



LOCAL STRUCTURE PLAN

LOT 311 FIFTY ROAD, BALDIVIS CITY OF ROCKINGHAM

Prepared for: The Estate of GDR Lilburne
Prepared by: Allering and Associates

SEPTEMBER 2015

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Commercial

Document References	Revision	Prepared by	Reviewed by	Submitted to	
					Date
1	27 October 2010	Allerding & Associates		City of Rockingham	
2	September 2011	Allerding & Associates		City of Rockingham	
3	July 2013	Allerding & Associates		City of Rockingham	
4	December 2013	Allerding & Associates		City of Rockingham WAPC	
5	October 2014	Allerding & Associates		City of Rockingham WAPC	
6	June 2015	Allerding & Associates		WAPC	
7	September 2015	Allerding & Associates		WAPC	

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EXECUTIVE SUMMARY

This Local Structure Plan (**Structure Plan**) has been prepared to guide subdivision and development of Lot 311 Baldivis Road, Baldivis, being a total of 15.11 hectares within the City of Rockingham.

The subject site will create an urban subdivision of approximately 200 lots, which will house a new community of approximately 400 people with land that, together with the adjacent Structure Plan area, will provide for a new neighbourhood shopping centre.

The Structure Plan has been prepared in accordance with the provisions of Part 4 of the City of Rockingham Town Planning Scheme No. 2 and provides the planning framework to guide and facilitate urban development of the subject land.

The Structure Plan is submitted to the City of Rockingham and the Western Australian Planning Commission for endorsement.

TABLE OF CONTENTS

VOLUME 1:

EXECUTIVE SUMMARY	3
PART 1 - STATUTORY SECTION	7
1.0 STRUCTURE PLAN AREA	10
2.0 STRUCTURE PLAN CONTENT.....	10
3.0 INTERPRETATION AND RELATIONSHIP WITH THE SCHEME.....	10
4.0 OPERATION	11
5.0 LAND USE	11
5.1 RESIDENTIAL.....	11
5.1.1 Dwelling Target	11
5.1.2 Density.....	11
6.0 SUBDIVISION / DEVELOPMENT	12
6.1 NOTIFICATIONS ON TITLE.....	12
6.2. DETAILED AREA PLAN REQUIREMENTS.....	12
6.3 OTHER PROVISIONS / STANDARDS / REQUIREMENTS	13
BUSHFIRE CONSTRUCTION STANDARDS	13
PLAN 1: STRUCTURE PLAN.....	14
PART 2 - EXPLANATORY SECTION	16
1. 0 INTRODUCTION	17
2.0 SITE DETAILS.....	18
2.1 DESCRIPTION OF THE LAND.....	18
2.2 SITE CONTEXT	18
3.0 SITE ANALYSIS	19
3.1 LAND USE CONTEXT	19
3.2 TOPOGRAPHY.....	21
3.3 SOILS	21
3.4 ACID SULPHATE SOILS.....	21
3.5 GROUNDWATER	22
3.6 WETLANDS	22
3.7 ABORIGINAL HERITAGE	22
3.8 FLORA.....	24
3.9 FAUNA	25
3.10 CONTAMINANTS / ODOUR REPORT.....	25
4.0 STRATEGIC AND STATUTORY PLANNING CONSIDERATONS.....	27
4.1 METROPOLITAN REGION SCHEME.....	27
4.2 DIRECTIONS 2031	27
4.3 LIVEABLE NEIGHBOURHOODS.....	29
5.0 BALDIVIS (NORTH) DISTRICT STRUCTURE PLAN	31

5.1	CITY OF ROCKINGHAM LOCAL COMMERCIAL STRATEGY (2004)	32
5.2	CITY OF ROCKINGHAM TOWN PLANNING SCHEME NO. 2	33
6.0	LOCAL STRUCTURE PLAN.....	34
6.1	DESIGN RATIONALE	34
6.2	INTERFACE WITH EXISTING SITE & SURROUNDING LAND.....	35
6.3	COMMERCIAL CENTRES.....	35
6.4	NATURAL FEATURES	36
6.5	STREET BLOCK LAYOUT & STREET NETWORK	36
6.6	TRANSPORT CORRIDORS FOR PEDESTRIANS & CYCLISTS.....	37
6.7	PUBLIC TRANSPORT.....	38
6.8	TRAFFIC MOVEMENT.....	38
6.9	RESIDENTIAL DENSITIES AND POPULATION	39
6.10	SCHOOLS & COMMUNITY FACILITIES	41
6.11	PUBLIC OPEN SPACE.....	42
6.12	PLANNING FOR BUSHFIRE PROTECTION.....	47
7.0	SERVICING OVERVIEW	49
7.1	SEWER CONNECTION.....	49
7.2	WATER RETICULATION.....	49
7.3	POWER	50
7.4	WESTNET ENERGY GAS NETWORK.....	50
7.5	DRAINAGE	50
7.6	ROADWORKS	51
8.0	LOCAL WATER MANAGEMENT STRATEGY	52
8.1	WATER SENSITIVE URBAN DESIGN (WSUD) INITIATIVES	52
8.2	TOTAL WATER CYCLE MANAGEMENT – PRINCIPLES AND OBJECTIVES	53
8.3	SURFACE WATER QUANTITY AND QUALITY.....	53
8.4	URBAN WATER MANAGEMENT PLAN.....	53
9.0	ROAD TRANSPORT NOISE AND NOISE MITIGATION	55
10.0	CONCLUSION	56

ANNEXURES

ANNEXURE A – CERTIFICATE OF TITLE

ANNEXURE B – LOCATION PLAN

ANNEXURE C – MRS PLAN

ANNEXURE D – BALDIVIS NORTH DISTRICT STRUCTURE PLAN

ANNEXURE E – PROPOSED LOCAL STRUCTURE PLAN

ANNEXURE F – PROPOSED STAGING PLAN

ANNEXURE G – THE ODOUR UNIT REPORT

VOLUME 2

ANNEXURE H – TRAFFIC ASSESSMENT REPORT

ANNEXURE I – BUSH FIRE HAZARD ASSESSMENT

ANNEXURE J – BUSHFIRE MANAGEMENT PLAN

ANNEXURE K – VDM ENGINEERING SERVICES REPORT

ANNEXURE L – LOCAL WATER MANAGEMENT STRATEGY

ANNEXURE M – ACOUSTIC ASSESSMENT

PART 1 - STATUTORY SECTION

Change or Departure from Structure Plan

Change or Departure No.	Description of Change or Departure	Date Adopted by the Council	Date Approved by the WAPC (if required)	Date Structure Plan Commences

CERTIFICATION OF AGREED LOCAL STRUCTURE PLAN

Certified that this Local Structure Plan for Lot 311 Fifty Road, Baldivis
was approved by
Resolution of the Western Australian Planning Commission on

.....

Date

Signed for and on behalf of the Western Australian Planning Commission

.....

An officer of the Commission duly authorised by the Commission pursuant to section 24
of the *Planning and Development Act 2005* for that purpose, in the presence of:

.....

Witness

.....

Date

And adopted by
Resolution of the City of Rockingham on

.....

Date

And pursuant to the Council's resolution hereunto affixed
in the presence of:

.....

Mayor, City of Rockingham

.....

Chief Executive Officer, City of Rockingham

.....

Date

This Structure Plan is prepared under the provisions of the City of
Rockingham Town Planning Scheme No.2

1.0 STRUCTURE PLAN AREA

This Structure Plan shall apply to Lot 311 Fifty Road, Baldivis, being the land contained within the inner edge of the line denoting the Structure Plan boundary on the Structure Plan map (Plan 1).

2.0 STRUCTURE PLAN CONTENT

This Structure Plan comprises:

- a) Part 1 - Statutory section
This section contains the Structure Plan map and statutory planning provisions and requirements.
- b) Part 2 – Non-statutory (explanatory) section. This section to be used as a reference guide to interpret and justify the implementation of Part One.
- c) Appendices – Technical reports and supporting plans and maps.

3.0 INTERPRETATION AND RELATIONSHIP WITH THE SCHEME

Unless otherwise specified in this part, the words and expressions used in this Structure Plan shall have the respective meanings given to them in the City of Rockingham Town Planning Scheme No. 2 (**the Scheme**) including any amendments gazetted thereto.

The Structure Plan map (Plan 1) outlines land use, zones and reserves applicable within the Structure Plan area. The zones and reserves designated under this Structure Plan apply to the land within it as if the zones and reserves were incorporated into the Scheme.

Pursuant to clause 4.2.9.2 of the Scheme:

- a) The provisions, standards and requirements specified under Part One of this Structure Plan shall have the same force and effect as if it were a provision, standard

or requirement of the Scheme. In the event of there being any variations or conflict between the provisions, standards or requirements of the Scheme and the provisions, standards or requirements of Part One of this Structure Plan, the Scheme prevails to the extent of any inconsistency.

4.0 OPERATION

This Structure Plan commences operation on the date it is adopted by Council pursuant to Clause 4.2.6.15 of the Scheme.

Clause 4.2.7 of the Scheme outlines the manner in which a change to or departure from a Structure Plan is determined.

5.0 LAND USE

The Structure Plan Map (Plan 1) outlines land use, zones and reserves applicable within the Structure Plan area. The zones and reserves designated under this Structure Plan apply to the land within it as if the zones and reserves were incorporated into the Scheme.

5.1 Residential

5.1.1 Dwelling Target

Objective

To provide for a minimum of 190 dwellings within the Structure Plan area.

5.1.2 Density

The Residential Densities applicable to the Structure Plan shall be in accordance with that shown on the Structure Plan Map (Plan 1).

6.0 SUBDIVISION / DEVELOPMENT

6.1 Notifications on Title

In respect of applications for the subdivision of land the Council shall recommend to the Western Australian Planning Commission that a condition be imposed on the grant of subdivision approval for a notification to be placed on the Certificate(s) of Title to advise of the following:

- a) Lots deemed to be affected by a noise impact is identified in the *Lot 311 Fifty Road, Baldivis SPP5.4 Acoustic Assessment*, May 2015 by Herring Storer (as updated) within Annexure M.
- b) Lots deemed to be affected by a Bushfire Hazard as identified in the *Bushfire Management Plan, Lot 311 Fifty Road, Baldivis* June 2014 by Bushfire Prone Planning (as updated) within Annexure J.

6.2. Detailed Area Plan Requirements

Detailed Area Plans (**DAP**), are required to be prepared and implemented pursuant to clause 4.23 of the Scheme for lots comprising one or more of the following site attributes:

- a) Lots with rear loaded vehicle access; and/or
- b) Lots with direct boundary frontage (primary or secondary) to an area of Public Open Space; and/or
- c) Lots zoned 'Commercial'; and/or
- d) Lots deemed to be at risk from a recognised bush fire hazard as identified spatially in the *Bushfire Management Plan, Lot 311 Fifty Road, Baldivis* June 2014 by Bushfire Prone Planning (as updated) within Annexure J; and/or

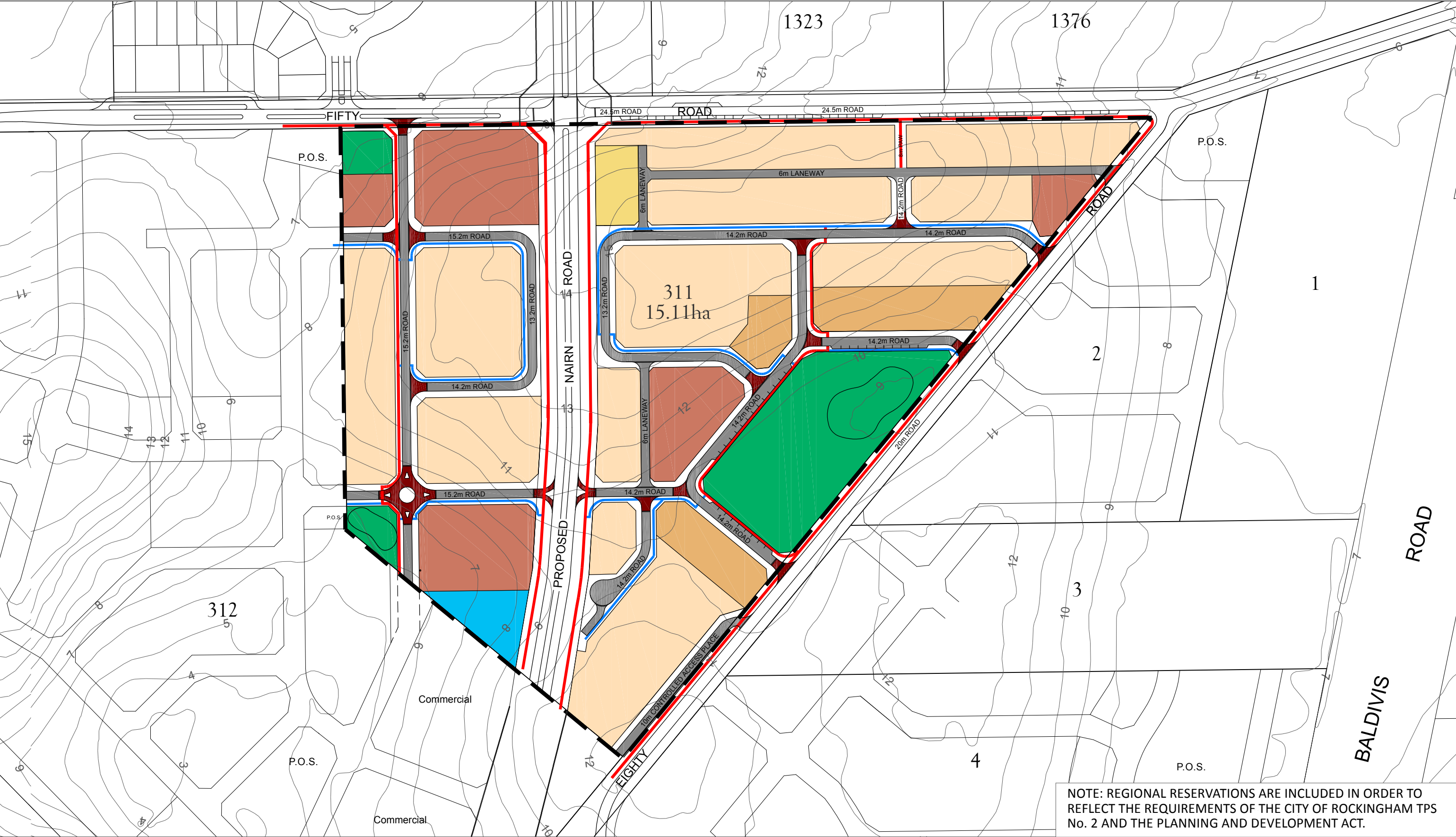
- e) Lots deemed to be affected by noise as identified spatially in the *Lot 311 Fifty Road, Baldivis SPP5.4 Acoustic Assessment* May 2015 by Herring Storer (as updated) within Annexure M.

6.3 Other Provisions / Standards / Requirements

Bushfire Construction Standards

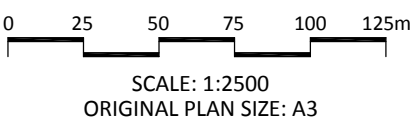
This Structure Plan is supported by a Bushfire Hazard Level Assessment (BFHA) and a Bushfire Management Plan (BMP). Regardless of whether the land has been formally designated as bushfire prone, any buildings to be erected on land identified as falling within 100 metres of a bushfire hazard shall comply with the requirements of *Australian Standard 3959* under the *Building Code of Australia*.

PLAN 1: STRUCTURE PLAN

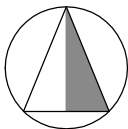


PROPOSED STRUCTURE PLAN

LOT 311 FIFTY ROAD
BALDIVIS
CITY OF ROCKINGHAM



JOB CODE:
LIL BAL GE
DATE:
02.09.2015



LEGEND:
Other elements that
inform the LSP
SUBJECT LAND -
DUAL USE PATH -
LOCAL FOOTPATH -

ZONES:
RESIDENTIAL R20 -
RESIDENTIAL R25 -
RESIDENTIAL R30 -
RESIDENTIAL R40 -
COMMERCIAL -
RESERVES:
PUBLIC OPEN SPACE -

**Allerding
& Associates**
Town Planners, Advocates
and Subdivision Designers

PART 2 - EXPLANATORY SECTION

1.0 INTRODUCTION

The following report has been prepared by Allerding & Associates on behalf of the estate of GDR Lilburne the registered proprietor of Lot 311 Fifty Road, Baldivis (the subject site). This report has been provided to the City of Rockingham in support of the proposed Local Structure Plan (**Structure Plan**) over the subject site, the purpose of which is to provide the general planning framework to guide future development into an integrated residential estate.

Given the strategic location of Baldivis, a significant opportunity exists to create a fully integrated residential community that will build on the development currently underway in the Baldivis (North) District Structure Plan area.

This report provides an overall context to this Structure Plan as amended, and justification for the purpose of advertising and subsequent endorsement by the City of Rockingham and the Western Australian Planning Commission (**WAPC**).

2.0 SITE DETAILS

2.1 Description of the Land

The subject site is 15.115 ha in area and described as Lot 311 Fifty Road, Baldivis on Deposited Plan 202704.

The site is formally identified on Certificate of Title: Volume 1170/Folio 618. Please refer to the Certificate of Title included as **Annexure A**.

2.2 Site Context

The subject site is located within the municipal boundary of the City of Rockingham and within the locality of Baldivis. The subject site is located approximately 42 km south of the Perth CBD and approximately 10 km west of the Rockingham City, refer to **Annexure B**.

To the north the subject site fronts Fifty Road, Baldivis and to the east fronts Eighty Road, Baldivis. To the west exists Lot 312 Fifty Road, which abuts the Rockingham Lakes Regional Park. To the immediate north-east of Fifty Road is the original Baldivis settlement and adjoining nature reserve. The general locality is bounded by Mandurah and Baldivis Road with the Kwinana Freeway providing the major North-South movement within 1km of the subject site.

The nature of the surrounding locality is such that the traditional rural pursuits on the land are being replaced by the rapid development of residential and associated land uses.

3.0 SITE ANALYSIS

3.1 Land Use Context

The subject site is uncleared and contains no formal access roads, in addition unlike the surrounding land, the site does not appear to have been used for intensive horticultural activities and is clear of any structures including residential dwellings or associated outbuildings.

The adjoining land to the north is currently undergoing urban development in accordance with the Baldivis North Structure Plan and residential lots immediately adjacent to Fifty Road have been created.. Other land to the north of the subject Structure Plan Area, includes the Baldivis Primary School and community and recreation facilities, including the Baldivis Recreation Centre. The Structure Plan Area at its western, south western and eastern boundaries is bound by land subject to the approved Spires Estate Structure Plan. That Structure Plan will facilitate the future residential and commercial development of approximately 54.57 ha of land on Lots 312 & 313 Fifty Road, Lots 2, 4, 7 & 8 Eighty Road and Lot 5 Baldivis Road, Baldivis.

Land to the east, being Lot 2 on the corner of Eighty Road and Fifty Road is presently used for rural purposes, but forms part of the Spires Estate and will ultimately be developed for residential purposes. Land to the south east (south of the hatchery) being one of the first stages of the Spires Estate, is currently being progressively developed and subdivided for Residential purposes.



Figure 1: Lot 311 and surrounds *Source: nearmap.com*

The Layertech Chicken Hatchery is located on Lot 3 Eighty Road to the immediate east of the subject site. WAPC Statement of Planning Policy No. 4.3 – Poultry Farms Policy provides guidance on this matter. The Policy indicates that an assessment may be required to show that the operation of the poultry farm will not adversely affect the amenity of the new residents in the proposed residential and rural-residential area. As such the proposed local Structure Plan has been prepared so as to comply with the relevant requirements. Further information with respect of separate distance of the poultry farm on Lot 3 Eighty Road to the proposed development of the Structure Plan Area is provided at section 3.10 of this report.

3.2 Topography

The subject site has gently undulating gradients with elevations ranging from 6.0m to 15.8m AHD. The highest point occurs in the north near Fifty Road and the lowest point occurs near the south west corner of the site.

Topography mapping is provided in **Attachment 4** of the Local Water Management Strategy.

3.3 Soils

The Dept. of Agriculture identifies the soils in the locality as comprising land unit S2a - moderately deep to deep siliceous yellow-brown sands or pale sands with yellow-brown sub-soils, and minor limestone outcrop.

Soil mapping is provided in **Attachment 4** of the Local Water Management Strategy.

3.4 Acid Sulphate Soils

The site exhibits some areas with moderate to low risk of Acid Sulphate Soils (ASS) occurring within 3 metres of natural soil surface. Therefore, development on this land can be undertaken with minimal adverse future risk of acid sulphate soils.

The impact arising from acid sulphate soils and any management measures required to address them will be explored further prior to subdivision and will be subject to more detailed engineering and environmental advice at that time.

Acid Sulphate Soil mapping is provided in **Attachment 5** of the Local Water Management Strategy.

3.5 Groundwater

Advice contained in the Perth Groundwater Atlas confirms that groundwater across the site ranges between 2 to 3 metres AHD and that the groundwater flows in westerly direction.

Mapping of Groundwater Contours is provided in **Attachment 7** of the Local Water Management Strategy.

3.6 Wetlands

The lot is not identified to contain any areas of wetland in the Department of Environment and Conservation Swan Coastal Plain Geomorphic Wetlands Database or under the Environmental Protection (Swan Coastal Plain Lakes) Policy 1992. Furthermore the site does not adjoin any wetland areas.

Wetland mapping is provided in **Attachment 6** of the Local Water Management Strategy.

3.7 Aboriginal Heritage

The Aboriginal Heritage Act 1972 (AHA) was introduced in Western Australia in 1972 to protect Aboriginal heritage. Under the Act, it is an offence for anyone to excavate damage, destroy, conceal or in any way alter an Aboriginal site without the Minister's permission.

Original investigations of the Department of Indigenous Affairs Heritage Sites Database identified that the database does not include any sites within lot 311. However as part of formal advertising, comment was provided by the Department of Indigenous Affairs in regard to the property containing Aboriginal Heritage Site DIA 4323 (Gas Pipeline 2).

The investigation of the file revealed the following findings in “*A report of an Aboriginal Heritage Assessment of a proposed clay borrow pit, Mundajong Road, Wellard*” dated June 2001 states:

“The site is located on Dog Hill immediately on the south-eastern corner of the junction of St Albans Road and Dog Hill Road. ... However the Aboriginal Affairs Department has determined that the location information in the site file is insufficient to accurately or confidently determine the location of the site. ... The site is described as being concentrated on a 9m high and 200 m long crescent shaped sand slope immediately on the north-east side of a large swamp area and the WANG pipeline to Dongara runs 50m to 100m to the east of this slope. It is not entirely clear from the information contained in the site file, but it would appear that all of the artifactual material was collected from this site at the time of recording (February 1979) such that this side also probably no longer exists.”

Figure 2 shows the relationship of the Structure Plan area (yellow on the left hand side), the intersection of Dog Hill Road and St Albans Road, the Gas Pipeline to Dongara/Dampier gas pipeline and the swamp. It is considered most likely that Registered site 4323 is located east of Baldivis Road (and possibly east of the Kwinana Freeway), between the swamp and the pipeline and therefore this does not impact upon this property.

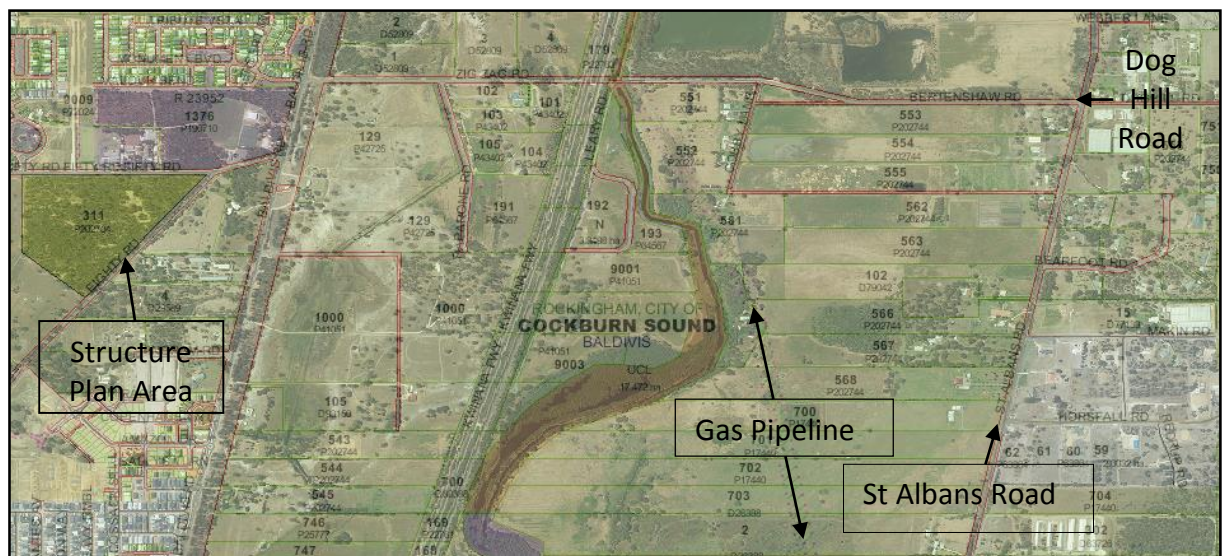


Figure 2: Relationship of Structure Plan Area to detailed description of Aboriginal Heritage place *Source: landgate.wa.gov.au*

Notwithstanding, the landowner is aware of their obligations under Section 15 of the Aboriginal Heritage Act 1972 and in the event that cultural material or a new site is discovered during construction work, the landowner will report this information to the Registrar of Aboriginal Sites.

3.8 Flora

A review of the Bush Forever site database has not identified any Bush Forever sites on the subject land. It is however, noted that the site is uncleared and contains remnant native vegetation. The natural vegetation of the Bassendean system typical of this area consists of low woodland of Banksia with scattered Jarrah; in areas which collect water it merges into Marri-Jarrah woodland. The Pinjarra system has very little original vegetation and consists of open Marri forest with Wandoo component and some Jarrah on higher areas.

It is intended that part of the remaining bushland will be incorporated as part of the open space to be provided in the development of the land.

3.9 Fauna

The subject land is not part of an interconnected area of bushland, it contains no wetland areas and the 15.1ha of land is of a relatively limited size. As such, although remnant bush remains within the lot, the locality is not conducive to fauna habitat.

The obligations under the Environmental Protection and Biodiversity Conservation Act (EPBC Act) are noted with respect to clearing of existing vegetation and as such it will be dealt with having regard to those processes. However the EPBC Act is Commonwealth legislation that we contend ought to be independent of the Structure Plan considerations by the City of Rockingham. Accordingly whilst we acknowledge this is a matter that we will be required to address with the respective Commonwealth Authorities, it is not, however, a matter that ought to prevent the consideration of the Structure Plan as proposed.

3.10 Contaminants / Odour Report

The site has not been utilised for agricultural or commercial purposes that have involved the introduction of contaminants. In relation to the Layertech Services Poultry farm on Lot 3 Eighty Road, the 100m buffer recommendation of the Odour Report commissioned by RPS Environmental in conjunction with The Odour Unit (refer to **Annexure G**) has been supported for the surrounding adopted Spires Estate Local Structure Plan, and the recommendations of the report are incorporated here (that is, use of public land and/or recreational areas bordering Eighty Road).

The report states in the Discussion of Results, Pg. 43:

[The Odour Unit] TOU is of the belief that the odours observed during the FAOA surveys are non problematic with respect to Lot 311 Fifty Road.



Figure 3: Sensitivity Modelling undertaken by The Odour Unit

The odour sensitivity model projection, **Figure 3**, shows a distance of off-site odour impacts up to approximately 100 metres in any direction from the shed locations at the Layertech Services Poultry Farm. This distance is supported by TOU's field observations. The report recommends that the proposed residential land development at Lot 311 Fifty Road retain some public land and/or recreational areas that would border Eighty Road.

4.0 STRATEGIC AND STATUTORY PLANNING CONSIDERATIONS

4.1 Metropolitan Region Scheme

Under the provisions of the Metropolitan Region Scheme (MRS) the land is zoned 'Urban'. It also contains an 'Other Regional Road' bisecting the property in a north south direction. A copy of the relevant MRS mapping is included as **Annexure C**.

4.2 Directions 2031

Directions 2031 is a high level spatial framework and strategic plan that establishes a vision for future growth of the Metropolitan Perth and Peel region. In addition Directions 2031 provides a framework to guide the detailed planning and delivery of housing, infrastructure and services necessary to accommodate a range of growth scenarios. Directions 2031 replaces all previous metropolitan strategic plans for both the Perth Metropolitan area and Peel and supersedes the draft Network City policy.

Directions 2031 incorporates a number of key themes along with applicable strategies to be applied to urban growth in the context of a growing population. The key themes of directions 2031 and select strategies to achieve the themes, are as follows:

Liveable:

- *Promote good urban design and development to enhance people's experience of the city.*
- *Provide quality passive and active public open space.*
- *Plan for increased housing supply in response to changing population needs.*
- *Promote and increase housing diversity, adaptability, affordability and choice.*
- *Ensure urban expansion occurs in a timely manner in the most suitable locations.*
- *Promote high densities in greenfield development.*

Prosperous:

- *Provide a hierarchy of places and locations for a range of economic activities and employment across the metropolitan Perth and Peel region.*
- *Plan for a diverse mix of services, facilities, activities, amenity and housing types.*

Accessible:

- *Plan and develop urban corridors to accommodate medium-rise higher density housing development.*

Sustainable:

- *Protect our natural and built environments and scarce resources;*
- *Respond to social change and optimise the land use and transport conditions that create vibrant, accessible, healthy and adaptable communities.*

Responsible:

- *Maximise essential urban infrastructure efficiency and equity; and develop a coordinated approach to infrastructure and land use planning and development;*
- *Allow for the strategic expansion of the urban area, with priority on the development and use of land that is already zoned urban or urban deferred.*

Furthermore the subject site is contained within the South-West Metropolitan sub-region encompassed within Directions 2031 which includes the areas of City of Kwinana, Cockburn and Rockingham. The sub-region has experienced considerable population and economic growth and is well serviced by road and rail infrastructure enabling connection to the Perth CBD. Rockingham is the principle centre of the region and of mixed use activity and as such is identified as a Strategic Metropolitan Centre under Directions 2031. Other major employment generators within the region are the Kwinana and Henderson industrial areas.

The Structure Plan Area is contained within the BA1 cell in Directions 2031, forecasted to provide approximately 3900+ dwelling across the cell by 2031. This Structure Plan will contribute to this target by allowing for the development of a minimum of 190 dwellings.

Given the strategic location, infrastructure and employment within the area, it is expected by 2031 that the population will grow by 34% to 278,000.

The proposed local Structure Plan has been prepared based on the key themes and strategies of Directions 2031 and within the context of population growth within the South-West Metropolitan sub-region.

4.3 Liveable Neighbourhoods

Liveable Neighbourhoods has been prepared to implement the objectives of the State Planning Strategy, which aims to guide the sustainable development of Western Australia to 2029.

Liveable Neighbourhoods has been adopted by the WAPC as an operational policy for the design and assessment of Structure Plans and subdivision for new urban areas in the metropolitan area and country centres. The Structure Plan is consistent with the principal aims of this document, acknowledging it's following salient features:

1. This Structure Plan caters for a safe universal pedestrian and cyclist environment with pathways linking the neighbourhood and associated local parks, as well as providing for external connectivity to areas outside of the site. Accordingly, the Structure Plan will provide for an urban structure of walkable neighbourhoods and reduce car dependence;
2. Pathways within the Structure Plan are designed to ensure that the walkable Structure Plan area will provide access to services and facilities for all users, including those with disabilities;
3. The Structure Plan has been designed to foster a sense of community and strong local identity and sense of place;
4. The Structure Plan provides interconnected network of streets which facilitate safe, efficient and pleasant walking, cycling and driving;
5. The Structure Plan ensure active street-land interfaces, with building frontages to streets to improve personal safety through increased surveillance and activity;

6. The commercial zoned land within this Structure Plan Area and the adjacent Spires Estate Structure Plan, and a range of residential densities, will provide for a wide range of living and employment opportunities, capable of adapting over time as the community changes. Such a design reflects appropriate community standards of health, safety and amenity;
7. The varied residential densities provided for in the Structure Plan Area will facilitate a variety of lots sizes and housing types to cater for the diverse housing needs of the community;
8. The Structure Plan includes an integrated design of open space and urban water management; and
9. The design of the Structure Plan maximises land efficiency.

5.0 BALDIVIS (NORTH) DISTRICT STRUCTURE PLAN

The Structure Plan is located within Precincts 1 and 2 of the Baldivis (North) District Structure Plan, which was adopted by Council in 2000. That District Structure Plan outlines the preferred broad land use and district road framework for the area and identifies land in the plan for R20 and R40 residential development.

The Council has adopted the Baldivis (North) District Structure Plan (“District Structure Plan”) over a large area which are identified for future urban development and held in multiple ownership. The purpose of the District Structure Plan is to ensure that coordinated development occurs across the landholdings by identifying infrastructure such as main roads, commercial nodes and regional open space. A copy of the District Structure Plan is included **as Annexure D**.

The District Structure Plan is used as a basis to assess the more detailed Local Structure Plans which are required prior to subdivision and development as provided for under clause 4.2.4(a) of TPS2.

The subject land falls within part of the site designated for a neighbourhood centre with a floor space of 5,500m². The site for the neighbourhood centre has also been identified within the City of Rockingham Local Commercial Strategy with a maximum floor space of 4,500m² proposed.

However, in considering the Spires Structure Plan for the adjacent land, Council supported relocation of the majority of the commercial floorspace from a location on Fifty Road on the intersection with the proposed Nairn Road extension to a location on Nairn Road, immediately south of the area subject of this Structure Plan. Accordingly, the commercial floorspace for this Structure Plan has been similarly relocated to abut the remainder of the relocated commercial floorspace.

Consistent with the Baldivis (North) District Structure Plan, the Structure Plan provides an area of public open space (POS), on Eighty Road opposite the chicken hatchery on the adjoining land to the east.

Overall, subject to the modifications detailed in this section of this report, this Structure Plan is consistent with the Baldivis (North) District Structure Plan.

5.1 City of Rockingham Local Commercial Strategy (2004)

The City of Rockingham Local Commercial Strategy (“Commercial Strategy”) was prepared as part of the City review of Town Planning Scheme 1. The Commercial Strategy aims to give effect to the Metropolitan Centres Policy (2000) and the Community Design Codes. It aims to promote the development of a hierarchy of centres which are viable, sustainable and which provide maximum benefit to the community.

The purpose of the Strategy is as follows:

- *Establish the objectives, principles and key strategies for retailing and commercial development in Rockingham.*
- *Apply the strategic planning policies set out in the State Government’s Metropolitan Centres Policy Statement (2000)².*
- *Provide a context for the review of the City of Rockingham Town Planning Scheme No 2 in respect of provisions for retail and commercial development.*
- *Guide private sector investment and the City’s capital works expenditure.*
- *Provide Council with a sound basis for decision making on development applications, rezoning proposals and the provision and location of future Council services and facilities.*
- *Identify centres and commercial locations requiring particular action, for example, where new ideas such as Community Design Codes³ may change the urban form of existing structure plans or for the restoration and improvement of established centres.*

The Commercial Strategy identifies a future neighbourhood commercial centre at the intersection of Nairn and Fifty Roads identified as North Baldivis. As detailed above, the proposed commercial zone has been relocated and the City of Rockingham is presently considering an amendment to the District Structure Plan to show the relocated commercial land.

The Commercial Strategy recommends in accordance with the Metropolitan Centres Policy (2000) that the Nairn Road centre should be limited to 4,500m².

5.2 City of Rockingham Town Planning Scheme No. 2

The City of Rockingham Town Planning Scheme No. 2 (TPS2) was gazetted on 19 November 2002.

In accordance with the City of Rockingham TPS2 the subject site is zoned 'Development'.

In reference to the 'Development' Zone, TPS2 states:

The Council requires a Structure Plan for a Development Area, or for any particular part or parts of a Development Area, before recommending subdivision or approving the development of land within the Development Area.

An existing District Structure Plan applies to the site, being the Baldivis North District Structure Plan. In discussions with Council staff however, for residential subdivision and development to occur, a local Structure Plan is required applying to the site (refer clause 4.2.4(c) of TPS2).

The land surrounding the subject site is also zoned 'Urban' under the MRS and 'Development' under the City of Rockingham TPS2.

6.0 LOCAL STRUCTURE PLAN

6.1 Design Rationale

Underlying the subdivision layout proposed in this Structure Plan are the principles and objectives expressed in Liveable Neighbourhoods. Particular attention has been given to Element 1 – Community Design as it states:

For structure plans and larger subdivisions, the primary measure of compliance is achieving the objectives and requirements of Element 1 - community design. Compliance with the balance of the element objectives and requirements should follow.

The Structure Plan incorporates a design which seeks an integration of and balance between urban and environmental sustainability outcomes through a functional pattern of residential subdivision with strategically located and usable POS, an efficient movement network which takes into account the existing road hierarchy, transport infrastructure, nearby community facilities and schools, and provides a cyclist and pedestrian friendly street environment.

A copy of the Structure Plan is included as **Annexure E**.

With respect to the staging of development, the detail will be determined at the subdivision stage however indicatively staging is to be in accordance with the plan included as **Annexure F**. Staging is such that a steady release of lots is available to the market and development is undertaken in an orderly manner.

6.2 Interface with Existing Site & Surrounding Land

Element 1 of Liveable Neighbourhoods addresses Community design, in particular R5 outlines the requirement of integration with adjoining development. The requirements detail the need for a proposed Structure Plan area to connect well with existing, committed or proposed development and provide for a sustainable urban structure.

The proposed Structure Plan is consistent with the overall North Baldivis Structure Plan. Further the road design provides east-west road connections through to the recently approved Spires Structure Plan. The Structure Plan has been amended to include opportunity for further road connection surrounding the commercial site. Whilst the Structure Plan for the adjacent Spires Estate may not show all such connections, this Structure Plan provides that opportunity for those connections to be provided.

6.3 Commercial Centres

The proposed District Structure Plan incorporates a proposed Neighbourhood Centre within the north-west portion of the subject site. The approved Spires Structure Plan effectively relocated the neighbourhood centre to Nairn Road being the southern portion of this site. The proposed Structure Plan addresses the Neighbourhood Centre as designated in the District Structure Plan by including development site and higher density grouped dwellings surrounding the original commercial site (on Fifty Road) and the newly located commercial site on Nairn Road. In addition the centre is within walking distance of all the residential zoned land within the Structure Plan area, one of the key elements of liveable neighbourhoods in accordance with Element 7.

6.4 Natural Features

As stated previously in the report, the site is uncleared and consists of remnant vegetation. It is noted that the Bush Forever site database does not identify any sites on the subject land. The natural vegetation which does exist reflects that of the Bassendean system typical of this area and consists of low woodland of Banksia with scattered Jarrah.

The designated POS area of approximately 1.2 ha is to be located on Eighty Road which is consistent with the proposed location under the District Structure Plan. It is proposed, at the time of subdivision, to undertake a survey of trees on site to enable carriageway locations to be selected which provide the opportunity to preserve significant trees.

6.5 Street Block Layout & Street Network

The design of streets is a key element in integrating the neighbourhood as it is pivotal in encouraging social interaction, public safety and amenity and is also a determinant of the level of quality thereof. Developments maintain frontage to the street in order to facilitate passive surveillance of activity within streets, create visual interest and also provide exposure for commercial viability in the proposed local centre.

The arrangement of streets and lot layout have also been designed to encourage energy efficiency by enabling the orientation of lots in a north-south and /or east-west direction.

The proposed street layout has largely been determined by the major north-south running road bisecting the Structure Plan area; the limited access onto this District Distributor bisecting the site has resulted broadly in two confined residential pockets which are linked internally. A north-south running pedestrian access way linking northern lots with the south will increase pedestrian connectivity and access to the POS. In addition in accordance with discussions with the City portions of path have been upgraded to 'shared use' paths.

A Transport Assessment Report was prepared for this site and has been included in **Annexure H**.

6.6 Transport Corridors for Pedestrians & Cyclists

This Structure Plan further caters for a safe universal pedestrian and cyclist environment with pathways linking the neighbourhood and associated local park, as well as providing for external connectivity to areas outside of the site.

Pedestrian-friendly measures by way of cul-de-sacs, regularly spaced junctions, and controlled access to residential pockets on either side of the District Distributor will facilitate the reduction in traffic and speeds of vehicles to promote a more walkable and cyclist friendly residential neighbourhood.

This Structure Plan, as included in **Annexure E** illustrates the proposed pedestrian/cycle network. The plan provides for residents to have direct pedestrian and cycle routes connecting the Baldivis Primary School, local parks and adjoining residential areas.

6.7 Public Transport

Bus services are provided by the Southern Suburbs Railways at Wellard, Rockingham and Warnbro Stations. Wellard and Rockingham stations also provide an integrated interchange with surrounding bus services. These stations provide park and ride facilities and are 4-5kms from the Baldivis site however they are linked to the Transperth bus network which will in future be linked with Fifty Road and Nairn Road.

Currently bus services are not available on Fifty or Eighty Roads. Access to Rockingham by bus is available from Safety Bay Road which is approximately four kilometres to the south. It is anticipated that bus services will be extended to Fifty Road and Nairn Road as the area becomes further urbanised.

6.8 Traffic Movement

The subject land is centrally divided by the proposed Nairn Road, which is described as an “Other Regional Road” under the Metropolitan Region Scheme.

Access points on to Eighty Road Baldivis have been provided, similarly, access points on to adjoining Lot 312 have also been provided following consultation with the consultants representing that landowner.

A Transport Assessment has been prepared by Tarsc, refer **Appendix H**. The traffic assessment concludes that:

- Traffic flows are not expected to exceed the indicative maximum acceptable daily flow rates on any of the roads bordering the proposed development.
- Investigation of the Nairn Drive and East West Road intersection during the AM peak flow revealed that the queues on the western approach are expected to be 13m/2 vehicles at worst, this being acceptable.

- Investigation of the intersection of Fifty Road and Eighty Road was that the intersection is expected to operate at a level of service B/E on the Eighty Road approach with vehicles able to undertake right turns through the intersection in a single stage through an assumed 2m wide median incurring a 28s delay and queue length of about 3 vehicles.
- In regard to the impact of the development on the local area, based upon the assessment it was concluded that the development will have an acceptable impact on the surrounding roads and intersections.
- Most traffic flows on internal roads are in the order of 100 to 400 vehicles per day, with the only exception near the commercial centre development site where volumes are expected higher due to the commercial development.
- The proposed development will generate in the vicinity of 2,000 vehicle trips per day.
- There are good pedestrian footpaths currently and proposed on all sides of the proposed development with access to public transport.
- The impact of the traffic volumes associated with the development are considered acceptable in the longer term with increases in traffic flows to 2031.

6.9 Residential Densities and Population

The subdivision predominantly features a minimum Residential Density Coding of R20 across the site whilst also allowing for R25, R30 and R40 densities as shown by Plan 1. The provision of a diversity of housing choices in locations suited to medium density development has been contemplated in this design in recognition of population differences in respect of housing affordability, lifestyle and age differences.

The locations for medium density development to the south of the site, includes a site adjacent to the local neighbourhood centre as well as to the southeast surrounding the public open space and adjacent to the public open space and Fifty Road to the north. Lots are designed in either a north-south or east-west orientation for the purposes of maximising solar access to dwellings. Lots are also orientated to directly front the area of POS to the southeast of the site. The Structure Plan Area will house approximately 215 to 250 new dwellings. Based on an average household size of 2.91 persons per dwelling (per 2011 ABS Census Data) the Structure Plan Area will house approximately 600-700 new residents. This will go some way in assisting the South-west sub-region's target under Direction 2031 to provide an additional 41,000 new dwellings for an additional 70,000 new residents by 2031.

The Structure Plan is within area "BA1" of the *Outer Metropolitan Perth and Peel Sub-Regional Strategy* and this total area of "BA1" is projected to accommodate 3,900+ dwellings assuming a 'Connected City' development model of 15 dwellings per gross urban zoned hectare or 3,100 dwellings based on a 'business as usual' scenario of 10 dwellings per gross urban zoned hectare.

In regard to this Structure Plan

Structure Plan area	15.11 hectares
Gross Urban zoned land (excluding the land designated as 'Other Regional Roads')	13.522 ha

Directions 2031 scenario	
Connected City @ 15 dwellings per gross urban zone	202 dwellings
Business as usual @ 10 dwellings per gross urban zone	135 dwellings
Estimated dwelling yield 215-250 dwellings	Targets achieved

Liveable Neighbourhoods	
Urban hectare (excluding all roads, open space and centres)	8.6 hectares
Minimum of 15 dwellings per urban hectare	129 dwellings
Target of 22 dwellings per hectare	189 dwellings
Estimated dwelling yield 215-250 dwellings	Targets achieved

6.10 Schools & Community Facilities

There are several schools and other existing community facilities servicing the Baldivis area; as such there are no additional schools and community facilities required to be included as part of this Structure Plan. The Structure Plan area is conveniently located within walking distance to the north of the existing Baldivis Primary School on Fifty Road, and is also in close proximity to other nearby secondary and tertiary institutions, including Tranby College, Mandurah Christian Community School, Kolbe Catholic College, as well as Challenger Institute of Technology, Rockingham (formerly TAFE) and Murdoch University Campuses.

The scope of choice and high degree of access enjoyed by future residents to these education facilities will be a significant contributor to achieving a sustainable urban development as it reduces the need for commuting across the Perth metro area to other institutions. The proximity of the site to a primary school, for instance, will reduce the need for the private vehicle during peak traffic periods and instead encourage walking, cycling and use of public transport.

6.11 Public Open Space

The provision of a minimum of 10 per cent public open space being provided in accordance with the WAPC's Liveable Neighbourhoods. Public open space is to be provided generally in accordance with Plan 1 (Appendix E) and Table 1 below. For reference purposes a public open space plan is provided in Figure 4 which identifies each of the reserves and the drainage basins/swales within the public open space reserves.

Public open space will be developed to a high standard to ensure high levels of amenity for both surrounding residents as well as to generally enhance the area for other park users.

As illustrated in **Annexure E** and Figure 4, a large POS reserve is proposed to the southeast of the site in addition to a pocket of POS in the north-west serving a secondary purpose of accommodating drainage. In addition, the Structure Plan provides another reserve in the southwest corner, which serves a primary purpose of accommodating drainage. However the POS reserve in the south-west corner is not proposed to be credited as public open space, rather, it is proposed that this would be ceded as a drainage reserve.

As illustrated in Table 1, and pursuant to R4 of Element 4 of Liveable Neighbourhoods, a minimum of ten per cent (10%) open space is provided including restricted use public open space comprising dry drainage basin/swales on the eastern park (DB1) and North West public open space (DB3). In accordance with R33 of Element 4, those two land aspects are appropriately classified as 'restricted use public open space' as they comprise urban water management drainage areas, and:

- the areas are not subject to inundation more frequently than a one year average recurrence interval rainfall event and do not present a safety hazard;
- Their respective areas are contoured, unfenced and grassed; and
- Their respective areas form part of an appropriate management plan (refer to **Annexure L** being the Local Water Management Strategy).

Table 1: Public Open Space Schedule

Site Area			15.11 ha
Net Site Area			15.11 ha
Deductions			
Commercial Southern extent of Structure Plan area	0.2040 ha		
POS/Drain Reserve (DB2) South-west corner of Structure Plan area	0.1049 ha		
Arterial Road (Proposed Nairn Road – MRS: Other Regional Road)	1.5880 ha		
Sub total		1.8969 ha	
Gross Subdivisible Area			13.2131 ha
Public Open Space @ 10%			1.3213ha
Public Open Space contribution			
May comprise			
• Minimum 80% unrestricted public open space		1.0570 ha	
• Maximum 20% restricted use public open space		0.2640 ha	
Unrestricted POS			
North – west park (1038m ² – 340m ² drainage being DB3)		0.0698 ha	
Eastern Park (12300m ² – 1845m ² drainage being DB1)		1.0455 ha	
Total Unrestricted POS			1.1153 ha
Restricted POS			
Drainage on eastern park (DB1)		0.1845 ha	
Drainage on North West park (DB3)		0.0340 ha	
Total Restricted POS			0.2185 ha
TOTAL POS			1.3338 ha
% Public Open Space			10.09%

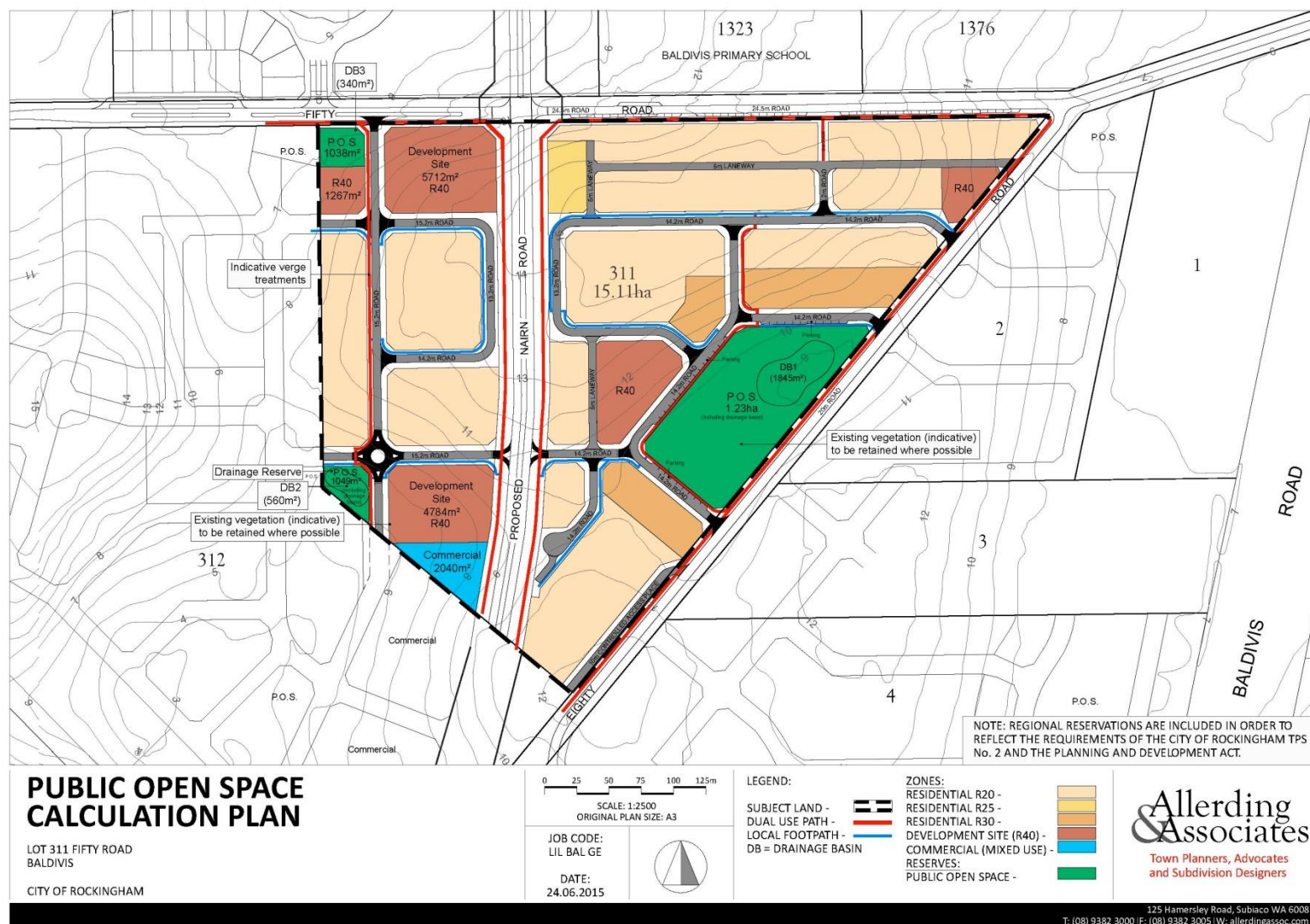


Figure 4: Public Open Space Calculation Plan

In accordance with R14 of Element 4, the Structure Plan will provide a neighbourhood park of 1.23ha, within safe walking distance of all dwellings. The park will contain stands of retained native vegetation and be grassed and reticulated and the size of the proposed reserves will allow for a combination of both passive and active recreational needs of future residents.

The public open space will be contributed free of cost by the developer at the subdivision stage and landscaped accordingly. POS is an important community feature of the Structure Plan in terms of enhancing local amenity in providing for locally accessible active and passive recreational needs of future residents.

The area of open space will be surrounded by adjacent lots orientated to face the park which will promote a high degree of safety through passive surveillance, and is conveniently located for the residents it is intended to serve. As already noted in previous sections, part of the remaining bushland will be incorporated as part of the open space to be provided in the development of the land, thereby facilitating the conservation of remnant vegetation.

Furthermore, notwithstanding the environmental assessment of the potential impact of the operations of the Layertech Chicken Hatchery confirmed there will be no adverse impact on the amenity of the future residents in the proposed residential and rural-residential area, the strategic location of the proposed POS area will act as an additional buffer between future residential dwellings and the hatchery.

In summary the required 10% public open space has been identified in the Structure Plan. The reserves provided allows for both passive and active public open space within the Structure Plan area. The areas to be used for drainage in two of the reserves will be landscaped and their drainage function will be temporary in nature and therefore they have been included as restricted public open space. The south-western reserve has not been identified as public open space and accordingly will be ceded as a drainage reserve, with no credit as public open space.

The public open space provided is consistent with the requirements and objectives of *Liveable Neighbourhoods*.

6.12 Planning for Bushfire Protection

A Bushfire Hazard Assessment (FirePlan WA) was prepared as part of the Structure Plan and a copy of this is included as **Annexure I**.

As requested by the Western Australian Planning Commission a subsequent Bushfire Management Plan was also prepared and a copy of this is included in **Annexure J**.

Whilst the site does contain vegetation, as the site is developed, the vegetation is removed in advance of the subdivision and accordingly the bushfire hazard will reduce.

The Bushfire Attack Level (BAL) has been calculated for the site and is divided into three distinct areas. The highest BAL applicable is BAL 29 for the lots in the north east corner that are opposite the existing native vegetation on the recreation/parkland reserve on the northern side of Fifty Road. As noted in the Assessment, the distance of the proposed dwellings to retained vegetation is to be managed to the Bushfire Protection Zone standards detailed in the Bushfire Management Plan.

The Assessment identifies that the distance of the proposed dwelling to retained vegetation can consist of the front setback of a lot to the dwelling and the road reserve. In the areas adjoining the POS reserve, areas with retained vegetation can achieve the 20 metres from the front setback and the road reserve and a narrow strip within the POS providing it is landscaped to achieve the required distance and compliance with the Building Protection Zone standards.

Following the Structure Planning, where retained vegetation influence the BAL rating, all dwellings within 100 metres of the vegetation must be constructed to AS 3959, giving due consideration to when adjoining areas to the west, south and east of Fifty Road are to be developed as urban residential.

Each stage of land release is to have two access/egress public roads. Fire hydrants are to be installed in each stage of land release in accordance with the Bushfire Management Plan.

The Bushfire Management Plan details implementation and responsibilities for ensuring that the subdivision and development of the Structure Plan area meets the minimum criteria of the WAPC Bushfire Protection Guidelines, Edition 2, 2010. These guidelines will be implemented as part of the future subdivision of the Structure Plan area.

Part 1 of The Structure Plan includes specific requirements relating to notifications on Title, Detailed Area Plan requirements and other requirements in accordance with the Bushfire Management Plan.

7.0 SERVICING OVERVIEW

VDM consultants have been appointed and have prepared an Engineering Services Report which is included as **Annexure K** of this report.

This report includes a site evaluation and description and will and details regarding bulk earthworks and supply for water, power, street lighting telecommunications and gas supply.

7.1 Sewer Connection

The site falls within the catchment area of the Baldivis North Pumping station, Water Corporation has a sewer line running along Fifty Road. The Water Corporation has also advised that a 375mm high pressure pipeline will be constructed through Lot 311 along the Nairn Ave. road reserve. This main will connect between the Brownell Crescent Sewerage Pump Station and the Baldivis Sewerage Pump Station.

Provision has been established for wastewater from the locality to be treated at the Water Corporation's Thomas Road treatment facility. Detailed future investigations will be required at the time of subdivision to determine engineering and design requirements to accommodate the development of the site.

7.2 Water Reticulation

Water Corporation plans highlight that the Baldivis North Structure Plan area is serviced by mains water. A water main currently runs along Eighty Road, it is proposed that the site will be serviced from the Water Corporation's Tamworth Hill reservoir on Eighty Road.

7.3 Power

Power will be extended within the Structure Plan area during subdivision development.

7.4 Westnet Energy Gas Network

We are advised that there are no WA Gas Networks underground assets / pipes present in the vicinity of the site.

7.5 Drainage

The principles to be implemented with respect to drainage are outlined in the VDM Engineering Report included as **Annexure J**. This is to be read in conjunction with the Local Water Management Strategy included in **Annexure L**. More detailed consideration will be given, where required, as part of an Urban Water Management Plan at the subdivision stage.

Section 4 of the report deals with stormwater management and should be read in conjunction with the Local Water Management Strategy which is more detailed in regard to this matter.

Comment raised by the City in the advertising period request revision to the soakage overflow into the Rockingham Lakes Regional Park be revised. This matter was discussed with the City's Environmental Planning Services who advised that this was raised in error and that the City's Environmental Planning Services was satisfied with the stormwater strategy and management system.

In regard to the Engineering Services Report (dated 2013) concern was raised by the Department of Water (DoW) in regard to the non potable irrigation source for the public open space. After discussion with the DoW staff, a licence application to Take Groundwater was lodged with the Department of Water and a licence has been issued for irrigation of the public open space and dust suppression measures for the subdivision works. Therefore this demonstrates that there is sufficient groundwater allocation to support the POS irrigation within this development.

7.6 Roadworks

The future Nairn Road bisects the site and has been accommodated in the Structure Plan design. This road will be major local distributor and access to the road has been minimised.

No existing roads exist within the site. The future internal roads will be constructed to current urban standard in accordance with City of Rockingham requirements.

8.0 LOCAL WATER MANAGEMENT STRATEGY

The Peritas Group consultants were appointed and prepared a Local Water Management Strategy which is included as **Annexure L** of this report.

8.1 Water Sensitive Urban Design (WSUD) Initiatives

As mentioned previously WSUD can be achieved through several initiatives surrounding water conservation, stormwater management and groundwater management. The following initiatives are proposed to be:

Water Conservation

- Upon subdivision and development of the Structure Plan area waterwise landscaping packages for residential lots could be implemented incorporating waterwise plants, increased soil quality improving water and nutrient retention, and efficient irrigation techniques; and
- Education of the future residents in waterwise measures.

Stormwater Management

- The implementation of drainage design ensuring storage and infiltration onsite; and
- Maximising the infiltration onsite through the incorporation of infiltration basins within the POS areas where practical and reasonable to do so. These areas will consist of planted vegetation to encourage nutrient and suspended soils uptake.

Groundwater Management

- Ensuring adequate treatment of inundation areas and/or infiltration basins in regards to landscaping so as to strip the nutrients prior to infiltration;
- Limiting fertiliser use within POS areas; and
- Educate future landowners at a later stage to ensure responsible and limited use of fertilisers.

8.2 Total Water Cycle Management – Principles and Objectives

Total Water Cycle Management within an urban context is also referred to as Water Sensitive Urban Design (WSUD). WSUD within the proposed local Structure Plan is achieved through design and the development and maintenance of the urban water system with the following WSUD principles in mind as per the Better Urban Water Management Guidelines:

- Protection and enhancement of natural water systems within urban developments;
- The integration of stormwater management within the urban landscape;
- Protecting the quality of urban water runoff to minimise the spread of pollutants as well as managing the amount of urban water runoff through local detention measures; and
- Minimise drainage infrastructure costs.

8.3 Surface Water quantity and quality

There are no permanent water bodies on the subject site. The nearest wetlands are Kerosene Lane Swamp and Lake Cooloongup, both are conservation category wetlands identified within the Environmental Protection (Swan Coastal Lakes) Policy 1992. The proposed Structure Plan will not have an adverse impact on either wetland.

8.4 Urban Water Management Plan

The matters proposed to be considered at the subdivision stage within a Urban Water Management Plan (UWMP) include:

Water Conservation

- The provision of further details on waterwise landscaping to be implemented on residential lots and information packages for landowners;

Stormwater Management

- Detailed drainage design and planning of the subdivision area; and
- Details of landscaping in regards to POS areas.

Groundwater Management

- Confirmation of finished lot levels;
- Details of landscaping and education packages provided to landowners;
- Detailed designs in regards to swale and basin design, landscaping, vegetation and soils within the POS area;
- Undertake further site investigations including contamination if required to the satisfaction of the DEC; and
- Consideration of the soil types and amendments if required.

Furthermore any modelling to be undertaken onsite will occur at the Subdivision Stage and addressed by an Urban Water Management Plan (UWMP) and may include groundwater monitoring as well as stormwater modelling, dependant on DoW requirements.

9.0 Road Transport Noise and Noise Mitigation

In accordance with the Western Australian Planning Commission's Statement of Planning Policy 5.4 *Road and Rail transportation Noise and Freight Considerations in Land Use Planning* (SPP5.4), an acoustic assessment of traffic noise has been carried out for the Structure Plan. The purpose of this assessment was to assess noise received at future dwellings within the Structure Plan area from vehicles travelling on the surrounding road network, specifically the proposed extension to Nair Road.

SPP5.4 identifies a 'noise limit' which sets out acceptable noise levels for residential use. Noise modelling indicates that without any noise amelioration, noise received at the residence located adjacent to Nairn Road would exceed the 'noise limits.' In order to address this, a 2.2m high barrier located at the boundary of the Nairn Road reserve is recommended, together with lots requiring "quiet house" design and notifications on title. Specific details of the extent and location of the barrier fence is provided in Appendix B of the Acoustic Assessment (which is contained in Appendix M of the Structure Plan.) Specific details of those dwellings requiring quiet design is provided in Appendix D of the Acoustic Assessment (which is contained in Appendix M of the Structure Plan.)

It is noted that under SPP5.4 that for those dwellings where noise would exceed the 'noise limit,' notification of this will be identified on the titles, provision is made for this is Part 1 of this Structure Plan.

Dwellings located in areas that exceed the 'noise limit' will also have to comply with construction standards (glazing, fencing, fittings) as explained in the Acoustic Assessment (Appendix M) and such standards are provided in Appendix E of the Acoustic Assessment.

10.0 CONCLUSION

This document provides the general planning framework for guiding the future subdivision and development of the Lot 311 Fifty Road, Baldivis into an integrated residential estate.

We understand that Lot 311 Fifty Road, Baldivis, unlike surrounding land, has not been utilised for intensive horticultural activities and does not present issues associated with contamination from such activity. The site is zoned Urban under the MRS and subject to a regional road reserve, at a local scheme level it is designated for future development within a Development zone.

Comprehensive predevelopment planning for the area, such as the Baldivis North Structure Plan, provides for residential development on the site, as well as designating a significant portion of the land for a local neighbourhood centre with overall potential for 5,500m² of floor space.

The site is strategically well located, with high access to infrastructure services due to urban development which has taken place to the north of Fifty Road. There are no identified environmental aspects posing constraints on the development potential of the land. There are no wetlands present, and although a significant amount of original vegetation remains on site, it has not been designated as a Bush Forever site.

It is noted that the Layertech Chicken Hatchery on Lot 3 Eighty Road is located opposite the subject site. As outlined in this report and the attached odour report by The Odour Unit, a buffer area is required around this site which marginally intrudes into Lot 311 and places some constraints on the development of the site.

However this has been responded to by the location of the POS where such a buffer has been identified. No residential land is therefore identified in the buffer area. Further details are provided in the RPS / The Odour Unit, Odour Impact Assessment report associated with this Structure Plan.

It is not anticipated that the presence of acid sulphate soils will constrain the structure planning process, measures will however be required to be put in place to address this issue upon subdivision/development of the land.

A Bushfire Hazard Assessment was undertaken and at the request of the Western Australian Planning Commission a Bushfire Management for the site has been prepared and now forms part of the technical reports for the Structure Plan.

VDM were appointed and have prepared an engineering services report with drainage details. In addition a Local Water Management Strategy has also been prepared by the Peritas Group, as requested by the Western Australian Planning Commission.

Lastly an acoustic assessment has been prepared which addresses SPP5.4 in relation to Road noise from future Nairn Road and the recommendations from that assessment are reflected in this Structure Plan.

This Structure Plan Report provides an overall context for the development of Lot 311 as a fully integrated residential locality. The report provides justification for the purpose of advertising and subsequent endorsement of the Structure Plan by the City of Rockingham and the Western Australian Planning Commission (WAPC).

ANNEXURE A

CERTIFICATE OF TITLE

WESTERN



AUSTRALIA

REGISTER NUMBER	
311/DP202704	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
1	8/3/2007

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

VOLUME
1170

FOLIO
618

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.

B. Roberts

REGISTRAR OF TITLES



LAND DESCRIPTION:

LOT 311 ON DEPOSITED PLAN 202704

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

LEO ANTHONY TSAKNIS OF 27 FORTVIEW ROAD, MOUNT CLAREMONT
AS EXECUTOR OF THE WILL OF GEOFFREY DOUGLAS ROLAND LILBURNE WHO DIED ON 25/7/2006
LEAVE BEING RESERVED FOR DAVID DOUGLAS ROLAND LILBURNE TO COME IN AND PROVE
(TA K103790) REGISTERED 28 FEBRUARY 2007

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

1. K103789 THIS EDITION WAS ISSUED PURSUANT TO SECTION 75 OF THE TLA. REGISTERED 28.2.2007.

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: 1170-618 (311/DP202704).
PREVIOUS TITLE: This Title.
PROPERTY STREET ADDRESS: LOT 311 FIFTY RD, BALDIVIS.
LOCAL GOVERNMENT AREA: CITY OF ROCKINGHAM.

- NOTE 1: A000001A LAND PARCEL IDENTIFIER OF PEEL ESTATE LOT 311 (OR THE PART THEREOF) ON SUPERSEDED PAPER CERTIFICATE OF TITLE CHANGED TO LOT 311 ON DEPOSITED PLAN 202704 ON 09-MAY-02 TO ENABLE ISSUE OF A DIGITAL CERTIFICATE OF TITLE.
- NOTE 2: THE ABOVE NOTE MAY NOT BE SHOWN ON THE SUPERSEDED PAPER CERTIFICATE OF TITLE OR ON THE CURRENT EDITION OF DUPLICATE CERTIFICATE OF TITLE.

Superseded - Copy for Sketch Only

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S. 287J.

WESTERN



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Land, 1/11/54, 1/11/54
Permit, 1/11/54, 1/11/54
Lease, 1/11/54, 1/11/54
Name, 1/11/54, 1/11/54
Vol. 1170, Folio 618
Receipt.
C.L. No.

Elizabeth the Second, by the Grace of God, of Great Britain, Ireland, and the British Dominions beyond the Seas, Queen, Defender of the Faith. To all to whom these Presents shall come, GREETING: Know Ye that We, of Our especial Grace, certain knowledge, and mere motion, have given and granted, and We do by these Presents, for Us, Our heirs and successors, in consideration of the payment of the sum of £32 : 0 : 0 and the fulfilment of the prescribed conditions to the satisfaction of Our Governor of Our State of Western Australia, Give and grant unto

Application 662/1955

1 Persimmon Street North Perth, Sea Room Proprietor Single Woman

Florence Ethel Eliza Kennedy of East Rockingham Married Woman

(hereinafter called the Grantee), the natural surface and so much of the land as is below the natural surface to a depth of 200 feet of ALL THAT Tract or Parcel of Land situate being in the District of Cockburn Sound, in our said State, containing 37 acres 1 rood 10 perches and marked and distinguished in the Maps and Books of the Department of Lands and Surveys of Our said State as Peel Estate Lot 311 and as the same is delineated and coloured green in the plan drawn hereon; TOGETHER with all Profits, Commodities, Hereditaments, and Appurtenances whatsoever thereunto belonging, or in anywise appertaining; TO HAVE AND TO HOLD the said Tract or Parcel of Land to the depth aforesaid, and all and singular the Premises hereby granted, with their appurtenances, unto the said Grantee, in fee simple; YIELDING AND PAYING for the same to Us, Our heirs and successors, one peppercorn of yearly rent on the twenty-fifth day of March in each year, or so soon thereafter as the same shall be lawfully demanded: PROVIDED, NEVERTHELESS, that subject to section 141 of the Land Act, 1933, and Amendments, it shall at all times be lawful for Us, Our heirs and successors, or for any person or persons acting in that behalf by Our or their authority, to resume and enter upon possession of any part of the said land which it may at any time by Us, Our heirs and successors, be deemed necessary to resume for roads, tramways, railways, railway stations, bridges, canals, towing paths, harbour or river improvement works, drainage, or irrigation works, or quarries, and generally for any other works or purposes of public use, utility, or convenience, and for the purpose of exercising the power to search for minerals hereinafter reserved, and such lands so resumed to hold to Us, Our heirs and successors, as of Our or their former estate without making to the said Grantee, or any person lawfully claiming under her, any compensation in respect thereof, so nevertheless, that the land so to be resumed shall not exceed one-twentieth part in the whole of the lands aforesaid, and that no such resumption be made of the part of any lands upon which any buildings may have been erected, or which may be in use as gardens, or otherwise, for the more convenient occupation of any such buildings, or on which any other improvements as defined by the Land Act, 1933, and Amendments, have been made, without compensation: AND PROVIDED, ALSO, that it shall be lawful at all times for Us, Our heirs and successors, or for any person or persons acting in that behalf, by Our or their authority, to cut and take away any such indigenous timber, and to search and dig for and carry away any stones or other materials which may be required for making or keeping in repair any roads, tramways, railways, railway stations, bridges, canals, towing paths, harbour works, breakwaters, river improvements, drainage or irrigation works, and generally for any other works or purposes of public use, utility, or convenience, without making to the said Grantee, or any person claiming under her, any compensation in respect thereof; and we do hereby save and reserve to Us, Our heirs and successors, all Mines of Gold, Silver, Copper, Tin or other Metals, Ores, and Minerals, or other substances containing Metals, and all Gems or Precious Stones and Coal or Mineral Oil and all Phosphatic Substances in and under the said land, with full liberty at all times to search and dig for and carry away the same, and for that purpose to enter upon the said land or any part thereof; and all marketable timber on the said lands save that the lessee may fell such timber in the ordinary course of bona fide clearing for cultivation and use any of such timber felled for his own reasonable requirements in connection with farming operations on the said lands, with full liberty to Us, Our heirs and successors and persons authorised by Us, or by any person or corporation in whom the control of forests is for the time being vested, to enter, fell, and remove the same, and for that purpose or for the purpose of extracting timber from any other land in the locality, full liberty for Us and any of the persons aforesaid to pass and repass over the said lands with or without workmen, machinery, horses or cattle, and to take water from any spring, stream, well or water hole, and to lay down and construct pipe lines for conveying such water, and to make roads and ways, and construct and maintain timber tramways on the said lands, subject, however (where such road, way, tramway or pipe line is for the purpose of extracting timber or conveying water from any other land in the locality), to no other direct and satisfactory route being available through Crown lands, reserves, or State forests, without making to the Grantee, or any person claiming under her, any compensation in respect of any of the matters aforesaid: Provided that We, Our heirs and successors, will make good the actual amount of any structural damage done to any buildings, erections, or fences in the exercise of such rights, and where a fence forming part of a cattle or sheep-proof enclosure is opened, provide and maintain cattle pits and other efficient means to prevent the escape therefrom of sheep and cattle.

IN WITNESS whereof We have caused Our trusty and well-beloved LIEUTENANT-GENERAL SIR CHARLES HENRY GAIRDNER, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Companion of the Most Honourable Order of the Bath, Commander of the Most Excellent Order of the British Empire, Governor in and over the State of Western Australia and its Dependencies, in the Commonwealth of Australia, to affix to these presents the Public Seal of the said State.

Sealed this twenty-fourth day of July, One thousand nine hundred and fifty-three
Charles H. Gaider
Governor.

Grant under the Land Act, 1933, and Amendments.

E. K. H. H.

Minister for Lands.

ENTERED ON RECORD this

24th day of July 1953
for Minister for Lands.

CT 1170 0618 F



CERTIFICATE OF TITLE UNDER THE TRANSFER OF LAND ACT, 1893-1950

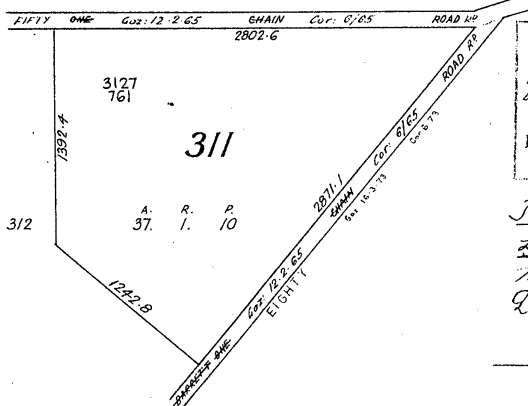
The abovenamed Grantee is now the registered proprietor of an estate in fee simple subject to the easements and encumbrances notified hereunder in all the land described in this grant.

Dated the twenty-fourth day of July, One thousand nine hundred and fifty-three

Assistant Registrar of Titles.

The area and measurements on the Plan below are more or less, and a post has been placed at each corner of the Lot.

PLAN HEREIN REFERRED TO:



TRANSFER 2723/1955 to Kenneth John Smith of 219 South Street, Beaconsfield, Waver.
Registered 23rd February 1955 at 3 o'clock
Assistant Registrar of Titles.

Transfer 85686/64 to Geoffrey Douglas Roland Lilburne of 98 Florence Road, Nedlands, medical practitioner. Registered 17th December 1964 at 9-11 o'clock.

Assistant Registrar of Titles.

Scale: 8 chains to an inch
Surveyed by W. F. Rudall
Corr. 351/47. O.P. 2704
3419/40 B.3.

W. F. Rudall
Surveyor General.

For encumbrances and other matters affecting the land see back.

Superseded - Copy for Sketch Only

EASEMENTS AND ENCUMBRANCES REFERRED TO.

Collateral to Mortgages stamped in all £1-2-6.
Mortgage 6971/1956 Kenneth John Smith
Registered 1st August 1956 at 9.17.0

DISCHARGED

English Scottish and Australian Bank Limited

Discharge 8688/1961 of Mortgage 6971/1956 Registered 18th September 1961 at 9.17.0

ASSISTANT REGISTRAR OF TITLES

Mortgage 8381065 to Bank of New South Wales Registered 29th June 1977 at 9.07.0



CT 1170 0618 B

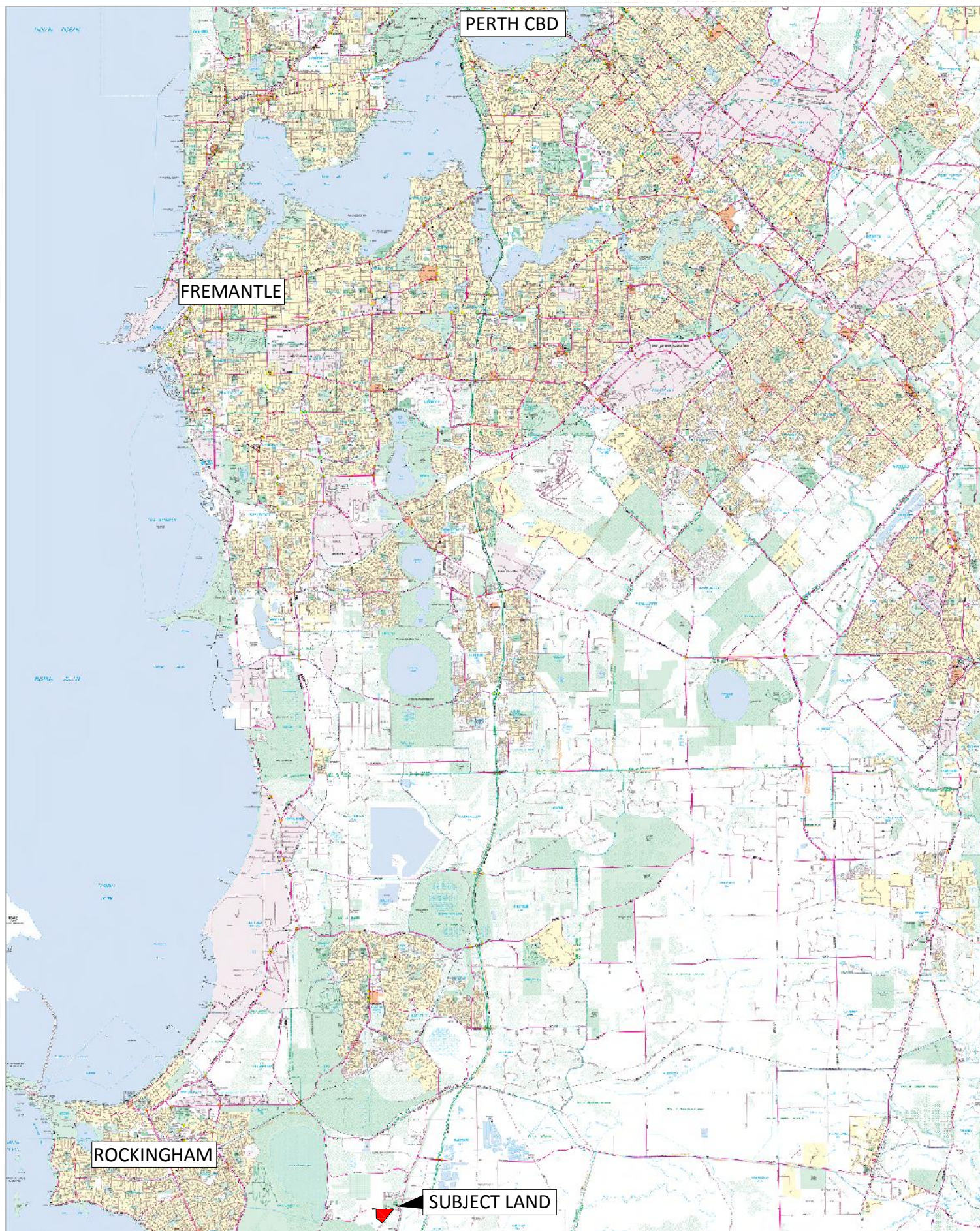


CROWN GRANT.

Vol..... Fol.....

ANNEXURE B

LOCATION PLAN



LOCATION PLAN

LOT 311 FIFTY ROAD
BALDIVIS

CITY OF ROCKINGHAM

0 2 4 6km

SCALE: 1:160 000
ORIGINAL PLAN SIZE: A4

JOB CODE:
LIL BAL GE

DATE:
18.08.2011



**Allerding
& Associates**
Town Planners, Advocates
and Subdivision Designers

125 Hamersley Road, Subiaco WA 6008

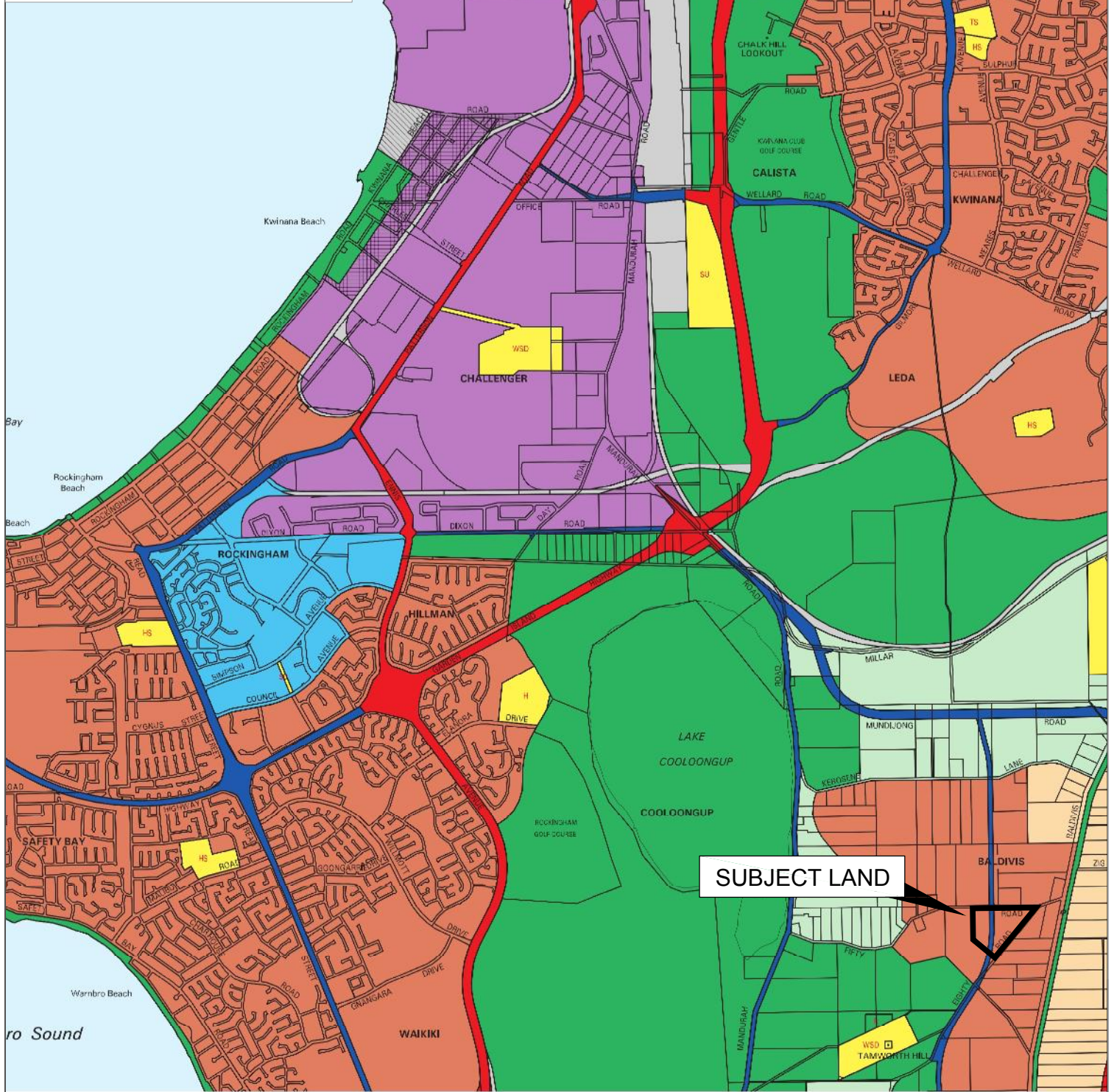
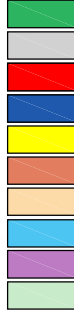
T: (08) 9393 3000 F: (08) 9393 3005 W: www.allerding.com.au

ANNEXURE C

MRS PLAN

LEGEND:

- PARKS & RECREATION -
- RAILWAYS -
- PRIMARY REGIONAL ROADS -
- OTHER REGIONAL ROADS -
- PUBLIC PURPOSES -
- URBAN -
- URBAN DEFERRED -
- CENTRAL CITY AREA -
- INDUSTRIAL -
- RURAL -



METROPOLITAN REGION SCHEME

LOT 311 FIFTY ROAD
BALDIVIS

CITY OF WANNEROO

0 50 100 150 200m

SCALE: 1:50 000
ORIGINAL PLAN SIZE: A4

JOB CODE:
LIL BAL GE

DATE:
21.05.2013



Allerding
& Associates

Town Planners, Advocates
and Subdivision Designers

ANNEXURE D

BALDIVIS NORTH DISTRICT STRUCTURE PLAN

Precinct 2

400m walkable catchment

Proposed primary school and associated active public open space

Walkable Catchment Node

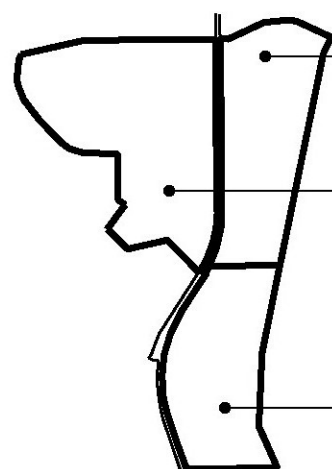
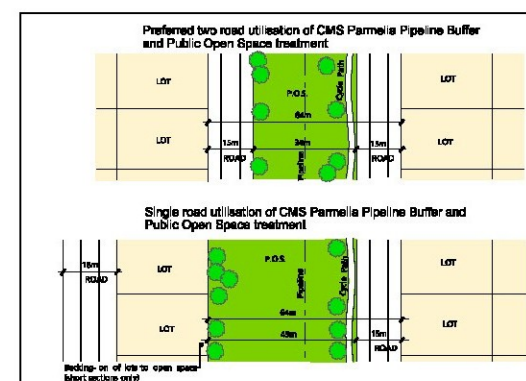
Dress Circle Lots - opportunity to design to capture long distance rural aspects

400m walkable catchment to Neighbourhood Centre

Neighbourhood Centre 5500m² n/a max.

Significant Tuart trees to be protected, widen road reserve to accommodate in verge

Existing wetland to be modified to create permanent lake and drainage feature encompassed within Public Open Space

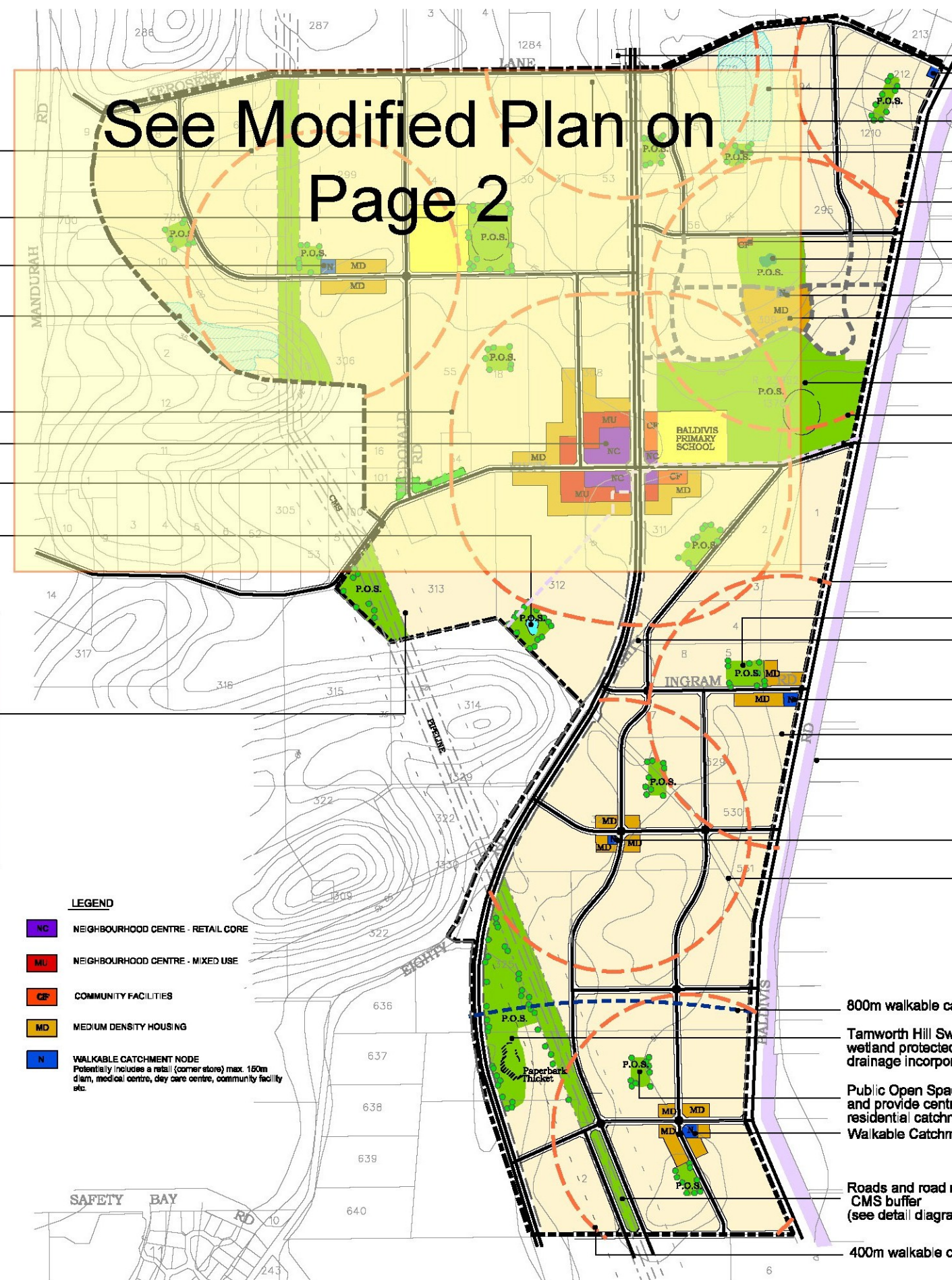


PRECINCT 1.	
Total Area	123.21ha
Deductions	
Baldvies Primary School 3.17ha	
Walkable Catchment Node 0.25ha	
Neighbourhood Centre 0.25ha	
Drainage (2%) 2.40ha	
TOTAL	3.17ha
Total Developable Area	117.08ha
Public Open Space Requirement (10%)	11.71ha
Public Open Space Provided	11.71ha (10%)

PRECINCT 2.	
Total Area	184.75ha
Deductions	
Primary School 3.17ha	
Neighbourhood Centre 2.50ha	
Walkable Catchment Node 0.25ha	
Drainage (2%) 3.63ha	
TOTAL	9.55ha
Total Developable Area	171.44ha
Public Open Space Requirement (10%)	17.14ha
Public Open Space Provided	17.14ha (10%)
Note: 50% credit only for areas within CMS 32m buffer subject to development. Refer section 8.3	

PRECINCT 3.	
Total Area	114.18ha
Deductions	
Walkable Catchment Node 0.25ha	
CMS Buffer 2.71ha	
Drainage (2%) 2.28ha	
TOTAL	5.24ha
Total Developable Area	108.72ha
Public Open Space Requirement (10%)	10.87ha
Public Open Space Provided	13.33ha (12.2%)
Note: 50% credit only for areas within CMS 32m buffer subject to development. Refer section 8.3	

See Modified Plan on Page 2



Precinct 1

Suggested location of Lunch Bar in proposed Light Industrial Area

Potential Rural Service Store site

Dress Circle Lots - opportunity to design to capture rural aspect to east

Design on south side of Kerosene Lane should recognise use of land north of Kerosene Lane for Light Industry

Landmark Public Open Space site. Public viewpoint on high point

400m walkable catchment to potential Rural Store

Community Facilities site

Public Open Space encompassing high point

Walkable Catchment Node

Approved subdivision area, western half affected by poultry farm buffer and pending reconsideration request

Existing Public Open Space containing District Level active and organised recreation

400m walkable catchment to local shopping

Pedestrian link between Tramway reserve and Tamworth Hill

400m walkable catchment

Public Open Space to preserve remnant bushland

Retain section of Fifty Road as services corridor

Precinct 3

Walkable Catchment Node

Proposed Coastal Christian Church community facilities site

400m walkable catchment

Former "Tramway" reserve

Walkable Catchment Node

Unconstructed road. Reserve to be closed

800m walkable catchment to Baldvies District Centre

Tamworth Hill Swamp Wetland is 'conservation' category wetland protected in public open space and utilised for drainage incorporating water sensitive design techniques

Public Open Space to preserve some remnant bushland and provide centrally located recreation opportunity for residential catchment

Walkable Catchment Node

Roads and road reserves and public open space within CMS buffer (see detail diagram insert)

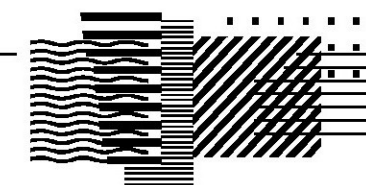
400m walkable catchment

BALDIVIS (NORTH) DISTRICT STRUCTURE PLAN

0 100 200 300 400 m



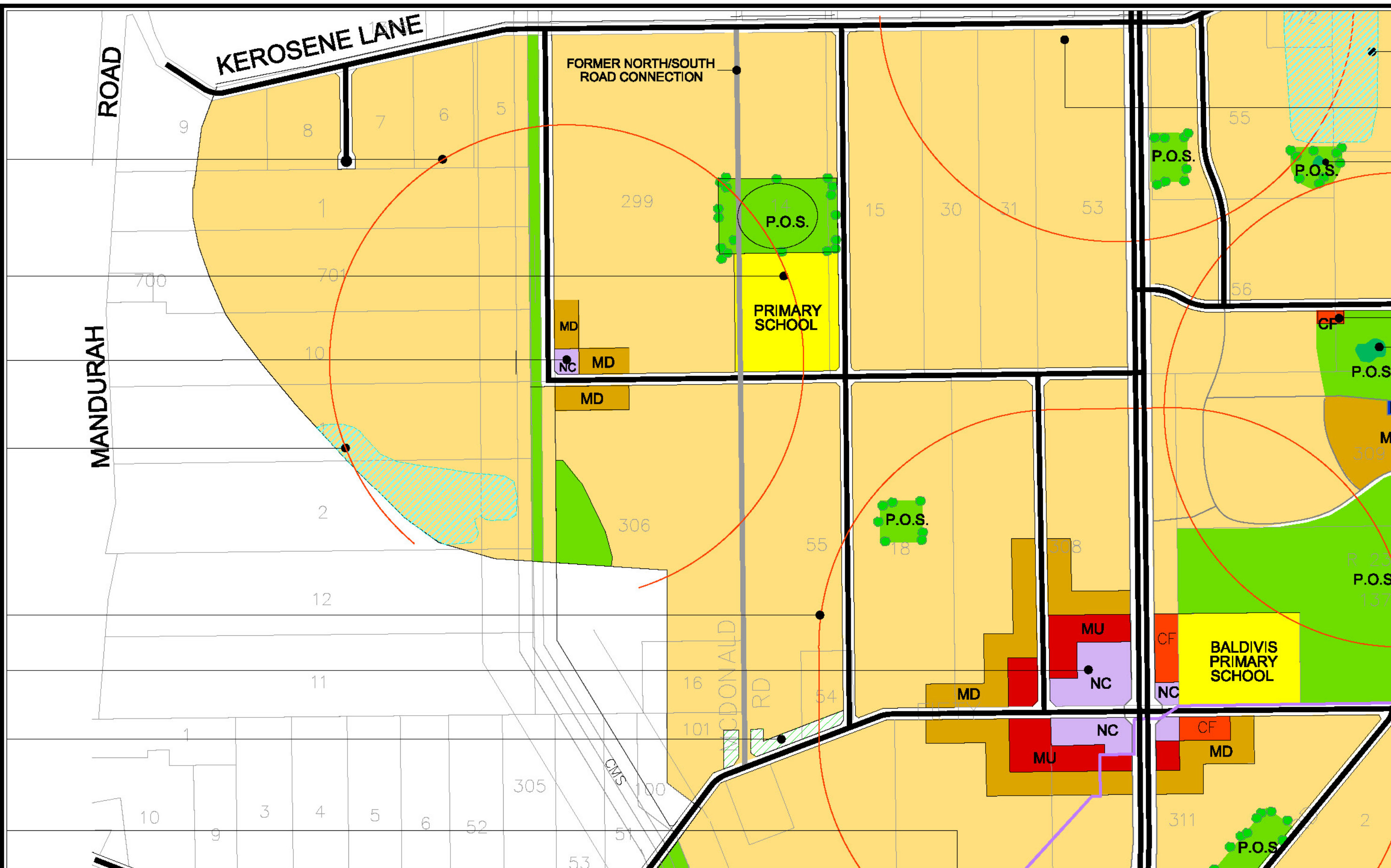
Fig.No.16



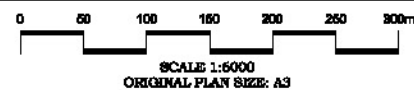
Taylor Burrell

Town planning and design

187 Roberts Road Subiaco
PO Box 603 West Perth
Western Australia 6872
Telephone (09) 382 2911
Facsimile (09) 382 4586



Allerding
Associates



DRAWING NUMBER:
NLV ROC SP

DATE:
26.09.2006

310A Newcastle Street, Perth W.A. 6000
PH: (08) 9328 5555 FAX: (08) 9328 5559
www.planningwa.com

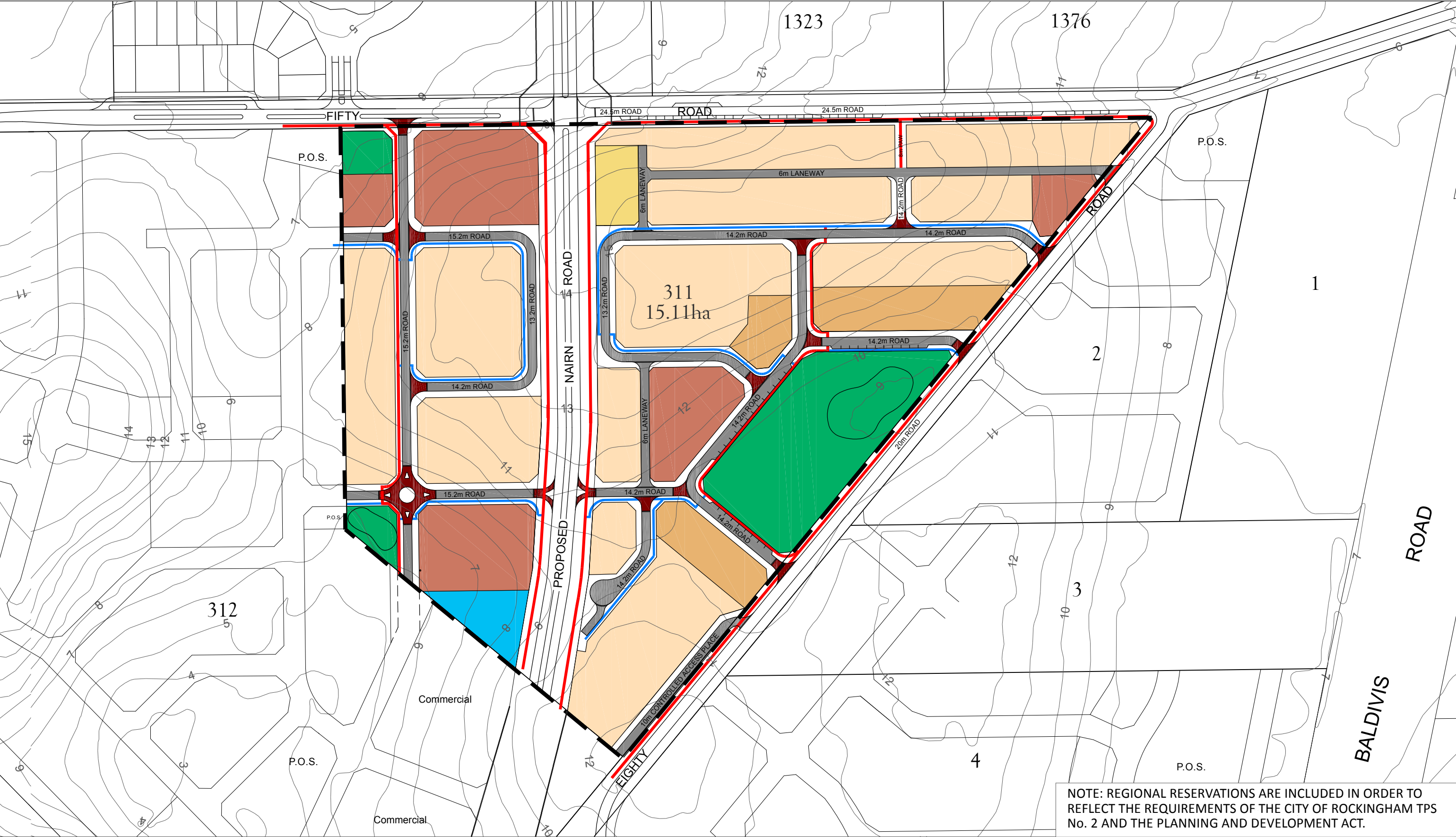


**PROPOSED MODIFICATIONS TO
BALDIVIS (North) DISTRICT
STRUCTURE PLAN - Option 2**

LOTS 1, 3, 700 & 703 MANDURAH ROAD
BALDIVIS
for National Lifestyle Villages

ANNEXURE E

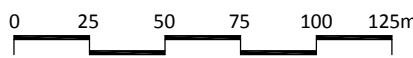
PROPOSED LOCAL STRUCTURE PLAN



PROPOSED STRUCTURE PLAN

LOT 311 FIFTY ROAD
BALDIVIS

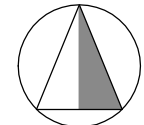
CITY OF ROCKINGHAM



SCALE: 1:2500
ORIGINAL PLAN SIZE: A3

JOB CODE:
LIL BAL GE

DATE:
02.09.2015



LEGEND:
Other elements that
inform the LSP
SUBJECT LAND -
DUAL USE PATH -
LOCAL FOOTPATH -

ZONES:
RESIDENTIAL R20 -
RESIDENTIAL R25 -
RESIDENTIAL R30 -
RESIDENTIAL R40 -
COMMERCIAL -
RESERVES:
PUBLIC OPEN SPACE -



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and Subdivision Designers

ANNEXURE F

PROPOSED STAGING PLAN

ANNEXURE G

THE ODOUR UNIT REPORT

5ou_99. 5th_1hr_Ji ang&Sands_0. 079
SOURCE CHARACTERISTICS

VOLUME SOURCE: SHED1

X(m)	Y(m)	Ground Elevation	Height	Hor. spread	Vert. spread
388933	6424434	0m	3m	4m	1m

(Constant) emission rate = 1.82E+03 OUV/second
No gravitational settling or scavenging.

VOLUME SOURCE: SHED2

X(m)	Y(m)	Ground Elevation	Height	Hor. spread	Vert. spread
388889	6424499	0m	3m	4m	1m

(Constant) emission rate = 1.20E+03 OUV/second
No gravitational settling or scavenging.

VOLUME SOURCE: SHED3

X(m)	Y(m)	Ground Elevation	Height	Hor. spread	Vert. spread
388957	6424483	0m	3m	5m	1m

(Constant) emission rate = 1.24E+03 OUV/second
No gravitational settling or scavenging.

1

Layertech_Bal di vi s_0. 0790ER_5ou' s_99. 5&i l e_1hr_ca94-b

RECEPTOR LOCATIONS

The Cartesian receptor grid has the following x-values (or eastings):

387800.m	387850.m	387900.m	387950.m	388000.m	388050.m	388100.m
388150.m	388200.m	388250.m	388300.m	388350.m	388400.m	388450.m
388500.m	388550.m	388600.m	388650.m	388700.m	388750.m	388800.m
388850.m	388900.m	388950.m	389000.m	389050.m	389100.m	389150.m
389200.m	389250.m	389300.m	389350.m	389400.m	389450.m	389500.m
389550.m	389600.m	389650.m	389700.m	389750.m	389800.m	389850.m
389900.m	389950.m					

and these y-values (or northings):

6423800.m	6423850.m	6423900.m	6423950.m	6424000.m	6424050.m	6424100.m
6424150.m	6424200.m	6424250.m	6424300.m	6424350.m	6424400.m	6424450.m
6424500.m	6424550.m	6424600.m	6424650.m	6424700.m	6424750.m	6424800.m
6424850.m	6424900.m	6424950.m	6425000.m	6425050.m	6425100.m	6425150.m
6425200.m	6425250.m	6425300.m	6425350.m	6425400.m	6425450.m	6425500.m
6425550.m	6425600.m	6425650.m	6425700.m	6425750.m		

METEOROLOGICAL DATA : Caversham 1994 Blockley 271200. Read ca94aus.rea for

ANNEXURE H

TRAFFIC ASSESSMENT REPORT

ANNEXURE I

BUSH FIRE HAZARD ASSESSMENT

ANNEXURE J

BUSHFIRE MANAGEMENT PLAN

ANNEXURE K

VDM ENGINEERING SERVICES REPORT

ANNEXURE L

LOCAL WATER MANAGEMENT STRATEGY

ANNEXURE M

ACOUSTIC ASSESSMENT