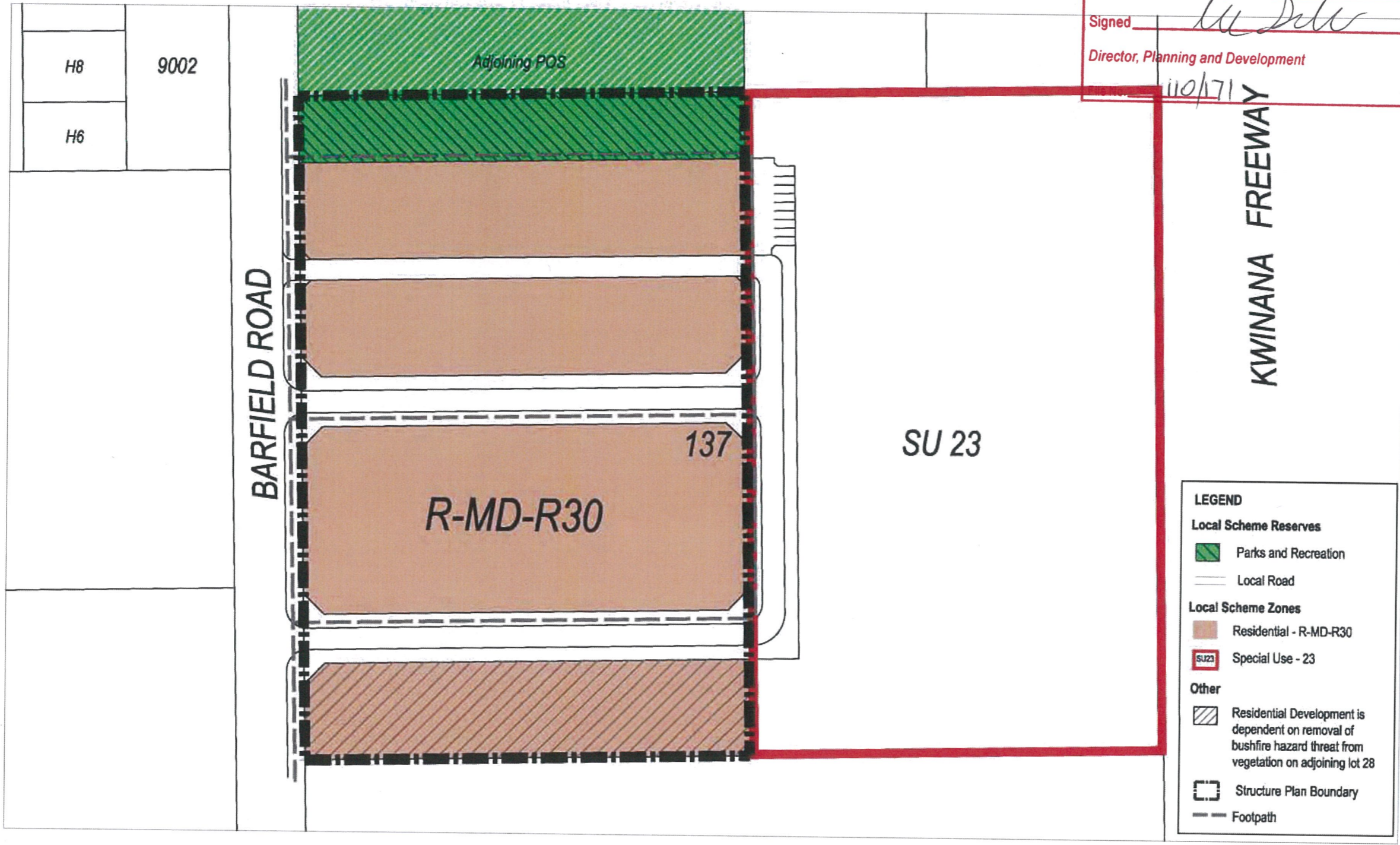


It is certified that this Structure Plan was approved by resolution of the Western Australian Planning Commission on 12/12/2017  
 This Structure Plan expires on 12/12/2027  
 Signed [Signature]  
 Director, Planning and Development



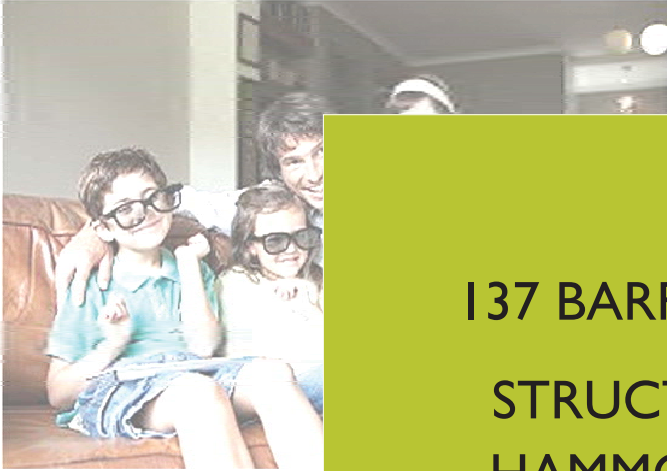
### 137 BARFIELD ROAD STRUCTURE PLAN



137 Barfield Road  
 Hammond Park - City of Cockburn



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**137 BARFIELD ROAD  
STRUCTURE PLAN  
HAMMOND PARK  
(Structure Plan Number:  
SPN/2101)**



Title: Barfield Road Structure Plan

Project: 137 Barfield Road

Prepared for: Symbolise Holdings

Reference: S59A

Date of release: December 2016

Author: Masterplan

Contributors: Masterplan, KCTT, 360 Environmental, Strategen, RPS,  
Lloyd George Accoustics, MNG

Approved by: S. Kerr

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DOCUMENT	DATE	PREPARED	AUTHORISED	REVIEW
DRAFT 1	AUG 2016	SK/SDS	SK	INTERNAL
DRAFT 2	NOV 2016	SK/SDS	SK	INTERNAL
DRAFT 3	DEC 2016	SK/SDS	SK	SH
FINAL	NOV 2017	SK/SDS	SH	WAPC


# ENDORSEMENT PAGE

This Structure Plan is prepared under the provisions of the City of Cockburn Local Planning Scheme No.3

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

*12 December 2017*.....Date

Signed for and on behalf of the West Australian Planning Commission:

  
.....

an officer of the Commission duly authorized by the Commission pursuant to section 16 of the *Planning and Development Act 2005* for that purpose, in the presence of:

  
.....Witness

*12 December 2017*.....Date

*12 December 2027*.....Date of Expiry

TABLE OF AMENDMENTS

Amendment No.	Summary of the Amendment	Amendment type	Date Approved by WAPC



## EXECUTIVE SUMMARY

The Lot 29, 137 Barfield Road Structure Plan (SP) is prepared to facilitate and guide the subdivision and development for residential purposes of the Structure Plan area comprising lot 137 Barfield Road, Hammond Park.

It comprises a total area of 4.8108 hectares consisting of a 'Development' zoned portion of 2.492ha fronting Barfield Road and a 'Special Use' zoned portion comprising the eastern half of Lot 29 of 2.31 ha.

The Special Use zone reflects an easement to Western Power to accommodate a number of high voltage power lines which traverse this portion of Lot 137 from north to south parallel to the abutting Kwinana Freeway.

The subject land contains no structures, other than the Western Power infrastructure, and has historically been partially cleared and is currently cleared or parkland cleared with some stands of trees. Remnant vegetation ranges in quality from good/very good to completely degraded.

The SP has been designed to support State Government residential density targets and to carefully integrate within its surrounding context. It reflects the relevant planning framework and has been prepared in close collaboration with abutting landowners to achieve coordinated and integrated development interfaces with those landholdings.

The SP accommodates a variety of residential product and is designed to achieve best sustainable design practice where possible, including application of better urban water management, maximised solar orientation and efficient servicing and infrastructure coordination in order to deliver affordable housing options.

The key statistics and planning outcomes of the Structure Plan are outlined in the following summary table.

Item	Data	Structure plan Ref. (Section No.)
Total Area Covered by Structure Plan	4.8107 Hectares	1.1
Area of each land use proposed <u>Zones</u> <ul style="list-style-type: none"> <li>• Residential</li> <li>• Commercial</li> <li>• Industrial</li> <li>• Rural Residential</li> </ul>	2.492 Hectares NA NA NA	Part 2 :3.0
Total Estimated Lot Yield	53 Lots	Part 2: 3.1
Total Estimated Number of Dwellings	53 Dwellings	Part 2: 3.1
Estimated Residential Density	21 dwellings per gross hectare 29 dwellings per net hectare	Part 2: 3.1
Estimated Population	132	Part 2: 3.1
Number of High Schools	NA	NA
Number of Primary Schools	NA	NA
Estimated Commercial Floor Space	NA	NA
Estimated area and percentage of public open space given over to <ul style="list-style-type: none"> <li>• Regional open space</li> <li>• District open space</li> <li>• Neighbourhood parks</li> <li>• Local parks</li> </ul>	NA NA NA 1 park - 2492 m <sup>2</sup>	Part 2: 3.2
Estimated percentage of natural area	NA	NA

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1. Local Water Management Strategy
2. Environmental Assessment Report
3. Infrastructure Servicing Report
4. Traffic Impact Report
5. Bushfire Management Plan
6. Acoustic Report



**PART ONE**

---

**IMPLEMENTATION**



## 1.0 Structure Plan Area

This Structure Plan shall apply to (Lot 29) 137 Barfield Road, Hammond Park being the land contained within the inner edge of the line denoting the structure plan boundary of the Structure Plan Map.

The Structure Plan is identified as the 137 Barfield Road Structure Plan.

## 2.0 Operation

This Structure Plan shall come into effect on the date it is approved by the WAPC

## 3.0 Staging

Development of the Structure Plan area may occur in stages and will be determined at the time of development. It is likely to be subject to Bushfire Clearance related to adjoining Lot 28.

If at the time of development a minimum depth of 20m has been cleared within adjoining Lot 28 abutting its northern boundary, development may proceed within Lot 29 as one stage.

Where clearance of the required 20m strip providing the required Asset Protection Zone has not been secured at the time of development, Lot 29 may be developed in two stages with Stage One comprising the 'Development' zoned portion of the Structure Plan area, with the exception of the future lots directly abutting adjoining Lot 28.

Stage Two will comprise the future lots directly abutting adjoining Lot 28 with the subdivision and/or release of those future lots to only occur once the required Asset Protection Zone is secured.

## 4.0 Subdivision and Development Requirements

Subdivision and development of the Structure Plan area shall generally be in accordance with the Structure Plan map.

### 4.1 Applicable Standards

Applicable zones and reservations under the Structure Plan include the 'Development' and 'Special Use' zones and 'Public Recreation' reservation. Landuse and development standards for these zones/reservation under the applicable City of Cockburn Planning Scheme shall apply within the Structure Plan area.

### 4.2 Residential Density

Applicable density for the Structure Plan area shall be as per the Structure Plan map.

### 4.3 Hazard Separation

The Structure Plan is subject to a Bushfire Management Plan attached as Appendix 5. Any land falling within a bushfire hazard identified in the Bushfire Management Plan is designated as a Bushfire Prone Area for the purpose of the Building Code of Australia.

#### 4.4 Public Open Space

Physical provision of Public Open Space shall be in accordance with the Structure Plan Map.

### 5.0 Local Development Plans

5.1 Local Development Plans are required to be prepared for lots comprising one or more of the following site attributes:

- (i) Lots with Laneway vehicle access.
- (ii) Lots with direct boundary frontage to an area of Public Open Space.
- (iii) Lots requiring elevated construction standards for bushfire hazard mitigation purposes.
- (iv) Lots affected by vehicle noise associated with the Kwinana Freeway.

5.2 (i) In respect to 5.1(i) the Local Development Plan shall specifically address interface with laneways, servicing and access, provision of visitor car parking and public street interface and presentation.

(ii) In respect to 5.1(ii) the Local Development Plan shall specifically address the interface between the proposed development and the directly abutting POS and where relevant any interface between these lots and abutting public streets.

(iii) In respect to 5.1(iii) the Local Development Plan shall specifically address lots identified as being affected by bushfire hazard or vehicle noise and the elevated construction standards required for mitigation purposes.

### 6.0 Other Requirements

#### 6.1 Notice on titles

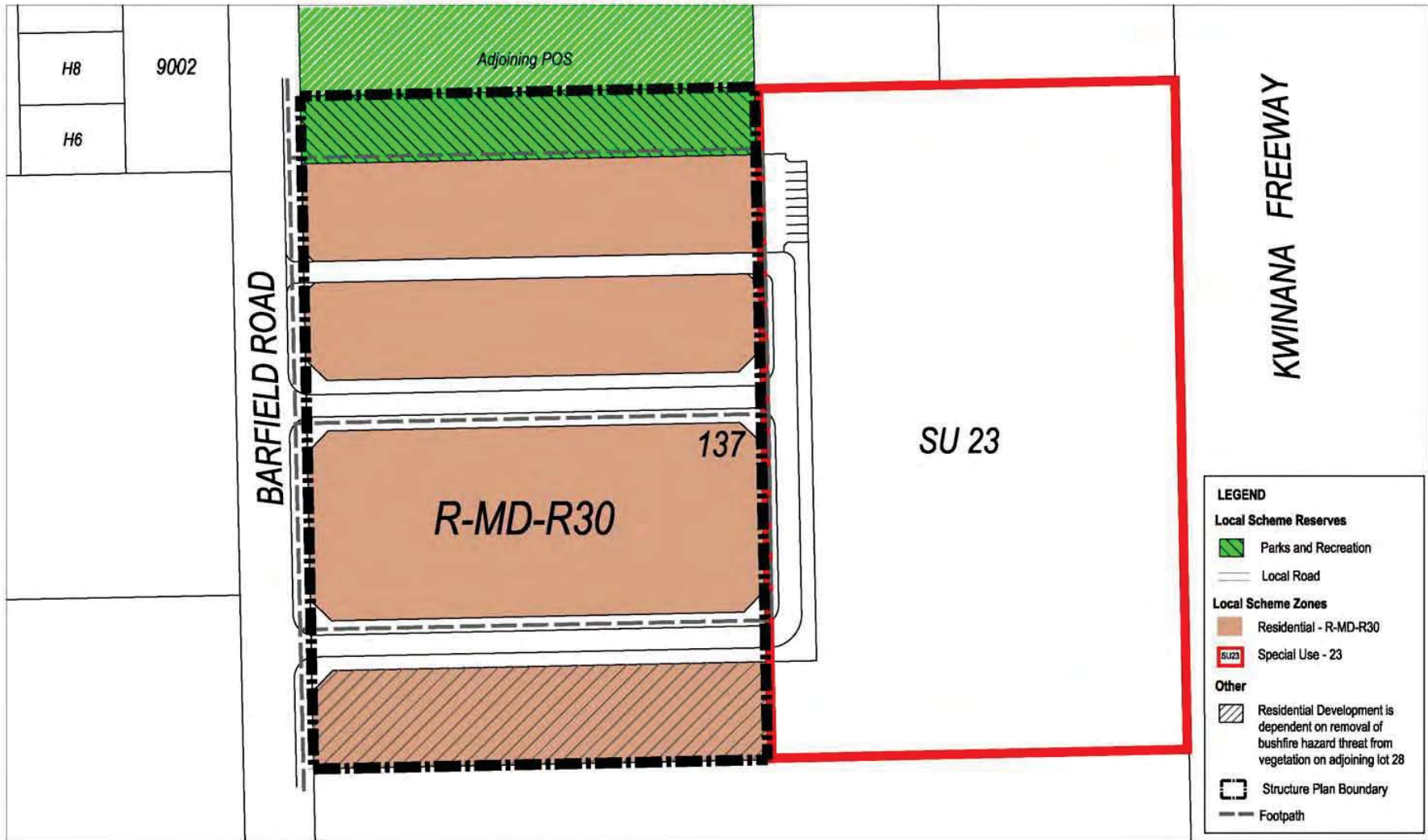
Where lots are affected by bushfire hazard and/or vehicle noise, a notice may be required on titles to provide notice for prospective purchasers in this regard.

### 7.0 Additional Information

The Following are to be recommended as a condition of subdivision and/or development approval to the satisfaction of relevant agencies:

Additional Information	Approval Stage	Consultation Required
Transport Noise Assessment	Subdivision Clearance	MRWA
Fauna Management and Relocation Plan	Subdivision Clearance	City of Cockburn

Urban Water Managment Plan	Subdivision Clearance	City of Cockburn
Landscape Plan	Subdivision Clearance	City of Cockburn



# 137 BARFIELD ROAD STRUCTURE PLAN

137 Barfield Road  
Hammond Park - City of Cockburn



0m 25m 50m



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**PART TWO**

---

**EXPLANATORY  
REPORT**



## 1.0 Planning Background

### 1.1 Introduction and Purpose

This Structure Plan for Lot 29 (137) Barfield Road, Hammond Park has been prepared by Masterplan Consultants on behalf of Symbolise Holdings.

It is lodged in accordance with clause 6.2.4 in the City of Cockburn Town Planning Scheme No. 3 (TPS3) which requires a structure plan to be approved for land zoned 'Development' under TSP 3 and provides the statutory planning framework to guide the future subdivision and development of the subject land contained within the Structure Plan boundaries.

The Structure Plan has been prepared in accordance with the City of Cockburn's procedure which specifies compliance with Schedule 2, Part 4 of the deemed provisions in the Planning and Development (Local Planning Schemes) Regulations 2015.

It comprises three parts as follows:

Part 1 – Implementation Section contains the Structure Plan map and the statutory planning provisions and requirements applicable to future subdivision and development of the subject land pursuant to clause 6.2.4 of TPS3.

Part 2 – Explanatory Section (this Part) provides an assessment of all relevant matters including the applicable planning framework, the site context and characteristics and provides an explanation of the proposed Structure Plan.

Part 3 – Technical Appendices being those technical reports and supporting documentation as required.

### 1.2 Land Description

#### 1.2.1 Location

The land subject to this Structure Plan (the subject land) is located to the eastern side of Barfield Road south of Gaebler Road. It is approximately 1.5km south of the Russell Road/Gibbs Road exit from the Kwinana Freeway, 1.2km south east of the Macquarie Boulevard local centre and less than 800m west of the proposed Hammond Centre.



Figure 1: Location

#### 1.2.2 Area and Land Use

The subject land has a total area of 4.8154ha with frontage of 192m to Barfield Road and the western boundary to the Kwinana Freeway and northern and southern boundaries of 250m in length. The subject land has been partially cleared and the site is undeveloped.



The eastern half of the site is affected by an easement in favour of Western Power associated with 330Kv power line infrastructure which traverses this portion of the site from north to south parallel to the Kwinana Freeway to the east.

surface of the land but can construct structures, buildings and improvements within the easement area with the written approval of Western Power.

### 1.3 Planning Framework

#### 1.3.1 Zoning and Reservations

The subject land is zoned 'Urban' under the Metropolitan Region Scheme (MRS). Under the City of Cockburn Town Planning Scheme No. 3 (TPS3) the western half of the subject land is zoned "Development" and is included in "Development Area 26" and "Development Contribution Area 9". The eastern half, being that portion of the property affected by the Western Power easement is zoned "Special Use 23".

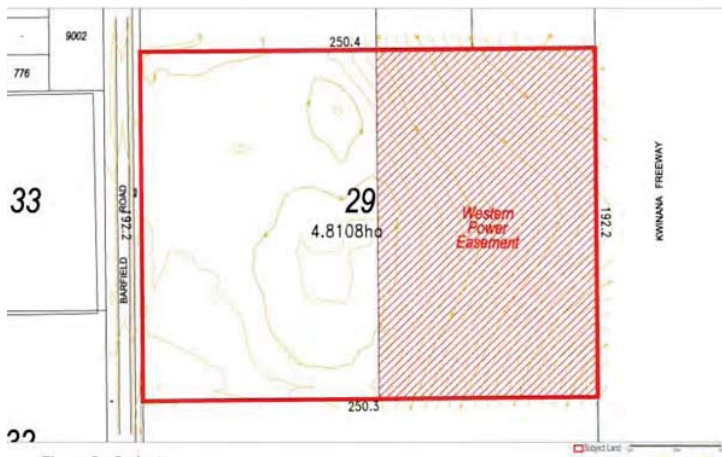


Figure 2: Cadastral Plan

#### 1.2.3 Legal Description and Ownership

The subject land comprises 137 Barfield Road, Hammond Park, being Lot 29 on Diagram 69857, Certificate of Title Volume 1754, Folio 136.

As noted portion of the site is subject to an easement to the State Electricity Commission of Western Australia for the purposes of clearing the land subject to the easement and to maintain in, upon, along and across the land in a proper manner, towers, poles, wires and other necessary apparatus in connection with its transmission, distribution and telephones lines for the purpose of transmitting and distributing power by electricity.

The easement also provides Western Power the right to enter upon the land for the purpose of inspecting electrical equipment and making necessary repairs and alterations thereto. Under the conditions of the easement the landowner may not increase the height of the natural

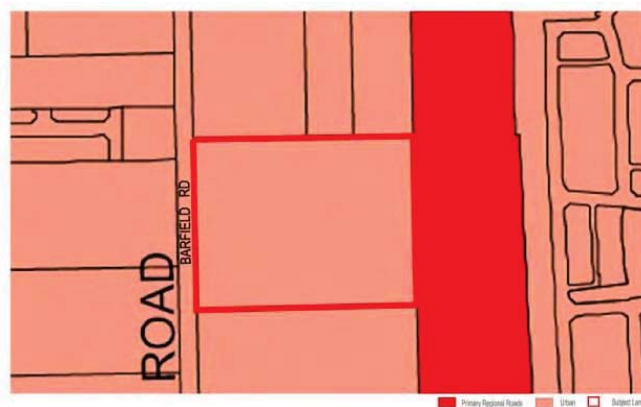


Figure 3: Metropolitan Region Scheme

Clause 6.2 of the TPS No.3 sets out the statutory requirements for the preparation and adoption of a Structure Plan within the 'Development' zone. This Structure Plan has been prepared in accordance with the requirements of clause 6.2.

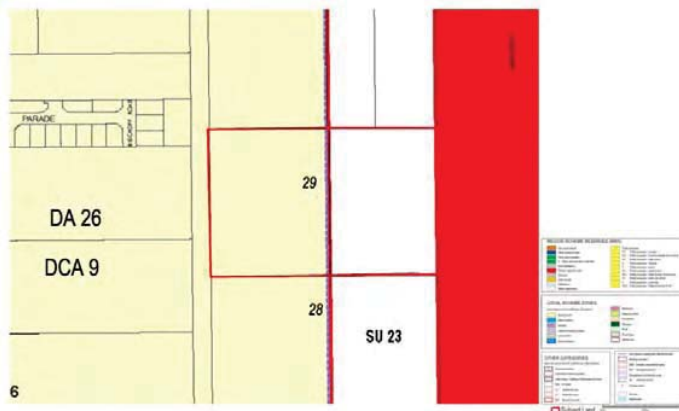


Figure 4: City of Cockburn TPS No. 3

### 1.3.2 Regional and Sub-Regional Structure Plans

The subject land, reflecting its 'Urban' zoning in the MRS, is identified for urban purposes in relevant regional strategic documentation including designation as 'Urban' within the draft South Metropolitan and Peel Sub-Regional Framework.

The subject site is located within the City of Cockburn Southern Suburbs District Structure Plan- Hammond Park where it is identified as medium density residential, with public open space indicated at its northern boundary.

### 1.3.3 Planning policies

The Structure Plan has been prepared within the context of the wider State and Local Planning Policy Framework including where relevant applicable State Planning Policy and Development Control Policies.

A number of items are particularly noted including SPP 3.1 Residential Design Codes, Liveable Neighbourhoods and Planning Bulletin 112/2016 R-MD Codes:

- State Planning Policy 3.1 – Residential Design Codes (WAPC 2015)

The State Planning Policy 3.1 – Residential Design Codes (R-Codes) control residential development throughout Western Australia. The R-Codes are the agreed mechanism to control density within residential zones, through the application of R-Code densities in local planning schemes.



Figure 5: Southern Suburbs District Structure Plan – Hammond Park

The R-Code density primarily controls the allowable average and minimum lot size, with built form performance standards and 'deemed-to-comply' examples, specific to the nominated density, described within Parts 5 & 6 of the R-Codes.

The Structure Plan map designates a proposed R-Code density of R30. Further discussion in regard to R-Codes density is provided in section 3.1 of this report.

- Liveable Neighbourhoods (WAPC 2009)

Liveable Neighbourhoods is the WAPC operational policy guiding the design of structure plans. The objective of Liveable Neighbourhoods is the delivery of a high quality residential environment.

The Structure Plan responds to the requirements of Liveable Neighbourhoods

by promoting an interconnected, safe and walkable neighbourhood, providing a variety of lot sizes and housing types, responding to the diverse housing needs of the community, maximising land efficiency and securing a residential density of 21 dwellings per gross hectare and approximately 29 dwellings per residential site hectare, exceeding the upper threshold of the Liveable Neighbourhoods target based on the development zoned portion of the Structure Plan area.

Further discussion regarding density targets is provided in section 3.1 of this report.

- State Planning Policy 3.7 Planning in Bushfire Prone Areas

SPP 3.7 addresses the requirements to be met where development is proposed in a bushfire prone area. This requires a detailed bushfire risk assessment to be undertaken and preparation of a Bushfire Management Plan outlining how the identified bushfire risk can be managed.

A Bushfire Management Plan for the proposed Structure Plan is attached in Appendix 5 and bushfire implications for the Structure Plan area discussed in section 2.4 of this report.

- State Planning policy 5.4 Road and Rail Transport Noise and Freight

SPP 5.4 addresses transport noise from within major transport corridors, such as the Kwinana Freeway, and outlines criteria to be used to assess noise impacts. It also outlines possible noise management and mitigation measures available to meet the noise level criteria identified in the policy.

A specific acoustic report has been prepared addressing the requirements of SPP 5.4 and is included as Appendix 6. The implications of SPP 5.4 for the proposed Structure Plan is discussed in section 3.5 following.

- Planning Bulletin 112/2016 – R-MD Codes (WAPC 2016).

Planning Bulletin 112/2016 – Medium Density Single House Development Standards – Structure Plan Areas (R-MD Codes) outlines the WAPC position in relation to a consistent set of R-Code variations within new Structure Plan areas.

The basis for implementation of the R-MD provisions is provided for within the City of Cockburn under the Cities Local Planning Policy 1.16 “Single House Standards for Medium Density Housing in the Development Zone”.

- Local Planning Policies

At a Local Authority level, in addition to relevant planning procedure outlined by the City of Cockburn to guide preparation and assessment of local structure plans, applicable local policies include:

- LPP 1.12: Noise Attenuation
- LPP 1.13: Bushfire Prone Areas
- LPP 1.16: Single House Standards for Medium Density Housing in the Development Zone
- LPP 5.1: Public Open Space
- LPP 5.4: Location of High Voltage Overhead Power Lines
- LPP 5.5: Local Development Plans
- LPP 5.15: Access Street- Road Reserve and Pavement Standards

The Structure Plan has been prepared with relevant requirements of these policies taken into consideration as/where appropriate.

#### **1.3.4 Other approvals and decisions**

At the date of lodgement of the Structure Plan documentation no other approvals or decisions had been identified which were considered relevant to the proposed Structure Plan.

#### **1.3.5 Pre lodgement consultation**

Pre lodgement consultation has been undertaken with a range of relevant stakeholders including officers from the City of Cockburn, Western Power, Department of Water, Federal and State Environmental Agencies, servicing agencies, and adjoining landowners.

## 2.0 Site Conditions and Constraints

### 2.1 Biodiversity and Natural Area Assets

Biodiversity and natural area assets are detailed in the Environmental Assessment Report included as Appendix 2 in Part 3 Technical Appendices. The findings of this report are summarised following:

resulted in extensive weed infestation. As a consequence the remnant banksia woodland is in an altered state and approximately half of the subject site (2.464ha) is identified as being either cleared or degraded to completely degraded with, importantly, the majority of that within the 'Development' zoned portion.



Figure 6: Subject Land - Aerial

#### 2.1.1 Flora and Vegetation

A spring survey was completed of the subject land. Vegetation conditions ranged from very good to completely degraded. While 2.3ha considered in good or better condition was identified within the subject land, approximately half of the actual 'Development' zoned portion has been cleared which along with firebreaks, proximity to Barfield Road and access to the Western Power infrastructure, has

No flora of conservation significance were identified either as Threatened Species under the EPBC Act or gazetted as Threatened Declared Rare Flora. Likewise no Priority Flora was identified. While Banksia Woodlands was listed as a sub-community under the EPBC Act in September 2016, remnant vegetation of sufficiently good condition remaining within the subject land is too small in area

and too disturbed to be suitable under the relevant federal criteria for national protection under the EPBC Act.

In summary, no vegetation of sufficient quantity or quality was identified within the subject land which would qualify for preservation.

### 2.1.2 Fauna

No conservation significant species were identified. While Banksia Woodlands are foraging habitat for the Black Cockatoos, the field survey could detect no evidence of Black Cockatoo foraging occurring at the subject land. No trees of sufficient width that could provide breeding habitat for the black cockatoos exist within the subject land.

As such, the presence of any fauna species or habitat functions associated with a particular species that would preclude clearance or development of the subject land has not been identified.

## 2.2 Landform and soils

The characteristics of the subject site are shown in Figure 6 site analysis. The highest part of the subject land is at the north eastern and south eastern corners at 33m and 34m respectively. The lowest part of the subject land is 23m at the south west corner.

The main drop in topography occurs in the eastern 'Special Use' zoned portion dropping from 34m to 24m. The 'Development' zoned portion is comparatively flat ranging from 23m-24m.

Soils are derived from the Bassendean Sand (Basal conglomerate overlain by dune quartz sand with heavy mineral concentrations) geological unit. Four soil sub systems were identified in the subject land comprising Bassendean B1, B2, B3 and

B4 Phase sub systems. None of these soil systems present any impediment to development of the subject land.

## 2.3 Groundwater and surface water

The water characteristics of the subject land, both surface and groundwater, are detailed in the Local Water Management Strategy (LWMS) attached as Appendix I.

There are no wetlands or any hydrological features within the subject land and the main hydrological process is rainfall infiltration through the sandy soils. The water table is shallow with historic Maximum groundwater levels (MGL's) ranging across the site from 22.8m to 23.4m AHD.

## 2.4 Bushfire hazard

A detailed Bushfire hazard assessment and Fire Management Plan has been prepared and is attached as technical appendix number 5.

A Bushfire Attack Level (BAL) contour assessment indicates that all proposed development can achieve a BAL 29 rating or lower based upon implementation of a 20m Asset Protection Zone (APZ). While portions of some future lots may fall within the 20m APZ the affected portions are within building setback areas and therefore future built form can meet BAL 29.

Clause 5.1 of the Implementation section requires preparation of a Local Development Plan (LDP) for any lots which might be affected by additional requirements for bushfire mitigation purposes.

The 20m APZ is provided via the Barfield Road reserve on the west, a proposed road reservation on the east and by

proposed residential development on abutting lot 28 to the south.

Detailed liaison has been undertaken with the owner of lot 28 who is currently progressing approval for clearing of the 20m APZ within his property. He is also progressing planning for development of his land which will identify future lots backing onto the boundary between lots 28 and 29.

In the event that matters have not progressed sufficiently within lot 28 to establish the required 20m APZ along the southern boundary of the development zoned portion of lot 29, development can be staged so that development and/or release of the lots directly abutting the boundaries of the 29 will be deferred until the 20m APZ is in place.

Alternatively, dependent upon circumstances at the time, the required 20m APZ could be secured internally within Lot 29 by running a 15m road

reserve along and abutting the southern boundary and implementing a minimum 5m setback within lots fronting that road.

The Structure Plan identifies the affected lots and makes development upon them contingent to provision of the 20m APZ.

## 2.5 Heritage

There are no sites, or items of European heritage identified on the subject land. A search of the Department of Indigenous Affairs Register of Aboriginal Sites does not identify the subject area as containing or within an aboriginal heritage site.

## 2.6 Context and other land use constraints and opportunities

The locational context of the subject land is illustrated in Figure 7. It is at the eastern edge of the wider Hammond Park development area which is progressively being developed. Subdivision approvals are in place for the abutting land to the north

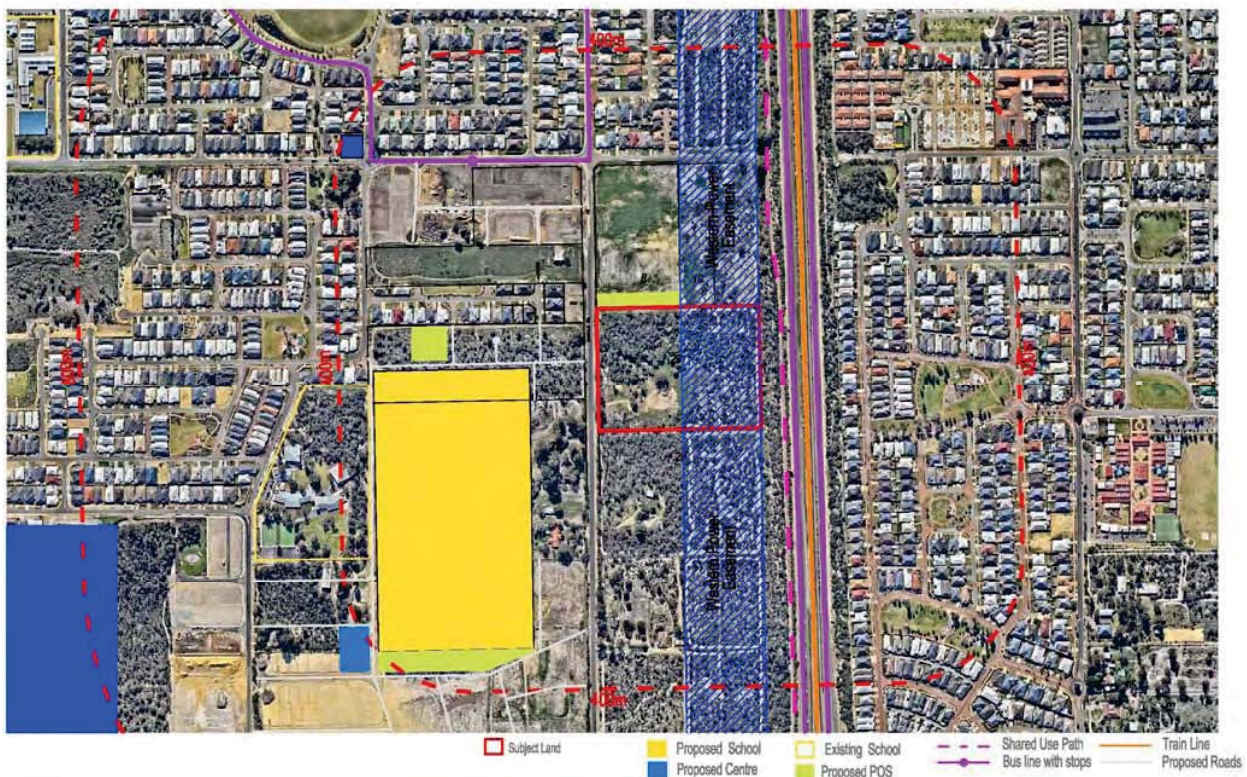


Figure 7: Site Context

and opposite the subject land to the west, while preparation of structure planning for the abutting land to the south has recently been initiated.

The Structure Plan area is located within comfortable walking distance (200m or less) of public transport and a future primary school, and within a 10 minute walk to a future neighbourhood centre within 800m to the west, The Kwinana Freeway along the eastern boundary will have potential noise implications.

The subject land is detailed in Figure 8: Site Analysis. It essentially comprises two components; the 'Development' zoned western half comprising a mix of cleared land and degraded remnant vegetation on essentially flat terrain, and, the 'Special Use' zoned eastern portion consisting of degraded vegetation on sloped terrain,

dominated by the Western Power infrastructure traversing the area north to south parallel to the Kwinana Freeway. The difference in terrain between the two components provide an opportunity to minimise the importation of fill by utilising the additional soil in the eastern part to meet fill requirements in the Development Zone area.

In addition, while the implication of the Western Power easement is that no residential development can occur in this part of the subject land, uses such as roads to service the development area can be sited within the easement/special use zone area. This provides more flexibility in design approaches as well as supports bushfire planning responses.

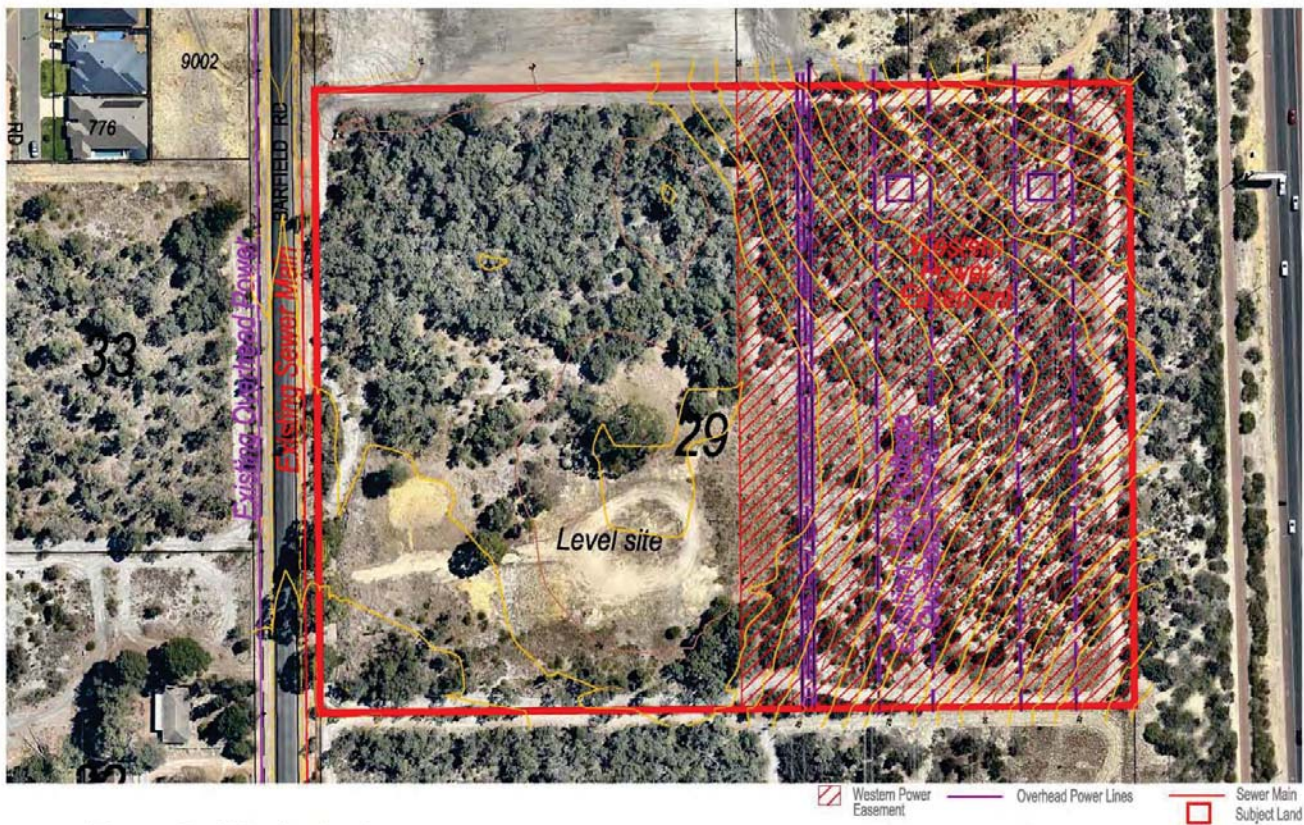


Figure 8: Site Analysis Plan



## 3.0 Proposed Structure Plan

The Structure Plan will facilitate the development of the western portion of the subject area for residential purposes. A residential estate designed around sustainability and affordability comprising a mix of both front and rear loaded lots ranging in size from 279m<sup>2</sup> to just over 400m<sup>2</sup> is envisaged.

Relevant components of the Structure Plan are discussed following and a development concept plan indicating the form of development arising from the proposed Structure Plan is shown in Figure 9.

### 3.1 Residential

The proposed Structure Plan is intended to enable implementation of the 'Development' zoned portion of the subject land for residential purposes, while protecting the Western Power infrastructure within the eastern section.

On this basis under the Structure Plan, the 'Development' zoned portion will accommodate residential and public open space land uses. The 'Special Use' zoned portion will retain the infrastructure use, road reservation and potential overflow drainage, but no residential development.

The requirement to achieve a minimum density of 15 dwellings per gross hectare of residential land as outlined in Directions 2031 and Beyond is acknowledged. The target of 26 dwellings per residential site hectare as per the "Perth and Peel @3.5 million" strategy released by the WAPC in 2015 is also noted.

Based upon the "Development" zoned portion of the subject land, at an area of

2.4ha x 15 dwellings per gross hectare the target dwelling yield is 36 dwellings. The residential site hectare requirement is 1.8ha x 26 dwellings generating a target dwelling yield of 47 dwellings.

The Structure Plan proposes an overall dwelling yield of 53 dwellings. This exceeds the gross hectare target by 17 dwellings and the residential site hectare target by 6 dwellings. The Structure plan therefore comfortably delivers on dwelling targets under all WAPC target criteria.

The proposed R30 density requirements of a minimum lot size of 260m<sup>2</sup> and average lot size of 300m<sup>2</sup> are also comfortably achieved with the Structure Plan promoting a minimum size of 279m<sup>2</sup> with an overall average of 338m<sup>2</sup>.

Based on this yield a potential population of 132 persons (2.5 persons per dwelling) has been identified.

The proposed road layout facilitates creation of lots oriented north to south maximising best solar orientation principles. Both rear and front loaded lot product is envisaged with 26 rear loaded lots located in the northern part of the 'Development' zoned portion of the Structure Plan area. The northernmost row of these lots directly front and abut the proposed POS and are serviced by a laneway orientated east to west. A further row of rear loaded lots is located abutting the laneway to the south.

The balance of the 'Development' zoned area comprises front loaded lots ranging in size from 378m<sup>2</sup> to 404m<sup>2</sup>. These are accessed by two further east to west

orientated internal roads which in turn are connected via a north-south orientated road located within the eastern edge of the 'Special Use'/easement area. As part of this provision is made to accommodate visitor parking for the rear loaded lots and pedestrian access to the POS.

As noted, the timing for subdivision and/or release of the southernmost row of lots might be impacted by the timing of clearing of adjoining land to the south. If for some reason clearance of this adjoining land proves problematical the southern part of the Structure Plan area can be modified to put a road along the boundary as an alternative.

### 3.2 Public Open Space

A provision of 2,492m<sup>2</sup> based on the 10% requirement is identified as needing to be provided in Public Open Space. A total of 2,492m<sup>2</sup> of Public Open Space is provided meeting the requirement.

POS Provision is summarised in the following table:

POS REQUIRED	
Structure Plan Area	4.810Ha
Net Site Area (Development Zone)	2.492Ha
Gross Subdivisible Area	2.492Ha
POS @ 10%	2492sqm
POS PROVIDED	
POS Contribution may comprise:	
80% Unrestricted POS	1994sqm
20% Restricted POS	498sqm
Unrestricted POS	2492sqm
Restricted POS	0sqm

Table 2: POS Provision

The POS is proposed along the northern boundary of Lot 29 within that portion zoned for development purposes. It comprises an area 19.35m in depth and 129.65m in width equating to the required 10% POS provision of 2,492m<sup>2</sup>.

It has been located to abut POS to be provided as part of development of the adjoining Lot 8 to the north, resulting in ultimately a combined POS area of approximately 5,500m<sup>2</sup>.

20% of the POS contribution area may be classified as Restricted POS, equating to 498m<sup>2</sup>, however, none of the POS is proposed to be utilised for drainage purposes as per the attached Local Water Management Strategy.

### 3.3 Movement Network

A detailed traffic assessment report has been prepared for the proposed Structure Plan by KCTT Traffic Engineering Consultants. This has examined traffic conditions both existing and future within the locality and considered the impact of the proposed Structure Plan within this context.

These investigations have confirmed that the traffic generated as a consequence of development based on the Structure Plan would not have significant impact upon the wider movement network and would not necessitate any modifications to that wider network.

The KCTT investigations have also confirmed that the proposed layout, reservation widths and design complies with relevant Liveable Neighbourhood's road classifications and requirements.

Pedestrian footpaths will be provided to a minimum on one side of each proposed street and along the eastern side of Barfield Road, to facilitate connectivity with pedestrian and cyclist crossing facilities from the structure plan area across Barfield Road.

### 3.4 Infrastructure and Servicing

An infrastructure servicing report has also been prepared by consulting engineers KCTT and is included as Appendix 3. This confirms that the subject land can be fully serviced with all relevant reticulated services and infrastructure including power, gas, wastewater, water and telecommunications.

Drainage management will be undertaken in accordance with 'Better Urban Water Management' principles and is addressed in detail in the Local Water Management Strategy.

### 3.5 Noise Mitigation

The Acoustic Report included as Appendix 6 considers noise mitigation requirements and responses arising from proximity of the Kwinana Freeway in detail.

In summary this confirms that acoustic impacts will affect future residences given the proximity of the Kwinana Freeway and that some mitigation measures may be required.

A range of approaches are available in this regard which could include construction of a suitable noise wall, built form responses or perhaps a combination of both.

### 3.6 Interface with Surrounds

As noted above the Structure Plan has been designed to coordinate with adjoining and nearby use and development. POS provision has been located to abut adjoining POS to generate ultimately a neighbourhood level park while the proponents have liaised extensively with the adjoining landowner to the south to ensure the Structure Plan layout coordinates with structure planning

currently being undertaken by the owner of that Lot 28.

Approved development to the west and the form of development proposed under this Structure Plan as identified within the KCTT Traffic Impact Assessment Report (Appendix 4) will likely result in the creation of a four way intersection at Barfield Road.

For the reasons outlined within Section 2.19 of the Traffic Impact Assessment Report such an eventual intersection on Barfield Road is not expected to have high traffic volumes and is located in a low speed environment. On this basis the proposed intersection will not raise any safety concerns and should therefore be able to be priority controlled.

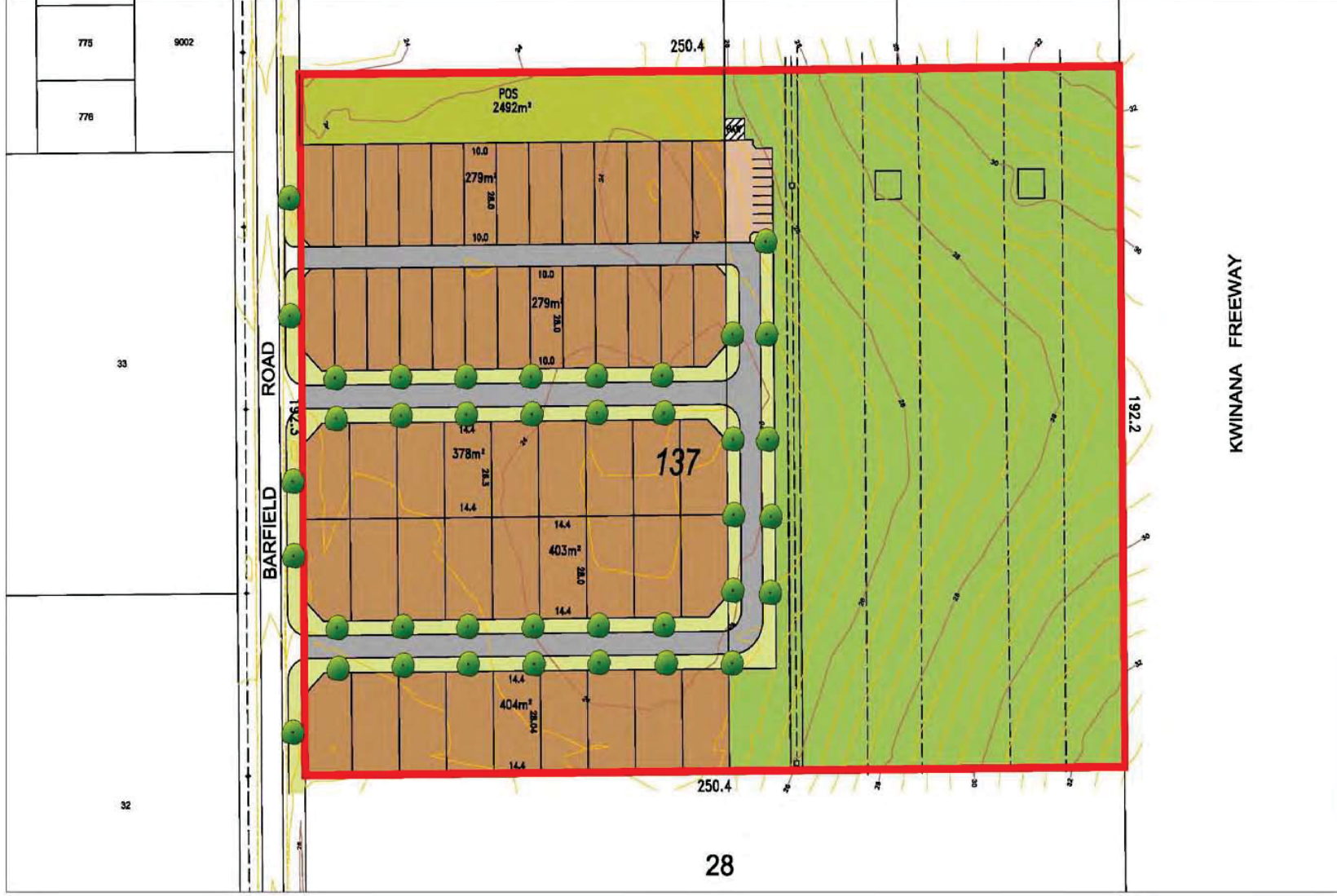


Figure 9: Development Concept Plan