBANY LOCAL PLANNING SCHEME No. 1

## AMENDMENT No. 10

## SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
1	Environmental Protection Authority Locked Bag 33 Cloisters Square PERTH WA 6850	The Environmental Protection Authority (EPA) considers that the proposed scheme amendment should not be assessed under Part IV Division 3 of the <i>Environmental Protection Act 1986</i> (EP Act) and that it is not necessary to provide any advice or recommendations.	Nil.	The submission is noted.
2	ATCO Gas 81 Prinsep Road JANDAKOT WA 6164	ATCO Gas Australia has no comments to make in regard to the proposal.	Nil.	The submission is noted.
3	Water Corporation PO Box 100 LEEDERVILLE WA 6902	The Corporation has no objection to the amendment.  An existing 150mm water supply main located in Nanarup Road feeds the area. The lots can be served via extension from Nanarup Road.	Nil.	The submission is noted.
4	Western Power Locked Bag 2520 PERTH WA 6001	No objection to the proposal.	Nil.	The submission is noted.
5	Department of Health PO Box 8172 PERTH BC WA 6849	The DOH provides the following comment:  <b>Wastewater Disposal</b> While DOH has no objection to the rezoning proposal, the creation of proposed Lot F is not supported as the water table at the lot is reported to be at 0.45m below natural ground surface and does not comply with	The Department of Health's concerns are noted. However, the lot can be filled as part of the subdivisional works to ensure that adequate vertical separation can be achieved between the water table and any future on-site effluent disposal systems.	The submission is noted.

**CITY OF ALBANY LOCAL PLANNING SCHEME No. 1** REPORT ITEM PD096 REFERS  
**AMENDMENT No. 10**  
**SCHEDULE OF SUBMISSIONS AND MODIFICATIONS**

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>the minimum site requirements of the draft <i>Country Sewerage Policy</i>.</p> <p>Also, based on the permeability of the soils as reported, wastewater disposal areas must be designed using infiltration rates given for Soil Category 4 – Clay Loams under Table L1 for Trenches and Beds or Table M1 for irrigation systems under AS/NZ 1547.2012.</p>		
6	Department of Water South Coast Region PO Box 525 ALBANY WA 6331	The Department of Water advises that as the site capability report has determined that on-site disposal of wastewater can be safely managed, it has no objections to the proposal and has no further comments to make.	Nil.	The submission is noted.
7	Department of Lands Level 2, 140 William Street PERTH WA 6000	The Department of Lands has no comments or objections.	Nil.	The submission is noted.
8		<p>As the owners of 3 Kalgonak Lane, we have no objection in principle to the amended zoning.</p> <p>We do, however, wish to advise our objection to the proposed access to the subdivision that utilises Kalgonak Lane as the entry point. This entrance to the subdivision has, in our opinion, no merit. We can only surmise that the proposal to utilise Kalgonak Lane as the subdivision</p>	The City's Manager of Building and Engineering has assessed the proposal and determined that the existing crossover near the centre of the lot frontage would be the most suitable location to take road access from. It is therefore recommended that the proposed subdivision guide plan be modified to reflect this.	<p>The submission is upheld.</p> <p><b><u>Modifications required:</u></b></p> <p>The Subdivision Concept Plan shall be modified to indicate a vehicle access point from Nanarup Road at the location of the existing crossover near the centre of the lot frontage.</p>

**CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD096 REFERS**

**AMENDMENT No. 10**

**SCHEDULE OF SUBMISSIONS AND MODIFICATIONS**

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p>entrance is a marketing strategy to imply that the subdivision is closer to the Kalgan River.</p> <p>The lot already has two existing entrances off Nanarup Road and there seems to be no impediment to these remaining as the entrance(s) to the subdivision. To utilise Kalgonak Lane will increase traffic on and off Nanarup Road near the Kalgan River bridge, creating unnecessary traffic complications and risk at the Kalgonak Lane entry, to the detriment of Kalgonak Lane residents and passing traffic. On this basis, we request that the proposed access to the subdivision be rejected by the City of Albany.</p>		
9		<p>We would like to raise our concerns regarding the proposed rezoning of Lot 11 Nanarup Road, Kalgan from 'Residential' R1 to 'Residential' R5.</p> <p>The site identified for the proposed changes is in close proximity to the School's residential accommodation area and the proposed density change together with the small distance between the existing Boarding Houses will, we believe, disadvantage the School and boarding students. The Boarding House buildings house over 160 students from Year 7 to Year 12 and the School has a high duty of care in relation to the students that will likely</p>	<p>The Great Southern Grammar's concerns are noted; however, the submission does not explain how the proposal is perceived to 'disadvantage'.</p> <p>Staff communicated with the school Principal in an effort to clarify the school's concerns. The Principal advised that the concerns relate primarily to the influence that additional residents adjacent to the school may have on their day-to-day operation and future expansion plans. He expressed concern that these new residents may complain about noise</p>	<p>The submission is upheld.</p> <p>Modifications required:</p> <p>A notation shall be added to the Subdivision Concept Plan as follows:</p> <p>'The City of Albany may request the Western Australian Planning Commission to impose a condition at the time of subdivision requiring a notification to be placed on the certificates of title of the proposed lots. The notification shall advise that the lots may be affected by the</p>



## CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD096 REFERS

## AMENDMENT No. 10

## SCHEDULE OF SUBMISSIONS AND MODIFICATIONS

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		be impacted by this proposed development.	<p>and disturbance caused by outdoor activities and sports and that they may object to the future expansion of the school, in accordance with the school's master plan.</p> <p>In order to allay these concerns, a notation can be added to the Subdivision Concept Plan to require a condition to be placed on any future subdivision that notifications are placed on the titles of new lots, advising of the ongoing operation and possible future expansion of the school on the adjoining lot.</p>	ongoing operation and possible future expansion of the Great Southern Grammar.'
10		<p><b>Observation:</b> This development is located on a portion of the Lower King – Nanarup Road that lies between the Lower Kalgan bridge and the Great Southern Grammar school. This section of road is notoriously dangerous and not a meeting of the Lower Kalgan Progress Association passes without association members expressing their ongoing and pressing concern about this section of the road. Time and again it is said that someone will be killed either accessing or crossing the road, whether it be by vehicle or on foot. These concerns were most recently expressed to Council staff attending the quarterly meeting of the Lower Kalgan Progress Association.</p>	<p>The Lower Kalgan Progress Association's point of view is acknowledged. However, the recommended modification to the proposed subdivision guide plan, outlined in response to submission 8 (see above) results in the best possible lines of sight along Nanarup Road in both directions, from the proposed subdivisional road.</p> <p>The Western Australian Planning Commission's <i>Development Control Policy 2.3 – Public Open Space in Residential Areas</i> does not require contributions to be made to public open space at the time of subdivision</p>	The submission is dismissed.

**CITY OF ALBANY LOCAL PLANNING SCHEME No. 1 REPORT ITEM PD096 REFERS**

**AMENDMENT No. 10**

**SCHEDULE OF SUBMISSIONS AND MODIFICATIONS**

No.	Name/Address of Submitter	Summary of Submission	Officer Comment	Staff Recommendation
		<p><b>Comment/Request:</b> Access/egress for the proposed development onto Nanarup Road must be relocated to the extreme north-west corner of the development site. This point of view is provided to Council after both i) our discussions with Council Planning Staff regarding this issue on Wednesday, 27 May, and ii) a visit to the site by Lower Kalgan Progress Association members following Staff suggestion that an access point midway along the length of the Nanarup Road lot boundary would meet legal requirements.</p> <p>A standard requirement of all developments should be a proportional contribution to Public Open Space.</p>	<p>of 'Special Residential' zoned lots. Due to the large lot sizes in these areas and the lower population densities, the provision of public open space, other than that placed over foreshores, is not desirable, as it tends to be underutilised and creates a maintenance burden for the City.</p>	



# Harley Dykstra

PLANNING & SURVEY SOLUTIONS

## Amendment No.10

Lot 11 (No.264) Nanarup Road, Kalgan

City of Albany Local Planning Scheme No.1

Prepared by Harley Dykstra Pty Ltd for R and JL Buegge

### ALBANY

116 Serpentine Road, Albany WA 6332  
PO Box 5207, Albany WA 6332

T: 08 9841 7333  
F: 08 9841 3643

E: [albany@harleydykstra.com.au](mailto:albany@harleydykstra.com.au)  
[www.harleydykstra.com.au](http://www.harleydykstra.com.au)

Albany Bunbury Busselton Kelmscott Perth

323

MEN 009 101 786 ABN 77 503 764 248



FS 536019

PLANNING AND DEVELOPMENT ACT 2005

RESOLUTION DECIDING TO AMEND A LOCAL PLANNING SCHEME

CITY OF ALBANY

LOCAL PLANNING SCHEME NO.1

AMENDMENT NO.10

RESOLVED that the Council, in pursuance of Section 75 of the Planning and Development Act 2005, amend the above local planning scheme by:

1. Rezoning Lot 11 (No.264) Nanarup Road, Kalgan from 'Residential R1' to 'Residential R5', and amending the Scheme Maps accordingly;

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_ .

---

**CHIEF EXECUTIVE OFFICER**



## DOCUMENT CONTROL

Control Version	DATE	Status	Distribution	Comment
A	13.10.14	Draft	Client	Draft for Comment and Approval
B	10.11.14	Final	City of Albany	Final Document for Lodgement with the City of Albany
C				
D				
E				

Prepared for: Mr Robert Buegge

Prepared by: SDP

Reviewed by: LB and SD

Date: 10.11.14

Job No & Name: 13688 Buegge

Version: B

## DISCLAIMER

This document has been prepared by HARLEY DYKSTRA PTY LTD (the Consultant) on behalf of R and JL Buegge (the Client). All contents of the document remain the property of the Consultant and the Client except where otherwise noted and is subject to Copyright. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.

This document has been exclusively drafted. No express or implied warranties are made by the Consultant regarding the research findings and data contained in this report. All of the information details included in this report are based upon the existent land area conditions and research provided and obtained at the time the Consultant conducted its analysis.

Please note that the information in this report may not be directly applicable towards another client. The Consultant warns against adapting this report's strategies/contents to another land area which has not been researched and analysed by the Consultant. Otherwise, the Consultant accepts no liability whatsoever for a third party's use of, or reliance upon, this specific document.

## CONTENTS

DOCUMENT CONTROL.....	i
DISCLAIMER.....	i
CONTENTS .....	ii
1 INTRODUCTION & PROPOSAL .....	1
1.1 Objectives of Amendment .....	2
1.2 Project History .....	2
1.2.1 Submission on draft LPS 1.....	2
1.2.2 Strategic Consideration .....	3
2 CONTEXT ANALYSIS .....	4
2.1 Site Description .....	4
2.1.1 Location and Description .....	4
2.1.2 Land Ownership .....	4
2.2 Land Use .....	5
2.2.1 Existing Land Use .....	5
2.2.2 Surrounding Land Use and Zonings .....	5
2.3 Community Consultation .....	6
2.4 Environmental.....	6
2.4.1 Topography.....	6
2.4.2 Land Capability.....	6
2.4.3 Remnant Vegetation .....	6
2.5 Bush Fire Hazard Management .....	6
2.6 Setback to Nanarup Road .....	7
2.7 Infrastructure.....	7
2.7.1 Access.....	7
2.7.2 Services .....	7
3 PLANNING CONTEXT .....	9
3.1 State and Regional Planning .....	9
3.1.1 State Planning Policy No.1 – State Planning Framework Policy .....	9
3.1.2 State Planning Policy No.3 – Urban Growth and Settlement.....	9
3.1.3 State Planning Policy No.3.1 – Residential Design Codes (R-Codes).....	10
3.1.4 Development Control Policy No.2.3 Public Open Space in Residential Areas .....	11
3.1.5 Development Control Policy No.2.5 Special Residential Zones.....	11
3.1.6 Draft Country Sewerage Policy .....	12
3.2 Local Planning.....	13
3.2.1 City of Albany Local Planning Scheme No.1.....	13
4 SUBDIVISION CONCEPT PLAN .....	15

4.1	Introduction .....	15
4.2	Design Philosophy .....	15
4.3	Constraints to Development .....	15
4.4	Outcomes of Design Exercise .....	15
5	JUSTIFICATION AND CONCLUSION .....	16
	APPENDIX A – CERTIFICATES OF TITLE .....	
	APPENDIX B – SITE CAPABILITY ASSESSMENT – GREAT SOUTHERN BIO LOGIC .....	
	APPENDIX C – SUBDIVISION CONCEPT PLAN .....	

## MINISTER FOR PLANNING

## PROPOSAL TO AMEND A LOCAL PLANNING SCHEME

LOCAL AUTHORITY:	CITY OF ALBANY
DESCRIPTION OF TOWN	
PLANNING SCHEME:	LOCAL PLANNING SCHEME NO.1
TYPE OF SCHEME:	DISTRICT PLANNING SCHEME
NO. OF AMENDMENT:	AMENDMENT NO.10
REZONING LOT 11 (NO.264) NANARUP ROAD, KALGAN FROM 'RESIDENTIAL R1' TO 'RESIDENTIAL R5' AND AMENDING THE SCHEME MAPS ACCORDINGLY.	

## 1 INTRODUCTION & PROPOSAL

The purpose of this Amendment to the City of Albany Local Planning Scheme No.1 (LPS 1) is to rezone Lot 11 (No.264) Nanarup Road, Kalgan (herein referred to as the subject site) from *Residential R1* to *Residential R5*.

This proposal has sound planning grounds, as justified by the following:

- The subject site is located directly adjoining the Great Southern Grammar School;
- The subject site is directly adjoined by lots of a minimum size of 2599m<sup>2</sup>, which is more reflective of the R5 density coding of the Residential Design Codes (R-Codes);
- The land has been demonstrated to be capable of supporting additional density of residential development, as indicated in the attached Site Capability Assessment (**Appendix B**); and
- The rezoning of the subject site to a higher density would be reflective of the development pattern in the immediate vicinity and would finalise the enclave of residential development in this locality.

As was evidenced in the previous submission on the draft LPS 1, the proposal to increase the residential density on the subject site is strategically sound. Subsequently, following officer comments being prepared on the submission and adoption of that recommendation by the Council of the City of Albany, the landowner has sought the preparation of a Site Capability Assessment to demonstrate that the subject site is capable of the higher density of residential development, particularly relating to on-site effluent disposal.

It is respectfully requested that the City of Albany initiate the proposal to rezone the subject site to 'Residential R5' in LPS 1.



## 1.1 Objectives of Amendment

The following key objectives are applicable to the Amendment:

- Providing for the finalisation of the development pattern in this locality;
- Providing appropriately located and serviced lots adjacent to a highly popular private school;
- Respecting the landform and providing future subdivision and development opportunities that consider the site's opportunities and constraints.

## 1.2 Project History

### 1.2.1 Submission on draft LPS 1

During the public advertising period of the draft LPS 1, a submission was made by Harley Global Pty Ltd (now Harley Dykstra Pty Ltd) on behalf of the landowners of the subject site. In summary, the submission requested that the subject site be zoned *Residential R5* through the gazettal of LPS 1, as justified by the following:

- The 'R5' density would be more consistent with the existing development in the immediate vicinity, with lot sizes smaller than that which would normally occur within a R1 density area;
- The higher density of development would be more consistent with the City's objectives for residential development, given it enables a better utilization of land where that land has been proven to be capable of supporting such a use;
- Make efficient use of the subject site, which has connections to reticulated water, power and telecommunications.

Due to the timing of the submission period, a Land Capability Assessment was not able to be provided supporting the further subdivision of the subject site, as submissions closed in July and late winter testing is more appropriately carried out in late August/early September. The submission also included a draft Subdivision Guide Plan to show the proposed subdivision and development of the subject site. This has also been included within this Amendment, identified as a Subdivision Concept Plan (attached in **Appendix C**).

In responding to the submission, the City's Planning Department comment, which was adopted by the Council of the City of Albany, was:

*"The ALPS includes the subject area in the Rural Residential designation surrounding by the Major Public Purpose Use for the grammar school (Strategic Map: Urban Map 9B).*

*5a/f*

*Comments noted. The lot is zoned Rural under existing TPS3 whilst the adjoining lots to the east are zoned Residential. Irrespective of ALPS, this lot has been zoned Residential under draft LPS 1 which is supported by the submission.*

*This lot and the 3 lots to the east have been included within the Residential Zone in draft LPS 1 presumably to reflect their size and general use for residential purposes rather than rural or rural residential. All of the lots are included within the R1 density code.*

*Whilst the landowners intentions are clear from the submission and the land may have more potential than reflected in the R1 density coding, any change to increase the amount of lots on Lot 11 or the other lots should be supported by an appropriate land capability assessment for consideration and approval by the City to determine the maximum potential for the land. Until this is completed, no change to the density is supported.*

#### *Conclusion*

*There are no modifications required to the draft LPS1."*

As is evidenced in the above, whilst the City of Albany did not adopt the recommendations of the submission to rezone the land to *Residential R5*, the reasoning for not adopting the submission was not on a strategic basis, but rather the demonstration of land capability for proposed development. It is intended for this document to provide the additional information needed to demonstrate to the City of Albany that the subject site is capable of *Residential R5* development.

## 1.2.2 Strategic Consideration

### *Albany Local Planning Strategy (ALPS)*

As was previously outlined in the officer's comments responding to a submission on the draft LPS 1, the subject site is identified as 'Rural Residential' by the ALPS. However, this classification of the subject site was not deemed consistent with the prevailing land use, being low density residential in a small enclave between the Great Southern Grammar School and Kalgan River/Oyster Harbour. This resulted in the subject site being rezoned to 'Residential R1' by the gazettal of LPS1.

As commented by the officer, any further increase in the density of land use on the subject site would need to be accompanied by a Land Capability Assessment, demonstrating the ability of the land to support a higher density of residential development without connection to reticulated sewer, which is not envisioned to be available in the locality for the long term.

Accordingly, when considering the proposal to rezone the subject site to *Residential R5*, it is not believed that the strategic identification of the subject site for 'Rural Residential' within ALPS should be considered with any weight, as this was clearly dismissed by Council and the City's Planning Officers when considering the zoning of the land in LPS 1.

## 2 CONTEXT ANALYSIS

### 2.1 Site Description

#### 2.1.1 Location and Description

The subject site is comprised of Lot 11 (No.264) Nanarup Road, Kalgan. The subject site has a total area of 1.45ha. The subject site is 15km from the Albany CBD via Nanarup, Lower King and Ulster Roads and Lockyer Avenue.

For a location plan, refer to **Figure 1**.

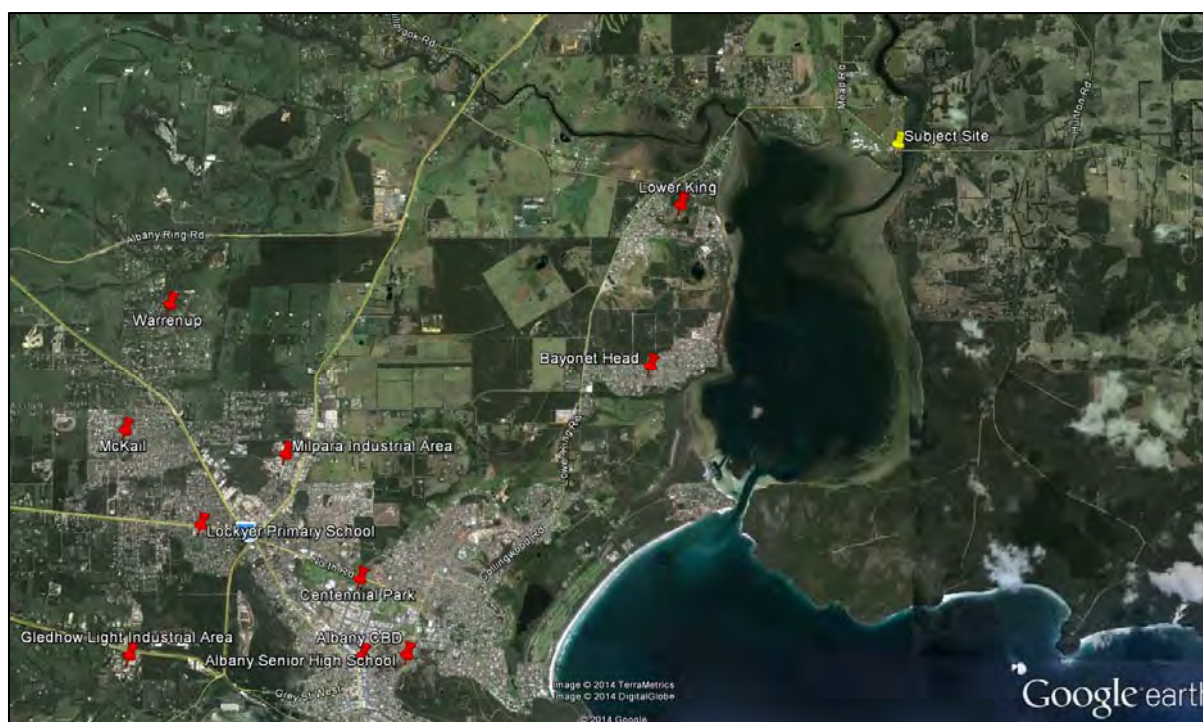


Figure 1: Location Plan

[Source: Google Earth]

#### 2.1.2 Land Ownership

The registered proprietors of the subject site are Robert Christian Buegge and Jaime Lea Buegge. The legal description of the subject site is detailed in **Table 1. Appendix A** provides the Certificate of Title applicable to the Amendment.

Lot Description	Lot Area	Certificate of Title	Landowner Details
Lot 11 on Diagram 42859	1.45ha	Volume: 1352 Folio: 621	Robert Christian Buegge & Jaime Lea Buegge

Table 1: Land ownership details.

## 2.2 Land Use

### 2.2.1 Existing Land Use

The subject site is currently majority cleared and used as residential property mixed with lifestyle uses.

### 2.2.2 Surrounding Land Use and Zonings

The subject site is surrounded by a variety of zones and reserves (refer to **Figure 2** below).

Adjoining the subject site to the east and accessed via Kalgonak Lane is land zoned *Residential R1*. This land contains three (3) lots which are between 2599m<sup>2</sup> - 5980m<sup>2</sup> in area. These lots are used for low density residential uses. Interestingly, the lot sizes of the existing lots do not comply with the density allocated to them (*R1*), which has a minimum lot size of 8500m<sup>2</sup>, as outlined by Clause 5.6.2 (a) of LPS 1. The intent of the proposed rezoning is to increase the density of development on the subject site to mirror existing neighbouring residential development. At this time, the Amendment does not include the neighbouring lots to be rezoned to *Residential R5*, as this would likely give subdivision potential to Lot 10, over which a land capability assessment has not been undertaken. Furthermore, the City of Albany did not include these at this density in LPS 1.

To the west and south of the subject site is land reserved for *Public Use (School)* by LPS 1, being the Great Southern Grammar School. Adjacent to the subject site on Nanarup Road (north) is land zoned *Caravan and Camping* by LPS 1, which is used for the Kalgan River Chalets and Caravan Park. Also adjacent to the north is land reserved for *Parks and Recreation Reserve*, which contains the Albany Rowing Club and access to the Kalgan River.

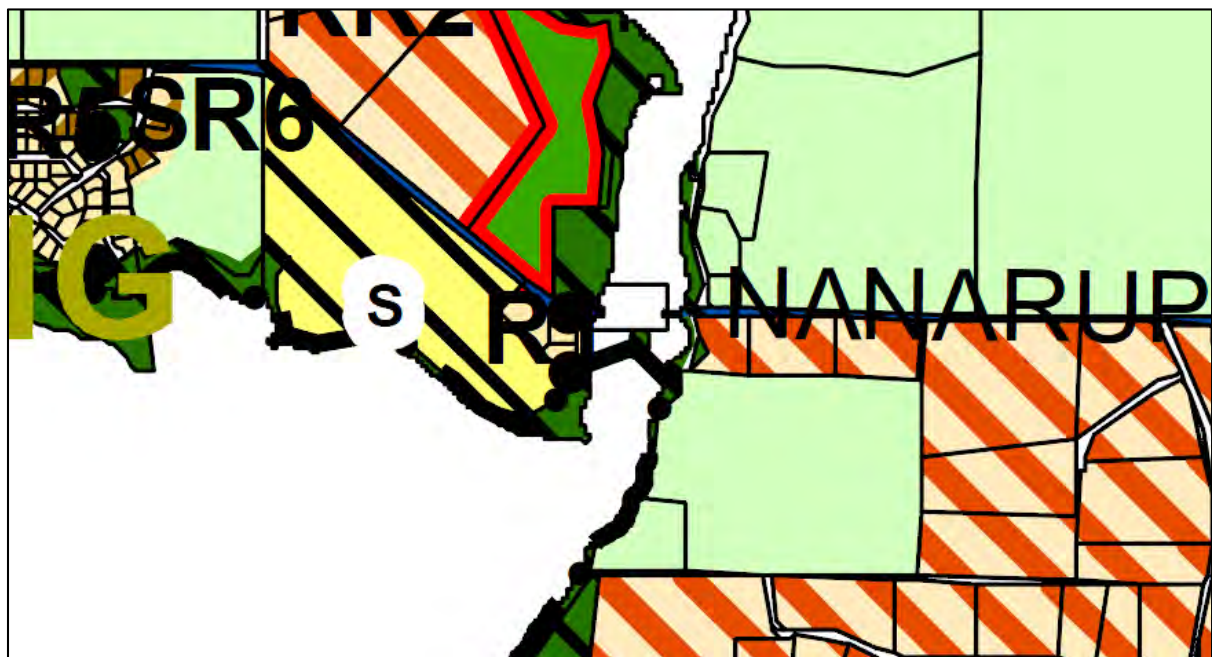


Figure 2: Land Zoning

[Source: City of Albany]



## 2.3 Community Consultation

In accordance with the requirements of the *Planning and Development Act 2005*, the Amendment is required to be advertised for 42 days for public submissions. These submissions are then presented to Council at its final consideration of the Amendment.

## 2.4 Environmental

### 2.4.1 Topography

The subject site is flat, with an elevation less than 5m AHD.

### 2.4.2 Land Capability

Following the lodgment of the submission on LPS 1 with the City of Albany, the landowner commissioned the preparation of a Site Capability Assessment by Great Southern Bio Logic, which is included in **Appendix B**. A summary of the results is outlined below:

- The site is suitable for the receipt of on-site effluent disposal;
- Test Pit F was the only test pit with less than 500mm clearance to groundwater. In all other test pits clearance to groundwater was in excess of 900mm;
- The soils of the site have medium permeability;
- The Phosphorous Retention Index (PRI) results were generally good across the site, with all test pits having soils with a high PRI within their profile;
- The site is likely to be compliant with the requirements of the *Draft Country Sewerage Policy* should it be subdivided.

As evidenced in the Site Capability Assessment prepared by Great Southern Bio Logic, the site is capable of receiving on-site effluent disposal in accordance with the requirements of the *Draft Country Sewerage Policy* and the City of Albany/Health Department of Western Australia.

### 2.4.3 Remnant Vegetation

The subject site has been cleared of remnant vegetation, with a small number of remnant trees and fence-line trees scattered throughout. A number of remnant trees are located on the boundary of the subject site, forming a visual distinction between it and land owned and managed by Great Southern Grammar School.

## 2.5 Bush Fire Hazard Management

A Fire Management Plan has not been prepared as part of the Amendment documentation. The subject site would not be considered to have any moderate to extreme fire hazard features. Furthermore, the land surrounding the subject site is either fully cleared or parkland cleared, with fuel levels maintained. As such, it is believed that fire would not pose a risk to any development proposed for the subject site.

## 2.6 Setback to Nanarup Road

As is shown on the Subdivision Concept Plan, it is proposed to implement screening vegetation along the boundary of Nanarup Road, primarily as a means of screening development from the road and maintaining the rural nature of the area. The width and type of screening will be discussed with the City of Albany at the time of subdivision, however, it is envisaged that it will be similar to that employed by the Kalgan Heights Estate fronting Nanarup Road.

## 2.7 Infrastructure

### 2.7.1 Access

Access to the subject site is via two crossovers onto Nanarup Road. As depicted on the Subdivision Concept Plan (**Appendix C**), it is intended for primary access to the subject site to be from a road connecting to the existing access to Kalgonak Lane, which will connect with a small internal road reserve to service the proposed lots. Please be advised that this method of access would be subject to approval at the time of subdivision.

Should the attached Subdivision Concept achieve approval, it is envisaged that the existing crossovers to Nanarup Road will be removed.

### 2.7.2 Services

#### *Water*

A reticulated water service is currently available from Nanarup Road and is connected to the subject site. It is envisaged that this service would be of sufficient capacity to service the relatively small subdivision and development proposed for the subject site.

#### *Power*

The subject site is currently serviced by an overhead low voltage power supply. New transformers and switch gear will be required throughout to service future subdivision and development.

#### *On-site Effluent Disposal*

The size of the proposed lots and distance from the Water Corporations Albany Sewerage Scheme requires that future development is serviced by on-site effluent disposal. As is demonstrated in the Site Capability Assessment prepared by Great Southern Bio Logic, the subject site is capable of supporting on-site effluent disposal through the use of alternative treatment units (ATUs).

When considering the ability of enforcing the use of ATUs on the subject site for future residential development, attention is drawn to Clause 5.8.2.2 of LPS 1, which states:

*"The Local Government shall require the use of alternative treatment effluent disposal systems, in the following situations:*

- (a) *Where the setback requirements of clause 5.3.6 cannot be achieved;*
- (b) *Where soil conditions are not conducive to the retention of nutrients on-site;*
- (c) *In low-lying areas; and*
- (d) *In areas where there is a perched winter water table.”*

As such, it is believed that the Amendment demonstrates through the Land Capability Assessment that the land is capable of supporting on-site effluent disposal and through LPS 1 demonstrates that the City will be able to impose appropriate controls on on-site effluent disposal.

### *Telecommunications*

The subject site is currently connected to telecommunications and will retain this connection as a result of future subdivision and development.

### 3 PLANNING CONTEXT

#### 3.1 State and Regional Planning

Applicable State Planning Policies are SPP1 – “State Planning Framework Policy (variation No.2)”, SPP3 “Urban Growth and Settlement” and SPP3.1 – “Residential Design Codes” (R-Codes). There are a number of applicable Development Control Policies (DCP), with those summarized below including DCP2.3 “Public Open Space in Residential Areas” and DCP2.5 “Special Residential Zones”

##### 3.1.1 State Planning Policy No.1 – State Planning Framework Policy

The purpose of SPP1 is to bring together the State and regional policies that apply to land use and development in Western Australia and to establish the general principles for land use planning and development in WA. SPP1 states “*the primary aim of planning is to provide for the sustainable use and development of land*”. It goes on to quantify this through identifying and expanding upon the five key principles that further define this statement, environment, community, economy, infrastructure and regional development.

The Amendment meets the objectives of SPP1, as evidenced by the following:

- The Amendment is not consistent with ALPS, however, the use of the land for residential purposes was also recognized in the zoning of the land by LPS 1, the more up-to-date document;
- The Amendment has demonstrated that the land is capable and the proposal is environmentally sound;
- It will provide an alternative source of land for settlement in the Albany hinterland, compliant with adjoining development and complimentary to the neighbouring Great Southern Grammar School;
- It will support the local economy by allowing the growth of Albany and providing an additional housing/lifestyle choice;
- The proposal will have minimal ability to generate land use conflicts; and
- It will utilise existing infrastructure for servicing.

The proposed Amendment is consistent with the objectives of SPP1.

##### 3.1.2 State Planning Policy No.3 – Urban Growth and Settlement

The purpose of SPP3 is to promote a sustainable settlement pattern across Western Australia. The objectives of the policy are:

*It specifically mentions rural residential development in Section 5.6 “Managing rural-residential growth”. When planning for rural-residential development, it states that development should-*



- *“To promote a sustainable and well planned pattern of settlement across the State, with sufficient and suitable land to provide for a wide variety of housing, employments, recreation facilities and open space.*
- *To build on existing communities with established local and regional economies, concentrate investment in the improvement of services and infrastructure and enhance the quality of life in those communities.*
- *To manage the growth and development of urban areas in response to the social and economic needs of the community and in recognition of relevant climatic, environmental, heritage and community values and constraints.*
- *To promote the development of a sustainable and liveable neighbourhood form which reduces energy, water and travel demand whilst ensuring safe and convenient access to employment and services by all modes, provides choice and affordability of housing and creates an identifiable sense of place for each community.*
- *To coordinate new development with the efficient, economic and timely provision of infrastructure and services.”*

With regards to creating sustainable communities, SPP3 also outlines that:

- *“making the most efficient use of land in existing urban areas through the use of vacant and under-utilised land and buildings, and higher densities where these can be achieved without detriment to neighbourhood character and heritage values; the cost effective use of urban land and buildings, schools and community services, infrastructure systems and established neighbourhoods; and promoting and encouraging urban development that is consistent with the efficient use of energy.*

The Amendment complies with the requirements of SPP3, as evidenced by the following points:

- As evidenced in the Land Capability Assessment and recent zoning of the subject site by LPS 1, the land is capable of supporting an increased density of residential development;
- The future subdivision of the land would be consistent with the existing subdivision pattern established by neighbouring development;
- The future subdivision of the land would provide for residences located in close proximity to the Great Southern Grammar School, which although a private school, provides a valuable community service;
- The future subdivision of the land would utilise existing infrastructure; and
- The future subdivision would provide an alternative housing choice to that commonly available in the Albany market.

### 3.1.3 State Planning Policy No.3.1 – Residential Design Codes (R-Codes)

The R-Codes provide a comprehensive basis for the control of residential development throughout Western Australia. The residential density of the land, which is currently R1 and is proposed to R5, corresponds with the density coding listed within Table 1 of the R-Codes, which outlines the requirements for residential development. Table 2 shows the requirements of the R5 density coding proposed by this Amendment.

1 R-Code	2 Dwelling type	3 Minimum site area per dwelling	5 Minimum frontage	6 Open space		7 Minimum setbacks		
				min total (% of site)	min outdoor living (m <sup>2</sup> )	primary street	secondary street	other/rear
R5	Single house or grouped dwelling	Min 2000	30	70	-	20	10	10

Table 2: Extract of R-Codes Table 1 for the R5 density coding.

As shown above, the R5 density coding has a minimum lot area of 2000m<sup>2</sup>. This is reflected on the Subdivision Concept Plan. The Subdivision Concept Plan complies with all other minimum requirements of the R5 density of the R-Codes.

### 3.1.4 Development Control Policy No.2.3 Public Open Space in Residential Areas

The purpose of DCP2.3 is to provide requirement for the contribution to or provision of public open space in residential subdivisions. The requirement is listed in Clause 3.1.1 of DCP2.3, which states that:

*“The Commission's normal requirement in residential areas is that, where practicable, 10 percent of the gross subdivisible area be given up free of cost by the subdivider and vested in the Crown under the provisions of Section 20A of the Town Planning and Development Act, 1928 (as amended) as a Reserve for Recreation. In determining the gross subdivisible area the Commission deducts any land which is surveyed for schools, major regional roads, public utility sites, municipal use sites, or, at its discretion, any other nonresidential use site.”*

Clause 3.1.5 of DCP2.3 is noted in that it is likely that a public open space contribution will be required of the future subdivision of the land, if it proposes more than five (5) lots as is shown on the Subdivision Concept Plan.

As shown on the Subdivision Concept Plan, it is not proposed to make a land contribution to public open space at this time. This is due to the size of the property, which is unlikely to yield public open space that is of a useful size or location for use by the community. As such, it is likely that if the subject site were developed for in excess of five (5) lots that a cash-in-lieu contribution to public open space would be made in accordance with Clause 4.3 of DCP2.3.

### 3.1.5 Development Control Policy No.2.5 Special Residential Zones

The purpose of DCP2.5 is to provide guidance and requirements applicable to special residential development throughout Western Australia. Whilst the proposal is not for a *Special Residential* zone to be applicable to the subject site, the type of development proposed is consistent with a *Special*

*Residential zone*. As such, the requirements of DCP2.5 have been taken into consideration for the Amendment.

Clause 3.2 lists the following design and servicing requirements for Special Residential development:

- Lot sizes of 2000m<sup>2</sup> and greater;
- Connection to a reticulated water supply;
- Road networks should take account of topography and be unobtrusive, with long cul-de-sacs being avoided;
- Lot size and design should achieve the best possible amenity;
- Direct access from major roads should not be permitted;
- Building setbacks should be considered to create a more interesting and spacious environment; and
- Provision of underground power should be required.

The Amendment complies with the requirements of DCP2.5, as evidenced by the following comments:

- Lot sizes and design comply with the requirements of the R5 density of the R-Codes;
- Future subdivision will be connected to reticulated water, underground power and telecommunications;
- The Subdivision Concept Plan has taken consideration of topography and lot constraints, to provide a development that will be screened from Nanarup Road and consistent with surrounding development; and
- No direct access will be provided from Nanarup Road, with access being obtained through Kalgonak Lane.

Clause 4.3 of DCP2.5 also mentions that any *Special Residential* zones should be considered the maximum density considered for the land, given that retrofitting these zones for a higher density of development is extremely difficult. The higher density development of the subject site is highly unlikely, given the likelihood that reticulated sewer would not be connected to the locality.

Although the Amendment is not for a *Special Residential* zone, it has been demonstrated that the proposal complies with DCP2.5 given the Amendment proposes lot sizes consistent with this zone type.

### 3.1.6 Draft Country Sewerage Policy

The Department of Health released a draft policy for wastewater treatment and dispersal in 2003. The draft Country Sewerage Policy sets minimum requirements for on-site wastewater disposal. This includes:

- A minimum lot size of 2000m<sup>2</sup> shall be established in areas proposed to utilise on-site effluent disposal techniques;

- The use of Aerobic Treatment Units (ATU's) where a clearance of 500mm from surface to groundwater can be achieved;
- The use of septic systems where a clearance of 2000mm from surface to groundwater can be achieved and suitable soil types are found; and
- A 30 metre setback to a dam, stream or private water supply.

As is outlined in the Site Capability Assessment, late winter testing of the Amendment Site was undertaken. It identified that the Amendment Site does meet the requirements of the draft Country Sewerage Policy.

## 3.2 Local Planning

### 3.2.1 City of Albany Local Planning Scheme No.1

Under the City of Albany Local Planning Scheme No. 1 (LPS 1), the subject site is zoned *Residential R1*. The purpose of the Amendment to LPS 1 is to rezone the subject site to *Residential R5*. The objectives of the *Residential* zone is:

- (a) *Maintain the character and amenity of established residential areas and ensure that new development, including alterations and additions, is sympathetic with the character and amenity of those areas;*
- (b) *Promote and safeguard the health, safety and convenience of residential areas and inhabitants by:*
  - (i) *Providing for increased dwelling density and encouraging urban renewal and consolidation in areas where land is sufficiently close to existing or planned facilities and infrastructure available to service the development;*
  - (ii) *Providing a range of lot sizes in appropriate locations to meet the needs of the City and its anticipated growth in population;*
  - (iii) *Providing for adaptable housing in areas where facilities are available to meet the needs of aged and disabled residents within the City;*
  - (iv) *Identifying those areas where a residential land use development requires additional development control standards to safeguard residents against an adjoining non-compatible land use activity or hazard;*
  - (v) *Encourage high standards of innovative housing design, which recognize the need for privacy and energy efficient design, whilst ensuring the building bulk and scale is compatible with adjoining sites; and*
  - (vi) *In low density areas, ensure that development (including dwellings, structures, outbuildings and access) are sited and designed to:*
    - *Minimise the clearing of stands of remnant vegetation and promotes the replanting of endemic vegetation species;*



- *Enhance the visual amenity of the area;*
- *Avoid areas affected by natural hazards or other impacts (including bushfire risk and/or floodplains, heavy haulage routes and the like) to reduce the potential for harm to buildings and their occupants.*

The Amendment is consistent with the objectives of the *Residential* zone, as evidenced by the following justification:

- (a) The purpose of the Amendment is to increase the density of residential development permitted on the subject site, and mirrors residential development which has already occurred to the east;
- (b) The proposal allows for the consolidation of land already identified for residential uses;
- (c) The development is appropriately located, being directly adjoining the Great Southern Grammar School and convenient to local goods and services provided in Lower King;
- (d) Suitable development controls are included within LPS 1 and other guiding policy documents of the City of Albany to control the future development of the subject site;
- (e) The proposal is on already cleared land, therefore, no further clearing will be needed to facilitate development. Furthermore, it is likely that some screening vegetation will be included to Nanarup Road as a result of future subdivision;
- (f) Subdivision of the subject site will enhance the visual amenity of the area, by allowing for the upgrading of the Kalgonak Lane entrance to Nanarup Road and implementation of vegetation screening; and
- (g) The subject site is relatively risk free from hazards such as flooding and bush fire, hence making it suitable for further subdivision and development.

It is believed that the Amendment complies with the objectives of the *Residential* zone of the City of Albany Local Planning Scheme No.1, as well as meeting general policies for lot size rationalization and use of existing zoned land for development.

## 4 SUBDIVISION CONCEPT PLAN

### 4.1 Introduction

To demonstrate the likely subdivision of the land, a Subdivision Concept Plan has been included with the proposed Amendment. Although the final subdivision layout will be determined upon lodgment of a future subdivision application, this Subdivision Concept demonstrates the key principles of subdivision that would be applicable.

### 4.2 Design Philosophy

The key influences on the design are as follows:

- Complying with the requirements of the Residential Design Codes relating to the R5 density, such as minimum size of 2000m<sup>2</sup> and minimum frontage of 30m;
- No direct access to Nanarup Road;
- Improvement of Kalgonak Lane intersection with Nanarup Road;
- Ensuring that the proposed subdivision complemented adjoining development; and
- Ensuring that the visual amenity of the area is not compromised by future subdivision.

The proposed subdivision aims to create large lot residential form that is responsive to landform and constraints and formalizes the final extent of residential uses in the locality.

### 4.3 Constraints to Development

As outlined in this report, there are relatively few constraints to the subdivision of the land, other than those listed in policy documents. Constraints for on-site effluent disposal and access have been adequately addressed to ensure that subdivision has relatively little impact.

### 4.4 Outcomes of Design Exercise

The Subdivision Concept Plan achieved the following:

- A lot yield of six (6) lots on the subject site, all with a minimum lot size of 2000m<sup>2</sup> and a minimum lot width of 30m;
- Access to the proposed lots by a 14.2m road reserve with 6m wide road and cul-de-sac, the minimum permitted by the City of Albany and Liveable Neighbourhoods, connecting to the existing Kalgonak Lane gravel access track;
- 10m separation between the proposed access road and Nanarup Road; and
- Implementation of screening vegetation along the northeast and northwest lot boundaries, from which the subject site is viewable from Nanarup Road.

The proposed subdivision design complies with all of the necessary requirements of the City of Albany and State Government and will achieve a long-term, rationalised use of the subject site.

## 5 JUSTIFICATION AND CONCLUSION

Amendment No.10 to the City of Albany Local Planning Scheme No.1 seeks to amend the density of the subject site from *Residential R1* to *Residential R5*.

This Amendment achieves the following objectives:

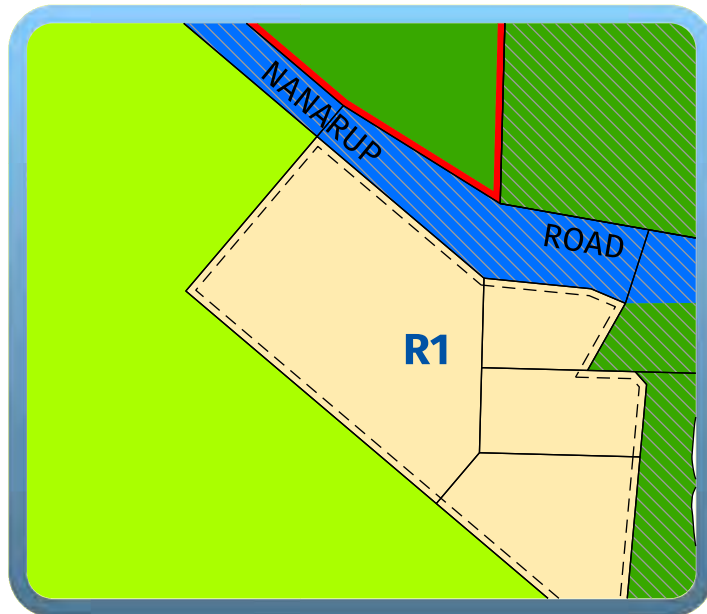
- Rationalising the *Residential* zoned land use of the subject site in accordance with the neighbouring land uses;
- Finalising residential land uses in this locality;
- Ensuring that the subject site can meet relevant requirements, such as site capability for on-site effluent disposal and the like;
- Addressing the key constraints and opportunities of the Amendment Site in a sensitive manner that will permit development;
- Providing for suitable land uses which complement their surrounding context.

The purpose of this Amendment is to increase the density of permitted residential development on the subject site, by demonstrating the site is capable and the land use can complement those surrounding. Endorsement of the Amendment is therefore respectfully requested.

# CITY OF ALBANY

## Local Planning Scheme No. 1

### Amendment No. 10



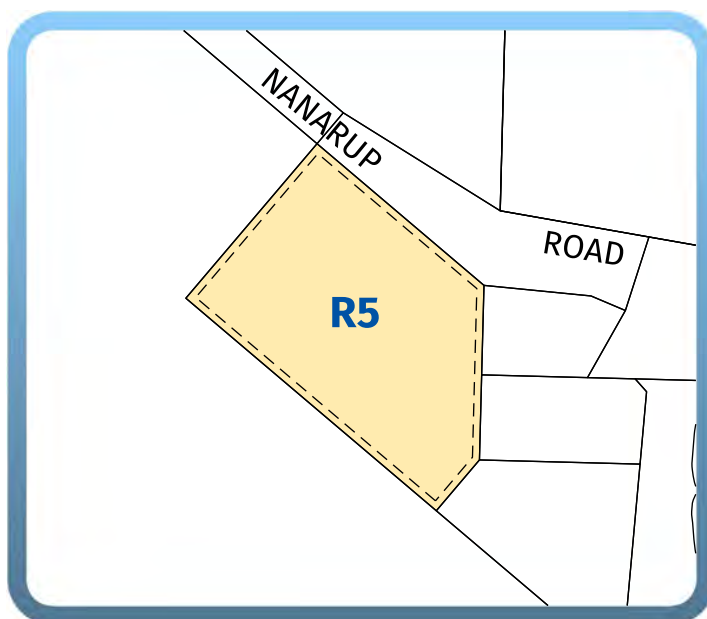
Existing Zoning

## LOCAL SCHEME RESERVES

	Local Roads
	Priority Road
	Parks and Recreation

## ZONES

	Residential
	Caravan & Camping
	Clubs & Institutions



Proposed Zoning





## PLANNING AND DEVELOPMENT ACT 2005

### CITY OF ALBANY

#### LOCAL PLANNING SCHEME NO.1

#### AMENDMENT No.2

The City of Albany under and by virtue of the powers conferred upon it in that behalf by the Planning and Development Act 2005 hereby amends the above local planning scheme by:

1. Rezoning Lot 11 (No.264) Nanarup Road, Kalgan from 'Residential R1' to 'Residential R5', and amending the Scheme Maps accordingly

PLANNING AND DEVELOPMENT ACT 2005

CITY OF ALBANY

LOCAL PLANNING SCHEME NO.1

AMENDMENT No.10

**ADOPTION:**

Adopted by resolution of the Council of the City of Albany at the meeting of the Council held on the \_\_\_\_\_ day of \_\_\_\_\_ 201\_\_:

---

**Mayor**

---

**Chief Executive Officer**

**FINAL APPROVAL:**

Adopted for final approval by resolution of the City of Albany at the meeting of the Council held on the \_\_\_\_\_ day of \_\_\_\_\_ 201\_\_ and the Common Seal of the municipality was pursuant to that resolution hereunto affixed in the presence of:

---

**Mayor**

---

**Chief Executive Officer**

**RECOMMENDED / SUBMITTED FOR FINAL APPROVAL:**

---

**Delegated under s.16 of the PD Act 2005**

**Date**

**FINAL APPROVAL GRANTED:**

---

**Minister for Planning**

**Date**

---

## APPENDIX A – CERTIFICATE OF TITLE

WESTERN



AUSTRALIA

REGISTER NUMBER <b>11/D42859</b>	
DUPLICATE EDITION <b>2</b>	DATE DUPLICATE ISSUED <b>18/5/2005</b>

# **RECORD OF CERTIFICATE OF TITLE** UNDER THE TRANSFER OF LAND ACT 1893

VOLUME  
**1352**FOLIO  
**621**

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES



## **LAND DESCRIPTION:**

LOT 11 ON DIAGRAM 42859

## **REGISTERED PROPRIETOR:** (FIRST SCHEDULE)

ROBERT CHRISTIAN BUEGGE  
JAIME LEA BUEGGE  
BOTH OF 14 CAMPBELL ROAD, ALBANY  
AS JOINT TENANTS

(T J200109 ) REGISTERED 2 MARCH 2005

## **LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:** (SECOND SCHEDULE)

1. J281725 MORTGAGE TO WESTPAC BANKING CORPORATION REGISTERED 12.5.2005.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
\* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.  
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

## **STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1352-621 (11/D42859).  
PREVIOUS TITLE: 403-82A.  
PROPERTY STREET ADDRESS: 264 NANARUP RD, KALGAN.  
LOCAL GOVERNMENT AREA: CITY OF ALBANY.



---

## APPENDIX B – SITE CAPABILITY ASSESSMENT – GREAT SOUTHERN BIO LOGIC



## **Site Capability Assessment of Lot 11 Nanarup Road - Kalgan**

Prepared for: Robert Buegge  
Lot 11 Nanarup Road  
Kalgan, 6330

Report Date: 22 November 2013  
Project Ref: GSBL126-site capability-Lot 11  
Nanarup Rd-V1

Written and Submitted By

A handwritten signature in blue ink, appearing to read "J. Spencer", is written over a faint, light blue circular stamp.

**Jeremy Spencer**  
Senior Environmental Scientist

**RECORD OF DISTRIBUTION**

<b>No. of copies</b>	<b>Report File Name</b>	<b>Report Status</b>	<b>Date</b>	<b>Prepared for:</b>	<b>Initials</b>
1	GSBL126-site capability- Lot 11 Nanarup Rd-V1	V1	22 November 2013	Robert Buegge	JS
1	GSBL126-site capability- Lot 11 Nanarup Rd-V1	V1	22 November 2013	Great Southern Bio Logic	JS

**CONTENTS**

EXECUTIVE SUMMARY	1
1 INTRODUCTION	2
1.1 Background	2
1.2 Site Characteristics	2
1.3 Objective	2
1.4 Scope of Works	2
2 METHOD	3
3 ASSESSMENT CRITERIA	4
3.1 Draft Country Sewerage Policy	4
3.2 Code of Practice for the Design, Manufacture, Installation and Operation of ATU's Serving Single Dwellings	4
4 RESULTS AND DISCUSSION	6
4.1 Soil Profile	6
4.2 Groundwater	6
4.3 Permeability	6
4.4 Phosphorous Retention Index	7
5 SUITABILITY FOR ONSITE EFFLUENT DISPOSAL	8
5.1 The Draft Country Sewerage Policy	8
5.2 Code of Practice for the Design, Manufacture, Installation and Operation of ATU's Serving Single Dwellings	8
5.3 Summary	8
6 REFERENCES	10
7 LIMITATIONS	11



## LIST OF ATTACHMENTS

### Tables

Table 1: PRI Results from Lot 11 Nanarup Rd

### Figures

Figure 1: Lot 11 Nanarup Rd showing the selected Test Pit Sites

### Appendices

Appendix A: Soil Profile Photographs

Appendix B: Soil Permeability Calculations

Appendix C: PRI Laboratory Analysis Certificates

## EXECUTIVE SUMMARY

Great Southern Bio Logic Pty Ltd were engaged by Robert Buegge of Lot 11 Nanarup Road, Kalgan (the site) to conduct a site capability assessment of the site, located approximately 11km northwest of the Albany Central Business District. The work has been undertaken in support of a proposal to subdivide the existing Lot 11 into multiple lots.

The site is situated on the floodplain of the Kalgan River close to the mouth of the river, where it meets Oyster Harbour. The Kalgan River lies approximately 140 meters to the east of the closest point of the existing lot and Oyster Harbour is approximately 300 meters to the south.

The site is predominantly level and cleared however some trees remain around the boundary and there is a slight elevation in the rear of the block where a localised granite extrusion is located.

The primary guideline document that provides guidance on the criteria required to assess suitability of a site to receive waste water effluent is the *Draft Country Sewerage Policy*. Should a site require ATU's, which it is understood to be the case for Lot 11 Nanarup Road, the *Code of Practice for the Design, Manufacture, Installation and Operation of Alternative Treatment Unit's (ATU's) Serving Single Dwellings* also applies.

Field observations recorded on the day of soil sampling identified a generally consistent soil profile of medium grained sands with high organic matter content over mottled kaolin clays. A layer of gravelly clay, consisting of lateritic gravel within the kaolin, was consistently identified at the top of the clay horizon.

Groundwater was encountered as a thin lens perched above the impeding clay horizon in four of the six Test Pit locations. Gravels in the upper clay horizon assist the permeability of the clay allowing groundwater to infiltrate through. The minimum vertical separation from observed groundwater ranged from 0.45m to 1.5m.

Soil permeability testing was conducted in the in-situ soil at each Test Pit location. All permeability results are consistent with silty sands with medium permeability.

PRI results were generally high to very high across the site, however 3 results are below the required PRI value of 20. These are the upper horizon from TP-A and TP-E, plus the soils from the intersection of the two soil horizons at TP- C. In all of these three Test Pits, soils with high PRI values were identified within the soil profile and would enable adequate retention of phosphorous released in treated effluent.

It is considered that Lot 11 Nanarup Road has sub-surface characteristics suitable for receiving treated wastewater effluent for disposal onsite.

## 1 INTRODUCTION

### 1.1 Background

Great Southern Bio Logic Pty Ltd were engaged by Robert Buegge of Lot 11 Nanarup Road, Kalgan (the site) to conduct a site capability assessment of the site, located approximately 11km northwest of the Albany Central Business District. The work has been undertaken in support of a proposal to subdivide the existing Lot 11 into multiple lots.

Requested works include an assessment of soil profile including the depth to groundwater, soil permeability and determination of the soils phosphorous retention index (PRI). The investigation was conducted using the Draft Subdivision Layout Plan as provided by Robert Buegge which identifies 6 separate lots.

### 1.2 Site Characteristics

The site is situated on the floodplain of the Kalgan River close to the mouth of the river, where it meets Oyster Harbour. The Kalgan River lies approximately 140 meters to the east of the closest point of the existing lot and Oyster Harbour is approximately 300 meters to the south.

The site is predominantly level and cleared however some trees remain around the boundary and there is a slight elevation in the rear of the block where a localised granite extrusion is located.

Observations from the test pit excavations showed a soil profile across the site consisting of sands over clay with each horizon of varied depth. More detail on the soil profile is provided in Section 4.

### 1.3 Objective

The objective of the site capability assessment was to:

- Assess the capacity of the soils to receive and effectively infiltrate local stormwater runoff and waste water effluent onsite in accordance with relevant guidelines.

### 1.4 Scope of Works

In order to meet the above objective the following scope of works was undertaken:

- Excavation of six test pits to log the soil profile and determine the depth of any ground water that may be present;
- Completion of six soil permeability tests using a constant head permeameter;
- Collection of soil samples from between the surface and the base of each test pit for Laboratory analysis of the soils Phosphorous Retention Index (PRI); and
- Reporting of results in a manner suitable for inclusion in the proposed application for subdivision.

Results of the permeability tests will be used to calculate the saturated hydraulic conductivity, or  $K_{sat}$ , of the soil. These values can be used by engineers in determining infiltration capacity and determining the specification of onsite infiltration systems.

Results of the PRI analysis provides an indication of the suitability of soils to receive treated waste water effluent for onsite disposal. The observed separation distance between the water table and the surface also provides information about the suitability of the site for on-site disposal of effluent.

## 2 METHOD

The investigation involved an intrusive site investigation to log the soil profile, collect soil samples, assess soil permeability and investigate the presence of the water table. The site investigation was conducted on Tuesday 29 October 2013 and involved the excavation of six soil test pits to a maximum depth of 2.2m below ground level (BGL), visual assessment of groundwater depth, six permeability tests and collection of samples for laboratory analysis of soil PRI. Excavation of the test pits was performed using a back hoe fitted with an extension boom to allow excavation to the required depths.

Permeability testing was conducted using a CL26100 constant head permeameter as suitable for compliance with Australian Standard 1547 and a hand augured 0.5m test hole. Permeability tests were performed following saturation of the soil which was achieved by filling the hole with water and allowing a minimum period of ten minutes for the water to saturate surrounding soils. The hole was then re-filled and following equilibration of water levels in the permeameter and the hole, the fall of water in the permeameter reservoir was measured at fixed time intervals until a consistent rate of fall within the permeameter had been established. The time taken for a fall of 10cm within the permeameter was determined from the average of two consecutive tests comprising timed readings at each location. The permeability testing and  $K_{sat}$  calculations were conducted with reference to the constant head permeability test methods presented in Standards Australia (2000). Permeability testing was conducted at each of the test pit locations shown in Figure 1.

Depth to ground water was determined by visual assessment after excavation and soil samples were collected from 0.1mBGL and just above the impeding layer at each test pit location. Soil samples were sent via overnight courier to Analytical Reference Laboratory (ARL) for analysis of PRI. The soil sampling locations are shown on Figure 1.

A PRI result provides a measure of the phosphorus-holding capacity of a soil. PRI is important as it provides an indication of whether phosphorus discharged in wastewater effluent will be bound to soils and held in the soil profile or leached directly to receiving environments. High PRI scores indicate a high phosphorus retention capability.





### 3 ASSESSMENT CRITERIA

The primary guideline document that provides guidance on the criteria required to assess suitability of a site to receive waste water effluent is the *Draft Country Sewerage Policy*. Should a site require ATU's, (Alternative Treatment Unit) which it is understood to be the case for Lot 11 Nanarup Road, the *Code of Practice for the Design, Manufacture, Installation and Operation of Alternative Treatment Unit's (ATU's) Serving Single Dwellings* also applies.

#### 3.1 Draft Country Sewerage Policy

The *Draft Country Sewerage Policy* identifies;

Minimum site requirements, irrespective of on-site wastewater disposal system;

- Having at least 0.5 metres separation between the natural ground surface and the highest known groundwater level. Correctly engineered drainage solutions may be used to increase the clearance between the natural surface and the highest known ground water level, subject to such drainage works being environmentally acceptable.
- The site is required to have soil characteristics capable of receiving all wastewater likely to be generated on the site without risk to public health or the environment. Sites that have shallow or no permeable topsoils, underlain by rock or low permeability soils (eg. clays, etc.) are less able to receive wastewater. On such sites, proposals will need to be supported by a wastewater system design based on the site's capability and the proposal's details.
- The natural land slope on which wastewater disposal is to occur shall not exceed a one in five gradient. Proposals for sites with gradients exceeding this may be engineered to allow on-site wastewater disposal.
- Proposals should demonstrate that the intended wastewater disposal design prevents the risk of wastewater run-off.

Additional requirements defined in the *Draft Country Sewerage Policy* include setbacks from Environmentally Sensitive Areas;

- Setbacks from water courses defined as 100m in areas with soils with a PRI of less than 5 and 30m for areas with soils with a PRI greater than 5.

The Department of Health (DoH, 2001) state that soils receiving wastewater effluent require a PRI in excess of 20. Soils with a PRI value below 20 may require amendment via the addition of materials with a high PRI such as gypsum or clays.

#### 3.2 Code of Practice for the Design, Manufacture, Installation and Operation of ATU's Serving Single Dwellings

The code of practice presents specifications for the design and manufacture of ATU's, requirements for the installation and operation of ATU's and defines site criteria required for lots receiving effluent from ATU's including setbacks and irrigation areas.

Minimum site requirements vary with regard to unit design and site characteristics. The full set of criteria for ATU's can be found in the code and should be assessed closely prior to installation. Relevant physical criteria associated with the site include:

- A minimum irrigation area of 150m<sup>2</sup>;
- A minimum of 300mm of permeable soil over impermeable soil horizons for surface irrigation;



- Soil PRI values greater than 20; and
- A minimum vertical separation from the maximum groundwater levels of 0.5m.



## 4 RESULTS AND DISCUSSION

### 4.1 Soil Profile

Field observations recorded on the day of soil sampling identified a generally consistent soil profile of medium grained sands with high organic matter content over mottled kaolin clays. A layer of gravelly clay, consisting of lateritic gravel within the kaolin, was consistently identified at the top of the clay horizon. The sand horizon extended from the surface to varied depths ranging from approximately 0.4mBGL (TP-B) to 0.83mBGL (TP-E). The clay horizon extended from the base of the sand horizon to the base of excavation in each test pit.

The only exception to this was noted in Test Pit C. Test Pit C is located at the rear of the block on a minor localised elevation where fractured granite protrusions were noted (Figure 1). In this location the basic soil profile remains similar to the remainder of the block however granite floaters of varying size were encountered. Test Pit C was excavated to a depth of 2mBGL demonstrating that the granite in this area does not represent an impeding layer. Appendix A shows photos for the soil profile from each test pit.

### 4.2 Groundwater

Groundwater was encountered as a thin lens perched above the impeding clay horizon in five of the six Test Pit locations. As described in Section 4.1, the clay horizon consists of an over-lying layer of permeable gravelly clay over impermeable clay. The gravel assists the permeability of the clay allowing groundwater to permeate through. Groundwater was identified in Test Pits A, C, D, E & F while Test Pit B was dry. The depth of groundwater varied from 0.45mBGL in Test Pit F to 1.5mBGL in Test Pit E. Test Pit F is the only location where groundwater was identified less than the required 0.5mBGL. The next shallowest groundwater was at Test Pit D @ 0.9mBGL. Variation in the depth to groundwater is attributed to variations in surface elevation and variability of the soil profile across the site.

Groundwater levels typically peak following winter as water permeates through soil and levels are maintained while rainfall continues. The monthly rainfall for September 2013 prior to the field assessment was 174.6mm (Ave 102.2mm) while October recorded 54.6mm (Ave 78.7) including 20.8mm which fell on October 20, eleven days prior to assessment (BoM 2013). Based on this information it is considered that the results will suitably reflect typical groundwater conditions for winter.

### 4.3 Permeability

A summary of the field parameters and the equation used to calculate the saturated hydrological conductivity ( $K_{sat}$ ) are included in Appendix B.

Based on the average time for the falling head of water to fall 10cm, the  $K_{sat}$  values for each location are as follows:

- Average time of 62.5 seconds to fall 10cm, the  $K_{sat}$  value for Test Pit A was 1.46m/day
- Average time of 78.3 seconds to fall 10cm, the  $K_{sat}$  value for Test Pit B was 1.16m/day
- Average time of 64.3 seconds to fall 10cm, the  $K_{sat}$  value for Test Pit C was 1.42m/day
- Average time of 60 seconds to fall 10cm, the  $K_{sat}$  value for Test Pit D was 1.52m/day
- Average time of 76.6 seconds to fall 10cm, the  $K_{sat}$  value for Test Pit E was 1.19m/day
- Average time of 128.6 seconds to fall 10cm, the  $K_{sat}$  value for Test Pit F was 0.71m/day



All of these results are consistent with silty sands with medium permeability.

Soil permeability at location Test Pit F is notably lower than other sites. In this area the sand horizon only extends to 0.45mBGL which is the second shallowest depth observed. A shallow lens of groundwater was also observed at 0.45mBGL suggesting that the underlying clays are impeding the drainage from this area.

#### 4.4 Phosphorous Retention Index

Chain of Custody documentation and Laboratory certificates for the PRI analysis are presented in Appendix C. Results from the laboratory analysis are as follows:

PRI RESULTS – Lot 11 NANARUP RD			
Sample Site	Sample Depth m/BGL	Soil Type	PRI
Test Pit A	0.1	sand	6.8
	0.7	sandy gravel	252.9
Test Pit B	0.1	sand	161.2
	0.6	gravelly clay	82.2
Test Pit C	0.1	sand	158
	0.65	gravelly clay	10.9
Test Pit D	0.1	sand	125
	0.7	sandy gravel	94.8
Test Pit E	0.1	sand	4.2
	0.8	gravelly clay	846.7
Test Pit F	0.1	sand	121.8
	0.5	sandy clay	534.5

Table 1: PRI results from Lot 11 Nanarup Rd

As shown in Table 1, the PRI results are generally high to very high across the site, however 3 results are below the required PRI value of 20. These are the upper horizon from TP-A and TP-E, plus the soils from the intersection of the two soil horizons at TP- C. In all of these three Test Pits, the soils either above or below the low PRI zone, have high PRI values and would enable adequate retention of phosphorous released in treated effluent.



## 5 SUITABILITY FOR ONSITE EFFLUENT DISPOSAL

The following information is a summary of the results presented in Section 4 in comparison with the assessment criteria presented in Section 3.

### 5.1 The Draft Country Sewerage Policy

- The minimum observed vertical separation to groundwater was 0.45m at TP-F, however it was generally greater than 0.9m at all other locations. With the exception of TP-F, the vertical separation to groundwater exceeds the required minimum 0.5m.
- The general soil profile consists of sands over gravelly clay over clay. The soil profile has generally high PRI values which have medium permeability, consistent with permeability values associated with fine sand. The impermeable layer sits below 0.45mBGL at the shallowest observed point (TP-F). However at all other locations it is below 0.9mBGL. It is considered that the soil characteristics are suitable of on-site disposal of treated effluent.
- The greatest slope across the site is negligible. At no location across the site does the slope exceed the maximum allowable gradient of one in five.
- Only one site recorded a PRI value of less than 5 (TP-E@0.1m). This site occurs at a location further than the required 100m setback from the nearest water course (Kalgan River) and also had soils with a PRI value of 846 lower in the profile. All other PRI values were greater than 5 and all locations are further than the required 30m setback from the Kalgan River.

### 5.2 Code of Practice for the Design, Manufacture, Installation and Operation of ATU's Serving Single Dwellings

- Site plans and water treatment system designs are not yet currently available, however, the proposed lot size is sufficient to allow for the required minimum irrigation area of 150m<sup>2</sup>;
- The permeable fraction of the soil horizon extends to a minimum depth of 0.45mBGL at TP-F however is generally deeper than 0.9mBGL. The highest permeability is in the top 0.5mBGL. These depths exceed the minimum requirement of 300mm of permeable soil over impermeable soil horizons for surface irrigation;
- Only three soil samples had PRI values less than 20 however soil of suitable PRI value was identified at every Test Pit location.
- The minimum observed vertical separation to groundwater was 0.45m at TP-F, however it was generally greater than 0.9m at all other locations. With the exception of TP-F, the vertical separation to groundwater exceeds the required minimum 0.5m.

### 5.3 Summary

With consideration of the information presented in Sections 4 and 5, it is considered that Lot 11 Nanarup Road has sub-surface characteristics suitable for receiving treated wastewater effluent for disposal onsite. It should however be noted that in the vicinity of Test Pit F, the vertical separation to groundwater is slightly below the required minimum and soil permeability at this site was also lower than the rest of the site, but is still considered adequate.

The site conditions associated with the results from TP-F do not restrict the capacity of this area receive treated wastewater effluent however it is recommended that either:

- Detailed site investigations be undertaken to identify potentially suitable areas within proposed Lot F that are better suited to receiving treated waste water effluent; or



- Engineering solutions be explored to improve the existing conditions. Such engineering solutions may include:
  - The importation of suitable fill material to increase the vertical separation to ground water; and
  - The irrigation area allocated to receive treated waste water is larger than the required minimum area of 150m<sup>2</sup>.

## 6 REFERENCES

**BoM (2013)** <http://www.bom.gov.au/climate/data/>

**DoH (2001)** *Code of Practice for the Design, Manufacture, Installation and Operation of Aerobic Treatment Units (ATU's)* November 2001. Department of Health, Perth, WA.

**Standards Australia (2000).** *AS/NZS 1547:2000 On Site domestic-wastewater management.* Standards Australia International, Strathfield, NSW.

**Western Australian Office of Waste Management (1999)** *Draft Country Sewerage Policy.* Western Australian Government, Perth, WA

## 7 LIMITATIONS

This report was prepared for Robert Buegge, solely for the purposes set out in the scope of works and it is not intended that any other person use or rely on the contents of this report.

Whilst the information contained in the Report is accurate to the best of our knowledge and belief, Great Southern Bio Logic and its agents cannot guarantee the completeness or accuracy of any of the descriptions or conclusions based on the information supplied to it or obtained during the site investigations, site surveys, visits and interviews. Furthermore, field and / or regulatory conditions are subject to change over time, and this should be considered if this report is to be used after any significant time period after its issue.

Great Southern Bio Logic and its agents have exercised reasonable care, skill and diligence in the conduct of project activities and preparation of this report. However, except for any non-excludable statutory provision, Great Southern Bio Logic and its agents provided no warranty in relation to its services or the report, and is not liable for any loss, damage, injury or death suffered by any party (whether caused by negligence or otherwise) arising from or relating to the services or the use or otherwise of this Report.

This report must be read, copied, distributed and referred in its entirety.



## Figures

### ***Site Capability Assessment – Lot 11 Nanarup Road - Kalgan***



589000.

589100.

REPORT ITEM PD096 REFERS



589000.

589100.



Great Southern Bio Logic does not guarantee that this map is without flaw of any kind and disclaims all liability for any errors, loss or other consequence which may arise from relying on any information depicted.

Ref: GSBL126

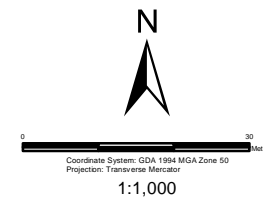
Date: 15/11/2013

Image: Albany\_townsite\_2007

**Figure 1: Lot 11, Nanarup Road showing selected Test Pit Sites**

Site Capability Assessment of Lot 11,  
Nanarup Road, Kalgan prepared for  
Robert Buegge, November, 2013

366





GSBL126-Site Capability-Lot 11 Nanarup Rd-V1



## Appendix A

### Soil Profile Photographs

GSBL126-Site Capability-Lot 11 Nanarup Rd-V1

**Photograph 1: Test Pit A**



**Photograph 2: Test Pit B**



**Photograph 3: Test Pit C**



**Photograph 4: Granite floaters from TP-C**





GSBL126-Site Capability-Lot 11 Nanarup Rd-V1

**Photograph 5:Test Pit D**



**Photograph 6: Test Pit E**



**Photograph 7:Test Pit F**



GSBL126-Site Capability-Lot 11 Nanarup Rd-V1



## Appendix B

### Soil Permeability Calculations



CLIENT: Robert Buegge  
 PROJECT: Site Capability  
 LOCATION: Lot 11 Nanarup Rd  
 SUBJECT: Constant Head Permeability Testing  
 JOB NO: GSBL126  
 TEST NO: TP A

Depth of water in the test hole 45 cm  
 Diameter of the test hole 8 cm  
 Diameter of the reservoir 7 cm  
 Diameter of air inlet tube 0.7 cm  
 Time taken to fall 10cm 62.5 sec

The method of calculation is described in Appendix 4.1F of  
 AS/NZS 1547:2000 'On-site domestic waste-water management'

$$K_{sat} = \frac{4.4Q \left[ 0.5 \sinh^{-1} \left( \frac{H}{2r} \right) - \sqrt{\left\{ \left( \frac{r}{H^2} \right) + 0.25 \right\} + \frac{r}{H}} \right]}{2\pi H^2}$$

where

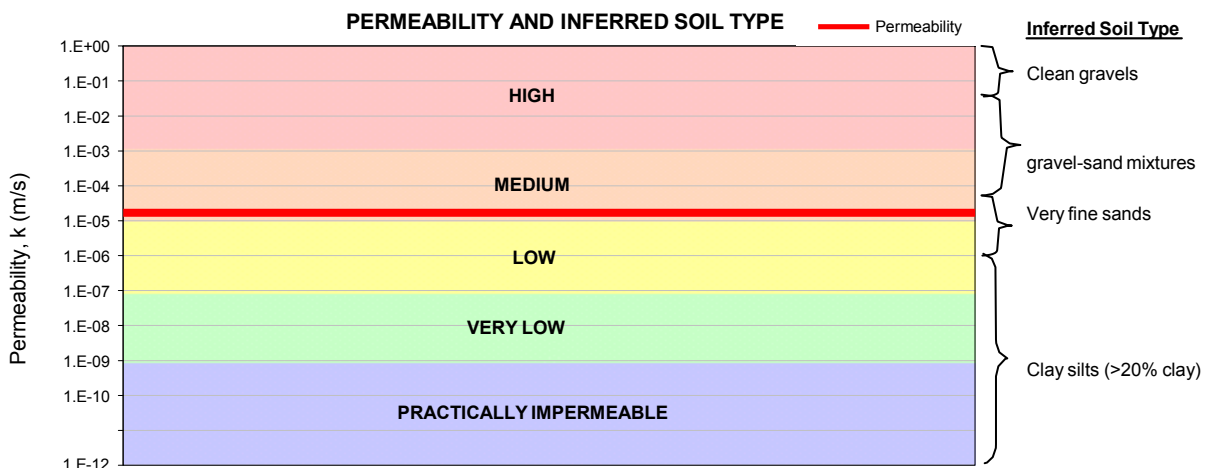
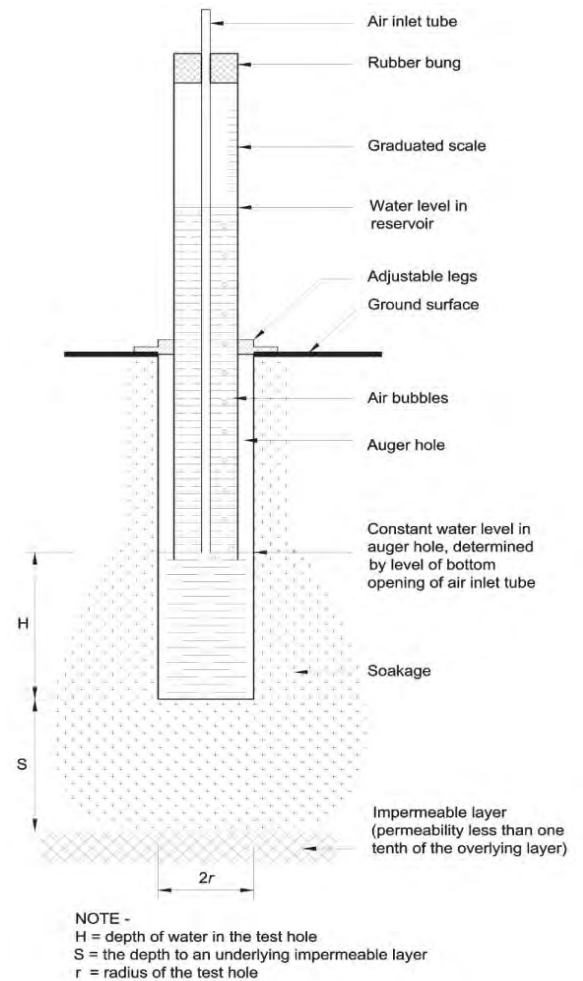
$K_{sat}$  = saturated hydraulic conductivity of the soil in cm/min  
 4.4 = correction factor for a systematic under-estimate of soil permeability in the mathematical derivation of the equation  
 $Q$  = rate of loss of water from the reservoir in cm<sup>3</sup>/min  
 $H$  = depth of water in the test hole in cm  
 $r$  = radius of the test hole in cm

#### Rate of water loss

$Q$  = 0.00610 L/sec  
 365.76 cm<sup>3</sup>/min

#### Saturated Hydraulic conductivity

$K_{sat}$  = 0.1013 cm/min  
 1.46 m/day  
 1.69E-05 m/sec





**CLIENT:** Robert Buegge  
**PROJECT:** Site Capability  
**LOCATION:** Lot 11 Nanarup Rd  
**SUBJECT:** Constant Head Permeability Testing  
**JOB NO:** GSBL126  
**TEST NO:** TP B

Depth of water in the test hole 45 cm  
 Diameter of the test hole 8 cm  
 Diameter of the reservoir 7 cm  
 Diameter of air inlet tube 0.7 cm  
  
 Time taken to fall 10cm 78.3 sec

The method of calculation is described in Appendix 4.1F of  
 AS/NZS 1547:2000 'On-site domestic waste-water management'

$$K_{sat} = \frac{4.4Q \left[ 0.5 \sinh^{-1} \left( \frac{H}{2r} \right) - \sqrt{\left\{ \left( \frac{r}{H^2} \right) + 0.25 \right\} + \frac{r}{H}} \right]}{2\pi H^2}$$

where

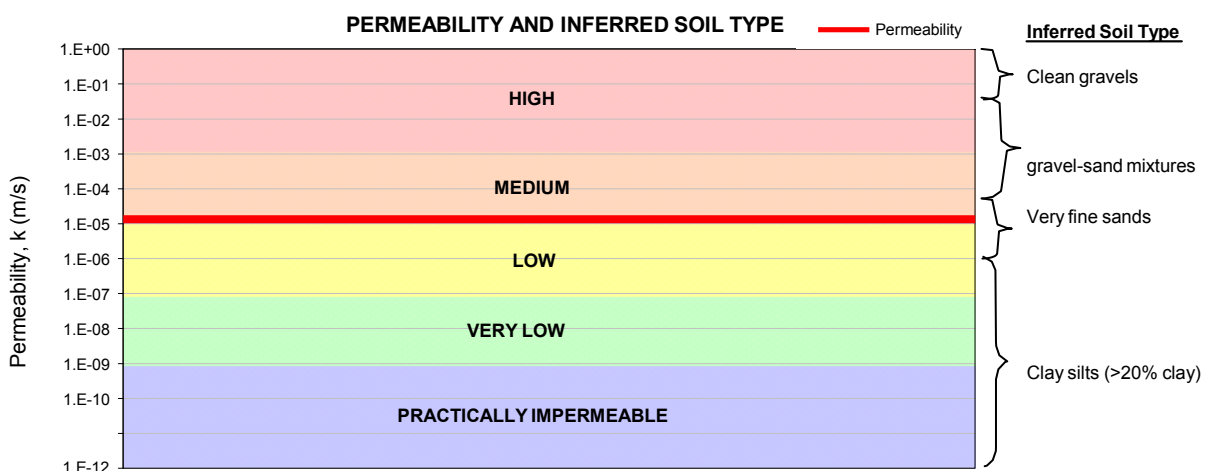
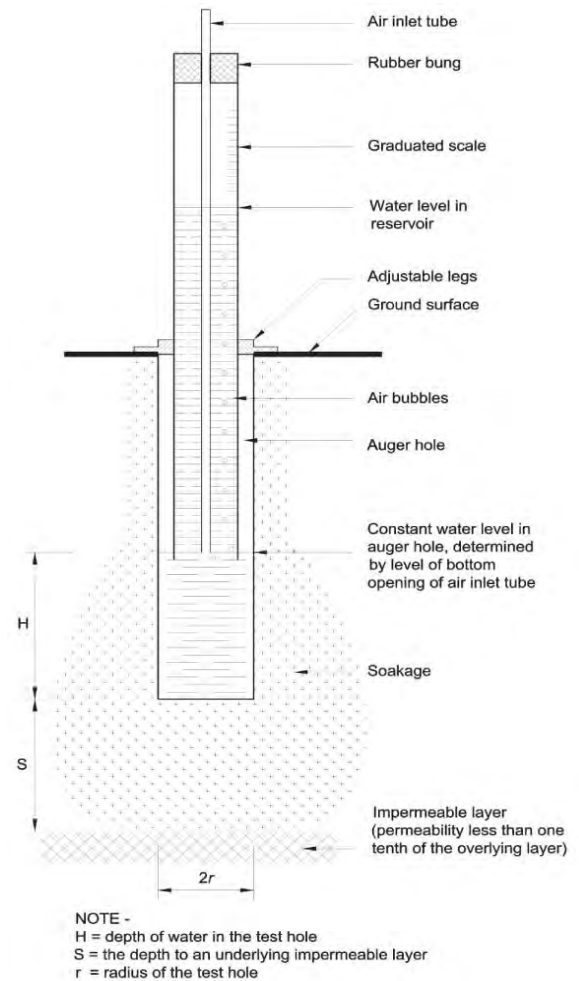
$K_{sat}$  = saturated hydraulic conductivity of the soil in cm/min  
 4.4 = correction factor for a systematic under-estimate of soil permeability in the mathematical derivation of the equation  
 $Q$  = rate of loss of water from the reservoir in cm<sup>3</sup>/min  
 $H$  = depth of water in the test hole in cm  
 $r$  = radius of the test hole in cm

#### Rate of water loss

$Q = 0.00487 \text{ L/sec}$   
 $291.95 \text{ cm}^3/\text{min}$

#### Saturated Hydraulic conductivity

$K_{sat} = 0.0809 \text{ cm/min}$   
 $1.16 \text{ m/day}$   
 $1.35\text{E-}05 \text{ m/sec}$





**CLIENT:** Robert Buegge  
**PROJECT:** Site Capability  
**LOCATION:** Lot 11 Nanarup Rd  
**SUBJECT:** Constant Head Permeability Testing  
**JOB NO:** GSBL126  
**TEST NO:** TP C

## REPORT ITEM PD096 REFERS



Depth of water in the test hole 45 cm  
 Diameter of the test hole 8 cm  
 Diameter of the reservoir 7 cm  
 Diameter of air inlet tube 0.7 cm  
  
 Time taken to fall 10cm 64.3 sec

The method of calculation is described in Appendix 4.1F of  
 AS/NZS 1547:2000 'On-site domestic waste-water management'

$$K_{sat} = \frac{4.4Q \left[ 0.5 \sinh^{-1} \left( \frac{H}{2r} \right) - \sqrt{\left\{ \left( \frac{r}{H^2} \right) + 0.25 \right\} + \frac{r}{H}} \right]}{2\pi H^2}$$

where

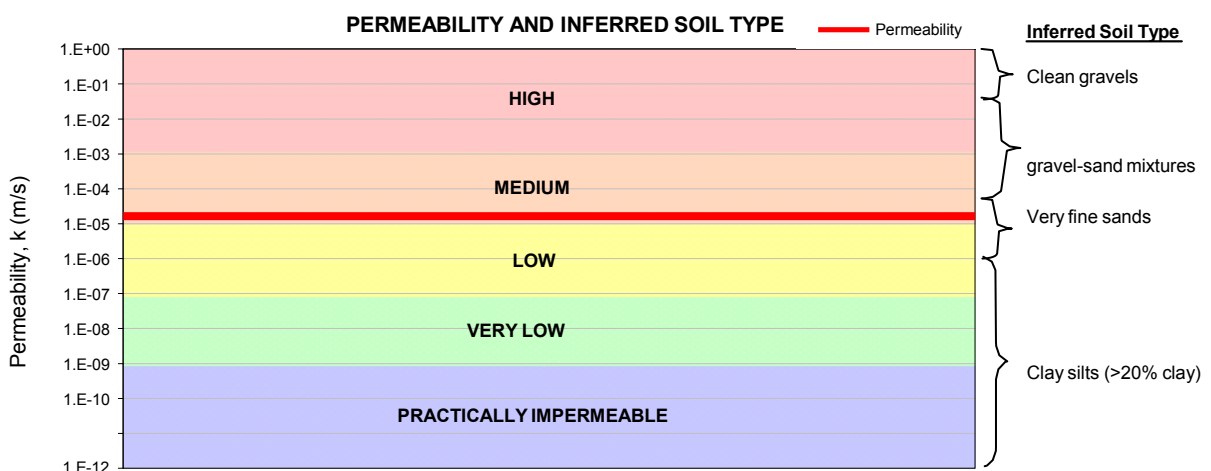
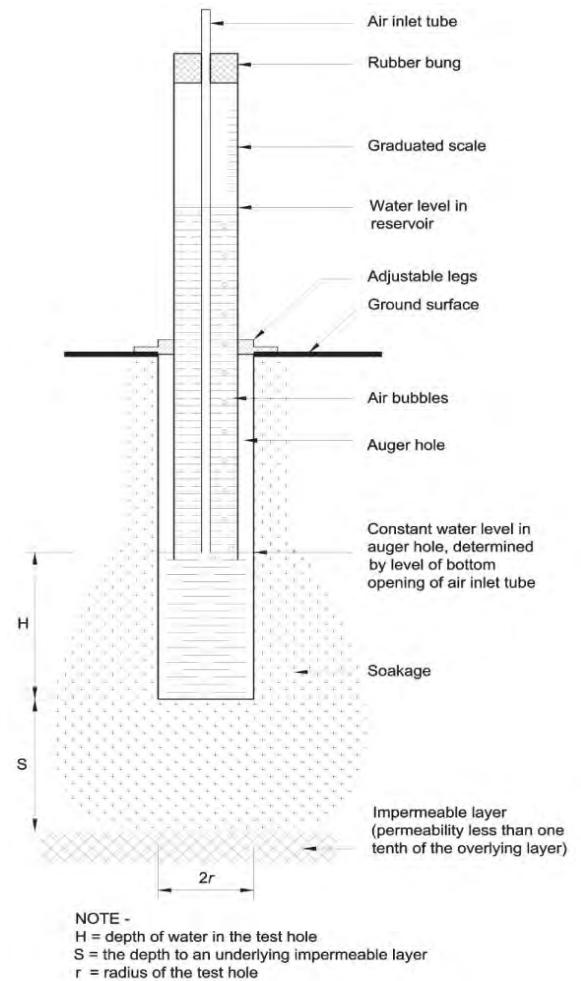
$K_{sat}$  = saturated hydraulic conductivity of the soil in cm/min  
 4.4 = correction factor for a systematic under-estimate of soil permeability in the mathematical derivation of the equation  
 $Q$  = rate of loss of water from the reservoir in cm<sup>3</sup>/min  
 $H$  = depth of water in the test hole in cm  
 $r$  = radius of the test hole in cm

### Rate of water loss

$Q = 0.00593$  L/sec  
 $355.52$  cm<sup>3</sup>/min

### Saturated Hydraulic conductivity

$K_{sat} = 0.0985$  cm/min  
 $1.42$  m/day  
 $1.64E-05$  m/sec



**CLIENT:** Robert Buegge  
**PROJECT:** Site Capability  
**LOCATION:** Lot 11 Nanarup Rd  
**SUBJECT:** Constant Head Permeability Testing  
**JOB NO:** GSBL126  
**TEST NO:** TP D

## REPORT ITEM PD096 REFERS



Depth of water in the test hole 45 cm  
 Diameter of the test hole 8 cm  
 Diameter of the reservoir 7 cm  
 Diameter of air inlet tube 0.7 cm  
  
 Time taken to fall 10cm 60 sec

The method of calculation is described in Appendix 4.1F of  
 AS/NZS 1547:2000 'On-site domestic waste-water management'

$$K_{sat} = \frac{4.4Q \left[ 0.5 \sinh^{-1} \left( \frac{H}{2r} \right) - \sqrt{\left\{ \left( \frac{r}{H^2} \right) + 0.25 \right\} + \frac{r}{H}} \right]}{2\pi H^2}$$

where

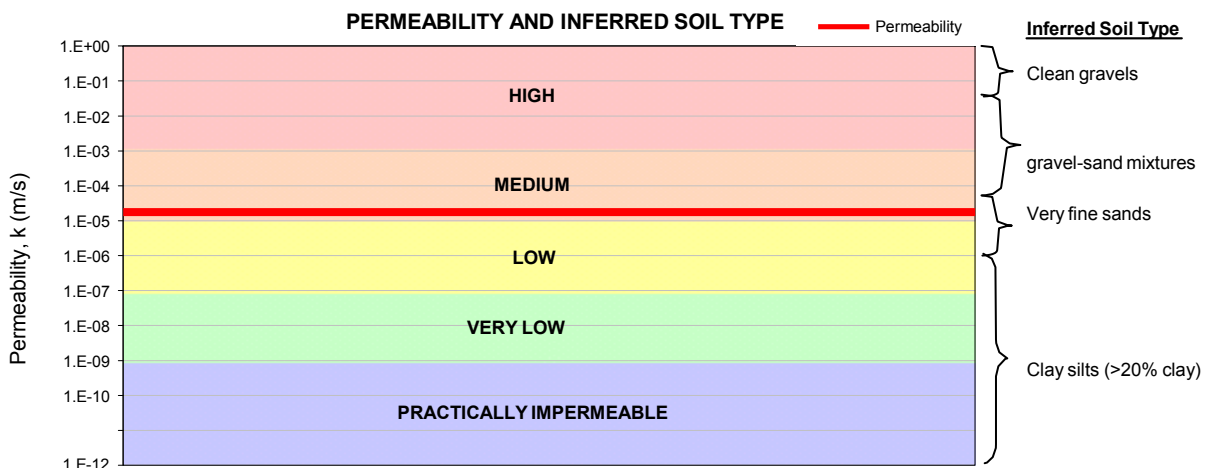
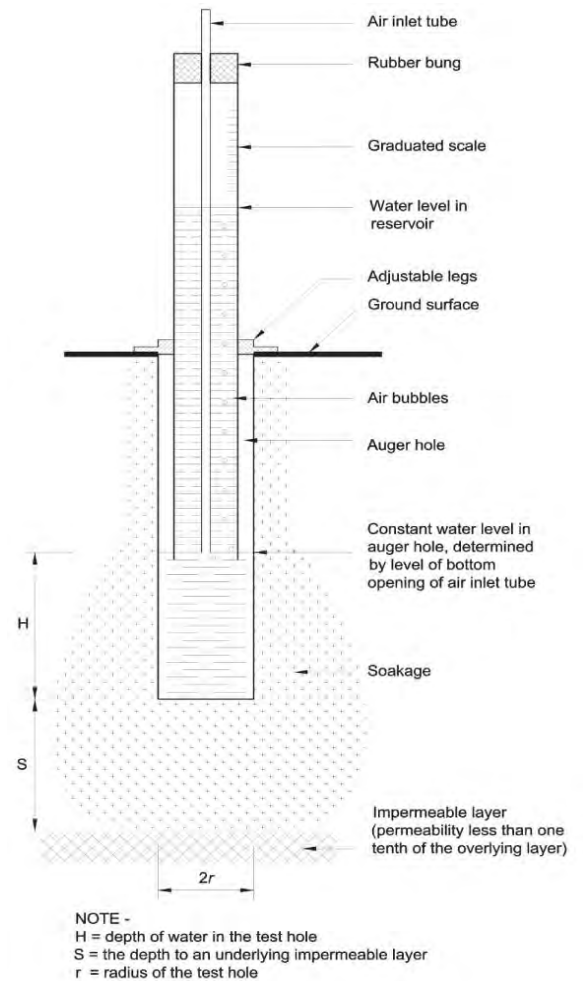
$K_{sat}$  = saturated hydraulic conductivity of the soil in cm/min  
 4.4 = correction factor for a systematic under-estimate of soil permeability in the mathematical derivation of the equation  
 $Q$  = rate of loss of water from the reservoir in cm<sup>3</sup>/min  
 $H$  = depth of water in the test hole in cm  
 $r$  = radius of the test hole in cm

### Rate of water loss

$Q = 0.00635$  L/sec  
 $381.00$  cm<sup>3</sup>/min

### Saturated Hydraulic conductivity

$K_{sat} = 0.1055$  cm/min  
 $1.52$  m/day  
 $1.76E-05$  m/sec





**CLIENT:** Robert Buegge  
**PROJECT:** Site Capability  
**LOCATION:** Lot 11 Nanarup Rd  
**SUBJECT:** Constant Head Permeability Testing  
**JOB NO:** GSBL126  
**TEST NO:** TP E

Depth of water in the test hole 45 cm  
 Diameter of the test hole 8 cm  
 Diameter of the reservoir 7 cm  
 Diameter of air inlet tube 0.7 cm  
  
 Time taken to fall 10cm 76.6 sec

The method of calculation is described in Appendix 4.1F of  
 AS/NZS 1547:2000 'On-site domestic waste-water management'

$$K_{sat} = \frac{4.4Q \left[ 0.5 \sinh^{-1} \left( \frac{H}{2r} \right) - \sqrt{\left\{ \left( \frac{r}{H^2} \right) + 0.25 \right\} + \frac{r}{H}} \right]}{2\pi H^2}$$

where

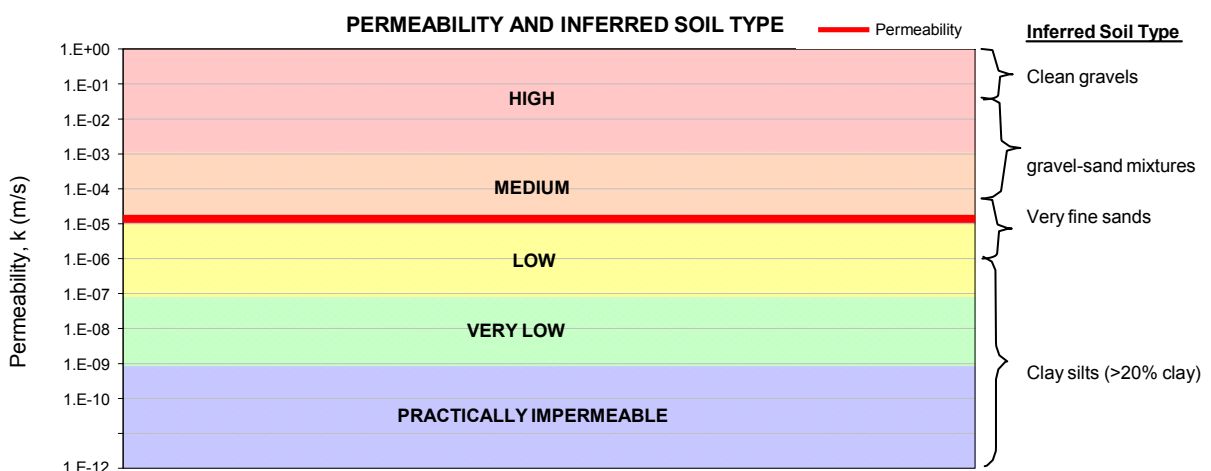
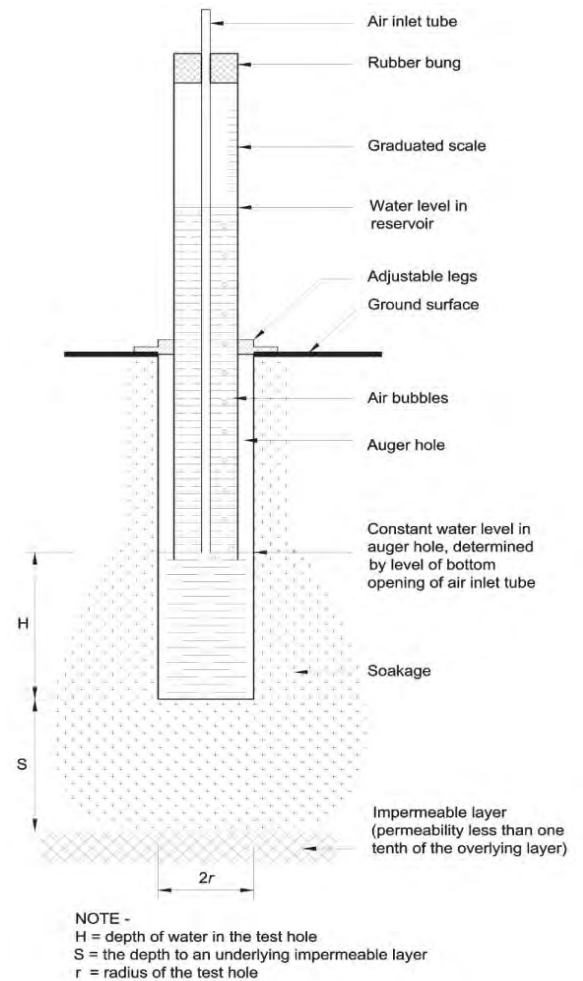
- $K_{sat}$  = saturated hydraulic conductivity of the soil in cm/min
- 4.4 = correction factor for a systematic under-estimate of soil permeability in the mathematical derivation of the equation
- $Q$  = rate of loss of water from the reservoir in cm<sup>3</sup>/min
- $H$  = depth of water in the test hole in cm
- $r$  = radius of the test hole in cm

## Rate of water loss

$Q = 0.00497$  L/sec  
 $298.43$  cm<sup>3</sup>/min

## Saturated Hydraulic conductivity

$K_{sat} = 0.0827$  cm/min  
 $1.19$  m/day  
 $1.38E-05$  m/sec





**CLIENT:** Robert Buegge  
**PROJECT:** Site Capability  
**LOCATION:** Lot 11 Nanarup Rd  
**SUBJECT:** Constant Head Permeability Testing  
**JOB NO:** GSB126  
**TEST NO:** TP F

Depth of water in the test hole 45 cm  
 Diameter of the test hole 8 cm  
 Diameter of the reservoir 7 cm  
 Diameter of air inlet tube 0.7 cm  
  
 Time taken to fall 10cm 128.6 sec

The method of calculation is described in Appendix 4.1F of  
 AS/NZS 1547:2000 'On-site domestic waste-water management'

$$K_{sat} = \frac{4.4Q \left[ 0.5 \sinh^{-1} \left( \frac{H}{2r} \right) - \sqrt{\left\{ \left( \frac{r}{H^2} \right) + 0.25 \right\} + \frac{r}{H}} \right]}{2\pi H^2}$$

where

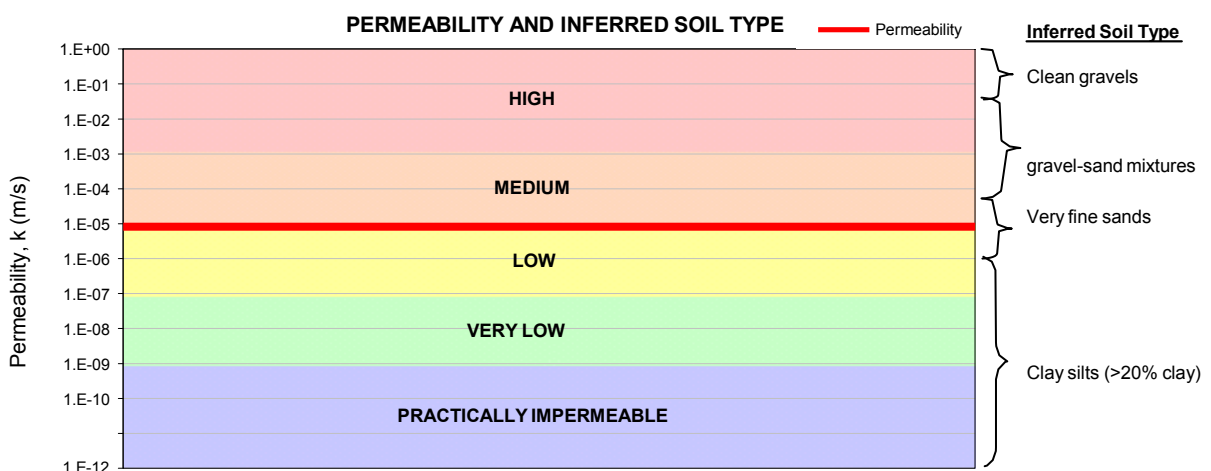
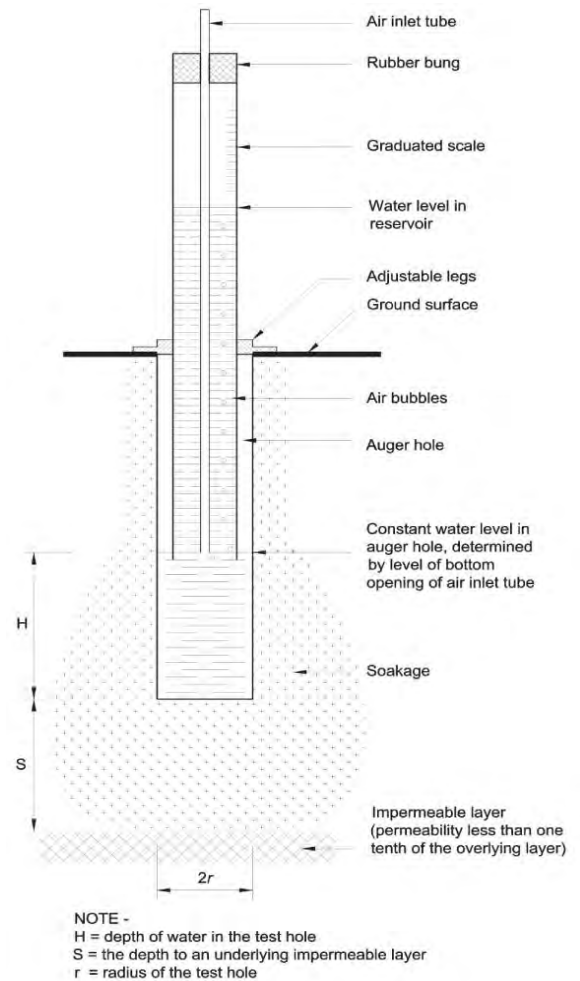
- $K_{sat}$  = saturated hydraulic conductivity of the soil in cm/min  
 4.4 = correction factor for a systematic under-estimate of soil permeability in the mathematical derivation of the equation  
 $Q$  = rate of loss of water from the reservoir in cm<sup>3</sup>/min  
 $H$  = depth of water in the test hole in cm  
 $r$  = radius of the test hole in cm

## Rate of water loss

$Q = 0.00296$  L/sec  
 $177.76$  cm<sup>3</sup>/min

## Saturated Hydraulic conductivity

$K_{sat} = 0.0492$  cm/min  
 $0.71$  m/day  
 $8.21E-06$  m/sec





GSBL126-Site Capability-Lot 11 Nanarup Rd-V1



## Appendix C

### PRI Laboratory Analysis Certificates



PO Box 5573  
ALBANY WA 6332  
Telephone: 0400 113 093  
[gsbiologic@westnet.com.au](mailto:gsbiologic@westnet.com.au)

## LABORATORY ANALYSIS & CHAIN OF CUSTODY RECORD

To: ARL  
Address: 46-48 Banksia Rd Welshpool  
Attention: Recievals  
Telephone: 62534444  
Facsimile:  
Received by: **MASA (ARL)**  
Date received: **31/10/13**

Project No.: GSBL126  
Project: Lot 11 Nannaup Rd  
Results required by: [gsbiologic@westnet.com.au](mailto:gsbiologic@westnet.com.au)  
Quote #  
Delivery Method: courier  
Sent By: Jeremy Spencer  
Date Delivered: 31-Oct-13

Sample Type: Groundwater ☐ Surfacewater ☐ Other: soil

**PLEASE SUPPLY LABORATORY QA/QC DATA AND QUOTE PROJECT NUMBER, PURCHASE ORDER NUMBER AND DATE ON ALL CORRESPONDENCE**

**13-7973**

**PLEASE PROVIDE A SIGNED CHAIN OF CUSTODY WITH ALL RESULTS**

Sample ID			Date Sampled	Container	Analyses															
					PRI															
-1	TP A	0.1	29-Oct-13	plastic	✓															
-2	TP A	0.7	29-Oct-13	plastic	✓															
-3	TP B	0.1	29-Oct-13	plastic	✓															
-4	TP B	0.6	29-Oct-13	plastic	✓															
-5	TP C	0.1	29-Oct-13	plastic	✓															
-6	TP C	0.65	29-Oct-13	plastic	✓															
-7	TP D	0.1	29-Oct-13	plastic	✓															
-8	TP D	0.7	29-Oct-13	plastic	✓															
-9	TP E	0.1	29-Oct-13	plastic	✓															
-10	TP E	0.8	29-Oct-13	plastic	✓															
-11	TP F	0.1	29-Oct-13	plastic	✓															
-12	TP F	0.5	29-Oct-13	plastic	✓															

DATE: **31/10/13**  
CHECKED BY: **Masa**  
No OF SAMPLES: **12**  
No OF GLASS: **1**  
No OF PLASTIC: **12**



Environmental and Analytical Laboratory

## LABORATORY REPORT

**Job Number:** 13-7973

**Revision:** 00

**Date:** 7 November 2013

**ADDRESS:** **Great Southern Bio Logic**  
PO Box 5537  
Albany WA 6332

**ATTENTION:** Jeremy Spencer

**DATE RECEIVED:** 31/10/2013

**YOUR REFERENCE:** GSBL126, Lot 11 Nannaup Rd

**PURCHASE ORDER:**

**APPROVALS:**

  
Douglas Todd  
Laboratory Manager

**REPORT COMMENTS:**

Phosphorus Retention Index subcontracted to CSBP, Report Number 262287

**METHOD REFERENCES:**

Subcontracting See Report Comments section for more information.

**LABORATORY REPORT**

Great Southern Bio Logic

ARL Job No: 13-7973

Revision: 00

Date: 7 November 2013

**RESULTS:**

Subcontracting Sample No: Sample Description:	LOR	UNITS	13-7973-1 TP A 0.1	13-7973-2 TP A 0.7	13-7973-3 TP B 0.1	13-7973-4 TP B 0.6	13-7973-5 TP C 0.1
Phosphorus Retention Index			6.8	252.9	161.2	82.2	158.0

Subcontracting Sample No: Sample Description:	LOR	UNITS	13-7973-6 TP C 0.65	13-7973-7 TP D 0.1	13-7973-8 TP D 0.7	13-7973-9 TP E 0.1	13-7973-10 TP E 0.8
Phosphorus Retention Index			10.9	125.0	94.8	4.2	846.7

Subcontracting Sample No: Sample Description:	LOR	UNITS	13-7973-11 TP F 0.1	13-7973-12 TP F 0.5
Phosphorus Retention Index			121.8	534.5

**Result Definitions**

LOR Limit of Reporting

[ND] Not Detected at indicated Limit of Reporting

[NR] Analysis Not Requested

(SS) Surrogate Standard Compound



---

## APPENDIX C – SUBDIVISION CONCEPT PLAN






LEGEND

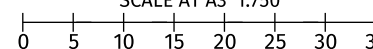
- Existing Lot Boundaries
- Proposed Lot Boundaries
- DBYD Overhead Power AE
- DBYD Water W
- DBYD Telstra T

SUBDIVISION  
CONCEPT PLAN  
Lot 11 (No.264)  
Nanarup Road  
KALGAN




Harley Dykstra  
PLANNING & SURVEY SOLUTIONS

DRAWN SDP 12/10/2014	CHECKED SD 13/10/2014	DRAWING No 13688-03A.dgn
SCALE AT A3 1:750		
REV A	DESCRIPTION Original Drawing	DATE 12/10/2014





0 5 10 15 20 25 30 35  
ALL DISTANCES ARE IN METRES



ALBANY OFFICE:  
116 Serpentine Road, ALBANY WA 6330  
T: 08 9841 7333 F: 08 9841 3643  
E: albany@harleydykstra.com.au  
W: www.harleydykstra.com.au  
Offices also at Bunbury, Busselton, Kelmscott and Perth

COPYRIGHT:  
This document is and shall remain the property of HARLEY DYKSTRA.  
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

NOTE:  
This plan has been prepared for planning purposes. Areas, Contours and Dimensions shown are subject to survey.





**CITY OF ALBANY**

**REPORT**

To : His Worship the Mayor and Councillors

From : Administration Officer - Planning

Subject : Planning Scheme Consents – August 2015

Date : 1 September 2015

---

1. The attached report shows Planning Scheme Consents issued under delegation by a planning officer for the month of August 2015.
2. Within this period 40 Planning Scheme Consent applications were determined, of these;
  - 39 Planning Scheme Consent applications were approved under delegated authority; and
  - 1 Planning Scheme Consent applications was withdrawn.



---

**Kandi Smith**  
Administration Officer – Planning

## **PLANNING SCHEME CONSENTS ISSUED UNDER DELEGATED AUTHORITY**

**Applications determined for August 2015**

<b>Application Number</b>	<b>Application Date</b>	<b>Street Address</b>	<b>Locality</b>	<b>Description of Application</b>	<b>Decision</b>	<b>Decision Date</b>	<b>Assessing Officer</b>
P2150174	7/04/2015	Grey Street East	Albany	Single House - Additions (Design Codes Assessment & Policy Variation)	Delegate Approved	5/08/2015	Alex Bott
P2150288	3/06/2015	Melville Street	Albany	Holiday Accommodation	Delegate Approved	5/08/2015	Taylor Gunn
P2150403	3/08/2015	Earl Street	Albany	Single House - Replace Existing Retaining Walls (Design Codes Assessment)	Delegate Approved	20/08/2015	Jessica Anderson
P2150324	17/06/2015	Kurannup Road	Bayonet Head	Single House - Design Codes Assessment	Delegate Approved	5/08/2015	Craig McMurtire
P2150378	17/07/2015	Albatross Drive	Bayonet Head	Single House - Retaining Walls (Design Codes Assessment)	Delegate Approved	7/08/2015	Jan van der Mescht
P2150385	27/07/2015	Albatross Drive	Bayonet Head	Single House - Retaining Walls (Design Codes Assessment)	Delegate Approved	6/08/2015	Taylor Gunn
P2150415	12/08/2015	Warrangoo Road	Bayonet Head	Single House - Design Codes Assessment	Delegate Approved	18/08/2015	Jessica Anderson
P2150235	8/05/2015	Barker Road	Centennial Park	Industry Light - Additions (Extra storage & Carport)	Delegate Approved	18/08/2015	Taylor Gunn
P2150332	22/06/2015	Bedwell Street	Emu Point	Single House - Outbuilding (Overheight) Design Codes Assessment	Delegate Approved	13/08/2015	Taylor Gunn
P2150444	26/08/2015	Swarbrick Street	Emu Point	Change of Use - Holiday Home	Withdrawn	27/08/2015	Deb Delury
P2150383	23/07/2015	Karrakatta Road	Goode Beach	Single House - Design Codes Assessment	Delegate Approved	6/08/2015	Taylor Gunn
P2150409	5/08/2015	La Perouse Road	Goode Beach	Single House - Design Codes Assessment	Delegate Approved	19/08/2015	Taylor Gunn
P2150396	31/07/2015	Walford Road	Kalgan	Development - Earthworks exceeding 600mm (Enlarge Existing Dam)	Delegate Approved	7/08/2015	Taylor Gunn
P2150405	3/08/2015	Valley Pond Heights	Kalgan	Single House Outbuilding and Rain Water Tanks	Delegate Approved	18/08/2015	Taylor Gunn
P2150394	30/07/2015	Stirling View Drive	Lange	Grouped Dwelling (x2)	Delegate Approved	14/08/2015	Taylor Gunn
P2150370	13/07/2015	Lorikeet Way	Little Grove	Development - Earthworks exceeding 600mm (Retaining Wall on Boundary)	Delegate Approved	19/08/2015	Alex Bott



Application Number	Application Date	Street Address	Locality	Description of Application	Decision	Decision Date	Assessing Officer
P2150421	13/08/2015	Frenchman Bay Road	Little Grove	Single House - Design Codes Assessment	Delegate Approved	19/08/2015	Taylor Gunn
P2150431	20/08/2015	Bushby Road	Lower King	Single House - Additions (Patio)	Delegate Approved	25/08/2015	Jessica Anderson
P2150398	31/07/2015	Lowanna Drive	Marbelup	Single House - Addition (Patio)	Delegate Approved	6/08/2015	Taylor Gunn
P2150399	31/07/2015	Morgan Place	McKail	Single House - Outbuilding (Boundary Setback Variation)	Delegate Approved	18/08/2015	Jessica Anderson
P2150406	4/08/2015	Morgan Road	McKail	Development - Earthworks exceeding 600mm (Retaining Wall)	Delegate Approved	10/08/2015	Taylor Gunn
P2150407	5/08/2015	Centaurus Terrace	McKail	Single House - Additions (Patio x 2 - Side & Rear)	Delegate Approved	10/08/2015	Taylor Gunn
P2150412	10/08/2015	Gregory Drive	McKail	Ancillary Accommodation - Addition (Carport)	Delegate Approved	14/08/2015	Taylor Gunn
P2150423	14/08/2015	Scorpio Drive	McKail	Single House - Design Codes Assessment	Delegate Approved	24/08/2015	Jessica Anderson
P2150404	3/08/2015	Marine Terrace	Middleton Beach	Grouped Dwelling - Additions (Carports x 2)	Delegate Approved	14/08/2015	Taylor Gunn
P2150425	14/08/2015	Friesian Rise	Milpara	Single House and Outbuilding	Delegate Approved	25/08/2015	Jessica Anderson
P2150381	21/07/2015	Suffolk Street	Mount Clarence	Development - Earthworks exceeding 600mm (Retaining Walls on future lot A)	Delegate Approved	4/08/2015	Alex Bott
P2150410	10/08/2015	Serpentine Road	Mount Melville	Development - Earthworks (Replacing existing retaining walls to rear & side boundaries)	Delegate Approved	28/08/2015	Jan van der Mescht
P2150427	18/08/2015	Gillam Place	Mount Melville	Single House - Design Codes Assessment	Delegate Approved	27/08/2015	Jessica Anderson
P2150329	19/06/2015	Rock Cliff Circle	Nullaki	Single House	Delegate Approved	11/08/2015	Alex Bott
P2150380	21/07/2015	Redmond-Hay River Road	Redmond West	Single House	Delegate Approved	4/08/2015	Taylor Gunn
P2150368	10/07/2015	Elphinstone Road	Robinson	Industry - General (Block & Paver Manufacture) & Caretakers Residence	Delegate Approved	20/08/2015	Taylor Gunn
P2150417	12/08/2015	Stirling Street	Robinson	Development - Storage Shed (Mens Shed)	Delegate Approved	31/08/2015	Jan van der Mescht

Application Number	Application Date	Street Address	Locality	Description of Application	Decision	Decision Date	Assessing Officer
P2150366	8/07/2015	Hardie Road	Spencer Park	Institutional Home - Additions (Office & Administration)	Delegate Approved	12/08/2015	Taylor Gunn
P2150402	3/08/2015	Andrews Street	Spencer Park	Single House - Additions (Design Codes Assessment)	Delegate Approved	7/08/2015	Taylor Gunn
P2150416	12/08/2015	Geake Street	Spencer Park	Ancillary Accommodation	Delegate Approved	20/08/2015	Taylor Gunn
P2150400	31/07/2015	Deloraine Drive	Warrenup	Single House - Outbuilding (Addition to Existing)	Delegate Approved	11/08/2015	Taylor Gunn
P2150401	3/08/2015	Greenwood Drive	Willyung	Single House - Outbuilding	Delegate Approved	6/08/2015	Taylor Gunn
P2150411	10/08/2015	Weston Ridge	Willyung	Single House	Delegate Approved	18/08/2015	Jessica Anderson
P2150418	13/08/2015	Greenwood Drive	Willyung	Single House - Outbuilding	Delegate Approved	18/08/2015	Taylor Gunn

**CITY OF ALBANY**

**REPORT**

To : His Worship the Mayor and Councillors  
From : Information Officer - Development  
Subject : Building Activity – August 2015  
Date : 2 September 2015

---

1. In August 2015, 80 building permits were issued for building activity worth \$7,677,802, including 4 demolition licences.
2. The two (2) attached graphs compare the current City activity with the past five (5) fiscal years. One compares the value of activity, while the other compares the number of dwelling units.
3. A breakdown of building activity into various categories is provided in the Building Construction Statistics form.
4. Attached are the details of the permits issued for August, the 2<sup>nd</sup> month of activity in the City of Albany for the financial year 2015/16.



**Ronelle Sutton**  
**Information Officer – Development Services**

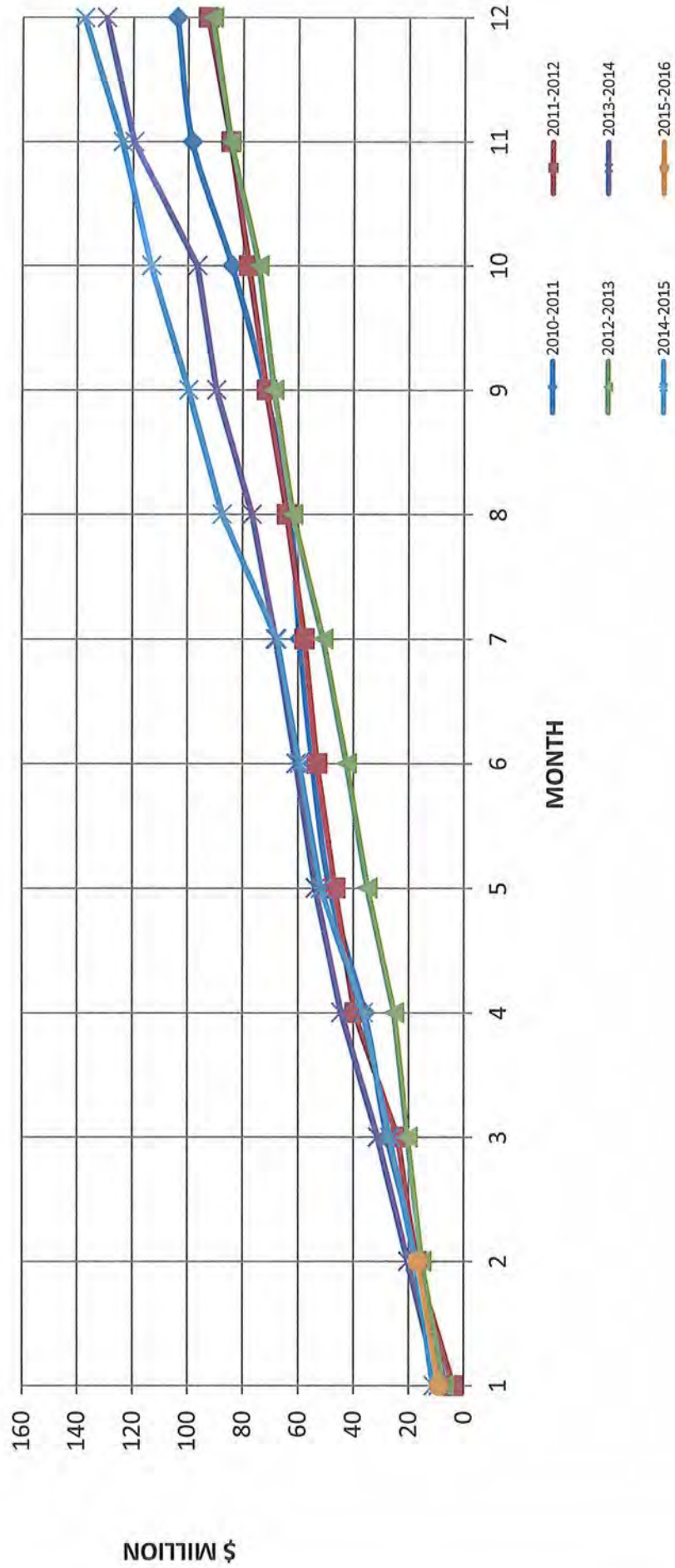
## CITY OF ALBANY

## BUILDING CONSTRUCTION STATISTICS FOR 2015 - 2016

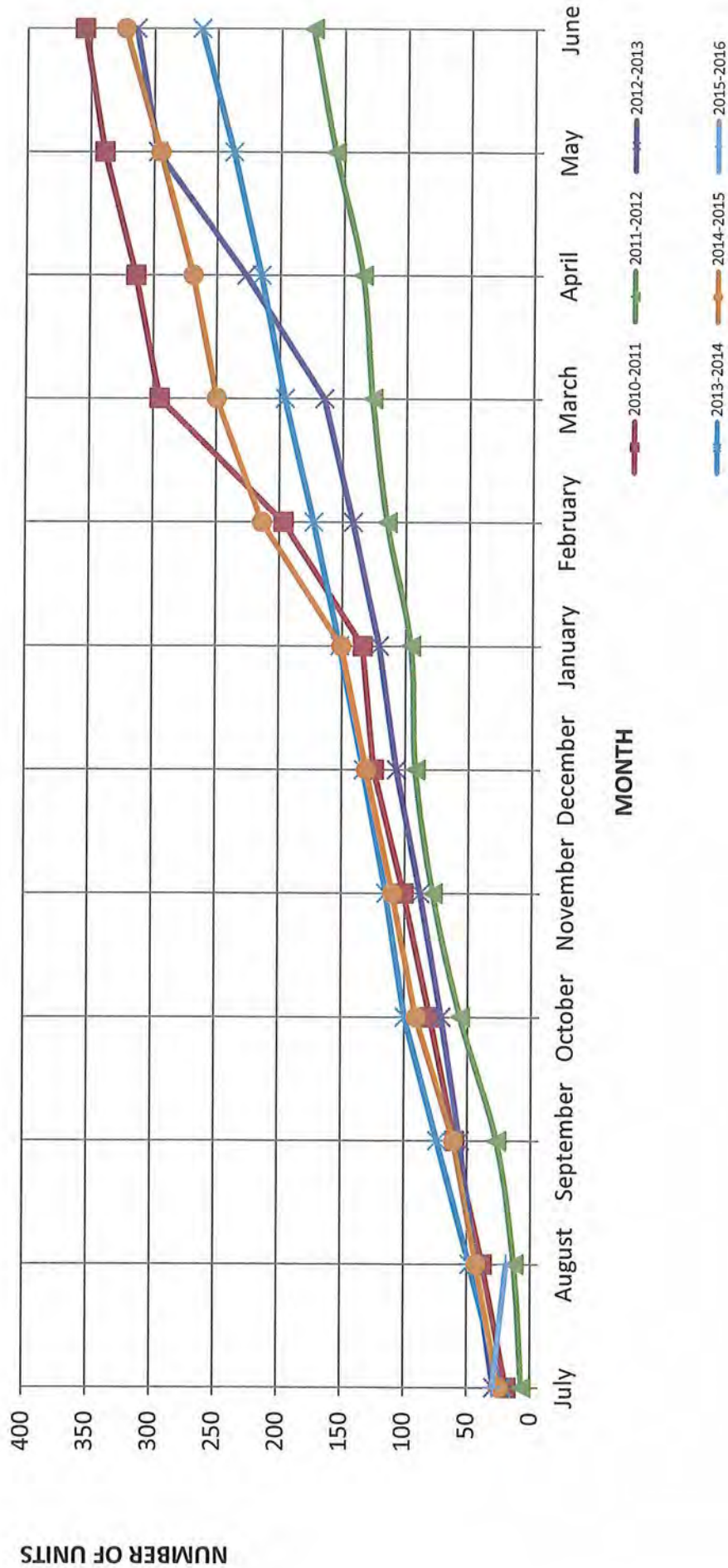
2015-2016	SINGLE DWELLING		GROUP DWELLING		DOMESTIC/ OUTBUILDINGS		ADDITIONS/ DWELLINGS		HOTEL/ MOTEL		NEW COMMERCIAL		ADDITIONS/ COMMERCIAL		OTHER		TOTAL \$ VALUE	
	No	\$ Value	No	\$ Value	No	\$ Value	No	\$ Value	No	\$ Value	No	\$ Value	No	\$ Value	No	\$ Value		
JULY	28	7,117,017	2	225,000	30	18	254,515	32	977,600	1	300,000		1	96,690	13	118,559	9,089,381	
AUGUST	17	4,441,634	2	547,778	19	18	350,537	26	1,846,383			1	75,000	3	258,500	10	157,970	7,677,802
SEPTEMBER																		
OCTOBER																		
NOVEMBER																		
DECEMBER																		
JANUARY																		
FEBRUARY																		
MARCH																		
APRIL																		
MAY																		
JUNE																		
TOTALS TO DATE	45	11,558,651	4	772,778	49	34	605,052	58	2,823,983	1	300,000	1	75,000	4	355,190	23	276,529	16,767,183



# BUILDING ACTIVITY \$M Value



# DWELLING UNITS



**BUILDING, SIGN & DEMOLITION LICENCES ISSUED UNDER DELEGATED AUTHORITY**

Applications determined for August 2015

Application Number	Builder	Description of Application	Street #	Property Description	Street Address	Suburb
141677	DOUDMAN PTY LTD	CERTIFICATE OF DESIGN COMPLIANCE - CHANGE OF CLASSIFICATION FROM CLASS 1A TO CLASS 5/6 & 4	76	PROUDLOVE PARADE	Lot 9	ALBANY
141693	KING	CHANGE OF CLASSIFICATION FROM CLASS 1A TO CLASS 5/6 & 4	76	PROUDLOVE PARADE	Lot 9	ALBANY
141700	ADFORM	SHOP FIT OUT TO SHOP	42-68	PARADE ALBANY	Lot 104	ALBANY
141690	G DOUBIKIN	L202 - CERTIFIED GARAGE & RETAINING	138	HIGHWAY BRUNSWICK	Lot 153	ALBANY
141672	DOWN UNDER	WALL - UNCERTIFIED RESIDENTIAL DWELLING & DOMESTIC SHED - FULL	20	EARL STREET	Lot 163	ALBANY
141710	CONTRACTING NEWMAN'S	DEMOLITION RETAINING WALL -	106-108	BURGOYNE	Lot 14	ALBANY
141733	CONCRETE DOWN UNDER	UNCERTIFIED RETAINING WALLS -	20	EARL STREET	Lot 163	ALBANY
141738	CONTRACTING GREAT SOUTHERN ENDEAVOUR	UNCERTIFIED NEW DWELLING -	24A	MELVILLE	Lot 211	ALBANY
141723	PROJECTS PTY LT SG TOBIASSEN	CERTIFIED PERGOLA WITH LOW LEVEL DECK & BALCONY	15	STREET MASKILL PLACE	Lot 41	ALBANY
141667	SOUTH COAST SHEDS	UNCERTIFIED SHED - UNCERTIFIED	20	PAUL TERRY DRIVE	Lot 468	BAYONET HEAD
141675	TRICOAST CIVIL	RETAINING WALLS -		LOWER KING	Lot 9008	BAYONET HEAD
141681	PLUNKETT HOMES	UNCERTIFIED NEW DWELLING -	5	ROAD CULLINAN	Lot 833	BAYONET HEAD
	(1903) PTY LTD	UNCERTIFIED		TERRACE		

Application Number	Builder	Description of Application	Street #	Property Description	Street Address	Suburb
141706	KOSTERS OUTDOOR PTY LTD	SHED - UNCERTIFIED	24	ANCHORAGE	Lot 904	BAYONET HEAD
141697	RYDE BUILDING	PLANTER BOX RETAINING WALL & AMENDMENT TO MASTER SUITE WINDO	7	VISTA CULLINAN	Lot 834	BAYONET HEAD
141673	COMPANY PTY LTD C DALY	SHED & CARPORT -	13	TERRACE BANOOL	Lot 203	BAYONET HEAD
141684	WA COUNTRY	UNCERTIFIED NEW DWELLING -	31	CRESCENT KURANNUP	Lot 143	BAYONET HEAD
141686	BUILDERS PTY LTD MATSON	UNCERTIFIED SHED & CARPORT -	58	ROAD HOUGHTON	Lot 799	BAYONET HEAD
141719	FABRICATIONS DOWN UNDER	UNCERTIFIED RETAINING WALL X2 -	26	BOULEVARD ALBATROSS	Lot 66	BAYONET HEAD
141735	CONTRACTING PULS PATIOS	UNCERTIFIED PATIO - UNCERTIFIED	55	DRIVE GREEN ISLAND	Lot 400	BAYONET HEAD
141743	POCOCK BUILDING	NEW DWELLING -	9	CRESCENT CULLINAN	Lot 835	BAYONET HEAD
141650	COMPANY PTY LTD TURPS STEEL	UNCERTIFIED GABLE CARPORT -	50-56	TERRACE PIONEER ROAD	Lot 16	CENTENNIAL
141674	FABRICATION MD IRELAND & CC	UNCERTIFIED OCCUPANCY PERMIT - PROFESSIONAL OFFICE - ADVANCED PODIATRY OCCUPANCY PERMIT -	37-39	PIONEER ROAD	Lot 60	PARK CENTENNIAL
141745	OOSTERHUIS D TADJ	REFER BP140513 ALTERATIONS & ADDITIONS TO EXISTING DWELLING - 3RD FLOOR DOMESTIC SHED & WATER TANK -	2-18	PIONEER ROAD	Lot 14	PARK CENTENNIAL
141662	IRONMONGER BUILDING COMPANY PTY LTD	REFER BP140513 ALTERATIONS & ADDITIONS TO EXISTING DWELLING - 3RD FLOOR DOMESTIC SHED & WATER TANK -	3	GRIFFITHS	Lot 15	PARK COLLINGWOOD
141654	MCB CONSTRUCTION PTY LTD	UNCERTIFIED	688	STREET LOWER	Lot 9001	PARK CUTHBERT
				DENMARK ROAD		



Application Number	Builder	Description of Application	Street #	Property Description	Street Address	Suburb
141685	GJ OLDFIELD	BUILDING APPROVAL CERTIFICATE FOR INCREASE OF FLOOR SHED - UNCERTIFIED	233	SOUTH COAST	Lot 11	GLEDHOW
141676	MCB CONSTRUCTION PTY LTD	STORAGE SHED /	46	HIGHWAY WALMSLEY ROAD	Lot 16	GLEDHOW
141716	FC & SM BURNS	WORKSHOP - CERTIFIED RESIDENTIAL SHED EXTENSION - UNCERTIFIED ADDITIONS TO EXISTING SINGLE STOREY RESIDENTIAL DWELLING	25	KITSON STREET	Lot 200	GLEDHOW
141701	TURPS STEEL	DEMOLITION - DEMOLITION - RESIDENTIAL DWELLING DWELLING GARAGE AND	233	SOUTH COAST	Lot 11	GLEDHOW
141715	FABRICATIONS FC & SM BURNS	STUDIO - CERTIFIED ALTERATIONS & ADDITIONS - CARPORT LAUNDRY STOREROOM & SHED - UNCERTIFIED	25	HIGHWAY KITSON STREET	Lot 200	GLEDHOW
141727	AD CONTRACTORS	CHANGE OF CLASSIFICATION FROM CLASS 5/7B TO CLASS 5/6 GROUPED DWELLING X 2	9	ST GEORGES	Lot 14	GOODE BEACH
141725	PTY LTD DOWNRITE DEMOLITION	UNCERTIFIED OCCUPANCY PERMIT	302	CRESCENT MILLSTREAM	Lot 5743	GREEN VALLEY
141678	AUSTRALIA PTY LTD WISHART HOMES PTY LTD	CHANGE OF CLASSIFICATION FROM CLASS 5/7B TO CLASS 5/6 GROUPED DWELLING X 2	34	ROAD WATARI RISE	Lot 67	KALGAN
141696	JEREMY SCOTT HOMES	UNCERTIFIED OCCUPANCY PERMIT	204	GULL ROCK	Lot 217	KALGAN
141741	BL SHARMAN	CHANGE OF CLASSIFICATION FROM CLASS 5/7B TO CLASS 5/6 GROUPED DWELLING X 2	112	ROAD CHURCHLANE	Lot 113	KALGAN
141695	A BRAAM	UNCERTIFIED OCCUPANCY PERMIT	126	ROAD CHESTER PASS	Lot 9	LANGE
141705	RYDE BUILDING COMPANY PTY LTD	UNCERTIFIED OCCUPANCY PERMIT	30	ROAD STIRLING VIEW	Lot 100	LANGE
141729	FEDERATION CUSTODIAN PTY LTD	UNCERTIFIED OCCUPANCY PERMIT	160	DRIVE CHESTER PASS	Lot 1007	LANGE

Application Number	Builder	Description of Application	Street #	Property Description	Street Address	Suburb
141748	SITKA PTY LTD	OFFICE / SHOWROOM -	126	CHESTER PASS	Lot 9	LANGE
141659	TURPS STEEL FABRICATIONS	OCCUPANCY PERMIT PATIO - UNCERTIFIED	18	ROAD QUEEN STREET	Lot 5	LITTLE GROVE
141666	SOUTH COAST SHEDS	NEW DOMESTIC SHED -	6	GROVE STREET	Lot 141	LITTLE GROVE
141680	AUSCAN	UNCERTIFIED PATIO X 2	653	WEST FRENCHMAN	Lot 9	LITTLE GROVE
141732	CONSTRUCTION PLUNKETT HOMES	AMENDMENT TO BP 141619 FOR NEW DWELLING -	5	BAY ROAD FINCH COURT	Lot 235	LITTLE GROVE
141736	(1903) PTY LTD POCOCK BUILDING	NEW DWELLING -	623	FRENCHMAN	Lot 151	LITTLE GROVE
141747	COMPANY PTY LTD AR & DA DOCKING	UNCERTIFIED ALTERATIONS & ADDITIONS TO EXISTING	21	BAY ROAD GROVE STREET	Lot 96	LITTLE GROVE
141658	GREAT SOUTHERN ENDEAVOUR PROJECTS PTY LT	DWELLING- CERTIFIED SINGLE STOREY RESIDENTIAL DWELLING - CERTIFIED	34	EAST CULL ROAD	Lot 459	LOCKYER
141687	JB FORM	CHANGE OF CLASSIFICATION - CAFE / WORKSHOP CLASS 6/8	233	PIGGOT MARTIN	Lot 13	LOWLANDS
141724	DOWNRITE DEMOLITION	TO DWEL DEMOLITION -	222	ROAD CORIMUP ROAD	Lot 4	MANYPEAKS
141707	AUSTRALIA PTY LTD AUSCAN	RESIDENTIAL DWELLING PATIO - UNCERTIFIED	206	EAST LOWANNA DRIVE	Lot 172	MARBELUP
141647	S ORO	PATIO - UNCERTIFIED	13	BRADY CORNER	Lot 563	MCKAIL
141682	J & TW DEKKER PTY	NEW DWELLING -	11	BOUNDARY	Lot 205	MCKAIL
141688	LTD MCB CONSTRUCTION PTY LTD	UNCERTIFIED PATIO - UNCERTIFIED	3	STREET ENDEAVOUR WAY	Lot 100	MCKAIL

Application Number	Builder	Description of Application	Street #	Property Description	Street Address	Suburb
141679	KARL METZ MOBILE	PATIO - UNCERTIFIED	129	LANCASTER	Lot 378	MCKAIL
141441	WELDING R CHARLES	PATIO - UNCERTIFIED	63	GLADVILLE ROAD	Lot 176	MCKAIL
141708	OUTDOOR WORLD	NEW GARAGE - (CHANGE TO PREVIOUSLY APPROVED BP141488 ADDING SHED - UNCERTIFIED	34	ALFRED STREET ROAD	Lot 1	MCKAIL
141709	ALBANY RYDE BUILDING	SHED - UNCERTIFIED	49	EDINBURGH ROAD	Lot 27	MCKAIL
141717	COMPANY PTY LTD WREN (WA) PTY LTD	SINGLE STOREY RESIDENTIAL DWELLING - UNCERTIFIED NEW DWELLING -	5	CENTAURUS TERRACE	Lot 660	MCKAIL
141730	RYDE BUILDING	UNCERTIFIED NEW DWELLING -	50	CENTAURUS TERRACE	Lot 236	MCKAIL
141698	COMPANY PTY LTD TAYLOR	UNCERTIFIED SHED - UNCERTIFIED	6	MCGONNELL ROAD	Lot 2	MCKAIL
141683	OUTDOOR WORLD	DOMED ROOF PATIO - UNCERTIFIED BUILDING APPROVAL CERTIFICATE - UNAPPROVED CHANGES	4	GARDEN STREET	Lot 138	MIDDLETON
141712	ALBANY M HANIKERI	UNCERTIFIED BUILDING APPROVAL CERTIFICATE - UNAPPROVED CHANGES	3	CHECKERS STREET	Lot 11	BEACH MIDDLETON
141726	RANBUILD GREAT	TO DWELL CARPORT X2 -	38-42	WALK MARINE	Lot 1218	BEACH MIDDLETON
141656	SOUTHERN RYDE BUILDING	UNCERTIFIED ANCILLARY ACCOMMODATION - UNCERTIFIED PATIO - UNCERTIFIED	95	RUFUS STREET TERRACE	Lot 114	BEACH MILPARA
141692	COMPANY PTY LTD AUSCAN	UNCERTIFIED PATIO - UNCERTIFIED	5	MARY STREET	Lot 180	MILPARA
141734	CONSTRUCTION PS O'NEIL	RE-CLADDING WALLS TO EXISTING DWELLING AND NEW PATIO - CERT	1	SUFFOLK STREET	Lot 704	MOUNT CLARENCE

Application Number	Builder	Description of Application	Street #	Property Description	Street Address	Suburb
141728	DOWNRITE DEMOLITION	RETAINING WALLS -	133	MIDDLETON	Lot 5	MOUNT
141722	AUSTRALIA PTY LTD RIDE BUILDING	UNCERTIFIED SINGLE STOREY RESIDENTIAL DWELLING -	2	MAWSON ROAD	Lot 291	CLARENCE MOUNT
141703	COMPANY PTY LTD MURRAY RIVER	UNCERTIFIED NEW DWELLING -	1719	STREET REDMOND-HAY	Lot 3	MELVILLE REDMOND
141718	NORTH PTY LTD SIMTINO PTY LTD	CERTIFIED SHED - UNCERTIFIED	89	RIVER ROAD HOME ROAD	Lot 533	WEST ROBINSON
141663	IRONMONGER BUILDING COMPANY PTY LTD	ALTERATION & ADDITION ALFRESCO - UNCERTIFIED NEW DWELLING -	85-87	ANGOVE ROAD	Lot 49	SPENCER PARK
141699	PLUNKETT HOMES	UNCERTIFIED NEW DWELLING -	41	GEAKE STREET	Lot 2	SPENCER PARK
141704	(1903) PTY LTD RF WILSON	UNCERTIFIED DOMESTIC BOAT SHED & RETAINING WALL -	58	DAVID STREET	Lot 144	SPENCER PARK
141713	J & C DECLARADOR	UNCERTIFIED PATIO - UNCERTIFIED	96	ULSTER ROAD	Lot 610	SPENCER PARK
141721	TM STEEL CONSTRUCTION & CONTRACTING P/L	PATIO - UNCERTIFIED	4	ANDREWS STREET	Lot 40	SPENCER PARK
141474	K & T CASTLEHOW	ALTERATIONS &	359	PERKINS BEACH	Lot 222	TORBAY
141702	BUILDERS RYDE BUILDING	ADDITIONS - CERTIFIED NEW DWELLING -	9	OWEN COURT ROAD	Lot 247	WARRENUP
141668	COMPANY PTY LTD KOSTERS OUTDOOR PTY LTD	UNCERTIFIED PATIO - CERTIFIED		WINDSOR ROAD	Lot 49	WELLSTEAD
141691	NJ & RD	NEW DWELLING & GARAGE - UNCERTIFIED		WESTON RIDGE	Lot 807	WILLYYUNG
141720	GROENEWOLD MCB CONSTRUCTION PTY LTD	SHED - UNCERTIFIED		GREENWOOD DRIVE	Lot 726	WILLYYUNG



Application Number	Builder	Description of Application	Street #	Property Description	Street Address	Suburb
141737	HOME GROUP WA	NEW DWELLING -		WESTON RIDGE	Lot 814	WILLYUNG
141664	GREAT SOUTHERN PTY LTD J & T PETTIT	UNCERTIFIED GARAGE EXTENSION - UNCERTIFIED	27	SYDNEY STREET	Lot 28	YAKAMIA

**City of Albany**  
**MONTHLY FINANCIAL REPORT**  
**For the Period Ended 31st July 2015**

**TABLE OF CONTENTS**

Compilation Report

Statement of Financial Activity

Note 1 Major Variances

Note 2 Net Current Funding Position

Note 3 Cash and Investments

Note 3A Cash and Investments- Graphical Representation

Note 4 Receivables

Note 5 Capital Acquisitions

City of Albany  
Compilation Report  
For the Period Ended 31st July 2015

**Report Purpose**

This report is prepared to meet the requirements of Local Government (Financial Management) Regulations 1996, Regulation 34 .

**Overview**

No matters of significance are noted.

**Statement of Financial Activity by reporting nature or type**

Is presented on page 3 and shows a surplus For the Period Ended 31st July 2015 of \$40,100,617.

Note: The Statements and accompanying notes are prepared based on all transactions recorded at the time of preparation and may vary.

**Preparation**

Prepared by: S Beech  
Reviewed by: D Olde  
Date prepared: 18/08/2015

**City of Albany**  
**STATEMENT OF FINANCIAL ACTIVITY**  
**(Nature or Type)**  
**For the Period Ended 31st July 2015**

	Note	Original Annual Budget	Revised Annual Budget	YTD Budget (a)	YTD Actual (b)	Var. \$ (b)-(a)	Var. % (b)-(a)/(b)	
<b>Operating Revenues</b>			\$	\$	\$	\$	%	
Rate Revenue		32,446,624	32,446,624	32,446,624	31,886,662	(559,962)	(1.8%)	▼
Grants & Subsidies		2,861,525	2,861,525	49,135	26,430	(22,705)	(85.9%)	
Contributions, Donations & Reimbursements		503,577	503,577	60,204	22,242	(37,962)	(170.7%)	
Profit on Asset Disposal		778,817	778,817	57,191	0	(57,191)	(100.0%)	▼
Fees and Charges		16,773,408	16,773,408	6,310,022	6,161,853	(148,169)	(2.4%)	▼
Interest Earnings		1,067,515	1,067,515	88,924	56,690	(32,234)	(56.9%)	
Other Revenue		367,000	367,000	30,571	15,685	(14,886)	(94.9%)	
<b>Total (Excluding Rates)</b>		<b>54,798,466</b>	<b>54,798,466</b>	<b>39,042,671</b>	<b>38,169,562</b>	<b>(313,147)</b>		
<b>Operating Expense</b>								
Employee Costs		(24,064,424)	(24,064,424)	(1,885,423)	(1,338,831)	546,592	40.8%	▼
Materials and Contracts		(18,217,273)	(18,217,273)	(1,549,096)	(674,867)	874,229	129.5%	▼
Utilities Charges		(1,880,911)	(1,880,911)	(152,938)	13,815	166,753	(1207.0%)	▼
Depreciation (Non-Current Assets)		(15,906,098)	(15,906,098)	(1,324,983)	(1,324,983)	0	0.0%	
Interest Expenses		(1,031,072)	(1,031,072)	(32,708)	50	32,758	(66017.0%)	
Insurance Expenses		(807,919)	(807,919)	(65,902)	0	65,902	100.0%	▼
Loss on Asset Disposal		(2,801)	(2,801)	0	0	0		
Other Expenditure		(2,438,340)	(2,438,340)	(144,660)	(142,937)	1,723	1.2%	
Less Allocated to Infrastructure		864,475	864,475	72,174	113,393	41,219	36.4%	
<b>Total</b>		<b>(63,484,363)</b>	<b>(63,484,363)</b>	<b>(5,083,536)</b>	<b>(3,354,360)</b>	<b>1,729,176</b>		
<b>Contributions for the Development of Assets</b>								
Grants & Subsidies		20,498,747	20,498,747	118,061	675,083	557,022	82.5%	▲
Contributions, Donations & Reimbursements		613,000	613,000	2,499	4,857	2,358	48.5%	
<b>Net Operating Result Excluding Rates</b>		<b>12,425,850</b>	<b>12,425,850</b>	<b>34,079,695</b>	<b>35,495,142</b>	<b>1,973,051</b>		
<b>Funding Balance Adjustment</b>								
Add Back Depreciation		15,906,098	15,906,098	1,324,983	1,324,983	0	0.0%	
Adjust (Profit)/Loss on Asset Disposal		(776,016)	(776,016)	(57,191)	0	57,191	100.0%	▼
<b>Funds Demanded From Operations</b>		<b>27,555,932</b>	<b>27,555,932</b>	<b>35,347,487</b>	<b>36,820,125</b>	<b>1,472,638</b>		
<b>Capital Revenues</b>								
Proceeds from Disposal of Assets		1,528,590	1,528,590	127,331	0	(127,331)	(100.0%)	▼
<b>Total</b>		<b>1,528,590</b>	<b>1,528,590</b>	<b>127,331</b>	<b>0</b>	<b>(127,331)</b>		
<b>Acquisition of Fixed Assets</b>								
Land and Buildings	5	(5,475,609)	(5,475,609)	(282,968)	(35,083)	247,885	706.6%	▼
Plant and Equipment	5	(5,082,613)	(5,082,613)	(366,768)	(200,497)	166,271	82.9%	▼
Furniture and Equipment	5	(801,493)	(801,493)	(18,494)	(565)	17,929	3175.9%	
Infrastructure Assets - Roads	5	(5,163,717)	(5,163,717)	(18,430)	(15,635)	2,795	17.9%	
Infrastructure Assets - Other	5	(23,044,151)	(23,044,151)	(1,676,484)	(347,438)	1,329,046	382.5%	▼
<b>Total</b>		<b>(39,567,583)</b>	<b>(39,567,583)</b>	<b>(2,363,144)</b>	<b>(599,217)</b>	<b>1,763,927</b>		
<b>Financing/Borrowing</b>								
Debt Redemption		(1,819,703)	(1,819,703)	0	(19,833)	(19,833)	(100.0%)	
Loan Drawn Down		600,000	600,000	49,980	0	(49,980)	100.0%	
<b>Total</b>		<b>(1,219,703)</b>	<b>(1,219,703)</b>	<b>49,980</b>	<b>(19,833)</b>	<b>(69,813)</b>		
<b>Demand for Resources</b>		<b>(11,702,764)</b>	<b>(11,702,764)</b>	<b>33,161,654</b>	<b>36,201,074</b>	<b>3,039,420</b>		
<b>Restricted Funding Movements</b>								
Opening Funding Surplus(Deficit)		3,149,428	3,149,428	3,149,428	3,207,565	58,137	1.8%	▼
Restricted Cash Utilised		2,712,556	2,712,556	993,306	691,978	(301,328)	(43.5%)	▼
Transfer to Reserves		(12,688,843)	(12,688,843)	(42,484)	0	42,484	100.0%	
Transfer from Reserves		18,529,625	18,529,625	0	0	0		
<b>Closing Funding Surplus(Deficit)</b>	2	<b>0</b>	<b>0</b>	<b>37,261,898</b>	<b>40,100,617</b>	<b>2,838,713</b>		



# REPORT ITEM CSF 192 REFERS

City of Albany  
NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY  
For the Period Ended 31st July 2015

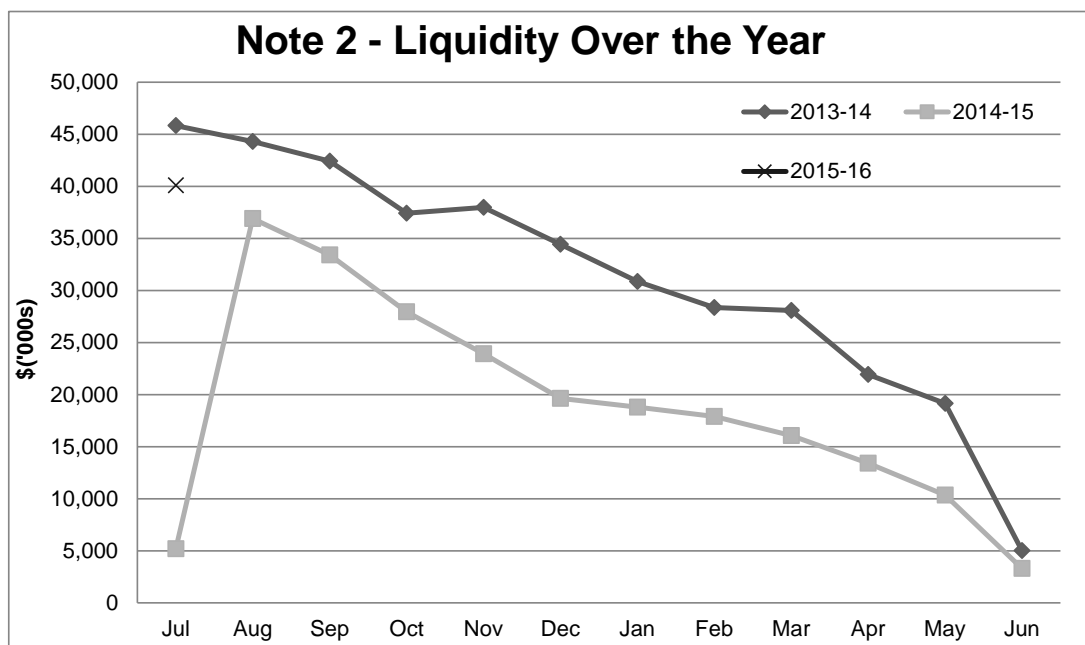
**Note 1: EXPLANATION OF MATERIAL VARIANCES IN EXCESS OF \$50,000**

	Var.	Var.	Timing/ Permanent	Explanation of Variance
	\$			
<b>1.1 Operating Revenues</b>				
Rate Revenue	(559,962)	▼	Timing	Rates raised, expect to be to budget over the year as backrates and interim rates billed during the year.
Grants & Subsidies	(22,705)			No material variance.
Contributions, Donations & Reimbursements	(37,962)			No material variance.
Profit on Asset Disposal	(57,191)	▼	Timing	No assets disposed year to date.
Fees and Charges	(148,169)	▼	Timing	No single variance. Timing of budget phasing.
Interest Earnings	(32,234)			No material variance.
Other Revenue	(14,886)			No material variance.
<b>1.2 Operating Expense</b>				
Employee Costs	546,592	▼	Timing	Timing of year end adjustment. Part of first pay accrued back to 2014/15 financial year.
Materials and Contracts	874,229	▼	Timing	Timing of invoices and year end adjustments. At time of compilation of report, a number of July invoices for contract not yet received (such as waste contract and a number of service contracts)
Utilities Charges	166,753	▼	Timing	Timing of receipt of invoices. Expect to be to budget over the whole year.
Depreciation (Non-Current Assets)	0			No material variance.
Interest Expenses	32,758			No material variance.
Insurance Expenses	65,902	▼	Timing	Phasing of budget. Part of budget allocated to July, invoice not yet received.
Loss on Asset Disposal	0			No material variance.
Other Expenditure	1,723			No material variance.
Less Allocated to Infrastructure	41,219			No material variance.
<b>1.3 Contributions for the Development of Assets</b>				
Grants & Subsidies	557,022	▲	Timing	Timing of road grants (budgeted for receipt in August, actual receipt July).
Contributions, Donations & Reimbursements	2,358			No material variance.
<b>1.4 Funding Balance Adjustment</b>				
Add Back Depreciation	0			No material variance.
Adjust (Profit)/Loss on Asset Disposal	57,191	▼	Timing	No assets disposed year to date.
<b>1.5 Capital Revenues</b>				
Proceeds from Disposal of Assets	(127,331)	▼	Timing	Timing of plant replacement program. Expect to be to budget over the year.
<b>1.6 Acquisition of Fixed Assets</b>				
Land and Buildings	247,885	▼	Timing	Budget timing of carried forward project - CPSP. Expect to be budget over life of the project.
Plant and Equipment	166,271	▼	Timing	Timing of plant replacement program. Expect to be to budget over the year.
Furniture and Equipment	17,929			No material variance.
Infrastructure Assets - Roads	2,795			No material variance.
Infrastructure Assets - Other	1,329,046	▼	Timing	Budget timing of carried forward project - CPSP. Expect to be budget over life of the project.
<b>1.7 Financing/Borrowing</b>				
Debt Redemption	(19,833)			No material variance.
Loan Drawn Down	(49,980)			No material variance.
<b>1.8 Restricted Funding Movements</b>				
Opening Funding Surplus(Deficit)	58,137	▼	Timing	Addressed in budget review.
Restricted Cash Utilised - Loan	(301,328)	▼	Timing	Portion of loan drawn down for CPSP not yet used.
Transfer to Reserves	42,484			No material variance.
Transfer from Reserves	0		Timing	Year end/new financial year reserve adjustments to be finalised.

**City of Albany**  
**NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY**  
For the Period Ended 31st July 2015

**Note 2: NET CURRENT FUNDING POSITION**

		Positive=Surplus (Negative=Deficit)		
		2015-16		
Note		This Period	Last Period	Same Period Last Year
		\$	\$	\$
<b>Current Assets</b>				
4	Cash Unrestricted	5,605,789	9,231,025	6,285,396
	Cash Restricted	17,008,282	16,988,365	16,276,209
	Receivable - Rates and Rubbish	40,804,109	1,069,724	937,662
	Receivables - Other	1,871,761	2,615,938	2,057,484
	Investments - LG Unit Trust Shares	220,474	220,474	0
	Accrued Income	117,449	228,032	0
	Prepaid Expenses	39,983	266,468	9,012
	Investment Land	303,950	303,950	735,409
	Stock on Hand	768,060	770,043	841,014
		66,739,856	31,694,019	27,142,186
<b>Less: Current Liabilities</b>				
	Payables	(5,027,337)	(5,432,207)	(3,127,779)
	Accrued Expenses	(36,993)	(262,096)	0
	Income in advance	(244,040)	(300,887)	(521,173)
	Provisions	(3,576,933)	(4,068,251)	(3,254,177)
	Retentions	(328,272)	(328,272)	(149,018)
		(9,213,575)	(10,391,713)	(7,052,147)
	Add Back: Loans	1,837,893	1,857,727	1,503,397
	Less: Cash Restricted	(16,722,149)	(16,722,149)	(15,650,632)
	Utilised - Loan	(2,016,985)	(2,608,963)	0
	Investment land	(303,950)	(303,950)	(735,409)
	Investments - LG Unit Trust Shares	(220,474)	(220,474)	0
	<b>Net Current Funding Position</b>	<b>40,100,617</b>	<b>3,304,497</b>	<b>5,207,395</b>



Comments - Net Current Funding Position

**City of Albany**  
**NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY**  
**For the Period Ended 31st July 2015**

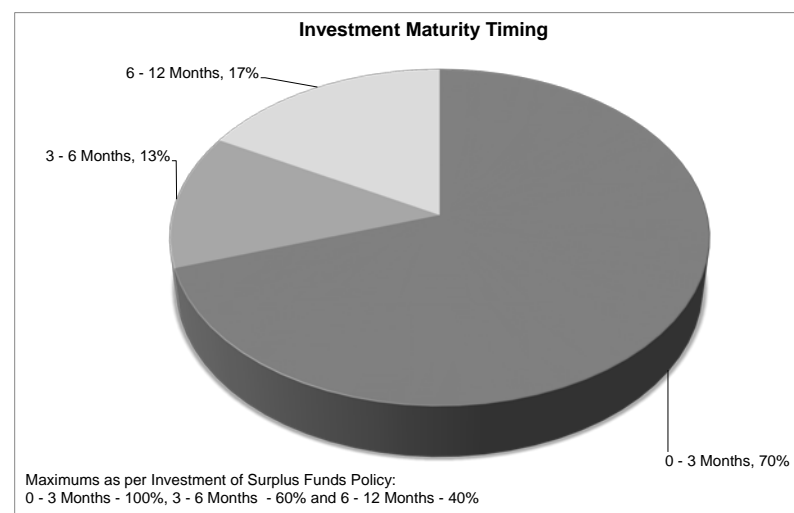
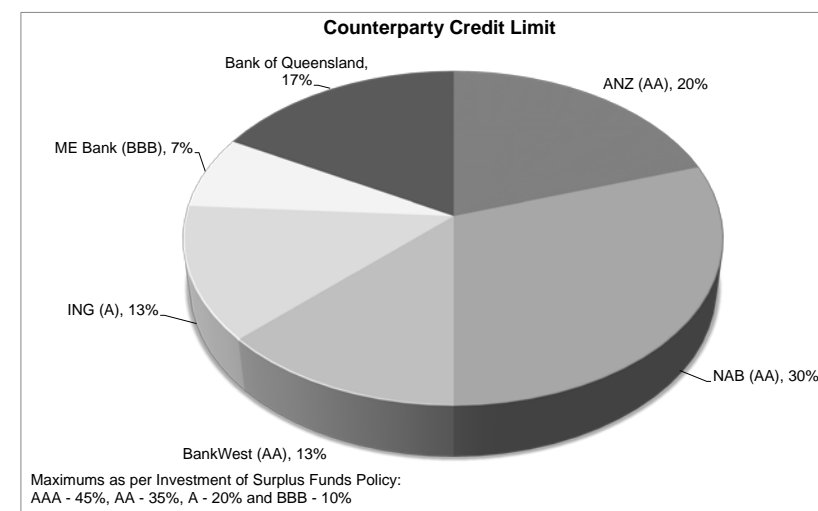
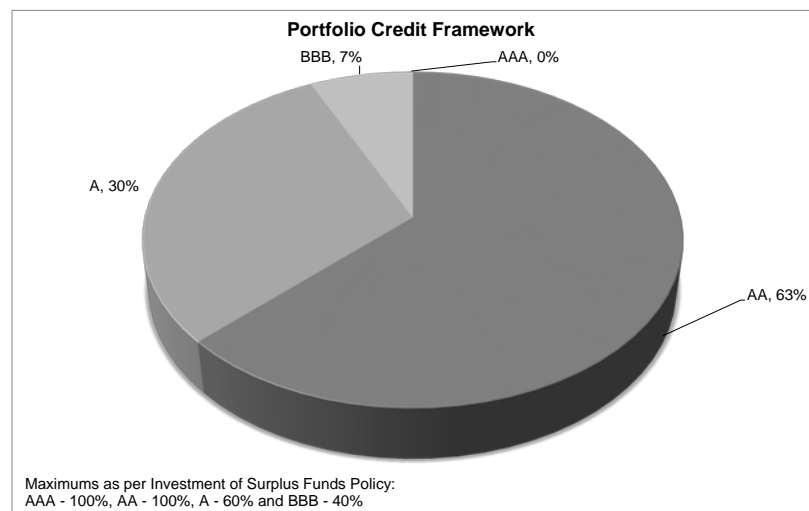
**Note 3: CASH INVESTMENTS**

Deposit Ref	Institution	Rating	Deposit Date	Term (Days)	Invested Interest rates	Amount Invested	Expected Interest	Amount Invested (Days)			Comparative rate		Budget v Actual			
								0 - 3 Months	3 - 6 Months	6 - 12 Months	Prior Month Interest Rate	Interest Rate at time of Report	Year to Date Budget	Year to Date Actual	Var.\$	
General Municipal																
TD 1116	NAB	AA	29/07/2015	30	2.30%	1,000,000	1,890	1,000,000			2.30%	2.30%				
TD 385	NAB	AA	6/07/2015	60	2.72%	1,000,000	4,471	1,000,000			2.43%	2.72%				
TD 64724	ME Bank	BBB	24/07/2015	31	2.30%	1,000,000	1,953	1,000,000			2.30%	2.30%				
						Subtotal		3,000,000		8,315			49,980	17,036	32,944	
Restricted																
TD 322626	Bank of Queensland	A	6/11/2014	270	3.50%	2,500,000	64,726			2,500,000	3.50%	3.50%				
TD 128398	ING	A	9/03/2015	180	3.04%	2,000,000	29,984		2,000,000		3.04%	3.04%				
TD 69843	ANZ	AA	1/07/2015	31	2.10%	3,000,000	5,351	3,000,000			2.60%	2.10%				
TD 4271047	BankWest	AA	3/06/2015	61	2.60%	2,000,000	8,690	2,000,000			3.50%	2.60%				
TD 3749	NAB	AA	27/07/2015	30	2.28%	2,500,000	4,685	2,500,000			2.93%	2.28%				
						Subtotal		12,000,000		113,436			16,660	30,362	(13,702)	
						Total Funds Invested		15,000,000		121,751			66,640	47,398	19,242	

Comments/Notes - Cash Investments

**City of Albany**  
**Monthly Investment Report**  
**For the Period Ended 31st July 2015**

**Note 3A: GRAPHICAL REPRESENTATION - CASH INVESTMENTS**





**City of Albany**  
**NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY**  
**For the Period Ended 31st July 2015**

**Note 4: RECEIVABLES****Receivables - Rates and Refuse**

Opening Arrears Previous Years

Rates Levied this year

Refuse Levied

ESL Levied

Other Charges Levied

Less Collections to date

Equals Current Outstanding

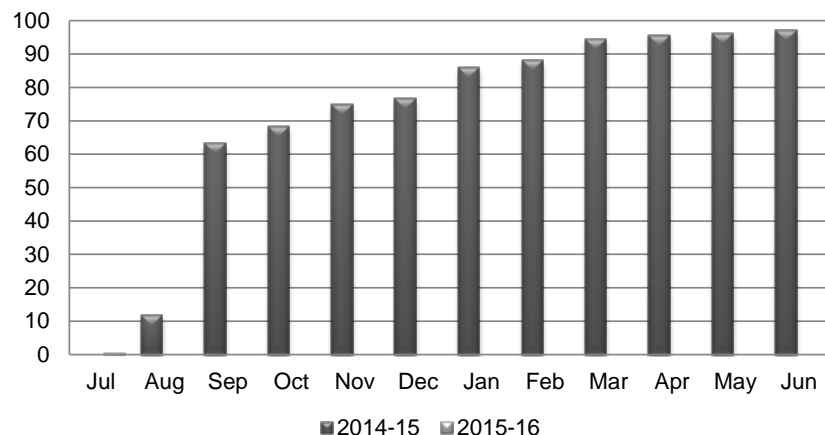
**Total Rates & Charges Collectable**

% Collected

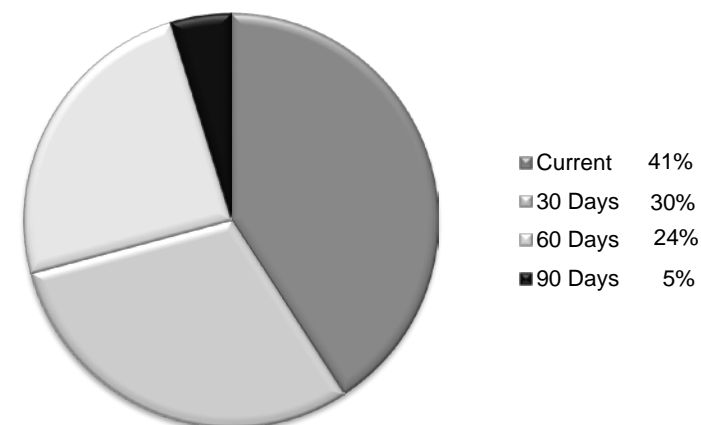
Current 2015-16	Previous 2014-15	Total
\$	\$	\$
	1,068,405	1,068,405
31,886,662		31,886,662
5,563,749		5,563,749
2,488,112		2,488,112
9,897		9,897
(102,978)	(109,738)	(212,716)
<b>39,845,442</b>	<b>958,667</b>	<b>40,804,109</b>
		<b>40,804,109</b>
		0.52%

**Receivables - General**

Current	30 Days	60 Days	90 Days
\$	\$	\$	\$
478,943	352,486	286,446	55,496
			<b>1,173,370</b>

**Total Outstanding****Amounts shown above include GST (where applicable)****Note 4 - Rates & Refuse % Collected**

Comments/Notes - Receivables Rates and Refuse

**Note 4 - Accounts Receivable (non-rates)**

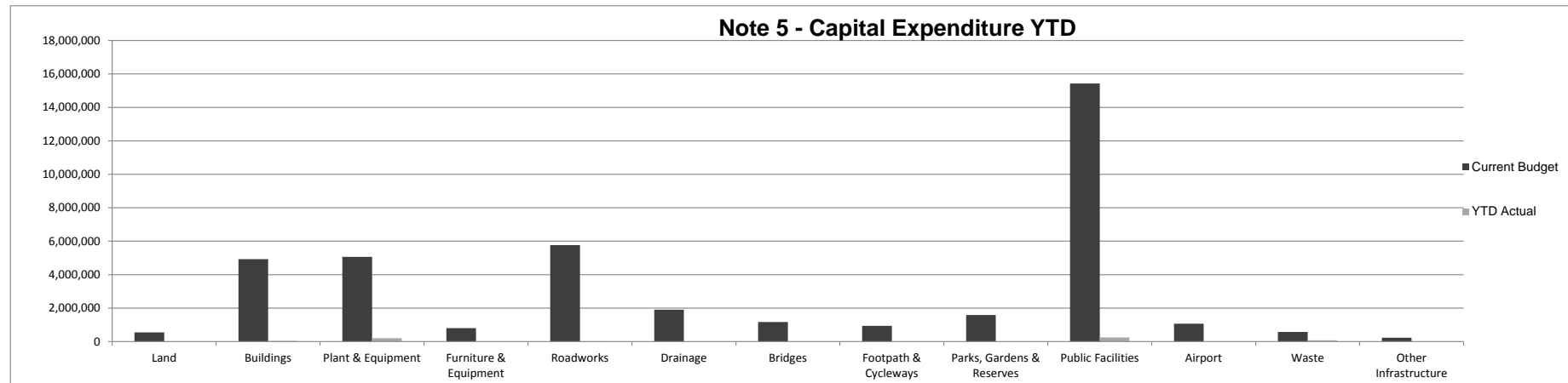
Comments/Notes - Receivables General

City of Albany  
NOTES TO THE STATEMENT OF FINANCIAL ACTIVITY  
For the Period Ended 31st July 2015

## Note 5: CAPITAL ACQUISITIONS

Contributions Information					Summary Acquisitions					
Grants	Reserves	Borrowing	Restricted	Total		Original Budget	Current Budget	YTD Budget	Actual	Variance
\$	\$	\$		\$		\$			\$	\$
0	0	0	0	0	<b>Property, Plant &amp; Equipment</b>	513,516	549,100	0	450	450 ▲
2,458,000	595,000	0	0	3,053,000	Land	4,962,093	4,929,503	282,968	34,633	(248,335) ▼
0	1,009,485	0	520,000	1,529,485	Buildings	5,082,613	5,064,704	366,768	200,497	(166,271) ▼
0	268,688	0	0	268,688	Plant & Equipment	801,493	801,493	18,494	565	(17,929) ▼
					Furniture & Equipment					
					<b>Infrastructure</b>					
3,521,492	272,000	0	0	3,793,492	Roadworks	5,163,717	5,765,760	18,430	15,635	(2,795) ▼
350,000	0	0	0	350,000	Drainage	1,905,071	1,905,071	21,908	65	(21,843) ▼
1,140,000	26,331	0	0	1,166,331	Bridges	1,166,331	1,166,331	0	321	321 ▲
246,650	0	0	0	246,650	Footpath & Cycleways	1,031,112	940,140	5,500	9,450	3,950 ▲
497,798	0	0	0	497,798	Parks, Gardens & Reserves	1,636,208	1,587,659	154,008	9,160	(144,848) ▼
12,272,807	50,000	600,000	2,192,556	15,115,363	Public Facilities	15,429,039	15,425,447	1,340,436	249,284	(1,091,152) ▼
575,000	495,000	0	0	1,070,000	Airport	1,070,000	1,070,000	72,471	354	(72,471) ▼
0	581,390	0	0	581,390	Waste	581,390	573,154	68,000	75,767	7,767 ▲
30,000	0	0	0	30,000	Other Infrastructure	225,000	225,000	14,161	3,037	(11,124) ▼
<b>21,091,747</b>	<b>3,297,894</b>	<b>600,000</b>	<b>2,712,556</b>	<b>27,702,197</b>	<b>Totals</b>	<b>39,567,583</b>	<b>40,003,362</b>	<b>2,363,144</b>	<b>599,217</b>	<b>(1,764,281)</b>

Comments - Capital Acquisitions



TRUST CHEQUES AND ELECTRONICS FUNDS TRANSFER PAYMENTS

EFT/CHQ	Date	Name	Description	Amount
			Total	\$ -

MASTERCARD TRANSACTIONS - JULY

Date	Payee	Description	Amount
11/07/15	Fraser Suites Perth	Accommodation - D. Putland - Regional Centre Collaborative Forum	543.03
24/07/15	Novotel Northbeach, Wollongong	Accommodation - J. van der Mescht - ICTC & Mainstreet Conference	590.73
24/07/15	Novotel Northbeach, Wollongong	Accommodation - T. Wenbourne - ICTC & Mainstreet Conference	590.73
30/06/15	ICTC Society Inc	Conference Fee - Cr. Hollingworth - ICTC Mainstreet	1,195.00
30/06/15	Lastminute.com.au	Accommodation - Cr. Price - WALGA Conference	363.80
30/06/15	WOTIF	Accommodation - Mayor Wellington - RCDP Regional Centres Collaborative Forum	265.00
1/07/15	Virgin	Airfare - Cr. Hollingworth - ICTC Conference	362.70
7/07/15	Virgin	Airfare - Cr. Price - WALGA Conference	435.97
7/07/15	WOTIF	Accommodation - Mayor Wellington - Sydney, ICTC Conference	447.00
8/07/15	Qantas	Airfare - Mayor Wellington - ICTC Conference - Perth - Sydney - Perth	637.00
8/07/15	Virgin	Airfare - Mayor Wellington - ICTC Conference - Albany - Perth - Albany	395.16
16/07/15	Novotel Langley, Perth	Accommodation - R. Stephens - Public Sector Women In Leadership Summit	567.80
24/07/15	Novotel Northbeach, Wollongong	Accommodation and Meals - Mayor Wellington - ICTC Conference	810.99
24/07/15	Chifley, Wollongong	Accommodation - Cr. Hollingworth - ICTC Conference	561.56
27/06/15	Ibis Hotel Perth	Accommodation - M. Mcrae - Archives Record Training	444.57
30/06/15	Virgin	Airfare - G. Foster - Tourism Board Meeting - Albany - Perth - Albany	445.63
1/07/15	Virgin	Airfare - R. Param - Workshop - Albany - Perth - Albany	468.49
6/07/15	WOTIF	Accommodation - R. Batten & R. Stephens - Civic Reception	580.00
7/07/15	Virgin	Airfare - R. Batten - Civic Reception - - Albany - Perth - Albany	395.16
7/07/15	Virgin	Airfare - R. Stephens - Civic Reception - - Albany - Perth - Albany	395.16
11/07/15	Virgin	Airfare - G. Foster - Tourism Board Meeting - Albany - Perth - Albany	374.95
17/07/15	Virgin	Airfare - A. McEwan - ICTC Conference - Albany - Sydney - Albany	1,880.97
21/07/15	The Grace Hotel	Meals - A. McEwan - ICTC Conference	255.78
22/07/15	Hybla	Meeting - G. Foster, R. Batten & C. Woods	277.00
23/07/15	Virgin	Airfares - A. McEwan & M. Randall - Premiers Award - Albany - Perth - Albany	635.20
24/07/15	Ibis Hotel Perth	Accommodation - A. Cousins, A. McEwan & M. Randall - Premiers Awards	594.00
25/07/15	Novotel Northbeach, Wollongong	Accommodation & Meals - A. McEwan - ICTC Conference	736.89
30/06/15	Our Community Pty Ltd	Funding Centre Membership	400.00
30/06/15	Flight Centre Albany	Airfare - S. Platt - OHS Training Facilitator	341.63
16/07/15	Ibis Hotel Perth	Accommodation - L. Battison - IT Training	954.00
23/07/15	Avangate Edrawsoft.com	Diagram Software for HR	362.79
27/06/15	Virgin	Airfare - I. Geidans - Albany to Perth Return - Albany Art Prize	518.96
2/07/15	Virgin	Airfare -M. Ryan - Newcastle to Perth - Albany Art Prize Judge	554.99
2/07/15	Virgin	Airfare -M. Ryan - Perth to Albany - Albany Art Prize Judge	201.40
2/07/15	Virgin	Airfare -M. Ryan - Perth to Melbourne - Albany Art Prize Judge	316.70
10/07/15	Fraser Suites Perth Accommodation	Accommodation -C. Woods - Regional Centres Collaborative Forum & DSR/Project3/WALGA Meetings	343.07
18/07/15	Virgin	Airfares - A. Cousins - Albany to Perth - Premiers Awards	538.68
23/07/15	Varidesk	Ergonomic Workstation	544.00
24/07/15	Tourism Council	2015 Tourism WA Conference Registration - C. Woods	525.00
24/07/15	Novotel Northbeach, Wollongong	Accommodation - A. Cousins - ICTC & Mainstreet 2015 Conference	514.61
27/06/15	Thermo Fisher Scientific	Water Sampling and Analysis	1,349.10
29/06/15	Johnny Appleseed GPS	Two handheld GPS Units for Reserves	766.60
29/06/15	Informsubscriptions	Licence Renewal - Earthmover and Civil Contractor Guide	253.00
23/07/15	Western Australian Museum	Science Conference - 7 Attendees from City Reserves	385.00
Various	Various	Sundry < \$ 200.00	2,915.01
		Total	\$ 27,034.81

PAYROLL 16/07/2015-15/08/2015

Date	Description	Amount
23/07/2015	COA-Salaries	\$ 565,273.38
24/07/2015	Sundry Pay	\$ 1,482.84
27/07/2015	Sundry Pay	\$ 224.37
27/07/2015	Sundry Pay	\$ 204.19
27/07/2015	Sundry Pay	\$ 1,809.21
29/07/2015	Sundry Pay	\$ 2,764.28
31/07/2015	Sundry Pay	\$ 28,340.28
6/08/2015	COA-Salaries	\$ 563,277.65
12/08/2015	Sundry Pay	\$ 1,081.68
14/08/2015	Sundry Pay	\$ 200.00
14/08/2015	Sundry Pay	\$ 4,803.40
14/08/2015	Sundry Pay	\$ 7,576.03
	Total	\$ 1,177,037.31

## REPORT ITEM CSF 193 REFERS

Chq	Date	Name	Description	Amount
30702	16/07/2015	I EXPRESS TRANSFERS & TOURS	Pick up and collection fees	190.00
30703	16/07/2015	SUSIE NELSON	Reimburse Fee For Building Permit	95.00
30704	16/07/2015	DAVID LAVERY	Refund Of Dog Registration	150.00
30705	16/07/2015	CITY OF STIRLING	Lost And Damaged Items	28.60
30706	16/07/2015	SENSIS PTY LTD	Business Essentials, South Western 2015/2016 July 2015	41.80
30707	16/07/2015	PETTY CASH - CITY OF ALBANY	Petty Cash Reimbursements	223.45
30708	16/07/2015	PETTY CASH - VANCOUVER ARTS CENTRE	Petty Cash Reimbursement	88.85
30709	16/07/2015	PETTY CASH - NATIONAL ANZAC CENTRE	Petty Cash Reimbursements	188.45
30710	16/07/2015	PIVOTEL SATELLITE PTY LIMITED	Satellite Phone Charges	250.00
30711	16/07/2015	TELSTRA CORPORATION LIMITED	Telephone Charges	17937.68
30712	16/07/2015	VODAFONE PTY LTD	SMS Services	48.99
30713	16/07/2015	WATER CORPORATION	Water Charges Various locations	6318.14
30714	23/07/2015	MICHAEL COOK	Crossover Subsidy	155.60
30715	23/07/2015	GIRL GUIDES GREAT SOUTHERN	Kidsport Vouchers	182.00
30716	23/07/2015	TELSTRA CORPORATION LIMITED	Telephone Charges	29.95
30717	23/07/2015	WATER CORPORATION	Water Charges Various locations	1801.94
30718	23/07/2015	PETTY CASH - PLANNING AND DEVELOPMENT SERVICES	Petty Cash Reimbursements	233.65
30719	30/07/2015	DUNKELD CONTRUCTION	Reimburse Fee For Planning Application	400.00
30720	30/07/2015	DEAN & ELIZABETH HARDING	Crossover Subsidy	123.21
30721	30/07/2015	BARRY PANIZZA	Payment For Sustenance Fees For Impounding Of Two Steers	151.80
30722	30/07/2015	TAMATHA EMIN	Crossover Subsidy	167.38
30723	30/07/2015	DEPARTMENT OF TRANSPORT	Vehicle Registration	305.10
30724	30/07/2015	DEPARTMENT OF JUSTICE - FINES ENFORCEMENT	Unpaid Infringements Sent To FER	2028.00
30725	30/07/2015	PIVOTEL SATELLITE PTY LIMITED	Satellite Phone Charges - Spot Tracking	93.00
30726	30/07/2015	TELSTRA CORPORATION LIMITED	Mobile Telephone Charges	13974.75
30727	30/07/2015	WATER CORPORATION	Trade Waste Fee 01/07/15 To 30/06/2016 Princess Royal Dr	900.76
30728	31/07/2015	PETTY CASH - ALBANY AQUATIC AND LEISURE CENTRE	Social Netball Umpire Payments	1680.00
30729	6/08/2015	CLIVE BROOKS	Crossover Subsidy	152.66
30730	6/08/2015	DAMON ANNISON	Forts Merchandise	96.00
30731	6/08/2015	STEVES CABINETS	Supply And Installation Of Cabinet Work At Airport Cafeteria	2862.20
30732	6/08/2015	TELSTRA CORPORATION LIMITED	Telephone Charges - Irrigation	192.95
30733	6/08/2015	WATER CORPORATION	Water Charges Various locations	1808.30
30734	13/08/2015	JEAN ANDERSON	Claim File Ref: RM.CLM.250	400.00
30735	13/08/2015	DEPARTMENT OF TRANSPORT	Amazing Albany Number Plates	200.00
30736	13/08/2015	DEPARTMENT OF TRANSPORT	Boat Registration Certificate	110.00
30737	13/08/2015	PETTY CASH - VISITORS CENTRE	Petty Cash Reimbursement	155.10
30738	13/08/2015	PETTY CASH - NATIONAL ANZAC CENTRE	Petty Cash Reimbursement	181.70
30739	13/08/2015	TELSTRA CORPORATION LIMITED	Mobile Phone Charges	130.95
30740	13/08/2015	WATER CORPORATION	Water Consumption For Trade Waste Permit 47047	799.52

**TOTALS****\$ 54,877.48**



## REPORT ITEM CSF 193 REFERS

EFT	Date	Name	Description	Amount
EFT101106	16/07/2015	JADES @14 PEELS PLACE	Catering	245.00
EFT101107	16/07/2015	AD CONTRACTORS PTY LTD	Heavy Plant Hire & Screening Sand	17,805.00
EFT101108	16/07/2015	AIRSERVICES AUSTRALIA	2015 Jan - March Quarter - Albany ILS/DME Performance Inspection And Maintenance	46,051.26
EFT101109	16/07/2015	ALBANY TOYOTA	Hilux 4X4 3.0L T/D E/C/C M/T RS 1R61200 002 As Per Quote 4140	38,353.91
EFT101110	16/07/2015	ALBANY V-BELT AND RUBBER	Filters/Vehicle Parts	317.74
EFT101111	16/07/2015	ALBANY STATIONERS	Stationery Supplies	13.90
EFT101112	16/07/2015	ALBANY AGRICULTURAL SOCIETY INCORPORATED	Community Event Sponsorship Program	3,850.00
EFT101113	16/07/2015	ALBANY AUTO 1	Jumper Leads	270.00
EFT101114	16/07/2015	ALBANY MARITIME FOUNDATION	Community Funding And Event Sponsorship Program - Festival Of The Sea 2016	4,400.00
EFT101115	16/07/2015	ALBANY OFFICE PRODUCTS DEPOT	50 X LEO Indoor / Outdoor Chairs/Stationery Supplies	6,330.75
EFT101116	16/07/2015	ALBANY MILK DISTRIBUTORS	Milk Deliveries	51.30
EFT101117	16/07/2015	ALBANY RECORDS MANAGEMENT	Storage Of Archive Boxes - July 2015	99.00
EFT101118	16/07/2015	AMPAC DEBT RECOVERY (WA) PTY LTD	Rates Debt Recovery	581.35
EFT101119	16/07/2015	AMPHIBIAN PLUMBING AND GAS	Plumbing Repairs/Maintenance	2,375.03
EFT101120	16/07/2015	PAPERBARK MERCHANTS	Newspapers/Books/Magazines/Stationery	3,670.13
EFT101121	16/07/2015	ARDESS NURSERY	Nursery Supplies	145.90
EFT101122	16/07/2015	ASP ALLOY AND STAINLESS PRODUCTS	Mower Blades	1,093.76
EFT101123	16/07/2015	ATC WORK SMART	Casual Staff/Apprentice Fees	15,442.40
EFT101124	16/07/2015	AVENTEDGE PTE LTD	HR Law Masterclass Australia 14 September 2015 - Registration for 2 x staff	2,189.00
EFT101125	16/07/2015	ANTHONY BALL	Fitness Instruction	495.00
EFT101126	16/07/2015	BT EQUIPMENT PTY LTD (TUTT BRYANT EQUIPMENT)	05570688 Fastening Parts/05570687 Adjusting Rail Kit/Air Freight	1,077.00
EFT101127	16/07/2015	BAREFOOT CLOTHING MANUFACTURERS	Purchase Stylecorp Jackets For Admin / Gym Staff	517.70
EFT101128	16/07/2015	SUSAN BARKER	Sales Of Artworks	168.75
EFT101129	16/07/2015	BATTERY WORLD	Battery Purchases	37.00
EFT101130	16/07/2015	BENARA NURSERIES	Nursery Supplies	516.78
EFT101131	16/07/2015	BENNETTS BATTERIES	Battery Purchases	281.60
EFT101132	16/07/2015	BERTOLA HIRE SERVICES ALBANY PTY LTD	Equipment Hire	24.75
EFT101133	16/07/2015	BLOOMIN FLOWERS	2 X Wreath For Friday 3 July For Mayor & Minister Ronaldson	180.00
EFT101134	16/07/2015	BMT OCEANICA PTY LTD	Provision Of Single Remote Imagery Unit And Secure Web Portal	302.50
EFT101135	16/07/2015	BOOEASY AUSTRALIA PTY LTD	Monthly Commission - June 2015	1,359.05
EFT101136	16/07/2015	BRIDGESTONE AUSTRALIA LTD	Q15008(B) - Supply And Fit Bridgestone V-Steel M Traction Radial 20.5R25 Loader Tyre.	3,013.75
EFT101137	16/07/2015	BRILLIANT SILK	National Anzac Centre Merchandise	1,408.00
EFT101138	16/07/2015	CARDNO BSD PTY LTD	Local Area Traffic Management Studies - Albany PS/SHS	11,000.00
EFT101139	16/07/2015	BUNNINGS GROUP LIMITED	Hardware Supplies/Tools	260.36
EFT101140	16/07/2015	C&C MACHINERY CENTRE	Vehicle Maintenance/Parts	388.25
EFT101141	16/07/2015	CALTEX AUSTRALIA PETROLEUM PTY LTD	Starcard Fuel Purchases June 2015	4,960.89
EFT101142	16/07/2015	J & S CASTLEHOW ELECTRICAL SERVICES	Electrical Repairs And Maintenance	29,479.55
EFT101143	16/07/2015	CENTIGRADE MECHANICAL CONTRACTING PTY LTD	Claim 1 For June 2015 Mechanical Services Works	19,699.90
EFT101144	16/07/2015	CIVITAS PROJECTS PTY LTD	Construct New Bin Enclosure Including Concrete Paving	24,244.50
EFT101145	16/07/2015	BIS CLEANAWAY LIMITED	Rubbish Removal Contract	276.25
EFT101146	16/07/2015	COLES SUPERMARKETS AUSTRALIA PTY LTD	Groceries	505.17
EFT101147	16/07/2015	COVS PARTS PTY LTD	Vehicle Parts	115.65
EFT101148	16/07/2015	DOWNER EDI WORKS PTY LTD	7mm Granite AC 50 Blow	2,462.78
EFT101149	16/07/2015	AL CURNOW HYDRAULICS	Hydraulics supplies	515.85
EFT101150	16/07/2015	V J CUSWORTH TRADING AS HARDWARE MAGIC BASSENDEAN	National Anzac Centre Merchandise	175.00
EFT101151	16/07/2015	D & K ENGINEERING	Travel Out To Site And Modify Hooklift Bins	403.70
EFT101152	16/07/2015	DENMARK VISITOR CENTRE	Brochure Racking Fee 1 July 2015 - 30 June 2016	155.00
EFT101153	16/07/2015	LANDGATE - PROPERTY & VALUATIONS	Title Searches	5,287.65
EFT101154	16/07/2015	DEPARTMENT OF TRANSPORT	Vehicle Search Fees	405.00
EFT101155	16/07/2015	JANINE DETERMES	Fitness Instruction	180.00
EFT101156	16/07/2015	DOG ROCK MOTEL	Accommodation Booking For Thursday 18th June 2015 To Friday 19th June 2015 Meal Included	184.80
EFT101157	16/07/2015	DYLAN ON THE TERRACE	Catering	949.30
EFT101158	16/07/2015	ENGINEERING TECHNOLOGY CONSULTANTS	York Street - Proposed Street Lighting Concept Design Consultancy	7,653.25

## REPORT ITEM CSF 193 REFERS

EFT101159	16/07/2015	ALBANY CAMERA HOUSE	New Olympus OM-D E-M5 Digital Camera	999.00
EFT101160	16/07/2015	FIRE & SAFETY WA	8 X Eflare EMS Packs Red/Blue (EFEMS+RB) As Per Quote 1702	2,697.29
EFT101161	16/07/2015	TAMMIE FLOWER	Fitness Instruction	405.00
EFT101162	16/07/2015	G2G SOLUTIONS PTY LTD	Provide Dangerous Goods Assistance For Close Out Of Dangerous Goods Remediation Notice RN2201141300CK	5,056.50
EFT101163	16/07/2015	GREAT SOUTHERN GROUP TRAINING	Casual Staff Apprentices Fees	5,667.24
EFT101164	16/07/2015	GREAT SOUTHERN INSTITUTE OF TECHNOLOGY	Ipad Next Steps Training	210.00
EFT101165	16/07/2015	GREEN SKILLS INCORPORATED	Installation Of Bollards At Lake Seppings	5,366.02
EFT101166	16/07/2015	SOUTHERN SHARPENING SERVICES	Mobile Plant Extinguisher Testing	2,891.30
EFT101167	16/07/2015	GREAT SOUTHERN SAND AND LANDSCAPING SUPPLIES	Retention For Pfeiffer Road Contract Number C13017	34,125.31
EFT101168	16/07/2015	GREAT SOUTHERN PACKAGING SUPPLIES	Uniforms/Safety Wear Projects Team	2,271.51
EFT101169	16/07/2015	GREAT SOUTHERN SOLAR	Supply And Installation Of Solar Panels At North Road Administration Building As Per C15013 - Payment 1	19,173.41
EFT101170	16/07/2015	GT BEARING AND ENGINEERING SUPPLIES	Engineering and Bearings Maintenance/Repairs	1,008.00
EFT101171	16/07/2015	CHRISTINE HANNAN	Reimbursements For Cloud Services In Local Government Conference	393.89
EFT101172	16/07/2015	JR AND A HERSEY PTY LTD	Protection Clothing	501.60
EFT101173	16/07/2015	HUDSON SEWAGE SERVICES	Quarterly Maintenance Service To Sewerage System	326.25
EFT101174	16/07/2015	ICKY FINKS WAREHOUSE SALES	The Art Of Maths Education Workshop Supplies	527.53
EFT101175	16/07/2015	ALBANY MAPPING AND SURVEYING SERVICES	Volume Survey Of S022 Gravel Pit For 2014/2015 Stock take	8,910.55
EFT101176	16/07/2015	JOHN KINNEAR AND ASSOCIATES	Professional Fees	3,421.00
EFT101177	16/07/2015	JUST SEW EMBROIDERY	Embroidery	109.45
EFT101178	16/07/2015	KESTON TECHNOLOGIES PTY LTD	National Anzac Centre Impacts Analysis	6,215.00
EFT101179	16/07/2015	GEORGIA ROBYN KIDMAN	Fitness Instruction	45.00
EFT101180	16/07/2015	KINJARLING INDIGENOUS CORPORATION	NAIDOC Week Catering	1,800.00
EFT101181	16/07/2015	CAMERON LANGRIDGE	Visitors Centre Merchandise	60.20
EFT101182	16/07/2015	LATRO LAWYERS	Professional Services	3,467.75
EFT101183	16/07/2015	STATE LIBRARY OF WESTERN AUSTRALIA	Lost/Damaged Books	238.70
EFT101184	16/07/2015	LORLAINE DISTRIBUTORS PTY LTD	Cleaning Supplies	169.45
EFT101185	16/07/2015	M & B SALES PTY LTD	Treated Pine Supplies	381.67
EFT101186	16/07/2015	BUCHER MUNICIPAL PTY LTD	Vehicle Parts	178.42
EFT101187	16/07/2015	RL & KJ MACKENZIE (GLENORAN LEATHER)	Visitors Centre Merchandise	226.20
EFT101188	16/07/2015	ALBANY EVENT HIRE	7 X Grey Partitions (1.8M X 1.8M) For Six Weeks Commencing	1,157.50
EFT101189	16/07/2015	SORAYA MAJIDI	Reimbursements Library Events Refreshments	133.50
EFT101190	16/07/2015	ALBANY CITY MOTORS	Vehicles/Vehicle Parts/Repairs	261.21
EFT101191	16/07/2015	MANDALAY TECHNOLOGIES PTY LTD	Annual Subscription - Tipshop CS	3,960.00
EFT101192	16/07/2015	MARINDUST SALES & ACE FLAGPOLES	T6 Temper Marine Grade Aluminium Hot Dipped Galvanized Steel Spigot With Nylon Bushes And Flange Base	1,368.40
EFT101193	16/07/2015	VICKI MICHELLE MARTIN	Fitness Instruction	405.00
EFT101194	16/07/2015	METROOF ALBANY	Roofing Materials	48.87
EFT101195	16/07/2015	MIDALIA STEEL PTY LTD	Supply And Delivery Of 18 Lengths Of 90 X 90 X 2MM Dura Galv Tubing	2,118.49
EFT101196	16/07/2015	JULIA MITCHELL	Reimbursements For Refreshments For Authors Events At Library	107.10
EFT101197	16/07/2015	MOUNT ROMANCE AUSTRALIA PTY LTD	National Anzac Centre Merchandise	1,357.71
EFT101198	16/07/2015	NEVILLES HARDWARE & BUILDING SUPPLIES	Hardware Supplies/Tools	1,198.75
EFT101199	16/07/2015	ALBANY NEWS DELIVERY - NORTH ROAD - NEW	Newspaper Deliveries	146.24
EFT101200	16/07/2015	NORDIC FITNESS EQUIPMENT	Fitness Equipment - Ex Hire Spin Bike	650.00
EFT101201	16/07/2015	OCS SERVICES PTY LTD	Cleaning Services F/E 7/8/2015 Town Hall	201.04
EFT101202	16/07/2015	OFFICEWORKS SUPERSTORES PTY LTD	A1 Gloss Prints - Boys On The Pyramid	522.00
EFT101203	16/07/2015	OKEEFE'S PAINTS	Paint & Painting Supplies	171.73
EFT101204	16/07/2015	OPUS INTERNATIONAL CONSULTANTS LTD	Design Of Norwood Road Upgrade (\$1k0.00 - 3.53) As Per Quote Q15020	30,067.95
EFT101205	16/07/2015	ORANA CINEMAS ALBANY PTY LTD	35 X Movie Ticket Vouchers For Children's Gifts	385.00
EFT101206	16/07/2015	ORAL HISTORY ASSOCIATION OF AUSTRALIA (WA BRANCH) INC	Membership Application/Renewal 1/7/15 - 30/6/16	65.00
EFT101207	16/07/2015	PACIFIC BIOLOGICS	2 X Prolink XR Briquette Case Of 220 (A WEL 83650 Case)	2,905.93
EFT101208	16/07/2015	PALMER EARTHMOVING (AUSTRALIA) PTY LTD	Tonnes Metal Dust (P14008)	3,058.00
EFT101209	16/07/2015	PAULS PET FOOD	4 Alert Plus 20kgs Dog Biscuits	134.00
EFT101210	16/07/2015	PAUL G ROBERTSON AND ASSOCIATES	Road Traffic Audit - Tennessee Road South	1,496.00
EFT101211	16/07/2015	PC MACHINERY PTY LTD	Throttle Cable Assembly	79.00
EFT101212	16/07/2015	KRISTIE PORTER	Fitness Instruction	405.00

## REPORT ITEM CSF 193 REFERS

EFT101213	16/07/2015 REEVES AND COMPANY BUTCHERS PTY LTD	Catering	85.00
EFT101214	16/07/2015 REECE PTY LTD	Lengths Of 300mm Stormpro	1,014.52
EFT101215	16/07/2015 505 REGIONAL CADET UNIT	Kidsport Vouchers	370.00
EFT101216	16/07/2015 RIDING FOR THE DISABLED - ALBANY GROUP	Kidsport Vouchers	175.00
EFT101217	16/07/2015 THE ROYAL WESTERN AUSTRALIAN HISTORICAL SOCIETY	Subscription 2015/16	90.00
EFT101218	16/07/2015 NEAL RYAN	Reimbursement For Airfare/Taxi fares	545.16
EFT101219	16/07/2015 SECUREPAY PTY LTD	Web Payments, Seat Advisor Pricing. Transaction Fee. Without	23.27
EFT101220	16/07/2015 SKILL HIRE WA PTY LTD	Casual Staff	821.30
EFT101221	16/07/2015 SMITH CONSTRUCTIONS ALBANY PTY LTD	Forts Cafe - Repairs To Awning At Garrisons	440.00
EFT101222	16/07/2015 SOUTHERN TOOL & FASTENER CO	Pump 3 Transfer Pump As Per Quote 110011742	1,583.89
EFT101223	16/07/2015 SOUTHWAY DISTRIBUTORS PTY LTD DIVISION OF PDF FOOD SERVICES PTY LTD	Catering Supplies	147.28
EFT101224	16/07/2015 SOUTHCOAST SECURITY SERVICE	Security Services June 2015	12,651.90
EFT101225	16/07/2015 SQUIRE PATTON BOGGS	Professional Services	106.41
EFT101226	16/07/2015 STAR SALES AND SERVICE	Replacement Parts For Chainsaw Used At Bakers Junction Fire	210.00
EFT101227	16/07/2015 STATEWIDE BEARINGS	Vehicle Parts	15.44
EFT101228	16/07/2015 BLUESCOPE DISTRIBUTION PTY LTD	WM-100-100-5.6-Gal-2400-3000 Weld Mesh Galvanised	101.06
EFT101229	16/07/2015 STIRLING FREIGHT EXPRESS	Freight Charges	207.45
EFT101230	16/07/2015 STIRLING PRINT	Printing 4,000 Copies Of 2015 Senior Services Directory As Per Quote Number QU15185695	3,121.00
EFT101231	16/07/2015 SUBWAY	Catering For Access And Inclusion Workshop 18 June 2015	120.00
EFT101232	16/07/2015 SUMMER SALT GIFTS AND BELONGINGS	Visitors Centre Merchandise	132.00
EFT101233	16/07/2015 ALBANY LOCK SERVICE	Provide Software, Training And Support For Key System Upgrade	15,311.00
EFT101234	16/07/2015 SYNERGY	Electricity Supplies	63,568.65
EFT101235	16/07/2015 T & C SUPPLIES	Tool Supplies For Workshop	3,437.85
EFT101236	16/07/2015 T-QUIP	V Belts	122.80
EFT101237	16/07/2015 TECTONICS CONSTRUCTION GROUP PTY LTD	C15012 Refurbishment Of North Road Customer Service Area	133,420.66
EFT101238	16/07/2015 TOLL FAST	Freight Charges	539.50
EFT101239	16/07/2015 CAROLINE ELLEN TOMPKIN	Fitness Instruction	90.00
EFT101240	16/07/2015 TRUCKLINE	Vehicle Parts	25.88
EFT101241	16/07/2015 ALBANY TYREPOWER	Tyre Repairs/Maintenance	282.00
EFT101242	16/07/2015 UNICOM PTY LIMITED	7 X RE609 IS Single Channel Frequency And With 6 Address. 7 X Charger, Standard Model LG Ch 101 RX163.15 Ch 204 RX163.8625	5,677.10
EFT101243	16/07/2015 VANCOUVER WASTE SERVICES PTY LTD	Coarse Sand/Metal Dust	175.00
EFT101244	16/07/2015 JULIA WARREN	Fitness Instruction	450.00
EFT101245	16/07/2015 ALBANY & GREAT SOUTHERN WEEKENDER	Advertising	725.08
EFT101246	16/07/2015 WELLSTEAD COMMUNITY RESOURCE CENTRE INC	Subs Whisper July 2015 - June 2016	30.00
EFT101247	16/07/2015 WESTERBERG PANEL BEATERS	Transport Vehicle From Rufus Street To Pickles Yard	93.50
EFT101248	16/07/2015 WESTERN AUSTRALIAN LOCAL GOVERNMENT ASSOCIATION	Advertising	3,202.54
EFT101249	16/07/2015 LANDMARK LIMITED	Tomcat Rodent Blox	681.14
EFT101250	16/07/2015 WEST AUSTRALIAN NEWSPAPERS LIMITED - (NORTH ROAD)	Seven Day Magazine Advertising NAC	14,030.19
EFT101251	16/07/2015 WESTSHRED DOCUMENT DISPOSAL	Document Disposal	411.40
EFT101252	16/07/2015 WEST-OZ WEB SERVICES	Complete Bookings Marketing Fee June 2015	210.33
EFT101253	16/07/2015 WEST CAPE HOWE WINES	Wine purchases	652.00
EFT101254	16/07/2015 WEST AUSTRALIAN NEWSPAPERS LIMITED - (VISITORS)	Advertising West Australian June 2015	693.00
EFT101255	16/07/2015 WILSON MACHINERY	Fit Slashing And Mulching Blades To Verge Slasher.	807.49
EFT101256	16/07/2015 THE WINDOW WASHER MAN	Window Cleaning	55.00
EFT101257	16/07/2015 WOODLANDS DISTRIBUTORS AND AGENCIES	Rolls - Black Oxo Degradable Waste Bags	396.00
EFT101258	16/07/2015 WREN OIL	Waste Oil Disposal	165.00
EFT101259	16/07/2015 ZENITH LAUNDRY	Laundry Services/Hire	11.68
EFT101260	16/07/2015 EXCLAIMER LTD	Signature Manager Outlook Edition 3.0 Increase To 500 Users/Signature Manager Outlook Edition 3.0	454.00
EFT101261	21/07/2015 WA LOCAL GOVT SUPERANNUATION	Payroll Deductions	81,529.21
EFT101262	21/07/2015 REST SUPERANNUATION	Payroll Deductions	3,344.28
EFT101263	21/07/2015 ING ONE ANSWER PERSONAL SUPER	Superannuation Contributions	246.23
EFT101264	21/07/2015 COLONIAL FIRST STATE FIRSTCHOICE PERSONAL SUPER 1	Superannuation Contributions	439.78

## REPORT ITEM CSF 193 REFERS

EFT101265	21/07/2015	ASGARD 1	Superannuation Contributions	445.23
EFT101266	21/07/2015	BT SUPER FOR LIFE 6	Superannuation Contributions	143.23
EFT101267	21/07/2015	AMP SUPERANNUATION SAVINGS (RETIREMENT SAVINGS ACCOUNT)		202.58
EFT101268	21/07/2015	TAL SUPERANNUATION LIMITED	Superannuation Contributions	211.61
EFT101269	21/07/2015	WEALTH PERSONAL SUPER AND PERSONAL PENSION 1	Superannuation Contributions	78.34
EFT101270	21/07/2015	WA LOCAL GOVT SUPERANNUATION	Superannuation Contributions	21.43
EFT101271	21/07/2015	AUSTRALIAN SUPER	Superannuation Contributions	114.13
EFT101272	21/07/2015	REST SUPERANNUATION	Superannuation Contributions	13.70
EFT101273	21/07/2015	WA LOCAL GOVT SUPERANNUATION	Superannuation Contributions	19.65
EFT101274	21/07/2015	WA LOCAL GOVT SUPERANNUATION	Superannuation Contributions	144.73
EFT101275	21/07/2015	WA LOCAL GOVT SUPERANNUATION	Superannuation Contributions	177.04
EFT101276	21/07/2015	WEALTH PERSONAL SUPER AND PERSONAL PENSION 3	Superannuation Contributions	32.42
EFT101277	21/07/2015	BT SUPER FOR LIFE 3	Superannuation Contributions	239.71
EFT101278	21/07/2015	PRIME SUPER	Superannuation Contributions	396.81
EFT101279	21/07/2015	NATIONAL MUTUAL RETIREMENT FUND (RETIREMENT SECURITY PLAN)		121.56
EFT101280	21/07/2015	HOSTPLUS PTY LTD	Superannuation Contributions	
EFT101281	21/07/2015	MLC MASTERKEY BUSINESS SUPER 1	Payroll Deductions	603.62
EFT101282	21/07/2015	BANSCOTT SUPER FUND	Superannuation Contributions	252.36
EFT101283	21/07/2015	SUPERWRAP PERSONAL SUPER PLAN1	Superannuation Contributions	308.53
EFT101284	21/07/2015	COLONIAL FIRST STATE FIRSTCHOICE PERSONAL SUPER 2	Superannuation Contributions	407.13
EFT101285	21/07/2015	BT SUPER FOR LIFE 4	Superannuation Contributions	492.45
EFT101286	21/07/2015	OAK TREE SUPERANNUATION FUND	Superannuation Contributions	171.42
EFT101287	21/07/2015	BT SUPER FOR LIFE 7	Superannuation Contributions	59.81
EFT101288	21/07/2015	FIRST SUPER	Superannuation Contributions	65.13
EFT101289	21/07/2015	AUSTRALIAN SUPER	Superannuation Contributions	189.96
EFT101290	21/07/2015	ABUNDANT SPERANNUATION FUND	Payroll Deductions	5,473.10
EFT101291	21/07/2015	CARE SUPER PTY LTD	Payroll Deductions	395.68
EFT101292	21/07/2015	FIRST STATE SUPER	Superannuation Contributions	329.82
EFT101293	21/07/2015	WATER CORPORATION SUPERANNUATION PLAN	Superannuation Contributions	524.46
EFT101294	21/07/2015	SPECTRUM SUPER 2	Superannuation Contributions	211.94
EFT101295	21/07/2015	SUPERWRAP PERSONAL SUPER PLAN2	Superannuation Contributions	326.57
EFT101296	21/07/2015	CULLOTON SUPERANNUATION FUND	Superannuation Contributions	157.67
EFT101297	21/07/2015	NORTH PERSONAL SUPERANNUATION & PENSION FUND 1	Superannuation Contributions	14.04
EFT101298	21/07/2015	AJW SUPERANNUATION FUND	Superannuation Contributions	189.96
EFT101299	21/07/2015	MLC MASTERKEY SUPERANNUATION GOLD STAR	Superannuation Contributions	236.76
EFT101300	21/07/2015	NORTH PERSONAL SUPERANNUATION & PENSION FUND 3	Superannuation Contributions	118.49
EFT101301	21/07/2015	PLUM NOMINEES P/L PLUM SUPER FUND	Payroll Deductions	48.29
EFT101302	21/07/2015	TTCSL ATF CRUELTY FREE SUPER	Superannuation Contributions	319.07
EFT101303	21/07/2015	VISION SUPER	Superannuation Contributions	182.66
EFT101304	21/07/2015	KINETIC SUPERANNUATION	Superannuation Contributions	312.33
EFT101305	21/07/2015	BENDIGO SMARTSTART SUPER	Superannuation Contributions	189.96
EFT101306	21/07/2015	SUNSUPER SUPERANNUATION	Superannuation Contributions	80.13
EFT101307	21/07/2015	LOCAL GOVERNMENT SUPER	Superannuation Contributions	242.41
EFT101308	21/07/2015	IOOF EMPLOYEE SUPER	Payroll Deductions	518.00
EFT101309	21/07/2015	ASGARD 2	Superannuation Contributions	205.31
EFT101310	21/07/2015	BENJAMIN A & MICHELLE A MCKENNA ATF THE MCKENNA SUPER FUND	Superannuation Contributions	171.00
EFT101311	21/07/2015	AG & CK TONKIN SUPER FUND		76.29
EFT101312	21/07/2015	DESMO SUPERANNUATION FUND	Superannuation Contributions	
EFT101313	21/07/2015	ONEPATH MASTERFUND	Superannuation Contributions	69.53
EFT101314	21/07/2015	COMMONWALTH ESSENTIAL SUPER	Superannuation Contributions	152.58
EFT101315	21/07/2015	ANZ SMART CHOICE SUPER (ONEPATH MASTERFUND)	Superannuation Contributions	151.42
			Superannuation Contributions	20.00
			Superannuation Contributions	52.05



## REPORT ITEM CSF 193 REFERS

EFT101316	21/07/2015	MTAA SUPERANNUATION FUND	Superannuation Contributions	47.74
EFT101317	21/07/2015	IOOF GLOBAL ONE (EX SKANDIA GLOBAL) 7	Superannuation Contributions	212.53
EFT101318	21/07/2015	AMP SUPERANNUATION SAVINGS (SIGNATURE SUPER)	Superannuation Contributions	919.34
EFT101319	21/07/2015	HESTA SUPER FUND	Superannuation Contributions	1,001.23
EFT101320	21/07/2015	WEALTH PERSONAL SUPER AND PERSONAL PENSION 2	Payroll Deductions	224.85
EFT101321	21/07/2015	AMP SUPERANNUATION SAVINGS (FLEXIBLE LIFETIME SUPER PLAN)	Superannuation Contributions	1,181.69
EFT101322	23/07/2015	ABA SECURITY	Security Services	88.00
EFT101323	23/07/2015	ACORN TREES AND STUMPS	Removal Of Stumps	580.00
EFT101324	23/07/2015	AD CONTRACTORS PTY LTD	Heavy Vehicle Equipment Hire	44,136.50
EFT101325	23/07/2015	ALBANY ADVERTISER LTD - NORTH ROAD	Advertising	179.52
EFT101326	23/07/2015	ALBANY INDUSTRIAL SERVICES PTY LTD	Supply M3 Of Topsoil	1,478.40
EFT101327	23/07/2015	OPTEON (ALBANY AND GREAT SOUTHERN WA)	Valuations	440.00
EFT101328	23/07/2015	ALBANY V-BELT AND RUBBER	Filters/Vehicle Parts	265.54
EFT101329	23/07/2015	ALBANY SWEEP CLEAN	Sweeping Of Car parks, Pathways And Boardwalks To The 12/06/15	5,368.50
EFT101330	23/07/2015	ALBANY STATIONERS	Stationery Supplies	71.45
EFT101331	23/07/2015	ALBANY CHAMBER OF COMMERCE AND INDUSTRY	Advertising Display Full Page ACCI Directory	688.50
EFT101332	23/07/2015	ALBANY AGRICULTURAL SOCIETY INCORPORATED	Hire BTA & Tearoom CMCA Rally, Hire Centennial, Norman, Sandilands Pav 15 Oct - 4 Nov 2015	20,480.00
EFT101333	23/07/2015	ALBANY AUTO 1	Battery Link Power Box 1059/Supercharge Battery D871	280.00
EFT101334	23/07/2015	ALBANY SKIPS AND WASTE SERVICES PTY LTD	Skip Bin Charges	735.00
EFT101335	23/07/2015	ALBANY OFFICE PRODUCTS DEPOT	Stationery	83.55
EFT101336	23/07/2015	ALD FUEL INJECTION SERVICES	Primer Pump	31.02
EFT101337	23/07/2015	ALINTA	Gas Charges	309.95
EFT101338	23/07/2015	ALLROADS MOTOR BODY BUILDERS	Supply And Delivery Of 3 Hook lift Bins As Per Quotation Number Q15021	56,970.00
EFT101339	23/07/2015	AMPHIBIAN PLUMBING AND GAS	Plumbing Repairs/Maintenance	3,139.00
EFT101340	23/07/2015	PAPERBARK MERCHANTS	Newspapers/Books/Magazines/Stationery	391.40
EFT101341	23/07/2015	APEX CLUB OF ALBANY INCORPORATED	Community Funding Program - Carols By Candlelight	3,500.00
EFT101342	23/07/2015	ART ON THE MOVE	Art On The Move Membership To July 2016	110.00
EFT101343	23/07/2015	ATC WORK SMART	Casual Staff/Apprentice Fees	18,378.60
EFT101344	23/07/2015	BADGEMATE	Staff Name Badges	181.06
EFT101345	23/07/2015	B C & C FORM (BUSHFOOD FACTORY)	Visitors Centre Merchandise	117.60
EFT101346	23/07/2015	SOPHIE BEECH	Reimbursement For Unit Fees	3,143.00
EFT101347	23/07/2015	BENNETTS BATTERIES	200L Drums Of Fleetmaster Extreme CJ/4 15W/40 Engine Oil.	2,015.20
EFT101348	23/07/2015	BLACKWOODS	Safety Equipment & Supplies	194.36
EFT101349	23/07/2015	ALBANY BOBCAT SERVICES	Soft fall Installation For New Playground At Cull Park	467.50
EFT101350	23/07/2015	BRANDNET PTY LTD T/AS MILITARY SHOP	Forts Merchandise	1,206.20
EFT101351	23/07/2015	BRITEL ENTERPRISES PTY LTD	Half Banner Display Lions Diary Planner 2015 -2016	295.00
EFT101352	23/07/2015	BUNNINGS GROUP LIMITED	Supply Temp Fence Panel Rapid Mesh 2.4M X 2.1M Galvanised Steel/Hardware Supplies/Tools	61,574.54
EFT101353	23/07/2015	CAMLYN SPRINGS WATER DISTRIBUTORS	Water Container Refills	1,050.00
EFT101354	23/07/2015	J & S CASTLEHOW ELECTRICAL SERVICES	Electrical Repairs And Maintenance	19,518.25
EFT101355	23/07/2015	COLES SUPERMARKETS AUSTRALIA PTY LTD	Groceries	94.17
EFT101356	23/07/2015	CONSTRUCTION EQUIPMENT AUSTRALIA	Vehicle Parts	17.33
EFT101357	23/07/2015	COURIER AUSTRALIA	Freight Charges	376.76
EFT101358	23/07/2015	ALBANY SIGNS	Assorted Signage	572.00
EFT101359	23/07/2015	COVS PARTS PTY LTD	Vehicle Parts	151.00
EFT101360	23/07/2015	BARRIER COUNSELLING AND PSYCHOLOGICAL SERVICES	EAP Counselling Sessions January - June 2015	3,553.00
EFT101361	23/07/2015	HOLCIM (AUSTRALIA) PTY LTD	Supply M3 Of Full Rate 25X14X80Slump Concrete	835.11
EFT101362	23/07/2015	CURTIN UNIVERSITY OF TECHNOLOGY	Boutique Food: Grounds For Sustainability Report - QU15185941	16,500.00
EFT101363	23/07/2015	CYNERGIC COMMUNICATIONS	Managed Server Xeon/ Hosting Linux 30	648.74
EFT101364	23/07/2015	DATA #3 LIMITED	Adobe Acrobat Standard Upgrade Plan	959.61
EFT101365	23/07/2015	DE JONGE MECHANICAL REPAIRS	Fuel System Contamination	339.00
EFT101366	23/07/2015	DE LAGE LANDEN PTY LIMITED	Monthly Rental Due For Contracts	7,186.30
EFT101367	23/07/2015	LANDGATE - PROPERTY & VALUATIONS	Land Enquiries June 2015	432.00
EFT101368	23/07/2015	JANINE DETERMES	Fitness Instruction	180.00
EFT101369	23/07/2015	DOG ROCK MOTEL	Accommodation	346.00

## REPORT ITEM CSF 193 REFERS

EFT101370	23/07/2015	DOWNRITE DEMOLITION	Demolition Of Cricket Shed	3,159.20
EFT101371	23/07/2015	EASFLEET MANAGEMENT	Motor Vehicle Lease Rental/ESP Bureau Fee/Bureau Fee Rebate	7,350.33
EFT101372	23/07/2015	ECOTECH PTY LTD	Accommodation For Site Visit To Repair Emu Point Met Station	5,454.90
EFT101373	23/07/2015	ELLENBY TREE FARM PTY LTD	400L Corymbia Maculata Tree Stock for Centennial Park	4,427.50
EFT101374	23/07/2015	ALBANY ENGINEERING COMPANY	Repair Hydraulic Ram End And Clevis As Required.	641.93
EFT101375	23/07/2015	EVERTRANS	Vehicle Repairs	82.50
EFT101376	23/07/2015	AYERITE SIGNS	Plaque For Renaming Of Gallery In Town Hall To Carol Pettersen Hall	111.10
EFT101377	23/07/2015	FIRE & SAFETY WA	Fire and Safety equipment	1,218.69
EFT101378	23/07/2015	TAMMIE FLOWER	Fitness Instruction	315.00
EFT101379	23/07/2015	GEOFABRICS AUSTRALASIA PTY LTD	Elcorock 2.5M3 Vandal Deterrent Bags	7,890.50
EFT101380	23/07/2015	GEOPIX PTY LTD	Chipolatas Performance Saturday 10 October 2015	2,750.00
EFT101381	23/07/2015	JEFFREY ALLAN GIBB	Forts Merchandise	472.00
EFT101382	23/07/2015	KENNETH NEIL GORDON	Rates Refund	184.47
EFT101383	23/07/2015	GREAT SOUTHERN PEST & WEED CONTROL	Pest Control	154.00
EFT101384	23/07/2015	GREAT SOUTHERN SAND AND LANDSCAPING SUPPLIES	Hanrahan Leachate Project Stage 3A Variation RF1006	61,721.00
EFT101385	23/07/2015	GREAT SOUTHERN PACKAGING SUPPLIES	Cleaning Stock	2,595.76
EFT101386	23/07/2015	AUSTRALIAN MEDICAL SUPPLIES PTY LTD	First Aid Supplies	12.98
EFT101387	23/07/2015	GREAT SOUTHERN TAEKWONDO	Kidsport Vouchers 2015	194.00
EFT101388	23/07/2015	GSM AUTO ELECTRICAL	Vehicle Parts/Maintenance	374.69
EFT101389	23/07/2015	GT BEARING AND ENGINEERING SUPPLIES	Vehicle Parts	306.72
EFT101390	23/07/2015	HOT HOUSE FLOWERS	Floral Arrangement	50.00
EFT101391	23/07/2015	RATTEN & SLATER MACHINERY	Vehicle Parts	120.07
EFT101392	23/07/2015	H AND H ARCHITECTS	Albany Town Hall Re-Purposing Architectural Research, Consultation And Design	10,102.60
EFT101393	23/07/2015	HHG LEGAL GROUP	Professional Services	550.00
EFT101394	23/07/2015	QUBE LOGISTICS (WA2) PTY LTD	Chlorine Drums Fuel Levy	2,256.46
EFT101395	23/07/2015	INTERACTCARD	C4001 CR80 Blank White Cards Pack 500	440.00
EFT101396	23/07/2015	JASON SIGNMAKERS	Provision Of Signs And Overlay Stickers	1,023.00
EFT101397	23/07/2015	JIMS TEST AND TAG	Electrical Testing And Tagging	211.86
EFT101398	23/07/2015	JJ'S HIAB SERVICES & JJ'S GREAT SOUTHERN	Pick Up And Delivery Services	92.40
EFT101399	23/07/2015	JOSH BYRNE & ASSOCIATES	Design Of All Abilities Regional Play Space As Per Q15012	7,346.00
EFT101400	23/07/2015	JUST SEW EMBROIDERY	Embroidery Of Polos And Logos	400.40
EFT101401	23/07/2015	GEORGIA ROBYN KIDMAN	Fitness Instruction	45.00
EFT101402	23/07/2015	GRAEME LINDSAY	Forts Merchandise	144.00
EFT101403	23/07/2015	MARIO LIONETTI	Groceries For Day Care Centre	345.10
EFT101404	23/07/2015	M & B SALES PTY LTD	Timber Supplies	1,002.20
EFT101405	23/07/2015	BUCHER MUNICIPAL PTY LTD	Main Brooms	983.84
EFT101406	23/07/2015	ALBANY CITY MOTORS	Vehicles/Vehicle Parts/Repairs	290.18
EFT101407	23/07/2015	VICKI MICHELLE MARTIN	Fitness Instruction	705.00
EFT101408	23/07/2015	METROOF ALBANY	Roofing Materials	216.30
EFT101409	23/07/2015	METRO CERAMIC TILES	Grout Supplies	853.67
EFT101410	23/07/2015	METCO FARM	Forts Merchandise	660.00
EFT101411	23/07/2015	AIRPORT SECURITY PTY LTD	Aviation Security Card And Clearance Check	220.00
EFT101412	23/07/2015	ROY MINITER	Aboriginal Heritage Monitoring Baltic Ridge Sunday June 14 - Monday June 15 2015	400.00
EFT101413	23/07/2015	WESTERN AUSTRALIAN RANGERS ASSOCIATION INC	Staff Attendance to The WA Ranger Association Conference 23rd And 24th September 2015.	570.00
EFT101414	23/07/2015	M M ELECTRICAL MERCHANDISING	Being For 4 / ML-FG- RGB -30 Flood 30W Led BLK INT Driver IP65	770.00
EFT101415	23/07/2015	MOLONEY ASSET MANAGEMENT SYSTEM	Moloney Software Agreement For Period 01/07/15 To 30/06/16	440.00
EFT101416	23/07/2015	MOUNT ROMANCE AUSTRALIA PTY LTD	NAC Merchandise	160.62
EFT101417	23/07/2015	MSS SECURITY	Casual Guard Services June 2015 - Delayed Flights Screening	3,824.19
EFT101418	23/07/2015	JOHN MICHAEL MULLALLY	Rates Refund	204.04
EFT101419	23/07/2015	LGIS INSURANCE BROKING	Motor Vehicle Insurance Renewals	185,356.05
EFT101420	23/07/2015	LGIS LIABILITY	Insurance Renewals	460,581.15
EFT101421	23/07/2015	ALBANY NEWS DELIVERY - ALAC - NEW	Newspaper Deliveries	219.92
EFT101422	23/07/2015	KOMATSU AUSTRALIA PTY LTD	Supply Cutting Edges, Bolts, Nuts And Washers	1,863.11
EFT101423	23/07/2015	OCS SERVICES PTY LTD	Cleaning Services Day Care Centre - Strip & Reseal	1,520.00

## REPORT ITEM CSF 193 REFERS

EFT101424	23/07/2015	OKEEFE'S PAINTS	Paint & Painting Supplies	43.16
EFT101425	23/07/2015	IXOM	June 2015 - 2 X 920kg CL Gas Cylinder Hire	337.26
EFT101426	23/07/2015	PACK AND SEND BUNBURY	Freight Of 1 X Art box From Albany To Strathmore Vic	98.00
EFT101427	23/07/2015	PAINT INDUSTRIES PTY LTD	20kg Bag Highway Safety Spheres 2mm	93.50
EFT101428	23/07/2015	BROOKE DENISE PEARSON	Fitness Instruction	540.00
EFT101429	23/07/2015	PETER GRAHAM AND COMPANY LTD	Logran For Weed Maintenance	207.00
EFT101430	23/07/2015	ALBANY PLAZA PHARMACY	First Aid Supplies	26.80
EFT101431	23/07/2015	KRISTIE PORTER	Fitness Instruction	450.00
EFT101432	23/07/2015	PROTECTOR ALSAFE INDUSTRIES PTY LTD	15 X Uvex Ultrasonic Fireman's Goggles, 15 X Helmets HF46VWH With Visor	336.93
EFT101433	23/07/2015	PUBLIC LIBRARIES AUSTRALIA LTD	PLA Econnect Subscription July Premier 7.5 Unlimited Sends	209.55
EFT101434	23/07/2015	RAECO INTERNATIONAL PTY LTD	Tradeback Insert Easel Acrylic	910.14
EFT101435	23/07/2015	RAILWAYS FOOTBALL CLUB	Kidsport Vouchers	495.00
EFT101436	23/07/2015	RAINBOW EDUCATIONAL PTY LTD	Day Care Educational Items	206.00
EFT101437	23/07/2015	REECE PTY LTD	Top Trapscrew Grate CP80mm	10.24
EFT101438	23/07/2015	MP ROGERS AND ASSOCIATES PTY LTD	Request For Unit Rates For Jetties, Boat Ramps, Boat Walks	2,073.18
EFT101439	23/07/2015	SEEK LIMITED	Seek Job Advertising	289.30
EFT101440	23/07/2015	G & L SHEETMETAL	Building Maintenance - Flashings	320.10
EFT101441	23/07/2015	SMITHS ALUMINIUM AND 4WD CENTRE	Repairs To Notice Board Frame	25.00
EFT101442	23/07/2015	SOUTHERN TOOL & FASTENER CO	Hardware Supplies/Tools	355.79
EFT101443	23/07/2015	SOUTH COAST DIVING SUPPLIES	Refill 2 Air Cylinders For SCBA	18.00
EFT101444	23/07/2015	STATEWIDE BEARINGS	Vehicle Parts	86.68
EFT101445	23/07/2015	STATEWIDE BUILDING CERTIFICATION WA	Town Hall Public Amenities Upgrade Certificates Of Design Compliance And Construction Compliance	836.00
EFT101446	23/07/2015	STEWART AND HEATON CLOTHING PTY LTD	PPE For Bush Fire Brigades	915.63
EFT101447	23/07/2015	STUDIO PAPA	Developing And Designing For City Of Albany Events Mini Brand	929.50
EFT101448	23/07/2015	SUBWAY	Catering	120.00
EFT101449	23/07/2015	ALBANY LOCK SERVICE	Locksmith Services, Repairs etc.	149.20
EFT101450	23/07/2015	ALBANY IGA	Groceries For Visitors Centre June 2015	106.47
EFT101451	23/07/2015	T & C SUPPLIES	Hardware Supplies/Tools	1,330.20
EFT101452	23/07/2015	DAVID THEODORE	Reimbursements For Volunteers Field Trip And Photographic Prints	58.39
EFT101453	23/07/2015	THINKWATER ALBANY	50mm Filterworx Auto Screen Filter Including Electric Controller	5,190.09
EFT101454	23/07/2015	THURLBY HERB FARM	NAC Merchandise	423.98
EFT101455	23/07/2015	CAROLINE ELLEN TOMPKIN	Fitness Instruction	45.00
EFT101456	23/07/2015	TRAILBLAZERS	Ledlenser P14.2 Torch	105.80
EFT101457	23/07/2015	CAROLYN FRANCIS TRAPNELL	Forts Merchandise	3,679.00
EFT101458	23/07/2015	TRAFFIC FORCE	Traffic Control	2,957.10
EFT101459	23/07/2015	ALBANY TYREPOWER	Supply And Fit Set Of Armour Bobcat Tyres Including Deposals.	1,787.50
EFT101460	23/07/2015	UNIVERSITY OF WESTERN AUSTRALIA	Great Southern Great Science 2014 Sponsorship	1,650.00
EFT101461	23/07/2015	VANCOUVER WASTE SERVICES PTY LTD	Bulk Green Waste	67,840.32
EFT101462	23/07/2015	VALERIE DICKMANN T/A SILK DESIGN	Forts Merchandise	180.00
EFT101463	23/07/2015	ALBANY VETERINARY HOSPITAL PTY LTD	Disposal of Animals	241.65
EFT101464	23/07/2015	THE IT VISION USER GROUP (INC)	IT Vision User Group Membership Subscription 2015/2016	715.00
EFT101465	23/07/2015	JULIA WARREN	Fitness Instruction	270.00
EFT101466	23/07/2015	WAVESOUND PTY LTD	One Click Digital Subscription Renewal For 2015/16	6,326.10
EFT101467	23/07/2015	ALBANY & GREAT SOUTHERN WEEKENDER	Advertising	2,451.22
EFT101468	23/07/2015	WESTSHRED DOCUMENT DISPOSAL	Document Disposal	49.50
EFT101469	23/07/2015	WHITFIELD ESTATE & PICNIC IN THE PADDOCK	NAC Merchandise	263.20
EFT101470	23/07/2015	WILSON MACHINERY	Tractor Seats x 2	100.00
EFT101471	23/07/2015	WORKWISE OCCUPATIONAL HEALTH	Pre Employment Screening	2,126.19
EFT101472	23/07/2015	WURTH AUSTRALIA PTY LTD	Vehicle Parts	133.55
EFT101473	23/07/2015	ZENITH LAUNDRY	Laundry Services/Hire	123.95
EFT101474	30/07/2015	ABA SECURITY	Security Services	1,320.00
EFT101475	30/07/2015	ACORN TREES AND STUMPS	Removal Of Stumps	25,600.00
EFT101476	30/07/2015	AD CONTRACTORS PTY LTD	Plant Hire For Operational Works	21,797.90
EFT101477	30/07/2015	AECOM AUSTRALIA PTY LTD	Contract C12023 - Mount Clarence Infrastructure Upgrade Superintendent Services	8,667.23

## REPORT ITEM CSF 193 REFERS

EFT101478	30/07/2015	ALBANY FARM TREE NURSERY	Supply 2095 Plants For Emu Beach Foreshore	1,613.15
EFT101479	30/07/2015	ALBANY COMMUNITY HOSPICE	Payroll Deductions	104.00
EFT101480	30/07/2015	ALBANY INDOOR PLANT HIRE	Indoor Plant Hire	1,041.92
EFT101481	30/07/2015	ALBANY CHAMBER OF COMMERCE AND INDUSTRY	Advertising Display ACCI Directory	204.00
EFT101482	30/07/2015	ALBANY RSL SUB BRANCH	Visitors Centre Merchandise	305.00
EFT101483	30/07/2015	ALBANY OFFICE PRODUCTS DEPOT	Stationery Supplies	697.90
EFT101484	30/07/2015	ALBANY CEMETERY BOARD	Reserve Account Cemetery Capital Works Financial Year 2014/15 Allocation	55,715.00
EFT101485	30/07/2015	ALBANY COMBINED CABS PTY LTD	YAC Taxi Fares 19/06/15	29.50
EFT101486	30/07/2015	ALBANY WALLCUTTING SERVICES	Installation Of Tactiles At Apex Drive	465.85
EFT101487	30/07/2015	ALBANY MILK DISTRIBUTORS	Milk Deliveries ALAC	9.15
EFT101488	30/07/2015	ALBANY COMMUNITY FOUNDATION	Payroll Deductions	50.00
EFT101489	30/07/2015	ALINTA	Gas Usage Charges	8.05
EFT101490	30/07/2015	ALL EVENTS PROSOUND HIRE	Exhibition Focus Hire Wed 22/07/15	68.35
EFT101491	30/07/2015	ALL PARK PRODUCTS	Spare Parts For BIB's	248.60
EFT101492	30/07/2015	AMBER PERRYMAN	Reimbursements Tour Of Art Centres And Institutions	1,250.00
EFT101493	30/07/2015	AMPHIBIAN PLUMBING AND GAS	Plumbing Repairs/Maintenance	9,789.32
EFT101494	30/07/2015	AUSTRALIAN TAXATION OFFICE	Payroll Deductions	332,715.00
EFT101495	30/07/2015	AUSTRALIAN SERVICES UNION WA BRANCH	Payroll Deductions	3,901.00
EFT101496	30/07/2015	THE AUSTRALIAN HISTORICAL ASSOCIATION	Annual AHA Affiliate Membership Subscription	110.00
EFT101497	30/07/2015	AWNING REPUBLIC	Replacements For Damaged Awnings	658.35
EFT101498	30/07/2015	AYSEMART	Visitors Centre Merchandise	125.00
EFT101499	30/07/2015	ANTHONY BALL	Fitness Instruction	495.00
EFT101500	30/07/2015	BENNETTS BATTERIES	Battery Purchase Sweeper Truck	255.20
EFT101501	30/07/2015	BLACKWOODS	Bags Quick Set Cement	489.16
EFT101502	30/07/2015	BRIDGESTONE AUSTRALIA LTD	Supply And Fit New 17.5R25 Economy Grader Tyre/Tyre purchases/repairs	2,479.99
EFT101503	30/07/2015	BUNNINGS GROUP LIMITED	Hardware Supplies	100.41
EFT101504	30/07/2015	CALTEX AUSTRALIA PETROLEUM PTY LTD	Litres Diesel Fuel	18,864.48
EFT101505	30/07/2015	J & S CASTLEHOW ELECTRICAL SERVICES	C13029 Retention - Railways Football Oval Lighting Supply And Installation	15,157.94
EFT101506	30/07/2015	CHILD SUPPORT AGENCY	Payroll Deductions	2,006.65
EFT101507	30/07/2015	CMM TECHNOLOGY	Calibration Of Three Breathalyser Units	357.50
EFT101508	30/07/2015	COLES SUPERMARKETS AUSTRALIA PTY LTD	Groceries	271.15
EFT101509	30/07/2015	TANJA COLBY DESIGNS	Storage Boxes For Forts Store	156.60
EFT101510	30/07/2015	CONSTRUCTION EQUIPMENT AUSTRALIA	Vehicle Parts	87.55
EFT101511	30/07/2015	ALBANY SIGNS	COA Logo For Cars	132.00
EFT101512	30/07/2015	ADAM COUSINS	Reimbursements For Lunch With Richard Muirhead In Perth	50.00
EFT101513	30/07/2015	AL CURNOW HYDRAULICS	Travel To Site. Manufacture And Fit New Hydraulic Hose.	305.64
EFT101514	30/07/2015	D & K ENGINEERING	Complete Modifications To Hooklift Bin	420.75
EFT101515	30/07/2015	DATA #3 LIMITED	IT Software And Equipment	6,358.48
EFT101516	30/07/2015	DE JONGE MECHANICAL REPAIRS	30000km Service	326.00
EFT101517	30/07/2015	JANINE DETERMES	Fitness Instruction	180.00
EFT101518	30/07/2015	DOWNUNDER CONTRACTING PTY LTD	Supply And Install 45M Of 1800mm High Chain Mesh Fencing	4,455.00
EFT101519	30/07/2015	ESRI AUSTRALIA PTY LTD	Annual Maintenance On Perpetual Licenses	14,047.00
EFT101520	30/07/2015	TAMMIE FLOWER	Fitness Instruction	315.00
EFT101521	30/07/2015	FOUNDATION ELECTRICAL PTY LTD INCORPORATING SOUTHERN ELECTRICS	Electrical Repairs And Maintenance	121.42
EFT101522	30/07/2015	GLASS SUPPLIERS	Replacement Window	66.00
EFT101523	30/07/2015	GREAT SOUTHERN GROUP TRAINING	Casual Staff Apprentices Fees	5,749.18
EFT101524	30/07/2015	GREEN SKILLS INCORPORATED	Community Funding And Event Sponsorship	3,278.00
EFT101525	30/07/2015	GREAT SOUTHERN PEST & WEED CONTROL	Former BOM Building - Inspection & Bait Q15026	220.00
EFT101526	30/07/2015	SOUTHERN SHARPENING SERVICES	Forts Merchandise	330.00
EFT101527	30/07/2015	GSP WORKFORCE	Gardening Lotteries House	189.00
EFT101528	30/07/2015	GREAT SOUTHERN PACKAGING SUPPLIES	Cleaning Supplies	5,079.35
EFT101529	30/07/2015	GREENWAY ENTERPRISES	One Roll Of GT350 Grade Non Woven Geotextile ( 3M X 110 M )	811.80
EFT101530	30/07/2015	GREAT SOUTHERN DISTRICT DISPLAY COMMITTEE	Donation For District Display At Royal Perth Show 2015	1,000.00



## REPORT ITEM CSF 193 REFERS

EFT101531	30/07/2015	GREAT SOUTHERN TURF	100M2 Of Turf	550.00
EFT101532	30/07/2015	HAYNES ROBINSON	Legal Fees	165.00
EFT101533	30/07/2015	HBF OF WA	Payroll Deductions	340.90
EFT101534	30/07/2015	HELEN LEEDER-CARLSON	Art Classes With Helen	240.00
EFT101535	30/07/2015	ICKY FINKS WAREHOUSE SALES	Art Supplies	201.41
EFT101536	30/07/2015	ITRAILS DOWN UNDER	Albany Whale Adventure	33.95
EFT101537	30/07/2015	JACK THE CHIPPER	Tractor Mulching Of Greenwaste	444.68
EFT101538	30/07/2015	JJ'S HIAB SERVICES & JJ'S GREAT SOUTHERN	Being For Removal Of Bus Shelter From Albany Highway And Deliver To Second Yard Mercer Rd	616.44
EFT101539	30/07/2015	KANDOO WINDSCREENS	Supply And Fit New Windscreen And Moulding	320.00
EFT101540	30/07/2015	SHIRE OF KATANNING	Hire Of Roller Skates For Roller Rave Youth Event Saturday 18 July 2015	180.00
EFT101541	30/07/2015	GEORGIA ROBYN KIDMAN	Fitness Instruction	45.00
EFT101542	30/07/2015	ELIZABETH ANNE KIRKLAND	My Complements Workshop Tuition	315.00
EFT101543	30/07/2015	KLB SYSTEMS	Computer Hardware Supplies	489.50
EFT101544	30/07/2015	THE LAKE HOUSE DENMARK	NAC Merchandise	335.70
EFT101545	30/07/2015	LASER CORPS WA	Lasercorps Entertainment - Deposit	1,000.00
EFT101546	30/07/2015	LEADING EDGE HIFI-ALBANY	Replacement CD Player In Mipro System - RPM Room	759.00
EFT101547	30/07/2015	LEASE CHOICE	Monthly Lease Photocopiers Ricoh MP CW2200SP/E083G700134 & E083G700026	1,246.83
EFT101548	30/07/2015	LIFETIME DISTRIBUTORS	Local Library Book Stocks	15.00
EFT101549	30/07/2015	LIQUID LEARNING GROUP PTY LTD	Conference Fees For R. Stephens To Attend Women In Leadership Conference October 2015	2,414.50
EFT101550	30/07/2015	SORAYA MAJIDI	Reimbursement Library Events Refreshments	96.30
EFT101551	30/07/2015	VICKI MICHELLE MARTIN	Fitness Instruction	405.00
EFT101552	30/07/2015	ANTHONY MCEWAN	Reimbursements For Lunch With R. Muirhead In Perth	50.00
EFT101553	30/07/2015	MERRIFIELD REAL ESTATE	Storage Unit Rental	200.00
EFT101554	30/07/2015	METROOF ALBANY	Hardware Supplies	9.30
EFT101555	30/07/2015	LINDAS BOOKS	Visitors Centre Merchandise	54.58
EFT101556	30/07/2015	NURRUNGA COMMUNICATIONS	Fit Two Way And UHF Radios And Supply And Fit Aerials To Suit.	686.10
EFT101557	30/07/2015	MY PLACE COLONIAL ACCOMMODATION	1 Night Accommodation For Mem Fox ( Pre-Conference Workshop) 18 July, 2015.	160.00
EFT101558	30/07/2015	ALBANY NEWS DELIVERY	Newspaper Delivers	12.40
EFT101559	30/07/2015	NIKANA CONTRACTING PTY LTD	Removal Of Rubbish Boat Harbour Skip Bins July 2015	781.00
EFT101560	30/07/2015	ANNE NORTH	Sale Of Artwork	262.50
EFT101561	30/07/2015	KATHLEEN CAMERON NORGAARD	Rates Refund	1,047.00
EFT101562	30/07/2015	OFFICEWORKS SUPERSTORES PTY LTD	Office Supplies	278.04
EFT101563	30/07/2015	ORAL HISTORY ASSOCIATION OF AUSTRALIA (WA BRANCH) INC	Workshop	485.00
EFT101564	30/07/2015	MELISSA RANDALL	Reimbursements For Lunch With R. Muirhead In Perth	50.00
EFT101565	30/07/2015	IXOM	1 X 920kg Drum Chlorine/1 x 920kg Soda Ash	3,647.60
EFT101566	30/07/2015	ORIGIN ENERGY	Bulk Gas Supplies	9,870.35
EFT101567	30/07/2015	FULTON HOGAN INDUSTRIES	Centreline Marking Of Bolt Terrace	3,710.63
EFT101568	30/07/2015	KRISTIE PORTER	Fitness Instruction	495.00
EFT101569	30/07/2015	PRACTICAL PRODUCTS PTY LTD	Hot Food Bar and Grill station delivered to Airport	9,559.00
EFT101570	30/07/2015	PROTECTOR ALSAFE INDUSTRIES PTY LTD	Uvex Ultrasonic Fireman's Goggles	1,157.31
EFT101571	30/07/2015	RAECO INTERNATIONAL PTY LTD	Book Processing Supplies Qu15186131	542.61
EFT101572	30/07/2015	REEVES AND COMPANY BUTCHERS PTY LTD	Catering	240.50
EFT101573	30/07/2015	REEF BEATS PRODUCTIONS	DJ For Roller Rave Event Saturday 18 July 2015	635.00
EFT101574	30/07/2015	SCOTT REITSEMA	Reimbursements For Kojonup Regional EH Meeting & Workshop	76.00
EFT101575	30/07/2015	REPLICA MEDALS & RIBBONS PTY LTD	NAC Merchandise	449.35
EFT101576	30/07/2015	REXEL AUSTRALIA	Building Supplies	3.17
EFT101577	30/07/2015	RICOH	Photocopier Charges	16,621.55
EFT101578	30/07/2015	BASKETBALL RINGLEADER	Installation For Floor Sockets - Additional Works For Old Four Court Area	16,027.00
EFT101579	30/07/2015	ROYAL HASKONING	Q15010 - Albany Artificial Surf Reef Feasibility Study Compilation And Data Analysis	24,161.50
EFT101580	30/07/2015	ANDREW SHARPE	Reimbursements For Removal Costs To Albany	7,700.00
EFT101581	30/07/2015	G & L SHEETMETAL	Fabricate & Install Stainless Steel Tray In Chimney - Forts	352.00
EFT101582	30/07/2015	SHEILAH RYAN	Gardening Vancouver Arts	455.00
EFT101583	30/07/2015	SKILL HIRE WA PTY LTD	Casual Staff	3,862.23
EFT101584	30/07/2015	SOUTHCOAST SECURITY SERVICE	Security Guard For Roller Rave Youth Event Saturday 18 July 2015	148.50

## REPORT ITEM CSF 193 REFERS

EFT101585	30/07/2015	STAR SALES AND SERVICE	Brush cutter Harness	180.00
EFT101586	30/07/2015	STATEWIDE BEARINGS	Vehicle Parts	18.50
EFT101587	30/07/2015	STIRLING PRINT	Advertising Posters Roller Rave	104.00
EFT101588	30/07/2015	STREAMLINE BRICK PAVING	Brick paving Repairs	440.00
EFT101589	30/07/2015	SUNNY SIGN COMPANY	Assorted Signage	4,095.85
EFT101590	30/07/2015	ALBANY LOCK SERVICE	Locksmith Services, Repairs Etc.	401.60
EFT101591	30/07/2015	ALBANY IGA	Groceries	175.00
EFT101592	30/07/2015	SYNERGY	Electricity Supplies	10,115.30
EFT101593	30/07/2015	T & C SUPPLIES	Hardware/Tool Supplies	190.80
EFT101594	30/07/2015	THE TOFFEE FACTORY	NAC Merchandise	231.26
EFT101595	30/07/2015	TOLL FAST	Freight Charges	1,256.79
EFT101596	30/07/2015	CAROLINE ELLEN TOMPKIN	Fitness Instruction	135.00
EFT101597	30/07/2015	TRISLEY'S HYDRAULICS SERVICES	Service CL2 Regulators, Rate Meters, Injectors And Auto Shutdown Unit. Quote Number WA5885	13,524.50
EFT101598	30/07/2015	JAN VAN DER MESCHT	Reimbursements ICTI & Main street Conference	142.75
EFT101599	30/07/2015	ROALD VAN WYK	Reimbursements For Kojonup Regional EH Meeting & Workshop	42.50
EFT101600	30/07/2015	VARIDESK LLC	Varidesk For Revenue Development - Quote # Q-A-3664	577.50
EFT101601	30/07/2015	ALBANY VETERINARY HOSPITAL PTY LTD	Disposal of Animals	89.77
EFT101602	30/07/2015	JULIA WARREN	Fitness Instruction	180.00
EFT101603	30/07/2015	WESTERN AUSTRALIAN LOCAL GOVERNMENT ASSOCIATION	WALGA Subscription - Roman II Asset Management Services	16,332.25
EFT101604	30/07/2015	WESTERN AUSTRALIAN MUSEUM	Monitor NAC Website To 18/6/2015	1,562.33
EFT101605	30/07/2015	WILD EYED PRESS PTY LTD	Visitors Centre Merchandise	161.70
EFT101606	30/07/2015	WOOD AND GRIEVE ENGINEERS	Structural Engineer Assessment Of Quararup Lookout Tower On Reserve	3,630.00
EFT101607	30/07/2015	ZENITH LAUNDRY	Laundry Services/Hire	9.74
EFT101608	31/07/2015	JOCK'S COMMERCIAL MOWING	Contract Mowing Round July 2015	8,195.70
EFT101609	4/08/2015	WA LOCAL GOVT SUPERANNUATION	Payroll Deductions	81,138.86
EFT101610	4/08/2015	ING ONE ANSWER PERSONAL SUPER	Superannuation Contributions	246.23
EFT101611	4/08/2015	COLONIAL FIRST STATE FIRSTCHOICE PERSONAL SUPER 1	Superannuation Contributions	439.78
EFT101612	4/08/2015	ASGARD 1	Superannuation Contributions	459.51
EFT101613	4/08/2015	BT SUPER FOR LIFE 6	Superannuation Contributions	143.23
EFT101614	4/08/2015	AMP SUPERANNUATION SAVINGS (RETIREMENT SAVINGS ACCOUNT)	Superannuation Contributions	202.58
EFT101615	4/08/2015	TAL SUPERANNUATION LIMITED	Superannuation Contributions	196.30
EFT101616	4/08/2015	WEALTH PERSONAL SUPER AND PERSONAL PENSION 3	Superannuation Contributions	23.89
EFT101617	4/08/2015	BT SUPER FOR LIFE 3	Superannuation Contributions	239.71
EFT101618	4/08/2015	NATIONAL MUTUAL RETIREMENT FUND (RETIREMENT SECURITY PLAN)	Superannuation Contributions	121.56
EFT101619	4/08/2015	HOSTPLUS PTY LTD	Payroll Deductions	575.82
EFT101620	4/08/2015	PRIME SUPER	Superannuation Contributions	392.60
EFT101621	4/08/2015	MLC MASTERKEY BUSINESS SUPER 1	Superannuation Contributions	252.36
EFT101622	4/08/2015	BANSCOTT SUPER FUND	Superannuation Contributions	308.53
EFT101623	4/08/2015	SUPERWRAP PERSONAL SUPER PLAN1	Superannuation Contributions	407.13
EFT101624	4/08/2015	COLONIAL FIRST STATE FIRSTCHOICE PERSONAL SUPER 2	Superannuation Contributions	492.45
EFT101625	4/08/2015	BT SUPER FOR LIFE 4	Superannuation Contributions	171.42
EFT101626	4/08/2015	OAK TREE SUPERANNUATION FUND	Superannuation Contributions	97.48
EFT101627	4/08/2015	FIRST SUPER	Superannuation Contributions	189.96
EFT101628	4/08/2015	ABUNDANT SPERANNUATION FUND	Payroll Deductions	395.68
EFT101629	4/08/2015	CARE SUPER PTY LTD	Superannuation Contributions	315.84
EFT101630	4/08/2015	FIRST STATE SUPER	Superannuation Contributions	542.27
EFT101631	4/08/2015	AUSTRALIAN SUPER	Payroll Deductions	5,282.52
EFT101632	4/08/2015	WATER CORPORATION SUPERANNUATION PLAN	Superannuation Contributions	211.94
EFT101633	4/08/2015	SPECTRUM SUPER 2	Superannuation Contributions	317.65
EFT101634	4/08/2015	NORTH PERSONAL SUPERANNUATION & PENSION FUND 1	Superannuation Contributions	189.96
EFT101635	4/08/2015	AJW SUPERANNUATION FUND	Superannuation Contributions	236.76
EFT101636	4/08/2015	PLUM NOMINEES P/L PLUM SUPER FUND	Superannuation Contributions	319.07

## REPORT ITEM CSF 193 REFERS

EFT101637	4/08/2015	TTCSL ATF CRUELTY FREE SUPER	Superannuation Contributions	182.66
EFT101638	4/08/2015	VISION SUPER	Superannuation Contributions	312.33
EFT101639	4/08/2015	KINETIC SUPERANNUATION	Superannuation Contributions	189.96
EFT101640	4/08/2015	AUSTRALIAN CATHOLIC SUPERANNUATION AND RETIREMENT FUND	Superannuation Contributions	85.32
EFT101641	4/08/2015	SUNSUPER SUPERANNUATION	Superannuation Contributions	244.05
EFT101642	4/08/2015	AG & CK TONKIN SUPER FUND	Superannuation Contributions	85.39
EFT101643	4/08/2015	LOCAL GOVERNMENT SUPER	Payroll Deductions	518.00
EFT101644	4/08/2015	IOOF EMPLOYEE SUPER	Superannuation Contributions	205.31
EFT101645	4/08/2015	BENJAMIN A & MICHELLE A MCKENNA ATF THE MCKENNA SUPER FUND		95.36
EFT101646	4/08/2015	DESMO SUPERANNUATION FUND	Superannuation Contributions	138.59
EFT101647	4/08/2015	ONEPATH MASTERFUND	Superannuation Contributions	187.08
EFT101648	4/08/2015	CBUS	Payroll Deductions	610.84
EFT101649	4/08/2015	UNI SUPER	Superannuation Contributions	139.84
EFT101650	4/08/2015	MTAA SUPERANNUATION FUND	Superannuation Contributions	196.25
EFT101651	4/08/2015	IOOF GLOBAL ONE (EX SKANDIA GLOBAL) 7	Superannuation Contributions	110.73
EFT101652	4/08/2015	AMP SUPERANNUATION SAVINGS (SIGNATURE SUPER)	Superannuation Contributions	982.40
EFT101653	4/08/2015	HESTA SUPER FUND	Superannuation Contributions	1,011.27
EFT101654	4/08/2015	REST SUPERANNUATION	Superannuation Contributions	3,267.79
EFT101655	4/08/2015	WEALTH PERSONAL SUPER AND PERSONAL PENSION 2	Payroll Deductions	224.85
EFT101656	4/08/2015	AMP SUPERANNUATION SAVINGS (FLEXIBLE LIFETIME SUPER PLAN)	Superannuation Contributions	1,189.09
EFT101657	6/08/2015	3D CATERING	Catering	70.00
EFT101658	6/08/2015	ACORN TREES AND STUMPS	Removal Of Stumps	1,980.00
EFT101659	6/08/2015	AD CONTRACTORS PTY LTD	Construction Of Sea Wall At Emu Point	11,452.00
EFT101660	6/08/2015	ADVERTISER PRINT	10000 Anzac Albany Brochures	2,193.00
EFT101661	6/08/2015	AUSTRALIAN AIRPORTS ASSOCIATION (AAA)	Early Bird Registration For Conference 2015/2016 13/10/15 - 16/11/15	2,770.00
EFT101662	6/08/2015	AIRSERVICES AUSTRALIA	Albany ILS/DME Performance Inspection And Maintenance April - June Qtr 2015	46,051.26
EFT101663	6/08/2015	OPTEON (ALBANY AND GREAT SOUTHERN WA)	Rental Valuations	440.00
EFT101664	6/08/2015	ALBANY SOIL AND CONCRETE TESTING	Soil Testing On Submitted Samples	524.70
EFT101665	6/08/2015	ALBANY MOTORCYCLES	Oil Flitter And Oil To Suit Can -AM 500	78.95
EFT101666	6/08/2015	ALBANY GAS CENTRE PTY LTD	Restart Lap Pool Boiler, In Fault	88.00
EFT101667	6/08/2015	ALBANY REFRIGERATION	Refrigeration & Air conditioning Repairs & Maintenance	165.00
EFT101668	6/08/2015	ALBANY OFFICE PRODUCTS DEPOT	Stationery Supplies	480.10
EFT101669	6/08/2015	ALBANY MILK DISTRIBUTORS	Milk Deliveries July 2015	515.80
EFT101670	6/08/2015	TRACTOR PARADE	Albany Art Prize Design Work	920.00
EFT101671	6/08/2015	ALINTA	Gas Usage Charges	61.05
EFT101672	6/08/2015	AMITY PAINTING & DECORATING	Being For The Painting Of The Weigh Bridge Office. Q14027	3,795.00
EFT101673	6/08/2015	AMPHIBIAN PLUMBING AND GAS	Plumbing Repairs And Maintenance	4,852.00
EFT101674	6/08/2015	ANNETTE DAVIS	Sale Of Artworks	435.00
EFT101675	6/08/2015	ATC WORK SMART	Casual Staff/Apprentice Fees	17,117.05
EFT101676	6/08/2015	AUDIOCOM ALBANY	Sim Card For Prepaid	30.00
EFT101677	6/08/2015	AUSSIE DRAWCARDS PTY LTD	Printing Of 5000 Promotional Drawcards	595.00
EFT101678	6/08/2015	AUSTRALIAN FINE JEWELLERY PTY LTD	NAC Merchandise	432.04
EFT101679	6/08/2015	AUSSIE TELECOM PTY LIMITED	Deep Freeze Enterprise Individual Workstation Perpetual On Premise Licenses	454.08
EFT101680	6/08/2015	COMFORT INN BEL EYRE PERTH	2 Nights Accommodation And Meals For 4 x Staff	963.50
EFT101681	6/08/2015	BEST OFFICE SYSTEMS	Photocopier Charges	927.16
EFT101682	6/08/2015	BIG SKY PUBLISHING	Forts Store Merchandise	1,019.71
EFT101683	6/08/2015	BLACKWOODS	Bags Quick Set Cement	546.84
EFT101684	6/08/2015	BLOOMIN FLOWERS	Flower Arrangement For L. Wenbourne For The Passing Of Her Father	70.00
EFT101685	6/08/2015	ALBANY BOBCAT SERVICES	Spreading of Mulch	210.38
EFT101686	6/08/2015	BOND ELECTRICS	Six Monthly Service Of Baggage Systems At Airport	4,724.50
EFT101687	6/08/2015	BOOTLEG COMEDY	Entertainment - Christmas Festival	1,155.00
EFT101688	6/08/2015	BRANDNET PTY LTD T/AS MILITARY SHOP	Forts Store Merchandise	5,593.18
EFT101689	6/08/2015	TERRY BROOKS	Reimbursements Reticulation Seminar And Plant Investigation	59.05

## REPORT ITEM CSF 193 REFERS

EFT101690	6/08/2015	CONSTRUCTION TRAINING FUND	BCITF Levy For The Month Of July 2015 Less Commissions	17,892.16
EFT101691	6/08/2015	BUILDING COMMISSION	BSL Levy Collected For The Month Of: July 2015 Less Commissions	13,764.33
EFT101692	6/08/2015	BUNNINGS GROUP LIMITED	Hardware Supplies	10.20
EFT101693	6/08/2015	CABCHARGE AUSTRALIA LIMITED	Cab Charges	821.66
EFT101694	6/08/2015	CALTEx AUSTRALIA PETROLEUM PTY LTD	Litres Diesel Fuel	17,160.10
EFT101695	6/08/2015	J & S CASTLEHOW ELECTRICAL SERVICES	Install Changeover Switch And Inlet Socket On Power Box On Mercer Rd To Fit New Generator As Quoted	3,877.12
EFT101696	6/08/2015	CMM TECHNOLOGY	Recalibration Of Lifeloc FC Breathalyser	88.00
EFT101697	6/08/2015	SUE CODEE	Visitors Centre Merchandise	140.00
EFT101698	6/08/2015	COLES SUPERMARKETS AUSTRALIA PTY LTD	Groceries	47.48
EFT101699	6/08/2015	GARY COOPER	Reimbursements Irrigation Training Course	65.45
EFT101700	6/08/2015	COURIER AUSTRALIA	Freight Charges	235.18
EFT101701	6/08/2015	ALBANY SIGNS	Centennial Park - Western Precinct Construction Signboard	2,893.00
DD22595.1	6/08/2015	ADAM COUSINS	Reimbursements For ICTIC Conference - Wollongong	75.73
DD22595.2	6/08/2015	MELANIE TARRYN CRABTREE	Rates Refund	1,499.71
DD22595.3	6/08/2015	HOLCIM (AUSTRALIA) PTY LTD	Tonnes 5mm Metal Washed Only From Bunbury Quarry (WALGA Contract Co33_13)	5,257.62
DD22595.4	6/08/2015	V J CUSWORTH TRADING AS HARDWARE MAGIC BASSENDEAN	Visitors Centre Merchandise	150.00
DD22595.5	6/08/2015	LANDGATE - PROPERTY & VALUATIONS	Title Searches	1,836.85
DD22595.6	6/08/2015	JANINE DETERMES	Fitness Instruction	180.00
DD22595.7	6/08/2015	DOG ROCK MOTEL	1 Nights Accommodation Brian Cole To Present At The Planning And Development Committee Meeting	159.30
DD22595.8	6/08/2015	DOWNRITE DEMOLITION	Removal Of The Katoomba Street Bus Shelter	2,202.00
DD22595.9	6/08/2015	DYLANs ON THE TERRACE	Catering	1,630.40
DD22602.1	6/08/2015	EASIFLEET MANAGEMENT	Motor Vehicle Lease Rental/Esp Bureau Fee/Bureau Fee Rebate	8,644.19
DD22609.1	6/08/2015	EDEN GATE ESTATE	Forts Merchandise	276.00
DD22610.1	6/08/2015	ELLEKER GENERAL STORE	Fuel Purchases	169.58
DD22611.1	6/08/2015	ALBANY ENGINEERING COMPANY	Supply And Fit Cutting Edge To Bobcat.	1,079.67
DD22619.1	6/08/2015	EVERITE SIGNS	Supply Of Single Sided Alucobond Face With UV Protection	176.00
DD22629.1	6/08/2015	THE FIXUPPERY	Window Cleaning Airport May 2015	1,806.97
DD22644.1	6/08/2015	TAMMIE FLOWER	Fitness Instruction	495.00
DD22644.2	6/08/2015	GRAHAM FOSTER	Reimbursements For Overseas Conference	735.40
DD22644.3	6/08/2015	FREMANTLE ARTS CENTRE PRESS	Forts Store Merchandise	506.77
DD22644.4	6/08/2015	GALLERY WORKS	1 X Framed Picture Of Bald Head	660.00
DD22644.5	6/08/2015	JEFFREY ALLAN GIBB	Forts Store Merchandise	545.00
DD22644.6	6/08/2015	SOUTHERN SHARPENING SERVICES	Hose Repairs	79.20
DD22644.7	6/08/2015	GSP WORKFORCE	Clerical Assistant	79.40
DD22644.8	6/08/2015	GREAT SOUTHERN ZONE OF WALGA	Annual Subscription 2015/2016	935.00
DD22644.9	6/08/2015	GREAT SOUTHERN PACKAGING SUPPLIES	Cleaning Supplies	1,226.80
DD22595.10	6/08/2015	GREENMAN TRADING COMPANY	Removal Of Trees	2,475.00
DD22595.11	6/08/2015	GRESLEY ABAS PTY LTD	C13014 Full Service Consultant - Centennial Park Sporting Precinct Price Schedule 2 - Western Precinct Civil	219,980.52
DD22595.12	6/08/2015	GREAT SOUTHERN TAEKWONDO	Kidsport Vouchers	200.00
DD22595.13	6/08/2015	HART SPORT	Whistles And Mouthguards	455.00
DD22595.14	6/08/2015	HARVEY NORMAN COMPUTERS ALBANY	CBW - Samsung Galaxy Tab 7 Competition Prize 2015"	178.00
DD22595.15	6/08/2015	HELEN LEEDER-CARLSON	Art Classes	240.00
DD22595.16	6/08/2015	HELEN MUNT	Provision Of Heritage Advisory Services In Albany	1,353.00
DD22595.17	6/08/2015	BILL HOLLINGWORTH	Car Hire	611.30
DD22595.18	6/08/2015	STATEWIDE RACKING & STORAGE SOLUTIONS	Supply And Construction Of Full Length Tier Locker For The Hanrahan Rd Waste Facility	1,999.80
DD22595.19	6/08/2015	ITOMIC WEB SPECIALISTS	200 Pre Paid Work As Per Web Development Contract C13027	43,200.00
DD22595.20	6/08/2015	ITRAILS DOWN UNDER	Albany Hero Trail	33.95
DD22595.21	6/08/2015	ALBANY MAPPING AND SURVEYING SERVICES	Re-Establishment Of Boundary And Feature Survey - 21 Parade Street And Foundation Park	1,650.00
DD22595.22	6/08/2015	JUST A CALL DELIVERIES	Internal Mail Deliveries July 2015	1,218.47
DD22595.23	6/08/2015	KANDOO WINDSCREENS	Supply And Fit New Windscreen To Truck.	550.00
DD22595.24	6/08/2015	GEORGIA ROBYN KIDMAN	Fitness Instruction	90.00
DD22595.25	6/08/2015	KING RIVER HORSE AND PONY CLUB	Kidsport Vouchers	1,000.00
DD22595.26	6/08/2015	MICHELLE KINNEAR	Fitness Instruction	25.00
DD22595.27	6/08/2015	LGIS RISK MANAGEMENT	OSH Roles And Responsibilities Senior Management Training 2015	2,999.10



## REPORT ITEM CSF 193 REFERS

DD22595.28	6/08/2015 CALTEX ENERGY WA	Drums Kerosene (200 Lts Each)	1,147.98
DD22595.29	6/08/2015 MARIO LIONETTI	Groceries For Day Care Centre	153.43
DD22595.30	6/08/2015 ANDRE LIPSCOMBE	Illustrated Talk At Vancouver Arts Centre 250715	450.00
DD22595.31	6/08/2015 LOCAL GOVERNMENT MANAGERS AUSTRALIA, WA DIVISION	2015/16 Affiliate Membership	1,745.00
DD22595.32	6/08/2015 LORLAINE DISTRIBUTORS PTY LTD	Cleaning Supplies	177.50
DD22595.33	6/08/2015 M & B SALES PTY LTD	Timber Supplies	101.10
DD22595.34	6/08/2015 RL & KJ MACKENZIE (GLENORAN LEATHER)	Visitors Centre Merchandise	109.30
DD22595.35	6/08/2015 MADMAN ENTERTAINMENT PTY LTD	License For Screening Of That Sugar Film	385.00
DD22595.36	6/08/2015 ALBANY CITY MOTORS	Only Supply And Delivery Of Isuzu FVZ 1400 Med Auto Truck As Per Quotation Number P15010.	145,924.80
DD22595.37	6/08/2015 VICKI MICHELLE MARTIN	Fitness Instruction	315.00
DD22595.38	6/08/2015 METRO CERAMIC TILES	Trowel And Grout Supplies	50.62
DD22595.39	6/08/2015 STEPHANIE MORRIGAN	EAP Counselling Services	990.00
DD22595.40	6/08/2015 MSS SECURITY	Guard Services For 1/6/15 - 30/5/15	48,218.89
DD22595.41	6/08/2015 LGIS LIABILITY	Public Liability Insurance Renewal	146,840.17
DD22595.42	6/08/2015 NORMAN DISNEY AND YOUNG	ALAC Lap Pool HVAC Upgrade - Superintendent Services	8,404.00
DD22595.43	6/08/2015 NEVILLES HARDWARE & BUILDING SUPPLIES	Hardware Supplies	366.45
DD22595.44	6/08/2015 ALBANY NEWS DELIVERY - ALAC - NEW	Newspaper Deliveries 20/7/15 - 26/7/15	109.47
DD22595.45	6/08/2015 IAN WILLIAM NICHOLS	Rates Refund	171.55
DD22595.46	6/08/2015 ALBANY COMMUNITY PHARMACY	Hot Cold Packs For Library	34.65
DD22595.47	6/08/2015 OCS SERVICES PTY LTD	Cleaning Services North Road July15	20,005.86
DD22595.48	6/08/2015 OFFICEWORKS SUPERSTORES PTY LTD	Extreme Scout Case Iphone 6 Black And Grey	149.95
DD22595.49	6/08/2015 OKEEFE'S PAINTS	Paint & Painting Supplies	1,512.11
DD22595.50	6/08/2015 OPUS INTERNATIONAL CONSULTANTS LTD	Q13064 - Superintendence For Pfeiffer Road Construction Contract (C13017)	13,119.35
DD22595.51	6/08/2015 ORIGIN ENERGY	Bulk Gas Supplies	6,327.10
DD22595.52	6/08/2015 CARMELIA O'SULLIVAN	Refund Of Multi Visit Pass - Leaving Town	46.55
DD22595.53	6/08/2015 ANNA PAGE	Fuel Reimbursement Travel To Perth Return For Training 26-29 July 2015	140.78
DD22595.54	6/08/2015 PALMER EARTHMOVING (AUSTRALIA) PTY LTD	Retention For Frenchman Bay Road - Contract Number C13022	53,341.91
DD22595.55	6/08/2015 PATHWEST LABORATORY MEDICINE WA	Pre Employment Screenings	70.00
DD22644.10	6/08/2015 PETER GRAHAM AND COMPANY LTD	Poly Wool Packs	58.56
DD22644.11	6/08/2015 PFD FOOD SERVICES PTY LTD	Catering Supplies	86.39
DD22644.12	6/08/2015 KRISTIE PORTER	Fitness Instruction	585.00
DD22644.13	6/08/2015 PRINT IDEAS PTY LTD T/AS ART GUIDE AUSTRALIA	Full Page Placement September/October Print And Digital Issues 2 Month Banner Placement August To October	2,860.00
DD22644.14	6/08/2015 REEVES AND COMPANY BUTCHERS PTY LTD	Catering	253.50
DD22644.15	6/08/2015 THE ROYAL LIFE SAVING SOCIETY WA INC	Purchase Mannequin Airbags Etc.	406.47
DD22644.16	6/08/2015 ROYALS FOOTBALL CLUB	Kidsport Vouchers	3,950.00
DD22644.17	6/08/2015 SEEK LIMITED	Seek Job Advertising	289.30
DD22644.18	6/08/2015 SHILLER IMAGES	Forts Store Merchandise	451.60
DD22644.19	6/08/2015 SKILL HIRE WA PTY LTD	Casual Staff	2,628.83
DD22644.20	6/08/2015 SMITHS ALUMINIUM AND 4WD CENTRE	Internal Fit Out As Per Design Provided By Assets	2,100.00
DD22644.21	6/08/2015 SOUTHERN TOOL & FASTENER CO	Hardware Supplies	10.26
DD22644.22	6/08/2015 SOUTHWAY DISTRIBUTORS PTY LTD DIVISION OF PDF FOOD SERVICES PTY LTD	Coffee Supplies For Depot	381.64
DD22644.23	6/08/2015 SOUTH COAST CRANES	Pick Up C/A Portable Toilet For Albany Race Club And Deliver To Centennial Oval With Crane And Rigger	1,078.00
DD22644.24	6/08/2015 SOUTH COAST ENVIRONMENTAL	Supply Of Fence Materials For Temporary Fence At Emu Beach	3,633.45
DD22644.25	6/08/2015 SUNNY SIGN COMPANY	Assorted Signage	1,922.25
DD22644.26	6/08/2015 ALBANY LOCK SERVICE	Locksmith Services Padlocks And Keys	1,115.00
DD22644.27	6/08/2015 SYNERGY	Electricity Supplies	15,383.50
DD22644.28	6/08/2015 PRACSYS MANAGEMENT SYSTEMS	Industrial Land Strategy Consultancy Services - Community Chest Fund	11,000.00
DD22644.29	6/08/2015 T & C SUPPLIES	Hardware/Tool Supplies	222.90
DD22644.30	6/08/2015 TALIS CONSULTANTS PTY LTD	GIS Data Conversion - Reserves - E-Quote P15012 (WALGA C001_13) As Per Submission Dated 28.04.15	32,659.00
DD22644.31	6/08/2015 KATI THAMO	Services For Exhibition	200.00
DD22644.32	6/08/2015 CAROLINE ELLEN TOMPKIN	Fitness Instruction	135.00
DD22644.33	6/08/2015 CENTAMAN SYSTEMS PTY LTD	Implementation Services 26/2/15 - New Site Anzac Centre Install	660.00
DD22644.34	6/08/2015 TRAILBLAZERS	Safety Boots	250.15

## REPORT ITEM CSF 193 REFERS

DD22644.35	6/08/2015	TRADELINK PLUMBING SUPPLIES	Supply Pipe DWV PVC S/Weld Sn8 225mm X 6mtr As Per Quote Number 3193073/SQ	16,576.32
DD22644.36	6/08/2015	ALBANY TYREPOWER	Tyre Repairs	238.00
DD22644.37	6/08/2015	RT & JR WALKER	Forts Merchandise	766.50
DD22644.38	6/08/2015	WA NATURALLY PUBLICATIONS	Visitors Centre Merchandise	309.00
DD22644.39	6/08/2015	JULIA WARREN	Fitness Instruction	225.00
DD22644.40	6/08/2015	ANDREW WILLIAM WENZEL	Reimbursement Of 3 Months Of Spotify For NLNL	35.97
DD22644.41	6/08/2015	WESTRAC EQUIPMENT PTY LTD	Vehicle Parts	219.76
DD22644.42	6/08/2015	WESTERN AUSTRALIAN LOCAL GOVERNMENT ASSOCIATION	Advertising	53,980.93
DD22644.43	6/08/2015	WEST COAST ANALYTICAL SERVICES	Waste Facility Water Monitoring Services As Per Quotation Q15018	12,241.00
DD22644.44	6/08/2015	NICOLETTE MULCAHY	Councillor Attendance And Travel Allowance 1/8/15 - 31/8/15	2,184.17
DD22644.45	6/08/2015	SARAH WISEMAN	Contract Staff - Cleaning Of Events Shed.	247.50
DD22644.46	6/08/2015	SARAH WISEMAN	Poster Distribution - Vinyl Meltdown	90.00
DD22644.47	6/08/2015	MARGARET YOUNG	Visitors Centre Merchandise	345.00
DD22644.48	6/08/2015	ZENITH LAUNDRY	Linen Hire/services	59.13
EFT101702	13/08/2015	ABA SECURITY	Security Services	254.73
EFT101703	13/08/2015	AD CONTRACTORS PTY LTD	Supply Semi Tipper For Carting Lime Sand (C14015)	15,682.50
EFT101704	13/08/2015	ADVERTISER PRINT	A4 Flyers	625.00
EFT101705	13/08/2015	ALBANY CITY LAWNS	Mowing Of Lancaster Pk	638.00
EFT101706	13/08/2015	ALBANY FARM TREE NURSERY	Replacement Plants Anzac Park	250.80
EFT101707	13/08/2015	ALBANY STATIONERS	Stationery Supplies	42.95
EFT101708	13/08/2015	ALBANY CHAMBER OF COMMERCE AND INDUSTRY	ACCI Directory 2015	4,853.50
EFT101709	13/08/2015	ALBANY OFFICE PRODUCTS DEPOT	Stationery Supplies	334.15
EFT101710	13/08/2015	ALBANY PSYCHOLOGICAL SERVICES	Consultation Fees	440.00
EFT101711	13/08/2015	ALBANY LEGAL PTY LTD	Professional Fees	1,672.00
EFT101712	13/08/2015	ALBANY IRRIGATION & DRILLING	Irrigation Material For Baltic Ridge	6,287.00
EFT101713	13/08/2015	ALBANY RECORDS MANAGEMENT	Library Services - Storage And Supply Of New Archive Boxes	319.00
EFT101714	13/08/2015	ALLROADS MOTOR BODY BUILDERS	Supply And Delivery Of Tipping Body To Suit Tandem Axle Truck	51,064.20
EFT101715	13/08/2015	ALL EVENTS PROSOUND HIRE	Smoke Machine And DJ Light For Vinyl Meltdown Saturday 8/8/15	80.00
EFT101716	13/08/2015	AMITY PAINTING & DECORATING	Being For The Painting Of The Entry Of The North Rd Admin Building	4,125.00
EFT101717	13/08/2015	AMPHIBIAN PLUMBING AND GAS	Amity Quarry Dump Point	5,909.18
EFT101718	13/08/2015	AURORA ENVIRONMENTAL ALBANY	Preliminary Acid Sulphate Soils Assessment	4,136.00
EFT101719	13/08/2015	ALBANY AUTOSPARK	Vehicle Repairs/Parts	303.00
EFT101720	13/08/2015	BT EQUIPMENT PTY LTD (TUTT BRYANT EQUIPMENT)	Hydraulic Filters	803.37
EFT101721	13/08/2015	BENNETTS BATTERIES	Supply And Fit 2 New Truck Batteries.	660.00
EFT101722	13/08/2015	BEST OFFICE SYSTEMS	Photocopy Charges	2,799.50
EFT101723	13/08/2015	BEVANS (WA) PTY LTD	3 X Bag Ice	30.00
EFT101724	13/08/2015	BLACKWOODS	Pairs Of UVEX Unilite Gloves/Protective safety gear	490.16
EFT101725	13/08/2015	BLOOMIN FLOWERS	Floral Arrangement For J. Taylor	55.00
EFT101726	13/08/2015	BMT OCEANICA PTY LTD	Site Visit For Installation, Service Or Retrieval	302.50
EFT101727	13/08/2015	BOC GASES AUSTRALIA LIMITED	Container Service Rental	125.00
EFT101728	13/08/2015	BOOEASY AUSTRALIA PTY LTD	Bookeasy Booking Returns Commission / Monthly Fees - July 2015	1,596.06
EFT101729	13/08/2015	AIR BP	Refund Airport Hangar Lease	178.50
EFT101730	13/08/2015	CARDNO BSD PTY LTD	Local Area Traffic Management Studies - Albany PS/SHS	13,200.00
EFT101731	13/08/2015	BUNNINGS GROUP LIMITED	Hardware Supplies	148.75
EFT101732	13/08/2015	C&C MACHINERY CENTRE	Supply And Delivery Of Massey Ferguson 6613 Tractor As Per Quotation P15005	146,666.00
EFT101733	13/08/2015	CAPE AGENCIES	Nelson E Halogen BC Globe 70W	3.00
EFT101734	13/08/2015	J & S CASTLEHOW ELECTRICAL SERVICES	Being For The Wiring And Installation Of The New Aware Centre Toilet. C12026	2,934.09
EFT101735	13/08/2015	CHILDREN'S BOOK COUNCIL OF AUSTRALIA	CBW Merchandise 2015	164.50
EFT101736	13/08/2015	BIS CLEANAWAY LIMITED	Rubbish Removal Contract	6,998.93
EFT101737	13/08/2015	COLES SUPERMARKETS AUSTRALIA PTY LTD	Groceries	54.32
EFT101738	13/08/2015	COURIER AUSTRALIA	Freight Fees	1,018.62
EFT101739	13/08/2015	ALBANY SIGNS	Aluminium Signs For Volunteer Service	121.00
EFT101740	13/08/2015	CROKER LACEY GRAPHIC DESIGN	NAIDOC Exhibition Library 2015	1,430.00
EFT101741	13/08/2015	HOLCIM (AUSTRALIA) PTY LTD	9M3 25X14 90 Slump Cement (C14022)	6,130.52

## REPORT ITEM CSF 193 REFERS

EFT101742	13/08/2015	DE JONGE MECHANICAL REPAIRS	Vehicle Servicing	743.00
EFT101743	13/08/2015	DEPARTMENT OF TRANSPORT	Vehicle Search Fees	120.25
EFT101744	13/08/2015	JANINE DETERMES	Fitness Instruction	180.00
EFT101745	13/08/2015	G & M DETERGENTS & HYGIENE SERVICES ALBANY	Hygiene Contract	1,669.53
EFT101746	13/08/2015	DOG ROCK MOTEL	Accommodation For A. Stanley And S. Frye	239.40
EFT101747	13/08/2015	DYLAN'S ON THE TERRACE	Catering	210.40
EFT101748	13/08/2015	EDEN GATE ESTATE	Forts Merchandise	69.00
EFT101749	13/08/2015	ELLEKER PROGRESS & SPORTING ASSOCIATION	Provision Of Water For Toilets, Corner Brassey Street And Lower Denmark Road Elleker	200.00
EFT101750	13/08/2015	THE FIXUPPERY	Window Cleaning	701.97
EFT101751	13/08/2015	ALL TRUCK REPAIRS	Vehicle Repairs And Maintenance	1,095.12
EFT101752	13/08/2015	FOUNDATION ELECTRICAL PTY LTD INCORPORATING SOUTHERN ELECTRICS	Repair ALAC Hockey Cannon, Fault To Cable	49.78
EFT101753	13/08/2015	FOXTEL MANAGEMENT PTY LTD	Foxtel Business Premium Package Monthly Subscription Fee	385.00
EFT101754	13/08/2015	GLASS SUPPLIERS	Reglaze Windows/Doors - Women's Rest Centre	157.89
EFT101755	13/08/2015	GREAT SOUTHERN PEST & WEED CONTROL	Pest Control	286.00
EFT101756	13/08/2015	GREAT SOUTHERN PACKAGING SUPPLIES	Cleaning Supplies	552.09
EFT101757	13/08/2015	GREENMAN TRADING COMPANY	Tree Removal At Centennial Oval As Per Contract C14023	5,665.00
EFT101758	13/08/2015	GREAT SOUTHERN TAEKWONDO	Kidsport Voucher	200.00
EFT101759	13/08/2015	GT BEARING AND ENGINEERING SUPPLIES	Vehicle Parts	490.00
EFT101760	13/08/2015	HELEN LEEDER-CARLSON	Art Classes	240.00
EFT101761	13/08/2015	ALAN HORTIN	Mileage Claim	120.00
EFT101762	13/08/2015	H AND H ARCHITECTS	ALAC Floor Works - Superintendent Services	330.00
EFT101763	13/08/2015	HOWARD PARK WINES	Wine Purchases	420.00
EFT101764	13/08/2015	ICKY FINKS WAREHOUSE SALES	Paint Supplies	590.49
EFT101765	13/08/2015	ICON TOURISM CONSULTING PTY LTD	Undertake A Destination Marketing Options Assessment For Albany	23,000.00
EFT101766	13/08/2015	IDENTITY CREATIVE	CEO Invite Artwork	333.08
EFT101767	13/08/2015	QUBE LOGISTICS (WA2) PTY LTD	General Freight	165.00
EFT101768	13/08/2015	JACK THE CHIPPER	Chipping Of Tree Pruning's	756.25
EFT101769	13/08/2015	ALBANY MAPPING AND SURVEYING SERVICES	Volume Survey Limestone Quarry Site	729.85
EFT101770	13/08/2015	JIMS TEST AND TAG	Electrical Testing And Tagging	517.77
EFT101771	13/08/2015	JJ'S HIAB SERVICES & JJ'S GREAT SOUTHERN	Pick And Delivery Services	184.80
EFT101772	13/08/2015	GEORGIA ROBYN KIDMAN	Fitness Instruction	90.00
EFT101773	13/08/2015	ELIZABETH ANNE KIRKLAND	Workshop: Up Close And Personal 9 August 2015	315.00
EFT101774	13/08/2015	KLB SYSTEMS	Q2160034 Black Sam4S Small Drawer With 24V Solenoid 4 Note/4 Coin (Expendable To 6 Coin), - 325Mm (W) X 420Mm (D) X 95Mm (H) & Q2160034 Freight	253.00
EFT101775	13/08/2015	LEADING EDGE HIFI-ALBANY	Mipro Receiver 6B Install Receiver In Rack Set Up Test	962.00
EFT101776	13/08/2015	LEASE CHOICE	Operating Lease Monthly In Advance 25/09/15 To 24/10/15	1,246.83
EFT101777	13/08/2015	MARIO LIONETTI	Groceries For Day Care Centre	287.12
EFT101778	13/08/2015	LOCKEEZ LUNCHBAR	Catering	85.00
EFT101779	13/08/2015	BUCHER MUNICIPAL PTY LTD	Vehicle Parts	169.22
EFT101780	13/08/2015	MAGPIES MAGAZINE PTY LTD	Magpies Magazine Subscription 1 Year	55.00
EFT101781	13/08/2015	ALBANY CITY MOTORS	Vehicles/Vehicle Parts/Repairs	818.24
EFT101782	13/08/2015	VICKI MICHELLE MARTIN	Fitness Instruction	495.00
EFT101783	13/08/2015	ANTHONY MCEWAN	Various Travel Expenses Claim	1,586.45
EFT101784	13/08/2015	MCKAILS GENERAL STORE	Alcohol Purchases	467.81
EFT101785	13/08/2015	AIRPORT SECURITY PTY LTD	Aviation Security Cards And Auscheck Clearance Fee	220.00
EFT101786	13/08/2015	MOIR & CO PTY LTD	Waste Removal From Cape Rich Camp Site For The Month Of July 2015.	616.00
EFT101787	13/08/2015	STEPHANIE MORRIGAN	EAP Counselling Services	990.00
EFT101788	13/08/2015	MOUNT ROMANCE AUSTRALIA PTY LTD	Forts Store Merchandise	1,009.68
EFT101789	13/08/2015	NURRUNGA COMMUNICATIONS	Fit Supplied Two Way Radios And Supply New Aerials To Tractor As Required.	1,064.78
EFT101790	13/08/2015	ALBANY NEWS DELIVERY - ALAC - NEW	Newspaper Deliveries	146.24
EFT101791	13/08/2015	ALBANY COMMUNITY PHARMACY	First Aid Supplies	141.51
EFT101792	13/08/2015	ELSIE JUNE NORTH	Rates Refund	646.45
EFT101793	13/08/2015	OCS SERVICES PTY LTD	Cleaning Services	167.82

## REPORT ITEM CSF 193 REFERS

EFT101794	13/08/2015 KATE PARKER	Art Prize Co-Ordination	1,425.60
EFT101795	13/08/2015 PAUL G ROBERTSON AND ASSOCIATES	Road Safety Audit For Coogee Street	1,496.00
EFT101796	13/08/2015 PENROSE PROFESSIONAL LAWN CARE	Mowing & Edge Lawns	264.00
EFT101797	13/08/2015 PETER GRAHAM AND COMPANY LTD	The Purchase Of One Harness For A Solo 15 Litre Knapsack Sprayer.	89.40
EFT101798	13/08/2015 KRISTIE PORTER	Fitness Instruction	630.00
EFT101799	13/08/2015 PPCA	Sound Recordings 7 Public Exhibition Of Music Videos	1,143.46
EFT101800	13/08/2015 PREFERRED TRAINING NETWORKS PTY LTD	Program Cost - Course/Travel And Books	12,386.00
EFT101801	13/08/2015 SOUTHERN CROSS AUSTRALIA - RADIO WEST	Radio Branding For The 2015/16 Financial Year	1,155.00
EFT101802	13/08/2015 RAECO INTERNATIONAL PTY LTD	Book Processing Supplies QU15186131	956.27
EFT101803	13/08/2015 RAYS SPORTS POWER	Ammunition Supplies	1,004.90
EFT101804	13/08/2015 REPLICA MEDALS & RIBBONS PTY LTD	Forts Store Merchandise	395.67
EFT101805	13/08/2015 AUSTIN ROGERSON	Training In Perth Travel Reimbursement	170.98
EFT101806	13/08/2015 RUSTY ROO	Visitors Centre Merchandise	234.85
EFT101807	13/08/2015 UNITED TOOLS ALBANY	Hardware/Tool Supplies	43.71
EFT101808	13/08/2015 3RD ALBANY SCOUT GROUP	Kids Sports Vouchers	220.00
EFT101809	13/08/2015 SECUREPAY PTY LTD	Web Payments, Seat Advisor Pricing. Transaction Fee.	27.06
EFT101810	13/08/2015 SMITHS ALUMINIUM AND 4WD CENTRE	Aluminium Fabrication Materials & Labour	30.00
EFT101811	13/08/2015 SOUTHERN TOOL & FASTENER CO	Hardware Supplies /Tools	651.95
EFT101812	13/08/2015 SOUTHCOAST SECURITY SERVICE	Security Services	1,055.71
EFT101813	13/08/2015 STATEWIDE BEARINGS	Vehicle Parts	57.99
EFT101814	13/08/2015 STATEWIDE BUILDING CERTIFICATION WA	Certificate Of Design Compliance For Emu Point Disabled Access Ramp	429.00
EFT101815	13/08/2015 STIRLING PRINT	Printing Of A4 And A3 Mad Youth Event - Pool Party Posters	52.00
EFT101816	13/08/2015 STORM OFFICE NATIONAL	Stationery Supplies	5.00
EFT101817	13/08/2015 SUNNY INDUSTRIAL BRUSHWARE	Main brooms To Suit VT605.	858.00
EFT101818	13/08/2015 SUNNY SIGN COMPANY	Assorted Signage	518.10
EFT101819	13/08/2015 ALBANY LOCK SERVICE	Locksmith Services, Repairs etc.	33.50
EFT101820	13/08/2015 SYNERGY	Electricity Supplies	60,331.30
EFT101821	13/08/2015 T & C SUPPLIES	Hardware/Tool Supplies	826.98
EFT101822	13/08/2015 ANDREA LEE TICKELL	Fitness Instructor	270.00
EFT101823	13/08/2015 CAROLINE ELLEN TOMPKIN	Fitness Instruction	135.00
EFT101824	13/08/2015 VANCOUVER WASTE SERVICES PTY LTD	Coarse Sand	289.50
EFT101825	13/08/2015 VARIDESK LLC	1 X Proplus 36 Varidesk For Risk Management/Insurance	621.00
EFT101826	13/08/2015 ALBANY VETERINARY HOSPITAL PTY LTD	Disposal of Animals	193.72
EFT101827	13/08/2015 JULIA WARREN	Fitness Instruction	180.00
EFT101828	13/08/2015 WESTERN AUSTRALIAN LOCAL GOVERNMENT ASSOCIATION	Manage Recovery Activities For Local Govt Course For D. Olde	605.00
EFT101829	13/08/2015 LANDMARK LIMITED	Seed For Albany Hwy/Herbicides/Insecticides	867.63
EFT101830	13/08/2015 TOURISM WESTERN AUSTRALIA	WA Cruise Exchange 2015 - Seller Fee	250.00
EFT101831	13/08/2015 WEST-OZ WEB SERVICES	Completed Bookings Marketing Fee July 2015	215.50
EFT101832	13/08/2015 WEST AUSTRALIAN NEWSPAPERS LIMITED - (VISITORS)	32 Books From Albany Advertiser	96.00
EFT101833	13/08/2015 THE WINDOW WASHER MAN	VAC Window Cleaning 07/07/15 - 28/07/15	44.00
EFT101834	13/08/2015 WOOLWORTHS LIMITED	Groceries For Daycare	1,708.00
EFT101835	13/08/2015 YOUR TUTOR TUTORING AUSTRALASIA	Your Tutor Homework And Study Centre License	6,121.50
EFT101836	13/08/2015 ZENITH LAUNDRY	Laundry Services/Hire	12.33
EFT101837	13/08/2015 LANI MALAN	Fitness Instruction	1,080.00
EFT101838	13/08/2015 CHRISTINE MARY SARGENT	Fitness Instruction	45.00
DD22674.2	14/08/2015 WA LOCAL GOVT SUPERANNUATION	Payroll Deductions	31,533.82
<b>TOTALS</b>			<b>4,357,939.96</b>



Document Number	Description	Date Sent /Received
EDR1547624	<p>COPY OF EXECUTED DOCUMENT</p> <p>ITEM: N/A</p> <p>RE: REQUEST TO WA ELECTORAL COMMISSION TO PREPARE LOCAL GOVERNMENT ROLL FOR 2015 ELECTION</p> <p>PARTIES: WA ELECTORAL COMMISSION</p> <p>SIGNED BY THE CEO 1 COPY</p>	22/07/2015
EDR1547651	<p>COPY OF EXECUTED DOCUMENT</p> <p>ITEM: DELEGATION 2015.012</p> <p>RE:COA PROCEEDING TO SELL 5 STANLEY STREET FOR THREE YEARS NON PAYMENT UNDER SECTION 6.64 OF THE LOCAL GOVERNMENT ACT</p> <p>PARTIES: N/A</p> <p>SIGNED BY THE CEO 1 COPY</p>	23/07/2015
EDR1547775	<p>COPY OF EXECUTED DOCUMENT</p> <p>ITEM: OCM 26.05.2015 ITEM CSF169</p> <p>RE:REGIONAL ROAD GROUP FUNDING</p> <p>PARTIES: MAIN ROADS WA</p> <p>SIGNED BY THE CEO 1 COPY</p>	30/07/2015
EDR1547860	<p>COPY OF EXECUTED DOCUMENT</p> <p>ITEM: N/A</p> <p>RE:ACQUITTAL OF 2014/15 LGGS BUSH FIRE BRIGADE AND SES FUNDING TO DFES</p> <p>PARTIES: N/A</p> <p>SIGNED BY THE CEO 1 COPY</p>	03/08/2015
EDR1547921	<p>COPY OF EXECUTED DOCUMENT</p> <p>ITEM: DELEGATION 2015:006</p> <p>RE: LICENCE FOR USE OF PROPERTY VESTED IN MINISTER FOR EDUCATION (MOWING OF LITTLEGROVE PRIMARY SCHOOL OVAL) - OVAL WILL BE USED TO RELOCATED SPORTING FIXTURES DURING CENTENNIAL PARK SPORTING PRECINCT REDEVELOPMENT</p> <p>PARTIES: LITTLE GROVE PRIMARY SCHOOL ON BEHALF OF THE MINISTER FOR EDUCATION</p> <p>SIGNED BY THE CEO 2 COPIES</p>	05/08/2015

Document Number	Description	Date Sent /Received
EDR1547922	COPY OF EXECUTED DOCUMENT ITEM: DELEGATION 2015:008 S6.56 OF LOCAL GOVERNMENT ACT RE:MEMORANDUM OF CONSENT ORDER FOR LEGAL ACTION TO BE TAKEN AGAINST TWO RATEPAYERS FOR UNPAID RATES IN 2010 AND 2014 PARTIES: N/A SIGNED BY THE CEO 4 COPIES	05/08/2015
EDR1548046	COPY OF EXECUTED DOCUMENT ITEM: N/A RE:DEVELOPMENT OF SINGLE TOILET BLOCK AT ALBANY GOLF COURSE AT 42-164 GOLF LINKS ROAD LAKE SEPPING PARTIES: N/A SIGNED BY THE CEO 1 COPY	11/08/2015
EDR1548048	COPY OF EXECUTED DOCUMENT ITEM: N/A RE:PURCHASE ORDER FOR PUBLIC CONVENIENCE AND BBQ CLEANING AS PER C14036 PARTIES: CGS QUALITY CLEANING SIGNED BY THE CEO 1 COPY	11/08/2015
EDR1548050	COPY OF EXECUTED DOCUMENT ITEM: OCM 23.06.2015 ITEM WS077 RE: AWARD OF TENDER C15018 - SUPPLY AND INSTALLATION OF TURF FOR CENTENNIAL PARK SPORTING COMPLEX PLAYING FIELDS PARTIES: TURFMASTER PTY LTD SIGNED BY THE CEO 1 COPY	11/08/2015
EDR1548051	COPY OF EXECUTED DOCUMENT ITEM: OCM 24.06.2015 ITEM CSF094 RE:SUMMER EVENTS PROGRAM - CHRISTMAS FESTIVAL AND PAGEANT; NEW YEARS EVE SKYWORKS; AUSTRALIA DAY CELEBRATIONS PARTIES: LOTTERYWEST SIGNED BY THE CEO 1 COPY	11/08/2015
EDR1548168	COPY OF EXECUTED DOCUMENT ITEM: OCM 24.06.2014 ITEM CSF094 RE: SPONSORSHIP BY WATER CORPORATION OF TWO DRINKING FOUNTAINS FOR CENTENNIAL PARK DEVELOPMENT PARTIES: WATER CORPORATION SIGNED BY THE CEO 2 COPIES	13/08/2015

EDR1548169	<p>COPY OF EXECUTED DOCUMENT</p> <p>ITEM: OCM 24.06.2014 ITEM CSF094</p> <p>RE: NATURE BASED CAMPING - UPGRADE OF 6 SHIRES NATURE BASED CAMPING FACILITIES - COA TO HOLD \$1M IN TRUST</p> <p>PARTIES: TOURISM WA</p> <p>SIGNED BY THE CEO 2 COPIES</p>	13/08/2015
NCSR1547501	<p>COPY OF COMMON SEAL</p> <p>ITEM: OCM 26.08.2014 ITEM CSF109</p> <p>RE: SIGNING OF CONTRACTS FOR C15011 - TOWN HALL PUBLIC AMENITIES REFURBISHMENT</p> <p>PARTIES: TECTONICS CONSTRUCTION GROUP</p> <p>SIGNED BY THE CEO 3 COPIES</p>	16/07/2015
NCSR1547502	<p>COPY OF COMMON SEAL</p> <p>ITEM: OCM 23.06.2015 ITEM WS076</p> <p>RE: SIGNING OF CONTRACTS FOR C15007 - SUPPLY OF EXTRUDED CONCRETE KERBING AND / OR ASPHALT</p> <p>PARTIES: GORDON WALMSLEY PTY LTD</p> <p>SIGNED BY THE CEO 1 COPY</p>	16/07/2015
NCSR1547558	<p>COPY OF COMMON SEAL</p> <p>ITEM: OCM 23.06.2015 ITEM WS077</p> <p>RE: SIGNING OF CONTRACTS C15019 - SUPPLY AND DELIVERY OF SAND FOR CENTENNIAL PARK COMPLEX PLAYING FIELDS</p> <p>PARTIES: AD CONTRACTORS PTY LTD</p> <p>SIGNED BY THE CEO 2 COPIES</p>	20/07/2015
NCSR1547570	<p>COPY OF COMMON SEAL</p> <p>ITEM: N/A</p> <p>RE: WITHDRAWAL OF CAVEAT ON A220321 IN ORDER FOR PROPERTY OWNER TO REFINANCE BEFORE REINSTATING CAVEAT</p> <p>PARTIES: J &amp; J DEVELOPMENT SYSTEMS PTY LTD</p> <p>SIGNED BY THE CEO 1 COPY</p>	20/07/2015
NCSR1547730	<p>COPY OF COMMON SEAL</p> <p>ITEM: N/A</p> <p>RE: SECTION 70A NOTIFICATION FOR STRATA APPROVAL 576-14 LOT 30 COCKBURN ROAD - WAPC 150703</p> <p>PARTIES: DALY AND SHAW PTY LTD (ROBERT SHAW)</p> <p>SIGNED BY THE CEO 6 COPIES</p>	28/07/2015

Document Number	Description	Date Sent /Received
NCSR1547731	<p>COPY OF COMMON SEAL</p> <p>ITEM: OCM 23.06.2015 ITEM WS075</p> <p>RE: SIGNING OF CONTRACTS FOR C15009(D) - SUPPLY AND DELIVERY OF CONCRETE DRAINAGE</p> <p>PARTIES:DURACAST</p> <p>SIGNED BY THE CEO 2 COPIES</p>	28/07/2015
NCSR1547733	<p>COPY OF COMMON SEAL</p> <p>ITEM: N/A</p> <p>RE: PROPERTY HAS CAVEAT (L693019) WHICH ALLOWS COA TO RESUME A SECTION OF PROPERTY FOR FUTURE ROAD PURPOSES. CAVEAT IS TEMPORARILY LIFTED WHILE TRANSFER OF SALE OCCURS</p> <p>PARTIES: N/A</p> <p>SIGNED BY THE CEO 1 COPY</p>	28/07/2015
NCSR1547781	<p>COPY OF COMMON SEAL</p> <p>ITEM: N/A</p> <p>RE:WITHDRAWAL AND REINSTATEMENT OF CAVEAT ON A131009 DUE TO REFINANCING REQUIREMENTS FOR PROPERTY AT 174 ALBANY HIGHWAY.</p> <p>PARTIES: J &amp; J DEVELOPMENT SYSTEMS PTY LTD</p> <p>SIGNED BY THE CEO 1 COPY</p>	30/07/2015
NCSR1547826	<p>COPY OF COMMON SEAL</p> <p>ITEM: OCM 24.02.2015 ITEM WS062</p> <p>RE: SIGNING OF CONTRACTS FOR P14021 - WASTE AND RECYCLING COLLECTION SERVICES</p> <p>PARTIES:TRANSPACIFIC CLEANAWAY PTY LTD</p> <p>SIGNED BY THE CEO 2 COPIES</p>	31/07/2015
NCSR1547923	<p>COPY OF COMMON SEAL</p> <p>ITEM: N/A</p> <p>RE: CAVEAT IN BENEFIT TO THE COA ON PROPERTY FOR LOT 202 HARDING ROAD TO BE TEMPORARILY LIFTED FOR TRANSFER OF OWNERSHIP. DEED IS TO ENSURE CAVEAT IS TO BE PUT BACK ON TITLE.</p> <p>PARTIES: ANTHONY ROBIN AND DEBORAH JANETTE HOWARD</p> <p>SIGNED BY THE CEO 2 COPIES</p>	05/08/2015



Document Number	Description	Date Sent /Received
NCSR1547963	COPY OF COMMON SEAL ITEM: N/A RE: DRAINAGE INFRASTRUCTURE ON LOT 252 COCKBURN ROAD, MIRA MAR HAS BEEN REMOVED - DRAINAGE EASEMENT TO BE EXTINGUISHED PARTIES:DALY & SHAW PTY LTD SIGNED BY THE CEO 1 COPY	06/08/2015
NCSR1548054	COPY OF COMMON SEAL ITEM: OCM 28.07.2015 ITEM WS079 RE:SIGNING OF CONTRACTS FRO C15010 - PROVISION OF TRAFFIC CONTROL PARTIES: ADVANCED TRAFFIC MANAGEMENT (WA) PTY LTD SIGNED BY THE CEO 2 COPIES	11/08/2015
NCSR1548060	COPY OF COMMON SEAL ITEM: OCM 26.05.2015 ITEM CSF169 RE:RENEWAL OF EXISTING COMMUNITY LEASE FOR THE LITTLE GROVE COMMITTEE INC UNDER DELEGATED AUTHORITY 2015:019 PARTIES: THE LITTLE GROVE CHALET COMMITTEE INCORPORATED SIGNED BY THE CEO 2 COPIES	11/08/2015
NCSR1548061	COPY OF COMMON SEAL ITEM: OCM 26.05.2015 ITEM CSF169 RE: RENEWAL OF EXISTING LEASE FOR AIRPORT HANGAR SITE 18 UNDER DELEGATED AUTHORITY NO: 2015:019 PARTIES: SIMON DAVID STONE SIGNED BY THE CEO 2 COPIES	11/08/2015
NCSR1548166	COPY OF COMMON SEAL ITEM: OCM 26.05.2015 ITEM CSF169 RE:PRINCESS ROYAL SAILING CLUB KITCHEN LICENCE FOR ONE YEAR + 2 FURTHER ONE YEAR TERMS ON PORTION OF CROWN RESERVE 1036 PARTIES: PRINCESS ROYAL SAILING CLUB ABD IAIN AND JOANNE MACINNES TRADING AS KOOKAS SIGNED BY THE CEO 3 COPIES	13/08/2015
NCSR1548167	COPY OF COMMON SEAL ITEM: OCM 24.02.2015/ 28.07.2015 ITEM PD069 / PD084 RE:LAMD13 - ALTERING VARIOUS PARTS OF THE SCHEME TEXT TO CORRECT IDENTIFIED ANOMALIES AND ERRORS PARTIES:N/A SIGNED BY THE CEO 3 COPIES	13/08/2015

## Council Report

# Mount Elphinstone to CBD Cycle Link

## Feasibility Study

## TABLE OF CONTENTS

1	Introduction .....	4
2	Study Area .....	4
3	Existing Situation .....	6
3.1	Existing Road Network .....	6
3.1.1	Hanrahan Road – Princess Royal Drive.....	6
3.1.2	Carlisle Street .....	7
3.1.3	Festing Street .....	7
3.1.4	Frenchman Bay Road.....	7
3.1.5	Grey Street West .....	8
3.1.6	Lower Denmark Road.....	8
3.1.7	Vancouver Street .....	9
3.1.8	Woolstores Place.....	9
3.2	Existing Cycle Facilities .....	13
3.3	Crash History .....	13
3.4	Existing Cycle / Pedestrian Trails .....	13
3.5	Rail Corridor .....	14
4	Previous & Current Proposals .....	15
4.1	Albany Harbours Dual Use Path Planning Strategy (DUPPS) .....	15
4.2	Main Roads WA.....	17
4.3	Grange Resources Pipeline .....	19
5	Suitability of existing roads and opportunities for cycle infrastructure improvements.....	22
5.1	Hanrahan Road – Princess Royal Drive.....	22
5.2	Carlisle Street .....	23
5.3	Festing Street .....	23
5.4	Frenchman Bay Road.....	23
5.5	Grey Street West .....	23
5.6	Lower Denmark Road.....	24
5.7	Vancouver Street .....	24
5.8	Woolstores Place.....	24
6	Options for cycle infrastructure improvements .....	27
6.1	Route for confident cyclists .....	27
6.2	Route options for less confident cyclists. ....	29
6.2.1	Option 1 .....	29
6.2.2	Option 2 .....	29
7	Stakeholder Engagement.....	35
8	Recommendations.....	36
8.1	Route for Confident Cyclists .....	36
8.1.1	Short Term (within 12 months) .....	36
8.1.2	Medium term (1-3 years) .....	36
8.1.3	Long Term .....	36

8.2	Routes for Less Confident Cyclists .....	37
8.2.1	Short Term (within 12 months) .....	37
8.2.2	Medium Term (1-3 years) .....	37
8.2.3	Long Term .....	37
Appendices.....		38
Appendix A – Extracts from Cycle City Albany 2014-2019 Strategy.....		39
Appendix B – Extracts from Albany Harbours Dual Use Path Planning Strategy .....		46
Appendix C - Stakeholder Feedback.....		50

## LIST OF FIGURES

Figure 1 - Study Area.....	5
Figure 2 - Existing Road Network, Cycle Infrastructure and Long Distance Trails .....	10
Figure 3 - Main Roads WA Recently Constructed Cycle Lanes. Princess Royal Drive .....	11
Figure 4 - Albany Harbours DUPPS. Preferred and Alternative Path Alignments .....	16
Figure 5 - Albany Ring Road Proposed Alignment and Recommended Modifications .....	18
Figure 6 - Grange Resource. Proposed Alignment of Slurry Pipeline .....	20
Figure 7 - Slurry Pipeline Preferred Embankment Widening Option (Option A) .....	21
Figure 8 - Opportunities and Constraints. Routes for Confident Cyclists .....	25
Figure 9 - Opportunities and Constraints. Routes for Less Confident Cyclists .....	26
Figure 10 - Recommended Route for Confident Cyclists .....	28
Figure 11 - Route Options for Less Confident Cyclists.....	31
Figure 12 - Option 1 – Detailed Assessment (Sheet 1 of 3).....	32
Figure 13 - Option 1 – Detailed Assessment (Sheet 2 of 3).....	33
Figure 14 - Option 1 – Detailed Assessment (Sheet 3 of 3).....	34

## LIST OF TABLES

Table 1 - Existing Road Infrastructure. ....	12
Table 2 - Existing Rail Crossing Facilities .....	14

## 1 Introduction

City of Albany published the Cycle City Albany 2014-2019 Strategy (CCA) in October 2014. The Strategy has a bold vision “to transform Albany into one of Australia’s best cycling destinations, including both on and off road cycling”. To achieve this the Strategy “aims to improve cycling infrastructure, encourage cycling as a legitimate mode of transport, improve the culture surrounding cycling by encouraging ‘sharing the road’ and provide more cycle tourism”.

As part of the plan, extensive stakeholder consultation was undertaken including the formation of a Project Control Group (PCG), blank slate community consultation comprising surveys and community workshops, as well as a public submission period following the adoption by Council of a draft Bike Plan in February 2014.

Appendix C – Bike Plan Community Engagement Report of the CCA Strategy provides a detailed summary of the stakeholder consultation. Appendix C states that 90% of respondents to the Draft Bike Plan (approximately 130 submissions received in total) believed that the Princess Royal Drive/wool stores missing link is one of the most significant areas for improvement.

The Strategy also includes a detailed schedule of recommended bicycle infrastructure improvements which have been prioritised for implementation over the short, medium and long term.

The issue of Princess Royal Drive is discussed in detail in section 1.5.9 of the Strategy report and is reproduced in Appendix A of this study.

The Strategy recognised that “The ultimate solution for this section requires significant engineering investigation and is therefore outside the scope of this Strategy” and recommended that “a comprehensive feasibility study” is undertaken “to determine a preferred suite of short term and long term improvements”.

## 2 Study Area

The area covered by the Feasibility Study is shown in Figure 1. It is discussed in detail in Sections 1.5.9 and 1.5.11 of the Strategy (also project numbers 28, 28a, 56, 57 and 58 which can be found in Appendix F of the Strategy) and Appendix A of this study.

The study area includes the following roads:

- Hanrahan Road from the end of the existing sealed shoulders, north of the entrance to CSBP fertiliser works, to Frenchman Bay Road;
- Princess Royal Drive from Frenchman Bay Road to Residency Road;
- Frenchman Bay Road from Woolstores Place to Princess Royal Drive;
- Lower Denmark Road from Frenchman Bay Road to a point 500m west;
- Woolstores Place from Frenchman Bay Road to its end.
- Arterial roads into the CBD for which we have included:
  - Carlisle Street;
  - Festing Street;
  - Grey Street West, up to the intersection with Collie Street;
  - Vancouver Street.





SOURCE: LANDGATE  
SCALE 1:20,000

**Albany**  
102 NORTH ROAD, YAKAMIA WA 6330  
PO BOX 484 ALBANY WA 6331  
Tel: (08) 9841 9333  
Fax: (08) 9841 4099  
Email: [cityassets@albany.wa.gov.au](mailto:cityassets@albany.wa.gov.au)  
Website: [www.albany.wa.gov.au](http://www.albany.wa.gov.au)

## STUDY AREA



FIGURE 1

### 3 Existing Situation

#### 3.1 Existing Road Network

The existing road network within the study area is shown in Figure 2. A detailed description of each road is given below and summarised in Table 1 at the end of this section.

##### 3.1.1 Hanrahan Road – Princess Royal Drive

Hanrahan Road and Princess Royal Drive form the main access route to the Albany Port and are the responsibility of Main Roads WA (MRWA). They are part of the MRWA Restricted Access Vehicle Network having a network 7 classification. This allows for vehicles up to 107.5 tonnes mass and 36.5m in length to use the road.

Traffic data provided by MRWA shows that at the intersection with Frenchman Bay Road Hanrahan Road currently carries 6,770 vehicles per day (vpd) with 9% heavy vehicles and Princess Royal Drive carries 8,150 vpd with 6% heavy vehicles. The number of heavy vehicles accessing the port can vary considerably depending on shipping movements and seasonal requirements.

The length of Hanrahan Road within the study area is 250m from the intersection with Frenchman Bay Road to the start of the sealed shoulders just north of the entrance to the CSBP fertiliser works. The road has lane widths of between 3.5m and 4.5m, is kerbed both sides and has a large chip seal surface finish. The speed limit on this section of road is 70km/h.

There are no existing pedestrian or cyclist facilities along this section of Hanrahan Road

Princess Royal Drive is a continuation of Hanrahan Road, starting at the intersection of Frenchman Bay Road through to Residency Road, a distance of 2.2km. The road heads east from Frenchman Bay Road with intersections at Carlisle Street and Festing Street before passing over the rail line on a bridge. It then continues along on an embankment for approximately 1km before diverting around the northern edge of the Anzac Peace Park.

The road has a speed limit of 70km/h from Frenchman Bay Road to a point 260m west of Residency Road where it drops to 60km/h.

The Munda Biddi Trail utilises the northern verge of Princess Royal Drive between the Grey Street West Road reserve and Festing Street as discussed in Section 3.4.

The road varies in width from approximately 9.5m west of the rail line to 7.0m along the embankment section. At the intersections with Frenchman Bay Road and Carlisle Street median islands create pinch points and are of great concern for cyclists.

Also the bridge over the railway forms another squeeze point with a width of only 9.5m between the faces of the safety barrier creating a further hazard for cyclists.

Main Roads WA have recently completed construction of cycle lanes, 1.5m wide, on both sides of Princess Royal Drive from a point 180m east of Frenchman Bay Road to Festing Street as shown in Figure 3. The work involved alteration to the existing kerb lines and median islands to provide adequate lane widths as well as installing green lane treatments at the intersection with Carlisle St and the access driveway to the railway land to the south.

Cyclists have raised concerns over the rough surface finish, the level difference between the road surface and drainage grates as well as the height of the new kerb.

### 3.1.2 Carlisle Street

Carlisle Street runs west to east from Princess Royal Drive for 630m where it becomes Grey Street West. The road has a speed limit of 60km/h and carries approximately 2,700 vpd. The road is a main connector for traffic from Frenchman Bay Road to the CBD. Over its length, the road climbs 29m in height with a maximum gradient of 9%. The road has a constant width of 8 metres, is kerbed both sides and is surfaced with chip seal. There are no existing pedestrian or cycle facilities along Carlisle Street.

### 3.1.3 Festing Street

Festing Street runs from Princess Royal Drive through to Parade Street, a distance of 1.2km, where it becomes Stirling Terrace. The road is used as part of the route of the Munda Biddi Trail.

The road varies in width from a minimum of 7.1m to a maximum of 8m and has a fairly gentle grade for most of its length apart from the section between Melville Street and Parade Street where the road rises by 15m with a maximum gradient of 10%.

The road has a speed limit of 50km/h and has an asphalt surface finish.

Traffic flows of 800vpd were recorded on Festing Street, west of Parade Street, with an 85% speed of 58km/h. An 85% speed of 64km/h was recorded on Festing Street 200m east of the intersection with Princess Royal Drive.

There are no existing cycle facilities along the road. There is a footway along the north side of Festing Street westward from Parade Street for 110m which then becomes a gravel verge through to Melville Street.

### 3.1.4 Frenchman Bay Road

Frenchman Bay Road is an important corridor in the Albany road network providing the only link between the suburbs and tourist areas around Princess Royal Harbour with Albany, with a total length of 18km.

It runs south from the intersection with Hanrahan Road/Princess Royal Drive across the rail line before intersecting with Lower Denmark Road, all within the space of 100m. This section has 2 lanes in each direction separated by a 1.2m wide median with each carriageway being 7.2m wide and kerbed.

The road then reduces to a single lane carriageway 7.0m wide with unsealed shoulders through to Woolstores Place, a total distance of 590m.

This section of Frenchman Bay Road has a 70km/h speed limit with traffic flows of 6,400vpd although this can increase significantly during the peak tourist season. It is also part of the MRWA Restricted Access Vehicle (RAV) Network and has a Network 2 classification. This allows access for trucks up to 27.5m in length and 87.5 tonnes to use the road.

The road is fairly level for most of its length but rises about 8 metres on the approach to the Hanrahan Road/Princess Royal Drive intersection. There have been 21 recorded crashes along this road in the 5 years from 2009-2013, none involving cyclists.

The road is popular with cyclists of all confidence levels with an existing 2.0m shared path running south from Woolstores Place through to Little Grove. There are plans to continue this path through to Goode Beach and Frenchman Bay as part of the Albany Harbours Dual Use Path Planning Strategy.

There are no on-road cycle facilities along its entire length.



### 3.1.5 Grey Street West

The Grey Street West road reserve runs from Princess Royal Drive, 150m southeast of the Frenchman Bay Road intersection, through to Collie Street, a total distance of 1.97km.

- ***Princess Royal Drive to Spearwood Road***

This section is 310m long and forms part of the Bibbulmun Track. It consists of a rough track currently suitable for use only by walkers and mountain bike riders. The track climbs steeply with gradients of up to 16% with a total height difference of 26m.

- ***Spearwood Road to Carlisle Street***

This section consists of a formed gravel road with widths ranging from 3m to 11m. Over its distance of 580m the road climbs up to 13m in height. The Bibbulmun Track continues along this section of road before using existing bush tracks, joining Grey Street West again at Bay Street.

- ***Carlisle Street to Collie Street***

Here Grey Street West is a continuation of Carlisle Street and maintains a similar width of 8m until it widens out west of Melville Street to 11m through to Collie Street, a total distance of 1.08km.

The road carries around 2800vpd and is surfaced with asphalt. The gradient between Carlisle Street and Mill Street is fairly level. This then rises to around 3% from Mill Street to half way between Parade Street and Collie Street, before increasing to 7% for the final 80m to Collie Street.

Between Parade Street and Collie Street there are marked parking bays on both sides of the road. These bays are rarely fully utilised as they are located just outside of the CBD in a predominately residential area. There are existing footpaths on both sides of Grey Street West from Collie Street out to Melville Street with the path on the south side continuing through to Bay Street. No pedestrian facilities exist west of Bay Street and there are no existing cycle facilities for the entire length of Grey Street West. The Bibbulmun Track uses this section of Grey Street West from Bay Street through to Parade Street.

The speed limit along Grey Street West from Carlisle Street to a point 70m west of Parade Street is 60km/h; this then reduces to 50km/h through to Collie Street.

### 3.1.6 Lower Denmark Road

Lower Denmark Road runs westward from Frenchman Bay Road through to South Coast Highway east of Denmark, a total distance of 37km. The road is a popular tourist route between Albany and Denmark via Cuthbert, Elleker, Torbay and Youngs Siding. The section within the study area is the first 500m from Frenchman Bay Road which is covered by a 70km/h speed limit and carries 3,100 vpd.

The road has recently been upgraded along this section and now has a 7.0m wide asphalt seal and is kerbed both sides.

The road is level for most of its length but does rise at the western section by 4m with a gradient of 4%.

Lower Denmark Road is also part of the Main Roads Restricted Access Vehicle Network and has a Network 2 classification allowing trucks up to 67.5 tonnes and 20m in length to use it.

There are no pedestrian or cyclist facilities along this section of Lower Denmark Road although the road is a popular route with local cycle groups/clubs. There have been a number of requests for this section of road to be widened to include sealed shoulders/cycle lanes.

### **3.1.7 Vancouver Street**

Vancouver Street runs parallel to and south of Grey Street West between Festing Street and Collie Street, a distance of 820m. Vancouver Street is relatively narrow with a road reserve width of only 10m and a road carriageway width of 6.2m. It is kerbed on both sides and has a mixture of asphalt and chip seal surface finish. The road is subject to a speed limit of 50km/h and traffic volumes of 930vpd. The road is within a residential area with limited off-street parking resulting in on-street parking being commonplace.

From Festing Street, the road rises at an 8% gradient with gentle grades for the remainder of its length. There is a narrow footpath on the north side for the entire length of the road and a footpath on the south side between Parade Street and Cuthbert Street as well as between Melville Street and the Vancouver Arts Centre, 80m east of Festing Street. There are no existing cycle facilities along Vancouver Street.

### **3.1.8 Woolstores Place**

Woolstores Place is a 250m long cul-de-sac providing access to the redundant wool stores warehouse complex.

The road is gated at the entrance to the wool stores with the road reserve continuing a further 130m up to the railway reserve.

The gradient of the road is less than 3% and is between 6.0m and 6.5m in width with a chip seal surface finish up to the gate. Beyond the gate the surface is rough and uneven, petering out to an unsealed track before the railway reserve. Traffic volumes are low with less than 100 vpd using the road. The speed limit is 50km/h.

The existing shared path on the south side of Frenchman Bay Road terminates at Woolstores Place but there are no existing pedestrian or cyclist facilities along Woolstores Place itself.

As can be seen in Figure 2, both the Munda Biddi Trail and Bibbulmun Track utilise Woolstores Place as part of their route between Frenchman Bay Road and the CBD.

Woolstores Place is also proposed to be used for the route of the Grange Resources slurry pipeline from their Southdown Magnetite Mine as discussed in Section 4.3.



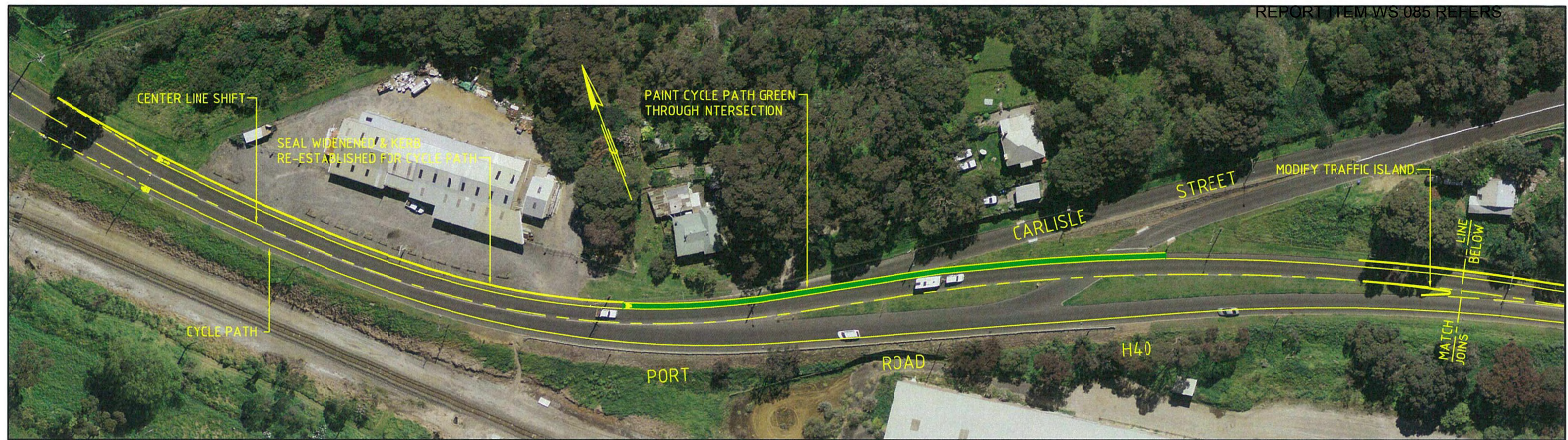


A geometric construction diagram showing a circle with a horizontal diameter. A vertical line passes through the center. A triangle is inscribed with its base on the diameter. The base is a rectangle with inward-pointing notches at its corners. The top vertex of the triangle is on the circle. Construction lines include the circle, the diameter, the vertical axis, and the triangle's sides and base.

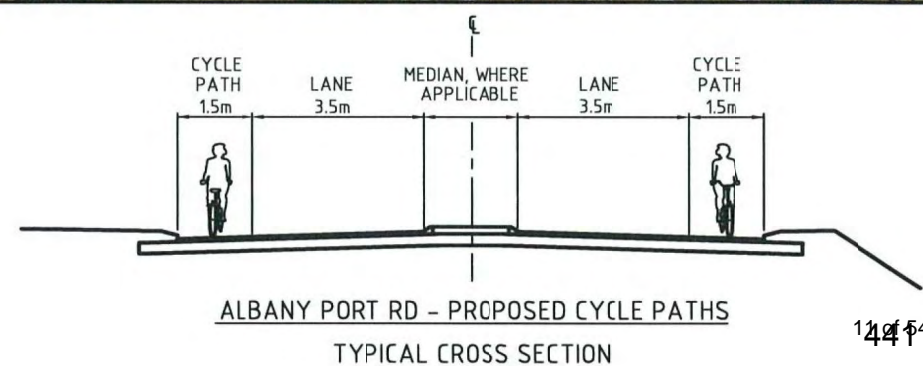
FIGURE 2

102 NORTH ROAD, YAKAMIA WA 6330  
PO BOX 484 ALBANY WA 6331  
Tel: (08) 9841 9333  
Fax: (08) 9841 4099  
Email: [cityassets@albany.wa.gov.au](mailto:cityassets@albany.wa.gov.au)  
Website: [www.albany.wa.gov.au](http://www.albany.wa.gov.au)





MAIN ROADS WA.  
RECENTLY CONSTRUCTED  
CYCLE LANES.  
PRINCESS ROYAL DRIVE



SCALE (AT A3) 1:1000

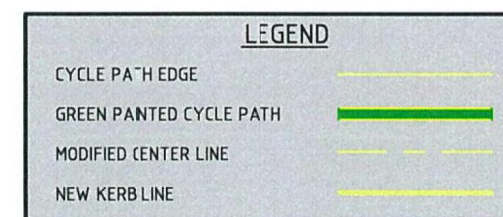
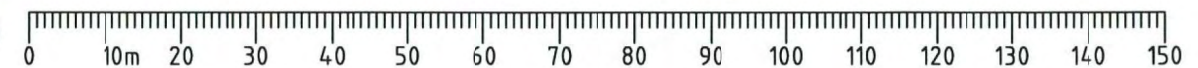


FIGURE 3



Table 1 - Existing Road Infrastructure.

Road name	From / To	Road Authority	Length (within study area)	Widths	Elevation (m AHD)			Surface finish	Max Gradient	Traffic Volume (7 day average)	85th Percentile speed	Crashes. Total No. (involving cycles) 2009-2013 inclusive	Existing cycle facilities	Existing footpaths	Speed Limit
					start	end	max								
Hanrahan Road	Frenchman Bay Road to end of existing sealed shoulders	Main Roads WA	250m	9.4m - 12.3m	12	17	17	Large chip seal	4%	6180 vpd	None available	36 (0)	None	None	70km/h
Princess Royal Drive	Frenchman Bay Road to Residency Road	Main Roads WA	2220m	8.0m - 11.0m	12	15	3	Large chip seal	5%	7300 vpd	66km/h		None	None	70km/h <sup>1)</sup> 60km/h <sup>2)</sup>
Carlisle Street	Princess Royal Drive to Grey Street West	City of Albany	630m	8.0m	11	40	40	Chip seal	9%	2700vpd	None available	1 (0)	None	None	60km/h
Festing Street	Princess Royal Drive to Stirling Terrace	City of Albany	1170m	7.1m - 8.0m	16	8	22	Asphalt	10%	800 vpd	58km/h	2 (0)	None	North (110m)	50km/h
Frenchman Bay Road	Hanrahan Road/Princess Royal Drive to Woolstores Place	City of Albany	590m	7.0m - 14.0m	12	3	12	Asphalt / chip seal	<3%	6400 vpd	None available	21 (0)	None	None	70km/h
Grey Street West	Princess Royal Drive to Spearwood Road	City of Albany	310m	Not applicable	11	35	37	Unformed	16%	Not applicable	Not applicable	N/A	None	Track	Not applicable
	Spearwood Road to Carlisle Street	City of Albany	530m	3m - 11m	35	39	48	Gravel	10%	None available	None available	0 (0)	None	None	None
	Carlisle Street to Collie Street	City of Albany	1080	8.0m - 11.0m	40	25	42	asphalt	7%	2670 vpd	68km/h in 60km/h zone. 58km/h in 50km/h zone.	10 (0)	None	North (500m) South (750m)	60km/h <sup>3)</sup> 50km/h <sup>4)</sup>
Lower Denmark Road	Frenchman Bay Road to a point 500m west	City of Albany	500m	7.0m	10	11	14	Asphalt	4%	3110 vpd	85km/h	7 (0)	None	None	70km/h
Vancouver Street	Festing Street to Collie Street	City of Albany	820m	6.2m	21	18	30	Asphalt / chip seal	8%	927 vpd	45km/h	4 (0)	None	North (810m) South (300m)	50km/h
Woolstores Place	Frenchman Bay Road to gate	City of Albany	310m	6.0m - 6.3m	3	3	3	Chip seal	<3%	None available	None available	0 (0)	None	None	50km/h

Notes:  
1) From Frenchman Bay Road to a point 260m west of Residency Rd  
2) From a point 260m west of Residency Road to York Street

3) Carlisle Street to a point 70m west of Parade Street  
4) From a point 70m west of Parade Street to Collie Street

### 3.2 Existing Cycle Facilities

As mentioned in section 3.1.1 Main Roads WA have recently completed construction of cycle lanes, 1.5m wide, on both sides of Princess Royal Drive from a point 180m east of Frenchman Bay Road to Festing Street. There are no other existing cycle facilities within the study area. There are cycle facilities that link to the study area as shown in Figure 2, as follows:

- There is a 2.0m wide shared path along the eastern side of Frenchman Bay Road that terminates at Woolstores Place. This path forms part of the route proposed in the Albany Harbours Dual Use Path Planning Strategy as detailed in Section 4.1, and continues around to the suburb of Little Grove, some 5km to the south. This is a popular route for cyclists and walkers and also forms part of the Munda Biddi trail and Bibbulmun Track as discussed in Section 3.4.
- A 2.5m wide shared path runs along the south side of the ANZAC Peace Park between the jetty and the performance space adjacent to the memorial wall.
- There are sealed shoulders (1.5m wide) along both sides of Hanrahan Road from Menzies Street through to a point just north of the entrance to the CSBP fertiliser works.

### 3.3 Crash History

Crash data has been obtained from the Main Roads WA Crash Analysis database for all of the roads within the study area. This data covers the 5 year period from 2009-2013 inclusive and is summarised in Table 1.

It can be seen from Table 1 that there have been a total of 81 recorded crashes within the study area but there have been no recorded crashes involving cyclists. However, this is more likely to be due to the relatively low number of cyclists riding through the area rather than a reflection of the adequacy of some of the roads in regard to their provision for cyclists.

### 3.4 Existing Cycle / Pedestrian Trails

Both the Munda Biddi Trail and Bibbulmun Track pass through the study area. The alignments of both trails are shown in Figure 2.

The Munda Biddi Trail is a 1000km off/on road cycle trail between Mundaring and Albany. The trail passes through the study area utilising Frenchman Bay Road and Woolstores Place before crossing the rail line and Princess Royal Drive. It then continues east along the northern verge of Princess Royal Drive, Festing Street and Stirling Terrace.

The Bibbulmun Track is a long distance walking trail between Kalamunda and Albany, a distance of nearly 1,000km. The track uses Frenchman Bay Road and Woolstores Place before crossing the rail line and Princess Royal Drive. It then climbs the lower part of Mount Melville using the unconstructed section of the Grey Street West road reserve to Maxwell Street where it then follows a bush track to the north of the road reserve before rejoining Grey Street West at Bay Street through to Parade Street. The track then continues down Parade Street, crosses Festing Street and the rail line before continuing eastward along the northern verge of Princess Royal Drive.

Comments have been received from the Department of Parks and Wildlife (DPAW) regarding issues with the existing alignment of both the Munda Biddi Trail and the Bibbulmun Track through the study area.

Comments include:

- Pedestrian only rail crossing at the end of Woolstores Place has not been upgraded by Brookfield Rail to include for cyclists.
- Brookfield Rail is seeking to have the crossing at the end of Woolstores Place closed and combined with adjacent road crossing (assumed to be Frenchman Bay Road).
- A 2-way cycle facility along Princess Royal Drive would be preferred to what is currently in place.
- Future plans for the upgrade of Princess Royal Drive and Frenchman Bay Road as part of the Albany Ring Road should cater for users of both long distance trails.

### 3.5 Rail Corridor

The rail line that passes through the study area provides access for freight trains carrying grain and woodchip to Albany port.

The line is single track narrow gauge and is managed by Brookfield Rail on a 50 year lease from the WA State Government.

The rail line runs parallel to Lower Denmark Road before crossing over Frenchman Bay Road as shown in Figure 2. It then runs between Princess Royal Drive and the wool stores before passing through a steep sided cutting and under Princess Royal Drive. It continues eastwards on an embankment to the south of Festing Street, crossing Parade Street, Residency Road and York Street before entering the port area.

Existing road and path crossing locations within the study area are detailed below in Table 2.

**Table 2 - Existing Rail Crossing Facilities**

Crossing location	At-grade or grade separated	Road or path	Pedestrian / cyclist facilities provided	Level of protection
Frenchman Bay Road	At-grade	Road	No	Boom gates
170m east of Frenchman Bay Road <sup>1)</sup>	At-grade	Path	Yes	Pedestrian maze
Princess Royal Drive	Grade separated	Road	No	Over bridge
Parade St <sup>2)</sup>	At-grade	Path	Yes	Pedestrian maze
Residency museum - 50m west of Residency Road	At-grade	Path	Yes	Pedestrian maze
Residency Road	At-grade	Road	No	Boom gates

Notes

1) Route of Munda Biddi Trail and Bibbulmun Track.

2) Route of Bibbulmun Track.

As can be seen in Table 2 crossing facilities for pedestrians and cyclists are limited. There are no specific facilities at any of the existing road crossings.



The existing path crossing, located 170m east of Frenchman Bay Road, is used by the route of both the Munda Biddi Trail and the Bibbulmun Track. The crossing is accessed from the south via a rough grassed track from the end of Woolstores Place. On the north side of the crossing users have to negotiate a steep unconstructed path to gain access to Princess Royal Drive.

As mentioned in Section 3.4 advice from the Department of Parks and Wildlife who manage both the Munda Biddi Trail and Bibbulmun Track suggests that Brookfield Rail intend to close this crossing point and combine it with the existing Frenchman Bay Road crossing to the west.

Recent feedback provided by Public Transport Authority (PTA) and Brookfield Rail indicates that any proposal to utilise the rail corridor as a route for cycle/pedestrian infrastructure, including the cutting under Princess Royal Drive as recommended in the Albany Harbours Dual Use Path Planning Strategy (discussed in Section 4.1), can no longer be considered feasible. Consideration will be given for any new/amended crossing points.

## **4 Previous & Current Proposals**

### **4.1 Albany Harbours Dual Use Path Planning Strategy (DUPPS)**

The Albany Harbours DUPPS was published in 1996 and aimed to produce a strategic plan for the construction of a dual-use (shared) path around the shores of the Albany Harbours, from Lower King to Whale World, a total distance of some 35km.

A number of alignments between York Street and the wool stores were considered and are shown in Figure 4. Extracts from the Albany Harbours DUPPS relevant to this section are reproduced in Appendix B.

As can be seen in Figure 4 the preferred alignment runs along Woolstores Place and along the south side of the rail reserve all the way through to Amity Quays. The route then passes between the Amity replica and the museum before crossing Residency Road and continuing through to York Street using the vacant land between the rail line and Princess Royal Drive.

Where the rail line passes under Princess Royal Drive, through a steep sided cutting, at Melville Point the proposal was to take the path through the cutting alongside the rail line. The Strategy states that “preliminary investigations carried out by the Town of Albany staff in conjunction with civil engineers and Westrail indicates that it is feasible for a path, with necessary safeguards, to be constructed through the cutting”.

It should be noted that the option of aligning a path through the railway cutting is no longer considered feasible and that even having a path alignment within the rail reserve is unlikely. This is discussed in more detail in Section 3.5.

An alternative alignment around the wool stores was also suggested in the strategy. This would utilise a “narrow band of vacant crown land on the foreshore side of the reclaimed land upon which the wool stores are situated”. However recent investigations show that this strip of land is not wide enough to accommodate a path and that the existing sea wall upon which it is built on is in poor state of repair.

Two other alignments were considered for the section between York Street and Melville Point. These were along the north side and south side of Princess Royal Drive. The alignment on the north side would follow the same route through the railway cutting and east of Amity Quays as the preferred alignment. The alignment along the south side of Princess Royal Drive required widening of the existing road embankment and the construction of a section of boardwalk before passing across Melville Point.



# ALBANY HARBOURS D.U.P.P.S. PREFERRED AND ALTERNATIVE PATH ALIGNMENTS

NOT TO SCALE



102 NORTH ROAD, YAKAMIA WA 6330  
PO BOX 484 ALBANY WA 6331  
Tel: (08) 9841 9333  
Fax: (08) 9841 4099  
Email: cityassets@albany.wa.gov.au  
Website: www.albany.wa.gov.au

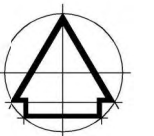


FIGURE 4



The report dismisses the option to the south of Princess Royal Drive as being not feasible due to the great expense involved in widening the road embankment and associated sea wall. However, it should be noted that this alignment is identical to the one proposed to be constructed as part of the Grange Resources slurry pipeline project. It should now be considered an option as the widening of the road embankment and construction of a shared path between the Anzac Peace Park and a point west of Melville Point will be funded by Grange Resources as discussed in Section 4.3.

## 4.2 Main Roads WA

As mentioned in Section 3.1.1 Main Roads WA (MRWA) are responsible for both Hanrahan Road and Princess Royal Drive and have provided the following information regarding provision for on-road cyclists:

- Minimum road width requirements for the provision of on-road cycle lanes are 3.5m traffic lanes and 1.5m wide cycle lanes giving a total minimum carriageway width of 10.0m.
- A cycle lane on the existing bridge over the railway is not feasible.
- Support the use of Carlisle Street or Festing Street as an alternative to using Princess Royal Drive east of Festing Street

As discussed in Section 3.1.1 Main Roads WA have recently completed construction of cycle lanes, 1.5m wide, on both sides of Princess Royal Drive from a point 180m east of Frenchman Bay Road to Festing Street. A future extension of these cycle lanes, westward, through to the existing sealed shoulders on Hanrahan Road is also being considered by MRWA. This extension is somewhat more involved than the recently completed section as it requires alteration to the existing intersection with Frenchman Bay Road.

Discussion has also taken place regarding a suitable location for a crossing point for a shared path within the vicinity of the Princess Royal Drive, Frenchman Bay Road intersection. The preferred location is at the end of the Grey Street West road reserve 130m east of Frenchman Bay Road, although a crossing point at the intersection is also being investigated as an alternative.

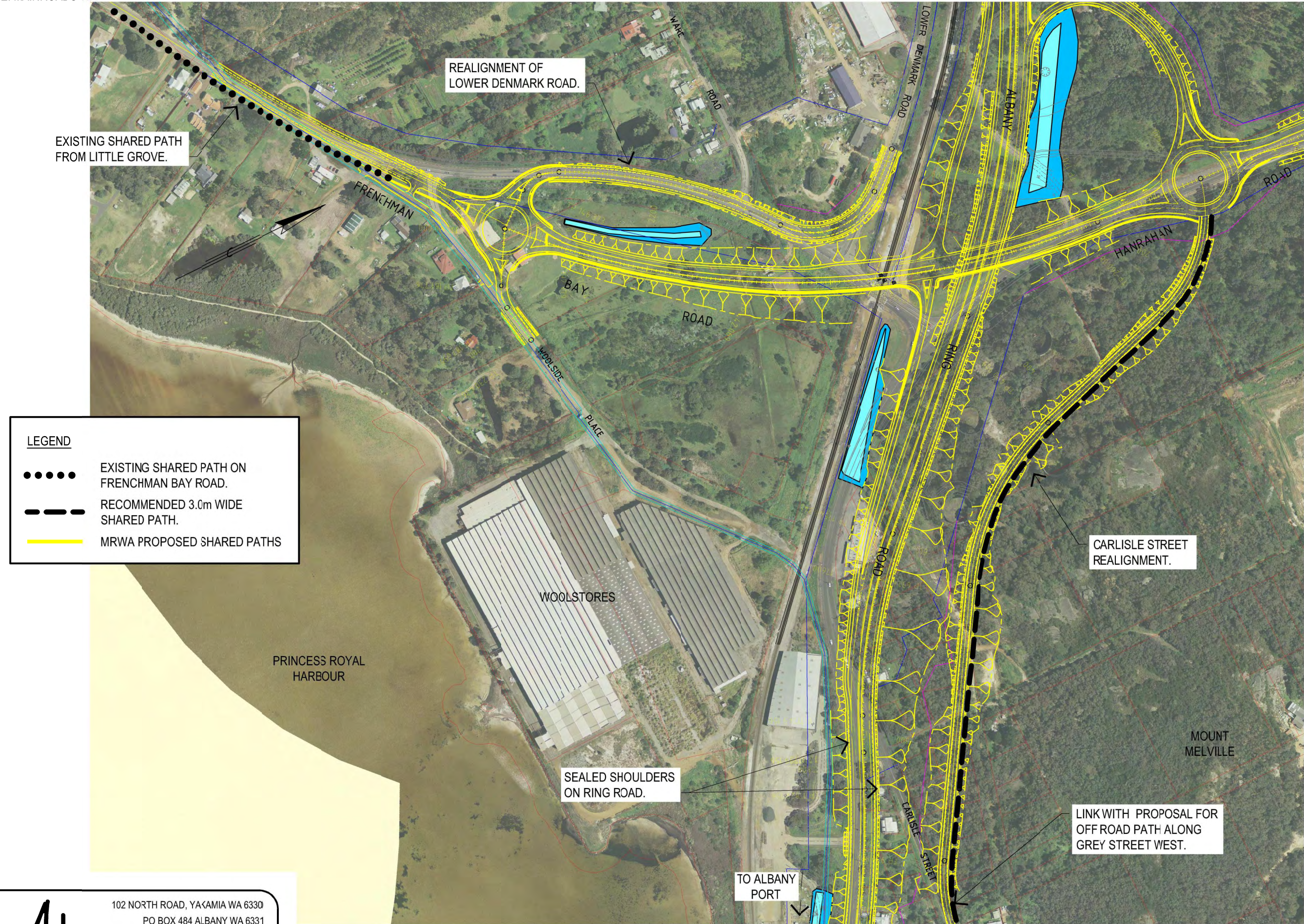
There are long standing proposals for the construction of a ring road around Albany. This would provide direct access to the port for road trains removing the need for them to use the Chester Pass Road – North Road – Albany Highway – Hanrahan Road roundabout. So far the only section to have been completed is Menang Drive from Chester Pass Road through to Albany Highway. The remaining sections from Albany Highway through to South Coast Highway, and South Coast Highway through to Princess Royal Drive, are still in the early stages of design. The proposal also includes for the upgrade of Princess Royal Drive, through to the port, to a four lane divided road. Figure 5 shows the current proposal for the intersection of the Ring Road with Frenchman Bay Road and Hanrahan Road which would become a grade separated intersection. This would see Frenchman Bay Road passing over the Ring Road and continuing on to become Hanrahan Road. Roundabouts on Frenchman Bay Road and Hanrahan Road would provide access down onto the Ring Road and Carlisle Street, which would be realigned to intersect directly with Hanrahan Road.

As can be seen in Figure 5 there are proposals for the construction of an off-road shared path, continuing from the existing shared path along the eastern side of Frenchman Bay Road through to the sealed shoulders on Hanrahan Road. Also proposed is the construction of sealed shoulders (2m wide) along the Ring Road itself.

The widening of Princess Royal Drive would also include the construction of a new bridge over the railway, replacing the existing one at Melville Point, which would also include sealed shoulders providing confident cyclists with a high quality continuous route.

MRWA are currently progressing with the design of the Ring Road although there is no proposed timeline for its construction and so it shouldn't be relied upon for providing a short or medium term solution to the existing cycling issues within the study area.





ALBANY RING ROAD PROPOSED ALIGNMENT  
AND RECOMMENDED MODIFICATIONS

NOT TO SCALE

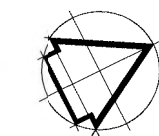



FIGURE 5



102 NORTH ROAD, YACAMIA WA 6330  
PO BOX 484 ALBANY WA 6331  
Tel: (08) 9841 9333  
Fax: (08) 9841 4099  
Email: [cityassets@albany.wa.gov.au](mailto:cityassets@albany.wa.gov.au)  
Website: [www.albany.wa.gov.au](http://www.albany.wa.gov.au)



### 4.3 Grange Resources Pipeline

There are plans for the construction a Magnetite mine approximately 70km east of Albany near Wellstead. Part of the proposal is for the magnetite to be transported to the port of Albany as slurry via buried pipelines.

The proposed route for the pipeline is shown in Figure 6 and utilises Frenchman Bay Road and Woolstores Place before crossing the rail line. It then runs along the northern boundary of the rail reserve behind the salvage yard before crossing back across the rail line and through Melville Point. The pipelines then continue eastward along the south side of Princess Royal Drive within a proposed widened road embankment.

In 2008, Wood and Grieve Engineers were commissioned by Grange Resources to produce a report investigating options for the construction of the slurry pipelines on the south side of Princess Royal Drive between Albany Peace Park and Melville Point. The report includes concept drawings for 2 options to widen the embankment on the south side of Princess Royal Drive. The preferred embankment widening option (Option A) is shown in Figure 7. This would involve moving the existing seawall southwards by 5m to accommodate the slurry pipelines.

As part of the proposals Grange Resources would also construct a 3m wide shared path from the ANZAC Peace Park through to where the pipelines cross over the rail line west of Melville Point as shown in Figure 6. The shared path would be separated from the adjacent road by a 1m wide vegetated buffer as shown in Figure 7. It is understood that the construction of a shared path west of this point would not be the responsibility of Grange Resources.

Even though the proposal to construct the magnetite mine has been around for a number of years there is no fixed date as to when project will commence and it should not be relied upon to provide the sole solution.







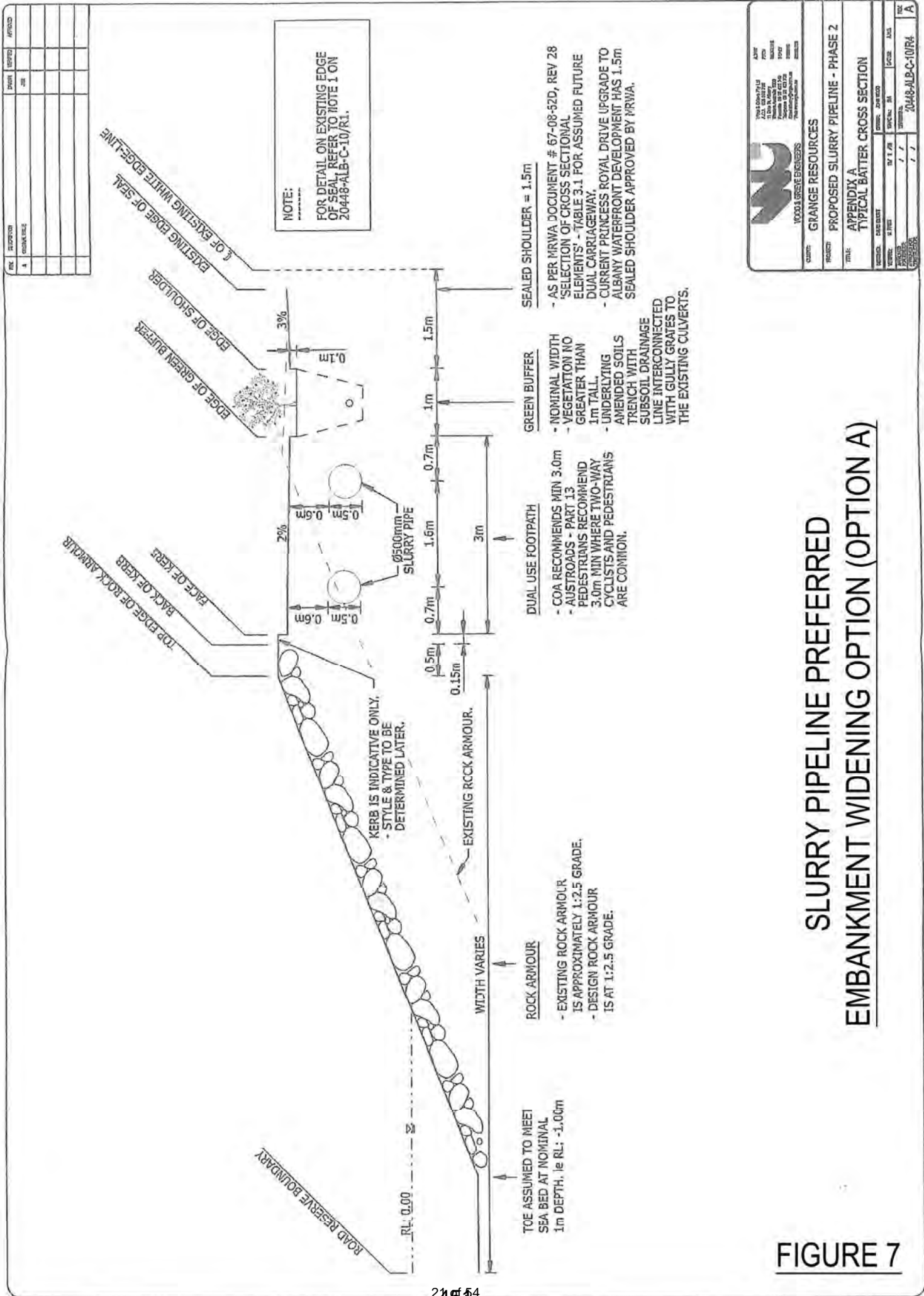


FIGURE 7

## **5 Suitability of existing roads and opportunities for cycle infrastructure improvements**

This section provides an assessment of the existing roads with regards to their suitability for cyclists of different confidence levels as well as exploring opportunities and constraints for the provision of on-road and off-road cycle infrastructure.

These are then graphically represented in Figures 8 and 9 giving an overall picture of the opportunities and constraints within the study area for providing routes for both confident and less confident cyclists.

This then forms the basis for the development of the proposed options in Section 6.

### **5.1 Hanrahan Road – Princess Royal Drive**

Apart from the section with the recently completed cycle lanes the existing road is clearly unsuitable as a proposed route for cyclists of all confidence levels with even the most experienced and confident feeling unsafe.

It would be possible to extend the recently constructed cycle lanes westward up to the existing sealed shoulders on Hanrahan Road. This would require some further modification to the existing kerb lines as well as the median islands at the intersection with Frenchman Bay Road. Relocation of some power poles may also be required.

Providing for cyclists east of Festing Street where Princess Royal Drive crosses the rail line would require the widening of the existing bridge, or construction of separate cycle bridges and approach embankments, and is not considered feasible due to the great cost of such works.

Along the embankment between the rail bridge and Anzac Peace Park the existing road shoulder could be sealed to provide 1.5m cycle lanes.

The opportunities discussed above are relevant for confident cyclists only. Provision for less confident ones is discussed below.

A shared path could be constructed along either verge of Hanrahan Road from north of the entrance to the CSBP fertiliser works to the intersection with Frenchman Bay Road. This could then be continued along the northern side of Princess Royal Drive through to Carlisle Street. Between Carlisle Street and Festing Street the steep drop offs on the south side of the road make the provision of an off-road path not feasible. On the north side the ground rises steeply in places and would require the construction of some sizeable retaining structures as well as the need to place the existing power lines underground. Although feasible the cost of this work would be expensive and the path would be located up against the kerb with little separation from adjacent traffic.

East of Festing Street the rail line again provides a barrier to the provision of facilities for less confident cyclists as described above.

East of the rail line a shared path could be constructed along either side of Princess Royal Drive with little modification required to provide one on the north side of the road reserve. However substantial widening of the existing embankment and sea wall would be required for a path on the south side of the road. This proposal was investigated as part of the Albany Harbours Dual Use Path Planning Strategy as discussed in Section 4.1. However it was not considered feasible due to the great expense involved.

As discussed in Section 4.3, a path to the south side of Princess Royal Drive will be provided by Grange Resources as part of the construction of the slurry pipelines.

## 5.2 Carlisle Street

Although it is the most direct route between Frenchman Bay Road and the CBD, avoiding continuing along Princess Royal Drive, its steep grade combined with relatively high traffic volume and 60km/h speed limit make Carlisle Street unattractive for all but the most confident cyclists.

Between Princess Royal Drive and the Castle Street road reserve, the ground slopes steeply on either side making it unfeasible to widen the road to provide cycle lanes or off-road cycle facilities. Between Castle Street and Grey Street West the road levels out and an opportunity exists to construct an off-road path along the verge/bush on the north side of the road.

Most of the land to the north of Carlisle Street is unallocated Crown Land. It would be feasible to construct an off-road path through this Crown Land, as well as utilising a section of the Carlisle Street verge at the top of the hill, down to the intersection of Princess Royal Drive and the unconstructed section of the Grey Street West road reserve, a distance of 600m. The level difference between these two points is 29m resulting in a constant grade of about 5%. This is slightly steeper than what would be considered acceptable.

However, to the north of the Grey Street West road reserve is Lot 893 Hanrahan Road. Located within this lot are a number of decommissioned oil storage tanks. By utilising Lot 893 the shared path could be taken through to the intersection of Princess Royal Drive and Frenchman Bay Road. This would extend the length of the path to 700m reducing its grade to a more acceptable 4%. As Lot 893 is privately owned an agreement with the landowner would need to be made if a path is to be constructed through the lot.

## 5.3 Festing Street

With low traffic volumes and gentle grade for most of its length the existing road is suitable for cyclists with higher confidence levels without modification. The steep grade west of Parade Street makes the section between Parade Street and Melville Street unsuitable for less confident riders. A reduction in the speed of traffic more in line with the existing speed limit would also be beneficial.

## 5.4 Frenchman Bay Road

The Cycle City Albany 2014-2019 Strategy recommended installing 1.5m wide cycle lanes along both sides of Frenchman Road (Sections 1.5.12 and project no.32 in Appendix F of the Strategy). This would provide an ideal facility for more confident riders. For the first 300m north from Woolstores Place providing the lanes is a simple case of widening and sealing the existing road shoulders. Where the lanes approach the intersection with Lower Denmark Road and Hanrahan Road the existing kerbs will need moving to provide adequate width for cycle lanes as well as the traffic lanes. Reducing the number of traffic lanes to accommodate the cycle lanes shouldn't be considered feasible as this would impact on the capacity of the intersections to function adequately. Amendments to the rail crossing would also be required.

For less confident cyclists there is ample room within the verge on the eastern side of Frenchman Bay Road to continue the existing shared path from south of Woolstores Place up to Princess Royal Drive. A suitable rail crossing would need to be provided adjacent to the existing road level-crossing. With Woolstores Place having such low traffic volumes and with the existing path terminating some 35m from the hold line with Frenchman Bay Road there would be an opportunity to provide a priority shared path crossing across Woolstores Place.

## 5.5 Grey Street West

- ***Princess Royal Drive to Spearwood Road***

The steep grade means this section of Grey Street is unsuitable as a cycle route even if a road or surfaced path were to be constructed.

- ***Spearwood Road to Carlisle Street***

The existing gravel surface makes the current road unsuitable as a route for cyclists of all confidence levels. Even if sealed the steep grade would not suit less confident cyclists and should not be considered suitable as an option.

- ***Carlisle Street to Collie Street***

With its fairly level grade and generous widths, this section of Grey Street West provides an ideal environment for confident cyclists but less confident ones may find the higher traffic speeds west of Parade Street intimidating.

The Cycle City Albany Strategy recommends that cycle lanes be provided in both directions between York Street and Collie Street and that a westbound only cycle lane is installed between Collie Street and Melville Street to allow cyclists to climb the hill with protection from vehicle conflicts.

The generous road and verge width between Collie Street and Bay Street coupled with the lack of parking demand provides an opportunity for the construction of an off-road shared path or two-way separated cycle path for use by less confident cyclists along the northern side of this section of Grey Street West.

West of Bay Street the Cycle Strategy proposes using the service road along the south side of Grey Street West as a two-way cycle route. Although feasible it requires east bound cyclists to cross over Grey Street West twice creating a discontinuous route. Although no other option exists within the road reserve along this section, due to the steep topography of the land either side, there is an opportunity for a path through the existing bushland immediately to the north. Behind the embankment upon which the power poles are located are what appear to be three old pits, possibly used for quarrying rock. By connecting these pits together a shared path of suitable width and level gradient could be constructed all the way through to Maxwell Street. The path would need to pass over the existing above ground water main near Bay Street on a suitable structure or the main be placed underground.

## **5.6 Lower Denmark Road**

The relatively high speed limit and traffic volumes result in the existing road being unsuitable for all but the most confident cyclists.

Scope exists to widen the road to provide 1.5m wide cycle lanes or sealed shoulders as recommended in section 1.5.11 (project 28 in Appendix F) of the Cycle City of Albany Strategy. Widening on the north side only would remove the need to construct piped drainage on the south side, which would be an expensive exercise over such a distance.

## **5.7 Vancouver Street**

With low traffic volumes and speeds, along with gentle gradients Vancouver Street in its existing form is suitable for cyclists of all confidence levels.

## **5.8 Woolstores Place**

The low traffic volumes and flat grade make Woolstores Place, between Frenchman Bay Road and the gate at the entrance to the wool stores ideal for cyclists of all confidence levels. Beyond the gate, reconstruction of the road or construction of a shared path would be required to provide a suitable running surface.



© GOOGLE



LEGEND

- OPPORTUNITIES
- CONSTRAINTS

## OPPORTUNITIES AND CONSTRAINTS ROUTES FOR CONFIDENT CYCLISTS

NOT TO SCALE



102 NORTH ROAD, YAKAMIA WA 6330  
PO BOX 484 ALBANY WA 6331  
Tel: (08) 9841 9333  
Fax: (08) 9841 4099  
Email: [cityassets@albany.wa.gov.au](mailto:cityassets@albany.wa.gov.au)  
Website: [www.albany.wa.gov.au](http://www.albany.wa.gov.au)

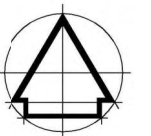


FIGURE 8



© GOOGLE



## OPPORTUNITIES AND CONSTRAINTS ROUTES FOR LESS CONFIDENT CYCLISTS

NOT TO SCALE



102 NORTH ROAD, YAKAMIA WA 6330  
PO BOX 484 ALBANY WA 6331  
Tel: (08) 9841 9333  
Fax: (08) 9841 4099  
Email: [cityassets@albany.wa.gov.au](mailto:cityassets@albany.wa.gov.au)  
Website: [www.albany.wa.gov.au](http://www.albany.wa.gov.au)

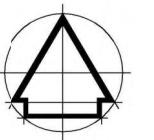


FIGURE 9

## 6 Options for cycle infrastructure improvements

This section details the possible options for routes for cyclists of different confidence levels which are also shown in Figures 10 and 11.

### 6.1 Route for confident cyclists

Figure 10 illustrates a proposed route for confident cyclists including modifications to the existing road network where required.

Proposals include:

- Cycle lanes (1.5m wide) on both sides of Lower Denmark Road between Frenchman Bay Road and the end of the kerbed section. These would then tie into the sealed shoulders that are proposed for Lower Denmark Road within the Cycle City Albany Strategy.
- Cycle lanes (1.5m wide) along both sides of Frenchman Bay Road from a point south of Woolstores Place up to Princess Royal Drive with “green lane” treatments across the intersections of Woolstores Place, Ware Road and Lower Denmark Road. Adjustments to the existing rail crossing will be required to accommodate the additional carriageway width. Where there are 2 traffic lanes in either direction these could be reduced to 3.25m each meaning that the resulting carriageway widening would be less than 1m.
- Cycle lanes (1.5m wide) along Hanrahan Road and Princess Royal Drive from the end of the existing sealed shoulders, north of the entrance to CSBP fertiliser works, to a point 180m east of Frenchman Bay Road. These would tie in with the recently constructed cycle lanes on Princess Royal Drive.
- Utilising the existing Festing Street roadway to avoid the narrow bridge on Princess Royal Drive. This route along Festing Street should be signed from Princess Royal Drive at its intersection with Festing Street and Residency Road to encourage cyclists, especially those unfamiliar with the area to use it.
- Sealed shoulders (1.5m-2.0m wide) on Princess Royal Drive between Residency Road and a point to the east of the bridge approach ramp. It would be possible to designate these as cycle lanes. However, this is not being proposed as it would promote the use of this section of Princess Royal Drive by all cyclists and bring them to a point where they had no option but to run the gauntlet of crossing the rail line on the narrow bridge. Sealed shoulders however will provide a safer road for those riders who choose to use this section of Princess Royal Drive without encouraging its use as a recommended cycle route.





## RECOMMENDED ROUTE FOR CONFIDENT CYCLISTS

NOT TO SCALE



102 NORTH ROAD, YAKAMIA WA 6330  
 PO BOX 484 ALBANY WA 6331  
 Tel: (08) 9841 9333  
 Fax: (08) 9841 4099  
 Email: [cityassets@albany.wa.gov.au](mailto:cityassets@albany.wa.gov.au)  
 Website: [www.albany.wa.gov.au](http://www.albany.wa.gov.au)

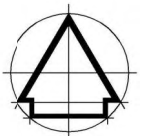


FIGURE 10

## **6.2 Route options for less confident cyclists.**

### **6.2.1 Option 1**

This option is 2.6km in length and is shown in its entirety in Figure 11. It is then illustrated in more detail in Figures 12, 13 and 14. It proposes the construction of an off-road shared path along the southeast side of Frenchman Bay Road from the end of the existing shared path at Woolstores Place, across the rail line and up to Princess Royal Drive. This then crosses Princess Royal Drive, runs through the existing Wesfarmers/CSBP land (Lot 893 Hanrahan Road) and unallocated crown land up to the top of Carlisle Street at a gradient of 4%. It then continues along the verge/bush on the north side of Carlisle Street and Grey Street West through to Melville Street. From here, the path continues along the north side of Grey Street West through to Collie Street but becomes a separate cycle/pedestrian facility rather than a shared one. Beyond Collie Street the path would tie into cycle routes being considered for the CBD although further work is required regarding their development.

Option 1 provides a direct link to the heart of the CBD, terminating close to the library, Town Hall and newly developed Town Square. It also compliments proposals to relocate the Visitors Centre from the current location at the old railway station to the Library.

The alignment provides a route that is sheltered from the elements where it passes through the bushland to the north of Grey Street West and Carlisle Street, where there are also opportunities to provide scenic views over Princess Royal Harbour.

Careful design of the section from Princess Royal Drive to the top of Carlisle Street is essential to ensure a constant gentle grade is achieved. The City has undertaken a topographical survey of this section to confirm that a constant grade of 4% can be achieved avoiding residential properties and rock outcrops. A retaining structure would be required where the route passes in front of 273 Grey Street West and over the existing water main.

The alignment of the route provides an opportunity for it to be used by both the Munda Biddi Trail and Bibbulmun track avoiding the less than desirable current alignments along Woolstores Place and Princess Royal Drive as well as a much improved rail crossing.

The alignment of Option 1 does require the crossing of both the rail line and Princess Royal Drive and careful selection of crossing type and location is required to achieve the best outcome for path users. Discussions are ongoing with Main Roads WA and Public Transport Authority / Brookfield Rail regarding these issues.

Where the route runs along the north side of Grey Street West between Collie Street and Parade Street there would be a loss of 13 parking spaces. These spaces are rarely fully utilised and drivers could still park within the parking bays on the south side of Grey Street West.

### **6.2.2 Option 2**

This option is similar to one of the routes investigated as part of the Albany Harbours Dual Use Path Planning Strategy and is 2.5km in length. It was originally considered as being unfeasible due to the great expense of widening the embankment and sea wall south of Princess Royal Drive. However, as discussed in Section 4.3, Grange Resources have committed to constructing a 3.0m wide shared path on top of the route of the pipeline between the ANZAC Peace Park and a point west of Melville Point.

The remainder of the route would need to be constructed / funded separately to the Grange Resources section but should be built at the same time so as to provide a continuous route between Frenchman Bay Road and the Peace Park.



Between the Grange Resources pipeline section and Woolstores Place, the path would run to the south of the existing rail line outside the rail corridor and then around the south side of the wool stores. It would continue along the western side of the wool stores, within the unconstructed road reserve, before joining Woolstores Place west of the existing gate. The section along Woolstores Place could use the existing roadway between the gate and the existing path along Frenchman Bay Road. The section along the southern edge of the wool stores would require the widening of the existing embankment and reconstruction of the sea wall which is in poor condition. However, any future development of the wool stores site should include for a shared path to be provided.

The alignment of option 2 maintains a level grade except for the section over Point Melville. It is a desirable route for tourists as it provides outstanding views of Princess Royal Harbour to the south, although the section past the wool stores is unsightly in its current state, and links in to the ANZAC Peace Park at its western end. However, its location along the shores of the harbour mean it will be exposed to the worst of the weather and even moderate winds will make riding more challenging.

The route doesn't require a crossing of the rail line or Princess Royal Drive, although path users travelling to/from the CBD will need to cross both at some point. Also the alignment doesn't provide good connectivity for cyclists travelling to/from CBD locations west of Parade Street as they have to back track to the east.

It should be noted that if Grange Resources do not construct the slurry pipeline then the cost of building this option will be prohibitive.



## ROUTE OPTIONS FOR LESS CONFIDENT CYCLISTS

NOT TO SCALE

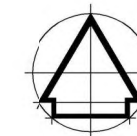
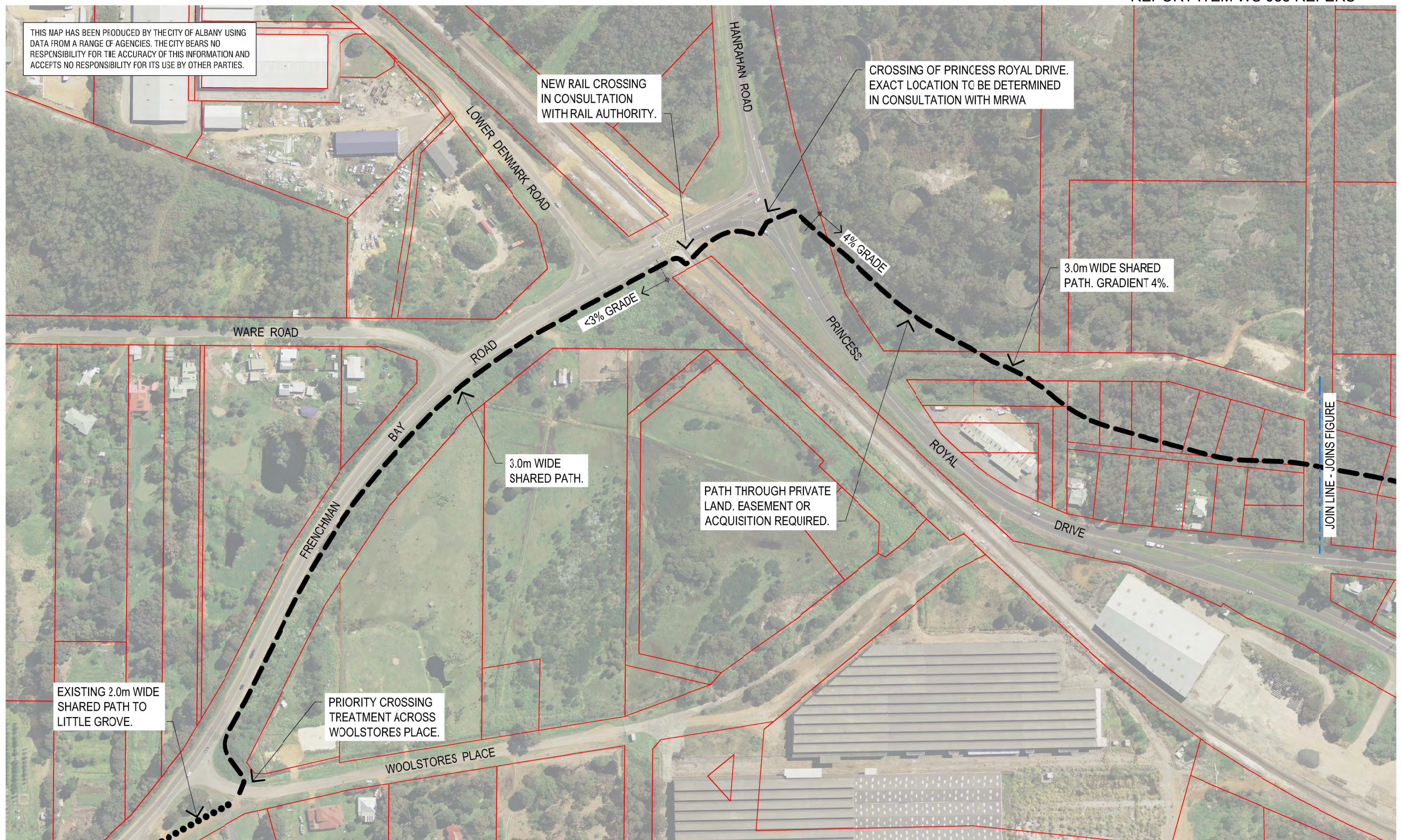


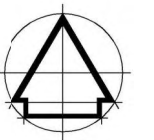
FIGURE 11





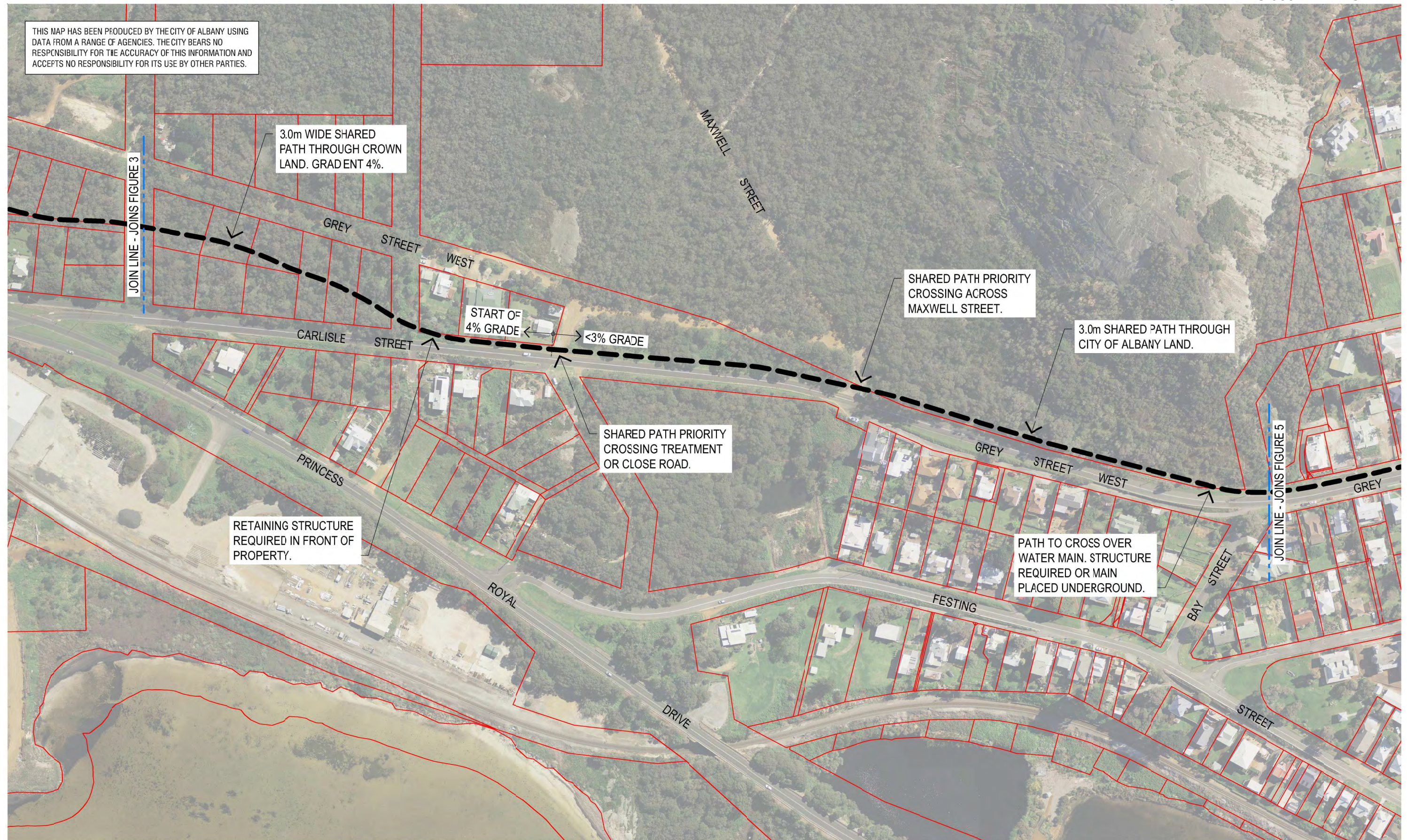
# OPTION 1 - DETAILED ASSESSMENT (SHEET 1 OF 3)

SCALE 1:2500





THIS MAP HAS BEEN PRODUCED BY THE CITY OF ALBANY USING DATA FROM A RANGE OF AGENCIES. THE CITY BEARS NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION AND ACCEPTS NO RESPONSIBILITY FOR ITS USE BY OTHER PARTIES.



## OPTION 1 DETAIL ASSESSMENT (SHEET 2 OF 3)

SCALE 1:2500



102 NORTH ROAD, YACAMIA WA 6330  
PO BOX 484 ALBANY WA 6331  
Tel: (08) 9841 9333  
Fax: (08) 9841 4099  
Email: [cityassets@albany.wa.gov.au](mailto:cityassets@albany.wa.gov.au)  
Website: [www.albany.wa.gov.au](http://www.albany.wa.gov.au)

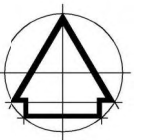
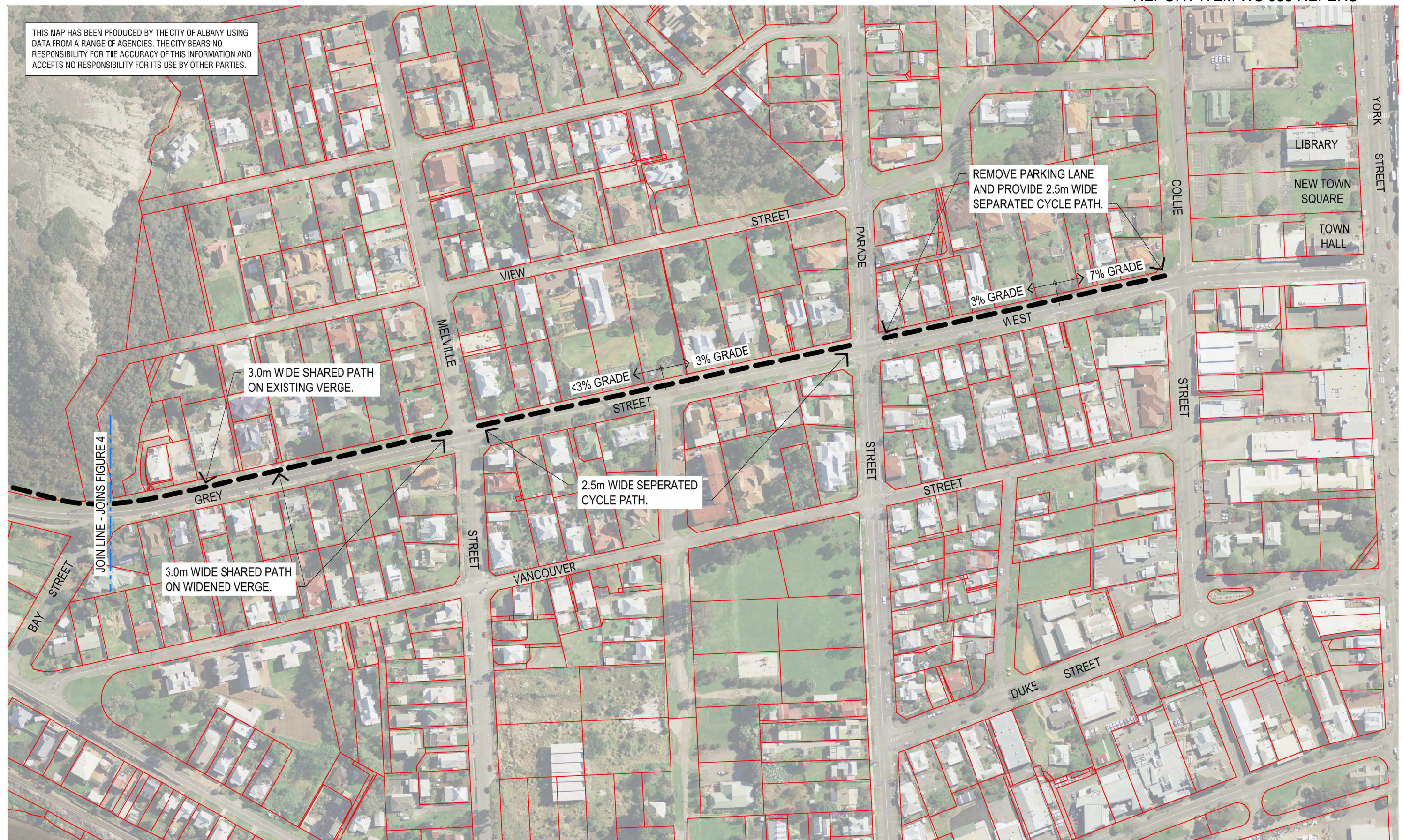


FIGURE 13



THIS MAP HAS BEEN PRODUCED BY THE CITY OF ALBANY USING DATA FROM A RANGE OF AGENCIES. THE CITY BEARS NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION AND ACCEPTS NO RESPONSIBILITY FOR ITS USE BY OTHER PARTIES.



## OPTION 1 DETAIL ASSESSMENT (SHEET 3 OF 3)

SCALE 1:2500



102 NORTH ROAD, YACAMIA WA 6330  
PO BOX 484 ALBANY WA 6331  
Tel: (08) 9841 9333  
Fax: (08) 9841 4099  
Email: [cityassets@albany.wa.gov.au](mailto:cityassets@albany.wa.gov.au)  
Website: [www.albany.wa.gov.au](http://www.albany.wa.gov.au)

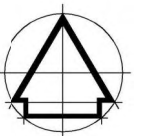


FIGURE 14



## 7 Stakeholder Engagement

In May 2015 City of Albany formed a Working Group with representatives from a variety of stakeholders including:

- Albany Bicycle User Group (ABUG)
- Albany Cycle Club (ACC)
- Brookfield Rail
- Department of Transport
- Grange Resources
- Main Roads WA (MRWA)
- Over 50's Cycle Group

The Working Group was tasked with providing advice for the feasibility study and was responsible for:

- Providing local advice to the City of Albany on proposed strategies for improvements.
- Ensuring all views are appropriately represented during the developmental phase.
- Providing guidance and assistance in regards to communication and consultation with stakeholders.
- Providing advice and assist with the collection of data and local contextual information, as requested.

A workshop/presentation was held at the City of Albany offices on 12 May 2015 and the group was presented with, and discussed, the various draft options and recommended routes. Plans were provided for comment and the group also undertook a site visit. Feedback was received and incorporated into a draft report.

The working group met once again in June 2015 and were presented with the draft report for further comment. The feedback from the various stakeholder groups is included in Appendix C.

## 8 Recommendations

The recommendations listed below are subject to any necessary approvals and funding and being made available.

### 8.1 Route for Confident Cyclists

#### 8.1.1 Short Term (within 12 months)

It is recommended that:

- Signage is installed on Princess Royal Drive at the intersections of Festing Street and Residency Road to encourage cyclists to use Festing Street as an alternative to crossing the rail line using the narrow bridge on Princess Royal Drive.
- City of Albany undertake design of cycle lanes (1.5m wide) on Frenchman Bay Road from Princess Royal Drive up to and including the intersection of Woolstores Place.
- City of Albany liaise with Public Transport Authority and Brookfield Rail regarding modifications to the existing rail crossing that will be required from widening Frenchman Bay Road to accommodate proposed cycle lanes.
- City of Albany undertake design of cycle lanes (1.5m wide) on Lower Denmark Road from the intersection of Frenchman Bay Road to the end of the kerbed section (500m).

#### 8.1.2 Medium term (1-3 years)

It is recommended that:

- MRWA construct cycle lanes (1.5m wide) on both sides of Hanrahan Road, from the end of the existing sealed shoulders through to the recently constructed cycle lanes on Princess Royal Drive shown in Figure 3.
- MRWA provide sealed shoulders (1.5m-2.0m wide) between Residency Road and the start of the rail bridge approach embankment.
- MRWA review the existing 70km/h speed limit on Princess Royal Drive following implementation of the cycle lanes.
- City of Albany construct cycle lanes (1.5m wide) along Frenchman Bay Road from Princess Royal Drive up to and including the intersection with Woolstores Place.
- City of Albany constructs cycle lanes (1.5m wide) on both sides of Lower Denmark Road from Frenchman Bay Road up to the end of the kerbed section (500m).

#### 8.1.3 Long Term

It is recommended that:

- MRWA include on-road sealed shoulders / cycle lanes in the design and construction of the Albany Ring Road as shown in Figure 5 and that these are continued along Princess Royal Drive through to York Street.
- MRWA include cycle lanes (1.5m wide) on the realigned sections of Lower Denmark Road, Frenchman Bay Road and Hanrahan Road as part of the Albany Ring Road construction.

## **8.2 Routes for Less Confident Cyclists**

### **8.2.1 Short Term (within 12 months)**

It is recommended that:

- City of Albany undertake design and obtain necessary approvals for route Option 1 as shown in Figure 11 and in more detail in Figures 12,13 and 14.

### **8.2.2 Medium Term (1-3 years)**

It is recommended that:

- (2016-17) City of Albany undertakes construction of route Option 1 from Woolstores Place through to Castle Street, a distance of 1.3km.
- (2017-18) City of Albany undertakes construction of route Option 1 from Castle Street through to Collie Street, a distance of 1.3km.
- City of Albany investigates designs for the section of route Option 2 from Frenchman Bay Road through to the section being undertaken by Grange Resources.

### **8.2.3 Long Term**

It is recommended that:

- MRWA include shared paths in the construction of the Albany Ring Road as shown in Figure 6.
- A shared path is included alongside the realignment of Carlisle Street, as shown in Figure 6, to tie in with the shared path shown in route Option 1.
- Grange Resources construct a 3m wide shared path at the same time as, and along the alignment of, the proposed slurry pipeline from Anzac Peace Park through to where the pipeline crosses to the north of the rail line, west of Melville Point as shown in Figure 11 (route Option 2).
- City of Albany construct the remaining section of route Option 2 as shown in Figure 11.

## Appendices



**Appendix A – Extracts from Cycle City Albany 2014-2019 Strategy**

### 1.5.9 Hanrahan Road/Princess Royal Drive

Hanrahan Road and Princess Royal Drive form the current road train route to/from the Port. However they also form part of popular cycling routes. Princess Royal Drive, between Frenchman Bay Road and Carlisle Street, is also the only cycling access between Albany Central Area and Lower Denmark and Frenchman Bay Roads, making it a critically important link in the network. It is traversed by a wide range of cyclists – mountain bikers, medium confidence level riders (e.g. the Over 50's cycle club), experienced cyclists (e.g. road riders) as well as walkers following the Bibbulmun Track and more recently Munda Biddi riders.

Currently, some cyclists use informal routes to avoid the risk of interacting with heavy vehicle traffic. Informal routes used by less confident cyclists include the use of Woolstores Place and private land to cross the railway line and enter Princess Royal Drive via the driveway east of Carlisle Street. These routes, aside from traversing private property, involve dismounting to cross the railway line and the risk of injury and damage to bicycles.

The community consultation process identified that Princess Royal Drive/Hanrahan Road was one of the most significant areas for improvement and an additional 66 responses specifically commented on safety issues on Princess Royal Drive/ Woolstores/Frenchman Bay Road. (See Appendix A and C)

East of Carlisle Street, cyclists are forced to ride on the road carriageway. This section is narrow, with an unbroken centreline, and a crest at the railway bridge, which creates a significant pinch point.

Hanrahan Road has sealed shoulders along most of its length and, whilst rougher than desirable, these are generally adequate. However, at the northern end of Hanrahan Road, the shoulders disappear, leaving cyclists to mix with traffic in very wide lanes

At the southern end of Hanrahan Road, the cycle lanes disappear at the entrance to the CSBP plant. From this point onwards, cyclists are required to ride in the traffic lane, mixing with road trains and general traffic. In many locations, e.g. between Carlisle Street and Festing Street, and at the railway bridge, there is insufficient width for vehicles to pass safely, particularly road trains, which results in a very dangerous situation for cyclists.



Project	Hanrahan Road / Princess Royal Drive
Responsibility	Main Roads
Reference	56,57,58
Links to Objectives	Cycle Tourism, Cycling Network, Safety and Respect for all Users
Possible Solutions / Treatments	<p>It is recommended that the northbound sealed shoulders on Hanrahan Road be continued through the Menzies Street intersection as far as Parker Street, where an optional path transition should be provided.</p> <p>For southbound cyclists, the existing sealed shoulders should be extended north from Menzies Street as far as Parker Street, with a 45 degree connection provided from the existing path Both these recommendations could be achieved by adjustments to line-marking only.</p> <p>Fixing the section of road, particularly between Frenchman Bay Road and Festing Street, is considered to be one of the highest priority cycling works due to the inherent risks associated with the existing environment.</p> <p>There is no easy fix solution, though some short term improvements are possible. Short term improvements may include the provision of paths, changes to line-marking, and/or signage to manage conflicts between road users until an ultimate solution can be implemented.</p> <p>The ultimate solution for this section requires significant engineering investigation, and is therefore outside of the scope of this Strategy. However, several preliminary options have been considered at a strategic level and an indicative solution at this time consists of:</p> <p>Mixed traffic operation along Woolstores Place</p> <p>New shared path along the western boundary of the Woolstores site</p> <p>3.5m wide shared path, on a combined bridge/pontoon structure, from Woolstores to Anzac Peace Park. This structure should have several lookout bays constructed at particularly scenic locations to cater for pedestrians admiring the scenery</p> <p>Investigation into the most appropriate route to cater for less confident cyclists between Anzac Peace Park and the beginning of the shared path at Bridges Street.</p> <p>This option is expected to accommodate most cyclist types, however very experienced road riders may continue using Princess Royal Drive.</p>
Recommendations	
Short	<p>A comprehensive Feasibility Study, lead by the City to determine a preferred suite of short term and long term improvements, with a view to commencing short term improvements in the 2015/16 FY. The study to include the arterial roads into the CBD.</p> <p>On Hanrahan Rd, northbound sealed shoulders be continued through the Menzies Street intersection as far as Parker Street, by adjustments to line-marking only</p> <p>On Hanrahan Rd, southbound, the existing sealed shoulders should be extended north from Menzies Street as far as Parker Street, by adjustments to line-marking with a 45 degree connection provided from the existing path.</p>
Medium	
Long	

### 1.5.11 Lower Denmark Road



Lower Denmark Road is a popular recreational road riding route, ridden by experienced road cyclists, and recreational cyclists (such as the Over 50s Cycling Club) as well as being a commuter corridor for residents of Elleker and beyond.





The recent installation of kerbing along Lower Denmark Road westward for 500m from Frenchman Bay Road has generated significant feedback from cyclists. They have commented on safety issues as they felt it prevented cyclists from being able to leave the roadway onto the unsealed shoulder. It is noted that the seal is now significantly wider than previously and has been asphalted.

Project	Lower Denmark Road
Responsibility	City of Albany/Main Roads
Reference	27,28,29, 289
Links to Objectives	Cycling Network Safety and Respect for all Users Cycle Participation Cycle Tourism
Possible Solutions / Treatments	<p>Given the number of complaints received about this section of road, and the safety risks due to high traffic volume and high cyclist volume, widening of the carriageway to provide minimum 1.5m wide sealed shoulders is recommended. This work should be extended beyond the end of the kerbed section, taking advantage of the existing unsealed shoulders, as funding permits.</p> <p>Improvement of the George and Robinson Road section would enable cyclists to avoid the section of Lower Denmark Road east of George Street, travelling via Robinson Road instead, until such time that the section east of George Street can have its safety issues addressed.</p> <p>Long term, combined with the previous described work on South Coast Highway, this would open up a long loop ride, as well as potential cycling tourism synergies with the Shire of Denmark. At present the route is generally not suitable for use by all but the most confident cyclists.</p>
Recommendations	
Short	<p>Investigate, as part of the Hanrahan/Princess Royal Drive Feasibility Study, options to improve cycling safety along Lower Denmark Road for 500m.</p> <p>Widening of the carriageway to provide minimum 1.5m wide sealed shoulders between George and Robinson Road,</p> <p>As part of the new Signage Strategy consider:</p> <p>Review of the existing signage along Lower Denmark Road and 'Share the Road' type signage at intervals no greater than 5km, particularly on the approach to pinch points (e.g. uphill grades)</p>
Medium	As part of the Ring Road, Main Roads to consider as per their policy, including cycling infrastructure.
Long	<p>Beyond Robinson Road, and beyond Elleker, it is recommended that Lower Denmark Road progressively be widened to provide a minimum 1.5m wide sealed shoulders in both directions.</p> <p>With the completion of Albany Ring Road, review the use of existing road for local access and encourage cycling from George Street to Frenchman Bay Road.</p>



Reference Number	Details						Indicative Cost at 2014	
26		Street Name		From		To		\$7,000,000
		South Coast Hwy		George St		City Boundary		
		Type	Surface	Width	Length	Area	Rating %	
		On-road	Chip seal	2.0	35,000.0	70000	48.00	
		Priority	Comments/Actions					
		Long	Widen and seal shoulders (MRWA)					
27		Street Name		From		To		\$180,000
		Lower Denmark Rd		George St		Robinson Rd		
		Type	Surface	Width	Length	Area	Rating %	
		On-road	Chip seal	1.5	1,000.0	1500	58.00	
		Priority	Comments/Actions					
		Short	Widen and seal shoulders					
28		Street Name		From		To		\$800,000
		Lower Denmark Rd		Frenchman Bay Rd		George St		
		Type	Surface	Width	Length	Area	Rating %	
		On-road	Chip seal	1.5	4,400.0	6600	58.00	
		Priority	Comments/Actions					
		Short	Widen and seal shoulders					
28a		Street Name		From		To		\$10,000
		Lower Denmark Rd		Frenchman Bay Rd		5km west		
		Type	Surface	Width	Length	Area	Rating %	
		On-road			5,000.0			
		Priority	Comments/Actions					
		Short	Review signage, install symbols,					

Reference Number	Details						Indicative Cost at 2014	
55a	Street Name		From		To			
	Albany Hwy		Chester Pass Rd		York St			
	Type	Surface	Width	Length	Area	Rating %		
	On-road	Asphalt	1.5	2,500.0	3750	76.00		
	Priority	Comments/Actions						
	Medium	Investigate on road cycle lanes						
55b	Street Name		From		To		\$710,000	
	Albany Hwy		Chester Pass Rd		York St			
	Type	Surface	Width	Length	Area	Rating %		
	Shared	Asphalt	2.5	2,500.0	6250	80.00		
	Priority	Comments/Actions						
	Short	Construct 2.5m wide asphalt shared path						
56		Street Name		From		To		\$12,000
		Hanrahan Rd		Albany Hwy		Frenchman Bay Rd		
		Type	Surface	Width	Length	Area	Rating %	
		On-road					78.00	
		Priority	Comments/Actions					
		Short	Linemark to provide sealed shoulder for cyclists MRWA)					
57		Street Name		From		To		\$80,000
		Princess Royal Dr		Frenchman Bay Rd		York St		
		Type	Surface	Width	Length	Area	Rating %	
		Shared			800.0	0	66.00	
		Priority	Comments/Actions					
		Short	Feasibility Study into best options (MRWA)					

Reference Number	Details						Indicative Cost at 2014																																				
58	<div></div> <table><tr><td colspan="2">Street Name</td><td colspan="2">From</td><td colspan="2">To</td></tr><tr><td colspan="2">Princess Royal Dr</td><td colspan="2">Railway Bridge</td><td colspan="2">York St</td></tr><tr><td>Type</td><td>Surface</td><td>Width</td><td>Length</td><td>Area</td><td>Rating %</td></tr><tr><td>On-road</td><td></td><td></td><td>1,200.0</td><td>0</td><td>56.00</td></tr><tr><td>Priority</td><td colspan="5">Comments/Actions</td></tr><tr><td>Short</td><td colspan="5">Feasibility Study into best options MRWA)</td></tr></table>						Street Name		From		To		Princess Royal Dr		Railway Bridge		York St		Type	Surface	Width	Length	Area	Rating %	On-road			1,200.0	0	56.00	Priority	Comments/Actions					Short	Feasibility Study into best options MRWA)					
Street Name		From		To																																							
Princess Royal Dr		Railway Bridge		York St																																							
Type	Surface	Width	Length	Area	Rating %																																						
On-road			1,200.0	0	56.00																																						
Priority	Comments/Actions																																										
Short	Feasibility Study into best options MRWA)																																										
60	<div></div> <table><tr><td colspan="2">Street Name</td><td colspan="2">From</td><td colspan="2">To</td></tr><tr><td colspan="2">Elizabeth St</td><td colspan="2">Paul Terry Dr</td><td colspan="2">The Esplanade</td></tr><tr><td>Type</td><td>Surface</td><td>Width</td><td>Length</td><td>Area</td><td>Rating %</td></tr><tr><td>Shared</td><td>Asphalt</td><td>2.5</td><td>900.0</td><td>2250</td><td>62.00</td></tr><tr><td>Priority</td><td colspan="5">Comments/Actions</td></tr><tr><td>Long</td><td colspan="5"></td></tr></table>						Street Name		From		To		Elizabeth St		Paul Terry Dr		The Esplanade		Type	Surface	Width	Length	Area	Rating %	Shared	Asphalt	2.5	900.0	2250	62.00	Priority	Comments/Actions					Long						\$260,000
Street Name		From		To																																							
Elizabeth St		Paul Terry Dr		The Esplanade																																							
Type	Surface	Width	Length	Area	Rating %																																						
Shared	Asphalt	2.5	900.0	2250	62.00																																						
Priority	Comments/Actions																																										
Long																																											
61	<div></div> <table><tr><td colspan="2">Street Name</td><td colspan="2">From</td><td colspan="2">To</td></tr><tr><td colspan="2">Paul Terry Dr (future extension)</td><td colspan="2">Berliner St</td><td colspan="2">Flinders Park Primary</td></tr><tr><td>Type</td><td>Surface</td><td>Width</td><td>Length</td><td>Area</td><td>Rating %</td></tr><tr><td>Shared</td><td>Asphalt</td><td>2.5</td><td>2,000.0</td><td>5000</td><td>61.00</td></tr><tr><td>Priority</td><td colspan="5">Comments/Actions</td></tr><tr><td>Long</td><td colspan="5">Condition of subdivisional development</td></tr></table>						Street Name		From		To		Paul Terry Dr (future extension)		Berliner St		Flinders Park Primary		Type	Surface	Width	Length	Area	Rating %	Shared	Asphalt	2.5	2,000.0	5000	61.00	Priority	Comments/Actions					Long	Condition of subdivisional development					
Street Name		From		To																																							
Paul Terry Dr (future extension)		Berliner St		Flinders Park Primary																																							
Type	Surface	Width	Length	Area	Rating %																																						
Shared	Asphalt	2.5	2,000.0	5000	61.00																																						
Priority	Comments/Actions																																										
Long	Condition of subdivisional development																																										
63	<div></div> <table><tr><td colspan="2">Street Name</td><td colspan="2">From</td><td colspan="2">To</td></tr><tr><td colspan="2">Warden Ave</td><td colspan="2">Collingwood Rd</td><td colspan="2">Hardie Rd</td></tr><tr><td>Type</td><td>Surface</td><td>Width</td><td>Length</td><td>Area</td><td>Rating %</td></tr><tr><td>Shared</td><td>Asphalt</td><td>2.5</td><td>650.0</td><td>1625</td><td>69.00</td></tr><tr><td>Priority</td><td colspan="5">Comments/Actions</td></tr><tr><td>Short</td><td colspan="5">Construction of shared path - western side</td></tr></table>						Street Name		From		To		Warden Ave		Collingwood Rd		Hardie Rd		Type	Surface	Width	Length	Area	Rating %	Shared	Asphalt	2.5	650.0	1625	69.00	Priority	Comments/Actions					Short	Construction of shared path - western side					\$185,000
Street Name		From		To																																							
Warden Ave		Collingwood Rd		Hardie Rd																																							
Type	Surface	Width	Length	Area	Rating %																																						
Shared	Asphalt	2.5	650.0	1625	69.00																																						
Priority	Comments/Actions																																										
Short	Construction of shared path - western side																																										

## Appendix B – Extracts from Albany Harbours Dual Use Path Planning Strategy

Page	Section No and title	Extract
7	2 Background	<i>This report is not about the selection of a route for commuter cyclists. It is about selecting the best alignment for a path which will have a multitude of users. Therefore the width, grade, elevation, alignment, surface material and 'all-weather useability' of the path needs to be appropriate for the range of probable users.</i>
8	3.1 Community Consultation	<p><i>A public workshop held in Albany on 23 August 1994 (under the auspices of the Albany Regional Alternative Transport Taskforce) elicited many comments about walking and cycling in Albany, from the 70+ residents who attended. As a result of that public workshop, a list of proposals, suggestions and ideas about new facilities was compiled, including:</i></p> <ul style="list-style-type: none"> <li><i>• greater education needed for all road users (motorists and cyclists) and dual use path users (pedestrians and cyclists)</i></li> <li><i>• better parking facilities required for cyclists</i></li> <li><i>• better signage needed along dual use paths and other trails</i></li> <li><i>• need to establish a comprehensive network of dual use paths, including the continuation of the establishment of the dual use path from Lower King through the town to Frenchman Bay (ie. around the harbours)</i></li> <li><i>• wider paths needed</i></li> <li><i>• high speed commuter cyclist routes needed on major roads</i></li> <li><i>• rest areas along paths are required</i></li> <li><i>• all further work should be properly planned, with more community involvement in the planning</i></li> <li><i>• concern over impact that future dual use paths may have on wildlife habitat at Rushy Point</i></li> </ul>
21	4.10 Issues	<i>Alternative routes should be provided for certain users (eg. 'commuter' type cyclists) who have the potential for high speed, which may not be appropriate in an environment more suited for recreational pursuits. High speed cyclists require high standard, direct routes and will usually not use a foreshore dual use path or trail if a better (usually on-road) alternative exists.</i>
22	4.12 Issues	<i>Though the path will be constructed close to the foreshore of the harbours, and will be many kilometres in length, the alignment and location of the path should service nearby educational, commercial and residential activities - both existing and proposed. The foreshore dual use path should connect with the existing dual use path network, other (on-road) cycle routes and pedestrian paths, and should take into account dual use paths proposed within future urban development areas.</i>
25	5.3 Environmental Review	<p><i>The consultants concur with AWMA's recommendations for DUPs and pathways in foreshore areas and concluded that:</i></p> <ul style="list-style-type: none"> <li><i>(i) a multi-use Trail can be constructed between the Wool Stores and Harding Road with minimal environmental impacts along the foreshore and wildlife; and</i></li> <li><i>(ii) (ii) a commuter-style DUP should be developed along Frenchman Bay Road and Woolstores Place as the obvious extension of the existing DUP.</i></li> </ul>



27	5.4 Environmental Review	<p><b>Foreshore Area 2 - The Wool Stores to the Town Centre</b></p> <p><i>The consultants noted that most of the foreshore vegetation has been cleared in this area and almost all of that remaining is Salt-marsh vegetation. In recommending an alignment for a dual use path through this area, the consultants believe the obvious west to east alignment for a DUP, 2.5 m wide and commencing at the eastern end of Woolstores Place, is along the rear of the Wool Stores, through Reserve 22837 (for Railway Purposes) and parallel to Princess Royal Drive to the Albany Town Centre. This alignment is fairly direct, involves only small gradients and over most of its route offers attractive vistas south across Princess Royal Harbour.</i></p> <p><i>The consultants made the following observations:</i></p> <ul style="list-style-type: none"> <li><i>• Reserve 22837 appears to include at least two railway tracks which are overgrown by bush and grass. Much of the reserve is bordered on the south side by a narrow strip of bush, up to 3m high;</i></li> <li><i>• the railway line cutting, which is crossed by Princess Royal Drive, offers a more direct and easier alignment than an alternative to the south around Melville Point;</i></li> <li><i>• the feasibility of constructing a DUP, fully protected by a strong mesh fence from railway traffic, on the south side of the cutting should be investigated, with consideration being given, if necessary, to widening of the cutting or raising the DUP well above the railway line;</i></li> <li><i>• the foreshore, which adjoins Princess Royal Drive on the eastern side of the cutting, is very exposed to the elements between Melville Point and Residency Road and hence a DUP aligned to the north of that major road would provide more protection;</i></li> <li><i>• the land on both sides of the two foreshore lakes appears suitable for development of a DUP, with most of that on the northern side of the larger lake being Vacant Crown Land, Reserve 6791 and Road Reserve, and freehold areas being Exempt for Sale (presumably available for acquisition, in whole or part, through the planning process); and</i></li> <li><i>• a DUP, if aligned next to the two foreshore lakes and close to the replica of the Brig Amity near Residency Road, would have a most attractive setting and provide many superb vistas across the foreshore, over Princess Royal Harbour and towards the Town Centre.</i></li> </ul>
39	6.8 Alternative Alignments	<p><b>York Street to Wool Stores</b></p> <p><i>Between York Street and the Wool Stores three alternative alignment options exist, each with components which could be included in other options.</i></p>
39 & 40	6.8.1 Alternative Alignments	<p><b>South side Princess Royal Drive</b></p> <p><i>This alignment utilises the (currently) narrow section of road shoulder between Princess Royal Drive and Princess Royal Harbour. This option makes good sense if the DUP around the northern side of Foreshore Redevelopment Project is used as an integral component of the Albany Harbours DUP. Rather than crossing over to the north side of Princess Royal Drive, it would be logical to keep the DUP on the southern side. Much of the southern verge of Princess Royal Drive, between York Street and the railway cutting, is too narrow in its present state for a dual use path to be</i></p>

		<p>constructed along it. As the causeway, upon which Princess Royal Drive is constructed, is fill retained by a rock wall on the Princess Royal Harbour side, it would be possible for the rock retaining wall to be relocated 2 - 3 metres out into Princess Royal Harbour, and backfilled, to create a wider verge upon which a DUP could be constructed.</p> <p>The DUP would require some structures (eg. boardwalk) through portions of Melville Point. Beyond Melville Point, the alignment would utilise a corridor currently occupied by disused railway tracks on the foreshore side of the operating railway. Minimal clearing of foreshore vegetation would be required along this stretch of the foreshore. The environmental consultants report (for Foreshore Area 2) indicates that two overgrown railway tracks exist in this location.</p> <p>It is feasible to follow the railway reserve all the way to Woolstores Place or, alternatively, to utilise a narrow band of vacant crown land on the foreshore side of the reclaimed land upon which the Wool Stores are situated.</p> <p>This option of using the southern verge of Princess Royal Drive would be expensive, and the lower costs associated with other possible alignments from York Street to the Wool Stores make this option not feasible.</p>
41 & 42	6.8.2 Alternative Alignments	<p><i>North side Princess Royal Drive</i></p> <p>Between York Street and the Amity replica the DUP alignment would be on the southern side of the Residency Museum, using the wide, grassed forecourt of the Museum grounds, and passing between the Amity and the Museum buildings themselves. Between the Amity and the western-most lake, the path would follow the recently built service road north of Princess Royal Drive, and follow through vacant land up to the eastern edge of the lake.</p> <p>The Town of Albany has plans for the modification of the lakes along Princess Royal Drive. It would be possible for works involved in the modifications of the lakes to incorporate a formation / embankment for a dual use path.</p> <p>In its current state the northern verge of Princess Royal Drive is sufficiently wide for much of the distance between the lake and the railway cutting for a DUP. At the railway cutting, a structure would be required to swing the path around the embankment to the cutting. Preliminary investigations carried out by Town of Albany staff, in consultation with civil engineers and Westrail, indicates that it is feasible for a path, with necessary safeguards, to be constructed through the cutting.</p> <p>On the southern side of the cutting, the DUP would follow the alignment set out in Section 6.8.1. Again, there are choices around the Wool Stores, using either the narrow foreshore reserve (vacant crown land), or following the railway reserve through to Woolstores Place.</p> <p>Though not confirmed, there are reports that Main Roads WA has plans for the duplication or widening of Princess Royal Drive (on its northern side). The proposals are, however, long term and would not preclude this option (as any path or structure built now would be available for use for many years until the road project was implemented).</p>

42	6.8.3 Alternative Alignments	<p><i>South side of Railway Reserve</i></p> <p><i>This option proposes the use of land on the south side of the railway between the eastern end of the lake, and the railway cutting. As the environmental consultants report indicates, the land on the north side of the lake appears suitable for development of a DUP. Most of the land immediately south of, and abutting, the railway reserve is Vacant Crown Land, Reserve 6791 and Road Reserve, and some portions of privately owned land. The freehold areas are Exempt for Sale (presumably available for acquisition, in whole or part, through the planning process).</i></p> <p><i>As discussed in Section 6.8.2, the Town of Albany has plans for the modification of the lakes along Princess Royal Drive. It would be possible for works involved in the modifications of the lakes to incorporate a formation / embankment for a dual use path on the northern reaches of the lake, to avoid land which is privately owned.</i></p> <p><i>The environmental consultants also state that this alignment would have a most attractive setting and provide many superb vistas across the foreshore, over Princess Royal Harbour and towards the Town Centre.</i></p> <p><i>Modification of the lake to create an embankment upon which a dual use path could be constructed would be the most cost effective solution to establishing a path between the Amity and the railway cutting and through the railway cutting.</i></p>
52	7 Preferred Alignment	<p><b>Preferred Alignment</b></p> <p><i>York Street to Wool Stores</i></p> <p><i>An alignment which utilises the vacant crown land and reserves on the south side of the railway tracks, north of the lake, is the preferred route. The proposed modifications to the lake will provide an opportunity to create a suitable alignment for a DUP on Council controlled land to avoid some private land holdings which exist on the south side of the railway. This alignment provides the best approach and simplest route for utilising the railway cutting under Princess Royal Drive. From the cutting, the preferred route would follow the disused railway tracks to the vicinity of the Wool Stores. At the Wool Stores the DUP should continue following the railway reserve to Woolstores Place.</i></p>

## Appendix C - Stakeholder Feedback

Respondent	Comments
ABUG	<p>ABUG response to the City of Albany, on their report "Mount Elphinstone to CBD Cycle Link Feasibility Study", based on feedback received from ABUG members.</p> <p><b>8.1.1 Confident Cyclists : Short Term (within 12 months)</b></p> <ol style="list-style-type: none"> <li><i>MR extend the proposed 1.5m wide cycle lanes on PRD, eastward to Festing St intersection and include appropriate signage.</i> Strong support for the improvement of facilities for cyclists who choose to ride on the road. Preference for wider cycle lanes (and associated traffic lane where applicable) where possible, to provide sufficient safe room for cyclists and separation from heavy vehicles, although general acceptance that "something is <u>far</u> better than nothing". Strong Support for review of speed limit to reduce impact of 'buffeting' from heavy vehicles, improve heavy vehicle tracking within lane maximizing offset from cyclist and reduce risk of collision.</li> <li><i>Signage be installed on PRD at Festing St and Residency Rd to encourage alternative route to crossing railway line and narrow bridge on PRD.</i> Strong Support.</li> <li><i>COA undertake design of cycle lanes (1.5 m) wide on FBR from PRD up to and including intersection of Woolstores Place.</i> Strong Support.</li> <li><i>COA liaise with PTA and Brookfield regarding modifications to rail crossing to accommodate cycle lanes.</i> Supported. See additional comments regarding crossing location for less confident cyclists.</li> <li><i>COA undertake design of cycle lanes (1.5m wide) on LDR from intersection of FBR for 500m.</i> Support for rectification of current hazard posed by narrow pavement surface width and high barrier kerb.</li> </ol> <p><b>8.1.2 Confident Cyclists : Medium Term (1-3 years)</b></p> <ol style="list-style-type: none"> <li><i>MR construct cycle lanes (1.5m wide) on both sides of Hanrahan Rd from end of existing sealed shoulders through to the currently proposed cycle lanes.</i> Strong support for the improvement of facilities for cyclists who choose to ride on the road. Preference for wider cycle lanes (and associated traffic lane where applicable) where possible, to provide sufficient safe room for cyclists and separation from heavy vehicles, although general acceptance that "something is <u>far</u> better than nothing".</li> <li><i>MR provide sealed shoulders (1.5m-2.0m) between Residency Rd and start of rail bridge.</i> Support for the improvement of facilities for cyclists who choose to ride on the road.</li> <li><i>MR review existing 70km/hr speed limit on PRD following implementation of cycle lanes.</i> Strong support for review of speed limit through the narrow sections of PRD (FBR to CBD) to reduce impact of 'buffeting' from heavy vehicles, improve heavy vehicle tracking within lane thereby maximizing offset from cyclists and reduce risk of collision.</li> </ol>



ABUG (cont...)	<p>9. <i>COA construct cycle lanes (1.5m wide) along FBR from PRD up to and including intersection with Woolstores Place.</i> Support for the improvement of facilities for cyclists who choose to ride on the road. Preference for wider cycle lanes (and/or wider associated traffic lane) where possible, to provide sufficient safe room for cyclists and separation from heavy vehicles, although general acceptance that “something is <u>far</u> better than nothing”.</p> <p>10. <i>COA construct cycle lanes (1.5m wide) on both sides of LDR from FBR to for 500m.</i> Support for the improvement of facilities for cyclists who choose to ride on the road. Preference for wider cycle lanes (and/or wider associated traffic lane) where possible, to provide sufficient safe room for cyclists and separation from heavy vehicles, although general acceptance that “something is <u>far</u> better than nothing”.</p> <p><b>8.1.3 Confident Cyclists : Long Term</b></p> <p>11. <i>MR include sealed shoulders/cycle lanes on Albany Ring Road.</i> Support. Preference for wider cycle lanes (and associated traffic lane where applicable) where possible, to provide sufficient safe room for cyclists and separation from heavy vehicles, although general acceptance that “something is <u>far</u> better than nothing”.</p> <p>12. <i>COA include cycle lanes (1.5m wide) on both sides of LDR.</i> Support for the improvement of facilities for cyclists who choose to ride on the road. Preference for wider cycle lanes (and associated traffic lane where applicable) where possible, to provide sufficient safe room for cyclists and separation from heavy vehicles, although general acceptance that “something is <u>far</u> better than nothing”.</p> <p>Other Comments: Support for the “confident/less confident cyclist” approach. Some difference of opinion about the naming, but general agreement that;</p> <ul style="list-style-type: none"> <li>(1) the optimum solution (reflected in international best practice) is for cycle paths that are totally/physically separated from vehicular traffic (where speed is over 30km/h or comprising of high number of heavy vehicles) and pedestrians, but an acknowledgment that;</li> <li>(2) on-road infrastructure (cycle lanes/sealed shoulders) are still required as some cyclists will always choose to ride on-road even if there is a high quality alternative.</li> </ul> <p><b>8.2.1 Less Confident Cyclist Short Term (within 12 months)</b></p> <p>13. <i>COA undertake design and obtain approvals for Option 1.</i> Strong support. ABUG recommends the crossing of PRD be separated from the intersection of LDR/PRD (moved east) to reduce risk of car on bike collisions. Also, to achieve the safest crossing of PRD an alternative crossing point over the railway may be desirable (perhaps in the location of the current Munda Bidi crossing). Brookfield Rail should be pressured to accommodate reasonable requests which provide clear net safety gains.</p>
----------------	--

<p>ABUG (cont...)</p>	<p><b>8.2.2 Less Confident Cyclist Medium Term (1-3 years)</b></p> <p>14. (2016/17) COA undertake construction of Option 1 from Woolstores to Castle St. Strong Support.</p> <p>15. (2017/18)COA undertake construction of Option 1 from Castle St to Collie St. Strong Support.</p> <p>16. COA investigate designs for Option 2 from FBR to the section being undertaken by Grange. Strong Support and suggestion that the investigation cover Option 2 all the way to the Peace Park. The Grange Project is uncertain and an alternative funding plan should be developed. Even with Option 1 constructed, Option 2 remains a highly desirable link with major tourism (and safety) benefits. Preliminary work should be completed to facilitate the pursuit of funding should the opportunities arise, and allow appropriate development conditions on relevant properties.</p> <p><b>8.2.3 Less Confident Cyclist Long Term</b></p> <p>17. MR include shared path construction in Albany Ring Rd. Strong Support. Cycle paths may also be appropriate.</p> <p>18. A shared path be included alongside the realignment of Carlisle St, to tie in with the shared path in Option 1. Strong Support. Cycle paths may also be appropriate.</p> <p>19. Grange Resources construct a 3m wide shared path at the same time as, and along the alignment of the proposed slurry pipeline from Anzac PP to the north of the rail line. Strong Support. Furthermore and as per point 16, the Grange Project is uncertain and an alternative funding plan should be developed. Even with Option 1 constructed, Option 2 remains a highly desirable link with major tourism (and safety) benefits. Preliminary work should be completed to facilitate the pursuit of funding should the opportunities arise, and allow appropriate development conditions on relevant properties.</p> <p>20. COA construct the remaining section of Option 2. Strong Support, and further comments about connection to Anzac PP as per 16 and 19.</p>
<p>Albany Cycle Club</p>	<p>We had our committee meeting on Monday night and the committee were fine with everything in the draft report and appreciative for the recommendation in the report to MRWA to provide sealed shoulders between Residency Rd and the start of the Railway bridge approach embankment on Princess Royal Drive. I explained that is only a recommendation and then it'd be up to MRWA to source funding amongst other priorities and the committee understood that.</p> <p>One question was raised however in relation to the signage. In the list of recommendations there is only mention of signage to be installed on the corner of Princess Royal Drive and Festing St &amp; Residency Rd. From my recollection of what you or Andrew Greenwood said at the meeting it was advised that signage was to be recommended to be put in place along the lines of a "Share the Road" message. That is not noted in the recommendations section. Would you please advise where in the draft report that is mentioned or did I get the wrong impression?</p>

<p>Albany Cycle Club (cont...)</p>	<p>In relation to the signage recommended as per the report – there was some concern expressed amongst the committee that with the signage “encouraging cyclists to use Festing St as an alternative to using Princess Royal Drive” that there is potential for motorists to direct abuse at individual cyclists and groups who continue to use Princess Royal Drive after Festing St, as the club proposes to do so re our Thursday morning club rides and other unofficial group &amp; individual rides that occur during the week. We therefore request that the Albany Cycling Club, &amp; other local cycling groups, to be consulted re the wording &amp; look of these proposed signs.</p> <p>If you have any questions in relation to this feedback then please contact me.</p> <p>Regards</p> <p>Paul Terry C/- Albany Cycling Club</p>
<p>Brookfield Rail</p>	<p>The main point which was stated at the Workshop, is that there can be no cycle path within any section of the rail corridor in Albany. All other options which are outside of the rail corridor could be supported. Greater detail would be require if/and when, path routes are agreed and may need to cross rail at dedicated road crossings. At that point BR would consider how this may work and provide all the safety information.</p> <p>Regards</p> <p>Laura Adair Manager Network Lease &amp; Property</p>
<p>Department of Transport</p>	<p>The Department of Transport is very pleased to see community involvement in the process and reasoning behind the design and alignment of paths the community will be using. Subject to receiving favourable response from the community groups the Department has no objections with the projects progressing to the next stage.</p> <p>Regards</p> <p>Noel Chambers Operations Manager   Regional Services   Department of Transport</p>
<p>Grange Resources</p>	<p>As cycling is not our area of expertise, I don't think it would be appropriate for me to comment on any of the concepts apart from where they interface with our project, and I'm very comfortable, from the workshop, that those interfaces are fine.</p> <p>I hope that helps.</p> <p>Kind regards</p> <p>Glenda Stirling B.Com(Acc) CPA CMC   Community Liaison Manager   Grange Resources</p>

Main Roads WA	<p>Main Roads supports the concept / alignments presented and, as always, will work with the City of Albany to manage the implementation (ie delivery of works on PRD and the review of signage and speed zones on the various routes etc).</p> <p>Regards.</p> <p>Andrew Duffield Regional Manager Great Southern Region</p>
Over 50's Cycle Group	<p>Thanks for organising the meeting on 3 June and presenting the draft feasibility study document, which is comprehensive and makes interesting reading.</p> <p>I confirm that the Albany Over 50s Cycle Group supports the recommendations in the study. Our group is also supportive of the suggestions from Albany Cycle Club regarding cyclist-specific signage.</p> <p>I'm pleased to note that work that has started on the Princess Royal Drive cycle lane and commend the City of Albany and Main Roads WA for attending to this so promptly.</p> <p>Kind regards Denis Sawers Albany Over 50s Cycle Group representative</p>





Lloyd George Acoustics

PO Box 717

Hillarys WA 6923

T: 9300 4188 F: 9300 4199

E: [daniel@lgacoustics.com.au](mailto:daniel@lgacoustics.com.au) W: [www.lgacoustics.com.au](http://www.lgacoustics.com.au)

# Noise Management Plan

**Albany Motorcycle Club  
Proposed Motocross Venue  
Chester Pass Road**

**Reference: 13072454-01**

**Prepared for:**  
City of Albany

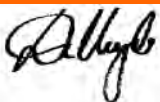



Member Firm of Association of Australian Acoustical  
Consultants

Report: 13072454-01

<b>Lloyd George Acoustics Pty Ltd</b> ABN: 79 125 812 544  <b>PO Box 717</b> <b>Hillarys WA 6923</b>				
<b>Offices:</b>	<b>Ocean Reef</b>	<b>Padbury</b>	<b>Scarborough</b>	<b>Heathridge</b>
Phone:	9300 4188	9401 7770	9245 3223	0412 611 330
Fax:	9300 4199	9401 7770	9300 4199	9300 4199
Email:	<a href="mailto:daniel@lgacoustics.com.au">daniel@lgacoustics.com.au</a>	<a href="mailto:terry@lgacoustics.com.au">terry@lgacoustics.com.au</a>	<a href="mailto:mike@lgacoustics.com.au">mike@lgacoustics.com.au</a>	<a href="mailto:matt@lgacoustics.com.au">matt@lgacoustics.com.au</a>
Mobile:	0439 032 844	0400 414 197	0438 201 071	0412 611 330
Member of the Association of Australian Acoustical Consultants – (AAAC)				

This report has been prepared in accordance with the scope of services described in the contract or agreement between Lloyd George Acoustics Pty Ltd and the Client. The report relies upon data, surveys, measurements and results taken at or under the particular times and conditions specified herein. Any findings, conclusions or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client. Furthermore, the report has been prepared solely for use by the Client, and Lloyd George Acoustics Pty Ltd accepts no responsibility for its use by other parties.

<b>Prepared By:</b>	Daniel Lloyd	
<b>Position:</b>	Project Director	
<b>Verified</b>	Terry George	
<b>Date:</b>	6 May 2014	

## Table of Contents

1	INTRODUCTION	1
2	NOISE PREDICTION METHODOLOGY	2
2.1	Site Measurements	2
2.2	Noise Modelling	2
2.2.1	Meteorological Information	3
2.2.2	Topographical Data	4
2.2.3	Ground Absorption	4
2.2.4	Source Sound Levels	4
3	NOISE MODELLING RESULTS	5
4	DISCUSSION	11
5	NOISE MANAGEMENT MEASURES	11
5.1	Noise Testing of Motorcycles	11
5.2	Operating Times	12
5.2.1	Events	12
5.2.2	Training Days	12
5.3	Notification of Events and Operating Times	12
5.4	Complaint Response	13
5.5	Responsibilities	13

## List of Tables

Table 2-1	Modelling Meteorological Conditions	3
Table 2-2	Source Sound Power Levels, dB(A)	4

## List of Figures

Figure 1-1	Location of the Proposed Motocross Track	1
Figure 1-2	Proposed Track Layout	2
Figure 2-1	Dominant Wind Direction during the Winter Months at Albany Airport	4
Figure 2-2	Ground Contour Map	5
Figures 3-1 to 3-4	Predicted Noise Levels	7 to 10

## Appendices

A	Details of Track Usage Plan
B	Terminology

# 1 INTRODUCTION

The Albany Motorcycle Club is proposing to relocate its motocross track to Chester Pass Road, just north of the South Coast Highway. The location of the Motocross track is shown in *Figure 1-1* and the proposed track layout is shown in *Figure 1-2*.

This Noise Management Plan (NMP) has been prepared to ensure that any noise impacts to neighbouring properties are minimised as far as practicable. The plan includes predicted noise levels during racing and provides details of the Club's commitments in managing the noise emissions.

*Appendix B* contains a description of some of the terminology used throughout this report.



*Figure 1-1 Location of the Proposed Motocross Track*



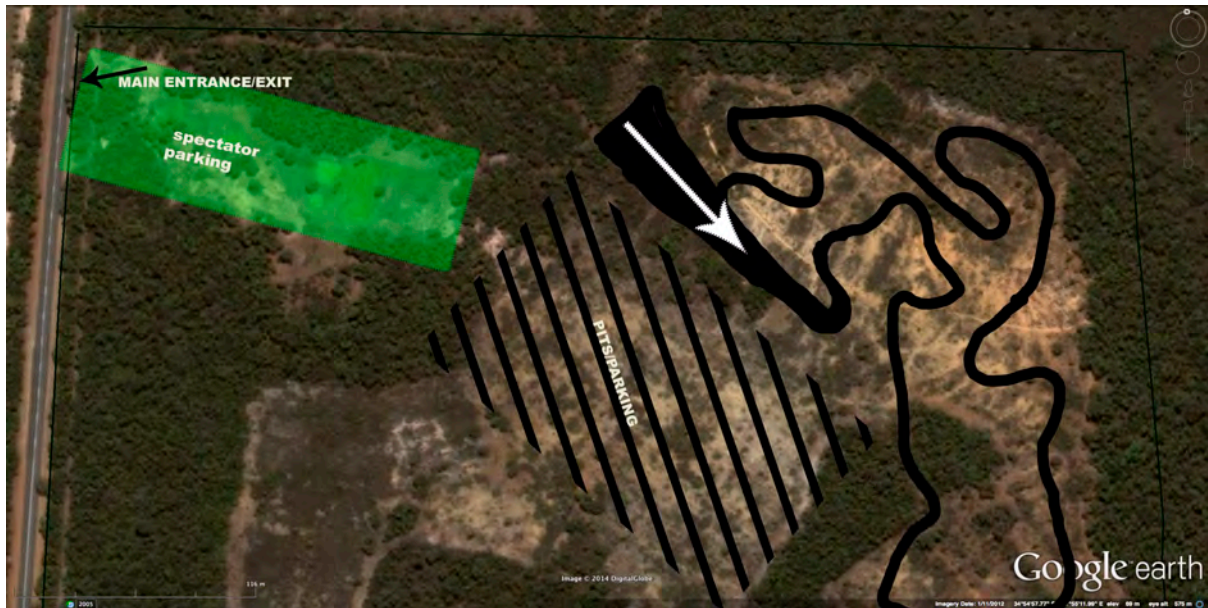


Figure 1-2 Proposed Track Layout

## 2 NOISE PREDICTION METHODOLOGY

### 2.1 Site Measurements

Noise resulting from a typical motocross race was measured on 2 August 2009, at the previous Albany Motorcycle Club on Roberts Road, Albany. The results of these measurements have been used as a basis for the noise modelling and are considered typical for motocross racing. Further verification show these results correlate well with the German national database of noise emissions.

### 2.2 Noise Modelling

Computer modelling has been used to support the hand held measurements. The advantage of modelling is that it is not affected by background noise sources and can provide the noise level for various weather conditions. It can also evaluate the effect of noise bunds and other noise amelioration methods.

The software used to predict the noise was SoundPLAN 7.2 together with the CONCAWE algorithms. These algorithms have been selected as they include the influence of wind and atmospheric stability. Input data required in the model are:

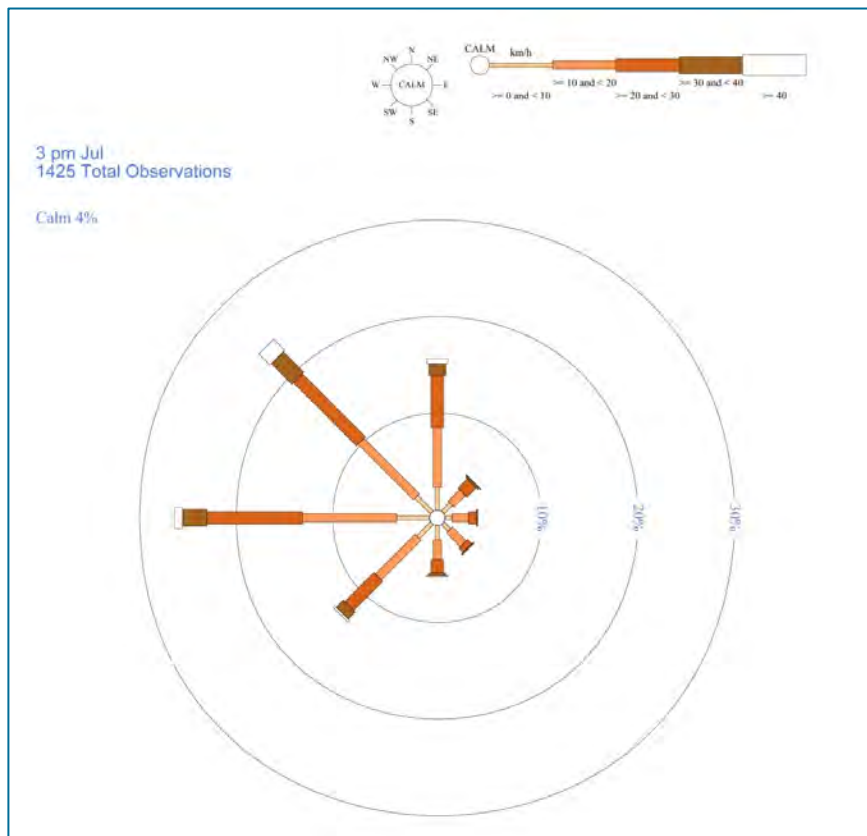
- ❑ Meteorological Information;
- ❑ Topographical data;
- ❑ Ground Absorption; and
- ❑ Source sound power levels.

### 2.2.1 Meteorological Information

Meteorological information utilised is based on that specified in the *EPA draft Guidance for the Assessment of Environmental Factors No.8 Environmental Noise*. These conditions approximate the typical worst-case for enhancement of sound propagation. For this assessment we have assessed the noise for the wind in all directions and for the wind coming from the west, which is the dominant direction for the winter months. The meteorological conditions used in the modelling are provided in *Table 2.1* and the dominant wind directions during the racing season (Bureau of Meteorology - Albany Airport) is shown in *Figure 2.1*. It should be noted that at wind speeds greater than those shown in *Table 2.1*, sound propagation may be further enhanced, however background noise from the wind itself and from local vegetation is likely to be elevated and dominate the ambient noise levels.

**Table 2-1 Modelling Meteorological Conditions**

Parameter	Day (0700-1900)
Temperature (°C)	20
Humidity (%)	50
Wind Speed (m/s)	4
Wind Direction*	All & NW
Pasquil Stability Factor	E



*Figure 2-1 Dominant Wind Direction during the Winter Months at Albany Airport*

Courtesy of Bureau of Meteorology

**2.2.2 Topographical Data**

Ground contour data was provided by the City of Albany. The contours were in 5 metre intervals and are shown in *Figure 2-2*.

**2.2.3 Ground Absorption**

Ground absorption varies from a value of 0 to 1, with 0 being for an acoustically reflective ground (e.g. water or bitumen) and 1 for acoustically absorbent ground (e.g. grass, trees). As this area is predominantly rural, a value of 1.0 has been used for the study area.

**2.2.4 Source Sound Levels**

Table 3.2 shows the sound power levels used in the modelling. As described previously, this data was obtained from measurements undertaken at the previous Albany Motorcycle Club track on Roberts Road, Albany.

*Table 2-2 Source Sound Power Levels, dB(A)*

Description	One-third Octave Band Frequency (Hz, dBA)								Overall
	63	125	250	500	1k	2k	4k	8k	
Motorcross Race (Senior Division)	75	97	105	117	117	121	117	104	128
	82	102	113	116	118	120	114	100	
	91	100	117	114	119	120	109	97	
Motorcross Race (Junior Division)	72	81	87	105	104	105	103	94	114
	75	81	92	102	103	104	100	91	
	78	87	99	100	103	105	98	90	





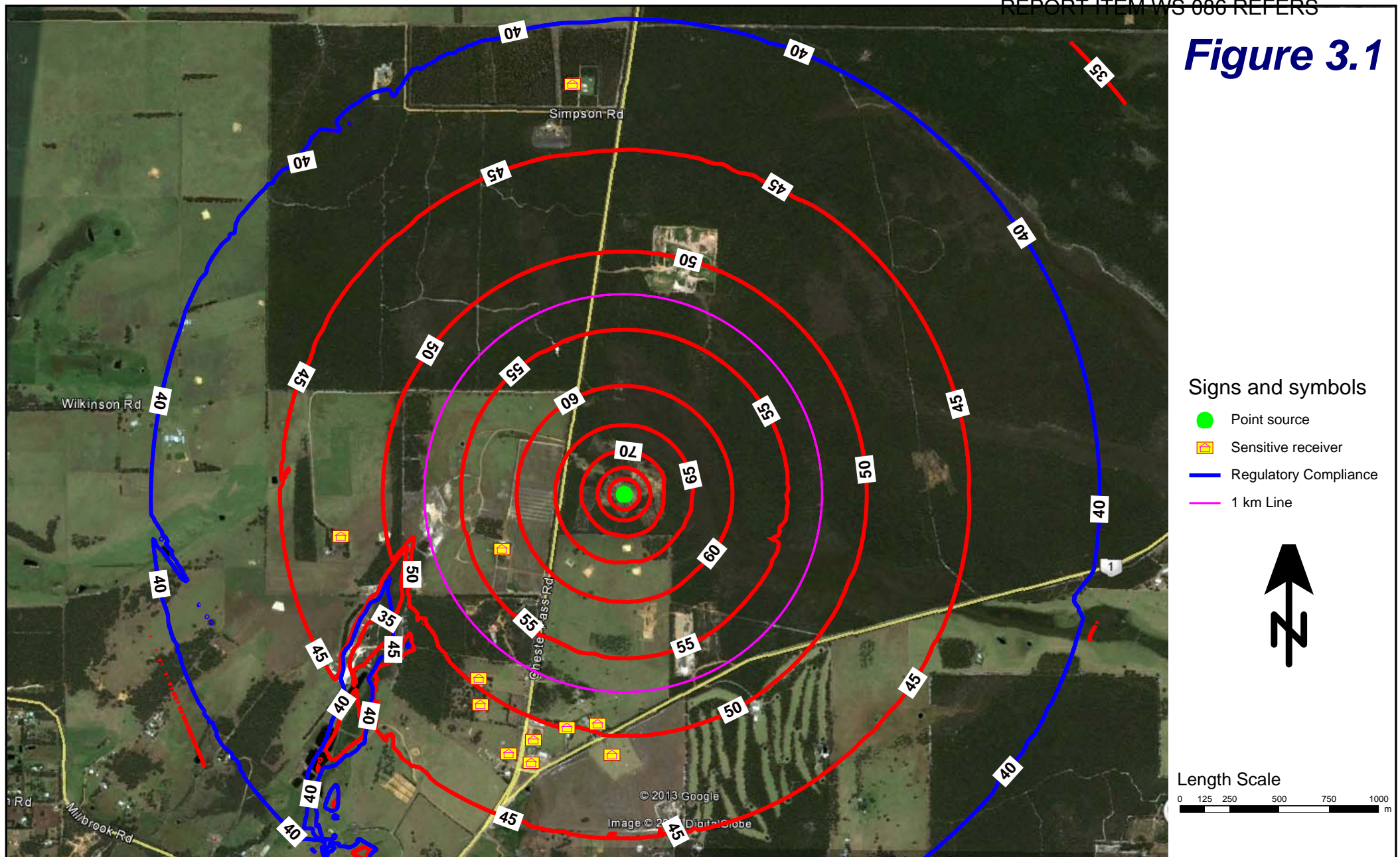
Figure 2-2 Ground Contour Map



### 3 NOISE MODELLING RESULTS

The results of the noise modelling, together with the location of the nearest noise sensitive premises, are provided in *Figures 3.1 to 3.4*. The figures show the following scenarios:

- *Figure 3.1*      *Noise from a Senior Division Race with Wind from All Directions;*
- *Figure 3.2*      *Noise from a Junior Division Race with Wind from All Directions;*
- *Figure 3.3*      *Noise from a Senior Division Race with Wind from the West; and*
- *Figure 3.4*      *Noise from a Junior Division Race with Wind from the West.*

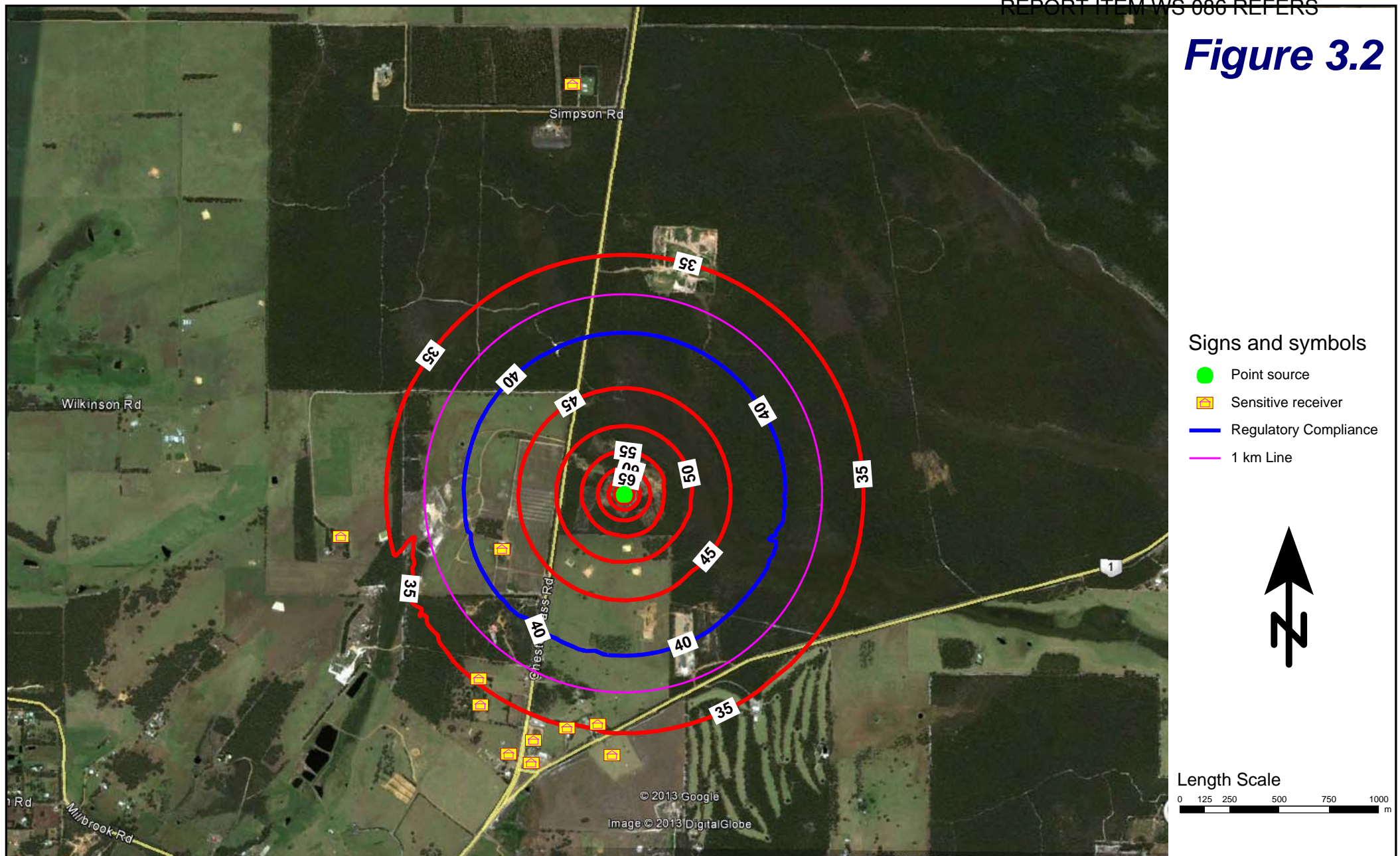
**Figure 3.1**

Proposed Albany Motorcross Track - Assumes Seniors Motorcross Racing  
 Predicted  $L_{A10}$  Noise Levels - Wind From All Directions



**Lloyd George Acoustics**  
 by Daniel Lloyd  
 daniel@lgacoustics.com.au  
 (08) 9300 4188



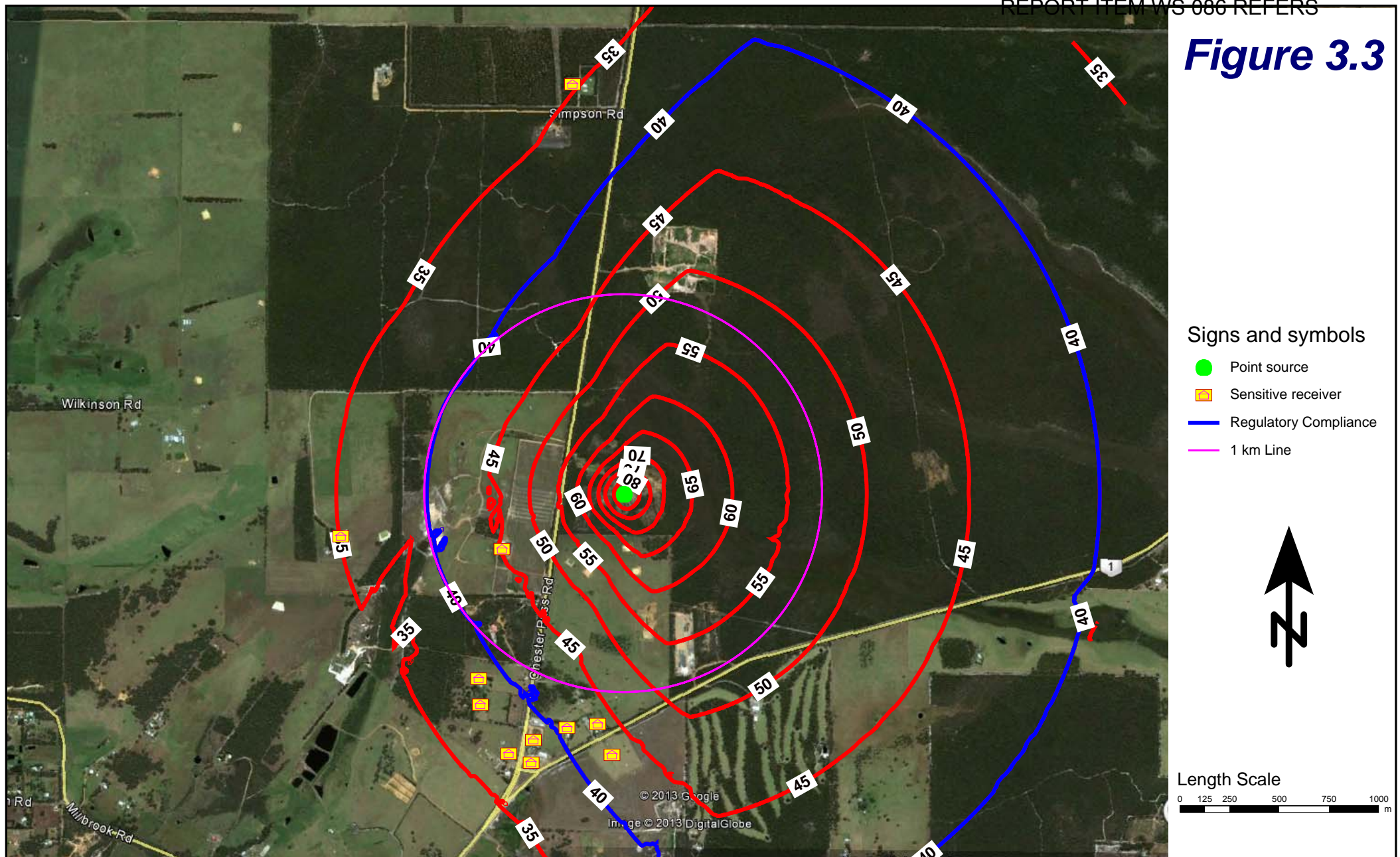
**Figure 3.2**

Proposed Albany Motorcross Track - Assumes Juniors Motorcross Racing  
Predicted  $L_{A10}$  Noise Levels - Wind From All Directions



**Lloyd George Acoustics**  
by Daniel Lloyd  
daniel@lgacoustics.com.au  
(08) 9300 4188



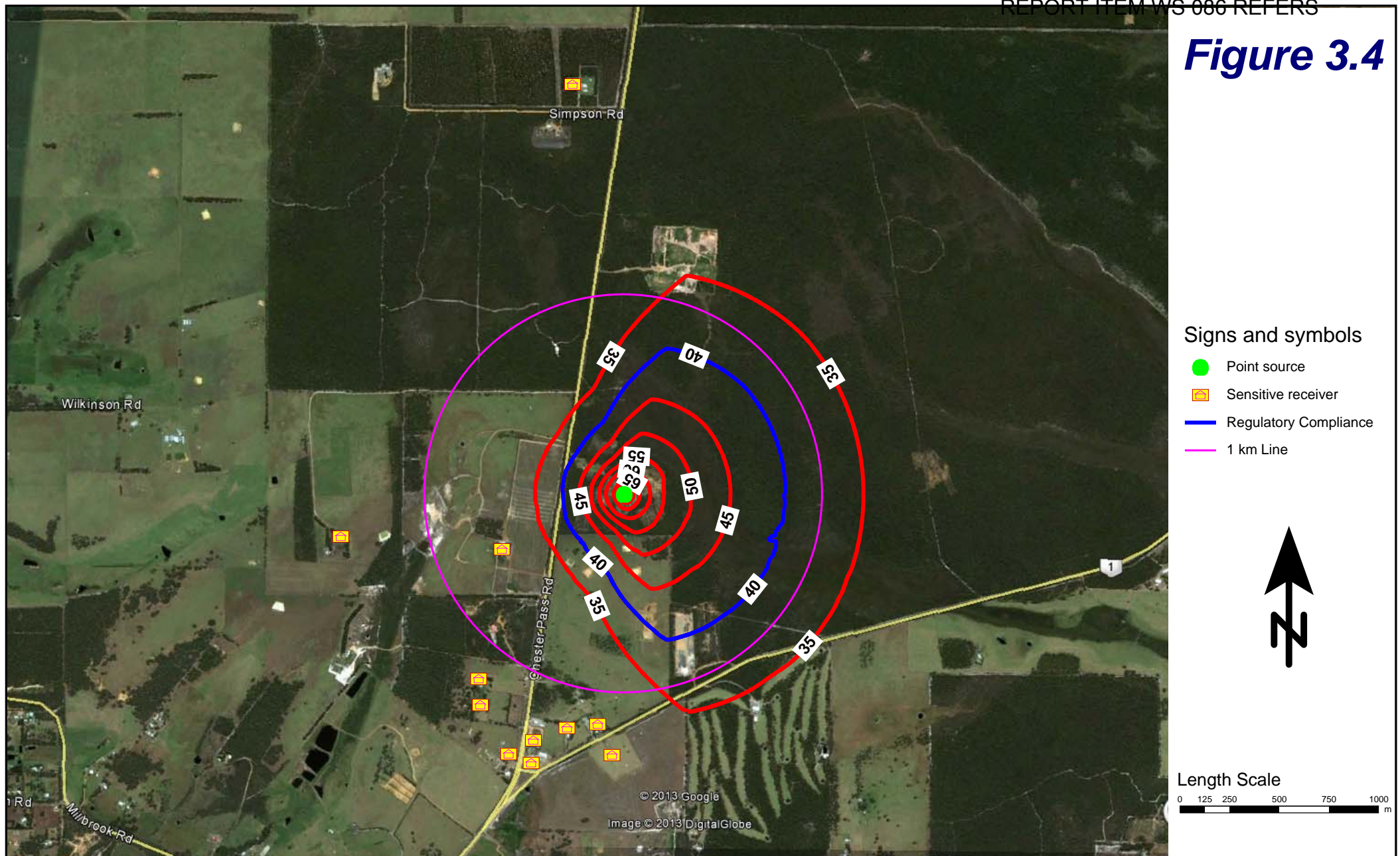
**Figure 3.3**

Proposed Albany Motorcross Track - Assumes Seniors Motorcross Racing  
 Predicted  $L_{A10}$  Noise Levels - Wind from the Predominant Direction (Westerly)



**Lloyd George Acoustics**  
 by Daniel Lloyd  
 daniel@lgacoustics.com.au  
 (08) 9300 4188



**Figure 3.4**

Proposed Albany Motorcross Track - Assumes Juniors Motorcross Racing  
 Predicted  $L_{A10}$  Noise Levels - Wind from the Predominant Direction (Westerly)



**Lloyd George Acoustics**  
 by Daniel Lloyd  
 daniel@lgacoustics.com.au  
 (08) 9300 4188

## 4 DISCUSSION

From *Figures 3.1 to 3.4*, it can be seen that the noise from the Albany Motorcycle Club Motocross track is predicted to be approximately  $L_{A10}$  58 dB at the closest receiver, being a caretaker's residence. This noise level would also be audible at nearby residential premises and exceeds the assigned levels under Regulation 7 of the *Environmental Protection (Noise) Regulations 1997 (Amended 2014 [the Regulations])*, during worst-case winds (from the track towards the receiver).

It is widely recognised that noise from motorsport venues results in an impact over a large area and compliance with the Regulations is often problematic. It is also recognised that motor racing venues are a community benefit. To achieve a balance between impact and benefit, Regulation 16A of the Regulations allows certain motorsport venues to be exempt from the assigned levels, provided that the Local Authority CEO has approved a noise management plan and that the motor sport is being conducted in accordance with that regulation.

Detailed below are the noise control measures developed by the Albany Motorcycle Club that should address the requirements of such a management plan.

## 5 NOISE MANAGEMENT MEASURES

To minimise the impact of noise, the following management measures will be enforced by the Albany Motorcycle Club at all racing (club and state races), training, practice sessions, exhibitions and special events.

Generally, the most effective noise management techniques for motocross venues are:

- Ensure noise emissions for motorcycles are within best practice guidelines;
- Limit the use of the track to prescribed times only;
- Ensuring PA systems are designed to minimise impacts to sensitive receivers; and
- Undertake community consultation and provide a complaints management system.

The Club will provide all Club members with a written instruction explaining the noise issues, the member's responsibility to maintain the NMP requirements and penalties that apply for breaches of these requirements.

### 5.1 Noise Testing of Motorcycles

All motorcycles using the track will be tested to ensure that they comply with Motorcycling Australia and FIM (Federation of International Motocross) Guidelines on noise output. The club has a sound level meter for this purpose and a number of club members are accredited Noise Control Officers.

Testing will also be carried out randomly or on motorcycles suspected of exceeding the Guidelines. Any motorcycles failing the test will not be permitted to race until they conform to the Guidelines. A record of non-complying racing vehicles will be kept for a period of 2 years.

The record will include:

- Details of the racing vehicle;
- The racing vehicle's owner
- Date and time that non-compliance was determined;
- The action taken by the owner following the request to cease racing; and
- The action taken by the owner to remedy the excessive noise emissions.

If requested by the CEO, these records are to be made available within 21 days.

## **5.2 Operating Times**

The track will only be open at prescribed times. When the track is closed, it will be securely locked and riding will be strictly prohibited. The track may be opened for maintenance purposes, however riding will be prohibited during this time.

On race or practice days, access to the site will be via a controlled key entry system. Riders (as directed by Motorcycling WA) may only enter the track with an official present. The ration will be kept at one (1) official per five (5) riders. All practice activity is recorded with riders and officials details entered into a log book. The officials present for practice will ensure that curfew times are adhered to.

The Albany Motorcycle Club has a five-year plan in place that incorporate State Title Event and Open Events.

### **5.2.1 Events**

Apart from two special events to be held on Sunday, all racing will be held on Saturday. Race days start after 8.30 am and conclude by 5.00 pm.

### **5.2.2 Training Days**

From 1 March to 31 November, training will occur on three days per week between 12.00 pm and 6.30 pm (curfew time will be drastically reduced in mid winter due to daylight).

From 1 December of one year to 28 February the following year, training will occur on two days per week between 12.00 pm and 6.30 pm.

The Albany Motorcycle Club commits to supplying our neighbours with a copy of our race calendar at the beginning of our season. The club will also inform neighbours of any changes to the calendar that may occur during the year.

## **5.3 Notification of Events and Operating Times**

The Albany Motorcycle Club will provide information on race dates and operating times to all affected residents. Should any unexpected changes to the calendar occur, the revised times will be conveyed to all affected residents at least one week before the event where practicable.

Event details will be published in the local newspaper one week before the event day. The club will liaise with the newspapers for editorial prior to the event for publicity and general information purposes. Information of events will be placed on the clubs web site as well as social media. In addition, any notifications for events will be hand delivered to any noise sensitive premises within 1km of the venue.

#### **5.4 Complaint Response**

The Albany Motorcycle Club wishes to maintain a good relationship with their neighbours and will ensure that systems are in place to address any concerns our neighbours have.

The Albany Motorcycle Club will provide all affected residents with a complaints number. All complaints will be answered as soon as possible and no later than 48 hours after the complaint was received. The reason for the complaint will be investigated and any remedial action will be conveyed to the complainant.

A log of any complaints will be kept on record and will be presented to the City of Albany upon request.

#### **5.5 Responsibilities**

The track will be designed to maximise distances from noise sensitive premises.

Club Committee:	Appointment of Club Secretary
	Appointment of Track Manager;
	Appointment of Race Stewards;
	Development of program for scheduled race and practice meetings.
Club Secretary:	Neighbour liaison;
	Complaints Handling.
Track Manager:	Rostering of Officials for race and practice days;
	Enforcement of racing and curfew times;
	Control of public address system.
Club Steward:	Scrutiny of racing vehicles.



Appendix A

Details of Track Usage Plan

Albany Motorcycle Club is involved in the Southwest Interclub Championships, this is a ten round event with clubs throughout the southwest and great southern hosting two rounds each per year. We call these events Interclub's.

Generally AMCC hold two Interclubs', five to eight Club Days, and two to three Organised Practice days per year. Depending on the room available in the State Race Calendar. As we cannot run race events when a State Title Round is on, we will either not race or hold a practice day. Coaching days are usually only held once a year, these can be held on either a Saturday or Sunday early in the season as all junior riders must complete five hours of coaching before they can enter a race event.

Each year all clubs in WA are able to apply to host a Junior and Senior State Round, (WAMX Championships) there are six round of each held throughout WA, generally clubs will only be allocated either a Junior or a Senior round. Sometimes clubs are able to hold one of each, although usually only those clubs that are close to Perth. AMCC will apply to host a junior or senior event in 2013. AMCC hope to be able to host one of these events every two years.

Each year clubs in WA can hold Open Events, AMCC plans to host its first open event in 2013.

AMCC will also endeavour to host a round of the VMX (vintage motocross) each year as a fundraiser for the club.

A 'Special Interclub' is a stand alone event, and open to invited clubs only. AMCC also have this event in their five year plan.

This number of events will not be held every year, this is only a guide to what the club wishes to do over the next five years. The average event number would be around eight to twelve.

The club will work with Albany City Kart Club to hold at least two of our weekday training days on the same days. Saturdays will be open for training from 12pm to 5pm. No more that three days per week for training. Please note that when a race day is to be held on a Sunday the track will be closed for Prep Work on Saturday. Racing is not held every weekend, the club try not to book races for two weekends in a row, but unfortunately this sometimes happens, it is also possible that no racing will be held for three or four weekends. All this depends on the WA State Calendar, and the South West Calendar.

**Appendix B**

**Terminology**

The following is an explanation of the terminology used throughout this report.

#### *Decibel (dB)*

The decibel is the unit that describes the sound pressure and sound power levels of a noise source. It is a logarithmic scale referenced to the threshold of hearing.

#### *A-Weighting*

An A-weighted noise level has been filtered in such a way as to represent the way in which the human ear perceives sound. This weighting reflects the fact that the human ear is not as sensitive to lower frequencies as it is to higher frequencies. An A-weighted sound level is described as  $L_A$  dB.

#### *Sound Power Level ( $L_w$ )*

Under normal conditions, a given sound source will radiate the same amount of energy, irrespective of its surroundings, being the sound power level. This is similar to a 1kW electric heater always radiating 1kW of heat. The sound power level of a noise source cannot be directly measured using a sound level meter but is calculated based on measured sound pressure levels at known distances. Noise modelling incorporates source sound power levels as part of the input data.

#### *Sound Pressure Level ( $L_p$ )*

The sound pressure level of a noise source is dependent upon its surroundings, being influenced by distance, ground absorption, topography, meteorological conditions etc and is what the human ear actually hears. Using the electric heater analogy above, the heat will vary depending upon where the heater is located, just as the sound pressure level will vary depending on the surroundings. Noise modelling predicts the sound pressure level from the sound power levels taking into account ground absorption, barrier effects, distance etc.

#### *$L_{ASlow}$*

This is the noise level in decibels, obtained using the A frequency weighting and the S time weighting as specified in AS1259.1-1990. Unless assessing modulation, all measurements use the slow time weighting characteristic.

#### *$L_{AFast}$*

This is the noise level in decibels, obtained using the A frequency weighting and the F time weighting as specified in AS1259.1-1990. This is used when assessing the presence of modulation only.

#### *$L_{APeak}$*

This is the maximum reading in decibels using the A frequency weighting and P time weighting AS1259.1-1990.

#### *$L_{Amax}$*

An  $L_{Amax}$  level is the maximum A-weighted noise level during a particular measurement.



*L<sub>A1</sub>*

An  $L_{A1}$  level is the A-weighted noise level which is exceeded for one percent of the measurement period and is considered to represent the average of the maximum noise levels measured.

*L<sub>A10</sub>*

An  $L_{A10}$  level is the A-weighted noise level which is exceeded for 10 percent of the measurement period and is considered to represent the “intrusive” noise level.

*L<sub>Aeq</sub>*

The equivalent steady state A-weighted sound level (“equal energy”) in decibels which, in a specified time period, contains the same acoustic energy as the time-varying level during the same period. It is considered to represent the “average” noise level.

*L<sub>A90</sub>*

An  $L_{A90}$  level is the A-weighted noise level which is exceeded for 90 percent of the measurement period and is considered to represent the “background” noise level.

*One-Third-Octave Band*

Means a band of frequencies spanning one-third of an octave and having a centre frequency between 25 Hz and 20 000 Hz inclusive.

*L<sub>Amax</sub> assigned level*

Means an assigned level which, measured as a  $L_{A\text{ Slow}}$  value, is not to be exceeded at any time.

*L<sub>A1</sub> assigned level*

Means an assigned level which, measured as a  $L_{A\text{ Slow}}$  value, is not to be exceeded for more than 1% of the representative assessment period.

*L<sub>A10</sub> assigned level*

Means an assigned level which, measured as a  $L_{A\text{ Slow}}$  value, is not to be exceeded for more than 10% of the representative assessment period.

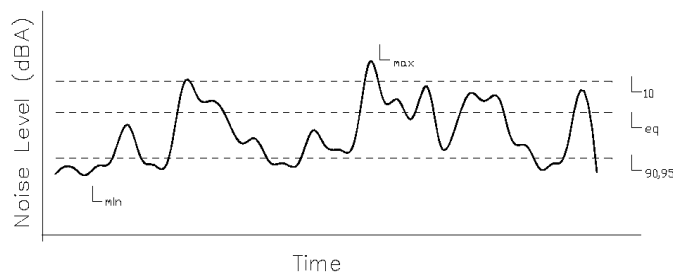
*Background Noise*

Background noise or residual noise is the noise level from sources other than the source of concern. When measuring environmental noise, residual sound is often a problem. One reason is that regulations often require that the noise from different types of sources be dealt with separately. This separation, e.g. of traffic noise from industrial noise, is often difficult to accomplish in practice. Another reason is that the measurements are normally carried out outdoors. Wind-induced noise, directly on the microphone and indirectly on trees, buildings, etc., may also affect the result. The character of these noise sources can make it difficult or even impossible to carry out any corrections.

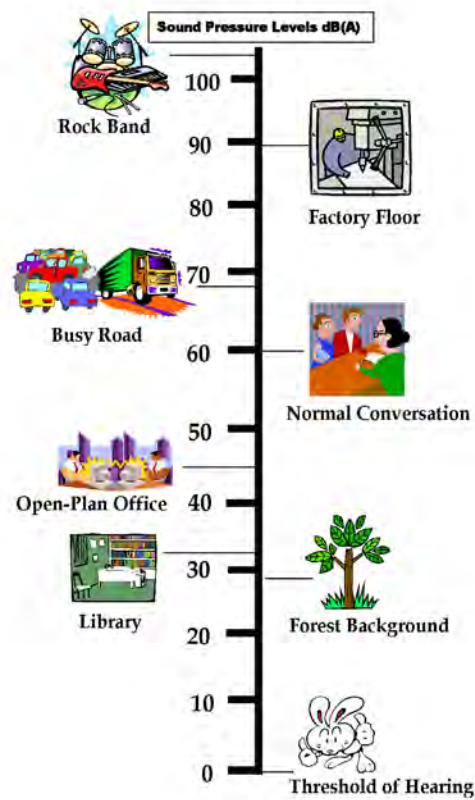
*Ambient Noise*

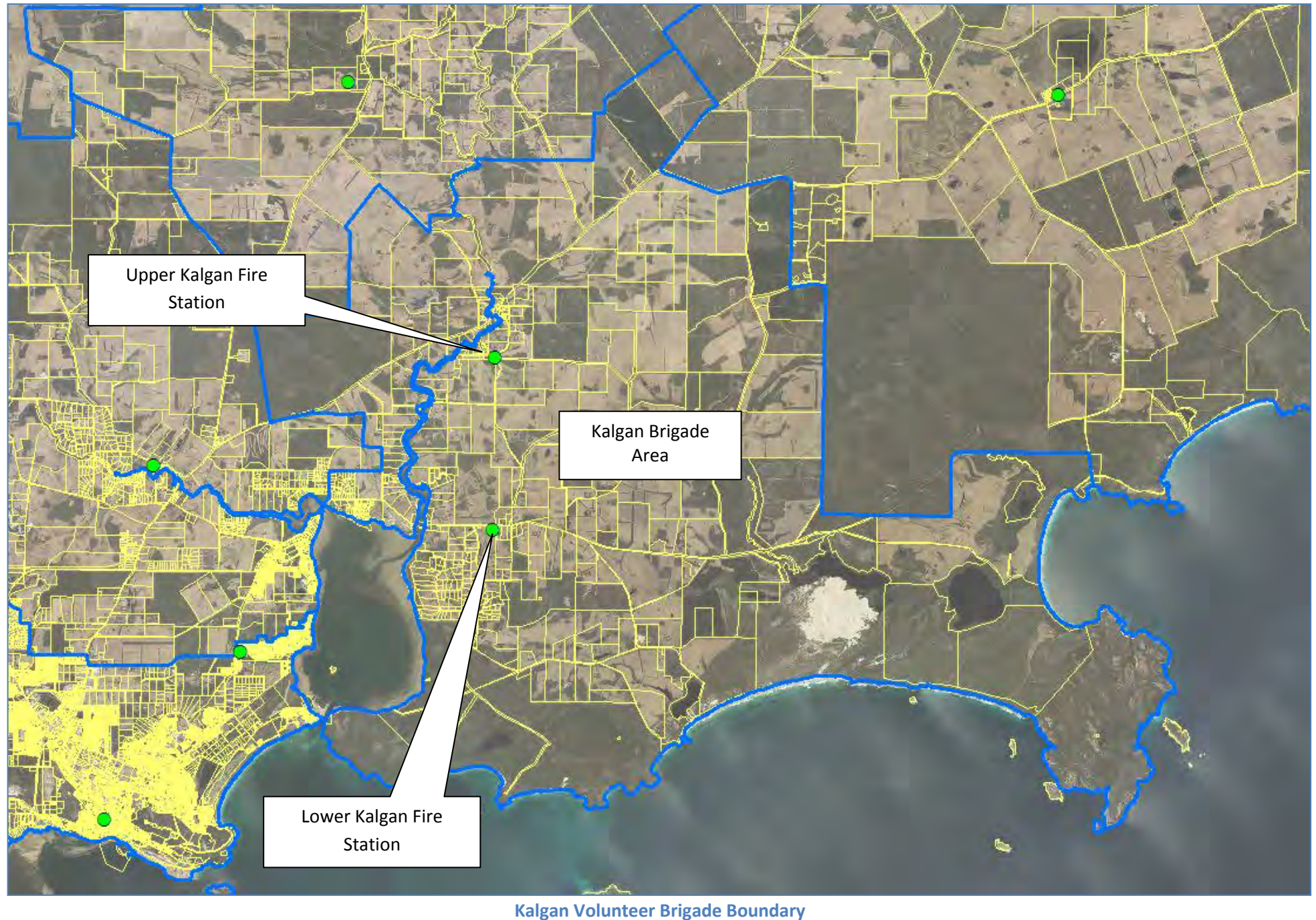
Means the level of noise from all sources, including background noise from near and far and the source of interest.

Chart of Noise Level Descriptors



Typical Noise Levels





Kalgan Volunteer Brigade Boundary