

GOLDEN GATEWAY STRUCTURE PLAN



ENDORSEMENT

This Structure Plan is prepared under the provision of the **City of Belmont Local Planning Scheme No. 15**

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

..... Date

Signed for and on behalf of the Western Australian Planning Commission

.....

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

..... Witness

..... Date

..... Date of Expiry



TABLE OF AMENDMENTS

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

EXECUTIVE SUMMARY

This Structure Plan is prepared to guide the subdivision and development of land contained within the inner edge of the line denoting the Structure Plan boundary on the Structure Plan map (hereafter referred to as ‘Golden Gateway’ or ‘Structure Plan area’).

The subject land is located:

- Within the municipality of the City of Belmont;
- Approximately 5 kilometres (km) north-east of the Perth Central Business District (CBD) 3km north of Belmont Forum and mixed business area and 5km north-east of Victoria Park entertainment precinct; and
- Approximately 2.5km east of Graham Farmer Freeway and 2km west of Tonkin Highway.

The subject land encompasses a mix of uses comprising mixed business, retail (food and beverage), public uses associated with the Western Australian Turf Club (WATC), Ascot Racecourse and Ascot Kilns, Belmont Charitable Trust Land and Swan River environs. The remainder of the subject land is largely undeveloped and devoid of vegetation.

The development of the Belmont Charitable Trust Land, Ascot Kilns and WATC sites are subject to separate planning processes.

The Ascot Kilns site is owned by the Western Australian Planning Commission (WAPC) and is the subject of a draft Local Development Plan (LDP) and draft Local Planning Policy (LPP) that was considered for final approval by Council at its meeting of 12 December 2017. The draft LDP and LPP details the intended future planning vision for this site with regards to proposed land uses, built form, development standards and the retention of the majority of the heritage listed kilns and chimney structures.

The Belmont Charitable Trust Land is owned by the City of Belmont and managed by the ‘Belmont Trust’. This land is not subject to any formal statutory planning processes at this stage and nor is there a specific timeline for the future planning of this land. The future consideration for this land is dependent upon the ‘Belmont Trust’.

Land owned by the WATC is subject to a separate planning process.

The Structure Plan proposes development of land for:

- Commercial/Retail uses;
- Residential purposes comprising medium and high residential densities;
- Public Open Space (POS) including foreshore reserve; and
- Access streets.

Item	Data	Structure Plan Ref. (Section No.)
Total area covered by the Structure Plan	30.9223 ha	1.2.3
Area subject to controls under this Structure Plan	22.8822 ha	1.2.3
Area subject to separate planning process	8.0401 ha	1.2.3
Area of each land use proposed:	Hectares	3.3
<ul style="list-style-type: none"> • Residential • Mixed Use 	4.2473 ha 1.7578 ha	
Estimated No. of Dwellings	2,268	3.3.1.1
Estimated Residential Site Density	378 Dwellings per site/ha	4.1.2.1
Estimated Population	4,082 persons	3.3.1.1
No. of High Schools	N/A	3.6
No. of Primary Schools	N/A	3.6
Estimated Commercial Floor Space	6,979m ² nett lettable area	3.3.2.2
Estimated Retail Floor Space	1,200m ² nett lettable area	3.3.2.2
Estimated area and percentage of Public Open Space (Local Parks)	0.2% 0.0525ha 1 park	3.3.7
Estimated area of natural area (existing Parks and Recreation Reservation)	4.5556 ha	3.3.7



TABLE OF CONTENTS

PART ONE IMPLEMENTATION	1	2.1.3 FAUNA	27	3.3.6 CAR PARKING	49
1 STRUCTURE PLAN AREA	2	2.2 LANDFORM AND SOILS	27	3.3.7 PUBLIC OPEN SPACE	50
2 OPERATION	2	2.2.1 LANDSCAPE AND TOPOGRAPHY	27	3.3.8 PUBLIC REALM PROVISION	52
3 STAGING	2	2.2.2 ACID SULFATE SOILS	27	3.3.9 LANDSCAPE DESIGN	55
4 SUBDIVISION AND DEVELOPMENT REQUIREMENTS	3	2.2.3 CONTAMINATED SITES	28	3.4 MOVEMENT NETWORK	56
4.1 LAND USE ZONES/RESERVES	3	2.3 GROUNDWATER AND SURFACE WATER	28	3.4.1 ROAD NETWORK AND TRAFFIC MANAGEMENT DEVICES ⁵⁶	
4.1.1 MIXED USE (R-AC0)	3	2.3.1 GROUNDWATER	28	3.4.2 TRAFFIC FORECASTS	56
4.1.2 PARKS AND RECREATION	4	2.3.2 SURFACE WATER	28	3.4.3 PEDESTRIAN AND CYCLING NETWORK	58
4.1.3 LOCAL ROADS	4	2.4 BUSHFIRE HAZARD	28	3.4.4 PUBLIC TRANSPORT	58
4.2 DEVELOPMENT REQUIREMENTS	5	2.5 HERITAGE	28	3.5 WATER MANAGEMENT	58
4.2.1 PRECINCT DEVELOPMENT REQUIREMENTS	5	2.5.1 ABORIGINAL	28	3.5.1 STORMWATER MANAGEMENT	58
4.2.2 GENERAL DEVELOPMENT REQUIREMENTS	7	2.5.2 EUROPEAN	29	3.5.2 GROUNDWATER MANAGEMENT	59
5 OTHER REQUIREMENTS	9	2.6 EXISTING MOVEMENT NETWORK	29	3.6 EDUCATION FACILITIES	59
5.1 SCHEME AMENDMENT	9	2.6.1 GREAT EASTERN HIGHWAY	29	3.7 EMPLOYMENT	59
5.2 INFRASTRUCTURE FUNDING STRATEGY	9	2.6.2 INTERNAL ROADS	29	3.8 INFRASTRUCTURE COORDINATION, SERVICING AND STAGING	59
5.3 BUSHFIRE MANAGEMENT	9	2.6.3 PEDESTRIAN NETWORK AND CYCLING	30	3.8.1 WATER SUPPLY	60
5.4 ABORIGINAL HERITAGE	9	2.6.4 PUBLIC TRANSPORT	31	3.8.2 WASTEWATER	60
5.5 NOISE ATTENUATION	9	2.7 ROAD TRAFFIC NOISE	31	3.8.3 POWER SUPPLY	60
5.6 DESIGN REVIEW PANEL	9	2.8 EXISTING INFRASTRUCTURE AND SERVICING	31	3.8.4 GAS SUPPLY	60
6 ADDITIONAL INFORMATION	10	2.8.1 WATER SUPPLY	31	3.8.5 TELECOMMUNICATIONS	60
PART TWO EXPLANATORY INFORMATION	14	2.8.2 WASTEWATER	31	3.8.6 WATER CORPORATION MAIN DRAIN	60
1 PLANNING BACKGROUND	15	2.8.3 POWER SUPPLY	31	3.9 IMPLEMENTATION	60
1.1 INTRODUCTION AND PURPOSE	15	2.8.4 GAS SUPPLY	31	3.9.1 SCHEME AMENDMENT TO FACILITATE STRUCTURE PLAN	60
1.2 LAND DESCRIPTION	15	2.8.5 TELECOMMUNICATIONS	32	3.9.2 INFRASTRUCTURE FUNDING STRATEGY	61
1.2.1 LOCATION	15	3 STRUCTURE PLAN	33	3.9.3 LAND ASSEMBLY	61
1.2.2 LAND USE	18	3.1 VISION AND OBJECTIVES	33		
1.2.3 LEGAL DESCRIPTION AND OWNERSHIP	19	3.1.1 VISION	33		
1.3 PLANNING FRAMEWORK	22	3.1.2 OBJECTIVES	33		
1.3.1 ZONING AND RESERVATIONS	22	3.2 DESIGN PREPARATION	33		
1.3.2 PLANNING STRATEGIES	24	3.2.1 OPPORTUNITIES	34		
1.3.3 PLANNING POLICIES	25	3.2.2 ISSUES AND CONSTRAINTS	36		
1.3.4 PRE LODGEMENT CONSULTATION	25	3.2.3 CONCEPT SCENARIO FORMULATION	40		
2 SITE CONDITIONS AND CONSTRAINTS	27	3.2.4 DEVELOPMENT CONCEPT PLAN	42		
2.1 ENVIRONMENTAL ASSETS AND CONSTRAINTS	27	3.3 LAND USE	47		
2.1.1 VEGETATION	27	3.3.1 RESIDENTIAL	47		
2.1.2 FLORA	27	3.3.2 OTHER LAND USES	47		
		3.3.3 LAND USES	48		
		3.3.4 BUILDING HEIGHT	48		
		3.3.5 LANDMARK SITES	49		

TECHNICAL APPENDICES

- APPENDIX A BUSHFIRE MANAGEMENT PLAN
- APPENDIX B ENVIRONMENTAL ASSESSMENT REPORT
- APPENDIX C MOVEMENT AND ACCESS STRATEGY
- APPENDIX D INFRASTRUCTURE ASSESSMENT REPORT
- APPENDIX E PUBLIC REALM STRATEGY

PART ONE IMPLEMENTATION

1 STRUCTURE PLAN AREA

This Structure Plan shall apply to the Golden Gateway Precinct, being the land contained within the inner edge of the line denoting the Structure Plan boundary on the Structure Plan map (**Plan 1**). The provisions of this Structure Plan apply to all land within this area, except for land designated as subject to a separate planning process on **Plan 1**.

2 OPERATION

This Structure Plan commences operation on the date it is approved by the Western Australian Planning Commission (WAPC).

3 STAGING

The staging of subdivision and development will be primarily influenced by the timing of land rationalisation. As most of the developable land is fragmented and privately owned, the actual timing and sequence of development will be subject to market demand and individual development intentions. Land within the northern section of the subject land is less constrained by land ownership, with the WA Turf Club (WATC) and WAPC owning the majority of this land, however is subject to a separate planning process.

Servicing infrastructure required to support future development of the subject land is either in place or can be relocated/provided to service the subject land and as such is not regarded as an impediment to staging.

The modification of Daly Street into a cul-de-sac will be a trigger to enable development within the Daly Street Precinct.

Table 1 below provides an outline of the key triggers for enabling development within various parts of the Structure Plan area.

TABLE 1: STAGING TRIGGERS

STAGING TRIGGERS	PRECINCTS	COMMENT
1. Planning Framework implementation - Scheme Rezoning, Structure Plan approval	<ul style="list-style-type: none"> Ascot Kilns 	No subdivision or development to be approved until the planning framework is in effect.
2. Closure of Daly Street	<ul style="list-style-type: none"> Daly Street 	The connection of Daly Street and Stoneham Street will be closed and redundant road reserve converted to public open space
3. Progressive rationalisation of private landholdings	<ul style="list-style-type: none"> Great Eastern Highway, Stoneham Street, Daly Street and Resolution Drive 	
4. Progressive upgrade to roads and adjacent verges	<ul style="list-style-type: none"> Great Eastern Highway, Stoneham Street, Daly Street and Resolution Drive 	Development may be permitted to occur prior to upgrades subject to contribution towards upgrade works in cash or in kind (where appropriate).

4 SUBDIVISION AND DEVELOPMENT REQUIREMENTS

This Structure Plan comprises the plans outlined below:

- **Plan 1 – Structure Plan Map**
Outlines the zones, reserves and residential densities applicable within the Structure Plan area.
- **Plan 2 – Precinct Plan**
Identifies development precincts within the Structure Plan area, for the purpose of defining specific development criteria.
- **Plan 3 – Building Height Plan**
Depicts the intended building heights within the Structure Plan area. All development should demonstrate compliance with the Building Height Plan.

4.1 LAND USE ZONES/RESERVES

The Structure Plan Map (**Plan 1**) outlines the following zones and reserves applicable within the Structure Plan area:

- Mixed use.
- Local roads.
- Parks and Recreation.

Land use permissibility within the subject land shall accord with the land use permissibility of the corresponding zone/reserve listed above, as specified in Table 1 of the City of Belmont Local Planning Scheme No. 15 (LPS 15) to the extent that the zoning of the land under LPS 15 permits. The Responsible Authority should also have due regard for the uses listed as “Unacceptable” under the following zoning statements.

4.1.1 MIXED USE (R-AC0)

The Mixed Use zone is intended to facilitate the development of a mix of varied, but compatible, land uses including residential, offices, retail, commercial, civic and entertainment uses, in a highly integrated built form environment.

The objectives of the Mixed Use area are to:

- Provide a diversity of land uses and housing types.
- Provide for development that contributes to the creation of a high quality public realm and creates a sense of identity and character.
- Provide local retail/commercial facilities to the subject land as well as the broader locality.

It is envisaged that the Mixed Use zone will predominantly accommodate residential development in the form of multiple dwellings With non-residential development comprising of active land uses (i.e. restaurant, café, shop) on ground level. The ‘mixed use’ designation provides the flexibility for land uses to change and evolve over time in response to market conditions.

4.1.1.1 LAND USE PERMISSIBILITY

Land use permissibility shall generally be in accordance with the corresponding zone in the Zoning Table in LPS 15. However, having regard for the amenity for future residents the following uses are considered to be Unacceptable in the subject land and should not be approved:

- Auction Mart
- Caretakers Dwelling
- Fast Food Outlet / Lunch Bar
- Home Store
- Garden Centre
- Industry - Light
- Industry - Service

- Motor Vehicle Repair
- Night Club
- Radio or TV Installation
- Restricted Premises
- Service Station
- Single House
- Vet Hospital
- Warehouse

Furthermore, 'Shop' is an Additional Use in the Mixed Use zone within the subject land.

Residential development within the Mixed Use zone shall be in accordance with the 'R-AC0' code and associated standards as set out in **Table 2: Precinct Development Table** for the relevant Precinct.

4.1.1.2 DWELLING TARGET

The dwelling targets for the Mixed Use zone is/are:

378 dwellings per site/ha

4.1.1.3 DENSITY

Plan 1 (Structure Plan) assigns a R-AC0 density code to the subject area.

4.1.2 PARKS AND RECREATION

The foreshore reserve and Belmont Charitable Trust Land are included in the Structure Plan Area for context only. No specific works or requirements are required under the Structure Plan for these areas. The Belmont Trust Land is for public recreation and enjoyment, further planning work will need to be undertaken to ensure adequate access to the site, and an appropriate interface with surrounding development.

Acknowledging the role that the Belmont Charitable Trust plays within the Structure Plan area, the Structure Plan provides for the collection of cash-in-lieu to be used for the upgrading of the Belmont Charitable Trust Land. The City can then make an application to the Minister for Planning under s.154(2)(c) of the *Planning and Development Act 2005* for approval to do this.

This does not preclude consideration being given to the allocation of land for additional POS where a developer chooses to do so at subdivision stage. The amount of cash or land to be provided would likely be based on the equivalent value of land which would otherwise be required, however this will ultimately be determined by the City of Belmont and the WAPC.

Within the balance of the Structure Plan Area, Public Open Space (POS) is to be provided generally in accordance with **Plan 1** and should be vested in the Crown and managed by the Local Government. POS within the Structure Plan area will be provided by the closure of Daly Street and the conversion of closed land, primarily serving a passive recreation and pedestrian connectivity function. The development of land included within the Swan and Canning River Development Control Area will be subject to the approval of the Department of Biodiversity, Conservation and Attractions (DBCA).

4.1.3 LOCAL ROADS

4.1.3.1 EXISTING ROADS

Existing local roads are to be upgraded to reflect an inner urban street character, featuring on-street parking, high quality landscape and pedestrian facilities. The existing 20m reserve width shall be maintained to ensure that the street serves a high quality public realm function in addition to facilitating local traffic movement.

It is not anticipated that additional roads will be required, however the introduction of additional roads within the Structure Plan Area may occur through possible future subdivision and in accordance with Part 10 of the Planning & Development Act 2005. Any new roads are to be designed to a residential standard in accordance with the requirements of the Local Government. Road reserve widths shall be 20m, to reflect similar characteristics to the existing road system, unless an alternative design is supported by the Local Government and approved by the WAPC.

Daly Street will be partially closed and converted to a cul-de-sac consistent with the Main Roads Western Australia Access Strategy for Great Eastern Highway. Redundant road reserve will be converted to POS.

4.2 DEVELOPMENT REQUIREMENTS

4.2.1 PRECINCT DEVELOPMENT REQUIREMENTS

The following precincts have been established to ensure that the Structure Plan Area is developed in a comprehensive and integrated manner having regard to desired character, preferred land uses, residential density, built form and public realm design principles:

- Precinct 1: Great Eastern Highway
- Precinct 2: Stoneham Street
- Precinct 3: Daly Street
- Precinct 4: Resolution Drive
- Precinct 5: Ascot Kilns

4.2.1.1 STATEMENTS OF INTENT

Precinct 1: Great Eastern Highway

The Great Eastern Highway Precinct will present itself as a strong, unified commercial and mixed-use edge. Active, commercial uses shall be provided at ground level and above with residential development to occupy upper storeys.

The visual prominence of the Great Eastern Highway frontage will require sensitive architectural treatment to ensure that the built form contributes positively to the aesthetic quality of the area. Two landmark sites are located at the eastern and western ends of the Precinct and these should seek to optimise the intrinsic benefits of a gateway position that responds to existing view corridors along Great Easter Highway.

Precinct 2: Stoneham Street

The Stoneham Street Precinct, whilst still remote from the river front, will be the primary interface between the Golden Gateway development and the river.

Understanding that planning for Belmont Charitable Trust Land is yet to be undertaken, it is recommended that any future planning should maintain strong physical links between the river and the future Golden Gateway population and workforce.

Development addressing Stoneham Street is to provide an appropriate interface to the Belmont Charitable Trust Land to ensure a high standard of visual amenity and surveillance within a mixed use environment. The aspect towards the river may be attractive for food and beverage uses, which should be accommodated. Active, commercial uses shall be provided at ground level and above with residential development to occupy upper storeys.

A tree-lined promenade along Hargreaves Street will create a unique vista with the Belmont Charitable Trust Land and the Swan River.

Precinct 3: Daly Street

The Daly Street Precinct will perform an important connective function between the remaining precincts adjacent to Great Eastern Highway. Mixed use development is encouraged; however, the ultimate land use mix should not rely upon passing traffic given the planned closure of the Daly Street and Stoneham Street intersection.

Daly Street is defined by numerous disparate landholdings that could be amalgamated to unlock the development potential of this precinct, and proposals for development should investigate the highest and best use of land.

Precinct 4: Resolution Drive

Buildings at the intersection of Resolution Drive and Stoneham Street should leverage its location as the northern 'arrival' point to Golden Gateway.

Active, commercial uses shall be provided at ground level and above with residential development to occupy upper storeys. Trees will line either side of the southern portion of Grandstand Road (between Great Eastern Highway and Resolution Drive) to create an attractive pedestrian environment.

Precinct 5: Ascot Kilns

This precinct is characterised by the historic kilns and landmark chimney stacks that are of considerable State heritage significance. Development will therefore have a strong heritage and landscape focus, using built form to celebrate and frame the historic structures, and to secure their ongoing preservation.

This precinct is the subject of separate Local Planning Policy (LPP) and Local Development Plan (LDP).

In addition to the Precinct Development Table, Design Guidelines may be adopted to provide further guidance for subdivision and development of the precinct pursuant to Section 5.1.

4.2.1.2 PRECINCT STANDARDS AND REQUIREMENTS

Table 2: Precinct Development Table outlines the standards and requirements for subdivision and development in the corresponding precincts designated on **Plan 2** Precinct Plan. Building height requirements should be read in conjunction with **Plan 3** Building Height Plan.

In relation to Precinct 5 Ascot Kilns, development standards and requirements in this Structure Plan should be read in conjunction with the Ascot Kilns Design Guidelines and LDP. The Ascot Kilns LDP should identify the requirement for a minimum of 10% POS to be delivered on site.

TABLE 2: PRECINCT DEVELOPMENT TABLE

Precinct	R-Code	Min. height	Max. height	Min. boundary setback	Min. street setback	Max. street setback	Plot ratio (Plot Ratio with Additional Height)
1 Great Eastern Highway	R-AC0	Podium: 2 storeys Tower: 7 storeys	Podium: 5 storeys Tower: 15 storeys	Podium: Nil Tower: as per State Planning Policy 7.3 Residential Design Codes Volume 2 - Apartments	Podium: Nil Tower: 3m	Podium: Nil Tower: N/A	5.0:1 (6.5:1)
2 Stoneham Street	R-AC0	Podium: 2 storeys Tower: 5 storeys	Podium: 3 storeys Tower: 10 storeys	Podium: Nil Tower: as per State Planning Policy 7.3 Residential Design Codes Volume 2 - Apartments	Podium: Nil Tower: 3m	Podium: Nil Tower: N/A	3.0:1 (5.0:1)
3 Daly Street	R-AC0	Podium: 2 storeys Tower: 5 storeys	Podium: 3 storeys Tower: 10 storeys	Podium: Nil Tower: as per State Planning Policy 7.3 Residential Design Codes Volume 2 - Apartments	Podium: Nil Tower: 3m	Podium: Nil Tower: N/A	3.0:1 (5.0:1)
4 Resolution Drive	R-AC0	Podium: 2 storeys Tower: 5 storeys	Podium: 3 storeys Tower: 10 storeys	Podium: Nil Tower: as per State Planning Policy 7.3 Residential Design Codes Volume 2 - Apartments	Podium: Nil Tower: 3m	Podium: Nil Tower: N/A	3.0:1 (5.0:1)
5 Ascot Kilns	R-AC0	Refer to Ascot Kilns Design Guidelines and Local Development Plan	Refer to Ascot Kilns Design Guidelines and Local Development Plan	Refer to Ascot Kilns Design Guidelines and Local Development Plan	Refer to Ascot Kilns Design Guidelines and Local Development Plan	Refer to Ascot Kilns Design Guidelines and Local Development Plan	N/A

Notes:

1. *Minimum and maximum building heights specified for tower components are inclusive of podium levels.*
2. *An additional 5 storeys in height can be considered subject to satisfying development requirements in section 4.2.2.2*
3. *This table is to be read in conjunction with the more detailed provisions of a LPP, where relevant.*
4. *In relation to Precinct 5 Ascot Kilns, this table is to be read in conjunction with the Ascot Kilns Design Guidelines and LDP.*

4.2.2 GENERAL DEVELOPMENT REQUIREMENTS

Development within the subject precinct shall be generally in accordance with the standards and requirements of the City’s Local Planning Scheme and any relevant State Planning Policy, Local Development Plan and Local Planning Policy, having regard to the provisions contained within this structure plan.

Proposed variations to the standards and requirements of the City’s Local Planning Scheme, any relevant State Planning Policy, Local Planning Policy, Local Development Plan or the provisions of this structure plan are to be outlined within a development application and will be considered by the Responsible Authority with due regard to the intent and purpose of the standards.

4.2.2.1 PARKING

Car parking should be provided in accordance with LPS 15 and the relevant R-Codes subject to the following variations:

1. The Local Government wishes to encourage innovative approaches to car parking provision, such as reciprocity, car-pooling programs or other innovations, that may result in reduced parking provision where appropriate.

The Responsible Authority will consider approving a reduced parking provision where it can be demonstrated that an alternative parking proposal is sound and will result in a reduction in parking demand. Any proposed variation should be supported by a parking demand assessment undertaken by a suitably qualified professional.

2. The following specific requirements apply:

- a) For Mixed Use development, all residential parking in excess of 1 bay per dwelling, and at least 50% of the minimum required parking for non-residential uses shall be made available for general use of either residential or non-residential uses (these bays represent unallocated communal parking bays).
- b) Mixed Use development that proposes parking as outlined in 2a) above should be required, as a condition of Development Approval, to prepare a Car Parking Strategy that addresses the management of the unallocated communal parking provision, including:
 - i. The hours during which parking bays shall be made available for general public access.
 - ii. Location, signage and monitoring of usage of the unallocated communal parking bays.

The provision of car parking that is in excess of the minimum required for the site will only be approved where it is designed to be adaptable for future conversion into habitable floor space, or other useable space for communal or private usage. In order for parking to be considered adaptable, it must be shown as located in a position that is suitable for an alternative use, not included in individual strata titles and constructed to comply with habitable floorspace standards.

This requirement may be waived if it can be demonstrated that complying with the requirement would not be practical or would result in a less desirable outcome.

4.2.2.2 BUILDING HEIGHT

Minimum and maximum building heights within the Structure Plan Area are to be in accordance with the ranges identified in **Table 2** and on **Plan 3**.

All sites within the Structure Plan area may incorporate an additional 5 storeys in height, above the maximum identified in **Table 2** at the discretion of the decision maker subject to the following:

- The production of an exceptionally high quality of design, as determined by the appointed design review panel; and
- Incorporate the following:
 - An area of publicly accessible private open space; and
 - 100% of windows containing double glazing; and
 - Provide an additional tree on-site above what is required by State Planning Policy 7.3 Volume 2 – Apartment Design Code. The tree must be a native species with a pot size of between 100L – 200L; and
 - Provide conduits and capacity within the electrical distribution system and metering or future provision of electric car charging for each unit within the development; and
 - Provide a minimum of two electric vehicle charging bays within the development; and
 - Provide shared sustainable transport measures for the development that may include the provision of electric bikes, scooters and vehicle/s; and

- Achieve a Nationwide House Energy rating Scheme (NatHERS) star rating of a minimum of one star in excess of the current energy efficiency rating for the dwelling shall be certified by a suitably qualified and accredited energy assessor using accredited software and shall be provided at the development application stage; and
- Install a photovoltaic solar panel system that can provide the equivalent of at least 1Kw energy per dwelling.

Notwithstanding the provisions of **Table 2** and **Plan 3**, maximum building heights are subject to compliance with the Airports (Protection of Airspace) Regulations 1996.

Information on Obstacle Limitation Surfaces is available at <https://www.perthairport.com.au/Home/corporate/planning-and-projects/airspace-protection>.

4.2.2.3 LANDMARK SITES

Landmark site locations have been identified on **Plan 3**. These sites have been located in response to priority view lines and public vistas. They define local character and maximise legibility through high quality pedestrian scale, development of these sites is strongly recommended to respond to existing sight lines and maximise street presence.

Elements of design that should be investigated include articulation adjacent to, and above, the street level, building proportion that maximises the perception of bulk from a distance, intrinsic quality of materials that produce interest for pedestrians, detail that is revealed in proximity to the development and interesting distribution of mass.

5 OTHER REQUIREMENTS

5.1 SCHEME AMENDMENT

An amendment to the City of Belmont's LPS 15 will be required to apply the R-AC0 density code over the subject land and to exclude land uses that would be permissible within the Mixed Use zone as identified in section 4.1.1.1. This will also need to provide for the 'Shop' land use as an additional use.

5.2 INFRASTRUCTURE FUNDING STRATEGY

The City of Belmont may establish an appropriate funding strategy for the provision of infrastructure within the Structure Plan Area. The strategy may include the introduction of a Development Contribution Area (DCA) through LPS 15, under which a Development Contribution Plan (DCP) can be implemented to contribute to the funding of public infrastructure necessary to facilitate development in the Structure Plan Area.

Infrastructure items that would be eligible to be funded under a DCP should be in accordance with State Planning Policy 3.6 Development Contributions for Infrastructure (SPP 3.6).

5.3 BUSHFIRE MANAGEMENT

This Structure Plan is supported by a Bushfire Management Plan (BMP), which is contained at **Appendix A**.

Where appropriate, development will have regard to the Bushfire Attack Level (BAL) Assessment contained in this Report and be determined in accordance with Schedule 2, Part 10A of the Planning and Development (Local Planning Schemes) Regulations 2015 and section 6.3 of SPP 3.7 Planning in Bushfire Prone Areas (SPP 3.7).

An LDP is required to be prepared for all lots with a BAL of 12.5 or greater.

Where a subdivision application includes land with a BAL of 12.5 or greater, the Local Government shall recommend to the WAPC that a condition be imposed on the grant of subdivision approval for a notification to be placed on the Certificate of Title to suitably respond to the following:

"That a lot with a bushfire attack level BAL rating of 12.5 or higher is subject to a BMP."

5.4 ABORIGINAL HERITAGE

A search of the Department of Planning, Lands & Heritage (DPLH) Aboriginal Heritage Enquiry System identifies one site within the northern/western portion of the subject land (Site ID 3753).

Should the Aboriginal Heritage Site identified as meeting the requirements of section 5 of the Aboriginal Heritage Act 1972 (AHA) be proposed to be disturbed in any way, an application must first be made and consent granted under section 18 of the AHA.

Furthermore, where applicable, an Aboriginal Heritage Management Plan shall be prepared and implemented prior to subdivision of any land affecting the identified site.

5.5 NOISE ATTENUATION

An acoustic assessment shall be undertaken and included as part of any application to demonstrate that the proposed design will meet the internal noise level requirements of State Planning Policy 5.4 Road and Rail Transport Noise and Freight Considerations in Land Use Planning (SPP 5.4).

In accordance with SPP 5.4 a notification shall be required to be placed on the Certificate of Title for lots where dwellings are exposed to traffic noise that exceeds the outdoor "Noise Target" as defined in SPP 5.4.

5.6 DESIGN REVIEW PANEL

Any application for development within the Structure Plan area will be referred to the City's Design Review Panel for evaluation.

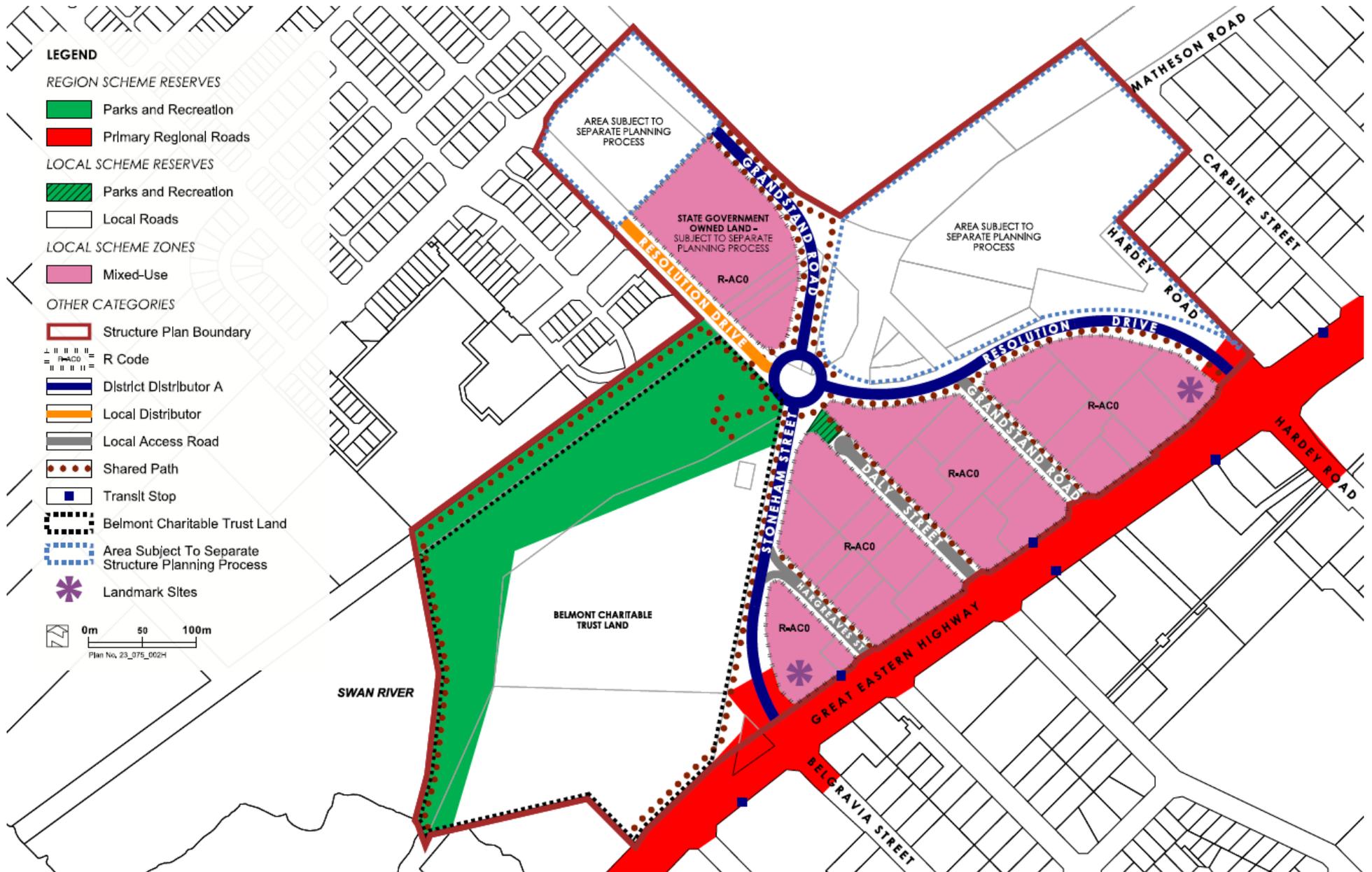
6 ADDITIONAL INFORMATION

Table 4 below outlines additional information that will be required at future approval stages. Additional information requirements may not be limited to those listed; the City or WAPC may require other information in relation to particular proposals.

TABLE 4: MANAGEMENT PLANS, REPORTS AND STRATEGIES

Additional information	Approval stage	Approving Authority
Water Management		
Local Water Management Strategy (LWMS)	Documented in Structure Plan and to be considered as part of Structure Plan process. Implementation as part of UWMP	WAPC, City, DWER
Urban Water Management Plan (UWMP)	Condition of subdivision	WAPC, City, DWER
Environment		
Environmental Assessment Report	Documented in Structure Plan Implementation via Subdivision	WAPC, City, OEPA,
Fire Management Plan	Condition of subdivision	WAPC, City
Foreshore Management Plan	Condition of Subdivision	WAPC, City, DBCA
Landscape Management Plan	Condition of subdivision	City
Aboriginal Heritage Management Plan	Condition of subdivision	DPLH
Acoustic Report (Noise Attenuation)	Condition of planning approval	City
Acid Sulphate Soils	Condition of Subdivision	DWER
Investigation for soil and groundwater contamination	Condition of Subdivision	WAPC, City
Identification and protection of vegetation worthy of protection	Condition of Subdivision	WAPC, City

Additional information	Approval stage	Approving Authority
Erosion and Sediment Management Plan	Condition of Subdivision	WAPC, City
Engineering		
Servicing Report	Documented in Structure Plan Condition of Subdivision	City, Water Corp, Western Power, ATCO Gas
Geotechnical	Condition of Subdivision	City
Other		
Local Development Plan(s)	Condition of subdivision if deemed necessary by City	City



Plan 1- Structure Plan



Plan 2 - Precinct Plan



Pan 3 - Building Height Plan

PART TWO

EXPLANATORY INFORMATION

1 PLANNING BACKGROUND

1.1 INTRODUCTION AND PURPOSE

This report has been prepared to provide a technical explanation for the provisions contained in Part 1- Implementation of the Golden Gateway Structure Plan.

The Structure Plan outlines the development vision for the ultimate development of the Golden Gateway Precinct (the subject land) and establishes key requirements. The Structure Plan also includes information regarding the development of the public realm and assesses the proposed development in context with the surrounding physical and natural environment.

The Project Team, responsible for preparing the information contained within this report, (in consultation with the City of Belmont and relevant Service Authorities) include those detailed in **Table 1**.

TABLE 1: PROJECT TEAM RESPONSIBILITIES

Project Role	Consultant
Town Planning and Urban Design	Taylor Burrell Barnett
Architectural	Taylor Robinson Chaney Broderick
Civil Engineering	Cardno
Environment Management and Hydrology	Urbaqua
Traffic and Transport	Flyt
Landscape	EPCAD
Community Engagement	Place Match
Bush Fire Management	Urbaqua

1.2 LAND DESCRIPTION

1.2.1 LOCATION

The location and extent of the subject land is outlined in **Figure 1**. The subject land is located at the axis of the key movement corridors of Great Eastern Highway, Stoneham Street, Grandstand Road and Resolution Drive and includes key strategic sites such as Belmont Charitable Trust Land, Ascot Kilns and Western Australian Turf Club (WATC) headquarters and associated land.

Figure 2 shows the subject land's district context. The land is located approximately 5 kilometres (km) north-east of the Perth Central Business District (CBD), 3km north of Belmont Forum and mixed business area, and 5km north-east of Victoria Park entertainment precinct. Within its immediate context, the subject land is located adjacent the Swan River and Ascot Racecourse.

It is also well connected to regional movement networks such as the Graham Farmer Freeway and Tonkin Highway. The Garratt Road Bridge also provides a key connection to the north across the Swan River.

Within the local context, the subject land can be regarded as lacking in basic convenience shopping facilities. The BP Service Station located on the corner of Great Eastern Highway and Resolution Drive and delicatessen located at Epsom Avenue approximately 2km south-east of the subject land provide the nearest local conveniences. However, the nearest neighbourhood centres (supermarkets) are Eastgate Commercial Centre, Kooyong Road, approximately 2.5km to the south-west, or Belvidere Street approximately 2.5km to the south. Additional services are located approximately 3km to the north-west of the subject land at Maylands Shopping Centre (neighbourhood centre) or 3km to the south at Belmont Forum (Secondary Centre).

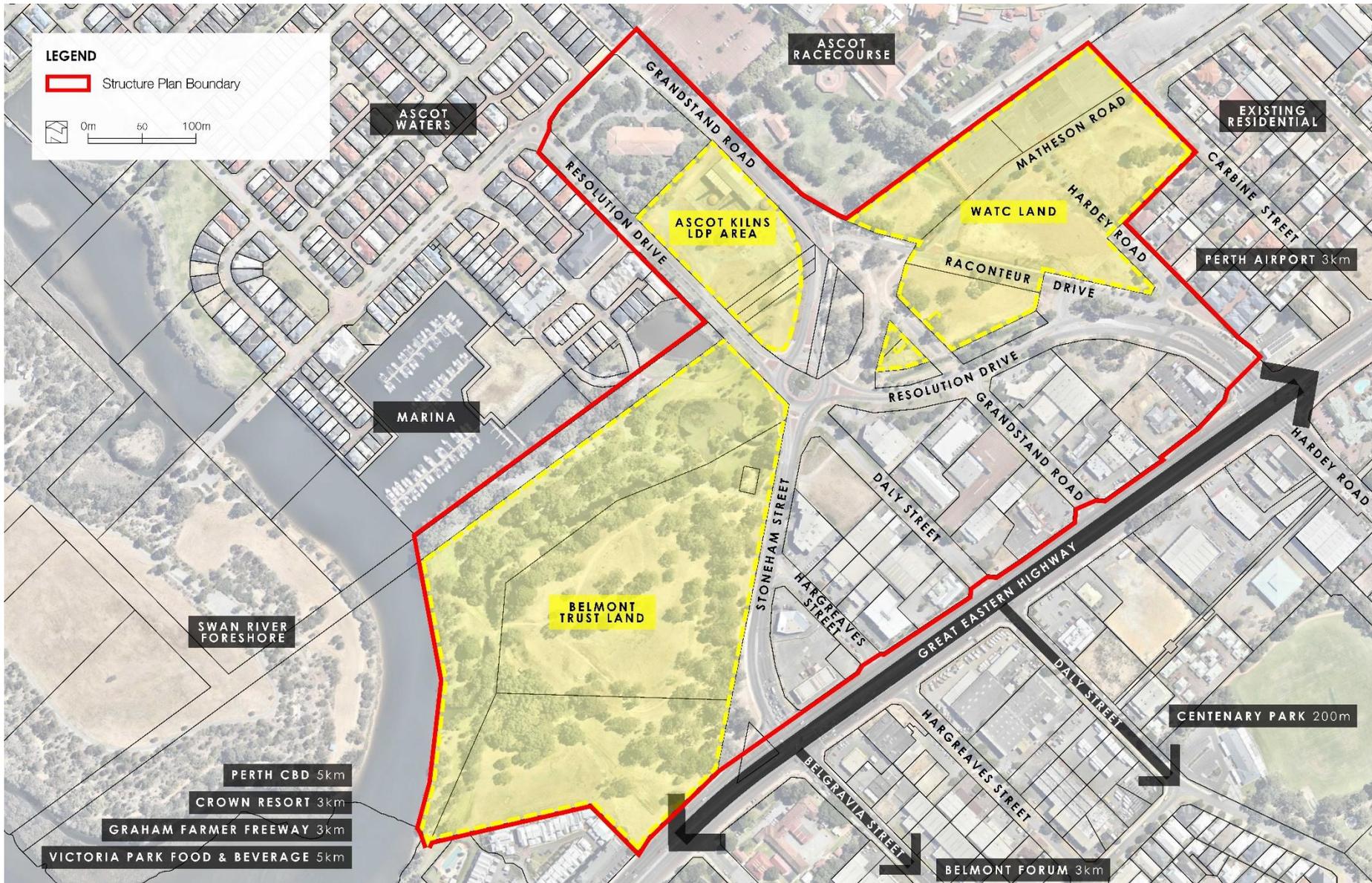


Figure 1 – Location Plan

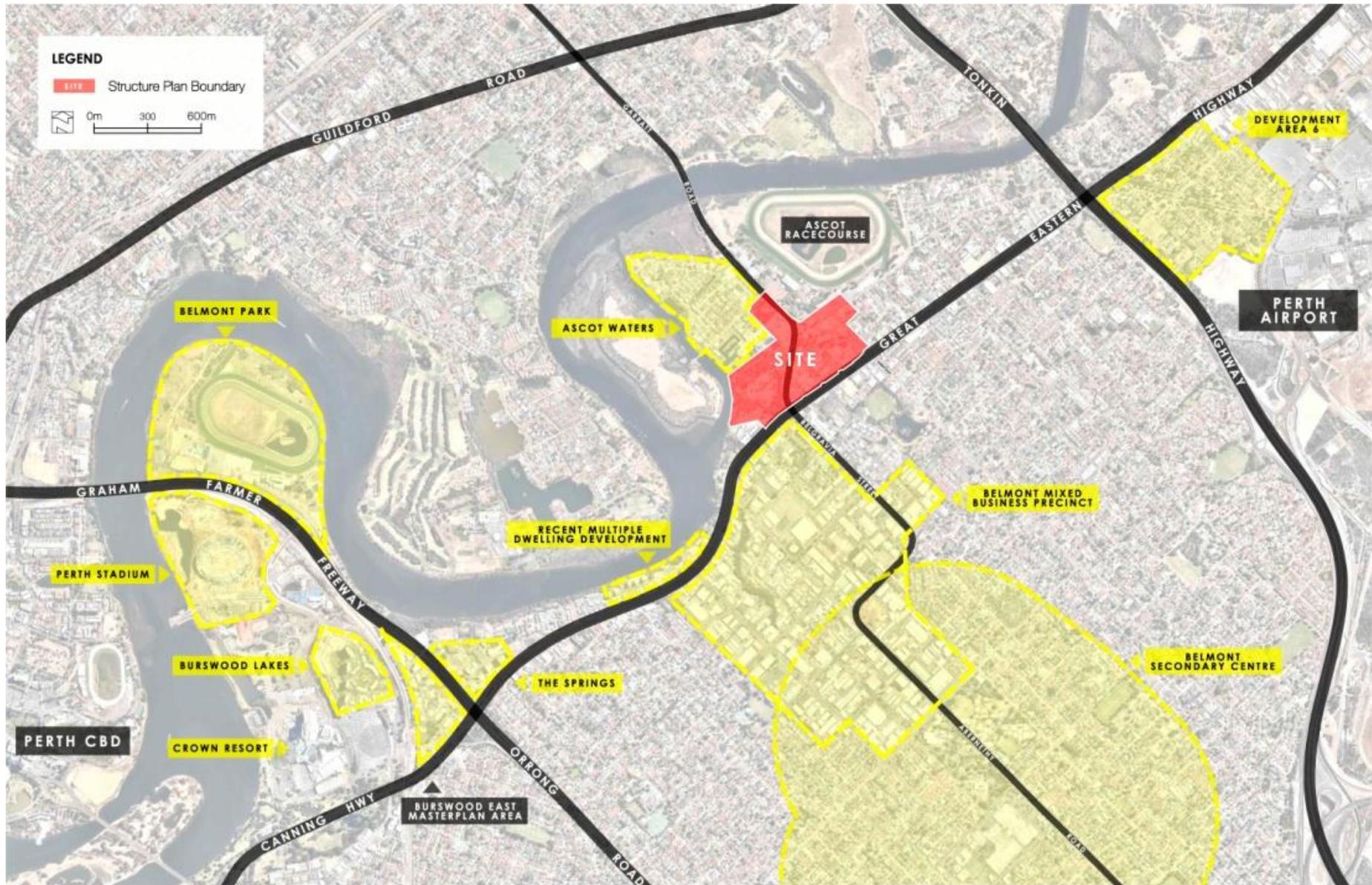


Figure 2 – District Context Plan

1.2.2 LAND USE

The subject land can be divided into four areas based on existing uses (refer **Figure 3**):

1. The area bounded by Great Eastern Highway, Stoneham Street and Resolution Drive is characterised by predominately mixed business development and small pockets of retail (food and beverage) uses along Great Eastern Highway;
2. The western portion of the subject land encompassing the Belmont Charitable Trust Land is largely cleared within the central portion with mature vegetation around the periphery. The site was historically used as a baseball field;
3. The northern portion of the subject land is partially developed with the WATC Headquarters and Ascot kilns and chimney stacks; and
4. The remainder of the subject land within the north-eastern corner is largely undeveloped and comprises a number of existing road reserves and WATC-owned land used for overflow parking on racing event days.

The development of the Belmont Charitable Trust Land, Ascot Kilns sites and the WATC land are subject to separate planning processes.



Figure 3 – Site Plan

1.2.3 LEGAL DESCRIPTION AND OWNERSHIP

The subject land is approximately 23.9871 hectares (ha) in area comprising the land identified in **Table 2** and **Figure 4**.

TABLE 2: LAND TENURE

Lot/Reserve	Landowner	Plan Number	Volume/Folio	Area (ha)
1 Resolution Drive	City of Belmont	P76257	2835/27	0.3642
5 Resolution Drive	City of Belmont	D64041	1776/785	4.1919
642 Great Eastern Highway	City of Belmont	P66341	2763/431	2.6481
950 Marina Drive / R52200	State of WA (City of Belmont)	P73752	LR3165/863	0.5843
512 Marina Drive / R51911	State of WA (City of Belmont)	P39786	LR3025/38	0.7749
513 The Boardwalk / R51911	State of WA (City of Belmont)	P32861	LR3025/39	0.2621
10417 Grandstand Road / R38783	State of WA (Water Corporation)	P185797	LR3048/920	0.1059
12645 Grandstand Road / R45069	State of WA (Water Corporation)	P15104	LR3064/783	0.2181
3 Grandstand Road	The Chairman of the Committee of the Western Aus Turf Club	D55346	1742/278	0.0351
13 Grandstand Road	The Chairman of the Committee of the Western Aus Turf Club	D26760	1883/670	0.7316
51Raconteur Drive	The Chairman of the Committee of the Western Aus Turf Club	P15104	1883/668	0.6940
100 Raconteur Drive	The Chairman of the Committee of the Western Aus Turf Club	P60341	2723/304	2.5726
452 Grandstand Road	The Chairman of the Committee of the Western Aus Turf Club	P60339	2723/355	1.1441
7705 Matheson Road	The Chairman of the Committee of the Western Aus Turf Club	P209359	1789/567	
1 Grandstand Road	State Planning Commission	D55346	1742/276	0.2452
197 Grandstand Road	State Planning Commission	P2635	1754/354	0.3927
236 Grandstand Road	State Planning Commission	P2635	1754/354	0.8925
237 Grandstand Road	WA Planning Commission	P2635	2117/791	0.9796
713 Grandstand Road	WA Planning Commission	D93557	2117/790	1.2806
707 Great Eastern Highway	Eurokars Australia Holdings Pty Ltd	P67257	2750/217	0.4767
709 Great Eastern Highway	Australian Postal Commission	P67258	1122/816	0.0551
1 Stoneham Street	5 Stoneham Road Belmont (Strata Scheme)	D41222	SP20374	0.2373
43 Hargreaves Street	Tarfield Holdings Pty Ltd	P2294	1582/988	0.1012
44 Hargreaves Street	Tarfield Holdings Pty Ltd	P2294	1582/989	0.1012

Lot/Reserve	Landowner	Plan Number	Volume/Folio	Area (ha)
45 Hargreaves Street	Jones, ED & Moore, JR	P2294	1977/545	0.1012
1 Great Eastern Highway	Ascot Grove (Strata Scheme)	P72552	SP65435	0.1966
60 Daly Street	Qube Ascot Development Ltd	D73791	1801/608	0.3934
36 Daly Street	Motwil Pty Ltd	P2294	1582/987	0.1012
35 Daly Street	Motwil Pty Ltd	P2294	1582/986	0.1012
650 Daly Street	76, 78 Daly Street, Belmont (Strata Scheme)	D59457	SP10988	0.2024
714 Great Eastern Highway	TLC Carousel Holdings Pty Ltd	P67260	2753/447	0.2033
52 Daly Street	SMC Pneumatics Australia Pty Ltd	D68380	1839/787	0.3798
801 Daly Street	Capital Growth Holdings Pty Ltd	P403687	2907/899	0.2440
21 Daly Street	Ashguard Pty Ltd	D78708	1892/169	0.2332
22 Grandstand Road	Ashguard Pty Ltd	D78708	1892/170	0.2031
23 Grandstand Road	Starttime Pty Ltd	D78708	1892/171	0.3731
11 Grandstand Road	The Easter Investment Pty Ltd	D17872	1182/103	0.1011
800 Great Eastern Highway	F&S Enterprises Pty Ltd	P403687	2907/898	0.2833
100 Resolution Drive	Dening Zhou Management Pty Ltd	D73202	1800/401	0.2071
101 Grandstand Road	127-129 Grandstand Street Belmont (Strata Scheme)	D73202	SP15951	0.3126
500 Grandstand Road	Kwik 'N' Kleen Pty Ltd	D90797	2076/935	0.3568
501 Great Eastern Highway	Sunlight Food Pty Ltd	D90797	2076/937	0.1063
502 Great Eastern Highway	Worldfirst Enterprises Pty Ltd	D90797	2076/938	0.1788
730 Great Eastern Highway	Novell Properties Pty Ltd	P67267	2753/474	0.3574
100 Great Eastern Highway	Selden Pty Ltd	P73087	2840/325	0.2622



Figure 4 - Land Tenure

1.3 PLANNING FRAMEWORK

1.3.1 ZONING AND RESERVATIONS

1.3.1.1 METROPOLITAN REGION SCHEME

The subject land is predominately zoned 'Urban' under the Metropolitan Region Scheme (MRS) (refer **Figure 5**).

Land abutting the Swan River within the subject land is reserved 'Parks and Recreation' and is situated within the 'Swan and Canning River Development Control Trust' area.

The south-eastern boundary abuts 'Primary Regional Roads' (PRR) reservation (Great Eastern Highway) directly to the south. This PRR reservation also extends north into the subject land at Stoneham Street and Grandstand Road.

The majority of the surrounding area is zoned 'Urban', whilst Ascot Racecourse is zoned 'Private Recreation'.

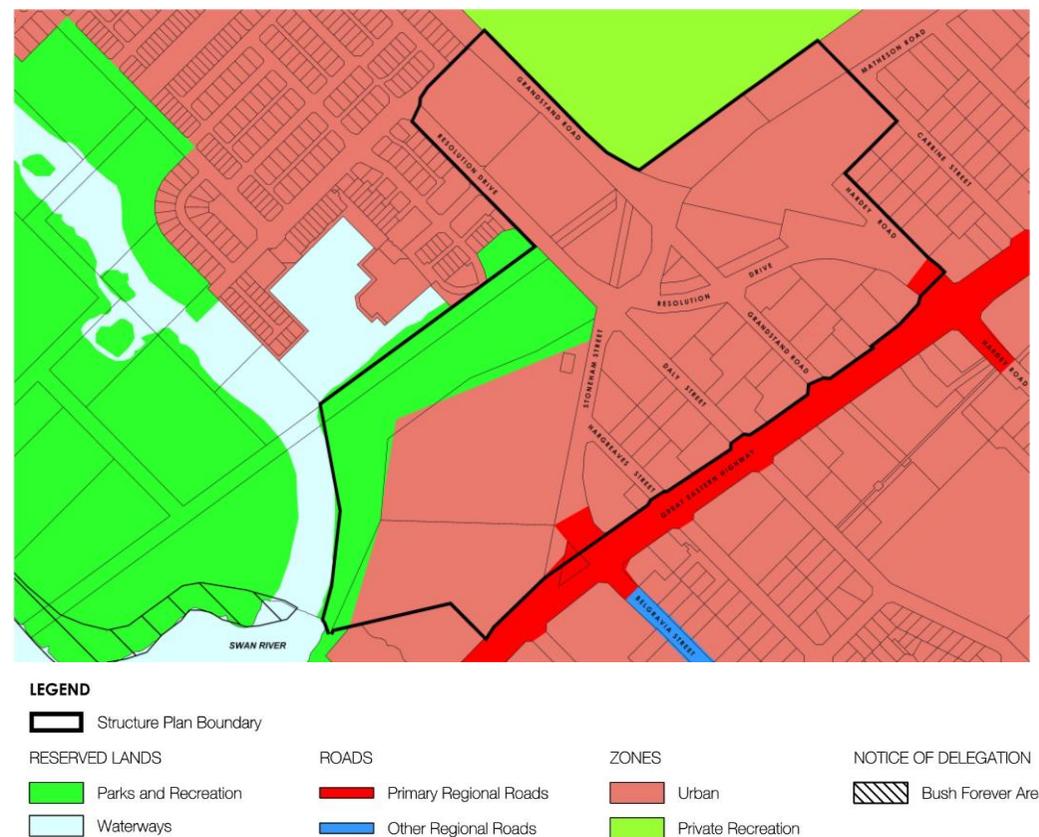


Figure 5 - MRS Zoning

1.3.1.2 CITY OF BELMONT LOCAL PLANNING SCHEME NO. 15

The subject land is predominantly zoned 'Mixed Use' under the City of Belmont's Local Planning Scheme No. 15 (LPS 15) (refer **Figure 6**).

Land within the north-eastern portion associated with Ascot Racecourse is zoned 'Place of Public Assembly – Racecourse' and identified with an 'Additional Use (A18)'. Land within the north-western portion of the subject land is also zoned 'Place of Public Assembly – Racecourse' associated with the WATC Headquarters (Lee-Steere House).

Consistent with the reservations under the MRS, the western portion of land abutting the Swan River is reserved 'Parks and Recreation' and Great Eastern Highway is reserved 'Primary Regional Roads' along with connecting sections of Stoneham Street and Hargreaves Street.

A stretch of land along Resolution Drive is reserved as Local Scheme Reserve - 'Parks and Recreation: Water supply sewerage and drainage'. This land contains a Water Corporation drain.

Land to the south of Great Eastern Highway, within proximity to Belgravia Street is predominantly zoned 'Mixed Business' with portions also zoned 'Mixed Use'.

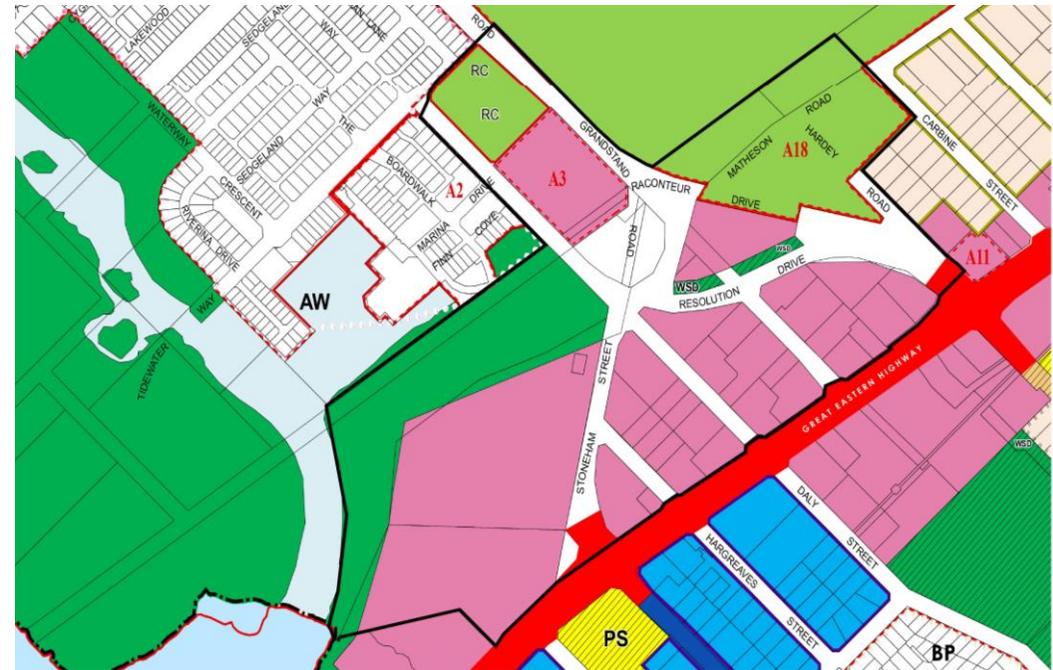


Figure 6 – LPS 15 Zoning

1.3.2 PLANNING STRATEGIES

1.3.2.1 PERTH AND PEEL@3.5MILLION

Perth and Peel@3.5million Planning Framework is a strategic suite of documents to guide future land uses through urban consolidation, integrated infrastructure and development, co-location of services and the strategic location of employment opportunities.

The subject land is located in the Central sub-region of the *Perth and Peel @3.5million Planning Framework* document.

The population in the Central sub-region is projected to grow by more than 468,000 people between 2011 and 2050 — from around 783,000 to nearly 1.2 million people. It is expected that more than 285,000 additional jobs will be accommodated in the Central subregion up to 2050.

The Central sub-region is expected to supply an additional 215,000 dwellings under the Framework, with 10,410 dwellings to be provided within the City of Belmont.

The Framework identifies Great Eastern Highway as an ‘urban corridor’ and Grandstand Road-Stoneham Street continuing into Hardey Road as a ‘high frequency public transit’ (refer **Figure 7**).

The Framework states that corridors should be the focus for investigating increased densities, with potential for mixed land uses where appropriate. The presence of existing or planned high-quality public transport is an important consideration in determining whether a corridor is suitable for a more-compact and diverse urban form.

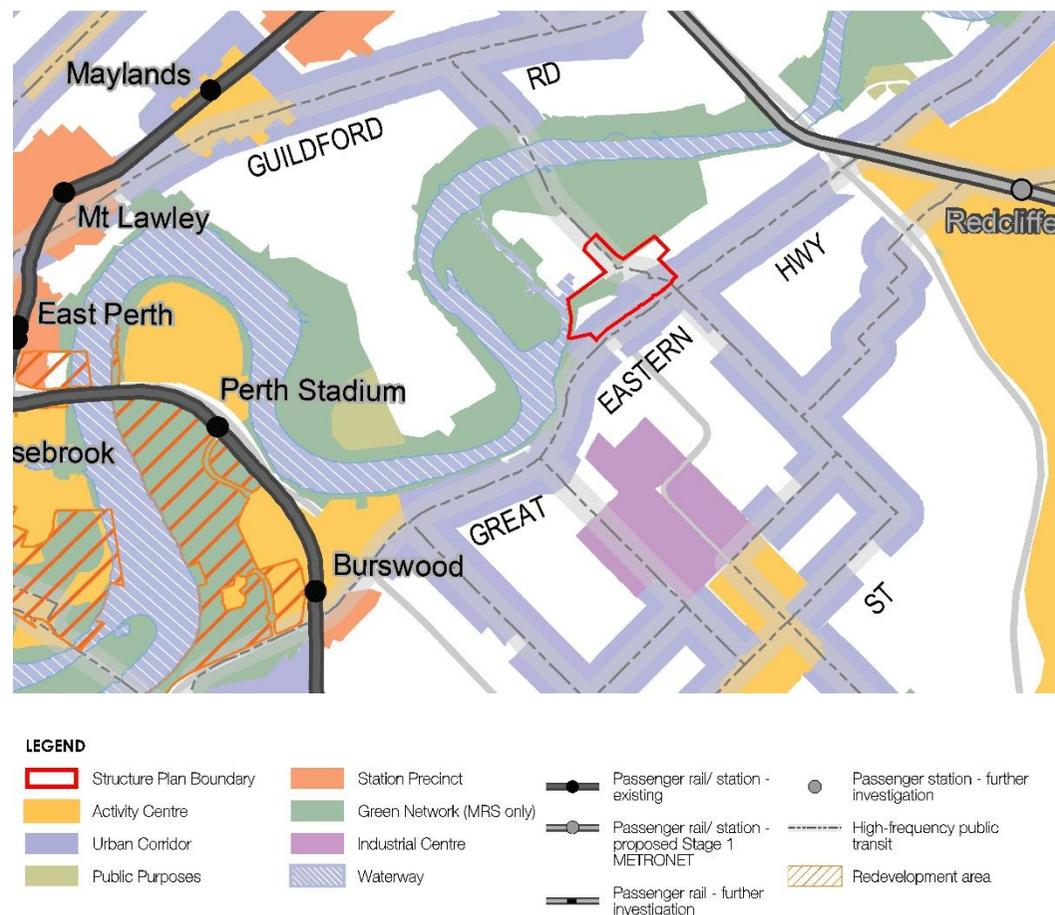


Figure 7 – Central Sub-regional Planning Framework

1.3.3 PLANNING POLICIES

1.3.3.1 STATE PLANNING POLICIES

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

State Planning Policy 5.4 – Road and Rail Transport Noise and Freight Considerations in Land Use Planning (SPP 5.4) seeks to minimise the adverse impact of transport noise, without placing unreasonable restrictions on noise-sensitive residential development. SPP 5.4 is applied where the proposal includes:

- A proposed new noise-sensitive development in the vicinity of an existing or future major road, rail or freight handling facility.
- A proposed new major road or rail infrastructure project in the vicinity of existing or future noise sensitive and uses.
- A proposed major redevelopment of existing major road or rail infrastructure in the vicinity of existing or future noise-sensitive land uses.
- A proposed new freight handling facility.

Great Eastern Highway is identified as a ‘primary freight road’ under SPP 5.4. Therefore, for any subdivision or development proposed within the threshold distance of Great Eastern Highway (200m) an acoustic report is required to be prepared and submitted with a development application.

Ascot Kilns Local Development Plan (Draft)

The draft Ascot Kilns Local Development Plan (LDP) and draft Local Planning Policy (LPP) was considered by Council for final approval at its Ordinary Council meeting of 12 December 2017.

The draft Ascot Kilns LDP and draft LPP proposes a vision to guide and coordinate future development across the 1.6ha former Bristle Kiln site. The draft LDP proposes the following outcomes:

- Creation of two development sites for residential apartments and some commercial uses within proposed building envelopes.
- Provision of an active edge component fronting onto the kilns cluster (promoting small-scale retail and hospitality).
- Development scale influenced by the surrounding lower scale residential context and the chimney stacks.
- Maintaining physical and visual access to the heritage structures from key aspects.
- Potential for integration of the heritage structures within future development sites to maximise opportunities for adaptive reuse and innovative design solutions.

Local Planning Policy 11 Public Art Contribution Policy

The City of Belmont’s Local Planning Policy No. 11 (LPP 11) outlines the requirements for the provision of public art by the developer to protect and enhance the utility, amenity and identity of the public domain.

The City of Belmont requires all development proposals within the Policy Area of a value greater than \$4.5 million to provide public art in accordance with the described method for determining public art contributions. The cost of any public art shall be no less than one percent of the value of the eligible proposal and provided in kind or alternatively, the Council may accept a cash-in-lieu payment.

A portion of the subject land falls within Precinct 4 – Great Eastern Highway Precinct of LPP 11 with the balance (excluding Ascot Kilns LDP area) situated within Precinct 5 – Swan River Foreshore.

1.3.4 PRE LODGEMENT CONSULTATION

A key component of the concept planning for the subject land has been stakeholder and community consultation and engagement. The DPLH has also been a key stakeholder in the concept planning process given the presence of the Ascot Kilns site within the Golden Gateway Precinct. The WATC have also been consulted separately given its significant landholding within the subject land, albeit subject to a separate planning process.

As part of the consultation and engagement strategy, three workshops were held during May 2016 and a fourth workshop in November 2016:

1. City of Belmont Council Staff Workshop (6 May 2016 – 22 participants)
2. Business and Landowners Workshop (26 May 2016 – 5 participants)
3. Community and Residents Workshop (31 May – 32 participants).
4. Combined Business/Landowners and Community/Residents Workshop (7 November 2016).

In addition to the above workshops, two online surveys were conducted by the City of Belmont (May and November 2016) to provide the community with the opportunity to provide additional comments. Feedback received was consistent with feedback provided at the various workshops as summarised below.

1.3.4.1 STAKEHOLDER WORKSHOPS

Overall, the overwhelming priority was the preservation and enhancement of POS both within Belmont Charitable Trust Land and throughout the remainder of the development. The emphasis was placed on the enhancement of active POS supported by recreational amenity and infrastructure.

Overall, residential development within the Golden Gateway Precinct was supported with varying degrees of density and height, however careful integration with existing residential to the north and east is paramount.

Other priorities included the creation of a destination / attraction for the City of Belmont and identification of 'place' qualities that will need to be considered in subsequent planning stages.

2 SITE CONDITIONS AND CONSTRAINTS

An Environmental Assessment Report was prepared by Urbaqua to support the Structure Plan. This report is included as **Appendix B**.

2.1 ENVIRONMENTAL ASSETS AND CONSTRAINTS

2.1.1 VEGETATION

No vegetation of conservation significance is located within the subject land. Due to historic clearing, commercial and recreational activities, the vegetation within the subject land is largely degraded. The subject land does contain some mature trees and these will be retained where possible.

Bush Forever Area 313 (Swan River Salt Marshes) is located to the north and west of the subject land. Surrounding this area, the Department of Water and Environmental Regulation (DWER) has mapped an Environmentally Sensitive Area described as 'Temperate Saltmarsh' and listed as 'vulnerable' under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This area is an important habitat for local and migratory bird species, however is largely disconnected from the subject land.

2.1.2 FLORA

A search of the EPBC Protected Matters Database was undertaken to identify flora species of conservation significance potentially occurring within a 2km radius of the subject land.

The search identified two 'endangered' species under the EPBC Act (*Caladenia huegelii* King Spider-orchid and *Lepidosperma rostratum* Beaked Lepidosperma) and one critically endangered species (*Darwinia foetida* Muchea Bell).

2.1.3 FAUNA

A search of the EPBC Protected Matters Database was undertaken to identify fauna species of conservation significance potentially occurring within a 2km radius of the subject land.

The search identified three species of 'endangered' status under the EPBC Act and seven 'vulnerable' species.

As a result of existing uses, the subject land supports limited or no remnant vegetation with a lack of intact understorey vegetation. The subject land therefore provides little, to no, fauna habitat of significant value to native fauna. The vegetation within Belmont Trust Land may provide important habitat for local and migratory birds.

2.2 LANDFORM AND SOILS

2.2.1 LANDSCAPE AND TOPOGRAPHY

The subject land is generally flat and grades gently from 6 metres (m) Australian Height Datum (AHD) in the south-east to 3mAHD in the west. A few low points exist within the centre of the subject land at approximately 1-2mAHD.

The surface geology is described broadly as Guildford formation: Alluvial sand and clay with shallow-marine and estuarine lenses and local basal conglomerate. Two-thirds of the north-western portion of the subject land is classified as Ms2 – Sandy Silt, which has a low permeability, and eastern third as S8 – Sand.

2.2.2 ACID SULFATE SOILS

A review of DWER acid sulfate soils (ASS) risk mapping identifies approximately two-thirds of the subject land, predominantly the area coinciding with surface geology Ms2-Sandy Silt, as containing a Class I 'high to moderate' risk of ASS and the remainder, coinciding with S8-Sand, classified as Class II 'moderate to low' risk occurring within 3m of the natural soil surface.

Given the Class I classification, an ASS investigation will be carried out where works are proposed in these areas consistent with the DWER Guidelines. Should ASS be present within the subject land, all site works must be carried out in accordance with an ASS management plan approved by DWER.

2.2.3 CONTAMINATED SITES

A search of the DWER Contaminated Sites database found a portion of the subject land as 'Possibly Contaminated – Investigation Required'.

2.3 GROUNDWATER AND SURFACE WATER

2.3.1 GROUNDWATER

Based on the DWER Ground Water Atlas, maximum groundwater levels are within 3m of the natural surface through the northern and central portions of the subject land, with groundwater flowing in a north-westerly direction toward the Swan River. As this drain is located adjacent to land owned by Perth Racing, they may explore opportunities for integration of the drain with future development as part of the planning they are progressing for their landholdings.

2.3.2 SURFACE WATER

A Water Corporation open drain is located within the centre of the subject land. The open drain is approximately 150m in length and directs flows of runoff from the eastern urban and industrial areas to piped drainage under the Stoneham Street / Resolution Drive roundabout to a compensation basin to the west of the subject land before travelling through a further 350m of open drain to the Swan River.

The Swan River is located adjacent to the western portion of the subject land. The DWER Floodway mapping indicates that a large area in the northern portion of the subject land lies within the Swan River 100 year average reoccurrence interval (ARI) flood fringe. Protection of the Swan River's environmental attributes will require the provision of a 50m buffer to the banks of the River consistent with its designation as an environmentally protected area and conservation category wetland (CCW) is generally applied.

The subject land also abuts the Swan and Canning River Development Control Area. The Department of Biodiversity, Conservation and Attractions Corporate Policy 49: Planning for Stormwater Affecting the Swan Canning Development Control Area provides further planning provisions to improve water quality, habitat, community benefits and amenity of the river system through stormwater management.

2.4 BUSHFIRE HAZARD

A very small portion of the subject land is identified as being located within a 'Bush Fire Prone Area' adjacent the Swan River and as such, a BMP has been prepared by Urbaqua in support of the Structure Plan (refer **Appendix A**). The BMP is a strategic level plan which identifies the bushfire protection measures to be applied to development on the subject site to accommodate compliance with:

- State Planning Policy 3.7 Planning in Bushfire Prone Areas;
- Guidelines for Planning in Bushfire Prone Areas; and
- Australian Standard for the construction of buildings in bushfire-prone areas (AS3959-2009).

As part of the BMP, a Bushfire Attack Level (BAL) Contour Map has been prepared which identifies the worst case BAL in relation to the subject land. The BAL Contour Map identifies a BAL of 'Low' across the majority of the subject land and a small portion of BAL-12.5 within the Belmont Charitable Trust Land. Given the Structure Plan does not propose development within the foreshore area subject to BAL-12.5 (or wider Belmont Charitable Trust Land), it is anticipated that any bushfire hazards can be appropriately managed.

It is expected that bushfire hazard assessment will be further refined as part of future subdivision or development stages in order to accurately assess the bushfire risk posed by surrounding classified vegetation and determine specific radiant heat exposure levels (and associated BAL) for future lots created within the Structure Plan area, as required.

2.5 HERITAGE

2.5.1 ABORIGINAL

A search of the Department of Planning, Lands & Heritage (DPLH) Aboriginal Heritage Enquiry System identifies one site occurring within the northern/western portion of the subject land.

Site ID 3753 – Registered site, Name: Perth, Type: Historical, mythological, hunting place, named place, natural feature.

Prior to disturbance of the above site, an application is to be made for consent to use the land under section 18 of the AHA.

2.5.2 EUROPEAN

The Ascot Kilns and chimneys were included on the State Heritage List in 2003 and are also included on the City's Local Heritage Survey and List. The Kilns were first built in 1930, manufacturing terracotta, stoneware and steel products. The draft Ascot Kilns LDP celebrates and enhances the site's heritage significance and maintenance.

The old Matheson Road railway line has historic value for its association with the rail link which connected Belmont to Perth and Guildford. This site is contained on the City's Local Heritage Survey. Where possible, development should recognise and interpret its significance.

2.6 EXISTING MOVEMENT NETWORK

The subject land benefits from a surrounding movement network that features access to key regional road connections, a high frequency public transport corridor and high-quality shared path cycling links.

2.6.1 GREAT EASTERN HIGHWAY

The subject land is bounded by Great Eastern Highway to the south which provides access to the west towards the Perth CBD, Graham Farmer Freeway and onto South Perth, Melville and Fremantle via Canning Highway. To the east, Great Eastern Highway provides access to Perth Airport, Tonkin/Roe Highway and onto Guildford, Midland and the Swan Valley.

Great Eastern Highway is classified as a 'Primary Distributor' under the Main Roads WA (MRWA) Functional Road Hierarchy and is regarded as one of the State's principal transport corridors carrying over 54,000 vpd, based on 2018 traffic counts.

Great Eastern Highway (between Kooyong Road in Rivervale to Tonkin Highway in Redcliffe) was subject to significant upgrade works between June 2011 and February 2013. These works included:

- Widening Great Eastern Highway, from four to six lanes, between Kooyong Road (Rivervale) and Tonkin Highway (Redcliffe) – a distance of 4.2 km;
- Constructing a central median for the full length of the project;
- Upgrading all major intersections to include dedicated turning movements;

- Providing U-turn facilities at key locations in order to maintain access to businesses fronting the Highway;
- Incorporating bus priority lanes into key intersections;
- Providing dedicated on-road cycling facilities;
- Constructing footpaths for pedestrians; and
- Relocating, replacing and protecting service utilities such as telecommunications, water, power and gas.

2.6.2 INTERNAL ROADS

The localised road network includes a network of local distributor and access roads providing access to key regional and district roads such as Great Eastern Highway and the Garret Road bridge. Grandstand Road, Resolution Drive and Stoneham Street are classified as 'District Distributor A' roads under the MRWA Functional Road Hierarchy. These are generally described as follows:

- Grandstand Road (20m road reserve) – a four lane road with a central median, running north-south within the subject land, connecting the Garratt Road crossing of the Swan River with Great Eastern Highway via Stoneham Street or Resolution Drive;
- Stoneham Street (20-25m road reserve) – a four lane road without a central median, running north-south within the subject land, connecting Grandstand Road/Resolution Drive with Great Eastern Highway and Belgravia Street; and
- Resolution Drive (22-47m road reserve) – a two lane with a central median, running east-west within the subject land, connecting Grandstand Road/Stoneham Street with Great Eastern Highway and Hardey Road.

All of these roads are under the control of the City of Belmont. The following roads are classified as 'Local Roads' under the MRWA Functional Road Hierarchy and are also under the control of the City of Belmont.

- Hargreaves Street (20m road reserve) – a two lane road without a central median, running north-west to south-east within the subject land, providing a connection between Stoneham Street (no right turn out) and Great Eastern Highway (left in/left out only);
- Daly Street (20m road reserve) – a two lane road without a central median, running north-west to south-east within the subject land, providing a connection between Stoneham Street (left out only onto Stoneham Street) and Great Eastern Highway (left in/left out only);
- Grandstand Road (south) (20m road reserve) – a two lane road without a central median, running north-west to south-east within the subject land, providing a connection between Resolution Drive and Great Eastern Highway (left in/left out only); and
- Raconteur Drive (20m road reserve) – operates as a one-way road from Grandstand Road to Matheson Road and is currently closed at the Grandstand Road intersection outside of event periods at Ascot Racecourse. Two-way access between Resolution Drive and Matheson Road is possible via the eastern extent of Resolution Drive.

2.6.3 PEDESTRIAN NETWORK AND CYCLING

2.6.3.1 PEDESTRIAN NETWORK

The extent and quality of the existing pedestrian infrastructure within, and surrounding, the subject land (with the exception of Great Eastern Highway) is poor and of a standard commensurate with the nature of existing development across the subject land (i.e. primarily light industrial/commercial unit style development).

However, Great Eastern Highway bordering the subject land to the south features good quality footpaths on both sides of the corridor. Within the vicinity of the subject land, the safe crossing of Great Eastern Highway by pedestrians is facilitated via traffic signal-controlled intersections at both Stoneham Street/Belgravia Street and Resolution Drive/Harvey Road intersections with Great Eastern Highway.

Each of the major road corridors running through the subject land (Grandstand Road, Resolution Drive and Stoneham Street) include footpaths along one side of the street – Grandstand Road along the eastern side adjacent to the Ascot Racecourse, Raconteur Drive along the northern side to connect to Grandstand Road, Resolution Drive along the eastern side adjacent to the Ascot Waters development and Stoneham Street along the western side adjacent to the Belmont Charitable Trust Land. There is an existing gap in pedestrian connectivity along Resolution Drive, opportunities to enhance connectivity may be explored by the City as part of a broader approach to infrastructure upgrade.

Local access streets (Hargreaves Street and southern section of Grandstand Road) providing access in a northerly direction from Great Eastern Highway are car dominated with no existing footpaths present. A footpath is located on Daly Street.

2.6.3.2 CYCLING

A number of existing shared paths and cycling connections are located within the subject land along primary routes, including Stoneham Street, Raconteur Drive and Grandstand Road. There is demand to upgrade facilities on Stoneham Street and Resolution Drive. Protected bicycle lanes and a shared path on Resolution Drive is essential, however the provision of ‘on street’ bicycle lanes on Stoneham Street will require further investigation dependent on the ultimate form of the road reserve.

A number of shared paths are also located within the Ascot Waters development directly to the north of the subject land. The Graham Farmer Freeway Principal Shared Path (PSP) is also located within close proximity to the subject land providing regional cycling connections and can be accessed via the shared path along the southern side of the Swan River.

The extent and quality of the existing cycling infrastructure within and surrounding the subject land is of a high standard, largely as a result of the Great Eastern Highway upgrades. Local connections are provided along Stoneham Street, Resolution Drive and Grandstand Road and further to the north within the Ascot Waters development. Regional connections are provided via high quality shared use paths along the Swan River Foreshore (via Belmont Charitable Trust Land towards the Graham Farmer Freeway PSP to access Perth CBD).

2.6.4 PUBLIC TRANSPORT

A number of existing bus routes operate within, or in close proximity to, the subject land. These include the Circle Route (998/999) via Raconteur Drive/Grandstand Road providing connections north to destinations including Bayswater Station, Morley Bus Station/Shopping Centre and south to destinations including Belmont Forum Shopping Centre, Oats Street Station and Curtin University.

In addition, existing bus routes (293 and 940) operate along high frequency bus corridor of Great Eastern Highway, providing connections east to destinations including Redcliffe Train Station, Perth Airport, Guildford, Midland and to the west to destinations including Victoria Park Transfer Station and Perth CBD.

Pedestrian access to existing public transport facilities is considered average with no bus stops currently located within the subject land. The closest bus stops are located on Grandstand Road immediately to the north of the subject land (close to the main pedestrian entry/exit to Ascot Racecourse). There are options to make improvements to public transport access if land uses within the subject land change over time to support additional public transport patronage.

2.7 ROAD TRAFFIC NOISE

As discussed in section 1.3.3.1, SPP 5.4 sets out specific requirements for addressing potential noise impacts from major transport arteries on adjacent noise-sensitive uses.

It has been identified that Great Eastern Highway, Resolution Drive and Grandstand Road are all likely to require consideration under SPP 5.4. In this respect any subdivision or development proposed adjacent to these roads will require an acoustic assessment to be undertaken and included as part of any application to demonstrate that the proposed design will meet the internal noise level requirements of SPP 5.4.

2.8 EXISTING INFRASTRUCTURE AND SERVICING

2.8.1 WATER SUPPLY

The Serpentine Trunk Main is located along Grandstand Road and Daly Street. A 915 steel distribution main is also located along Grandstand Road through the subject land. Existing development within the subject land is well serviced with a mixture of 100, 150 and 200 dia reticulation pipes made of asbestos cement, cast iron, PVC and steel.

2.8.2 WASTEWATER

Wastewater infrastructure general to the Ascot area is serviced by gravity style wastewater drainage infrastructure. A mixture of concrete and plastic arterial pipes on grade service all areas to local pump stations throughout the City of Belmont.

Lots within, and surrounding, the subject land are serviced by two main arterial sewer routes; a 225mm collector flowing north to south and a 225mm collector flowing east to west. Both collectors flow to the Redcliffe Pump Station 5 located on Stoneham Street. The Redcliffe Pump Station 5 collects all sewerage west of the Ascot Racecourse within the Ascot suburb and discharges it to the Redcliffe Pump Station 2 located on Abernethy Road.

2.8.3 POWER SUPPLY

Data obtained from the Western Power Network Mapping Tool indicates that the subject land is serviced by the Belmont Substation and the forecast network capacity for 2015 is >30MVA. There are High and Low Voltage power lines in the vicinity of the subject land.

2.8.4 GAS SUPPLY

Correspondence from ATCO Gas identifies Medium Pressure (MLP) gas mains (pressure indicated at 70kPa) along the majority of roads within the subject land.

2.8.5 TELECOMMUNICATIONS

The subject land is well serviced by telecommunications infrastructure with optical fibre running in or adjacent to the subject land. This infrastructure is owned by various telecommunications providers including Telstra, Optus and others. The National Broadband Network (NBN) has been rolled out in the subject area.

3 STRUCTURE PLAN

3.1 VISION AND OBJECTIVES

3.1.1 VISION

The objectives and design principles underpinning the Golden Gateway Structure Plan have been formulated around the following vision:

“The development of the Golden Gateway will transform this degraded and fragmented area into a vibrant precinct of residential and mixed use development, with strengthened connections to the Swan River and Ascot Waters, that derive best value from these attributes while respecting the area’s rich culture and heritage.”

3.1.2 OBJECTIVES

The overarching objectives for the Golden Gateway Precinct as established by the project team and reinforced through stakeholder engagement are as follows:

1. Improve **self-containment of facilities** – reduce car dependence
2. Improve people’s connection to the **Swan River**
3. Create accessible, quality **public realm** within the precinct
4. Ensure **heritage values** are retained
5. Identify **appropriate uses/densities** in conjunction with **infrastructure improvement**
6. Optimise value of strategic sites – **planning certainty**

3.2 DESIGN PREPARATION

The Structure Plan design has been informed by a thorough analysis of the existing site conditions and the potential opportunities and issues offered by the location. The key outcomes of this analysis are noted in **Figures 8 and 9** and described overleaf:

3.2.1 OPPORTUNITIES

Land use

1. Opportunity for residential development to be accommodated in the precinct given the accessibility to high amenity riverside amenity.
2. Opportunity for retail convenience and food and beverage land uses to be integrated into development outcomes.
3. Potential for higher density development given precinct location, proximity to high amenity open space destinations, Perth CBD, localised employment and high frequency public transport.
4. Existing primary school adjacent the precinct offers opportunity to attract a diverse demographic, including young families.
5. Consider mixed use development in core area to broaden activity opportunities and long term transition of the precinct, and to offer improved amenities for the existing Ascot community.

Built form

1. Opportunity for landmark building form and massing to inner core areas to perform key gateway functions.
2. Future building form to appropriately interface with adjacent public realm.
3. Local activity hub potential within the precinct providing local centre retail, cafe/mini main street offerings in a shared street atmosphere.
4. Existing street block depths south of Resolution Drive are well suited for typical multiple dwelling apartment development parcels.

Public realm

1. Existing character and destination status of adjacent Swan River open space provides significant public amenity and recreation opportunities for future residents.
2. Promote pedestrian and cycle network connectivity through the site to strengthen access to the Swan River for both the existing Ascot community as well as future residents in the Golden Gateway Precinct.
3. Significant tree canopies within the Belmont Charitable Trust Land and peripheral open space offer significant 'green horizon' views to the precinct.
4. Opportunity to provide strong open space 'cross-link' as a 'green ribbon' link to the Swan River.
5. Celebrate the heritage significance of the Ascot Kilns and the potential for integration of the heritage structures to maximise amenity for residents.

Movement

1. Utilise existing local street network of Hargreaves Street, Daly Street and Grandstand Road to deliver a robust structure for future development access and vehicle circulation.
2. Generous existing road reserve dimensions provide ability for reconfigured pedestrian friendly streetscapes offering shade trees, soft landscaping and convenient on-street parking embayments.
3. Potential for alteration to the priority road network of Stoneham Street and Resolution Drive for the benefits of precinct consolidation and integration, in particular, the potential to downgrade priority of Stoneham Street for benefits to foster a stronger relationship between the Ascot community and the Swan River.
4. Investigate alternative road alignments that celebrate key view lines of surrounding visual features and future gateway elements.

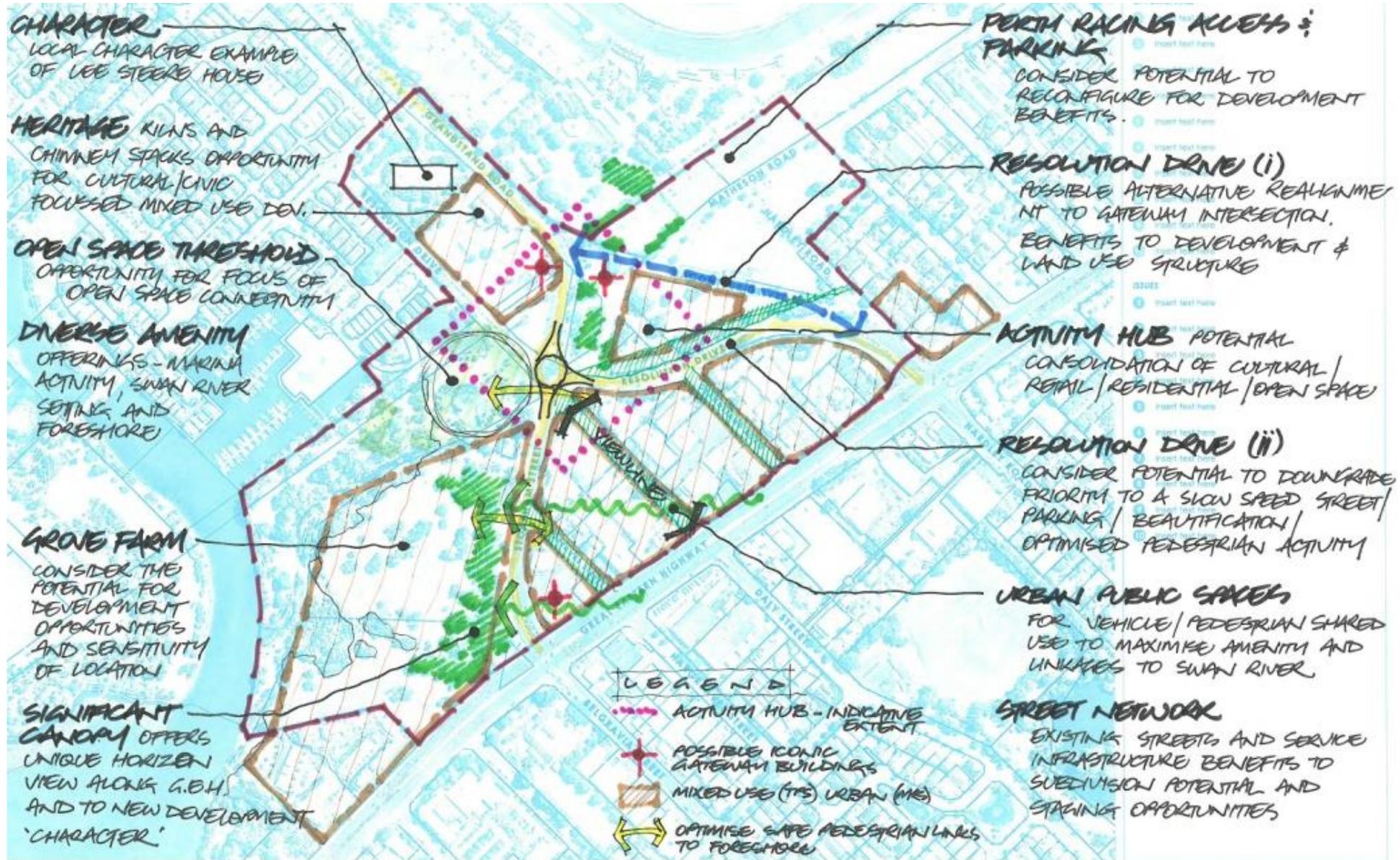


Figure 8 - Opportunities

3.2.2 ISSUES AND CONSTRAINTS

Land use

1. Service corridor extends northwards through Grandstand Road alignment.
2. Overland stormwater drainage, controlled by Water Corporation, extends east- west through the subject land located immediately north of Resolution Drive.
3. Careful consideration of existing residential development on periphery of precinct area.
4. Development adjacent Great Eastern Highway may be subject to noise attenuation.

Built form

1. Proposed development of Kilns area, which is subject to a Local Development Plan, to be considered in surrounding built form design.
2. Perth Airport restrictions based on flight path contours will potentially limit maximum building height.
3. Existing development is largely commercial and is located on a fractured land tenure base of multiple cadastral parcels.
4. Some future development may require land assembly to maximise development potential and desirable outcomes, and to rationalise redundant public reserves.

Public realm

1. Chimney locations in the Ascot Kilns area to be considered, surrounding public spaces and view lines should respect and celebrate these historic features.
2. Existing significant trees to be considered for integration into public realm, where appropriate.
3. Informal open space node to Hardey Road (east) to be considered, recognising relative disconnection of this area from other POS to the south of Resolution Drive.
4. Limited or no availability of suitable quality water from the superficial aquifer for the purpose of irrigation within the Golden Gateway area.

Movement

1. Existing roundabout impinges on precinct assimilation for all adjoining land quadrants.
2. Limited connection opportunities available to residents north of Resolution Drive.
3. Stoneham Street and its multi-lane configuration acts as a pedestrian barrier for development to interact with the POS area.

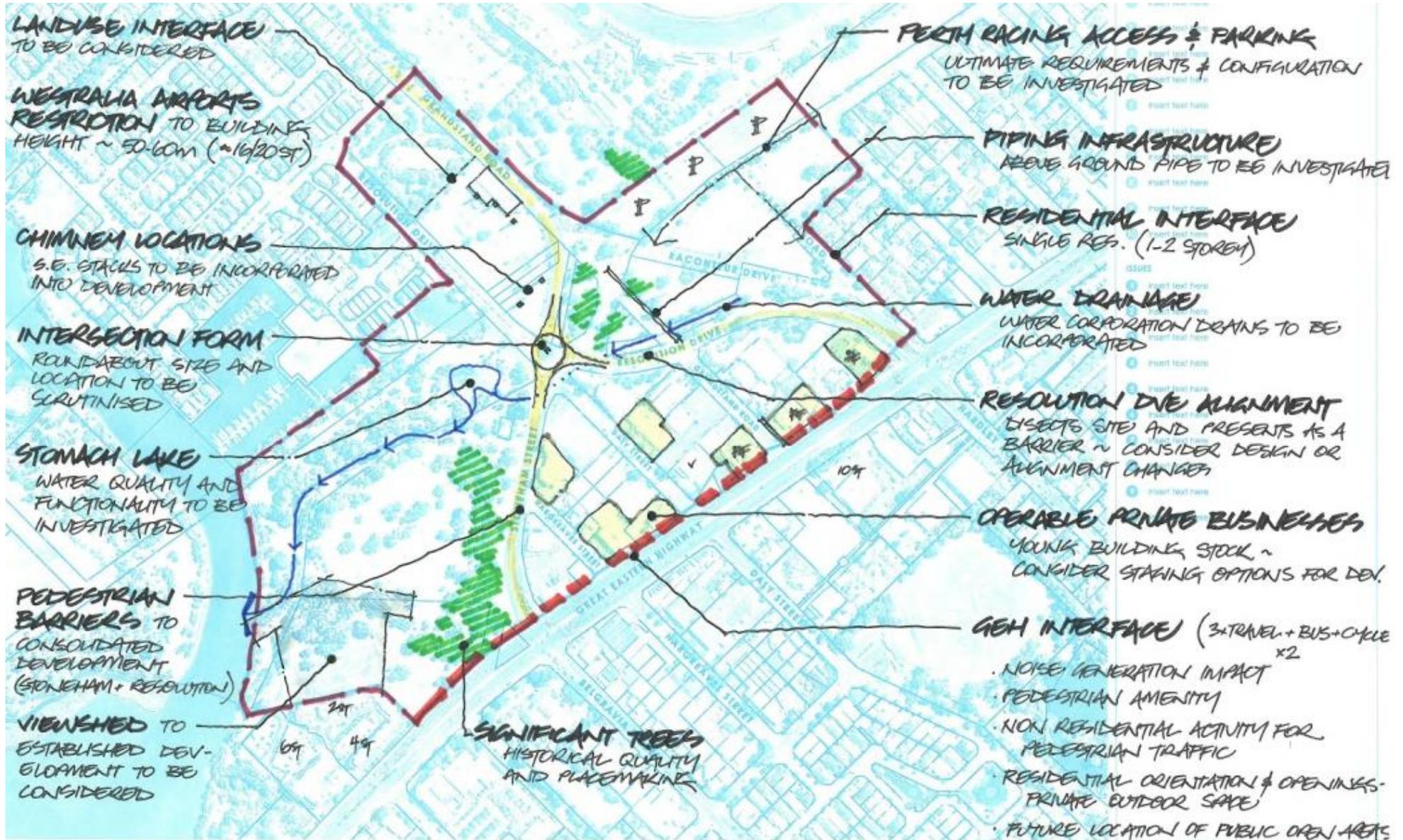


Figure 9 – Issues and Constraints

3.2.2.1 CONCEPT PLAN DEVELOPMENT – SITE ANALYSIS

One of the main challenges in testing development scenarios was to address the significant disunification of the precinct created by the heavily engineered road system, and the impact this has on local connectivity between the Precinct and the areas main natural attribute – the Swan River.

Figures 10 and 11 below were produced to stimulate discussion, during the stakeholder engagement process, about ways in which the physical barrier to the Swan River could be removed, or at least, reduced. The stakeholder engagement process produced a number of specific considerations for the initial design phase to develop scenarios (refer Figure 12).



Figure 10 - Existing access and connectivity summary

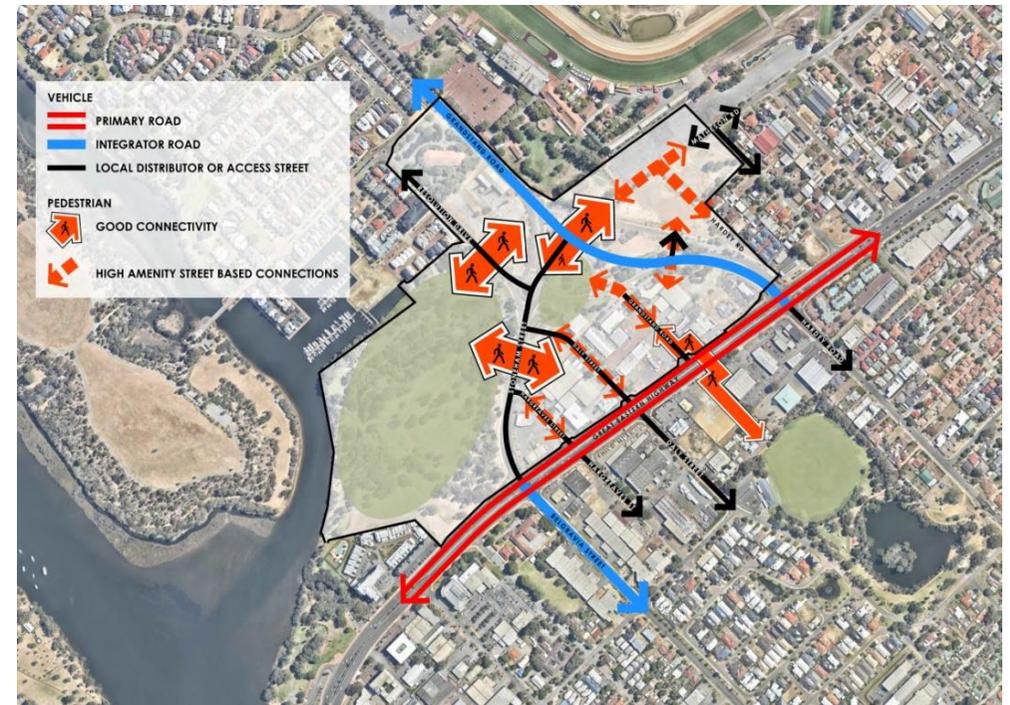


Figure 11 - Opportunity through altered vehicle priority for improved connectivity and access – to be considered further in design scenario testing



Figure 12 - Community engagement design feedback (summarised)

3.2.3 CONCEPT SCENARIO FORMULATION

Analysis of the subject land and key design principles resulted in the preparation of three development scenarios for testing and stakeholder discussion (refer **Figure 13**). The initial phase of high level scenario testing involved the preparation of Framework Diagrams, exploring structural opportunities and benefits to the following:

- **Landuse** – preferred structure and location.
- **Circulation** – enhancing connections, preferred hierarchy with future flexibility & rigour.
- **Character** – celebrating local qualities for unique place setting and to enhance the existing amenity.

Preliminary sketches exploring alternative land use and movement structures

The Framework Diagrams were discussed and analysed with the community and Council technical officers as key elements for the next phase of scenario evaluation. Various scenarios achieved the project objectives better than others, particularly with regard to public amenity and community integration with the Swan River foreshore.

Preliminary sketches developing framework scenarios

The next phase of scenario refinement resulted in the examination of appropriate land uses, building forms and public realm to test the structural opportunities and benefits for each of the scenarios. These were then evaluated by the project team and the community via design workshops and web based consultation sessions.

Preliminary design scenarios

In summary, Scenario A evaluates the development opportunities for the precinct whilst maintaining the existing road network. This scenario highlights the limitations this has on development consolidation and for connectivity of future residents with the foreshore amenity.

Scenario B evaluates the development outcome where the existing road priorities of Stoneham Street and Resolution Drive are modified to improve integration of the precinct's residents with the adjacent public amenity.

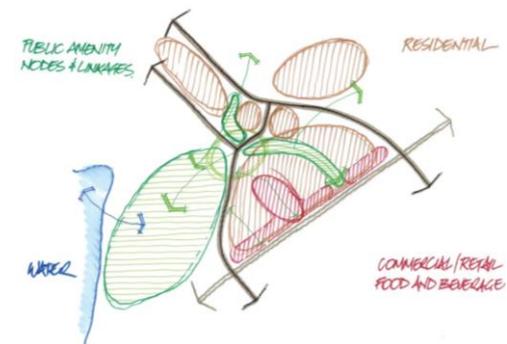
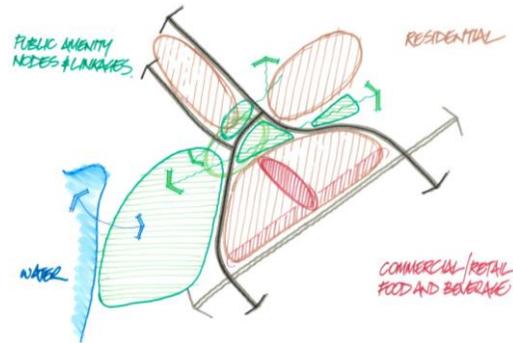
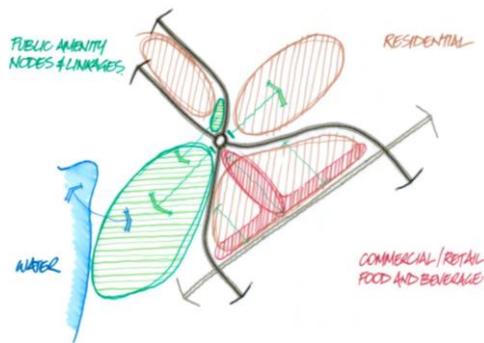
Scenario C evaluates an outcome where the original road alignment of Raconteur Drive is used to maximise future integration opportunities for development west of this road and consolidation of the precinct's future residents.

Scenario evaluation outcome

This scenario evaluation process led to the refined design outcome produced in the preferred scenario.

The preferred scenario was informed by detailed public response to the preliminary scenarios at the community workshops, and through other stakeholder contribution. That preferred scenario was further tested and developed into the preferred Golden Gateway concept, described in detail in section 3.2.4.

It should be noted that through the preparation of the Structure Plan, further assessment of the proposed movement network was undertaken in relation to the potential impacts on the Stoneham Street-Belgravia Street and Resolution Drive-Hardey Road corridors. Based on this assessment and in conjunction with MRWA, it was considered that any modifications to the redistribution of traffic flows (i.e. via Resolution Drive) would not be supported.



Preliminary sketches exploring alternative land use and movement structures
Figure 13 – Evolution of Design Scenarios

Preliminary sketches developing framework scenarios

Preliminary design scenarios

3.2.4 DEVELOPMENT CONCEPT PLAN

To support the formal Structure Plan included in Part 1 – Implementation, a Development Concept Plan was prepared to illustrate the development intent. The original Development Concept Plan that formed part of the advertised version of the Structure Plan document (**Figure 14**) was based on the preferred scenario that evolved from the Scenario Evaluation process.

Post-advertising Design Review

Following the public comment period, and having regard to the comments received from the community and government agencies, the City commissioned a review of the Movement and Access Strategy. The revised strategy (contained in **Appendix C**) recommended an amended movement network that is more closely aligned with the existing infrastructure. As a consequence of this, and other feedback received, the following key changes are proposed to the structure plan:

1. Adopting the movement network modifications recommended in the revised Movement and Access Strategy;
2. Removal of planning detail from land owned by the Western Australian Turf Club;
3. Removal of the linear open space proposed over the Water Corporation drainage alignment; and
4. Alteration of building height provisions.

In accordance with this direction the Development Concept has also been revised to maintain consistency with the Structure Plan (refer **Figure 15**). It should be noted that this graphical representation is indicative only and serves to illustrate a long term, mature development scenario. Its primary purpose is to graphically communicate the ultimate vision and intent underpinning the Structure Plan.



Figure 14 – Original Development Concept Plan



Figure 15 – Development Concept Plan

Key concept features

The key features of the Development Concept Plan are outlined as follows:

Access and connectivity

- Integrate Golden Gateway with the broader Belmont catchment.
- Minimise the barrier of Stoneham Street by formalising pedestrian movement opportunities.
- Enhance vehicle accessibility and circulation benefits offered by the existing movement framework.
- Reconfigure road network for enhanced development consolidation and precinct character benefits.

Planning and land use

- Sensitively integrate residential development of increased density with the surrounding area.
- Convenience retail, shops, restaurants and cafes located 'parksides', and within a pedestrian friendly street environment, to take advantage of the unique amenity and population growth of the location.
- Moderate building height and density to the residential interfaces of the precinct, providing an appropriate transition to existing development.
- Provide flexibility for commercial mixed-use development along Great Eastern Highway.
- Contemplate development controls to foster appropriate multi-level development to support denser living options.
- Opportunity for diversification of uses – facilities, amenity, destination uses and attractions.

Built Form

- The height and scale of new buildings will form an appropriate relationship with their environment and context, including adjacent residents.
- Use building form to create a more comfortable and characterful environment, enhancing the gateway location, particularly adjacent the public realm.
- Consider suitable building form and locations to enhance the precinct's outcomes.
- Retail opportunities promoted for improved sustainability outcomes of the precinct and adjacent residents.

Public realm

- Enhancement of existing public streets, utilising the wide reserve widths to produce unique character and pedestrian comfort.
- Prioritise the retention of established tree canopies where achievable.

Destination Planning

- Capitalise on the opportunity to leverage subject land's exceptional destination qualities.
- Creation of framework / strategies to support detailed place planning, investment attraction and place management.
- Creation of framework / strategies that will attract a diverse mix of uses, attracting visitors across different times of the day and week.

Images: Building Form Inspiration Images



Above: Introduce transitional building height to development edges.



Above: Corner site development addressing both street frontages, with 3 storey podium height to building edges and mixed height elsewhere on site.



Above: Example of a 4 storey residential building detailing an appropriate level of articulation and surveillance through the use of balconies and architectural elements. Also illustrates an acceptable treatment to site retaining at lot edges.



Above: Example of 5 storey mixed use building featuring retail/food and beverage uses at the ground level and residential living above producing a sustainable and active development outcome. In addition, this illustrates the beneficial outcome for buildings to interact with key mature trees available within the proposed Golden Gateway public realm.



Left: Example of 8 storey buildings with suitable levels of architectural detail, material and artwork to achieve an appropriate response for Golden Gateway.
 Right: Example of 10 storey building illustrating an appropriate podium design detail and landscape amenity.



Left: A 15 storey buildings providing an outstanding response to its corner location.
 Right: A 8 storey building examples incorporating desirable podium design and setback to tower element(s).



Above: Landmark buildings providing exceptional architectural gateways into the Golden Gateway precinct.



Above: Example of appropriate response to podium requirements to achieve active and enjoyable streetscapes with building mass setback into the site.

3.3 LAND USE

Golden Gateway will provide for a diverse range of land uses. The primary land use within the Structure Plan Area is residential, supplemented by commercial uses and local open space. A summary of the land uses and areas is provided in **Table 3**.

TABLE 3: LAND USE

Zone / Reserve	Area (Ha)
Mixed Use	1.7578
Residential	4.2473
Parks and Recreation	4.5556
Public Open Space	0.0525
Local Roads	4.7542

As outlined in Part 1 and **Plan 2**, the subject land has been divided into Precincts.

A statement of intent for each Precinct is described in Part 1 together with development standards to ensure that the intent of each Precinct is achieved.

3.3.1 RESIDENTIAL

Due to the proximity of high amenity areas such as POS and future areas of activity such as Great Eastern Highway, Stoneham Street and Resolution Drive, a density code of R-AC0 is proposed.

The R-AC0 coding has been applied to all land within the Mixed Use zone and it is considered that the Structure Plan and the R-Codes provides sufficient guidance on built form outcomes.

Part 1 – Implementation also stipulates maximum plot ratios applicable within the Mixed Use zone.

3.3.1.1 DWELLING PRODUCT TYPE, MIX AND YIELD

It is envisaged that Golden Gateway will accommodate primarily multiple dwellings to contribute to the desired scale and density of the development.

The estimated yield is indicative only, based on the build-out potential under the Structure Plan. With respect to dwellings, the ultimate yield and product mix will be determined by the type of development pursued by proponents and will be subject to the market conditions at the time, although the Structure Plan does impose minimum development parameters (for setbacks and heights) as well as maximums. The ultimate yield and product mix will be determined during the construction and development phase.

The Development Concept Plan suggests a potential yield of at least 2,268 dwellings. This could accommodate a total population of up to 4,082 assuming an average household size of 1.8 people.

3.3.2 OTHER LAND USES

3.3.2.1 COMMERCIAL

Commercial development in Golden Gateway will service the surrounding residential catchment and racing activities and optimise the value of the precinct's highly visible and connected location. The anticipated yield for the precinct estimates a total of 6979m² commercial (non-retail) floorspace (GFA).

It is envisaged that commercial activity will be mostly focused within the Great Eastern Highway Precinct (Precinct 1) and will likely occupy the first 1-2 levels of buildings across the precinct.

Development of commercial space is only likely to proceed based on its commercial feasibility and the prevailing market conditions at the time of development.

In order to foster the progressive and timely development of the precinct, it is not intended that commercial uses will be mandated within the Mixed Use areas; however ground level design should be adaptable to enable land use to change over time.

3.3.2.2 RETAIL

The existing residential areas of Ascot Waters and the stables area presently suffer a lack of local shopping facilities, with the BP Service Station on the corner of Resolution Drive and Great Eastern Highway providing the only nearby outlet for basic convenience items. Development of the Golden Gateway Precinct provides an opportunity to establish a local centre for the benefit of the precinct as well as the broader local catchment.

The Mixed Use zone permits non-residential development and this is encouraged at ground level, it is anticipated that some discrete retail development will occur to service the local population.

The City of Belmont has prepared an Activity Centre Planning Strategy (ACPS) to guide the future planning and coordination of activity centres. The ACPS states that a new local centre is proposed to be established within the Golden Gateway precinct with 1,200m² of retail floor space and that its location will be guided by future detailed planning. Due to land fragmentation within the Structure Plan area it may be appropriate to locate the local centre on WATC land. This would however be subject to further detailed planning. Given this, a specific local centre location has not been designated within the Structure Plan area.

3.3.3 LAND USES

Part 1 – Implementation of this Structure Plan refers to corresponding zones within the Zoning Table of LPS 15 to determine land use permissibility within the various precincts. It does, however, stipulate some exclusions (uses that are considered Unacceptable, notwithstanding that they are listed as a discretionary use in the Zoning Table). Having regard for the amenity of future residents the unacceptable uses include:

- Auction Mart
- Caretakers Dwelling
- Fast Food Outlet / Lunch Bar
- Home Store
- Garden Centre
- Industry - Light
- Motor Vehicle Repair
- Night Club
- Radio or TV Installation
- Restricted Premises
- Service Station
- Single House
- Vet Hospital
- Warehouse

These uses have been excluded as they are considered to be inconsistent with the vision and objectives of the Structure Plan, and approval of such uses would compromise the urban fabric envisaged for the area.

Furthermore, 'Shop' is an Additional Use in the Mixed Use zone within the subject land.

3.3.4 BUILDING HEIGHT

Maximum building height limits apply to satisfy relevant protection of airspace, airport facilities and surfaces regulations due to the proximity of Perth Airport. Development must comply with maximum building height limitations as indicated on the Obstacle Limitations Surfaces (OLS) Ultimate Surfaces Map – maximum height of 61mAHD within the majority of the subject land, equating to approximately 19 storey buildings. The remainder of the subject land is located within the 'conical surface', being the 5% slope to 61mAHD.

Cygnets West were engaged to investigate development feasibility and built form controls along Great Eastern Highway and within the Structure Plan area. The building heights have been informed by their input and recommendations. Accordingly, a maximum building height of 15 storeys is encouraged along Great Eastern Highway given the prominence of this location and level of commercial activity envisaged for this precinct, with a maximum height of 10 storeys elsewhere. All sites within the Structure Plan area may incorporate an additional 5 storeys in height, above the maximum identified in **Table 2**. Achievement of additional height is subject to the discretion of the decision maker and will need to:

- The production of an exceptionally high quality of design, as determined by the appointed design review panel; and
- Incorporate the following:
 - An area of publicly accessible private open space; and
 - 100% of windows containing double glazing; and
 - Provide an additional tree on-site above what is required by State Planning Policy 7.3 Volume 2 – Apartment Design Code. The tree must be a native species with a pot size of between 100L – 200L; and

- Provide conduits and capacity within the electrical distribution system and metering or future provision of electric car charging for each unit within the development; and
- Provide a minimum of two electric vehicle charging bays within the development; and
- Provide shared sustainable transport measures for the development that may include the provision of electric bikes, scooters and vehicle/s; and
- Achieve a Nationwide House Energy rating Scheme (NatHERS) star rating of a minimum of one star in excess of the current energy efficiency rating for the dwelling shall be certified by a suitably qualified and accredited energy assessor using accredited software and shall be provided at the development application stage; and
- Install a photovoltaic solar panel system that can provide the equivalent of at least 1Kw energy per dwelling.

In order to ensure development is built to a sufficient scale to facilitate the density envisaged for Golden Gateway, and to achieve the desired urban design outcomes, it is also considered appropriate to set minimum building heights. Priority should be given to the relationship of ground floor uses and building design with the public domain to ensure that considerations such as activation, passive surveillance and appropriate combination of uses are optimised.

A maximum podium height of 3 storeys applies (2 storey minimum) unless within the Great Eastern Highway Precinct, in which case a maximum podium height of 5 storeys applies. Podium elements are encouraged to relate to and activate the street, with the levels above the podium to be sufficiently setback.

Minimum and maximum building heights for podium and tower elements across the subject land are shown on **Plan 3** (Part 1).

3.3.5 LANDMARK SITES

There are two key locations situated at the termination of key view lines and sites highly visible from outside of Golden Gateway, thereby acting as landmarks for the development. These sites will also act as key nodes located along important pedestrian movement connections and will assist in linking these sites with the public realm.

Landmark sites have been identified as shown in **Plan 3** taking into consideration view corridors, overshadowing impacts and amenity considerations. In this regard, higher buildings are located at key corners of Great Eastern Highway and Stoneham Street and Resolution Drive.

Landmark sites should also be designed incorporating architectural or sculptural features with a point of difference, and will be reviewed by the City's Design Review Panel as a component of a Development Application.

3.3.6 CAR PARKING

The City wishes to encourage innovative approaches to car parking provision, such as reciprocity, carpooling programs or other innovations, that may result in reduced parking provision where appropriate, consistent with contemporary State Planning Policy. In this respect, the Structure Plan applies the car parking rates that are set out in the relevant R-Codes, and will also enable the Responsible Authority to consider approving a reduced parking provision where it can be demonstrated that an alternative parking proposal is sound and will result in a reduction in parking demand. Any proposed variation should be supported by a parking demand assessment undertaken by a suitably qualified professional.

An integrated approach to parking provision will be encouraged within Mixed Use and Multiple Dwelling development, in order to make the most efficient use of parking provision and to encourage use of alternative (public) transport modes where appropriate. In this respect special provisions are proposed to challenge the 'business-as-usual' approach to car parking design. The proposed parking provision is consistent with State Planning Policy 7.3 Volume 2 – Apartment Design. The following specific requirements are to be applied:

- a) For Mixed Use development, all residential parking in excess of 1 bay per dwelling, and at least 50% of the minimum required parking for non-residential uses shall be made available for general use of either residential or non-residential uses (these bays represent unallocated communal parking bays).
- b) Mixed Use development that proposed parking as outlined in 2a) above should be required, as a condition of Development Approval, to prepare a Car Parking Strategy that addresses the management of the unallocated communal parking provision, including:
 - I. The hours during which parking bays shall be made available for general public access; and

II. Location, signage and monitoring of usage of the unallocated communal parking bays.

- c) The provision of car parking that is in excess of the minimum required for the site will only be approved where it is designed to be adaptable for future conversion into habitable floor space, or other useable space communal or private usage. In order for parking to be considered adaptable, it must be shown as located in a position that is suitable for an alternative use, not included in individual strata titles and constructed to comply with habitable floorspace standards.

This requirement may be waived if it can be demonstrated that complying with the requirement would not be practical or would result in a less desirable outcome.

3.3.7 PUBLIC OPEN SPACE

The total POS provision is commensurate with the composition of land uses and having regard to the surrounding site context.

It should be noted that the subject land is well located within an existing urban context comprising of significant public parkland associated with the Swan River and portion of the Belmont Charitable Trust Land provided for public recreational value. As the subject land is generally constrained from providing more functional POS, and as there is a significant existing provision, it is proposed that contributions be sought for the upgrade of POS already supplied within the Belmont Charitable Trust Land.

A POS calculation has been prepared in accordance with Liveable Neighbourhoods (LN), as detailed in **Table 5**, including applicable deductions. In accordance with LN, a total of 1.5186ha of Open Space is required to be provided (**Figure 16**).

In the case of mixed use development, there is no minimum requirement for the provision of POS under LN. LN states that the appropriate POS contribution for mixed use development will be determined by the WAPC on a case by case basis.

It is proposed that approximately 0.0525ha of local public open space be provided as result of the closure of Daly Street. The proposed provision is less than the standard POS requirement of 10% POS for residential development under LN, however the proposed provision is considered appropriate for a mixed-use precinct. Furthermore, the City's POS Strategy also sets out minimum standards of land area provision for POS based on current best practice and ease of accessibility to available open space for both residential and non-residential areas. The subject land falls within the Ascot study area of the Strategy which concludes that whilst active open space provision is considered low, the area is well equipped for passive recreational activities largely as a result of the Regional Open Space associated with the Swan River foreshore to service its local needs.

Consistent with the assessment provided in the City's POS Strategy, the subject land is well located within an existing urban context allowing the future residents to take advantage of a variety of established recreation and leisure opportunities associated with the nearby Swan River and environs.

There is also the potential for the cash-in-lieu to be collected for the upgrade of the Belmont Charitable Trust Land, subject to the approval of the Minister for Planning under s154(2)(c) of the *Planning and Development Act 2005*.

Although subject to a separate planning process, the Ascot Kilns LDP will identify and provide for 10% of gross subdivisible area as POS. There may also be opportunities for public open space on a portion of Perth Racing's landholdings. This may be investigated as part of the separate planning work they are undertaking.



Figure 16 – Open Space Provision

TABLE 5: PUBLIC OPEN SPACE SCHEDULE

PUBLIC OPEN SPACE (ha)	
Gross Site Area	23.9871
DEDUCTIONS	
D1 Parks and Recreation Reservation (existing)	4.5556
D2 Road reserves (existing)	4.1930
Total Deductions	8.7486
Gross Subdivisible Area	15.2385
Creditable Public Open Space Required @ 10%	1.52385
PUBLIC OPEN SPACE PROVISION	
Unrestricted Public Open Space	
POS 1	0.0525
Total Unrestricted Public Open Space	0.0525
Restricted Public Open Space	
TOTAL CREDITED PUBLIC OPEN SPACE	0.0525
PERCENTAGE OF PUBLIC OPEN SPACE PROVIDED	0.2%

3.3.8 PUBLIC REALM PROVISION

A Public Realm Strategy was prepared in support of the Structure Plan (refer **Appendix E**) to develop a clear vision, principles and objectives to inform development of the public realm.

Existing local streetscapes are predominantly reflective of the commercial environment, particularly within the commercial 'triangle'. The standard of verge maintenance ranges from good quality reticulated lawns through to poorly maintained verges damaged by random, uncontrolled, overflow parking. The extent and quality of the existing pedestrian infrastructure within, and surrounding, the Structure Plan is of a standard commensurate with the nature of existing development across the Structure Plan area (i.e. primarily light industrial/commercial unit style development). The extent and quality of the existing cycling infrastructure within and surrounding the site is of a high standard, partly as a result of the Great Eastern Highway upgrades.

The Public Realm Strategy sets out to provide a high quality urban framework that promotes pedestrian circulation, accommodates vehicles in a safe and logical manner and is an environment that presents a desirable destination to live, work and recreate. Placemaking should inform the detailed design of spaces throughout the precinct. The spaces need to be able to facilitate and accommodate diverse uses that may emerge from community social investment. Places across the site will achieve a successful balance between physical attributes, the vehicle circulation and dynamic social, cultural and economic vitality. Its inherent qualities are strongly related to its proximity to the Swan River and its heritage related to the Ascot Kilns.

The key public realm areas are set out in the following pages.



Examples of Public Art, Rain Gardens & Swale Designs in an Urban Context (Jolimont Parkside Walk)

Road and street treatments

Road hierarchies and overall legibility of the subject land will be reinforced by the type of tree planting associated with the scale of the road. The paving treatments within all streets and roads will feature a consistent material palette to reinforce the distinctive character of the area.

Resolution Drive and Stoneham Street.

Whilst Resolution Drive and Stoneham Street will be largely vehicle dominated, the landscape aesthetic will be dominated by tree planting of larger species, creating a canopy boulevard along its length. Verge and median planting will create a formalised sinuous corridor of canopy trees that are recognisably different to the scale and nature of other landscapes in the area (refer **Figure 17**). Street trees will be planted to create a boulevard aesthetic the length of the street, aiding in wayfinding.

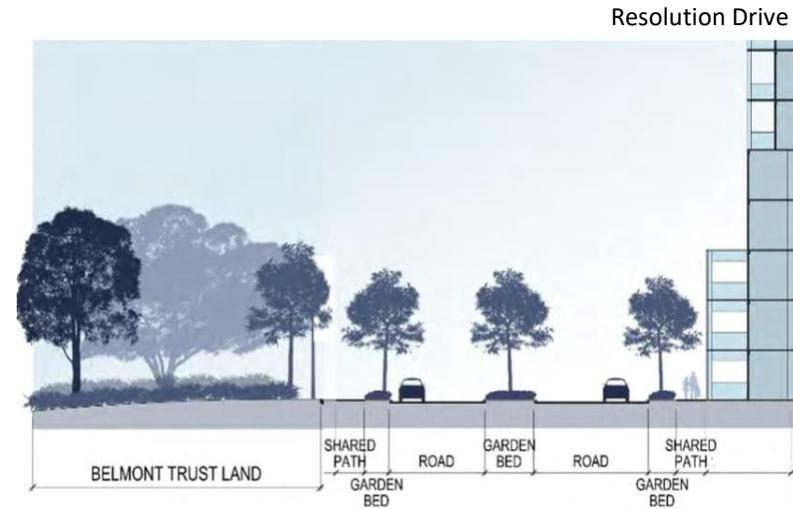
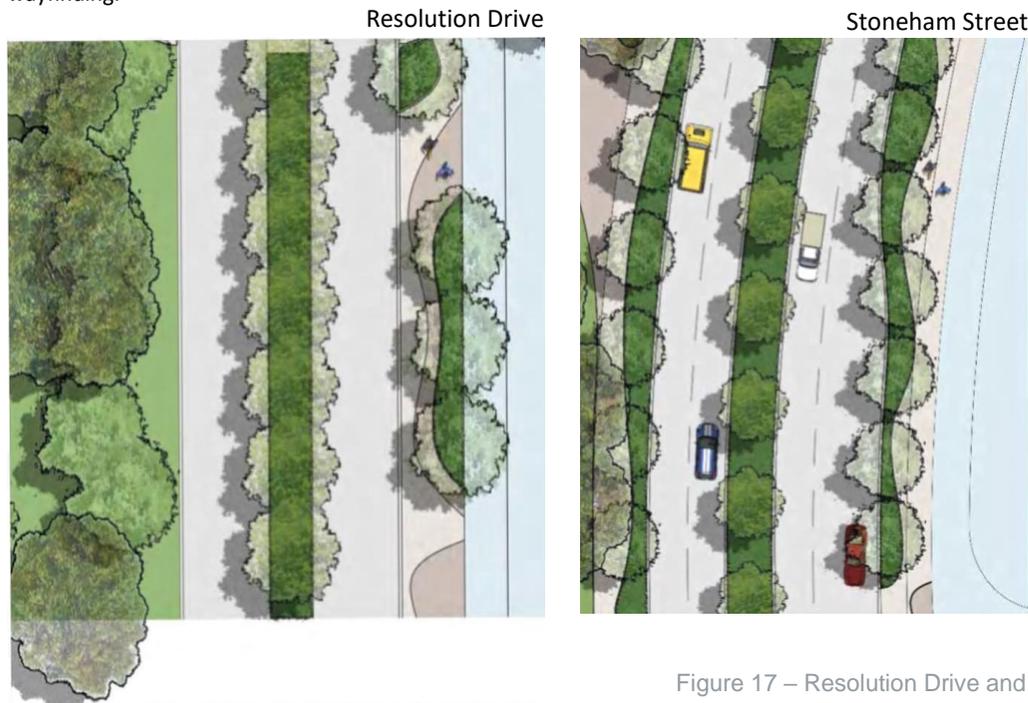


Figure 17 – Resolution Drive and Stoneham Street (Plan Extract and Indicative Section)

Central Streets

Hargreaves Street, Daly Street and Grandstand Road will comprise street tree planting that is not monoculture but uses a mix of street trees in varying combinations, to provide a dynamic and varied street tree canopy (refer to Section 10.3 of the Public Realm Strategy for proposed tree species). These streets will extend the overall public realm character established within the precinct but in a simpler manner. Street tree planting is proposed to create a canopied streetscape and to be positioned abutting the parallel parking embayments (refer to **Figure 18**).

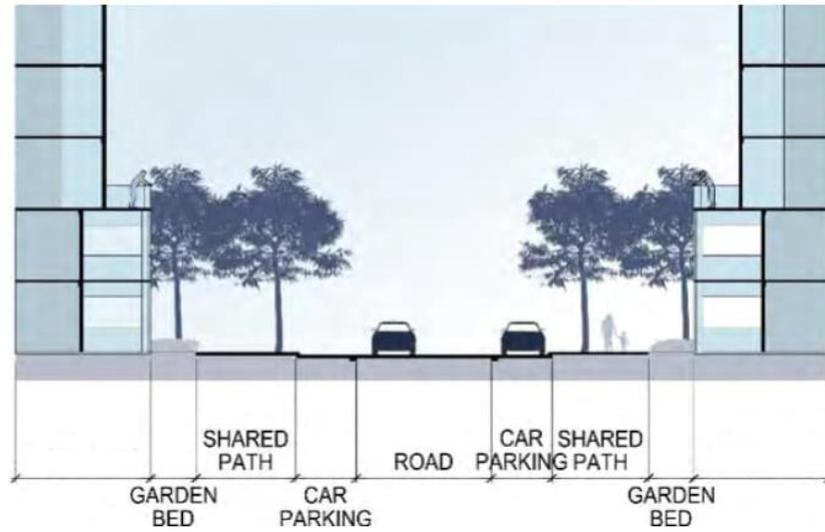


Figure 18 – Central Streets (Plan Extract and Indicative Section)

3.3.9 LANDSCAPE DESIGN

3.3.9.1 DESIGN OBJECTIVES—AN URBAN LANDSCAPE

As a busy location, the public realm offers the opportunity to be transformative, linking uses and people to the nearby valued Swan River, its parklands and the heritage and interest of the Ascot Kilns.

The public realm spaces made up of streets and a park, combine to be a defining element of this location, that importantly the users, employees and residents will experiences and define the qualities of the public realm.

The overall landscape design objectives for the public spaces are set out below:

Identifiable character

- Create a contemporary urban environment that promotes safe and easy pedestrian experiences.
- Create new diverse urban landscapes that reflect the subject land’s unique characteristics and close links to the river parklands.
- Create spaces that encourage and accommodate local community use and engagement.
- Establish an aesthetic that promotes positive development and investment in the location.
- Celebrate the heritage significance of the Ascot Kilns.

Valuable Landscapes

- Create a microclimate in public realm spaces and streets which encourages use and enjoyment.
- Provide key views and relationships that assist in orientation and legibility.
- Create highly utilised and valued public realm streets and spaces.

Environmental/Sustainability

- Create a durable urban landscape.
- Reduce urban heat sink characteristics.

- Create urban tree canopy (in compliance with the City of Belmont’s Urban Forest Strategy 2014 and the The Canopy Plan 2019-2024).
- Retain vegetation wherever practical.
- Promote the use of low water demand plants.
- Pursue water harvesting, passive irrigation and integrated urban water management.

3.3.9.2 INTEGRATED DRAINAGE MANAGEMENT

The use and promotion of Water Sensitive Urban Design (WSUD) techniques and approaches are to be utilised wherever possible throughout the subject land. The space for nutrient stripping is limited. As the urban area is not producing a nutrient load, the focus is on slowing runoff and reducing hydrocarbons. The use of linear and incidental ‘rain gardens’ and ‘nutrient sinks’ can be implemented discretely within paving in streets and areas of open space. These devices should be fully integrated with the road drainage promoting passive irrigation of street tree vegetation and controlling hydrocarbon runoff.

Within the context of a dense inner urban area, the design of these WSUD devices need not be natural in appearance but can be incorporated within the urban public realm infrastructure as a contemporary feature.

It is intended that the POS space within the redundant portion of the Daly Street road reserve will contain soft landscape areas. These areas present an opportunity to accommodate local drainage that is managed through swale type structures that infiltrate water and passively irrigate trees and other vegetation used in the public realm. This will be subject to further investigation and more detailed design at a later stage.

The use of permeable pavements and porous asphalt treatments in key locations is recommended, possibly associated with lower level threshold treatments of road junctions, should be incorporated as a component of the approach to integrated drainage management.

In order to deliver wider environmental sustainability objectives, as well as providing attractive places in which residents and visitors can enjoy, consideration should be given to the conservation of water resources and quality of groundwater. The use of water efficiency measures is encouraged and should promote the investigation of best management practices for irrigation of public open space.

The availability and quality of groundwater within the LSP area is limited at this stage. This will affect the ability of the City of Belmont to irrigate the proposed vegetation within the public realm areas. Therefore, due to the limitation of groundwater for irrigation purposes, the future irrigation of vegetation within the POS and public realm areas will need to be supplied by other sources. This may include scheme water, stormwater, irrigation (by agreement) from the Western Australian Turf Club's (now operating as Perth Racing) artesian groundwater licence, a new irrigation lake or other irrigation strategies will need to be investigated in the future. The City may encourage developers to consider the irrigation of abutting verge vegetation and street trees to ensure the high quality natural amenity of the public realm is maintained. Alternatively, non-irrigated (dry) landscape may need to be considered for the public realm areas.

3.4 MOVEMENT NETWORK

A Movement and Access Strategy was prepared by Flyt in support of the Structure Plan (refer **Appendix C**). This Strategy has been prepared using the requirements set out within the WAPC Transport Impact Assessment Guidelines (August 2016) Volume 2 – Planning Schemes, Structure Plans and Activity Centre Plans.

3.4.1 ROAD NETWORK AND TRAFFIC MANAGEMENT DEVICES

As outlined within this report, the Structure Plan proposes to retain the broad framework of the existing road network and primary traffic flows in order to achieve the desired development outcome, apart from Daly Street that will become a cul-de-sac. The remainder of Daly Street will be identified as POS.

The proposed changes to the existing road network and associated road hierarchy are outlined in **Figure 19** overleaf.

3.4.2 TRAFFIC FORECASTS

As outlined in the Movement and Access Strategy, the following new vehicle trips are anticipated to be generated by the proposed development:

- **AM peak hour traffic:**
 - Inbound 259 vehicles
 - Outbound 480 vehicles

- **TOTAL 739 vehicles**
- **PM peak hour traffic:**
 - Inbound 405 vehicles
 - Outbound 334 vehicles
 - **TOTAL 739 vehicles**

In summary, based on the application of standard assessment techniques as outlined in the report, the proposed development results in a slight reduction in road network performance in 2041 in the PM peak period at the Resolution Drive - Great Eastern Highway intersection.

The Stoneham Street - Great Eastern Highway modelling shows that by 2041 under the base scenario (i.e. without Golden Gateway development), all approaches (other than Belgravia Street approach) would operate over capacity during the AM peak and during the PM peak at all approaches. Factoring in the proposed Golden Gateway development, the degree of saturation on the Stoneham Street and Great Eastern Highway approach increases, however the level of service remains unchanged.

Acknowledging the current and existing background traffic growth rates the focus of the Structure Plan is to facilitate the enhancement of pedestrian and cycle connections. The increase in resident population can also serve as a catalyst in a step change in public transport use in the local area.

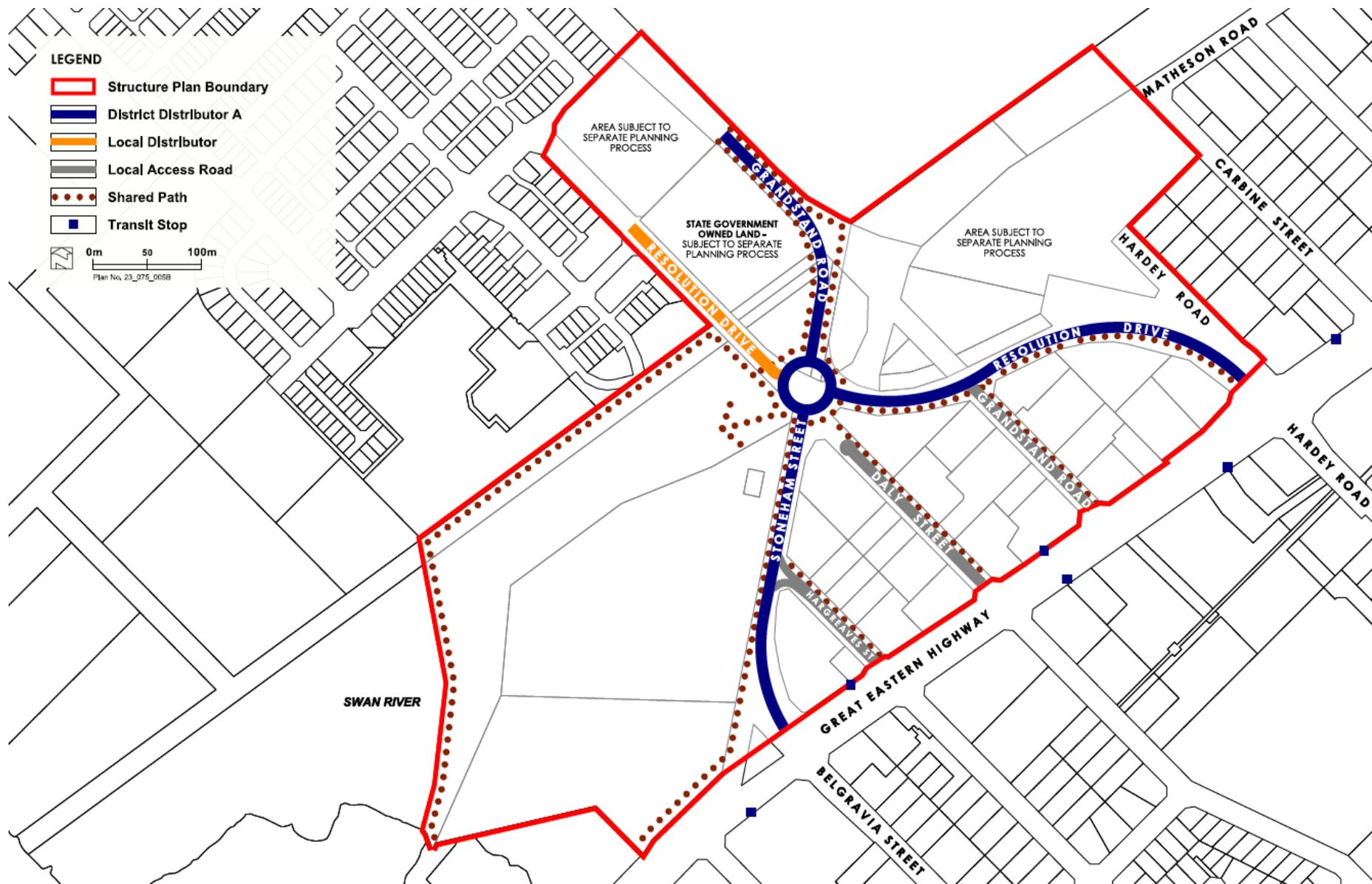


Figure 19 - Movement Network

3.4.3 PEDESTRIAN AND CYCLING NETWORK

All existing shared paths surrounding and through the subject land will be maintained, furthermore a 20% reduction in car driver and car passenger mode share is sought. Strategies to affect this change include:

- Implementation of a precinct wide 30km/h speed zone (excluding Grandstand and Stoneham Street as the main through route for traffic) to improve the environment for walking and cycling.
- Raised zebra crossings, with the crossing at footpath level creating a raised plateau speed hump for vehicles.
- Completing gaps in the shared path network and implementing the long term cycle network routes through the precinct.
- Increasing the tree canopy coverage along all roads within the precinct to create a pleasant environment for walking and cycling.
- Ensuring there are a variety of local amenities within a short and pleasant walking or biking distance.
- The introduction of a bike or electric scooter share scheme.
- The introduction of a car share scheme.
- The imposition of a parking cap for residential and commercial uses
- Lobby the Public Transport Authority to improve bus services to the Structure Plan area and explore the potential of other transit options such as a superbus or trackless tram.

3.4.4 PUBLIC TRANSPORT

High level discussions with the Public Transport Authority (PTA) has informed the proposed changes anticipated for the existing public transport network as discussed below. The introduction of the rail connection from central Perth to High Wycombe, including a park 'n' ride station at Redcliffe Train Station, resulted in the removal of four of the five existing bus routes operating along the Great Eastern Highway corridor. These were replaced with bus routes 293 and 940.

Currently the only bus routes that pass through the Structure Plan area are the circle route bus services 998 and 999 which are high frequency routes that travel along Grandstand Road and Resolution Drive, and then continue to Hardey Road. There are currently no bus stops for the circle route within the Structure Plan area, with the closest bus stops located on Grandstand Road immediately to the north of the Structure Plan area close to main pedestrian access for Ascot Racecourse.

High frequency bus route 940 operates along Great Eastern Highway which forms the southern boundary of the Structure Plan area and operates between Elizabeth Quay Bus Station and Redcliffe Station. Bus route 293 between Redcliffe Station and High Wycombe Station also travels along Great Eastern Highway (east of Belgravia Street) and along Belgravia Street.

The PTA has indicated that, if sufficient public transport demand was generated by large scale development of the subject land, they would consider the option of operating a bus service which connected the subject land and Perth CBD with a bus service that utilised the internal road network. However this would be contingent upon the proposed development generating the requisite public transport demand to warrant the investment in such a service.

3.5 WATER MANAGEMENT

3.5.1 STORMWATER MANAGEMENT

The key objectives for stormwater management are:

- Protection of wetlands and waterways (receiving environments) from the impacts of urban runoff.
- Protection of infrastructure and assets from flooding and inundation.

The following planning measures are adopted to achieve the above objectives:

- Residential, industrial or commercial premises in existing or proposed areas must maintain floor levels at 500 mm above the 100yr ARI in the Swan River and 300 mm above the 100yr ARI in the local drainage system.
- Runoff from events greater than the 1yr ARI interval event and up to the 5yr ARI event in residential areas and 10yr ARI event in commercial/industrial areas are to be managed in accordance with the serviceability requirements of Australian Rainfall and Runoff (Engineers Australia, 2001) minor/major system.
- Stormwater in excess of the capacity of on-site retention systems will be conveyed through the existing drainage system consisting of local road drainage, Central Belmont Main Drain Basin and compensating basin.
- Major flood runoff (1% AEP) will be conveyed via overland flow within the road reserve to the compensating basin and drain prior to discharging to the Swan River.

- The design of the redeveloped urban areas should incorporate current best practice in WSUD to mitigate the potential impacts on regional water quantity and quality from redevelopment and the legacy conditions within the catchment.
- Retrofitting of stormwater management systems to achieve improved water quality outcomes should be maximised through the installation of biofilters (raingardens), amended soils and the use of structural controls to address litter, sediment and vegetative materials at source.
- Modification of the existing Central Belmont Main Drain and local drainage systems to suit the urban form whilst maintaining drainage capacity and peak flow rates.
- WSUD and best management practices promoting on-site retention of the first 15mm of rainfall for small rainfall events.

3.5.2 GROUNDWATER MANAGEMENT

The key objectives for groundwater management are:

- Protecting infrastructure and assets from flooding and inundation by high seasonal groundwater levels, perching and/or soil moisture.
- Protecting groundwater dependent ecosystems from the impacts of urban runoff.
- Managing and minimising changes in groundwater levels and groundwater quality following redevelopment.

The following planning measures are adopted to achieve the above objectives:

- Retain existing surface levels as a minimum to ensure adequate separation.
- Limit basements in areas of shallow groundwater.
- Use of subsoil drainage below bio-retention areas, raingardens and tree pits to minimise local groundwater rise.

Groundwater levels provide potential clearance for basements to be installed, with two storey basements possible closer to Great Eastern Highway. Detailed designs of any infrastructure below the existing surface level (such as basements) may include tanking or other forms of damp-proofing. Any temporary lowering groundwater for construction, either for basements or sewer, may require dewatering licences from DWER.

3.6 EDUCATION FACILITIES

Existing education facilities located within close proximity to the subject land include the following:

- Belmont Primary School is located at the intersection of Great Eastern Highway and Belgravia Street.
- Redcliffe Primary School is located approximately 3km to the east.
- St Maria Goretti's Catholic School is located approximately 2.5km to the east.
- Maylands Peninsula Primary School is located approximately 2.5km to the north.
- Belmont City College is located approximately 3km to the south.

Given the nature of the development and anticipated demographic it is anticipated that there will be limited additional demand for education facilities generated in the precinct. The Golden Gateway Precinct is well located within an existing urban context allowing future residents to take advantage of existing education facilities.

3.7 EMPLOYMENT

Given the subject land's strategic location close to existing employment opportunities in the Belmont mixed business area, proximity to Perth CBD and commercial land uses along Great Eastern Highway, the area already enjoys a high rate of employment self-sufficiency, therefore additional employment generating land uses are not considered necessary to improve local employment opportunity. The non-residential uses anticipated for the Golden Gateway Precinct will generate a small amount of locally-based employment; however, the main purpose of these uses is to provide local services and to optimise the value of its highly visible and connected location.

3.8 INFRASTRUCTURE COORDINATION, SERVICING AND STAGING

An Infrastructure Assessment Report was prepared by Cardno in support of the Structure Plan (refer **Appendix D**).

3.8.1 WATER SUPPLY

Water Corporation does not foresee any issues with servicing the proposed scheme with potable water. Initial advice from the Water Corporation has confirmed the following with regards to required upgrades:

- Water Corporation will upgrade the headworks, pipe equal to or greater than 300mm diameter and pump stations, as and when required.
- Water Corporation recommends a consolidated approach to the requesting and programming of works to minimise disruptions and maximise cost efficiencies. Water Corporation recommends any reticulation reinforcement or new work should be managed by the City of Belmont due to the fractured land ownership within the area. It is recommended that a working group between the City of Belmont and Water Corporation is set up in order to help plan and coordinate precinct development and staging with any Water Corporation trunk infrastructure capital works.

3.8.2 WASTEWATER

The proposed development will have significant impacts to the current wastewater infrastructure. It is not envisaged the existing Redcliffe Pump Station 5 will have sufficient capacity with a shortfall of 9.09 L/s to service the proposed development and will require a significant upgrade. This would require the upgrade of the existing pumping station to a larger type 40. A type 40 pumping station is a station capable of a 40 L/s service consisting of two pump-sets located in a common wet-well constructed from 2500mm internal diameter precast concrete pipes. Redcliffe Pump Station 2 will likely have capacity, however further planning should be coordinated with the Water Corporation to ascertain other timing of other developments in the area.

3.8.3 POWER SUPPLY

The Belmont substation servicing the subject land falls under the Cannington load area. Western Power's Annual Planning Report 2015/16 states "no substation capacity shortfall is forecast in the Cannington load area over the next five years." This takes into account committed, and most likely to occur, network expansion plans for the area. The Western Power Network Mapping Tool indicates that there is >30MVA spare capacity in the network until at least 2036 based on current and forecast demand.

3.8.4 GAS SUPPLY

Correspondence received from ATCO Gas advised that the existing infrastructure can support the proposed development.

3.8.5 TELECOMMUNICATIONS

The infrastructure within a development will be installed by the developer. Alternatively, Telstra can be engaged to install infrastructure within a development at the developer's expense.

Telstra's commercial pit and pipe service will generally not be offered in developments where NBN Co has confirmed agreement to install NBN Co fibre within a development stage.

3.8.6 WATER CORPORATION MAIN DRAIN

Stormwater in excess of the capacity of on-site retention systems will be conveyed through the existing drainage system consisting of local road drainage, Central Belmont Main Drain Basin and compensating basin. No changes to the Central Belmont Main Drain are proposed.

Future planning of the WATC land should provide for an appropriate interface with the Central Belmont Main Drain.

3.9 IMPLEMENTATION

3.9.1 SCHEME AMENDMENT TO FACILITATE STRUCTURE PLAN

An amendment to the City of Belmont's LPS 15 will be required to apply the R-AC0 density code over the subject land and to exclude land uses that would be permissible within the Mixed Use zone and identified in section 4.1.1.1. This Amendment will also need to provide for the 'Shop' land use as an additional use.

3.9.2 INFRASTRUCTURE FUNDING STRATEGY

The City of Belmont may establish an appropriate funding strategy for the Structure Plan Area. As part of the strategy, a Development Contribution Area (DCA) within LPS 15, under which a Development Contribution Plan (DCP) may be implemented to contribute to the funding of the public infrastructure requirements to facilitate development in the Structure Plan Area will be considered.

Infrastructure items that would be eligible to be funded under a DCP should be in accordance with State Planning Policy 3.6 Development Contributions for Infrastructure (SPP 3.6) and may include:

- Great Eastern Highway pedestrian crossing.
- Land for public open space and community facilities.
- Landscape treatment for all public realm areas, including local roads.

This Structure Plan will inform any future DCP, particularly in relation to the proposed upgrades to roads and intersection treatments as determined by the Movement and Access Strategy contained at **Appendix C** and the Public Realm Strategy contained at **Appendix E**.

3.9.3 LAND ASSEMBLY

There are various statutory processes required to deliver and facilitate development of the subject land, including amendments to LPS 15. Following adoption of the Structure Plan, subdivision and amalgamation applications can be lodged with the WAPC in the normal manner to assemble the land appropriately. Amalgamation is also likely to occur to enable land rationalisation. The subdivision/amalgamation process may be necessary to create some key elements of the project, primarily for the amalgamation of land parcels as shown on **Figure 20** overleaf.

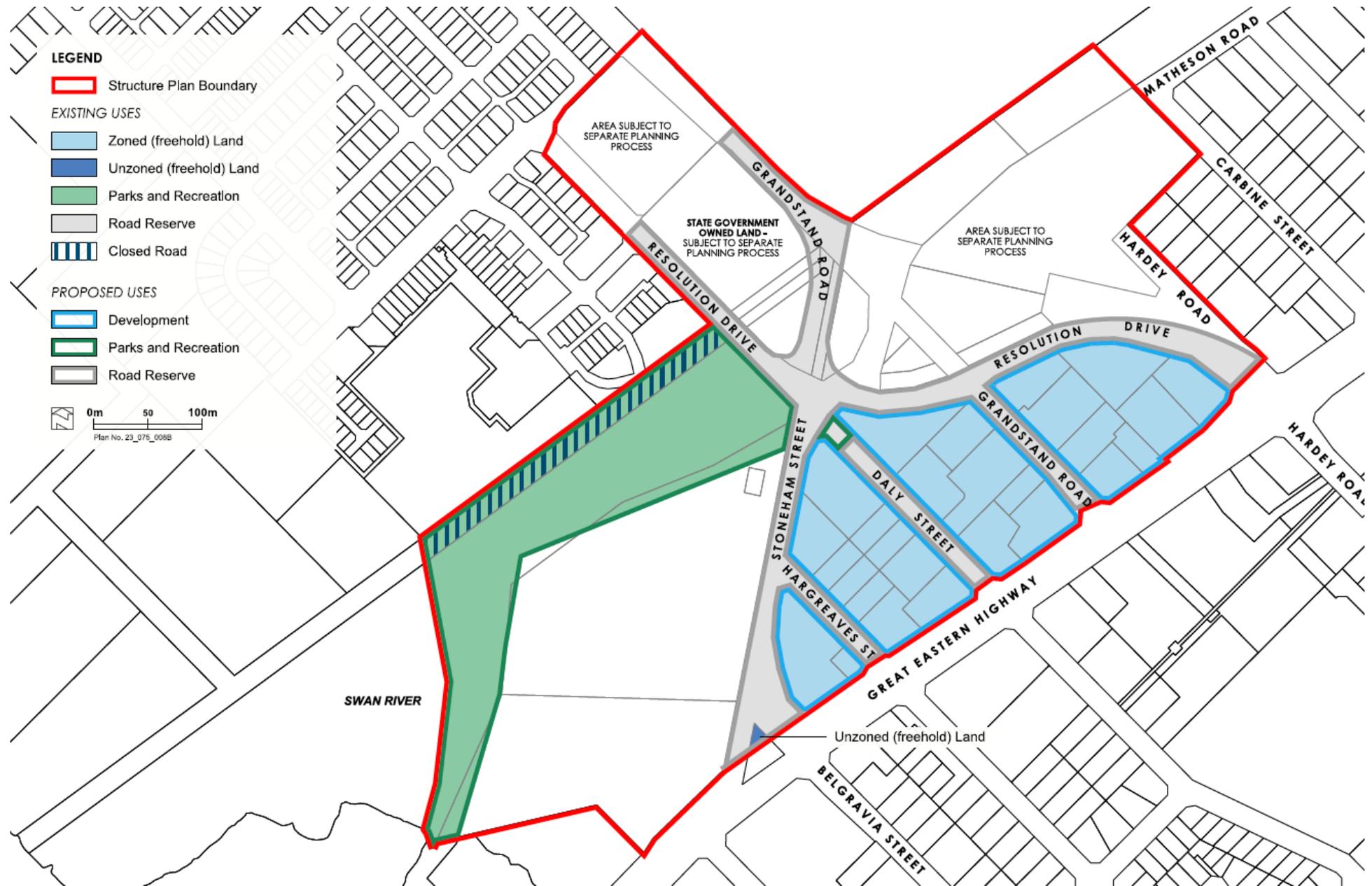


Figure 20 – Implementation

APPENDIX A BUSHFIRE MANAGEMENT PLAN

APPENDIX B

ENVIRONMENTAL ASSESSMENT REPORT

APPENDIX C

MOVEMENT AND ACCESS STRATEGY

APPENDIX D

INFRASTRUCTURE ASSESSMENT REPORT

APPENDIX E

PUBLIC REALM STRATEGY