



LOCAL STRUCTURE PLAN

Lots 1, 2 and 3 Thomas Road, Anketell



Harley Dykstra

PLANNING & SURVEY SOLUTIONS



DOCUMENT CONTROL

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Prepared for: Saracen Properties
Prepared by: CP
Reviewed by: DM
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Harley Dykstra
PO Box 316
KELMSCOTT WA 6991

Phone: (08) 9495-1947
Email: claytonp@harleydykstra.com.au

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PERTH & FORRESTDAL

Level 1, 252 Fitzgerald Street, Perth
15/2 Hensbrook Loop, Forrestdale
PO Box 316, Kelmscott WA 6991

T: 08 9228 9291

T: 08 9495 1947

E: metro@harleydykstra.com.au

ABN 77 503 764 248

Albany

Bunbury

Busselton

Forrestdale

Perth

www.harleydykstra.com.au



FD 536078

This structure plan is prepared under the provisions of the City of Kwinana
Town Planning Scheme No. 2.

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS ADOPTED BY
RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION
ON:

May 2014

In accordance with Schedule 2, Part 4, Clause 28 (2) and refer to Part 1, 2. (b)
of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

Date of Expiry: 19 October 2030

TABLE OF AMENDMENT(S)

Amendment No.	Summary of Amendment	Amendment Type	Date Approved by WAPC
1	Reconfiguration of neighbourhood centre	Minor	N/A (approved by Council Sept 2014)
2	Increased commercial designations, amended road layout, and amended residential designations and density codings.	Standard	05 May 2021

Executive Summary

Local Structure Plan Amendment Lots 1, 2 and 3 Thomas Road, Anketell

This report represents an application for a minor amendment to the Anketell South Local Structure Plan with respect to Lots 1, 2 and 3 Thomas Road, Anketell ("the subject land"). The subject land has an approximate area of 11.32ha and is situated approximately 30.5km south of the Perth Central Business District, within 4.5km east of the Kwinana Town Centre and approximately 750m from the Thomas Road – Kwinana Freeway intersection.

The proposed Local Structure Plan Amendment is minor in nature and is intended to facilitate the development of the proposed neighbourhood centre, adjacent to Thomas Road, by providing a more appropriately dimensioned commercial site capable of accommodating a supermarket, associated tenancies, and the relocated Community Purpose site within it. This has been achieved via the realignment of the central north - south spine road which has been designed having regard to the future roundabout on Thomas Road that is proposed by Main Roads WA. Subsequent minor amendments to the residential street blocks, densities and public open space areas are also proposed to accommodate the amended road alignments to deliver an improved development outcome.

The Local Structure Plan Amendment summary table below details the nature and key outcomes of the proposed amendment.

Table 1

ITEM	DATA	STRUCTURE PLAN REF (section no.)
Total area covered by the Structure Plan Amendment	11.3235ha	Section 1.2.1
Gross Subdivisible Area	7.0404ha	Section 3.3
Area of each land use proposed:		
Residential	4.192ha	Section 3.4.1
Commercial	2.461ha	
Total estimated lot yield (Includes green title and survey-strata lots)	122 lots	Section 1.1
Estimated number of dwellings	130 dwellings	Section 1.1, 3.4.1
Estimated population	447 persons	Section 3.4.1
Estimated residential site density	15.19 dwellings per site hectare	Section 3.4.1
Estimated area and percentage of Public Open Space given over to:		
- Local parks	0.7384 ha (10.49%)	Section 3.3
- Community Facility		



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APPENDICES

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<i>Appendix D -</i>	<i>Neighbourhood Centre Concept Plan</i>
<i>Appendix E -</i>	<i>Indicative Lot Yield Plan</i>
<i>Appendix F -</i>	<i>Transport Impact Assessment</i>



PART ONE - IMPLEMENTATION

1.0 Local Structure Plan Amendment Area

This Local Structure Plan Amendment relates to the land within the inner edge of the line denoted as the “Local Structure Plan Amendment Boundary” on the Local Structure Plan Amendment Map (Plan 1). This area is currently defined as Lots 1, 2 and 3 Thomas Road, Anketell - being the land contained in the south eastern portion of the Anketell South Local Structure Plan area. No amendments are proposed to the developed areas of the LSP or within undeveloped portions of Lots 9000, 9001 and 17 (the remaining lots covered by the existing Local Structure Plan). The amended Local Structure Plan Map is included as Plan 1.

2.0 Operation

The date the Local Structure Plan amendment comes into effect is the date that the amendment is approved by the WAPC.

3.0 Staging

It is likely that intersection upgrades at the Thomas Road intersection with the proposed north-south spine road will be triggered by the development of the neighbourhood centre adjacent to Thomas Road. These upgrades would be required as a part of the upgrading of Thomas Road that is funded by the Development Contribution Plan for Development Control Area 4. It is likely that the ultimate intersection upgrade would represent a roundabout, but that interim development, such as that depicted in Stage 1 of the Neighbourhood Centre Concept Plan (attached at **Appendix D** of the Explanatory section of this report) might be serviced by an interim intersection upgrade of a different form. Residential development that could be serviced from the north, through subdivisional roads, would not trigger this infrastructure requirement.

It is envisaged that the City would seek to acquire the land required for the Community Purpose facility at the time either of Commercial Lots B or C are subdivided, as identified on the Indicative Lot Yield Plan attached at **Appendix E** of the explanatory section.

Other than the intersection upgrades noted above, there are no other infrastructure triggers that would influence the staging of future subdivision within the structure plan area.

4.0 Subdivision and Development Requirements

4.1	Land Uses & Permissibility	The land use designations for the Local Structure Plan Area are as indicated on the ‘Local Structure Plan Amendment Map’. These will guide the future subdivision and development of the land for residential and commercial purposes. Land use permissibility within the Local Structure Plan Amendment area shall be
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		generally in accordance with the corresponding zone under the Town of Kwinana Town Planning Scheme No. 2.
4.2	Residential Density	Residential densities applicable to the Local Structure Plan Area shall be those residential densities shown on the 'Local Structure Plan Amendment Map'.
4.3	Staging of Subdivision/Development	Refer to Part 3.0 above.
4.4	Noise Attenuation	An acoustic study in accordance with State Planning Policy 5.4 – Road and Rail Noise is to be provided at the subdivision and development stage and the recommended noise attenuation measures implemented.
4.5	Notifications on Title	In respect of applications for subdivision of land, the City of Kwinana 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(s) to advise of the following: • Requirements of an approved Bushfire Management Plan (see Part Two – Section 2.1 Bushfire Management Plan); and • Requirements of a Noise Assessment (see Part Two – Section 2.2 Noise Assessment).
4.6	Neighbourhood Centre Development	Development in the Neighbourhood Centre shall generally conform with the Neighbourhood Centre Concept Plan (NCCP) included in Appendix D in the explanatory section of this report.
4.7	Access Easements	Satisfactory arrangements for the provision of access and vehicle parking easements between the commercial zone and community purpose site shall be made at the time of subdivision implementation.
4.8	Arterial Road Design	The median in the Spine Road adjacent to the crossover at the southern end of the supermarket is to comply with Austroad Standards (minimum width of 7 metres).

5.0 Local Development Plans

Local Development Plans (LDPs) are required to be prepared and implemented pursuant to the provisions of the Town of Kwinana Town Planning Scheme No. 2 and the *Planning and Development (Local Planning Schemes) Regulations 2015*, for affected lots that address the following, where relevant:

- Specific setback requirements;
- Vehicle access constraints;

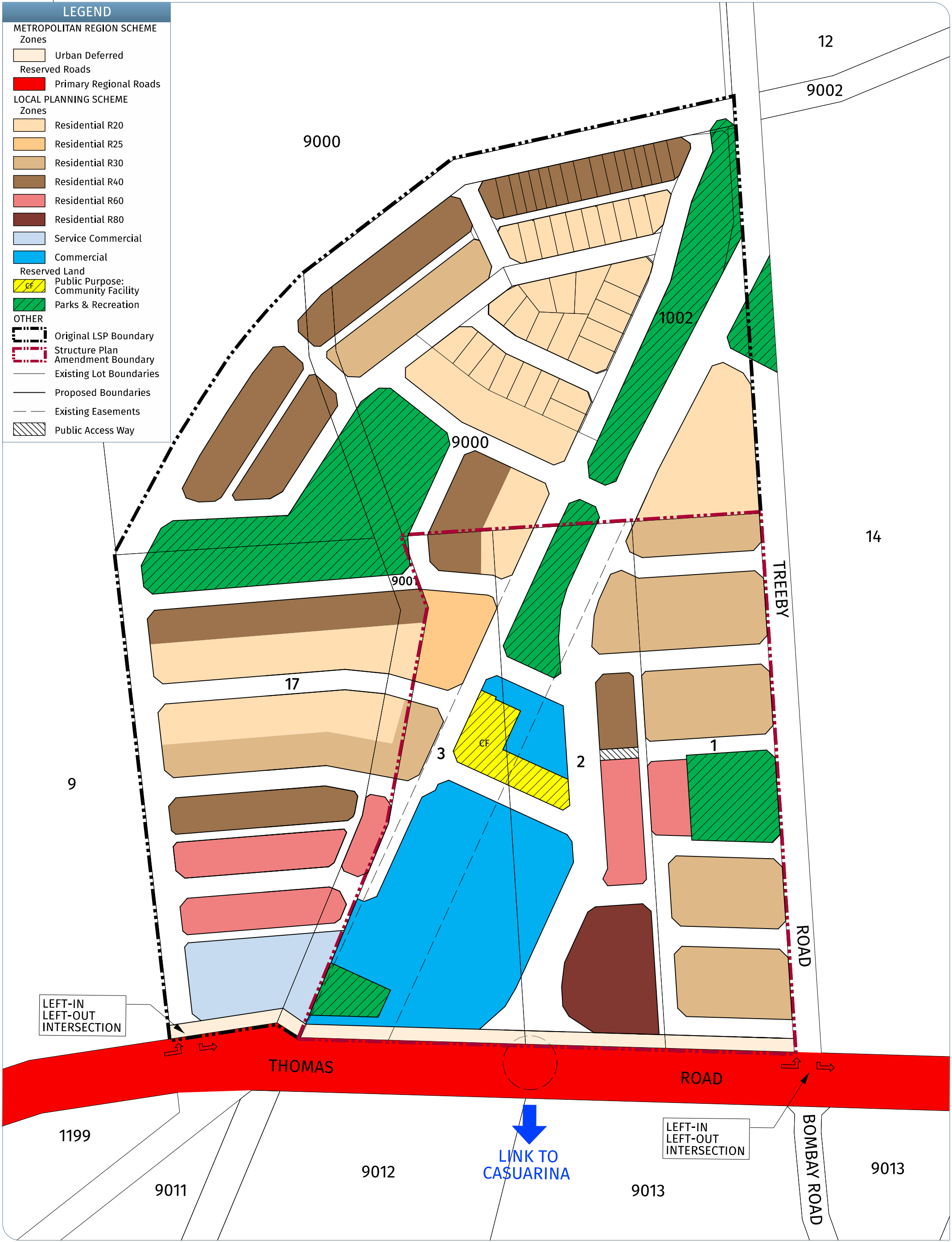


- Private Open Space;
- Bin pad locations;
- Garage or carport locations; and
- Quiet House Design requirements.

Lots that may require an LDP include those residential lots located adjacent to Thomas Road and all lots serviced by a laneway or with frontages of less than 10 metres.



PLAN 1 – STRUCTURE PLAN AMENDMENT MAP



STRUCTURE PLAN AMENDMENT MAP

Lots 1, 2 & 3 Anketell Road,
ANKETELL

Plan No. | 21617-07
Date | 31/03/21
Drawn | BdR
Checked | DM
Revision | J

PERTH & FORRESTDAL: Lvl 1, 252 Fitzgerald St PERTH WA 6000
1/2 Hensbrook Loop, FORRESTDAL WA 6112
T: 08 9495 1947
E: metro@harleydykstra.com.au
ALBANY | BUNBURY | BUSSELTON | FORRESTDAL | PERTH

Scale | 1:2500@A3

0 20m 40m 60m

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



PART TWO - EXPLANATORY REPORT



1.0 PLANNING BACKGROUND

1.1 Introduction and Purpose

This submission has been prepared by Harley Dykstra on behalf of Saracen Properties in respect of Lots 1, 2 and 3 Thomas Road, Anketell (“the subject land”).

The primary objective of this submission is to seek a minor amendment to the existing Anketell South Local Structure Plan (LSP) to facilitate the development of an appropriate neighbourhood centre adjacent to Thomas Road. This will be facilitated by providing more appropriately dimensioned commercial site capable of accommodating a supermarket and associated tenancies as well as a community purpose facility that will be relocated from its existing position on the approved LSP to a new location within the revised commercial precinct. This re-dimensioned site has been achieved via the realignment of the central north - south spine road, which has been designed having regard to the future roundabout on Thomas Road proposed by Main Roads WA. Subsequent minor modifications to internal road alignments, street block extents, orientation and residential densities over Lots 1, 2 and 3 Thomas Road are also proposed. The amendments will also ensure that, wherever possible, residential land uses occur in a manner that has greater regard to cadastral boundaries, thereby increasing the ability of the LSP to be implemented.

The intended land uses within the LSP Amendment area include:

- A total of three R20, six R25, fourteen R30, twelve R40 and fourteen R60 residential lots and 1 R80 grouped/multiple dwelling site over Lots 2 and 3 combined;
- A total of sixty-eight R30 and eight (plus a portion of balance land) R60 residential lots over Lot 1;
- 3 commercial lots within Lots 2 and 3;
- Two (2) areas of Public Open Space (POS) within the site (including a community purpose site) in addition to a power line easement that is to be used, in part, for drainage and recreational linkage purposes. The two Public Open Space portions within the site are located, separately, with one (community purpose site) being in the commercial portion of the site and the other being central and adjacent to the eastern boundary of Lot 1.

This proposal is accompanied by a Local Structure Plan Amendment Map (**Plan 1**) prepared in accordance with the *Planning and Development (Local Planning Schemes) Regulations 2015*, which is included at Part One of this Report.

The Explanatory Section of this LSP Amendment Report includes a description of the proposal, an evaluation of the relevant town planning, traffic, acoustic, bushfire management, water management and servicing considerations applicable to the land, and details the rationale supporting the proposed LSP Amendment.

The LSP Amendment has been formulated by Harley Dykstra in collaboration with specialist consultants, who have provided input in relation to matters as follows:

Hyd2o	-	Local Water Management Strategy
Transcore	-	Traffic Impact Assessment
Bushfire Prone Planning	-	Bushfire Management Plan



Copies of the relevant consultant reports are appended to this submission and key findings incorporated within the body of the report.

1.2 Land Description

1.2.1 Location

The subject land is located within the suburb of Anketell and is situated approximately 30.5km south of the Perth Central Business District and less than 750m west of the Kwinana Freeway. An Aerial Locality Plan is provided below

The subject land is 11.3235ha in area and has frontage to Thomas Road along its southern boundary and Treeby Road on its eastern boundary, the majority of which is unconstructed.



Figure 1 – Aerial Locality Plan (subject land outlined in blue)

1.2.2 Area and Land Use

The subject land comprises three (3) vacant lots that are not currently developed other than to accommodate the existing high voltage power line (330kW) that traverses Lots 2 and 3.

Residential redevelopment of land to the north of the subject site has commenced within the Anketell South Local Structure Plan area. Land to the east is reserved for parks and recreation purposes, whilst land to the south has been identified for urban development and is subject to a separate structure plan. The Aerial Photograph at (**Figure 2**, overleaf) depicts the nature of existing land use.



Figure 2 – Aerial Photograph (subject land)

1.2.3 Legal Description and Ownership

Table 1, below, provides details in respect to the legal ownership of the subject land.

Table 1 – Certificate of Title details

Lot No.	House No.	Plan / Diagram	Volume	Folio	Registered Proprietor(s)	Lot Area
1	819	83118	2034	46	Trevor Keith Pix Lisa Margaret Pix	3.7619 ha
2	811	83118	2123	858	Anketell South Investment Pty Ltd	4.0055 ha
3	793	83118	2034	48	Anketell Commercial Pty Ltd	3.5561 ha
Total						11.3235 ha

Copies of the Certificates of Title are included at **Appendix A**.

1.3 Planning Framework

1.3.1 Statutory Planning Framework

Metropolitan Region Scheme

The subject site is primarily zoned “Urban” under the Metropolitan Region Scheme, however, it is also noted that a narrow strip along the southern boundary of the site is zoned “Urban Deferred”. It is understood that this narrow portion of land is intended for the future road widening of Thomas Road.



Town of Kwinana Town Planning Scheme No. 2

The subject site is zoned “Development” under Town Planning Scheme No. 2 (TPS No. 2). Clause 6.17.2 of TPS No. 2 requires the preparation of a structure plan in order to enable subdivision or obtain development approval within the Development zone. This proposal is consistent with that requirement.

1.3.2 Perth and Peel at 3.5million

Perth and Peel at 3.5million is a high-level spatial framework and strategic plan that provides a vision for the future growth of the Perth metropolitan region towards a population of 3.5 million residents.

As depicted within the South Metropolitan Peel and Perth Subregional Framework, the subject site has been identified as existing urban development in accordance with the zoning of the site under the Metropolitan Region Scheme and the existing Anketell South Local Structure Plan.

The proposed LSP Amendment also provides for a more efficient use of space by proposing a larger commercial site with improved amenity outcomes, thereby facilitating an increase in residential densities and diversity within the LSP area. This increase in residential density offsets the loss in residential land that is caused as a result of the larger commercial site.

1.3.3 Structure Plans

1.3.3.1 Jandakot Structure Plan

The proposed amendment continues to confirm the intentions of the Jandakot Structure Plan (JSP), a regional structure plan that was adopted in 2007. The JSP was intended to guide strategic planning and development on either side of Kwinana Freeway, within the City of Kwinana, and within the western rural areas of the Shire of Serpentine-Jarrahdale.

The JSP identified the subject site as medium-term urban, and also identifies the development of a commercial site (neighbourhood centre) in accordance with the provisions of Liveable Neighbourhoods.

The proposed amendment is considered to be in accordance with the intent and provisions of the JSP.

1.3.3.2 Anketell South Local Structure Plan

The subject land is included within the existing Anketell South Local Structure Plan area, which was originally adopted by the Town of Kwinana on 13th July 2011 and endorsed by the WAPC on 22nd May 2014 and subsequently modified following that endorsement.

The Anketell South Local Structure Plan seeks to primarily facilitate residential development, a neighbourhood centre (adjacent to Thomas Road) and a community facility, whilst also incorporating areas of public open space and a community purpose site in addition to open space provided for drainage purposes within the easement associated with the high voltage power line infrastructure.

Development within the LSP area has already commenced within the northern half, primarily on Lot 13, whilst the remainder of the site has remained largely undeveloped aside from an existing rural supplies business on Lot 17.

It is also noted that a subdivision approval for subdivision within Lots 1, 2 and 3 was issued in February 2015; however, this was not implemented. The subdivision approval



confirmed a number of the elements identified on the adopted LSP, including road widths, POS location and size and lot layout and orientation. It also provided for a commercial space. It is noted that the approval is still valid; however, it appears unlikely to be implemented given this proposal to amend the Local Structure Plan.

1.3.4 State Planning Policies

1.3.4.1 SPP 3.7 – Planning in Bushfire Prone Areas

State Planning Policy 3.7 (SPP 3.7) seeks to guide the implementation of effective risk based land use planning and development to preserve life and reduce the impact of bushfire on property and infrastructure. SPP 3.7 applies to strategic planning proposals, including Structure Plans and Structure Plan Amendments over land designated as bushfire prone by the Map of Bushfire Prone Areas prepared by the Department of Fire and Emergency Services. An extract from the Map of Bushfire Prone Areas Mapping, as it relates to the subject land, is included at **Figure 3** below.

Given the subject land is designated as Bushfire Prone, SPP 3.7 is applicable to this Structure Plan Amendment proposal. A Bushfire Management Plan has been prepared in accordance with SPP 3.7 and is included at **Appendix B**. Further details are included at Section 2.1 of this Report.



Figure 3 – Bushfire Prone Areas Mapping (Subject land outlined in red)

1.3.4.2 SPP 4.2 – Activity Centres for Perth and Peel

State Planning Policy 4.2 provides guidance on the development of commercial centres of varying scales with the Perth and Peel region. In accordance with the adopted Anketell South LSP, a neighbourhood centre has been identified on the proposed amendment to the LSP. It is noted that this site has been previously identified as a Neighbourhood Centre at various levels of strategic planning, including within the Jandakot Structure Plan and the Eastern Residential Intensification Concept.

It is noted that within SPP 4.2 a Neighbourhood Centre is defined as a commercial centre with a maximum of 6000m² net lettable area. On that basis, this proposed commercial



facility will be representative of a Neighbourhood Centre according to the hierarchy established under SPP 4.2.

It is anticipated that the neighbourhood centre will accommodate a number of commercial land uses including a supermarket, fuel station, fast food store, child care centre, café and other specialty stores.

1.3.4.3 SPP 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning

State Planning Policy 5.4 (SPP 5.4) includes the following relevant objectives:

- protect people from unreasonable levels of transport noise;
- protect major transport corridors from incompatible urban encroachment;
- ensure that noise impacts are addressed as early as possible in the planning process; and
- encourage best-practice noise mitigation design and construction standards.

The subject site is affected by traffic noise from vehicles using Thomas Road, which is classified as an “Primary Regional Road”. The adopted Local Structure Plan document references the fact that noise attenuation measures can be implemented during development or subdivision application stage. These measures may include the need to place a notification on the title that would advise prospective purchasers of traffic noise and the requirement for quiet house design packages. It is envisaged that the approved approach will continue to be applicable to this amendment application given the residential development within close proximity to Thomas Road is consistent with the approved LSP.

1.3.4.4 SPP 2.1 – Peel Harvey Coastal Plain Catchment

The subject site is located in the Peel Harvey Coastal Plain Catchment area and as such, a two year water monitoring program was previously undertaken in support of the adopted Local Structure Plan. The findings of this study were utilised in the preparation of a Local Water Management Strategy (LWMS). It is noted that the LWMS has been updated to reflect the proposed amendment ensuring that the objectives and policy measures of SPP 2.1 can continue to be satisfied. The amended LWMS is attached at **Appendix C**, as prepared by Hyd2o.

1.3.4.5 Other Relevant State Planning Policies

Other State Planning Policies that are relevant to the Local Structure Plan area include the following:

- SPP 2.9 – Water Resources;
- SPP 3.0 – Urban Growth and Settlement;
- SPP 3.1 – Residential Design Codes; and
- SPP 3.6 – Development Contributions for Infrastructure.

All of these policies were suitably addressed in the application process for the adopted Anketell South LSP, and it is noted that the findings of that process remain relevant given these policies deal with the broad development intent of the site, which has not changed through the proposed amendment. This ensures that a detailed description of compliance is not required in this instance.



1.3.4 Operational Policies

1.3.4.1 Liveable Neighbourhoods

Liveable Neighbourhoods represents the adopted policy that forms the basis for the assessment of urban structure plans, such as that proposed. The original Local Structure Plan report confirms consistency with the policy and as such, the proposed amendment remains consistent with it.

1.3.5 Local Planning Policies

1.3.5.1 Design Guidelines for Medium Density

The *Design Guidelines* are intended to provide additional measures to the Residential Design Codes in order to ensure appropriate design outcomes for medium density residential development. Although these are primarily applicable to subdivision design, it is noted that detailed subdivision design will be heavily influenced by the design of the Local Structure Plan, as amended. Accordingly, the eventual lot yield and layout has been considered in the design of the LSP to ensure that compliance with this policy can be achieved.

1.4 Pre-Lodgement Consultation

Extensive consultation has been undertaken with both City of Kwinana's Strategic and Statutory Planning sections prior to the preparation of this Local Structure Plan Amendment and also following its recent lodgement. This proposal reflects the outcomes of this consultation with the City of Kwinana, given it represents a revision to the originally submitted plan and it acknowledges the previous work by others in refining the scope and requirements of the Local Structure Plan Amendment.

In addition, Main Roads WA has been consulted in relation to the proposed location and design of the round-about that will be required at the intersection of Thomas Road and the north-south spine road servicing the Structure Plan area.



2.0 SITE CONDITIONS AND CONSTRAINTS

2.1 Bushfire Hazard

A Bushfire Management Plan has been prepared to address the requirements of SPP 3.7 - *Planning in Bushfire Prone Areas* and the associated *Guidelines* in support of this application to amend the LSP. The Bushfire Management Plan addresses proposed development on Lots 1, 2, and 3 Thomas Road. A copy of the Bushfire Management Plan is included at **Appendix B**.

The Bushfire Management Plan concludes that the future development of the site will be able to occur in accordance with the requirements of the associated *Guidelines*. In particular, all dwellings will be able to have a determined rating of BAL-29 or less, multiple means of access and egress are available and a reticulated water supply will be able to be connected to any development.

It is anticipated that as a condition of subdivision approval, the WAPC may require a Notification, pursuant to Section 165 of the *Planning and Development Act 2005* to be placed on the certificate of title of the proposed lots with a Bushfire Attack Level (BAL) rating of 12.5 or above, which would be required to state:

'This land is within a bushfire prone area as designated by an Order made by the Fire and Emergency Services Commissioner and may be subject to a Bushfire Management Plan. Additional planning and building requirements may apply to development on this land'

2.2 Noise Attenuation

The proposed amendment to the Local Structure Plan continues to ensure that a land use noise buffer between Thomas Road and residential development occurs over the western two-thirds of the Thomas Road frontage. This is achieved by maintaining a service commercial and commercial space with significant frontage to Thomas Road. Residential land uses in the eastern third of the site continue to be setback from Thomas Road due to a proposed local road and possible internal driveways within the multiple/grouped dwelling R80 site.

Acoustic studies can be completed in support of subdivision applications, or development application in the instance of the R80 development site. These studies will likely need to investigate additional noise mitigation measures such as acoustic walls and/or the imposition of quiet house design requirements. Additionally, lots that are subject to an excessive noise level as a result of their proximity to Thomas Road may require the following Notification on their Certificate of Title:

"This lot is situated in the vicinity of the Thomas Road and is currently affected, and/or may in the future be affected by transport noise".

It is noted that a recent subdivision approval at the site, for subdivision consistent with the adopted LSP, was issued with a condition requiring a Transport Noise Assessment and another requiring the abovementioned 70A notification. It is envisaged that any future subdivision approvals would be similarly conditioned.



2.3 Western Power Easement Corridor

The Western Power easement corridor that dissects the Local Structure Plan area restricts development opportunities. As a result, the proposed LSP continues to be designed around the constraints of this easement. Vehicle parking areas associated with the proposed commercial development, roadways, pedestrian linkages, and drainage basins are considered the most effective means of utilising the Western Power easement corridor.



3.0 LAND USE AND DEVELOPMENT REQUIREMENTS

3.1 Land Use

The primary design driver to the proposed amendment of the Local Structure Plan is related to the need to modify the area designated for commercial use so that it can accommodate a viable neighbourhood centre and a community purpose facility within it. As a result, the commercial site has been made wider and longer, which in turn results in the need for minor amendments to the residential areas and road alignments within the LSP to the east of the commercial area, primarily within Lots 1 and 2. Other minor amendments include the redesign of residential street blocks and road alignments to ensure the amended LSP and eventual development seamlessly integrates with existing development that has occurred in the northern part of the LSP area.

Further details relating to the relevant design opportunities and constraints are provided below.

3.2 Commercial

The commercial space has been enlarged to enable the development of a commercial facility that can accommodate an anchor tenant and a number of other specialty stores and other commercial outlets. The developer has discussed the commercial site with a number of potential tenants whose requirements have driven the need to amend the size and configuration of the commercial space. These requirements, in addition to the constraints of the power line easement (that limits space available for buildings), have been the major driver behind the proposed amendment to the LSP.

Furthermore, since the lodgement of this LSP amendment, significant consultation with the City of Kwinana, relating to the design of the neighbourhood centre, has occurred. As a result, the latest iteration of the LSP depicts a centrally located Community Purpose Site. This layout amendment was completed to encourage a strong link between the commercial and community purpose elements of the LSP. The consultation occurred largely in the context of the proposed Neighbourhood Centre for the site and as a result there is a need to establish a number of design objectives for the eventual development of the neighbourhood centre through the Local Structure Plan process.

These objectives, which should be addressed as part of any Development Application for the commercial portion of the LSP, are set out within Part 1, section 4.6 of this LSP.

In accordance with the design objectives, a Neighbourhood Centre Concept Plan for the neighbourhood centre has been prepared by i2c architects and is attached at **Appendix D**. The plan has informed the total land requirement for a viable neighbourhood centre.

3.3 Public Open Space (POS)

The Structure Plan Amendment results in a number of changes to the Public Open Space (POS) arrangements identified in the adopted LSP. In particular, the “eastern parkland” (as identified in the original LSP report) has been made larger than the previously approved 4,248m² to 4,332m², representing an increase of 84m². The increase in the size of this POS site has been further enhanced by the reduction in the size of the drainage basin that is to occur within that POS area and through an overall reduction to the gross subdividable area, which reduces the need for POS space.



On the basis of the above the following summary of POS changes is provided:

- The “eastern parkland” has increased by 84m² from what was originally approved, as described above; and
- The community purpose site has been made smaller, from 3,507m² to 3,072m² now that the Local Government land use and parking requirements for this space have become known.(refer to the Neighbourhood Centre Concept Plan attached in **Appendix D** that includes an indicative design for this site).
- A reduction in drainage area within the eastern parkland from 2,231m² for the 1 in 5 year event, to the current 660m² 1 in 5 year stormwater event.

Therefore, on the basis of the above the following POS schedule demonstrates the proposed Local Structure Plan amendment satisfies the 10% public open space requirement (10.1%) for Lots 1, 2 and 3 (the lots subject to the Structure Plan amendment).

Public Open Space Schedule		
Total Land Area		11.3235ha
Deductions		
Commercial and Western Power Easement		3.8940
Uncredited POS (Incl. 1 in 1 year basins)		0.0270
Thomas Road Widening		0.3621
Total:		4.2831
Gross Subdivisible Area:		7.0404
POS Requirement:		0.704
Public Open Space Calculation		
To Comprise		
Minimum 80% unrestricted Open Space		0.5632
Maximum 20% restricted Open Space		0.1408
Public Open Space Provided		
	Unrestricted	Restricted
POS within Lot 1	0.3992	0.0320
POS within Lots 2 & 3	0	0
Community Purpose Site	0.3072	0
Total	0.7064	0.0320
Total Open Space Provided:		0.7384 ha (10.49%)

TABLE 2 – POS SCHEDULE (ALL AREAS IN HECTARES)

3.4 Residential

3.4.1 Land Use and Residential Density

The residential densities proposed by the Local Structure Plan Amendment are generally consistent with the existing densities depicted on the adopted Local Structure Plan. Some reallocation and reorganising of densities to accommodate the enlarged commercial space and reflect the amended POS location have occurred, generally reducing the total residential area within the LSP. To offset this reduction a redesign of the street blocks and road alignment, plus a minor increase in residential density, has occurred to ensure that the available residential space is utilised more efficiently. This is demonstrated within



Table 2, below, which summarises the total land area of commercial, various residential densities and POS areas within Lots 1, 2 and 3. Of particular interest, it is noted there is a total land increase in commercial space, yet a smaller reduction in total residential space. This has occurred through a more efficient design including a reduction in the central open space area within the power line easement and a reduction in the total road reserve area.

Land Use	Approved LSP	Proposed LSP
Commercial	1.510	2.3496
R20	1.001	0.140
R25	-	0.309
R30	2.084	2.472
R40	0.679	0.272
R60	0.569	0.385
R80	-	0.5819
POS	0.829	0.7384

Table 2: Land Use Area Comparison

The Structure Plan Amendment proposes the creation of standard street blocks where practical to accommodate a variety of lot sizes. Overall, 41,590m² of residential coded land is proposed. This appears capable of allowing for a total of 122 lots within Lots 1, 2 and 3, which includes one grouped / multiple dwelling site. Given it is difficult to determine how many dwellings this site will accommodate, the average lot size, prescribed in State Planning Policy 3.7 (R-Codes) can be used to estimate that 51 lots could be created on this lot. As such, the expected dwelling yield would be 172 dwellings, which equates to approximately 15.19 dwellings per site hectare. Based on 2011 ABS statistics and an expected dwelling yield of 172 dwellings, the estimated population within the Structure Plan Amendment area is 447 persons at 2.6 persons per dwelling.

An Indicative Lot Yield Plan has been attached at **Appendix E**

3.4.2 Residential Lot Layout

Street blocks and road layouts have been amended to provide for a more efficient use of space including rectangular lots that also respond to the current market demand in regard to lot depths and widths.

3.5 Movement Networks

3.5.1 Proposed Movement Network

The proposed public road network shall remain generally consistent with the adopted Structure Plan as detailed in preceding sections of this Report. Road reserves and laneways will be constructed generally in accordance with Liveable Neighbourhoods guidelines. The various road widths are considered consistent with those previously approved in both the Local Structure Plan and subsequent subdivision approvals. They are further considered and justified in the Transport Impact Assessment that has been prepared by Transcore, attached at **Appendix F**.

3.5.2 Traffic Generation

The proposed subdivisional road network within the current Local Structure Plan area has been designed to service future subdivision and development at densities between R20 and R80 over the subject land.

The anticipated change to the total daily traffic volume associated with the Local Structure Plan Amendment is minimal. Therefore, it is concluded that the proposed road network



has the capacity to accommodate the anticipated traffic generated by subdivision and development within the Structure Plan Amendment area with no adverse impact on traffic operations.

3.6 Stormwater Management

A Local Water Management Strategy has been prepared to address the various catchment areas within the Local Structure Plan area and is attached at **Appendix C**. Whilst this application only suggests amendments within Lots 1, 2 and 3 the LWMS addresses drainage across the whole LSP area given that drainage catchments are not necessarily limited to lot boundaries and because drainage infrastructure, on the basis of detailed UWMP design, has already been installed to the north given the current subdivision implementation and construction that is or has occurred. The updated LWMS seeks to reflect much of what was previously proposed and/or constructed.

The resultant structure plan layout and densities has, therefore, been the subject of initial assessment in terms of drainage illustrating the site's capacity to manage future drainage demands. Given the lot yield/dwelling density and layout is generally consistent with the original LSP, there are no additional drainage implications anticipated as a result of this Structure Plan Amendment.

The LWMS suggests assumed basin configurations (as detailed in the strategy) and therefore concludes that there will need to be an additional 630m³ of drainage space within the structure plan amendment area, provided in addition to that proposed within the open space area within the power line easement. This area is in addition to those that are contained within lots outside of the amendment area. Only one drainage area will be required within the LSP amendment area. This will occur within the POS area proposed within Lot 1. It is envisaged that the top of water level area required to capture 1 in 5 year stormwater events will be 660m² in area, with the portion of that required for 1 in 1 year events to be 340m² in area.

In accordance with Liveable Neighbourhoods Element 4 (R26), Restricted Open Space areas are able to be used for greater than 1 in 1 year events. Furthermore, any storm events greater than 1 in 5 AEP can be accommodated in the site as well, however, these areas form a part of the unrestricted POS area in accordance with Liveable Neighbourhoods Element 4 (R25).

3.7 Staging

It is likely that intersection upgrades at the Thomas Road intersection with the proposed north-south spine road will be triggered by the development of the neighbourhood centre adjacent to Thomas Road or any other residential development (dependant on the amount of lots proposed). These upgrades would be required as a part of the upgrading of Thomas Road that is funded by the Development Contribution Plan for Development Control Area 4, as detailed in the associated DCP Report. It is likely that the ultimate intersection upgrade would represent a roundabout, but that interim development, such as that depicted in Stage 1 of the Concept Plan (attached at **Appendix D** of the Explanatory section of this report) might be serviced by an interim intersection upgrade of a different form. Residential development that could be serviced from the north, through subdivisional roads, would not trigger this infrastructure requirement.

It is also envisaged that the City would seek to acquire the land required for the Community Purpose facility at the first stage of subdivision related to the Commercial Site.



Other than the above, there are no other infrastructure triggers that would influence the staging of future subdivision within the structure plan area.

3.8 Developer Contribution Arrangements

Under the City of Kwinana Town Planning Scheme No. 2 the subject site falls within two development control areas. These are Development Contribution Areas No. 4 and No. 10, which require contributions for hard and soft infrastructure respectively. Of particular interest, is the infrastructure requirement for the upgrading of Thomas Road, given this is likely to be triggered by the development of the neighbourhood centre or by any development that is to seek full movement access to Thomas Road.

On the basis of these development contribution schemes, future subdivision and development applications will be approved with conditions requiring the landowner / developer to provide a cost contribution.

3.9 Implementation

The proposed Structure Plan Amendment has been prepared in accordance with the requirements of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

The *Planning and Development (Local Planning Schemes) Regulations 2015* stipulates the manner by which the Structure Plan Amendment will be processed by the City of Kwinana and thereafter, the Western Australian Planning Commission to enable final approval.

Following adoption of the Local Structure Plan, subdivision applications, local development plans and development applications can be considered and approved where they comply with the Amended Structure Plan.



APPENDICES INDEX

Appendix	Nature of Document
A	Certificates of Title
B	Bushfire Management Plan
C	Local Water Management Plan
D	Neighbourhood Centre Concept Plan Design
E	Indicative Lot Yield Plan
F	Transport Impact Assessment