



Hammond Park West Structure Plan

Lots 71, 74–76 and 303–305
Wattleup Road, Hammond Park

Prepared for Qube Property Group
April 2021

Document control

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Prepared for: Qube Property Group

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Version	Comment	Author	Approved By	Date Issued
A	Lodged with City of Cockburn	K. Vizzutti	T. Trefry	22/06/16
B	Revised following City review	K. Vizzutti	T. Trefry	22/11/16
C	Final Following WAPC review	K. Vizzutti	T. Trefry	08/08/17
D	March 2019 Basic Amendment	K. Vizzutti	D. White	29/03/19
E	August 2019 Schedule of Modifications	K. Vizzutti	T. Trefry	7/08/19
F	December 2020 Standard Amendment	K. Vizzutti	T. Trefry	23/12/20
G	Revised following City review	K. Vizzutti	D. White	23/02/21
H	Revised following City letter 21/04/21	D. White	D. White	27/04/21
I	Amendment 2 Final Lodgement	T. Parker	D. White	08/09/21

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Endorsement Page

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

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

..... 28 September 2017

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 16
of the *Planning and Development Act 2005* for that purpose, in the presence of:

.....


Witness

..... 28 September 2017

Date

..... 28 September 2027

Date of Expiry

Amendments & Density Plans

Table of Amendments

Amendment no.	Summary of amendment	Amendment Type	Date endorsed by WAPC
1	Amend Part 1 by: <ol style="list-style-type: none">1. Removing a 15m Road Reserve within Lot 74;2. Amending the indicative waste water pump station location shown on Plan 1;3. Amending the amount and distribution of Public Open Space shown on Plan 1;4. Inserting textual provisions for the implementation of the City of Cockburn Local Planning Policy 1.16; and5. Rezoning of land from 'Residential' (R-Code R20, R40 and R60) to 'Residential' (R-Code Range R30-R40) with locational criteria.	Standard	16 August 2019
2.	Amend Part 1 by: <ol style="list-style-type: none">1. Amending Structure Plan area shown on Plan 1 to include Lot 76 inclusive of Road Reserves, Public Open Space and Residential land.2. Minor amendments to road reserve and lot layout shown on Plan 1; and Amend Part 2 by: <ol style="list-style-type: none">1. Inserting explanatory information pertaining to additional Lot 76 and amendments to local planning framework subsequent to endorsement.	Standard	28 September 2022

Table of Density Plans

Density Plan no.	Area of density plan application	Date endorsed by WAPC
1		
2		

Executive Summary

This Structure Plan has been prepared to guide the subdivision and development of Lots 71, 74-76 and 303-305 Wattleup Road, Hammond Park (the subject site). Implementation of a Structure Plan (SP) over the site will assist in the delivery of strategic planning objectives set by the State Government and the City of Cockburn in relation to housing supply, affordability and urban development.

The SP provides an overarching planning framework which will ensure that future urban development is undertaken in a coordinated and systematic manner, as required by the site's 'Development' zoning under the City of Cockburn Town Planning Scheme No.3 (TPS3). It is aligned with the objectives of the Southern Suburbs District Structure Plan (Stage 3), which provides a high level development framework for the broader locality.

The SP provides for a range of residential densities and lot typologies, contributing towards the availability of diverse and affordable housing product within the South-West Sub-Region. It also includes an interconnected and legible movement network, generous provision of public open space within a number of strategically located reserves, and a primary school site. It is anticipated that the Structure Plan area will accommodate approximately 780 people in 260 dwellings on 260 lots at a density of 26 dwellings per residential site hectare.

The following Summary Table outlines the key planning outcomes of the Structure Plan.

Item	Data	Section Reference
Total area covered by the Structure Plan	18.83 ha	1.3.2
Area of each land use proposed:		
Residential	9.97 ha	3.1, 3.2
Public Open Space	2.53 ha	
Estimated lot yield	260 lots	3.3
Estimated number of dwellings	260 dwellings	3.3
Estimated residential site density	26.1 dwellings (per residential site hectare)	3.3
Estimated population	780 people	3.3
Estimated area and number:		3.0
Local parks	12.4% (2.41 ha)	
Education Facilities (Primary School Site)	1.238 ha within SP area	3.6

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Appendix	Document	Consultant	Summary of document modifications
A	Local Water Management Plan	Emerge	<p>March 2019: Addendum added detailing revised LWMS strategy and drainage network</p> <p>December 2020: Addendum added confirming inclusion of Lot 76 is consistent with established modelling</p>
B	Engineering Report	Cossill & Webley	<p>March 2019: Addendum added detailing revised earthworks concept</p> <p>December 2020: Addendum added confirming inclusion of Lot 76 is consistent with agreed engineering and earthworks strategy</p>
C	Traffic and Transport Assessment	Transcore, Cardno	<p>August 2019: Addendum added confirming conclusions apply to amended plan.</p> <p>December 2020: Addendum added confirming traffic impact of Lot 76 is within acceptable parameters</p>
D	Bushfire Management Plan	Emerge and Safety Consulting	Bushfire December 2020: Addendum added modifying BMP to incorporate Lot 76
E	Environmental Assessment and Management Strategy	Emerge	December 2020: Addendum added to incorporate assessment of Lot 76



Part 1 Implementation

Part 1 Implementation

1.0 Structure Plan Area

This Structure Plan applies to the land contained within the inner edge of the line denoting the structure plan boundary on the Structure Plan Map (Plan 1).

2.0 Operation

This structure plan shall come into operation on the date it is approved by the Western Australian Planning Commission.

3.0 Staging

Staging of development will rely on key development parameters, primarily relating to:

1. The extension of available services from surrounding development.
2. The phasing and timing of development on land immediately abutting the eastern boundary of the SP area.
3. The timing for the clearing of vegetation from adjacent lots and individual lots within the area relative to the staging of development will impact on the specified BAL ratings for future lots.

4.0 Subdivision and Development Requirements

4.1 Land Use Zones and Reserves

Land Use permissibility within the Structure Plan area shall be in accordance with the Structure Plan Map (Plan 1) and corresponding Zones and Reserves under the City of Cockburn Town Planning Scheme No.3.

4.2 Notifications of Title

In respect of an application to subdivide land within the structure plan area, the City of Cockburn may request the WAPC require a notification, pursuant to section 165 of the Planning and Development Act 2005, be placed on the certificate (s) of title of:

- a. all lots:

“This lot is in close proximity to known mosquito breeding areas. The predominant mosquito species is known to carry viruses and other diseases.”

- b. all lots located in an area declared bushfire prone:

“This land is within a bushfire prone area as designated by an Order made by the Fire and Emergency Services Commissioner and is subject to a bushfire management plan. Additional planning and building requirements may apply.”

- c. all lots located within 300 metres of an operating market garden:

“This lot is located within 300 metres of operating market garden/s and has the potential to be affected by odours, noise, spray drift and dust that are associated with the continued operation of a market garden.”

- d. all lots located within 500 metres of the Kwinana Industrial Area (including air quality) buffer, whether in whole or in part:

“This lot is located in close proximity to existing industrial development, freight routes and semi-rural activities and has the potential to be affected by transport noise, vibration and dust which may be associated with the ongoing operation of those nearby activities.”

- e. lots, where specifically recommended by the Department of Health:

“This lot is located in an area where ground water may contain concentrations of nitrate exceeding levels recommended by the Australian Drinking Water Guidelines. Where this occurs, groundwater should not be used for drinking water purposes.”

4.3 Public Open Space

The provision of a minimum of 10% public open space is to be provided in accordance with Liveable Neighbourhoods. Public open space is to be provided generally in accordance with Plan 1, with an updated public open space schedule to be provided at the time of subdivision for determination by the WAPC, upon the advice of the City of Cockburn.

4.4 Movement Network

Access shall be provided generally in accordance with Local Road Reserves shown on the Structure Plan Map.

4.5 Contaminated Sites

As Lot 71 was previously used as a market garden a Soil Contamination Assessment is required.

4.6 Wattleup Road

A full upgrade of Wattleup Road is required fronting the Structure Plan area. The location and type of any intersection treatment is subject to further discussions with the City of Cockburn as part of the subdivision approval process.

4.7 Market Gardens

The Structure Plan ensures an adequate separation distance from the market garden to the West in accordance with WAPC Statement of Planning Policy 2.5 Rural Planning. Prospective purchasers will be made aware of the market garden via a Notification on Title.

4.8 Acid Sulphate Soils

The majority of the Structure Plan area is classed as having no risk of Acid Sulphate Soils (ASS) within 3 metres or deeper from the natural surface, apart from lots 303 and 304. However, given the depth to groundwater, it is deemed unlikely that any disturbance to ASS will occur during the civil construction works.

Part 1 Implementation

4.9 Waste Water Pump Station

Habitable buildings may not encroach into the Waste Water Pump Station buffer area delineated on the Structure Plan Map.

The design of the Waste Water Pump Station and surrounds shall generally accord with the Southern Public Open Space Landscape Concept (WAT-01-03) at Appendix A to the Structure Plan.

4.10 Earthworks

Earthworks are to be carried out generally in accordance with the agreed Preliminary Earthworks Plan (6137-00-SK02) at Appendix B to the Structure Plan. Substantial variations to this plan require further agreement between the City of Cockburn, impacted landowners, the Department of Education and Water Corporation.

4.11 Residential Design Code Variations

The City of Cockburn 'Single House Standards for Medium Density Housing in the Development Zone' Local Planning Policy 1.16 sets out acceptable variations to the provisions of the R-Codes for lots coded R25-R60. Except in a situation where an approved LDP imposing R-Code variations applies, the standards set out in Local Planning Policy 1.16 apply to this Structure Plan

4.12 Harry waring Marsupial Reserve

Where an application seeks approval to subdivide land abutting the Harry Waring Marsupial Reserve, the assessment and determination of that application should consider whether it is necessary to require construction of a fence restricting feral animal access to the reserve (Bush Forever Site 392), on the boundary of the reserve, to protect native flora and fauna.

In considering the matter, advice should be sought from the Department of Biodiversity, Conservation and Attractions.

5.0 Residential Density

Residential densities applicable to the Structure Plan Area shall be those densities shown on the Structure Plan Map.

5.1 Density

1. Plan 1 defines the broad residential density ranges that apply to specific areas within the Structure Plan. Lot specific residential densities, within the defined residential density ranges, are to be subsequently assigned in accordance with a Residential Density Code Plan approved by the WAPC.
2. A Residential Density Code Plan is to be submitted at the time of subdivision to the WAPC and shall indicate the Residential Density Coding applicable to each lot within the subdivision and shall be consistent with the Structure Plan, and the Residential Density Ranges identified on Plan 1 and locational criteria contained in Clause 5.2
3. The Residential Density Code Plan is to include a summary of the proposed dwelling yield of the subdivision.
4. Approval of the Residential Density Code Plan shall be undertaken at the time of determination of the subdivision application by the WAPC. The approved Residential Density Code Plan shall then form part of the Structure Plan and shall be used for the determination of future development applications. Variations to the Residential Density Code Plan will require further approval of the WAPC.
5. Residential Density Code Plans are not required if the WAPC considers that the subdivision is for one or more of the following:
 - a. The amalgamation of lots;
 - b. The purposes of facilitating the provision of access, services or infrastructure; or
 - c. Land which by virtue of its zoning or reservation under the Structure Plan cannot be developed for residential purposes.

5.2 Locational Criteria

The allocation of residential densities shall be in accordance with the following criteria:

1. A base density code of R30 shall apply to all residential lots except where identified in Clause 2 below.
2. A density code of R40 may apply to lots which meet one or more of the following criteria:
 - a. Generally surrounding areas of high amenity, such as open space;
 - b. Located so as to maximise access to and use of services and facilities such as public open space, activity nodes and public transport routes; and
 - c. Located to enhance passive surveillance of public spaces.

Part 1 Implementation

6.0 Local Development Plans

Local Development Plans (LDP) are required to be prepared and implemented pursuant to Part 6 of Schedule 2 of the Planning and Development (Local Planning Schemes) Regulations 2015 for lots comprising one or more of the following site attributes:

- a. Lots with an area of 260 square metres or less;
- b. Lots with an interface or outlook toward Public Open Space;
- c. Lots that obtain access from a laneway or right-of-way;
- d. Lots that propose grouped or multiple dwelling development

7.0 Other Requirements

7.1 Developer Contributions

The Structure Plan area is subject to the requirements of Development Contribution Area 10 and Development Contribution Area 13 (Community Infrastructure), as detailed in Schedule 12 of the City of Cockburn Town Planning Scheme No. 3.

7.2 Public Purposes (Primary School)

As the structure plan identifies part of a primary school site, the whole of which spans three separate landholdings which are subjected to two separate structure plans, the following conditions should be imposed on any future subdivision approvals that may be granted:

(S2) The land denoted as proposed primary school site on the approved plan of subdivision is to be set aside as a separate lot, pending the acquisition of the land by the Department of Education.

(S3) The landowner/applicant making a pro-rata contribution towards the cost of the acquisition of the primary school site identified in the subdivision locality.

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Part 2 Explanatory

1.0 Planning Background

1.1 Introduction and purpose

This Structure Plan (SP) (Amendment 2, February 2021) has been prepared by Hatch RobertsDay on behalf of Qube Property Group. The purpose of the SP is to facilitate the subdivision and development of the subject site for residential use, in line with the Southern Suburbs District Structure Plan Stage 3 (SSDSP3). The SP is prepared in accordance with the requirements and provisions of the Planning and Development (Local Planning Schemes) Regulations 2015 and the Western Australian Planning Commission's Structure Plan Framework, with due consideration given to Clause 6.2 of City of Cockburn Town Planning Scheme No. 3.

The SP proposes the creation of approximately 260 residential lots, with a density range of R30- R40. The SP design provides a diverse range of residential lot sizes and strategically located public open spaces, set within an interconnected road network that integrates the subject site with the surrounding locality. These design outcomes are informed by a range of technical reports and documentation prepared by a project team consisting of the following consultants:

- Hatch RobertsDay - Town Planning and Design;
- Emerge - Water Management and Environmental Assessment
- Cossill & Webley - Engineering;
- Transcore, Cardno - Traffic and Transport;
- Bushfire Safety Consulting, Emerge - Bushfire Management

1.2 Background

Lots 71, 74-76 and 303-305 comprise part of a larger Qube landholding on which development is planned to be undertaken. This includes adjoining Lot 107 as well as Lots 1, 810 and 11 Wattleup Road, Hammond Park, which are proximate to the SP area and for which an endorsed Structure Plan is in place.

Subdivision and development in Hammond Park, one of the last remaining large greenfield areas within the City of Cockburn, has been substantially progressed in recent years. To date, development in the locality has been undertaken in accordance with the Southern Suburbs District Structure Plan Stage 3 (SSDSP3), originally adopted in 2005. The SSDSP3 shows the broad land use framework for the locality, including major road network and neighbourhood structure, and forms the basis of co-ordinating and considering Structure Plans.

Figure 1: Location Plan

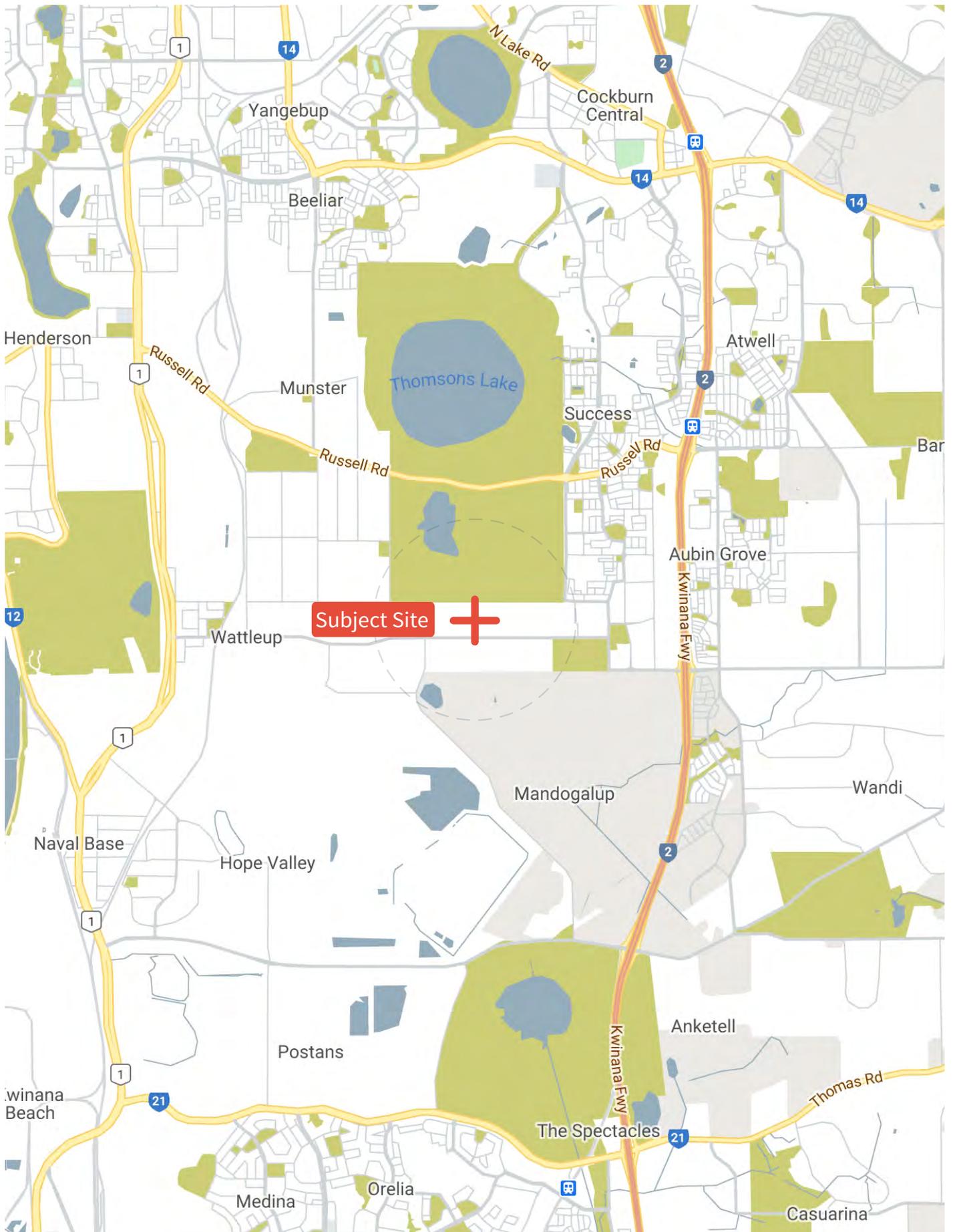
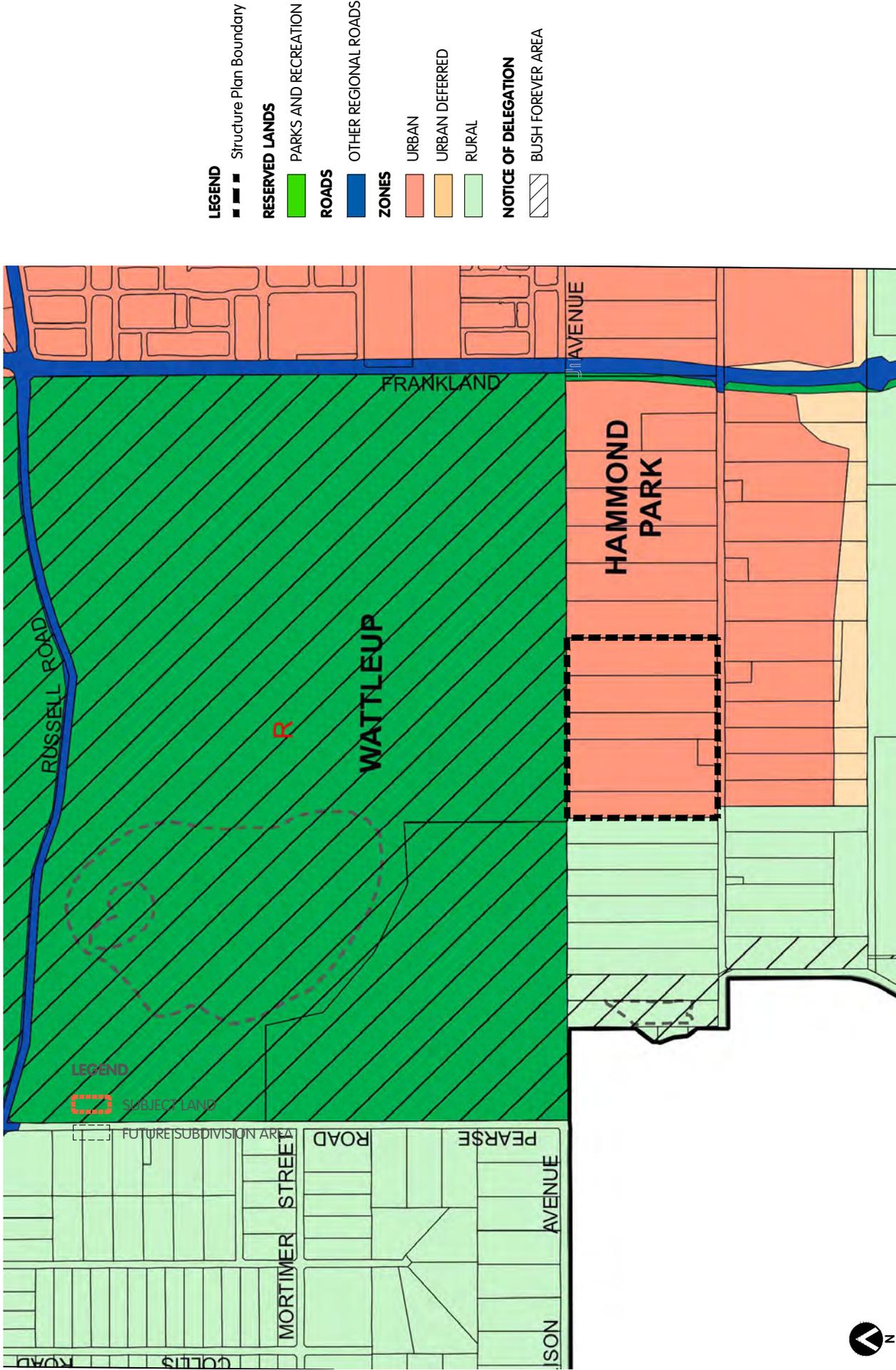


Figure 2: Context Plan



- LEGEND**
- Structure Plan Boundary
 - RESERVED LANDS**
 - PARKS AND RECREATION
 - ROADS**
 - OTHER REGIONAL ROADS
 - ZONES**
 - URBAN
 - URBAN DEFERRED
 - RURAL
 - NOTICE OF DELEGATION**
 - BUSH FOREVER AREA



HATCH | **RobertsDay** **DRAFT**

QUBE

CADASTRAL INFORMATION
 SOURCE: LANDGATE
 YYMMDD: 201125
 DWG REF: 201125-cad.DWG
 PROJECTION: PCG94

AERIAL PHOTOGRAPHY
 SOURCE: NEARMAP
 YYMMDD: 201119

MRS PLAN
Hammond West Structure Plan
 City of Cockburn

JOB CODE: **QUB HAMC** REV. **A**
 DRAW NO. **RD1 020**
 REV. **A**

SCALE: 1:3000

0 30 60 90 120 150 metres

REV DESCRIPTION: R BASE QUB HAMC RD1 003R 202111 SB KVV
 YYMMDD DRAWN APPRD

Figure 3: Site Plan

LEGEND
 - - - Structure Plan Boundary



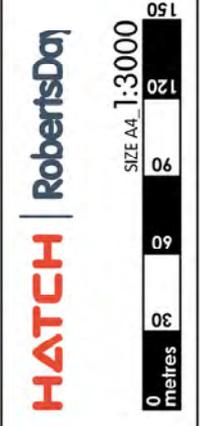
SITE PLAN
Hammond West Structure Plan
 City of Cockburn

JOB CODE **QUB HAMC** DRAW NO. **RD1 019** REV. **S**

HATCH | RobertsDay

UVAUT

S. MODIFY LOT & ROAD WIDTH 201218
 REV DESCRIPTION YMMDD TT KV
 DRAWN APPRD



CADASTRAL INFORMATION
 SOURCE: LANDGATE
 YMMDD: 201125
 DWG REF: 201125-cad.DWG
 PROJECTION: PCG94

AERIAL PHOTOGRAPHY
 SOURCE: NEARMAP
 YMMDD: 201119

QUBE

DISCLAIMER: ISSUED FOR DESIGN INTENT ONLY. ALL AREAS AND DIMENSIONS ARE SUBJECT TO DETAIL DESIGN AND SURVEY

1.3 Land description

1.3.1 Location

The SP area is situated within the locality of Hammond Park, which is located approximately 25 kilometres south of central Perth within the City of Cockburn. The SP area is bounded by Harry Waring Marsupial Reserve to the north, rural properties to the west, rural properties zoned for urban development to the east, and Wattleup Road to the south.

1.3.2 Area and Land Use

The Structure Plan area has a total area of 18.83 hectares and comprises remnant vegetation, a number of dwellings, outbuildings and cleared areas. A large portion of the site has been historically cleared for market gardening and other rural uses and as a result only Lots 74 and 76 contain remnant vegetation.

1.3.3 Legal Description and Ownership

The legal description of the subject land is provided in Table 1. The location of these lots indicated in Figure 1.

Table 1: Legal Description and Ownership

Lot No.	Street Address	Ownership	Volume & Folio (CT)	P/D No.	Area (ha)
71	346 Wattleup Road, Hammond Park	Qube Wattleup Development Pty Ltd	218/31A	Plan 8190	2.833 ha
305	Lot 354 Wattleup Road, Hammond Park	Qube Hammond West Pty Ltd	1901/599	Diagram 78809	5.292 ha
304	Lot 304 Wattleup Road, Hammond Park	Carl Malcolm Pacey Lisa Strika	1901/598	Diagram 78808	0.352 ha
303	Lot 303 Wattleup Road, Hammond Park	City of Cockburn	1901/597	Diagram 78808	0.023 ha
74	364 Wattleup Road, Hammond Park	Rockingham Park Pty Ltd	1476/888	Strata Plan 4989	2.833 ha
75	Lot 75 Wattleup Road, Hammond Park	Qube Wattleup Development Pty Ltd	13/357A	Plan 8384	4.047 ha
76	Lot 76 Wattleup Road, Hammond Park	Qube Hammond Link Pty Ltd	1905/827	Plan 8384	4.047 ha
					18.83 ha

1.4 Planning framework

The information contained in this section was correct at time of endorsement in August 2017, but may have been superseded as of Amendment 2 (December 2020)

1.4.1 Zoning and reservations

1.4.1.1 Metropolitan Region Scheme

The SP area is zoned 'Urban' under the Metropolitan Region Scheme (MRS). The SP area abuts land zoned 'Rural' to the east and land reserved 'Parks and Recreation – Restricted Public Access' to the north. Surrounding land to the east and south is generally zoned 'Urban'.

Refer *Figure 4 - Metropolitan Region Scheme Map*.

1.4.1.2 Town Planning Scheme No. 3

The SP area is zoned 'Development' (Development Area 10) under the provisions of TPS3. Surrounding land is generally zoned 'Development' to the east and south, 'Rural' to the west and 'Parks and Recreation – Restricted' to the north.

Clause 4.2.1 of TPS3 states that the objective of the Development Zone is to provide for future residential, industrial and commercial development in accordance with a comprehensive Structure Plan prepared under the Scheme. As is required for land zoned 'Development' in TPS3, a Structure Plan is to be prepared prior to Council providing comment on subdivision applications and determining development applications.

Clause 15 (a) (ii) of Schedule 2 – Deemed Provisions for local planning schemes of the Planning and Development (Local Planning Schemes) Regulations 2015 requires the preparation of a Structure Plan before any future subdivision or development is undertaken. The SP report has been prepared in accordance with the content and requirements outlined in clause 16 (1) of the Deemed provisions.

1.4.2 Regional and sub-regional structure plans

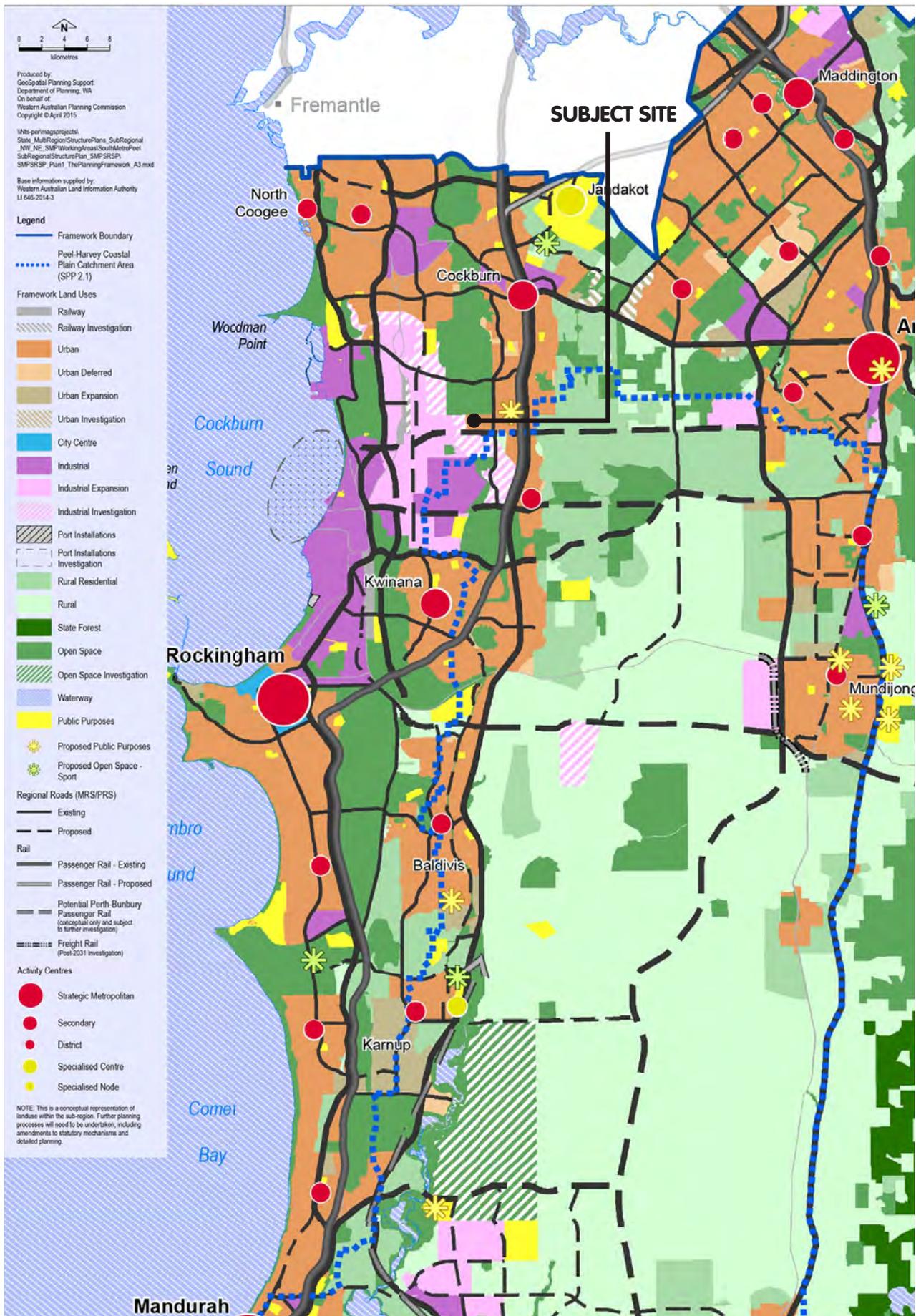
1.4.2.1 Southern Suburbs District Structure Plan Stage 3

The SP area is subject to the provisions of the Southern Suburbs District Structure Plan Stage 3 (SSDSP3) prepared by the City of Cockburn. The SSDSP3 was adopted by the City of Cockburn Council in September of 2012.

The SSDSP3 provides a framework for urban land uses that integrates with the broader Sub-Regional context. Under the provisions of the SSDSP3 medium density residential development and public open space network are identified for the SP area. The SP is consistent with the intent of the SSDSP3 in providing a high quality open space network and medium to high density residential development, commensurate with the subject site's location within an identified local centre 400m walkable catchment.

Refer *Figure 4 - Southern Suburbs District Structure Plan Stage 3 Map*.

Figure 6: Draft South Metropolitan Peel Sub-Regional Planning Framework



1.4.3 Planning Strategies

1.4.3.1 Directions 2031 and Draft Outer Metropolitan Perth and Peel Sub-Regional Strategy

Directions 2031 and Beyond (Directions 2031) is a high level spatial framework and strategic plan for metropolitan Perth and Peel regions, providing a framework for the detailed planning and delivery of housing, infrastructure and services necessary for a variety of growth scenarios.

Directions 2031 identifies growth scenarios for low, medium and high-density rates of infill and greenfield development. The 'Connected City' medium density scenario, identified as the preferred growth scenario, was modeled to determine the area of greenfield land required to provide for a city of 3.5 million people. Consistent with the outcomes of this approach, Directions 2031 sets a target of 15 dwellings per gross urban zoned hectare land in development areas.

Directions 2031 is supported by a series of draft Sub-Regional Strategies, which provide information about the levels of expected population growth in individual local government areas and identify development opportunities and prospects for increased density within Greenfield areas.

The SP area is included within the South-West Sub-Region identified within the Draft Outer Metropolitan Sub-Regional Strategy for Perth and Peel (Draft OMPPSS). The South-West Sub Region is expected to supply 119,760 dwellings under the adopted 'Connected City' scenario. 18,280 of these dwellings are expected to come from greenfield sites within the City of Cockburn.

The Draft OMPPSS identifies the Southern Suburbs District Structure Plan area as 'urban zoned undeveloped' with an expectation to provide '3000+' dwellings. In proposing approximately 237 dwellings the SP provides for approximately 7.9% of expected dwellings in this location.

Refer *Figure 5- Draft Outer Metropolitan Perth and Peel Sub-Regional Strategy Plan*.

1.4.3.2 Towards Perth and Peel @ 3.5 Million Draft Report and Draft South Metropolitan Peel Sub-Regional Planning Framework

Perth and Peel @ 3.5 million is a suite of draft strategic land use planning documents that provide a framework for accommodating 3.5 million people by 2050. The framework seeks to build upon the direction set by Directions 2031 in delivering a more liveable, prosperous, connected, sustainable and collaborative city.

To achieve this, the Draft Report establishes 7 overarching objectives: delivering consolidated built form to provide for more efficient use of urban land and infrastructure and preserve environmental attributes; promoting employment opportunities within strategic metropolitan centres to increase the number of people who live and work within the sub-regions; providing a wide range of community and social infrastructure to enhance community health and wellbeing; providing an efficient and effective regional movement network for people and freight that is integrated with land uses; ensuring the timely and efficient delivery of servicing to growth areas; preserving and enhancing the existing environmental and landscape values of the region, and; managing the availability and use of natural resources in balance with broader environmental outcomes.

The draft framework establishes the context for four draft sub-regional planning frameworks which build upon the principles of Directions 2031. Once finalised, these frameworks will become subregional structure plans that are intended to provide guidance for future urban development and supporting infrastructure across the Metropolitan area.

The SP area is included within the South Metropolitan Peel Sub-Regional Planning Framework Area (SMPSPF), which identifies the subject site as 'Urban'. The SMPSPF predicts a significant increase in population within the surrounding region, estimating that population will increase significantly from 523,406 in 2011 to 1.26 million in 2050, necessitating the provision of an additional 302,177 dwellings over this period. It is expected that the number of dwellings in the City of Cockburn will almost double, from 35,651 today to 65,770 by 2050. In proposed approximately 237 dwellings, the SP area will provide for 0.8% of these 30,119 additional dwellings.

Refer *Figure 6 - Draft South Metropolitan Peel Sub-Regional Planning Framework Plan*.

1.4.3.3 Liveable Neighbourhoods

Liveable Neighbourhoods, Edition 3 (LN 3) is a Western Australian Planning Commission (WAPC) operational policy used to guide the design and assessment of structure plans and subdivision and development applications in greenfield areas. Its aims include: promoting the design of walkable neighbourhoods; places that support community and a sense of place; mixed uses and active streets; accessible and sustainable parks; energy efficient design, and; housing diversity.

The key initiatives of LN 3 are covered under eight design elements. The implementation of these elements and the overall principles of LN 3 will be fundamental to ensuring that development of the structure plan area and the wider metropolitan region occurs in an appropriate manner. Application of the LN 3 principles is therefore relevant to all levels of planning for the site from the proposed SP through to detailed lot and building design.

By providing for a diverse range of housing within a connected and walkable neighbourhood, structured around a sequence of high quality public open spaces, the SP reflects these requirements. A comprehensive justification of the design in relation to the principles outlined in LN 3 is provided in Section 3.0.

1.4.3.4 City of Cockburn Local Planning Strategy

The SSDPS3 states that the District Structure Plan is consistent with the following core principles established in the City of Cockburn Local Planning Strategy (LPS):

- Promote higher density and mixed use developments to reduce car use and promote, walking and public transport;
- Ensure there is an appropriate housing and density mix to fulfill existing and potential demand from various groups;
- Promote medium and high density housing in and near regional and district centres and near public transport facilities;
- Provide a range of housing opportunities; and
- Promote mixed land uses in communities, especially through the location of housing in commercial centres.

The SP remains consistent with the SSDPS3 and is therefore consistent with the above principles.

1.4.4 Planning Policies and Statements

1.4.4.1 State Planning Policy No. 1: State Planning Framework

State Planning Policy No.1: State Planning Framework (SPP1) unites existing state and regional policies, strategies and statements under a central framework to provide a context for decision-making on land use planning and development matters in Western Australia. The SP is consistent with the primary aim of this overarching policy, which can be summarised as "...to provide for the sustainable use and development of land." The WAPC and local government will refer to the relevant planning instruments referred to under SPP1 for all planning decisions, including those concerning the SP and subsequent planning proposals presented for the site.

1.4.4.2 State Planning Policy 3: Urban Growth and Settlement

State Planning Policy 3: Urban Growth and Settlement (SPP3) seeks to promote sustainable and well-planned settlement patterns that have regard to community needs and are responsive to environmental conditions. The objectives and principles of Directions 2031 and Liveable Neighbourhoods are reflected in this Policy.

SPP3 recognises that a majority of greenfield development in the metropolitan region has been in the form of low-density suburban growth, to the detriment of land, water and raw material resource availability, infrastructure and servicing costs, transportation availability and efficiency and socio-economic equality.

To promote sustainable, equitable and liveable urban growth, SPP3 encourages a more consolidated urban form. The SP area is generally consistent with the high level principles of SPP3 in facilitating a high quality, cohesive and walkable community with a diversity of housing and lot types.

1.4.4.3 State Planning Policy 3.1 – Residential Design Codes

State Planning Policy 3.1 is the basis for the control of residential development throughout Western Australia, providing a framework for controlling development intensity within residential zones through the application of R-Code densities on local planning scheme maps. 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 stipulated density, outlined within Part 5 & 6 of the R-Codes.

1.4.4.4 State Planning Policy 2.8 – Bushland Policy for the Perth Metropolitan Region

State Planning Policy 2.8 provides a policy and implementation framework which ensures that bushland protection and management is appropriately addressed and integrated with broader land use planning and decision-making.

The subject site is immediately south of a Bush Forever site, as recognised within SPP 2.8. Future development of the subject site is not considered to have an adverse impact on the Bush Forever area, with provision made within the Structure Plan for a public open space adjoining the Bush Forever site to provide adequate separation and transition to urban development.

1.4.4.5 State Planning Policy 3.7 – Planning in Bushfire Prone Areas

State Planning Policy 3.7 directs how land use should address bushfire risk management in Western Australia. It establishes a framework 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.

SPP3.7 applies to all land which has been designated as bushfire prone by the Department of Fire and Emergency Services (DFES) Commissioner, such as the SP area. It impacts upon all higher order strategic planning tools and parts of Structure Plans, Subdivision and Development Applications.

The SP accords with the requirements of the SPP as detailed by the Bushfire Management Plan prepared for the SP area (refer Appendix D).

1.4.5 Other approvals and decisions

Several approved and proposed Structure Plans are in place across the Hammond Park locality, which outline the direction of future urban development surrounding the SP area, in line with the objectives of SSDSP3. The SP area is located west of the endorsed Lots 1, 810 and 111 Wattleup road, Hammond Park SP area, a 11.4 hectare site comprising residential development a range of Public Open Spaces.

The subject site abuts the Quenda Structure Plan (SPN 110/169) to the east. This SP includes Lot 17, which is owned by Qube Property Group and will be subdivided concurrent with the structure plan area generally in accordance with its separate structure plan.

1.4.6 Pre-lodgement Consultation

A number of agencies were consulted prior to lodgement of the SP. The nature and outcomes of this consultation is summarised in Table 2.

Table 2: Pre-Lodgement Consultation.

Agency	Date of Consultation	Method of Consultation	Outcome
Landowners adjacent to Structure Plan Area	2 & 3.03.16	Correspondence and Meeting/s	LSP draft design/ Interface design
	28.04.16		
	10.05.16		
	15.05.16		
City of Cockburn (Planning)	29.02.16	Correspondence and Meeting/s	LSP draft design/Interface design/report content
	25.05.16		LSP draft design + Interface design
Department of Planning	10.03.16	Correspondence and Meeting/s	LSP draft design/Interface design/Report content
City of Cockburn (Engineering)	17.03.16	Correspondence	Proposed Development Strategy
Water Corporation	16.03.16	Correspondence	Land Planning + Servicing Enquiry
ATCO Gas	17.03.16	Correspondence	Development Servicing Strategy
NBN CO	17.03.16	Correspondence	Development Servicing Strategy
Western power	21.03.16	Correspondence	Land Planning + Servicing Enquiry
City of Cockburn (Engineering)	Various dates August 2015- April 2016	Correspondence	Confirmation of run off assumptions for drainage modelling
Department of Water	Various between August 2015 - April 2016-06-10	Correspondence	Confirmation of requirements for groundwater monitoring
	Various dates Feb-April 2016		Confirmation of requirements for soil media provision
City of Cockburn (Planning and Engineering)	Various dates 2017-2018	Correspondence and Meeting/s	Agreement of consolidated earthworks strategy for locality with adjoining landowners; Consultation with City directorates regarding WWPS; revisions to site layout and POS design and function.
Department of Water	Various dates 2017-2018	Correspondence and Meeting/s	Confirmation of WWPS locational requirements and potential design configurations
City of Cockburn (Planning and Engineering)	29 September 2020	Meeting	Review of proposed Structure Plan Map modifications
City of Cockburn (Planning and Engineering)	9 December 2020	Correspondence	Provision of Traffic Assessment supporting CAP Road
City of Cockburn (Planning and Engineering)	January 2021	Correspondence and Meeting/s	Removal of CAP Road and revision to previously approved road reserve configuration (Lot 75)

2.0 Site conditions and constraints

2.1 Biodiversity and natural area assets

2.1.1 Flora and vegetation

Amendment 2 (December 2020): Flora and vegetation reporting has been updated to incorporate additional Lot 76. This additional reporting confirms that the site supports vegetation consistent with the Banksia Woodlands of the Swan Coastal Plain threatened ecological community, listed as ‘endangered’ pursuant to the Environmental Protection and Biodiversity Conservation Act 1999. The proponent has considered their obligations under this Act and intends to submit a referral under the EPBC Act for assessment of the structure plan prior to development (refer Appendix E Addendum, Emerge Associates 2020).

The flora and vegetation values of the site have been reviewed by Emerge Associates as part of their Environmental Assessment and Management Strategy report. Historical aerial imagery indicates that Lots 71, 304 and 305 were completely cleared between 1979 and 1981 for use as market gardens. As a consequence, these lots no longer contain any native vegetation. Clearing also extended into the western portion of Lot 74 resulting in degradation of the remnant vegetation within this lot. The historical aerials also indicate that the eastern portion of Lot 74 and Lot 76 contain some intact remnant vegetation. Lot 75 has been recently cleared.

A Spring flora and vegetation survey was conducted on 8 September 2016 by Emerge Associates. The flora survey identified 5.73 ha of remnant vegetation within Lot 74 and 75 (and Lot 76 per December 2020 addendum). This vegetation was identified as representing the recently listed EPBC ACT TEC “*Banksia Woodlands of the Swan Coastal Plain*”.

A search was conducted of the Department of Parks and Wildlife (DPaW) NatureMap Database and the Department of Environment (DoE) Protected Matters Database for Threatened and Priority Flora within a 5 km radius of the site. This search identified three Threatened and four Priority Flora as potentially occurring within the wider local area.

Future design levels for the site need to interface with the existing levels of the adjacent Harry Waring Marsupial Reserve and Wattleup Road, whilst accommodating a maximum water service level of RL 38. In response, significant levels of cut (5+) are required across the site including the eastern portions of the LSP area, being lots 74, 75 and 76. Accordingly, there is no opportunity to retain any remnant vegetation on Lots 74, 75 or 76.

For further detail, refer to *Appendix E – Environmental Management and Assessment Strategy*

2.1.2 Design Level Constraints on Vegetation Retention

There are site specific design constraints which preclude the retention of natural landform, and subsequently restrict potential for vegetation retention. Lots 71, 75 and 305 are already cleared of existing natural vegetation, and hence there is no potential for retention on these lots. Lot 76 and the eastern portion of Lot 74 contain remnant natural vegetation, however significant re-contouring of these lots is required.

Water services are not able to be provided to future lots above RL 38. As future design levels within the development cell are required to interface with the existing levels of the Harry Waring Marsupial Reserve and the existing Wattleup Road to the north and south respectively, the interface with existing surface levels at these points dictates the design “high point” of the cell, which requires significant levels of cut (5m+) across large portions of the site. These significant cut levels prohibit the retention of much of the natural vegetation within eastern portions of the LSP area. Internally, roads parallel to Wattleup Road have been graded down from RL38 as steeply as practicable to try and match the grade of the existing Wattleup Road. Duplicating the current grade of Wattleup Road internally is not possible, as the existing Wattleup Road is graded steeper than what can be achieved internally to provide access to newly developed lots within City of Cockburn guidelines, and to avoid rear spine walls in excess of 3m. As the natural surface is able to grade more steeply than newly constructed lots and roads, this results in the need for significant earthworking of the site, which impacts the ability to retain any of the natural vegetation.

The loss of the remnant vegetation needs to be considered in a district context. In this regard the vegetation to be removed and fauna to be relocated are well represented and reserved in the surrounding locality as detailed below:

- Harry Waring Marsupial Reserve, 200ha of fenced vegetation is located directly north of the site and is reserved as Bush Forever Site 392.
- There are no mapped ecological linkages within the site. However, two regional ecological linkages (numbers 49 and 50) from the Perth Biodiversity Project occur East and West of the site.

The representation of the remnant vegetation and fauna in the surrounding locality reflects the basis for the zoning of the subject land as ‘Urban’ in the Metropolitan Region Scheme, ‘Development’ zone in the City of Cockburn TPS No 3 and “medium density residential” in the Southern Suburbs District Structure Plan Stage 3.

Xanthorrhoea and Zamia Palms will be salvaged for use within landscaping works where practical and topsoil stockpiled for potential re-use. Opportunity will be provided to the City to translocate Xanthorrhoea and Zamia Palms and collect native seeds.

2.1.3 Fauna

Amendment 2 (December 2020): Flora and vegetation reporting has been updated to incorporate additional Lot 76 with findings generally consistent with those for the balance of the structure plan area (refer Appendix E Addendum, Emerge Associates 2020).

To assess the potential for protected fauna species to occur within the site, searches of the DPaW NatureMap Database and DoE Protected Matters database were undertaken within a 5k radius of the site.

A review of aerial imagery and the site visit conducted by Emerge identified Banksia- dominated woodland and emergent Jarrah trees within Lots 74 and 75 as potentially supportive of a range of native fauna species which may support native fauna species. This may include occasional foraging by Carnaby's Black Cockatoos and the Quenda.

A fauna assessment of the site was undertaken by Greg Harewood – Zoologist on behalf of Emerge Associates. In summary the fauna report advises;

- With respect to the vertebrate fauna in general, no substantial impacts are anticipated as a consequence of development at the site. In cases where some impact is anticipated, the degree of the impact is only expected to be low and relates to the loss of small areas of habitat, but as most species are common and widespread, with most if not all likely have secure populations in nearby reserves, no overall change in their conservation status is anticipated, despite a possible localised reduction in habitat extent.
- It is considered unlikely that impacts on black cockatoos that may occur because of development at any scale within the lots would result in a “significant impact” as defined by the Federal DotEE (DoE 2013)

For further detail, refer to Appendix E – *Environmental Management and Assessment Strategy*.

2.2 Topography, landform and soils

Amendment 2 (December 2020): Site landform assessment has been extended to incorporate Lot 76 and confirm that site development is compatible with agreed local area earthworking strategy (refer Appendix B Addendum, Cossil & Webley Engineers 2020).

The topography of the Structure Plan Area is flat to gently undulating in the western portion of the site, ranging from 23 metres Australian Height Datum (m AHD) at the western boundary to 17 m AHD within the central portion of the site. The eastern portion of the site slopes gently upwards.

Landform and soil mapping undertaken by Churchward and McArthur (1980) indicates that the site is within the Bassendean soil association, described as sand plains with low dunes and occasional swamps; iron or humus podzols; areas of complex steep dunes. The Perth Metropolitan Region Environmental Geology Map Series (Gozzard 1986) indicates that the site is comprised mostly of Sand (S7) with a band of 'peaty clay' (Cps) occurring north to south through the centre of the site.

A geotechnical investigation undertaken by Galt Geotechnics in 2015 across the portion of the site identified to contain 'peaty clay' identified that soil types were relatively consistent across the lot and were comprised of sand only, with no clayey soils encountered. Consequently, the site is considered to be comprised of sandy soils only.

As a result of this lack of peaty clay soils identified by site specific investigations, Acid Sulphate Soils (ASS) are also not expected to occur within this portion of the site. Mapping prepared by the Department of Environment Regulation (DER) indicates that the balance of the site has no known risk of ASS occurring.

For further detail, refer to *Appendix B – Engineering Report*.

2.3 Hydrology

Amendment 2 (December 2020): Hydrological modelling has been reviewed consistent with design modifications to Lot 75 and the incorporation of Lot 76 (with regard for adjoining Lot 107) to confirm that agreed urban water management strategies and drainage catchments are suitably provided for (refer Appendix A Addendum, Emerge Associates 2020).

Regional groundwater contour mapping shows maximum groundwater levels (MGL) reaching 16 m AHD in the north east corner of the site and 13.5 m AHD in the south west corner, with depth to water ranging between 2.5 in the central to southern portions of the site and 20 metres at the eastern boundary of the site. No defined streamlines or floodways occur within the site, consistent with the high permeability of the underlying sand formation. The DPaW Geomorphic Wetlands Swan Coastal Plan dataset indicates that there are no wetlands within the site.

Urban water management strategies will be implemented in accordance with the Local Water Management Strategy prepared by Emerge in August 2017 (as amended March 2019). This prescribes water conservation strategies, as well as mechanisms to protect hydrological characteristics on site and off site.

Portions of the site have historically been used for market gardening and Department of Health have confirmed levels of Nitrate-N within groundwater above Australian Drinking Water Guidelines for potable use, but within guideline levels for non potable use. Appropriate notifications will be placed on title.

For further detail, refer to *Appendix A – Local Water Management Strategy* and *Appendix B – Engineering Report*.

2.4 Bushfire hazard

Amendment 2 (December 2020): Bushfire reporting and hazard assessment has been updated to incorporate Lot 76 and confirm that bushfire risk is able to be suitably mitigated to allow for development (refer Appendix D Addendum, Emerge Associates 2020).

A Preliminary Bushfire Assessment prepared by Bushfire Safety Consulting and Emerge Associates in August 2017 to identify the bushfire risk to the future development of the subject site (refer to Appendix D). The Bushfire Assessment confirmed the following:

- A large portion of the site has been identified as a “Bushfire Prone Area” under the state-wide Map of Bush Fire Prone Areas released by the Office of Bushfire Risk Management. This requires a further assessment of the bushfire hazard implications on development proposed within the site, in accordance with the Guidelines for Planning in Bushfire Prone Areas (2015).
- Bushfire risk to development within the site is able to be mitigated through the provision of appropriate setbacks (asset protection zones) and where required increased construction standards in accordance with Australian Standard 3959.
- No future lots within the Structure Plan area will be exposed to an unacceptable level of radiant heat flux, based on proposed developments in the site and broader area.
- At the completion of the development of the Structure Plan area and the surrounding SSDSP area to the east and south, bushfire hazard will be concentrated entirely to the north, west and south-west of the site associated with the vegetation in the adjacent Bush Forever Site 329 and in rural landholdings respectively.
- Vegetation east of the site is subject to separate planning and approvals processes and will pose only a temporary bushfire hazard to the site. Once the vegetation is removed to accommodate urban development the hazard will also be removed.

The BMP provides a preliminary BAL assessment which indicates that no lots within the Structure Plan area are exposed to an unacceptable level of bushfire risk, based on the proposed development of the site and surrounding ‘urban’ zoned areas. Lot-specific BAL ratings are expected to be provided through detailed BAL assessment as part of a future subdivision application, when the ultimate lot locations/ boundaries and dwelling setbacks have been finalised. This approach will enable a more accurate response to bushfire risk at the time that development progresses.

For further detail, refer to *Appendix D – Bushfire Management Plan*

2.5 Heritage

An online search for relevant aboriginal heritage information was undertaken using the Department of Aboriginal Affairs (DAA) Aboriginal Heritage Inquiry System (AHIS). This search found no registered Aboriginal heritage sites or other heritage places within the site, with the closest registered Aboriginal site 500 metres west of the site.

An online search for non-indigenous heritage information was also conducted in order to determine the presence of potential or actual non-aboriginal heritage features of significance within the site. This review did not identify any areas of non-indigenous heritage significance.

For further detail, refer to *Appendix E – Environmental Assessment and Management Strategy*.

2.6 Land Use Buffers

2.6.1 Kwinana Industrial (Including Air Quality) Buffer (2010)

The south-eastern portion of the subject site is intersected by the Kwinana Industrial (Including Air Quality) Buffer (2010). This buffer is given effect by the The Draft Western Coast Trade Protection Area (WTCPA) Bill, which has been drafted to strengthen land use separation between progressing urban development and the existing industrial area comprised of the Kwinana Industrial Area, Latitude 32 Industry Zone, Rockingham Industry Zone and Australian Marine complex. This bill has now lapsed.

Amendment 2 (December 2020): The portion of the subject site that falls within the extent of the buffer and was previously excluded from the Structure Plan area has been reincorporated into the Structure Plan, consistent with WAPC Ref. 141080 (Lots 809, 811 and 9002 Wattleup Rd, Wattleup) and the 18 November 2020 decision of the Minister for Planning pursuant to Section 246(2)(b) of the Planning and Development Act 2005 (DR 444 of 2013) and supporting rationale which notes that “there is no further justification for providing what may be viewed as an almost continuous moratorium on subdivision and development approvals” arising from the buffer based on “reasonable application of the latest scientific data” and “non-planning grounds in the public interest”.

3.0 Land use and subdivision requirements

3.1 Land use

Consistent with Liveable Neighbourhoods, the design objectives for the SP include the following:

- To respond to the topography and site conditions of the land;
- To provide a walkable, interconnected street network that is integrated with adjoining development;
- To integrate the drainage with POS for the aesthetic and recreational value of future residents
- To ensure a balanced mix of lot sizes and dwelling types appropriate to the locality that contribute to affordable housing options; and
- To maximise the solar orientation of residential lots.

The SP incorporates a subdivision layout based on a traditional grid pattern with interconnected roads, adjusted where necessary to respond to the topography, which integrates with the lot design and road network of surrounding and approved development. The design delivers a range of residential lots with densities ranging from R30 to R40.

3.2 Open space

The Structure Plan provides a total Public Open Space area of 2.27 ha, distributed across four discrete open space areas:

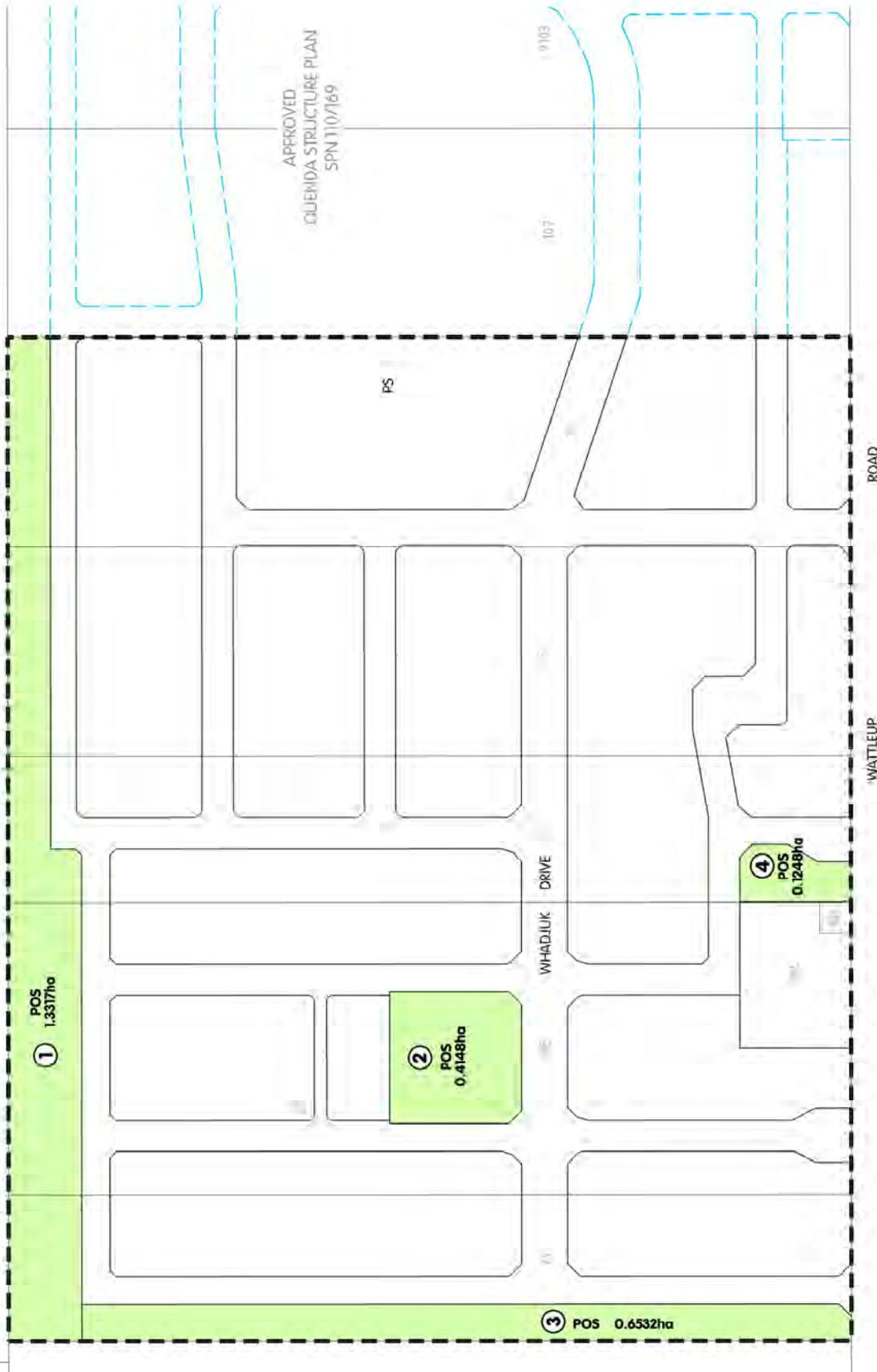
1. A 1.33 ha open space abutting Harry Waring Reserve and incorporating a sequence of useable open spaces and drainage infrastructure (POS 1);
2. A 0.42 ha consolidated central open space unconstrained by significant drainage infrastructure and suitable for recreational activities (POS 2);
3. A 0.65 ha linear open space adjoining the western boundary, providing a landscaped interface to adjoining market garden lots (POS 3); and
4. A 0.13 ha pocket park providing localised amenity while accommodating unobtrusive Waste Water Pump Station infrastructure, consistent with Element 4 (R14) of Liveable Neighbourhoods (POS 4).

The location of POS is influenced by a number of factors including drainage requirements, topography, the existing road network, adjoining land uses and development and the need to provide for local amenity and proximity to POS for future residents.

As amended, the accessibility and usability of POS has been improved through reconfiguration of drainage infrastructure and modifications to the surrounding movement network. This improved outcome is supported by revised Landscape Concept Plans included at Appendix A.

The WAPC generally requires that 10 per cent of gross subdivisible area be provided as POS. The POS Schedule provided at Table 6 demonstrates that the required minimum amount of open space is provided and is structured in accordance with the requirements of Liveable Neighbourhoods. This is summarised below in Table 3.

Figure 7: Public Open Space Plan



LEGEND

--- Structure Plan Boundary

POS BREAKDOWN

- ① 1.3317ha
- ② 0.4148ha
- ③ 0.6532ha
- ④ 0.1248ha

POS TOTAL 2.5245ha

QUBE

HATCH | RobertsDa

CADASTRAL INFORMATION
 SOURCE: LANDGATE
 YYYMDD: 201125
 DWG REF: 201125-cad.DWG
 PROJECTION: PCG14

AERIAL PHOTOGRAPHY
 SOURCE: NA
 YYYMDD: NA

PUBLIC OPEN SPACE
Hammond West Structure Plan
 City of Cockburn

JOB CODE QUB HAMC
DRAW NO. RD1 017
REV. S

SIZE A4: 1:3000

0 30 60 90 120 150 metres

S: MODIFY LOT & ROAD WIDTH 201222 TT KV
 REV DESCRIPTION YYYMDD DRAWN APPRD

DISCLAIMER: ISSUED FOR DESIGN INTENT ONLY. ALL AREAS AND DIMENSIONS ARE SUBJECT TO DETAIL DESIGN AND SURVEY

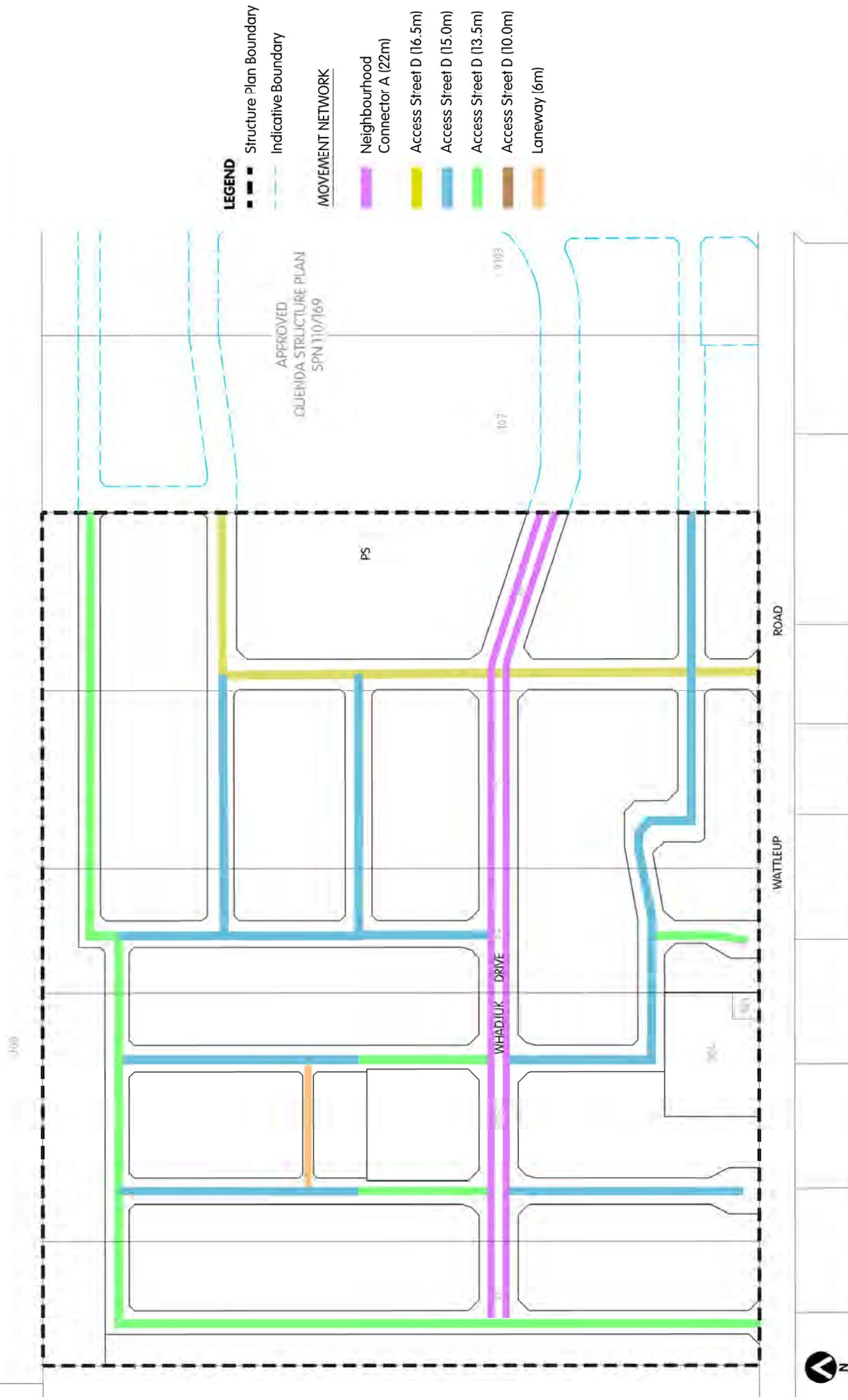
Table 3: Public Open Space Schedule

Site Area				18.83 ha
Deductions				
Dedicated drainage reserve not included in POS (1:1 year event)			0.12 ha	
Above Ground WWPS Infrastructure (cabinet and vehicle parking area)			0.02 ha	
Gross subdivisible area				18.69 ha
Public open space @ 10 percent				1.87 ha
May comprise:				
- Minimum 80% unrestricted POS			1.50 ha	
- Maximum 20% restricted POS			0.37 ha	
Public Open Space Contribution*	Open Space Area (Net)	Unrestricted	Restricted (including drainage >1:1 year event)	Dedicated Drainage not included in POS (1:1 year event)
POS 1	1.33 ha	1.12 ha	0.12 ha	0.09 ha
POS 2	0.42 ha	0.42 ha	-**	-**
POS 3	0.65 ha	0.57 ha	0.06 ha	0.02 ha
POS 4	0.13 ha	0.09 ha	0.03 ha	0.01 ha
Sub-Total	2.53 ha	2.20 ha	0.49 ha	0.12 ha
Total Public Open Space Provision	2.41 ha (12.9%)			

*Refer Figure 7, Public Open Space Plan.

**Emergency overflow basin treated as unrestricted open space in accordance with LWMS (March 2019 addendum).

Figure 8: Movement Plan



QUBE

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MOVEMENT NETWORK
Hammond West Structure Plan
City of Cockburn

CADASTRAL INFORMATION
SOURCE: LANDGATE
YYMMDD: 201225
DWG REF: 201225-cdd DWG
PROJECTION: PCG94

SIZE A4: 1:3000

0 30 60 90 120 150 metres

JOB CODE: QUB HAMC
DRAW NO: RDI 018
REV. S

AERIAL PHOTOGRAPHY
SOURCE: NA
YYMMDD: NA

5. MODIFY LOT & ROAD WIDTH/201222
REV DESCRIPTION YYMMDD DRAWN APPRD

REV. S
DRAW NO. RDI 018
JOB CODE QUB HAMC

3.3 Residential

The SP as amended (December 2020) proposes approximately 260 residential lots within a residential density range of R30 to R40. The subdivision configuration proposed by the SP adopts the principles of traditional neighbourhood design, with a wide variety of lot typologies suited to a range of income groups and household types.

Further, the proposed placement of lots achieves a highly desirable solar orientation outcome, with the majority of lots aligned on an east-west or north-south axis, as recommended by Liveable Neighbourhoods.

The Structure Plan proposes a residential density of 26.1 dwellings per residential gross site hectare, complying with the density target of 22 dwellings per residential site hectare set by Liveable Neighbourhoods and SSDSPS3. The Structure Plan design also meets the density target set by Directions 2031 of 15 dwellings per gross urban zoned hectare.

3.4 Movement network

Amendment 2 (February 2021): Transport impact analysis has been updated to incorporate Lot 76, confirming that overall trip generation and access arrangements remain within acceptable parameters. Primary access to the SP area is proposed to be provided by two T-junctions on Wattleup Road. Further discussion with the City will focus on the appropriate works for Wattleup Road to deal with traffic calming for vehicle and/or truck movements.

The internal street network proposed for the SP area establishes a hierarchy of laneways and access streets adjoining the east-west neighbourhood connector, facilitating vehicular, pedestrian and cyclist connections between neighbouring landholdings to the east. Intersection treatments along the neighbourhood connector will be generally in accordance with the Traffic and Transport Assessment, being a roundabout to the western intersection, a restricted movement treatment to the central intersection and a T-junction to the east.

Access shall be provided generally in accordance with Local Road Reserves shown on the Structure Plan Map. However, should the proposed 12.3m road reserves adjacent to POS not be able to accommodate on-street car parking, then these shall be widened to 13.5m.

A Pedestrian Shared Path runs parallel to the northern side of the proposed neighbourhood connector, with a footpath proposed for the south. On-road cycle lanes are also proposed for both sides of the east-west spine road. All other roads within the SP area are to include footpaths on at least one side of the road.

In support of the SP, a Transport Assessment Report has been prepared by Transcore that assesses traffic access, volume and safety. The report documents likely traffic generation associated with the proposed development, its impact on the internal and external road network, and public transport, walking and cycling requirements. The assessment confirms that the impact of predicted traffic volumes associated with development of the SP area will have an acceptable impact on roads in the vicinity.

Refer *Figure 8 - Movement Plan*.

For further information, refer to *Appendix C – Traffic and Transport Assessment*.

3.5 Water management

Amendment 2 (December 2020): LWMS reporting has been revised consistent with design modifications to Lot 75 and the incorporation of Lot 76 (with regard for adjoining Lot 107) to confirm that agreed urban water management strategies and drainage catchments are suitably provided for (refer Appendix A Addendum, Emerge Associates 2020).

A Local Water Management strategy (LWMS) has been prepared by Emerge Associates in August 2017 (as amended March 2019) for the SP area. The LWMS employs an integrated water cycle management approach which seeks to maintain the site's existing hydrological regime and minimise pollution. The LWMS demonstrates that the recommendations detailed in the report are sufficient to enable the development of the Structure Plan area for residential purposes.

As amended, the LWMS redistributes treatment and flood storage areas throughout the site to treat and retain runoff as close to source as possible while increasing amenity in POS 2 by relocating drainage from within this area to POS 1. However, as a contingency measure, POS 2 will be designed such that in the event of a conveyance pipe directing flows to POS 1 becoming blocked, runoff from the major event will be able to be retained within POS 2.

Revised landscape concepts and inundation figures demonstrate that the treatment and flood storage spatial requirements can be met within the available POS area, utilising designs consistent with the criteria described in the approved LWMS.

Groundwater management for the site focuses on protecting residential lots from groundwater inundation through the use of sand fill to increase clearance to groundwater where natural surface levels do not currently provide adequate separation.

For further information, refer to *Appendix A – Local Water Management Strategy*

3.6 Education facilities

Amendment 2 (December 2020): By incorporating Lot 76 into the Structure Plan area, the SP now includes a portion of proposed Primary School site to the east. The location of the Primary School site and the medium density residential interface proposed by the Structure Plan accord with the provisions of the Southern Suburbs District Structure Plan Stage 3 – Hammond Park/Wattleup (SSDSP3).

The land area and configuration proposed for the relevant portion of the School Site on the Structure Plan map has received in-principle endorsement from the Department of Education.

3.7 Activity centres and employment

The site falls within a 400 metre walkable catchment of a neighbourhood centre, as depicted by SSDSP3. However, the structure plan design does not provide for a local centre for the following reasons:

- The City of Cockburn decision to preclude residential development south of Wattleup Road results in 50% of the local centre catchment being removed. The local centre is therefore not commercially viable.
- A review of the existing and future design levels of the local centre by the project engineers confirm there is approximately an 8m fall across the site from east to west. The level change across the site is not suitable for a retail use.

The Structure Plan area is also approximately 850 metres east of a Neighbourhood Node identified by SSDSP3. The Harvest Lakes Shopping Centre is located 3 kilometres north-east of the site, accessible via Franklin Avenue and Gibbs Road.

3.8 Infrastructure coordination and staging

An Engineering Services Report was prepared by Cossill & Webley Consulting Engineers in August 2017 (later advice appended December 2020 and March 2019). The report outlines the infrastructure likely to be required to develop the site and confirms it can be fully serviced with electrical, water, sewer, gas, stormwater drainage and communications infrastructure.

Sewer infrastructure will be provided via the creation of a new waste water pump station (WWPS), connecting to existing Water Corporation sewerage infrastructure. As shown on the amended Structure Plan map, the pump station is proposed to be located within POS 4 based on the advice of Water Corporation, subject to ultimate Water Corporation approval.

Detailed design development of the WWPS site has been undertaken in consultation with Water Corporation and the City of Cockburn, with the identified WWPS position reflecting Water Corporation technical requirements whilst also being

generally in accordance with the stated preferences of the City. As shown on the Structure Plan Map, a 20 metre separation buffer fully contained within POS and Road Reserve is achieved.

Water supply will be provided via an extension of the existing pipe infrastructure in Wattleup Road. Electrical supply can be provided by extension of the existing infrastructure on Wattleup Road. Telecommunications and gas are available via extensions from the existing network in Wattleup Road to the development. There is capacity in the existing network to service the proposed development.

Staging will generally be from west to east consistent with availability of services. POS areas will be delivery concurrently with the adjacent residential development. Secondary temporary access to Wattleup Road will be maintained at all times to provide safe access in the event of a bushfire

Refer Figure 9 - Staging Plan.

Refer to *Appendix B – Engineering Report*

The Hammond Park West Structure Plan will facilitate the development of a diverse range of residential lots

4.0 Conclusion

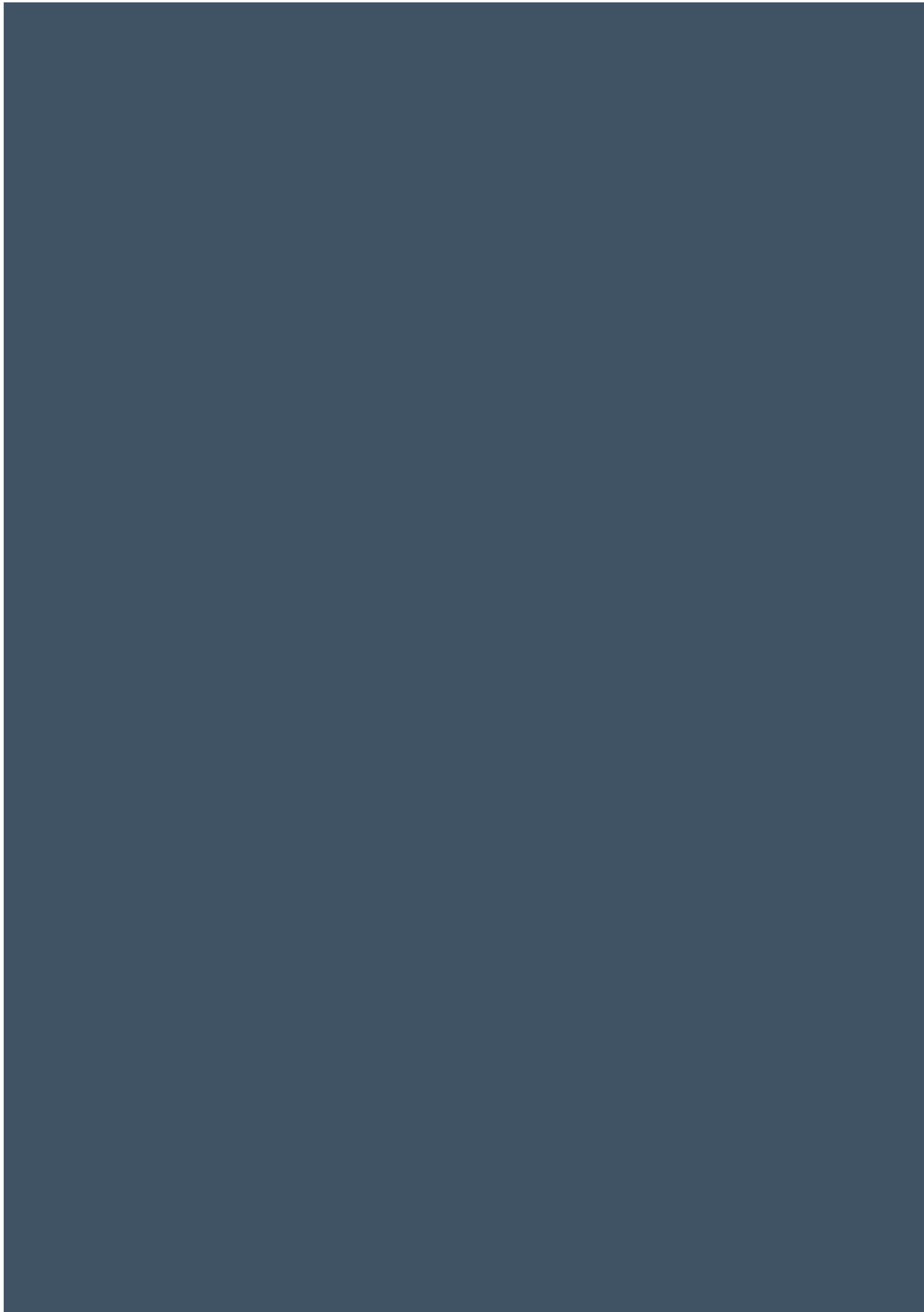
complemented by high quality and accessible public open spaces and an interconnected road network, consistent with the strategic planning context relating to the Wattleup locality.

It is expected that the SP will accommodate 260 dwellings, primarily consisting of single residential dwellings on freehold lots, facilitating a total population of approximately 780 people. Future residents will be well serviced by the internal road and public open space network and the availability of local retail, employment and education facilities in close proximity to the subject site.

The Structure Plan responds to State density targets established in Liveable Neighbourhoods and the Perth and Peel @ 3.5 Million Draft South Metropolitan Peel Sub-Regional Planning Framework by providing a density of 26.1 dwellings per residential site hectare.

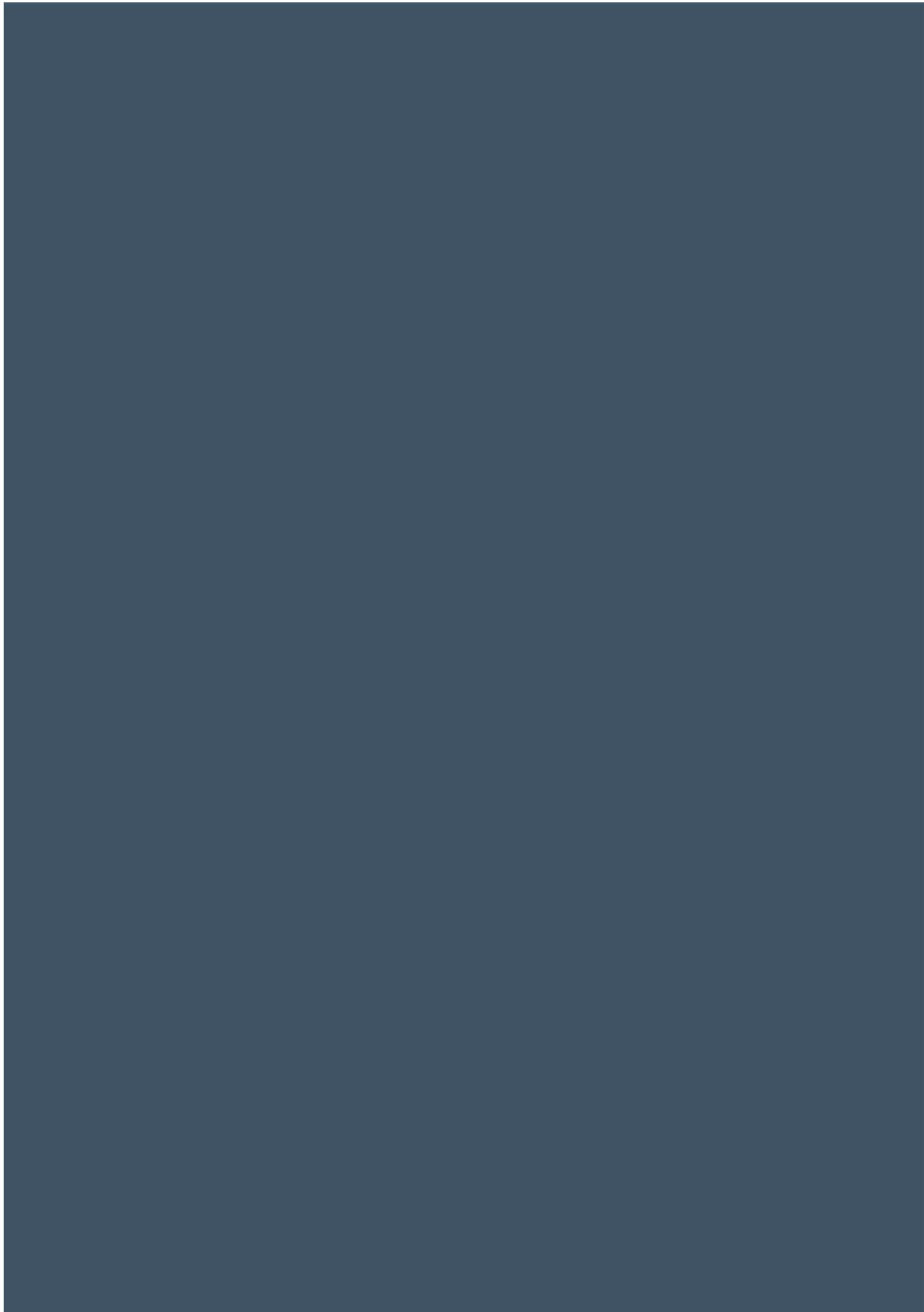
The Structure Plan also addresses a range of higher order strategic planning objectives outlined by the Southern Suburbs District Structure Plan - Stage 3, in providing identified road connections and public open spaces and facilitating medium-density residential development which meets established targets of 15 dwellings per gross hectare and 22 dwellings per site hectare of residential land.

Appendix A
Local Water
Management
Strategy

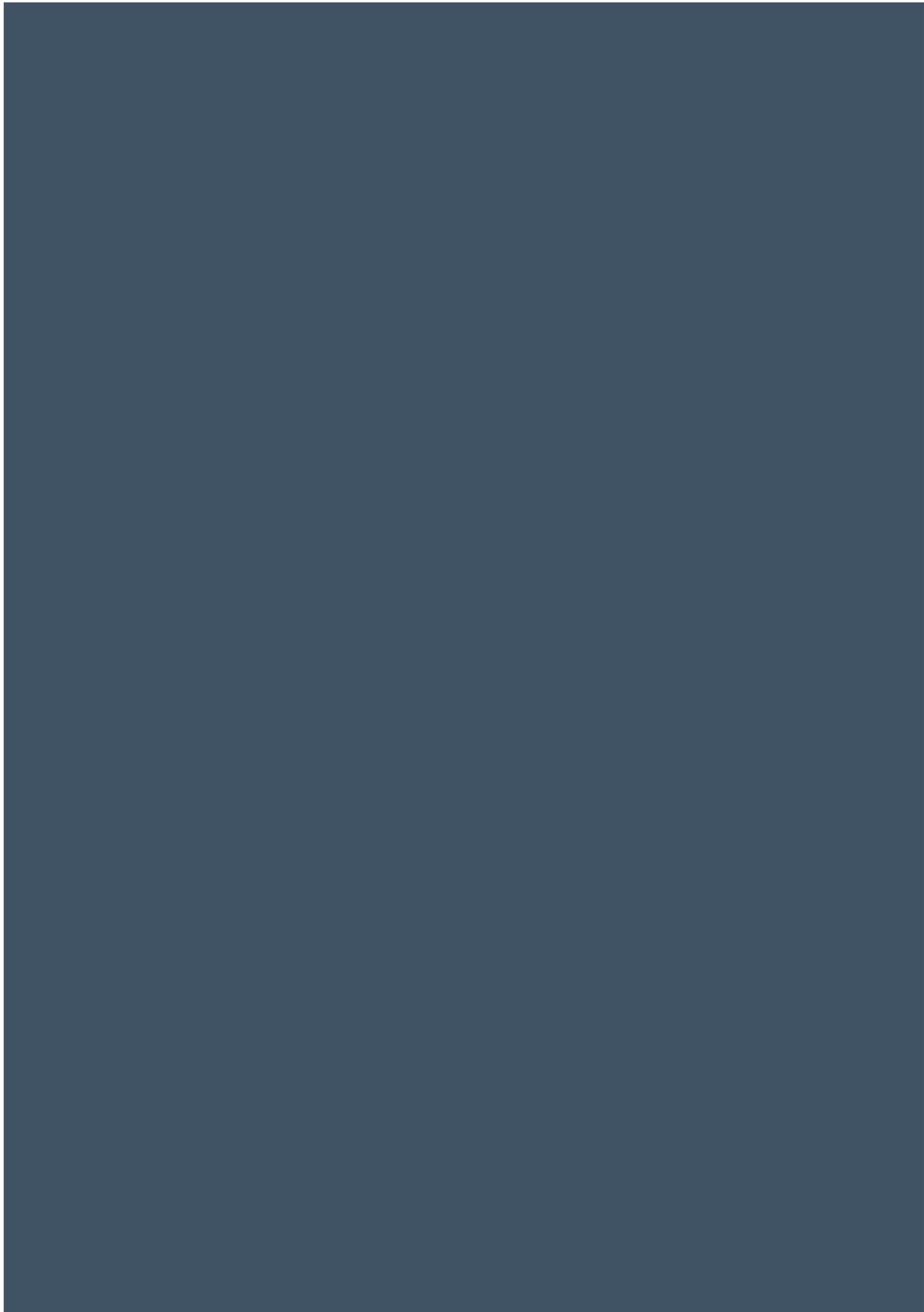


Appendix B

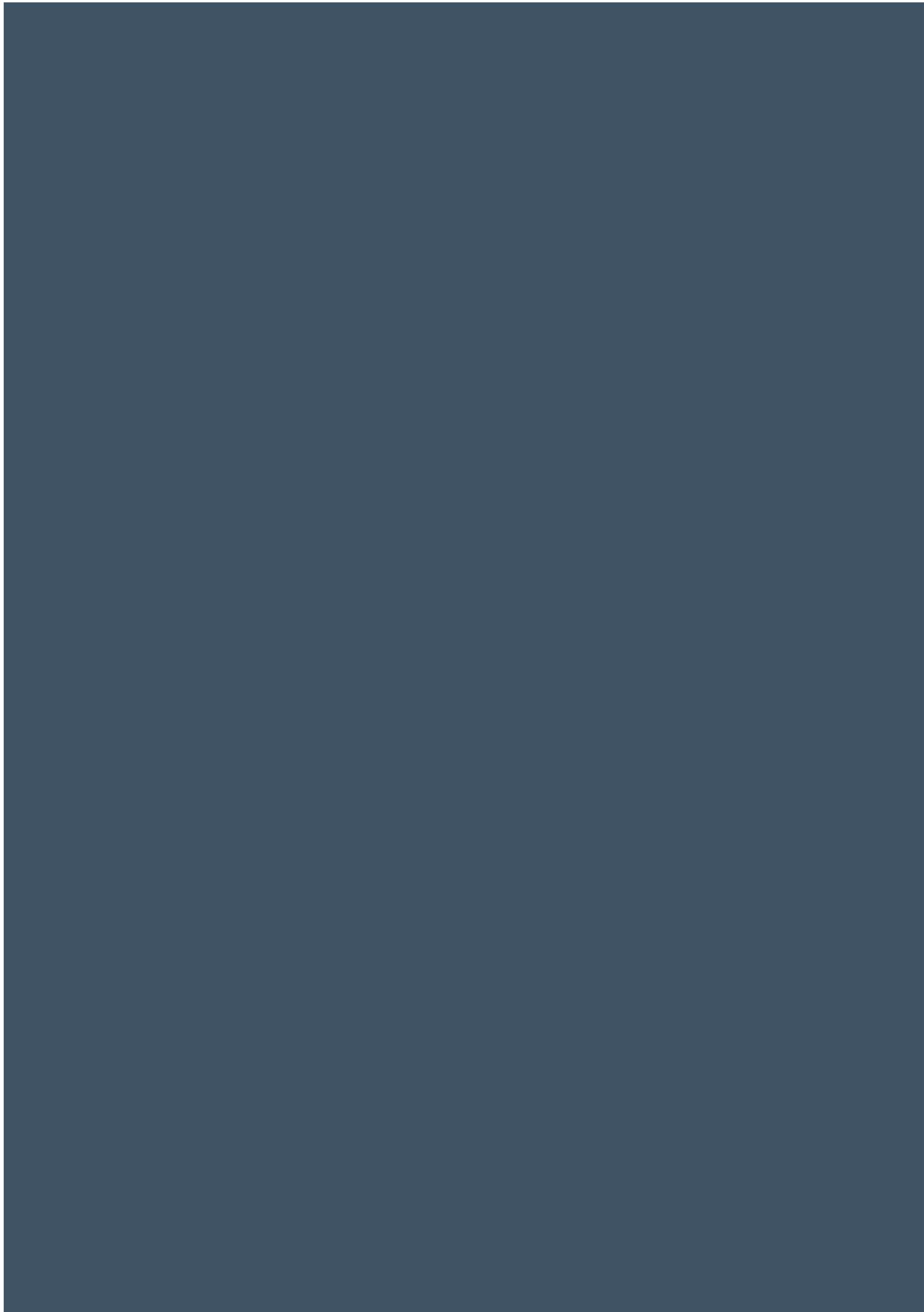
Engineering Report



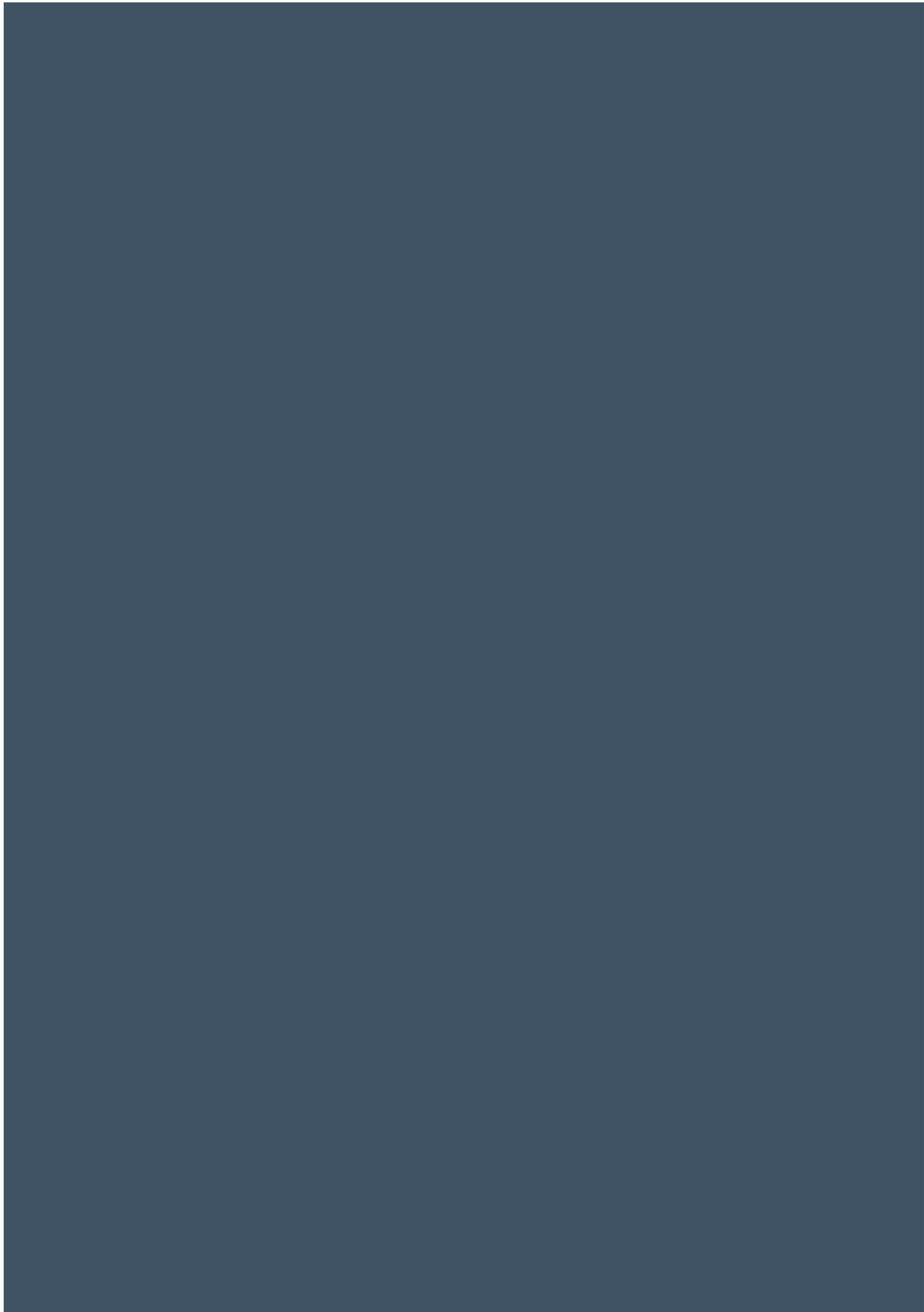
Appendix C
Traffic and Transport
Assessment



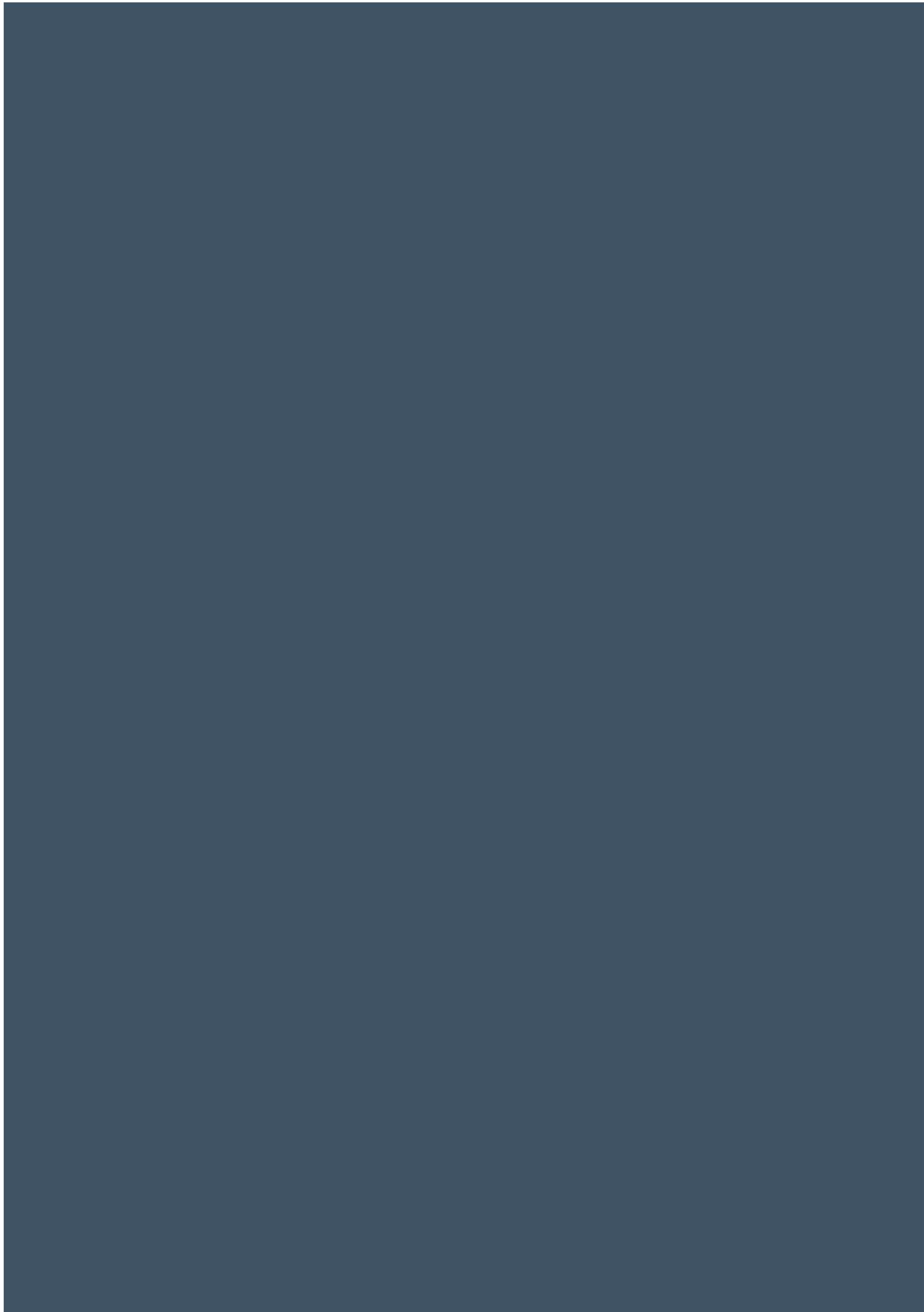
Appendix D
Bushfire
Management Plan



Appendix E
Environmental
Assessment &
Management Strategy



Appendix F
CAP Road Risk
Assessment



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