

# Structure Plan

Lots 7, 65, 66 and 67 View Street, Beeliar City of Cockburn (WAPC ref SPN 2215)

1 October 2019

Version 03



**STEWART URBAN PLANNING** 



## **ENDORSEMENT OF STRUCTURE PLAN**

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 PLA	NNING COMMISSION ON:
3 October 2019	Pate
Signed for and on behalf of the West	ern Australian Planning Commission:
	horised by the Commission pursuant to section Act 2005 for that purpose, in the presence of:
M. Wieclan	√itness
4 October 2019	Pate
3 October 2029	Pate of Expiry



## **TABLE OF AMENDMENTS**

Amendment No. Summary of the Amend		Amendment Type	Date Approved by WAPC



### **EXECUTIVE SUMMARY**

This Structure Plan applies to Lots 7, 65, 66 and 67 View Street, Beeliar.

The site has an area of 1.6189 hectares and is located 6.5 kilometres west of Cockburn Central and 9.5 kilometres south-south-east of Fremantle.

The Structure Plan site is zoned 'Development' under the City of Cockburn Town Planning Scheme No.3 ('TPS3').

The purpose of this Structure Plan is to facilitate the subdivision and development of the site for residential purposes, together with Public Open Space.

An approved Structure Plan applies to the adjoining land to the east, being Lots 97 to 102 View Street, Beeliar. The proposed Structure Plan has been designed to integrate with the approved Structure Plan for the land to the east.

The Structure Plan has been prepared in consultation with the City of Cockburn.

Table 1: Summary of Structure Plan

Item	Data			
Total area covered by the Structure Plan	1.6189 hectares			
Area of each land use proposed:  Residential	1.1464 hectares			
Total estimated lot yield	30			
Estimated number of dwellings	30			
Estimated residential density:  Per residential site hectare  Per gross urban hectare	21 26 dwellings per hectare 19 dwellings per hectare			
Estimated population  • At 2.5 persons per dwelling	75 people			
Estimated area and percentage of site given over to:  Local Parks	Number <u>Area</u> <u>%</u> 1 1,311m² 8.1%			

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- 1. Planning Background
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#### **TECHNICAL APPENDICES**

#### Table 2: Technical Reports

No.	Title	Туре	Referral Agency N/A	
1	Feature Survey	Technical Report		
2	Acoustic Assessment	Technical Report	City of Cockburn	
3	Bushfire Management Plan	Technical Report	City of Cockburn; DFES	
4	Civil Engineering Report	Technical Report	City of Cockburn	
5	Traffic Impact Assessment	Technical Report	City of Cockburn	
6	Landscape Concept Plan	Technical Report	City of Cockburn	

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### PART 1 IMPLEMENTATION

#### 1. Structure Plan Area

This Structure Plan shall apply to Lots 7, 65, 66 and 67 View Street, Beeliar, being the land contained within the inner edge of the line denoting the Structure Plan boundary on the Structure Plan map (**Plan 1**).

#### 2. Operation

This Structure Plan shall have effect from the day it is approved by the Western Australian Planning Commission.

#### 3. Staging

The land within the Structure Plan is proposed to be developed in a single stage.

#### 4. Subdivision and Development Requirements

#### 4.1 Land Use, Zones and Reserves

The Structure Plan map (**Plan 1**) depicts the Zones and Reserves applicable within the Structure Plan area. The permissibility of land uses within the Structure Plan area shall be in accordance with the corresponding Zones and Reserves under the City of Cockburn Town Planning Scheme No.3 ('TPS3').

#### 4.2 Residential Density

The residential density applicable to the Structure Plan area is depicted on the Structure Plan map (**Plan 1**).

The estimated residential density of the Structure Plan is:

- 19 dwellings per gross urban hectare; and
- 26 dwellings per residential site hectare.

#### 4.3 Public Open Space

The Structure Plan (**Plan 1**) depicts an area of 1,311m<sup>2</sup> as Public Open Space, being equivalent to 8.1% of the site's gross area.

The requirement for 10% Public Open Space shall be achieved by the shortfall of 1.9% (308m²) being provided as cash-in-lieu in accordance with the provisions of the Planning and Development Act. Pursuant to Clause 3.6.2 of WAPC 'Development Control Policy 2.3 – Public Open Space in Residential Areas', it is intended cash-in-lieu funds be spent on development of the Public Open Space depicted in the Structure Plan.

The final design of the Public Open Space will be subject to detailed engineering, drainage and landscaping.

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#### 4.4 Uniform Fencing

Uniform fencing shall be provided to all boundaries abutting the Public Open Space in accordance with the provisions of Local Planning Policy 5.7 – Uniform Fencing.

#### 4.5 Local Development Plan

A Local Development Plan shall be prepared for lots adjacent to the Public Open Space to ensure dwelling design achieves surveillance of the Public Open Space and street by addressing dwelling orientation and fencing.

#### 4.6 Interface with Adjoining Land

The Structure Plan makes provision for future road and service connections to the adjoining land to the north, east and south.

The proposed roads running east-west straddle the common boundary between the Structure Plan and adjacent land to the north and south. Until such time as the abutting land to the north and south is subdivided, the proposed roads shall be constructed within the road reserves contained within the Structure Plan area, including construction of the road carriageway and verge to one side only.

To service future residential lots, View Street will be required to be upgraded (or alternatively a contribution made) from a rural road to a residential road.

The Structure Plan relies upon implementation of the approved Structure Plan to the east for the purpose of connecting proposed roads to Watson Road. It is intended that implementation of the Structure Plan will occur upon completion of subdivision works for the adjoining land.

#### 4.7 Medium Density Housing Standards

The provisions of 'Local Planning Policy 1.16 – Single House Standards for Medium Density Housing in the Development Zone' shall apply to this Structure Plan.

#### 4.8 Hazards and Separation Areas

This Structure Plan is accompanied by a Bushfire Management Plan, including a Bushfire Hazard Level ('BAL') Assessment. The subdivision and development of the Structure Plan area shall be undertaken in accordance with the recommendations of the Bushfire Management Plan.

#### 5. Development Contributions

The Structure Plan is located within Development Contribution Area 4 ('DCA4') and Development Contribution Area 13 ('DCA13') under TPS3. Developer contributions toward community and standard infrastructure will be required to be made to the City of Cockburn in accordance with the provisions of TPS3, pursuant to a condition of subdivision or development approval.



Local Road

Local Scheme Zones

Residential
Structure Plan Boundary



Drawing Number: Revision: Projection:

Scale:

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Project
Job Reference:
Date:

Local Structure Plan 0049 20 September 2019



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### PART 2 EXPLANATORY REPORT

### 1.0 Planning Background

#### 1.1 Introduction

This Structure Plan has been prepared to guide the subdivision and development of Lots 7, 65, 66 and 67 View Street, Beeliar ('site') in a coordinated manner.

The Structure Plan has been designed having regard to the prevailing site conditions and constraints, the requirements of land owners with respect to retention of existing dwellings, and the findings of various technical reports accompanying this report.

#### 1.2 Land Description

#### Location

The site is situated in the locality of Beeliar, in the City of Cockburn ('City'), approximately 6.5 kilometres west of Cockburn Central and 9.5 kilometres south-south-east of Fremantle.

#### Refer Figure 1 - Regional Location.

The site is within the street block bound by View Street to the west, Howe Street to the north, Watson Road to the east and East Churchill Avenue to the south. Stock Road is approximately 100 metres to the west, while South Coogee Primary School and Beeliar Town Centre are approximately 750 metres to the north-east.

#### Refer Figure 2 - Local Location.

#### Land Use

From the early 1960's the locality was progressively developed with small-scale market gardens and single houses. This pattern of land use continued until the mid 1990's, when a large residential subdivision was constructed to the east of Watson Road. Single house lots were created along the south side of Howe Street in the early 2000's, with residential subdivision commencing north of Howe Street from about 2010. Lot 94 Watson Road was subdivided in 2015 resulting in the creation of Corella Close to the north-east of the subject site. The abutting land to the east is vacant while established homes occupy the adjoining land to the north and south, as well as to the west on the opposite side of View Street.

The four existing lots that comprise the subject site are each occupied by an existing dwelling fronting View Street. A small-scale domestic market garden occupies the balance of the southern-most lot (Lot 65). The remainder of the site is vacant.

#### Refer Figure 3 - Aerial Photograph.



#### Site Area

The site comprises four existing lots (three of 4,047m<sup>2</sup> and one of 4,048m<sup>2</sup>) each with a frontage to View Street of 32.19 metres. The site has a total area of 1.6189 hectares with a frontage to View Street of 128.76 metres.

Refer Figure 4 - Site Plan.

#### **Legal Description**

Table 3: Existing Lot Details

Lot	Plan	Certificate of Title		Address	Land Owner	
		Volume	Folio			
7	33008	2523	264	32 View Street	Garrick Crabbe	
67	3562	1288	112	36 View Street	Loma and Voli Klepec	
66	3562	1097	408	38 View Street	Beverley, Phillip and Graham Swif	
65	3562	1550	523	40 View Street	Marija and Vlatko Garbin	

#### 1.3 Planning Framework

#### Metropolitan Region Scheme

The site is zoned Urban under the Metropolitan Region Scheme. No part of the land abuts or is directly affected by any MRS reserves. Stock Road to the west is reserved as a Primary Regional Road under the MRS.

#### Refer Figure 5 - MRS Zoning Map

#### South Metropolitan Peel Sub-Regional Planning Framework

In March 2018, the State Government adopted the Perth and Peel @ 3.5 million suite of strategic planning documents to guide the growth and development of the Perth and Peel regions for the next 30 years. The site is within the South Metropolitan Peel Sub-Region of Perth and Peel @ 3.5 million. Under the South Metropolitan Peel Sub Regional Planning Framework, the City has been assigned an urban infill dwelling target of 14,680 dwellings by 2050.

The Structure Plan will assist the local government to meet this target, as it provides for the site to be subdivided into a minimum of 30 single house lots in accordance with the provisions of the Residential Design Codes with respect to land coded R25.

#### State Planning Policies

State Planning Policy 3.7 - Planning in Bushfire Prone Areas

State Planning Policy 3.7 – Planning in Bushfire Prone Areas ('SPP3.7') applies to land within a Bushfire Prone Area.



The western portion of the site is within a Bushfire Prone Area declared under the Fire and Emergency Services Act, as depicted on the Department of Fire and Emergency Services ('DFES') Map of Bush Fire Prone Areas

The Structure Plan is accompanied by a Bushfire Management Plan ('BMP') prepared in accordance with SPP3.7. The BMP includes a Bushfire Attack Level ('BAL') Assessment. The BMP concludes that the subdivision and development of the site in accordance with the Structure Plan is capable of achieving BAL-29 or lower, with required Asset Protection Zones wholly located within POS and roads within the site.

## <u>State Planning Policy 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning</u>

State Planning Policy 5.4 ('SPP5.4') applies to noise-sensitive development proposals in the vicinity of major road and rail transport infrastructure, and seeks to:

- protect people from unreasonable levels of transport noise by establishing a standardised set of criteria to be used in the assessment of proposals;
- protect major transport corridors and freight operations from incompatible urban encroachment;
- encourage best-practice design and construction standards for new development proposals and new or redeveloped transport infrastructure proposals.

The site is located 100 metres to the east of Stock Road, which is reserved as a Primary Regional Road under the MRS. An Acoustic Assessment has been undertaken to determine if future residents within the Structure Plan are likely to be affected by excessive levels of traffic noise, and if so, whether sound attenuation measures will be required to be incorporated into the Structure Plan and / or any subsequent subdivision and development proposals. The level of traffic noise recorded at the site was found to be under the noise target levels established by SPP5.4 and for this reason, the Acoustic Assessment concludes that no specific noise attenuation measures are required to be implemented.

#### **Development Control Policies**

The WAPC has adopted various Development Control Policies relevant to the Structure Plan and its subsequent subdivision and development, including:

- Development Control Policy 1.1 Subdivision of Land (General Principles);
- Development Control Policy 1.7 General Road Planning;
- Development Control Policy 2.2 Residential Subdivision;
- Development Control Policy 2.3 Public Open Space in Residential Areas; and
- Development Control Policy 2.6 Residential Road Planning.

Consideration has been given to the relevant provisions of the above-described Development Control Policies in the process of preparing this Structure Plan.

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#### Liveable Neighbourhoods

Liveable Neighbourhoods is an operational policy of the WAPC that guides the structure planning and subdivision of greenfield and large urban infill sites to promote the development of sustainable communities. The Structure Plan is consistent with the objectives and requirements of the relevant design elements contained within *Liveable Neighbourhoods*, including:

- Community Design;
- Movement;
- Lot Layout;
- Public Parkland;
- Water Management; and
- Utilities.

The Structure Plan proposes an efficient design that incorporates a permeable road network and linear open space system that integrates with the design of approved structure plans over adjoining land within the street block. The design has been informed by the technical reports attached to this Structure Plan and will facilitate infill development in an area with existing infrastructure capacity.

#### **Town Planning Scheme**

#### Zoning

The site is zoned 'Development' under City of Cockburn TPS3. The purpose of the Development zone is to facilitate the development of land in a coordinated manner in accordance with a comprehensive Structure Plan. The permissibility of land uses and applicable dwelling density code for land within the Development zone is determined by reference to an adopted Structure Plan.

#### Refer Figure 6 - TPS3 Zoning Map

#### Special Control Areas

Special Control Areas under TPS3 include:

- Development Areas; and
- Development Contribution Areas.

#### Development Areas

The site is located within Development Area 4 – Yangebup ('DA4'). Land within a Development Area is required to comply with Table 9 of TPS3, which contains the following provision applicable to DA4:

An approved Structure Plan together with all approved amendments shall be given due regard in the assessment of applications for subdivision and development in accordance with clause 27(1) of the Deemed Provisions.

The subdivision and development of land within DA4 is generally to be in accordance with any approved Structure Plan for the land.

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#### Development Contribution Areas

The purpose of a Development Contribution Area ('DCA') under TPS3 is to:

- a) provide for the equitable sharing of the costs of infrastructure and administrative costs between owners;
- ensure that the cost contributions are reasonably required as a result of the subdivision and development of land in the development contribution area; and
- c) coordinate the timely provision of infrastructure.

TPS3 states that a Development Contribution Plan ('DCP') is required to be prepared for each DCA and that an owner of land must make a cost contribution in accordance with the applicable DCP, with costs to be paid at the time of subdivision or development (whichever occurs first).

The site is located within the following DCA's under TPS3:

- Development Contribution Area 4 Yangebup West ('DCA4'); and
- Development Contribution Area 13 Community Infrastructure ('DCA13').

DCA4 requires that a contribution be made toward the cost of constructing Beeliar Drive between Stock Road and Spearwood Avenue, while DCA13 requires that a contribution be made toward regional community infrastructure on a suburb-by-suburb basis, pursuant to the adopted DCP's for each DCA. The following contribution rates currently apply (reviewed annually).

Table 4: Development Contribution Requirements

Development Contribution Area	Development Contribution Rate	
DCA4 – Yangebup West	\$31,537.16 per hectare of land	
DCA13 – Community Infrastructure	\$3,907.84 per lot / dwelling	

#### Structure Plans

The site is not presently subject to an adopted Structure Plan. Structure Plans have been adopted for other land within the street block bound by View Street, Howe Street, Watson Road and East Churchill Avenue.

Table 5: Surrounding Structure Plans

Structure Plan	Status	
Lots 91, 500, 501 & 1 to 5 Howe Street	Adopted 10 June 2010	
Lot 94 Watson Road	Adopted 10 April 2014	
Lot 95 Watson Road	Adopted 15 March 2016	
Lots 97 to 102 Watson Road	Adopted 20 February 2018	

#### Refer Figure 7 - Adopted Structure Plans



#### Local Planning Policies

The City of Cockburn has adopted a number of Local Planning Policies pursuant to TPS3 that are relevant to the Structure Plan and subsequent subdivision and development of the land, including the following:

- Local Planning Policy 1.16 Single House Standards for Medium Density Housing in the Development Zone;
- Local Planning Policy 5.1 Pubic Open Space;
- Local Planning Policy 5.7 Uniform Fencing;
- Local Planning Policy 5.12 Retaining Walls; and
- Local Planning Policy 5.15 Access Street Road Reserve & Pavement Standards.

Consideration has been given to the relevant provisions of the above-described Local Planning Policies in the process of preparing this Structure Plan.

### 2.0 Site Conditions and Constraints



#### 2.1 Biodiversity and Vegetation

As a result of historic and current land uses, the majority of the site has been cleared of all native vegetation. Remnant vegetation in the form of scattered shrubs remains over the central and eastern portions of Lot 66, while a number of mature trees have been planted around the curtilage of the existing dwellings on Lots 65 and 67. There is no riparian vegetation on the site.

A review of desk-top mapping (nationalmap.gov.au) confirms that the site is not known to contain any:

- Threatened and Priority Fauna;
- Threatened and Priority Flora; or
- Threatened Ecological Communities.

The site is not within an Environmentally Sensitive Area declared under Part 5 of the Environmental Protection Act. Accordingly, pursuant to the Environmental Protection (Clearing of Native Vegetation) Regulations, a permit is not required to clear native vegetation for the purpose of constructing a building or other structure, provided the clearing does not exceed 5 hectares, is to the extent necessary and does not involve riparian vegetation. For these reasons, a permit is not required to clear any native vegetation that may exist on the site.

#### 2.2 Landform and Soils

#### Topography

The site rises gently from its north-east and south-west corners toward a ridge line running diagonally through the site. The natural ground level of the site at its north-east corner is 24 metres AHD while the south-west corner of the site has a natural level of 26 metres AHD. The highest point of the ridge line is located at the site's south-east corner where the natural level is 30 metres AHD. The ridge falls slightly toward the site's north-west corner where the natural ground level is 29 metres AHD.

Further details of site levels can be found in the attached Feature Survey.

#### Soils

The site is situated on an elevated limestone ridge with sandy soils and is not within an area where there is a risk of Acid Sulphate Soils occurring,

#### 2.3 Groundwater and Surface Water

According to the Perth Groundwater Atlas published by the Department of Water and Environment Regulation ('DWER'), the depth of groundwater in the locality is 1 metre AHD. With a natural ground level ranging from 26 to 30 metres AHD, the depth to groundwater ranges from 25 to 29 metres below the site's ground level.



The DWER has granted a Groundwater Licence to the owners of Lot 65 for an allocation of 5,000 kilolitres of water per annum. The Groundwater Licence expires on 11 May 2019 (Licence No.68063). The site is not within a declared Public Drinking Water Source Area and there are no surface water features occurring on the site.

#### Refer Figure 8 - Perth Groundwater Atlas

#### 2.4 Bushfire Hazard

The western portion of the site is within a declared Bushfire Prone Area. The attached BMP concludes that development of the site in accordance with the Structure Plan is capable of achieving BAL-29 or lower, with required Asset Protection Zones located entirely within the boundaries of the subject site.

#### 2.5 Heritage

#### **Aboriginal Heritage**

A search of the Department of Aboriginal Affairs 'Register of Aboriginal Heritage Sites' confirms the site is not within a known place of Aboriginal heritage significance.

#### Heritage

A search of the State Heritage Office 'Register of Heritage Places' confirms the site does not contain or form part of any place listed on the State Register of Heritage Places under the Heritage of Western Australia Act. The site does not contain any place included in the City's Municipal Inventory or Heritage List.

#### 2.6 Traffic Noise

The site is located 100 metres to the east of Stock Road. According to traffic data published by Main Roads, Stock Road near Beeliar Drive carried an average of 22,300 vehicles per weekday in 2016/2017, with 12% recorded as truck movements.

An Acoustic Assessment has been undertaken to determine if future residents within the Structure Plan are likely to be affected by excessive levels of noise generated by vehicles on Stock Road. The level of traffic noise recorded at the site was found to be under the noise target levels established by SPP5.4. For this reason, the Acoustic Assessment concludes that no specific noise attenuation measures are required to be implemented within the Structure Plan area.

#### 2.7 Services

The site is able to be connected to all required services, as described in the attached Civil Engineering Report, including sewer, water, power, gas and communications. Sewer will be extended south from the corner of View Street and Howe Street, while all other services are presently within View Street abutting the site. It is anticipated that all services have adequate capacity to meet demand from the proposed lots that will be developed following approval of the Structure Plan. Landowners / developers will be required to coordinate and share the cost of any sewerage network extensions required to service higher density development.

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#### 2.8 Summary of Constraints and Opportunities

As evident from the above, there are no significant constraints that will prevent or restrict the opportunity for the site to be subdivided and developed for medium density housing in accordance with this Structure Plan.

### 3.0 Structure Plan



#### 3.1 Land Use and Density

This Structure Plan has been prepared to facilitate the subdivision and development of the site for medium density housing.

The Structure Plan will allow the site to be subdivided into a minimum of 30 single house lots in accordance with the provisions of the Residential Design Codes with respect to land coded R25. Part 1 of this Structure Plan confirms that the provisions of 'Local Planning Policy 1.16 – Single House Standards for Medium Density Housing in the Development Zone' shall apply to the Structure Plan area. The Structure Plan is designed to ensure that all proposed lots have direct frontage to either View Street or the proposed roads within the site.

#### 3.2 Road Layout

The Structure Plan proposes a road layout that maximises connectivity to abutting land to the east and north.

#### Refer Figure 9 – Structure Plan Connectivity.

The Structure Plan proposes two east-west roads running from the approved Structure Plan area to the east fronting Watson Road. These roads will connect to a north-south road running parallel to View Street. Provision is made for the new north-south road to continue in a northerly direction through the adjoining land to the north, where a future road connection to View Street can be established.

All road reserve widths depicted on the Structure Plan are consistent with City of Cockburn requirements and the width of roads proposed over the abutting land to the east. This ensures a seamless transition across both Structure Plan areas upon completion of road works.

The proposed roads running east-west straddle the common boundary between the Structure Plan and adjacent land to the north and south. Until such time as the abutting land is subdivided, the proposed roads will be constructed within the road reserves contained within the Structure Plan area. The width of the road reserves depicted within the Structure Plan area are sufficient to accommodate construction of the road carriageway and a verge to one side only, with the other verge to be established within the abutting land at the time of subdivision.

The attached Traffic Impact Assessment demonstrates that all existing and proposed roads are capable of accommodating the amount of traffic expected to be generated by the Structure Plan, without any requirement to widen or upgrade existing roads.

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#### 3.3 Public Open Space

The Structure Plan proposes a linear area of Public Open Space running parallel to the site's eastern boundary. It is intended that the POS will connect to the future linear POS network proposed to the north of the site (refer Figure 10).

The POS will front a proposed local road within the approved Structure Plan to the east, while the western boundary of the POS will abut the rear boundary of single house lots proposed by this Structure Plan. It is envisaged these lots will have a finished ground level higher than the POS, with a retaining wall along the western side of the POS. Part 1 of this Structure Plan confirms that Uniform Fencing shall be provided to all residential lot boundaries abutting the Public Open Space in accordance with the provisions of 'Local Planning Policy 5.7 – Uniform Fencing.'

The proposed POS has an area of 1,311m², being equivalent to 8.1% of the site's gross area. The shortfall of 1.9% (308m²) is proposed to be provided as cash-in-lieu. Pursuant to Clause 3.6.2 of WAPC 'Development Control Policy 2.3 – Public Open Space in Residential Areas', it is intended that cash-in-lieu funds be spent on the physical development of the proposed POS.

A Landscape Concept Plan has been prepared to demonstrate the intended finished quality and design of the POS. The detailed design of the POS will be subject to engineering and drainage requirements and the approval of the City of Cockburn.

Table 6: Public Open Space Schedule

Public Open Space Schedule		
Total Site Area (ha)		1.6189 ha
Deductions	Nil	
Gross Subdividable Area		1.6189 ha
Public Open Space		
POS Required	10%	0.1619 ha
POS Provided  Restricted POS Unrestricted POS	Nil 0.1311 ha	0.1311 ha
Total POS Provided	8.1%	0.1311 ha
Balance as Cash-in-Lieu – Physical Development of POS Refer Clause 3.6.2 of WAPC Development Control Policy 2.3	1.9%	0.0308 ha

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#### 3.4 Civil Engineering

#### Earthworks, Levels and Retaining Walls

The attached Civil Engineering Report provides an indication of the design levels that are intended to be achieved when the site is subdivided in accordance with this Structure Plan. The site will be cleared and earthworks undertaken to achieve the desired levels, with clean fill imported (as required) to achieve suitable geotechnical conditions for construction of roads and houses.

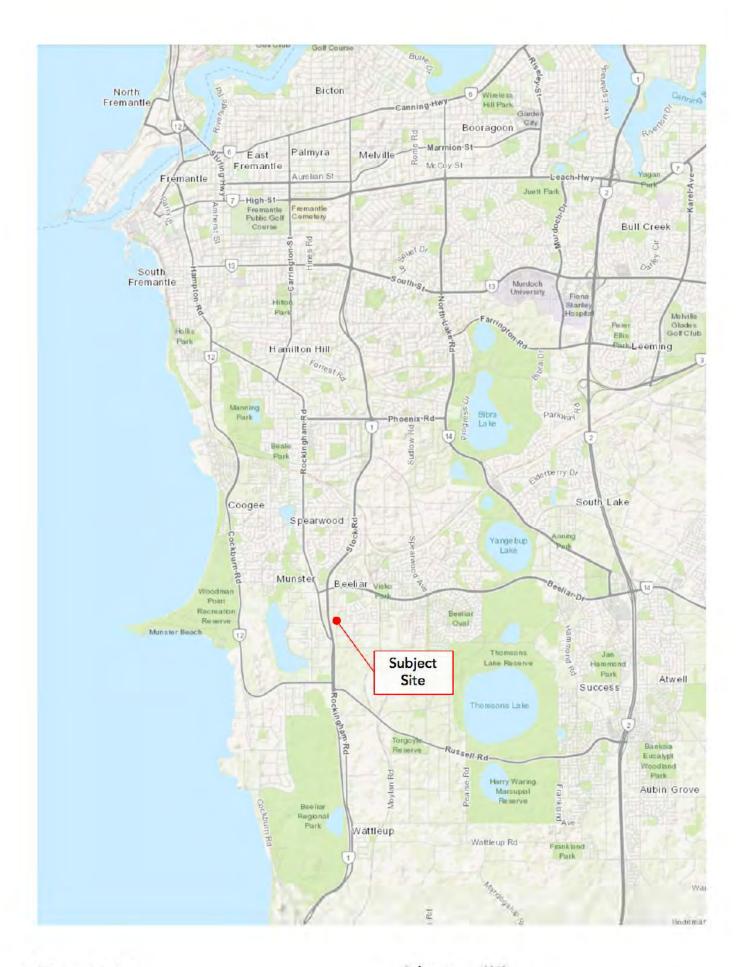
The preliminary design levels also take into account the likely finished level of the approved subdivision over the land to the east. Design levels will be refined and reviewed as development progresses over the adjoining land.

The attached Civil Engineering Report depicts the location of retaining walls, which are required to achieve level sites. Retaining walls are also proposed along the western edge of the POS. The retaining wall on the western edge of the POS is intended to elevate the adjacent lots so that they overlook the POS and obtain an outlook toward the east. The retaining wall will have a height of approximately 0.9 metres at its northern end, increasing to a height of approximately 1.2 metres toward the southern part of the POS, before decreasing to a height of 0.75 metres at the southern end of the POS.

#### Drainage

Appendix A of the Civil Engineering Report incorporates a Stormwater Management Strategy for the Structure Plan. The Strategy proposes the installation of two 'stormtech cells' (or similar) within the proposed POS. The Landscape Concept Plan takes into consideration the location of the 'stormtech cells' in the POS.





# Figure 1 Regional Location



Reference 0049

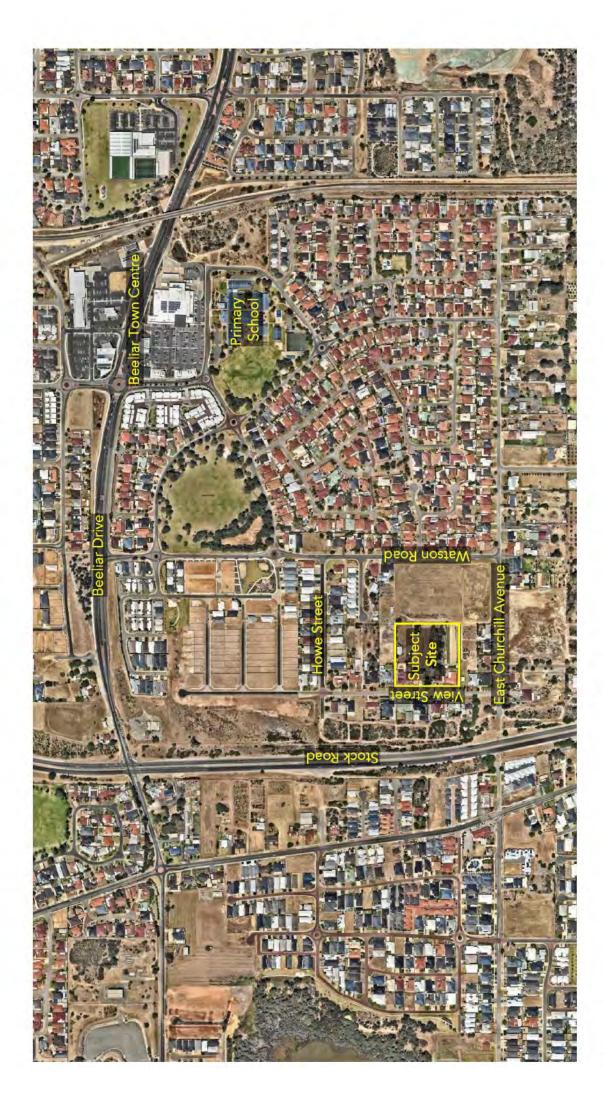
Project Local Structure Plan

Location Lots 7, 65, 66 & 67 View Street, Beeliar

Date 31 January 2019

Scale NTS

Map Source Landgate



Reference 0049

Project Local Structure Plan

Location Lots 7, 65, 66 & 67 View Street, Beeliar

Date 31 January 2019 Scale NTS

Map Source NearMap

Figure 2
Local Location

STEWART
URBAN
PLANNING



## Figure 3 Aerial Photograph



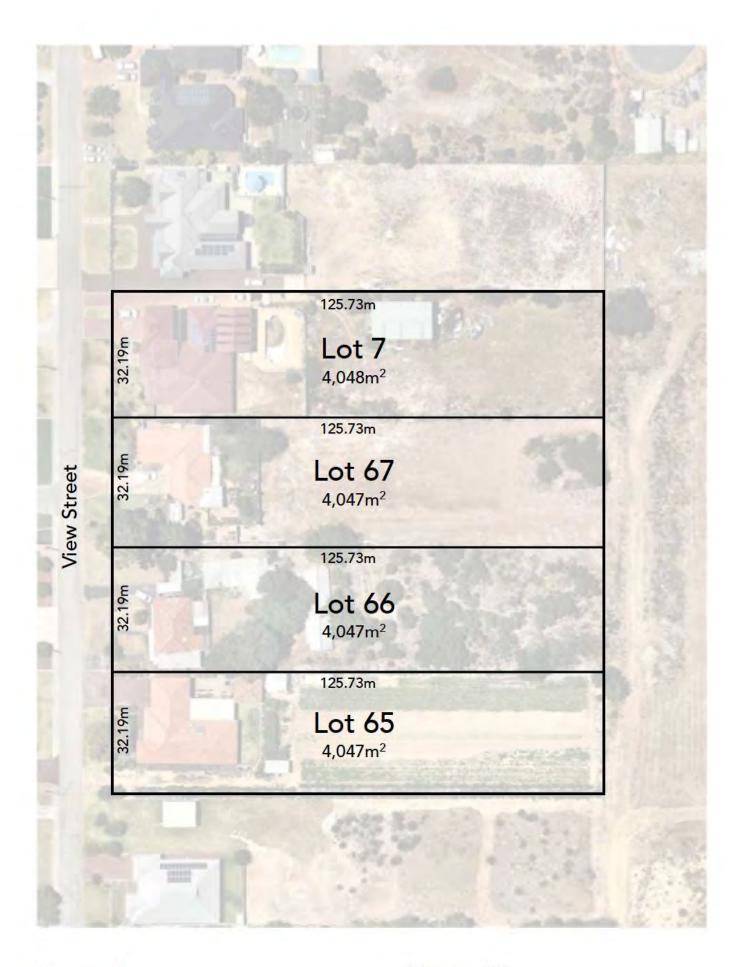
Reference 0049

Project Local Structure Plan

Location Lots 7, 65, 66 & 67 View Street, Beeliar

Date 31 January 2019

Scale NTS
Map Source NearMap



## Figure 4 Site Plan



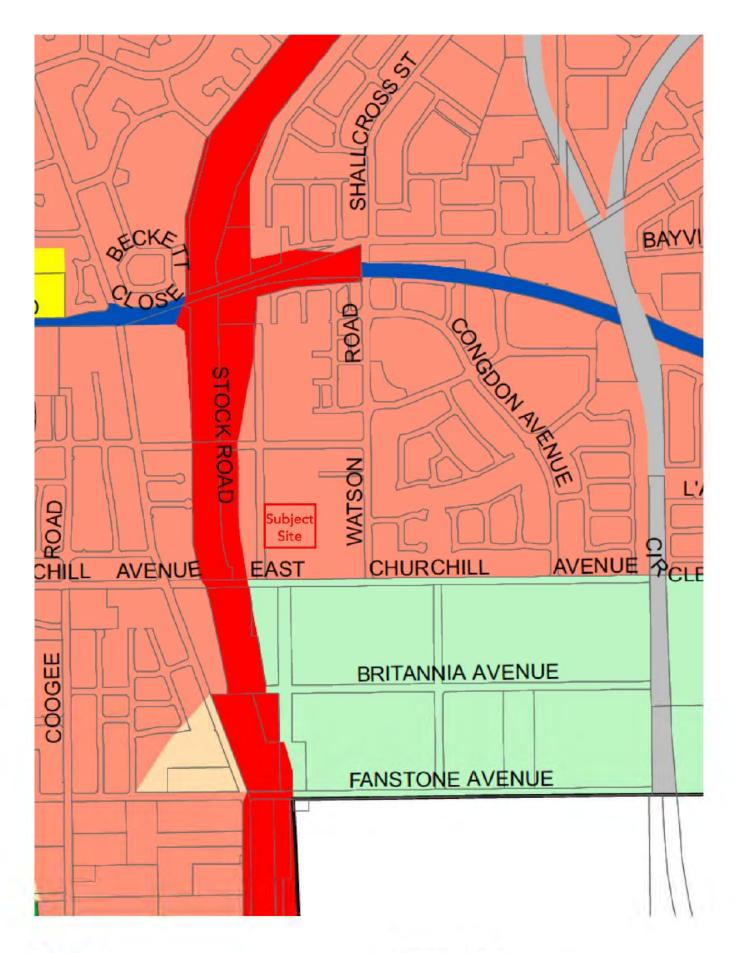
Reference 0049

Project Local Structure Plan

Location Lots 7, 65, 66 & 67 View Street, Beeliar

Date 31 January 2019

Scale NTS Map Source NearMap



### Figure 5 MRS Zoning Map



Reference 0049

Project Local Structure Plan

Location Lots 7, 65, 66 & 67 View Street, Beeliar

Date 31 January 2019

Scale NTS

Map Source Department of Planning, Lands & Heritage



### Figure 6 LPS3 Zoning Map



Reference 0049

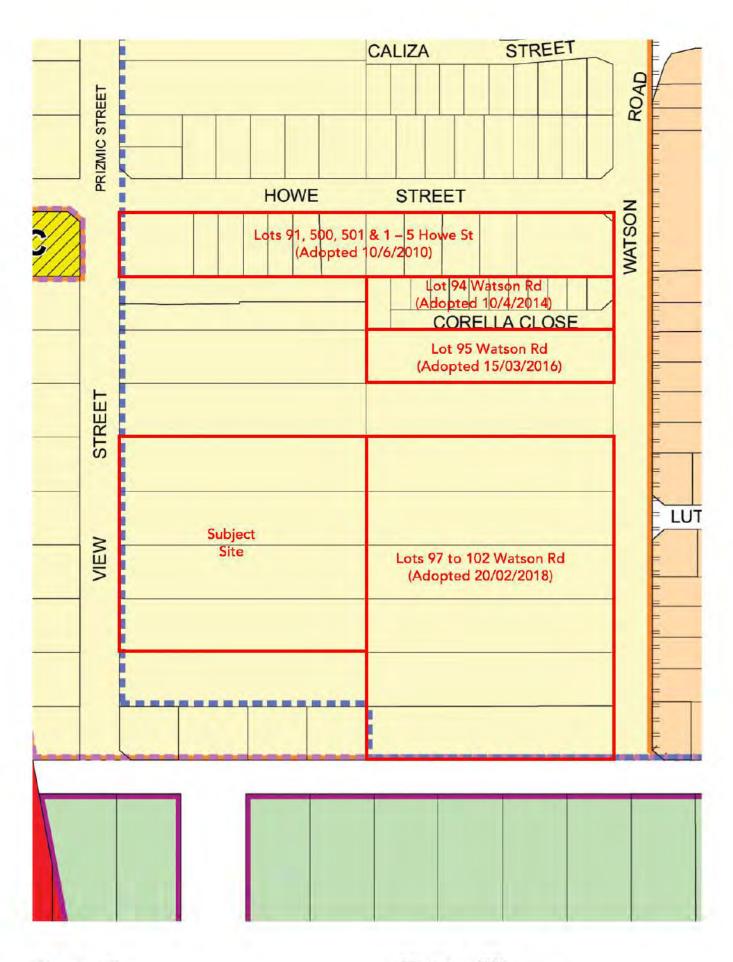
Project Local Structure Plan

Location Lots 7, 65, 66 & 67 View Street, Beeliar

Date 31 January 2019

Scale NTS

Map Source City of Cockburn



## Figure 7 Adopted Structure Plans



Reference 00

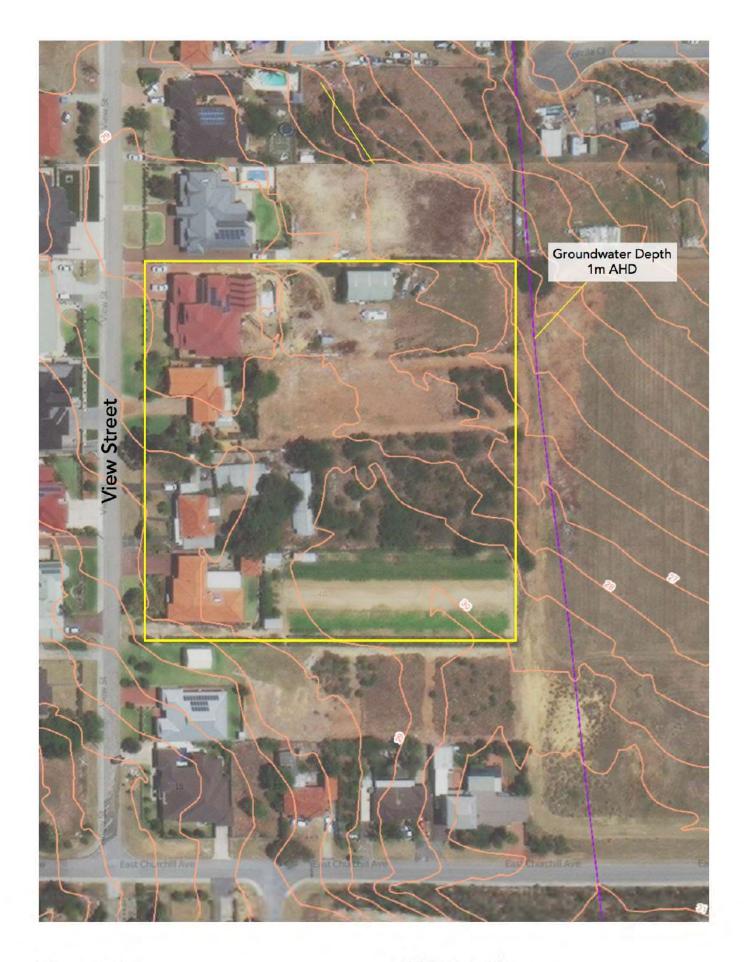
Project Local Structure Plan

Location Lots 7, 65, 66 & 67 View Street, Beeliar

Date 31 January 2019

Scale NTS

Map Source City of Cockburn



## Figure 8 Perth Groundwater Atlas



Reference 0049

Project Local Structure Plan

Location Lots 7, 65, 66 & 67 View Street, Beeliar

Date 31 January 2019

Scale NTS

Map Source Dep't of Water & Environment Regulation



Local Road

Local Scheme Zones

Residential Structure Plan Boundary



Drawing Number: Revision:

02 Projection: Scale:

D MGA50 1:2000 @ A4

Project Job Reference:

Date:

Local Structure Plan 0049 20 September 2019

