

**MASTER PLAN VISION** 







### Kwinana City Centre Master Plan

December 2019

### contents

### INTRODUCTION 4 i PURPOSE ii PLANNING CONTEXT iii RELATIONSHIP TO OTHER PLANNING DOCUMENTS iv DOCUMENT STRUCTURE 9 STRATEGIC CONTEXT $\bigcap$ **1.1** CITY CONNECTIONS **1.2** HISTORIC DEVELOPMENT OF THE CITY CENTRE **1.3** CHANGING POPULATION AND DEMOGRAPHIC PROFILE **1.4** KEY ISSUES AND OPPORTUNITIES MASTER PLAN VISION 17 2.1 VISION 2.2 OBJECTIVES 2.3 MASTER PLAN CONCEPT **URBAN STRUCTURE** 23 $\square$ **3.1** CHARACTER AREAS **3.2** PUBLIC SPACE NETWORK **3.3** VIEW CORRIDORS 3.4 ACTIVE TRANSPORT 3.5 MOVEMENT FRAMEWORK 3.6 PARKING **BUILT FORM** 37 Nγ 4.1 MIX OF LAND USES 4.2 HEIGHT AND MASSING 4.3 ACTIVE FRONTAGES 4.4 FACADE TREATMENT 4.5 BUILDING ORIENTATION

### contact

#### HAMES SHARLEY

Level 2, 50 Subiaco Square Subiaco WA 6008

т +61 8 9381 0236 Ref: 43438

#### www.hamessharley.com.au

#### DISCLAIMER

The information contained in this report has been prepared with care by our company, or it has been supplied to us by apparently reliable sources. In either case, we have no reason to doubt its completeness or accuracy. However, neither this company nor its employees guarantee the information, nor does it or is it intended to form part of any contract. Accordingly, all interested parties should make their own inquiries to verify the information, as well as any additional or supporting information supplied, and it is the responsibility of interested parties to satisfy themselves in all respects.

This report is for the use only of the party to whom it is addressed and Hames Sharley disclaims responsibility to any third party acting upon or using the whole or part of its contents.

This document has been prepared for the use of the City of Kwinana only. Copyright  $\odot$  2019 by Hames Sharley WA Pty Ltd. No part of this document shall be reproduced in any form without written permission of Hames Sharley.

Revisior	Letter	Date	Status	Details	Prepared by	Approved by
1		July 2016	Draft	First Draft	SE	SOS
2		October 2016	Draft	City Revisions	SE	SOS
3		November 2016	Draft	City Revisions	SE	SOS
4		November 2016	Draft	Format Amendments	SOS	JC
5		December 2016	Draft	Plan updates	SOS	JC
6		March 2019	Draft	Final Draft	SOS	JC
7		November 2019	Final Draft	Final Revisions	SOS	NS
8		December 2019	Final	Final	SOS	NS

### 05 PUBLIC REALM

### 49

- 5.1 VIBRANT PUBLIC REALM
- 5.2 LANDSCAPE
- 5.3 SIGNAGE
- 5.4 STREET FURNITURE
- 5.5 PUBLIC ART
- 5.6 WATER SENSITIVE URBAN DESIGN

### Introduction

The City Centre Master Plan Vision (CCMPV) is the first step by the City of Kwinana (the City) to overhaul the existing Kwinana Town Centre Master Plan and Design Guidelines, 2007. It aims to provide a framework for the future development of the city, reinforcing quality urban design outcomes that will contribute towards a vibrant, diverse and thriving centre.

The quality of the City Centre has a significant impact on the daily lives of those living and working in the area. Quality urban design, when implemented properly, makes a valuable contribution to the local economy, built environment and overall liveability of the area. This document concentrates on aspects of particular importance to the City in the creation of a distinctive place at the heart of the community and underpins Council's commitment to take design matters seriously.

### i PURPOSE

As a document to guide the future vision and development of the city centre, the CCMPV will not attempt to cover every issue but concentrates on those aspects which are of particular importance - creating places for people, enabling local businesses to prosper and establishing strong spatial relationships to integrate the city centre with surrounding neighbourhoods.



Figure 1: Kwinana Town Centre Master Plan, 2007

### Introduction

### ii PLANNING CONTEXT

In 2007, the Kwinana Town Centre Master Plan and Design Guidelines were developed as the framework for the City Centre and surrounding precinct (Figure 1). Given the substantial development that has progressed within the surrounding precincts, and to a lesser degree within the city centre itself, the need for a more contemporary Master Plan Vision was proposed to guide future development of the centre itself.

Figure 2 illustrates the City Centre Master Plan area of focus which takes into consideration opportunities to integrate new development on the edge as the centre grows in the future. The area is bound by Sulphur Road in the north, Gilmore Avenue to the west, Meares Avenue to the east and Challenger Avenue to the south.

The new CCMPV also responds to the WAPC State Planning Policy 4.2 – Activity Centres for Perth and Peel (SPP 4.2), released in 2010. This policy specifies broad planning requirements for activity centre development and renewal, focussing on greater diversity in land use, consolidated retail development, quality urban design and walkability in and around centres and underpins the final outcome for the Master Plan.

Under the SPP 4.2, Kwinana City Centre is designated as a Secondary Centre. Secondary Centres are the second highest order centres below Strategic Metropolitan Centres and Perth Capital City. As illustrated in Figure 3, Kwinana City Centre sits as a smaller scaled Secondary Centre in relation to other centres and the nature of retail offering within these centres.

In line with the City of Kwinana's projected population growth, it is expected that the demand for community facilities, services and residential dwellings will increase significantly. This highlights the importance of providing a city centre that will meet current and future demands of a growing community at a much larger scale than exists today.



Figure 2: Focus area for the City Centre Master Plan

## 1.0 Introduction

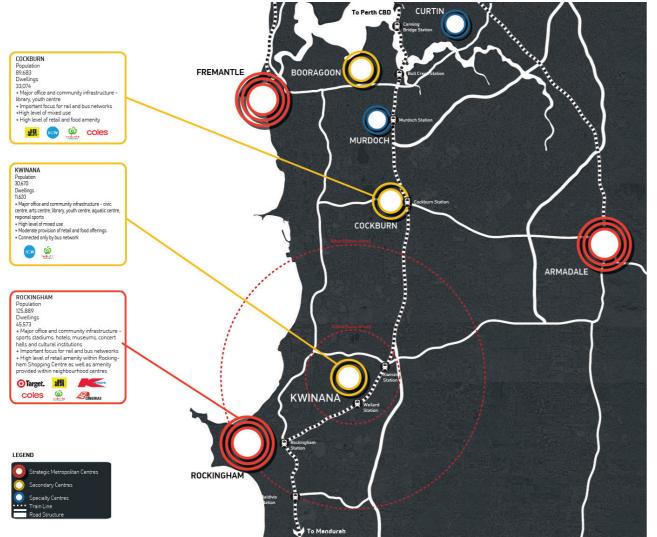


Figure 3: Activity Centres surrounding Kwinana

### iii RELATIONSHIP TO OTHER PLANNING DOCUMENTS

The Master Plan Vision outlines a development vision and key design principles that will positively contribute to the social and economic vibrancy of Kwinana's City Centre. In this regard, the CCMPV will be used by the City as a supporting document when assessing future development within the City Centre and should be read in conjunction with:

- + Kwinana City Centre, Local Planning Scheme No.3 (LPS)
- + Residential Design Codes

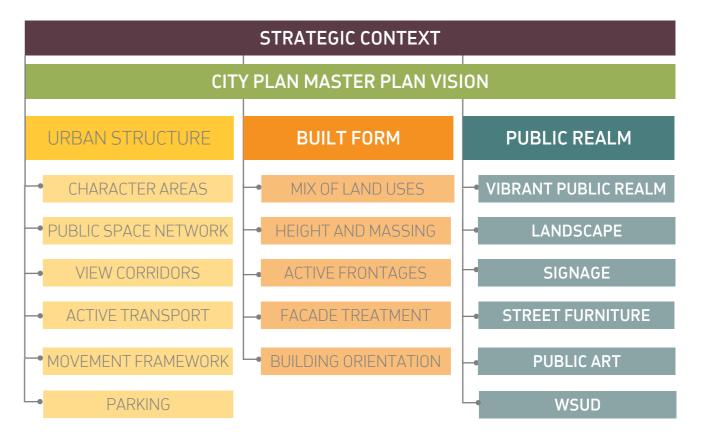
## 1.0 Introduction

### iv DOCUMENT STRUCTURE

The following Master Plan and guidelines should be used by those developing public and private buildings, streetscapes and landscape within the City Centre. Applications will be assessed on merit, understanding that not all developments are a 'one size fits all' in nature.

It is intended that the guidelines will be reviewed periodically to ensure they are relevant and current to service the needs of future development within the City Centre.

The document has been structured to include the following elements to help guide the overall Master Plan Vision for the City Centre:



- **Aims:** outline the overall design intent or philosophy underpinning the best practice criteria, explaining the desired outcome achieved.
- **Outcomes:** state the spatial areas that directly relate to implementation of each principle.
- **Attributes:** identifies key attributes new development should respond to.
- **Design Guidance**: recommendations and additional measure for which new development can achieve a higher level of design, community interaction and/or architectural character.



### 1 O Strategic Context

#### 1.1 CITY CONNECTIONS

The City is well serviced by the wider movement network (Figure 4). Future planning for connectivity of the City Centre and surrounding centres will need to ensure 'ease-of-movement', particular between the Kwinana City Centre and both Kwinana and Wellard train stations.

The need for a more comprehensive local transport management system, taking into account increased walkability and cycling as alternative active transport modes has been raised in the past. A 'Transport Oriented Trilogy Corridor', previously recommended as part of an integrated transport plan, aims to enhance public transport service between the City Centre and the two stations, combined with increasing densities around these centres.

Gilmore Avenue, identified as a Secondary Distributor, currently operates as a high speed corridor raising increased concerns for pedestrian safety as more activities are being developed within Calista Oval, namely the Skate Park and new children's Adventure Park. Speed restrictions have been implemented between Chisham Avenue and Sulphur Road to enable Gilmore Avenue to evolve from a busy distributor to a key entry boulevard into the City Centre, allowing for safe connections between the City Centre and adjacent activities.

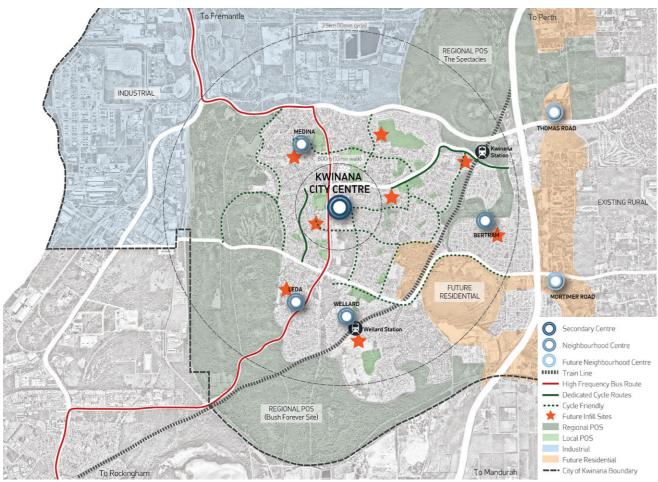


Figure 4: Wider Movement Network connecting Kwinana City Centre

### **1** Strategic Context

### 1.2 HISTORIC DEVELOPMENT OF THE CITY CENTRE

Figures 5-7 demonstrate how the City Centre has evolved over the last decade. The pattern of development on an 'as needs' basis has resulted in a somewhat fragmented centre, with some land uses not actively integrated into the Centre.

#### 2002-2007

A key anchor at the heart of the City Centre was the The Hub Shopping Centre. This also saw the development of the Recreation Centre and a number of small retail and commercial stores to the east of Chisham Avenue.

#### 2008-2011

Redevelopment of the Gilmore College to the north of the Centre integrated a new pedestrian link defining a new north-south pedestrian corridor. The new library





was completed with its forecourt linking the Recreation Centre and Chisham Ave. This also saw the relocation of the Tavern adjacent to the library.

#### 2012-2016

Expansion of The Hub Shopping Centre, renamed Kwinana Marketplace, expanded the building footprint south, as well as providing new buildings fronting Chisham Avenue.

- Within this period of time, a new ALDI supermarket has opened on the northern side of Chisham Avenue, and a Coles supermarket has moved into the Marketplace shopping centre.
- Chisham Avenue has also undergone extensive landscaping to redefine this as the City Centre Main Street. Complemented by new residential development to the north, this has the opportunity to add greater diversity of uses within a revitalised City Centre.





Figure 7: City Centre Zone, 2014

### Strategic Context

#### 1.3 CHANGING POPULATION AND DEMOGRAPHIC PROFILE

#### **POPULATION GROWTH**

Kwinana is currently the fastest growing local government area in the Perth South-West Metropolitan area and the fourth fastest in Western Australia. Population projections provided by Forecast.id show Kwinana having a population of 85,158 by 2036, representing more than double the population from 2017.

To accommodate this population growth, an increase in dwelling units from 15,480 in 2015 to 30,989 in 2036 will mostly occur in the north and eastern sections of the City, adjacent to the Kwinana Freeway and the Perth-Mandurah Railway. This equates to some 800-1,000 new residential lots being released each

year, predominantly as part of quality residential developments undertaken by the State's leading developers - currently including Honeywood (Satterley), Sunrise (AMEX), the Village at Wellard (Peet), Emerald Park (Cedar Woods) and Cassia Glades (Satterley) amongst others.

According to the City's 2016 Profile.id, detached houses make up 89% of dwelling structures in Kwinana, reflecting the need for greater urban consolidation and densification, as outlined in *Directions 2031 and* Beyond.

### Strategic Context

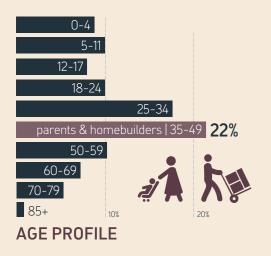
#### SOCIO-ECONOMIC COMPOSITION

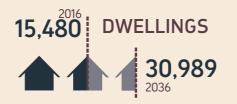
Kwinana has a young population with 67.2% of the population under the age of 40 with a median age of 32. The average house hold size is 2.6, this indicates that the residential environment of Kwinana is of choice for young families. This trend is projected to continue into 2036. On average, 70% of people living in Kwinana own or are purchasing their own home.

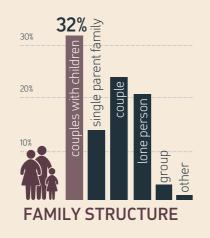
#### TRAVEL TO WORK

The current mode of travel to work is by car, however, a significant section of the resident labour force (51.5%) work within the south west corridor, suggesting the need to retain a strong public transport focus on employment locations within this sector.

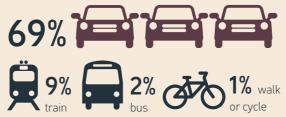
### 39,000 POPULATION 85,158

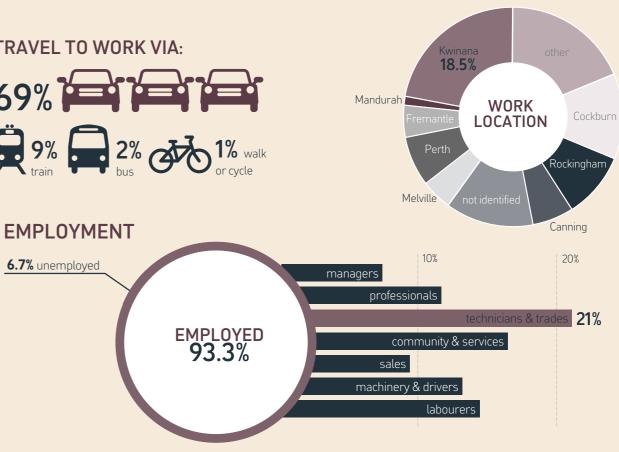






TRAVEL TO WORK VIA:





#### ECONOMY AND INDUSTRY

Unemployment in Kwinana is high at 6.7%, compared to the Perth metropolitan area at 4.8%. Of those in employment, the proportion of local resident labour force sits at 33%, while the remaining 67% work within the greater Perth area (Figure 6).

The dominant work sectors remain in Manufacturing and construction. Emerging sectors are within education and training, public administration and safety, health care and social assistance.

Kwinana has relied heavily on resource intensive industries such as mining, manufacturing and construction. Under represented in both high growth and cluster concentration are financial and insurance services, professional services, administrative and support services, arts and recreation services, retail, wholesale, agriculture, forestry and fisheries, education and training (Draft KLPS, 2015)

### 1.0 Strategic Context

### 1.0 Strategic Context

#### CHALLENGES AND OPPORTUNITIES 1.4

Kwinana City Centre is evolving, and whilst it is faced with a number of physical challenges outlined in the table below, this also provides for untapped opportunities

(Figure 8) to express the centre as a key destination, offering unrealised commercial returns and a place for the community to come together at its heart.

<ul> <li>Physical separation between precincts</li> <li>Visual separation between areas</li> <li>Strengthen the distinctive characteristics of each area by responding to the natural terrain</li> <li>Council Administration building at capacity</li> <li>Limited development opportunity on smaller lots</li> <li>Lack of night life offering</li> <li>Limited diversity of land uses within the City Centre</li> <li>Limited diversity of land uses within the City Centre</li> <li>Limited diversity of residential development in the immediate vicinity of the City Centre</li> <li>Vehicles dominate in City Centre</li> <li>Vehicles dominate in City Centre</li> <li>Width and speed along Gilmore Ave detracts from the City Centre environment the southern area</li> <li>Limited passive surveillance onto POS</li> <li>Lack of integration between City Centre</li> <li>The protection and enhancement of bush land has been identified as a priority in the Strategic Community Plan.</li> <li>Nevelopment and the protection of the natural environment needs to continue into the future.</li> <li>Ensure facilities meet the changing needs of th</li></ul>		CHALLENGES	OPPORTUNITIES
wmershipLimited development opportunity on smaller lotsCollaborative partnerships to integrate land usesxisting LandLack of night life offering Limited diversity of land uses within the City CentreGreater diversity of night time /day time offeringSesLimited diversity of residential development in the immediate vicinity of the City CentreGreater diversity of night time /day time offeringVehicles dominate in City CentreCollaborative partnerships with local businesses to engage with and develop sustainable outcomes for the City CentreIovementVehicles dominate in City Centre Width and speed along Gilmore Ave detracts from the City Centre environment the southern areaUblic Open paceLimited passive surveillance onto POS Lack of integration between POS Linking facilities across Gilmore Ave The protection and enhancement of bush land has been identified as a priority in the Strategic Community Plan.A balanced approach between development and the protection of the natural environment needs to continue into the future.edestrian CentreA t-grade car parking dominating the City CentreShort-stay parking primarily located on- street.overlap of facilities using closest convenient spaces Perceived lack of parkingIntegration of Parking Management Plan and Integrated movement strategy -working collaboratively with the MarketplaceMarking certsesTopography of the City Centre Perceived lack of parkingPiroritise safe pedestrian access Create pleasant walking environments between key destinations	Topography	Physical separation between precincts	<ul><li>spaces.</li><li>Strengthen the distinctive characteristics of each area by responding to the natural</li></ul>
sesLimited diversity of land uses within the City CentreImited diversity of residential development in the immediate vicinity of the City CentreOfferingLimited diversity of residential development in the immediate vicinity of the City CentreProvide for mixed used development to allow for upper storey residential uses - increasing the range of housing options.IovementVehicles dominate in City CentreDefining a clear movement network hierarchyIovementVehicles dominate in City CentreDefining a clear movement network hierarchyIbiconnect between land ownership within the southern areaDevelopment of an Integrated Transport StrategyLinking facilities across Gilmore Ave than has been identified as a priority in the Strategic Community Plan.A balanced approach between development and the protection of the natural environment needs to continue into the future.arkingA t-grade car parking dominating the City CentreShort-stay parking primarily located on- street.edestrian cccessTopography of the City Centre Disconneet spaces Lack of passive surveillance along primary pedestrian corridorsPrioritise safe pedestrian access Create pleasant walking environments between key destinations	Land Ownership	Limited development opportunity on	Collaborative partnerships to integrate land
Iovement• Vehicles dominate in City Centre • Width and speed along Gilmore Ave detracts from the City Centre environment • Disconnect between land ownership within 	Existing Land Uses	<ul> <li>Limited diversity of land uses within the City Centre</li> <li>Limited diversity of residential development in the immediate vicinity of</li> </ul>	<ul> <li>offering</li> <li>Provide for mixed used development to allow for upper storey residential uses - increasing the range of housing options.</li> <li>Collaborative partnerships with local businesses to engage with and develop</li> </ul>
<ul> <li>Limited passive surveillance onto POS</li> <li>Lack of integration between POS</li> <li>Linking facilities across Gilmore Ave</li> <li>The protection and enhancement of bush land has been identified as a priority in the Strategic Community Plan.</li> <li>At-grade car parking dominating the City Centre</li> <li>Overlap of facilities using closest convenient spaces</li> <li>Perceived lack of parking</li> <li>Topography of the City Centre</li> <li>Lack of passive surveillance along primary pedestrian corridors</li> <li>At crategic surveillance along primary</li> <li>Create pleasant walking environments between key destinations</li> </ul>	Movement	<ul> <li>Width and speed along Gilmore Ave detracts from the City Centre environment</li> <li>Disconnect between land ownership within</li> </ul>	<ul> <li>Defining a clear movement network hierarchy</li> <li>Traffic calming Gilmore Ave</li> <li>Development of an Integrated Transport</li> </ul>
Centrestreet.• Overlap of facilities using closest convenient spaces• Integration of Parking Management Plan and Integrated movement strategy - working collaboratively with the Marketplace• Perceived lack of parking• Topography of the City Centre • Lack of passive surveillance along primary pedestrian corridors• Prioritise safe pedestrian access • Create pleasant walking environments between key destinations	Public Open Space	<ul> <li>Lack of integration between POS</li> <li>Linking facilities across Gilmore Ave</li> <li>The protection and enhancement of bush land has been identified as a priority in the</li> </ul>	<ul> <li>A balanced approach between development and the protection of the natural environment needs to continue into the future.</li> <li>Ensure facilities meet the changing needs of the local community</li> <li>Maintain seamless connections to public</li> </ul>
• Lack of passive surveillance along primary pedestrian corridors       • Create pleasant walking environments between key destinations	Parking	<ul><li>Centre</li><li>Overlap of facilities using closest convenient spaces</li></ul>	<ul> <li>street.</li> <li>Integration of Parking Management Plan and Integrated movement strategy <ul> <li>working collaboratively with the</li> </ul> </li> </ul>
primary pedestrian corridors	Pedestrian access	Lack of passive surveillance along primary	<ul> <li>Create pleasant walking environments between key destinations</li> <li>Increase passive surveillance along</li> </ul>









# 2.0 Vision

### 2.1 VISION

Kwinana's character is reflected in its unique community driven spaces. A number of urban expansion areas continue to regenerate a number of inner and outer city sites, helping to define it as a modern centre.

Within this interplay of elements, the Strategic Community Plan (SCP) sets out the following vision statement for the City:

# "Kwinana 2030 – Rich in spirit, alive with opportunities, surrounded by nature – it's all here!"

This Master Plan has been prepared to assist in achieving this vision and overarching Strategic Community Planning Objectives under the following four themes:

- + Rich in spirit
- + Alive with opportunities
- + Nature preserve and enhance
- + Services, facilities and a diverse lifestyle

Within this context, the following aims have driven the revised City Centre Master Plan:

- 1. Create a context for people to engage with the place
- 2. Create a context for people to engage with each other
- 3. Create a context for people to celebrate a shared sense of place

### 2.2 OBJECTIVES

The follow objectives reflect the intent of this Master Plan to revitalise Kwinana City Centre:

- + Provide a high quality Main Street environment facilitating a pedestrian-orientated environment and public spaces.
- + Create key 'destinations' which promote activity and vibrancy in the City Centre.
- + Reinforce existing civic and retail anchors to link primary pedestrian routes north and south of the City Centre.
- + Encourage a wider variety of uses within the City Centre to facilitate activity outside of business hours.
- + Minimise the impact of vehicle traffic and car parking within the City Centre.
- + Integrate the City Centre with Calista Oval and surrounding developments.
- + Promote a high quality mixed use environment accommodating ground level retail and opportunity for multi-unit residential dwellings above.
- + Redefine Gilmore Avenue as the a gateway boulevard into the City Centre.
- + Reflect Kwinana's unique sense of place identity through the built form and links to natural and cultural landscapes.
- + Integrate peripheral development along Meares Avenue, reinforcing a mix of development within the City Centre.

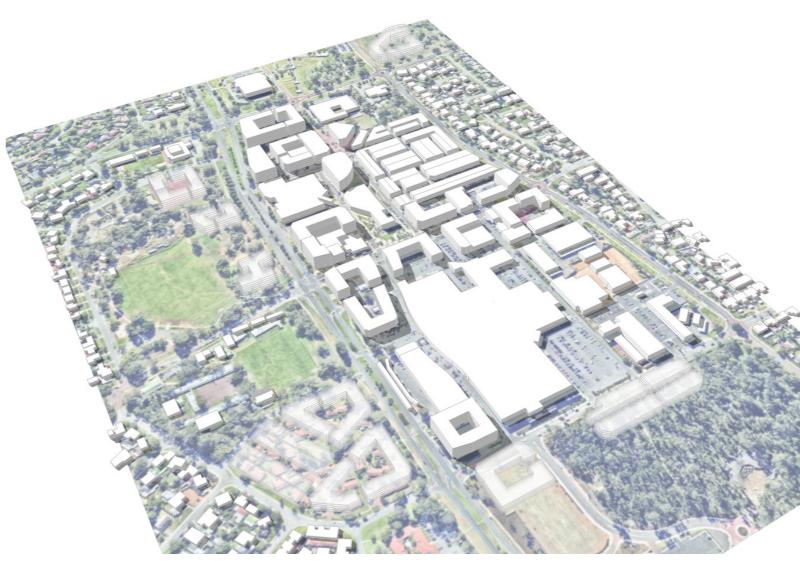


Figure 9: Indicative model Kwinana City Centre Master Plan

# 2.0 Vision

### 2.3 MASTER PLAN CONCEPT

The revised concept plan (Figure 10) is based on the outlined aims and design principles. The plan is illustrative only showing the desired layout of streets, public spaces and building footprints, guiding the development of the City Centre over a 30 year period.

Whilst the Master Plan does not seek to restrict creativity, new development within the City Centre will be assessed for their contribution to essential qualities outlined within the twelve development principles and the more detailed design guidelines presented in the following section. These guidelines have been developed to promote a degree of consistency in the quality, form and amenity new buildings contribute to the City Centre.

Key elements of the Master Plan are identified on the following plan (Figure 10). These suggestions contribute to a sustainable centre incorporating a mix of uses within a vibrant public realm.

- 1. Reinforce a slow speed pedestrian environment and continuous edge to Chisham Avenue Main Street providing visual interest and generous space for alfresco dining and pedestrian movement.
- 2. Creation of shared use pedestrian environment linking the Civic Square to surrounding destinations.
- 3. Redefine Gilmore Avenue as a slow speed entry boulevard facilitating safe and convenient access between the city and new activities on Calista Oval.
- 4. Reinforce legible and attractive north-south and east west primary pedestrian routes connecting uses within the City Centre to public transport, Calista Oval and surrounding residential development.
- 5. Integrate a diversity of residential dwellings and providing opportunities for residents to enjoy the City Centre location.
- 6. Development of a secondary Community Square providing a nodal link between the existing Public Transport Interchange and central Civic Square.
- 7. Introduce short-stay car parking on-street within the heart of the city.
- 8. Sleeving of longer-stay off-street car parking to the rear of buildings or partially screened from the street preferably shared between many uses.

- 9. Tree planting along the primary north-south and east-west pedestrian routes providing canopy coverage and continuous sight lines between nodal links.
- 10. Promote shared use pedestrian environment to link main entry points between the Kwinana Market Place and the Main Street.
- Integration of retail uses to the western edge of Kwinana Marketplace Shopping Centre addressing the primary north-south pedestrian route.
- 12. Bus stop accommodated either side of Gilmore Avenue to facilitate public transport connections north of Chisham Avenue.

# 2.0 Vision



Figure 10: Kwinana City Centre Master Plan



# URBAN STRUCTURE

K. Harris

# Urban Structure

### Aim: Create a context for people to engage with the place

to respond to. Key connections must be reinforced to

#### **ATTRIBUTES**

#### **Civic Precinct**

- + Located north of the City Centre between Sulphur Road and Darius Drive the Precinct is characterized by buildings set within a landscaped park setting.
- + City's civic administration is featured in a prominent location with associated public areas for ceremony and celebration.
- + New residential development will create a lively and active precinct accommodating a range of housing choice.

#### Main Street Precinct

- + A bustling retail and commercial centre supporting a high level of pedestrian activity, slow moving traffic and rich mix of uses fronting the Main Street.
- + Comfortable, wide, sheltered footpaths and public spaces of contemporary design will provide a setting for people to linger, shop, gather in the evening and for special events, local markets and festivals.
- + The public realm will be characterized by significant tree planting to enhance landscape qualities that are valued in Kwinana

#### 31 CHARACTER AREAS

and comprises its key natural and built features reflective

- + Provide a cohesive approach to development within
- + Buildings complementing the character and attributes
- + Integrate with adjacent development contributing to a

#### **DESIGN GUIDANCE**

#### Civic Precinct

- + Street frontages and public realm treatment should resolve level differences to provide accessible and attractive spaces.
- + Building form should respond to the topography using level changes to provide under-croft and basement parking below active floor levels.
- + New development, largely influenced by the surrounding built form, should respond to each other to establish elements of cohesiveness throughout the precinct.

#### Main Street Precinct

- + New development within this precinct should provide an engaging public space for locals, visitors and workers in the area.
- + Improved pedestrian connections to the shopping mall and Main Street retail will add to the city's economic vitality.
- + Residential development is encouraged, particularly at upper levels, to provide a liveable city centre supporting a variety of dwellings to enliven and to engender a sense of ownership of and care for the Centre.
- + New development should accentuate the edge of the Main Street, reinforcing a distinctive urban wall and sense of enclosure.

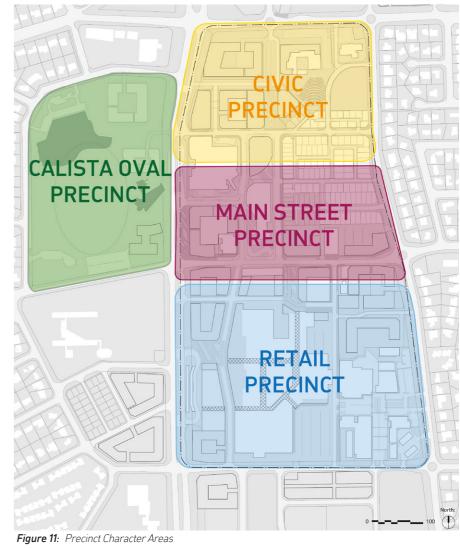
#### **ATTRIBUTES**

#### **Retail Precinct**

- + The shopping centre as the key activity, will evolve to become an integrated and connected part of the City Centre where people can move easily between the internal mall environment, the street and out to the precincts beyond.
- + Service areas will be designed to be clear and clean, using CPTED principles.
- + Buildings will be designed to minimise the visual impact of blank walls and large scale facades.

#### Calista Oval Precinct

+ Calista Oval Precinct is a treasured area of natural bush + Significant stands of natural vegetation and mature land which has contributed for a long time to the special specimen trees should be preserved wherever landscape character of Kwinana. possible.





#### **DESIGN GUIDANCE**

#### **Retail Precinct**

- + The built edges of the shopping centre are encouraged to provide active frontages along primary pedestrian linkages and building entrances, reaching out beyond the site and precinct to improve walkability to and through the City Centre.
- + All retail and business development will address public spaces to create a safe, attractive, well landscaped place for people at all times of the day and night.

#### Calista Oval Precinct

## Urban Structure

#### 3.2 PUBLIC SPACE NETWORK

Publicly accessible space linking nodes of activity are responsive to the existing pattern and uses within the City Centre and adjoining areas.

Key nodes of activity within the City Centre provide for a variety of spaces, enabling a range of opportunities for the community to come together at the heart of the City. Over time, this network of spaces will build on creating a unique sense of place and identity to the City Centre.

### **OUTCOMES**

#### Distinctive Places

- + Creation of distinctive places that brings the community together and attracts a broader diversity of users to the City Centre.
- + Ensure that development incorporate plazas, terraces and other public spaces for people to recreate.

Linking Activity Nodes

- + Integrated network of open space accommodating a variety of uses within the City Centre (Figure 13).
- + Defined connections to the surrounding land uses and public spaces.
- + Providing a variety of spaces as attractive venues for active and passive recreation within the City Centre.

#### Public Spaces

- + Establish Chisham Avenue Main Street as the focal point and prime public space of the City Centre.
- + Ensure buildings provide an integrated response to the adjacent public realm that corresponds to the overall character and sense of place.

#### **ATTRIBUTES**

**Distinctive Places** 

#### **DESIGN GUIDANCE**

- + The built form and public realm working together to create places having a distinctive character.
- + Embrace new and contemporary uses.

#### Linking Activity Nodes

- + Define key nodes of activity through the built form and expression of the public realm.
- + A variety of attractive and functional spaces providing for a range of users within the City Centre.

#### Public Spaces

- + High quality pedestrian access adopted throughout the public realm.
- + Public spaces and parks are within easy walking distance of the City Centre.
- + A connected network of open spaces, reinforcing linkages to the City Centre and surrounding recreational activities.

- + Providing a variety of pedestrian environments along key pedestrian routes, such as squares, plazas and courtyards, add interest and contribute to a distinctive
- + Integrate public art to reflect a unique sense of place.
- + Linking key pedestrian landmark features to ensure clear destinations within the City Centre and surrounds.
- + Resting spaces provided for within public spaces enabling people to linger.
- + Create active interfaces between the public realm and adjacent buildings.
- + Consider the site infrastructure design integrated within the public realm.
- + Ensure new built form provide a focus on natural passive surveillance.







- sense of place.

--- CITY CENTRE BOUNDARY





Footpath Parking Shared Street 29m 25m 65m Parking Footpath 3.0m 3.0m Figure 12: Western Section, Skerne Street Shared Street environment



Figure 13: Variety of Public Spaces within and surrounding the City Centre

## **O** Urban Structure

### 3.3 VIEW CORRIDORS

Figure 14 illustrates key view corridors, landmarks and

- + Preserve the opportunities for views and vistas through
- + Provide legible connections throughout the City Centre, linking nodes of activity.

Landmarks and Key Features

+ Maximise visual linkages with key lines of sight between

+ Defined thresholds into the City Centre.



Example: Northern view from the central pedestrian route linking view corridors

# View Corridor + New development reinforces important views and the Landmarks and Key Features + Buildings on key intersecting corners have an increase **Gateway Statements** + Reinforce the significance of Gilmore Avenue as the

- + Building design should maximise views from living
- + Maintaining walkable distances between blocks (<100m)
- + Consistent scale and massing creates a strong sense sight lines to landmark buildings and key features.
- + A dynamic sequence of spaces, providing opportunity
- + Enclosing spaces through landscaped edges or built

PRIMARY PEDESTRIAN VIEWS/ LINKS KEY PEDESTRIAN LANDMARKS DESIRED GLIMPSES ON APPROACH PRIMARY ARRIVAL GATEWAY SECONDARY ARRIVAL GATEWAY --- CITY CENTRE BOUNDARY

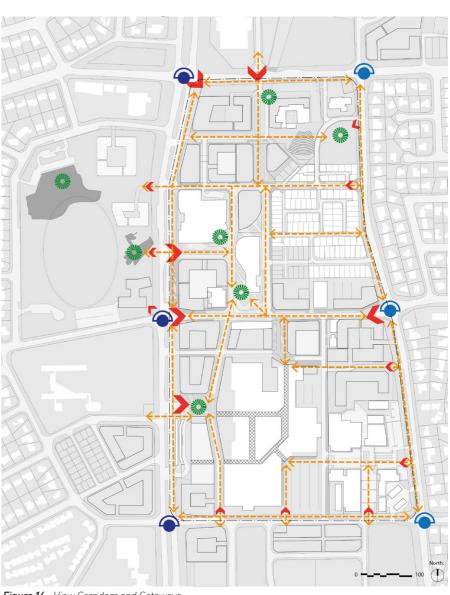


Figure 14: View Corridors and Gateways







Example: Opportunity to link nodal points within the city centre

#### 3.4 ACTIVE TRANSPORT

Promoting active transport through clearly defined pedestrian, cycle and public transit networks (Figure 15) enables greater integration of the city environment with the surrounding residential neighbourhoods. This provides the opportunity for city users to spend time and explore the city environments and in turn contribute to city life. The City adopted the Bike and Walk Plan in 2018. In this regard, future cycle provisions should refer to the Bike and Walk Plan.

#### **OUTCOMES**

Primary Pedestrian Routes

- + Defined north-south pedestrian route integrating with east-west connections through the City Centre.
- + Integrate 'shared streets' within the City Centre to reinforce pedestrian priority environments.

#### **ATTRIBUTES**

#### **Primary Pedestrian Routes**

- + Reinforced primary pedestrian links as shown in Figure + Continuous and visually permeable shop fronts 16
- + Pedestrian friendly road geometry including tight radii on corners, crossovers aligned with pedestrian movement and narrowing of carriageways.
- + Ground level frontages on primary pedestrian links incorporating a mix of land uses and design measures to ensure passive surveillance contributing to a safe, active and diverse public realm.
- + Provide safe and regular pedestrian crossings.
- + Generous uncluttered footpaths with sufficient space for alfresco seating and easy pedestrian movement.

#### Secondary Pedestrian Routes

+ Pathways providing permeable pedestrian connections through the City Centre, linking through to surrounding activities.

#### **Bicycle Facilities**

- + Adequate supply of bicycle parking bays enabling greater choice of movement through the City Centre.
- + Bicycle parking and storage functions incorporated into the building design.

#### Secondary Pedestrian Routes

+ Providing permeable connections through the City Centre.

#### Cycle Network

- + Promote active transport as a viable mode of transport linking the City Centre to clearly defined cycle routes and key destinations.
- + Ensure bicycle parking and end of trip facilities are provided for both public and private use.

Public Transport and Cycle Routes

- + Reinforce safe and legible connections to the public transport interchange adjacent to the Marketplace Shopping Centre.
- + Provide new bus stops north of the City Centre, linking new activities east and west of Gilmore Avenue.

#### **ATTRIBUTES**

#### Public Transport

- + Provide high quality bus stops within the City Centre, integrated with the streetscape design and easily accessible to pedestrians.
- + Legible pedestrian connections linking the public transport interchange with provision for shelter, seating and access to cafes.

#### **DESIGN GUIDANCE**

- reinforcing the 'main street' environment contributes to both the streetscape and sense of activity.
- + Providing wide pedestrian crossings at key intersections to assist safe pedestrian connections.
- + Providing regular seating, cycle racks, bins protected from the sun, rain and wind will improve comfort and encourage street activity.
- + Weather protection along buildings fronting primary pedestrian corridors enables seamless pedestrian connections throughout the seasons.
- + Legible way-finding through the city centre can improve access to parking areas and local facilities
- + Roads and paths are safe for adults and children to walk or ride.
- + Buildings that include any non-residential development should include end of trip facilities to support active transport modes.
- + Ensure cycle parking spaces are integrated within the streetscape, within easy access, and clear view of adjacent uses to facilitate passive surveillance.

#### PRIMARY PEDESTRIAN AXIS PEDESTRIAN LINKS SECONDARY PEDESTRIAN STREETS LOCAL PEDESTRIAN ROUTES **//////** SHARED STREETS PRIMARY CYCLE ROUTE - HIGH FREQUENCY BUS ROUTE LOCAL BUS ROUTE TRANSIT INTERCHANGE --- CITY CENTRE BOUNDARY

Figure 15: Pedestrian Network





#### **DESIGN GUIDANCE**

#### **Public Transport**

- + Provide safe, attractive and direct pedestrian and cycle access from large format buildings to public transport nodes and the surrounding area.
- + Pedestrian connections are reinforced to the public transport interchange with provision of shelter, seating and adjacent cafes providing passive surveillance over this area.



### 3.5 MOVEMENT FRAMEWORK

Streets are the foundation of a great city centre and taking a people-centred approach promotes vibrancy, enriching everyday life for all residents and visitors. The Master Plan provides guidance for the desired character of streets and of the public realm.

Buildings responding to the street hierarchy (Figure 17) provide the opportunity to reinforce the street wall along primary streets, clearly defining spaces within the City Centre and enhancing the overall character of Kwinana.

#### OUTCOMES

#### Entry Boulevards

 Representing the city's identity and civic pride, these streets are the highest priority due to the provision of a range of transport options for street users, as well as their importance to the City's overall entry function (Figure 16).

Primary Streets

- + Appropriate building height and street widths to create a sense of enclosure and definition to street, reinforcing street types by capacity and character.
- + An appropriate balance between vehicle and pedestrian movement, providing safety for pedestrians and accessibility for vehicles.

Secondary Streets

+ Create a human scaled environment which encourages social interaction, walking and active modes of transport.

#### DESIGN GUIDANCE

- Reinforce a built edge onto Gilmore Avenue supporting a slow speed environment between Chisham Avenue and Sulphur Road.
- + Prioritise pedestrian access across Gilmore Avenue at the key intersections of Sulphur Road, Chisham Avenue and Skerne Street.

#### Primary Streets

**ATTRIBUTES** 

Entry Boulevards

- Traffic is slowed within the Main Street Precinct providing for defined pedestrian crossings and tree planting to create a sense of enclosure to the street.
- + New buildings should maintain or reinstate a street wall along primary streets.

#### Secondary Streets

- + Enable permeable vehicle access through the City Centre, distributing traffic onto the outer ring route.
- + Provide clear sight lines for passive surveillance and to frame significant views.

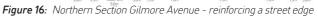
- Provide clearly defined, safe and convenient connections to the public transport network and cycle and pedestrian corridors
- + Ground level façades providing variation and interest at a human scale along its length encourage people to linger longer.
- + Weather protection for pedestrians should be provided along primary pedestrian routes in the form of awnings, verandas or first floor balconies.
- Vehicle entrance points and services areas integrated into the overall building design minimises the visual impact on the pedestrian environment and street vitality.
- Passive surveillance along secondary streets can be provided by orientating windows and building openings onto the street and public spaces.

DISTRICT DISTRIBUTOR
PRIMARY MOVEMENT
SECONDARY MOVEMENT
LOCAL MOVEMENT
LOCAL MOVEMENT
SERVICE ACCESS
CITY THRESHOLD TREATMENT
PEDESTRIAN CROSSING & INTERSECTION IMPROVEMENT
PRIMARY CAR PARKING SITES
CITY CENTRE BOUNDARY











# Urban Structure

### 3.6 PARKING

Good design of car parking is essential to both functionality and good visual quality throughout the City Centre. Realignment of on-street car parking integrated within a newly landscaped environment is designed to improve the pedestrian experience and maintain convenient access to the local shops and facilities.

To balance the future car parking needs within the City Centre, Figure 18 illustrates an approach to manage the integration of car parking with future development opportunities. This aims to provide both efficient and convenient access users within the city environment.

#### OUTCOMES

#### **On-street Car Parking**

- + Ensure on -street vehicle parking and access are appropriately located, maintaining strong pedestrian connectivity, whilst minimising adverse visual impacts on the streetscape.
- + Management of on-street short term car parking to provide convenient and efficient access to city centre facilities and services.

Off-street Car Parking

- + Minimise the adverse visual impact of car parking structures by sleeving ground level parking with active land uses and attractive facade treatment.
- + Integrate parking within new development to enable activation of street frontages.

#### **ATTRIBUTES**

#### **On-street Car Parking**

+ On- street car parking that is time managed providing the opportunity for a more accessible core to the City Centre

#### **Off-street Car Parking**

- + Provide safe, legible, well lit access to car parking at the rear of developments to maintain strong pedestrian connectivity.
- + Vehicle entry points and service areas integrated with the overall building design minimize visual detraction from the pedestrian environment and street vitality.

#### **DESIGN GUIDANCE**

- + At-grade car parking should not dominate primary street frontage or the public realm
- + On-street car parking should address safe and convenient locations within areas identified (Figure 18).
- + Locate and arrange customer parking areas to the rear of the building, or below or above ground.
- + Legible way-finding through the City Centre can improve access to parking areas and local facilities
- + Vehicle crossovers minimized and shared where possible creates the opportunity to define primary pedestrian routes.

PRIMARY CAR PARK AT GRADE CAR PARK ON-STREET PARKING SHORT TERM PARKING FUTURE MULTI DECK CAR PARK --- CITY CENTRE BOUNDARY



Figure 18: City Centre Car Parking Approach









le: Shared Space Street - Bayview Terrace, C





### Aim: Create a context for people to engage with the place

At the streetscape scale, this outlines the surrounding mix of uses, desirable height and scale of buildings within the City Centre, as well as the key location of active frontages that proposed new development should address. This also outlines the treatment of facades and building orientation appropriate for enclosing spaces and providing protection from the sun and prevailing winds, as well as acoustic and visual privacy for residential uses within mixed use buildings.

#### MIX OF LAND USES 4.1

To encourage sustainable urban development within the City Centre a diversity of retail and commercial uses must be embraced (Figure 19). This is essential in promoting a vibrant and active destination by day and night set within a high quality public realm. The City Centre Master Plan also facilitates the development of more diverse and intensive living options. Apartments and town-houses provide the opportunity to address a gap in the current market, providing affordable living options in an active and vibrant centre. The character sought by the following outcomes are derived from existing examples of prominent mixed use city centres.

#### **ATTRIBUTES**

#### Mixed Use

+ Integrate a mix of uses, providing for ground floor retail and commercial uses addressing the street and permanent residential in the levels above.

#### Mixed Use

- + Diversity of 'vertical' activities (multi-storey mixed
- + Diversity of 'horizontal' activities at ground level adding
- + Accommodating a mix of uses servicing daily needs.

- + Provide the opportunity for new businesses to be
- + Encourage a variety of businesses that will activate the
- + Ensure high levels of functionality and servicing for new

- + A range and variety of dwelling types to cater for a
- + Support residential living within the City Centre both
- + Ensure high levels of residential amenity whilst also

#### **DESIGN GUIDANCE**

- + Incorporate 'vertical' (multi-storey mixed use development) and 'horizontal' mix of uses (traditional stand-alone buildings clustered together but with different and complementary purposes). Desirable land uses are located in accordance with Figure 19.
- + Incorporate a range of dwelling types within 'mixed use' buildings. Future opportunity should consider residential/office uses to present at Sulphur Rd/ Gilmore Ave, as well as residential/retail uses within Gilmore Ave/Challenge Ave quadrant.
- + A Bushfire Hazard Level (BHL) assessment will be required for any Development Applications in areas identified (specifically along Challenger Avenue) as being bushfire prone in accordance with SPP 3.7 and the National Construction Code.

# Built Form

#### **ATTRIBUTES**

#### **Commercial and Retail**

- + Ground floor levels incorporating a mix of retail and commercial uses (e.g. shops, restaurants, consulting rooms, offices), recreation and/or entertainment uses that address the public realm.
- + Ground floor retail and commercial floor space providing major pedestrian entries directly from the street.

#### **Residential Diversity**

- + Medium-to-high density residential development providing for a greater diversity of household within the City Centre.
- + Providing a clear distinction between the private and public space for residential uses at ground floor level
- + Allowing for passive surveillance and interaction with the street through window and balcony orientations.

MAIN STREET RETAIL/COMMERCIAL

MIXED USE OFFICE/RESIDENTIAL

MIXED USE RETAIL/RESIDENTIAL

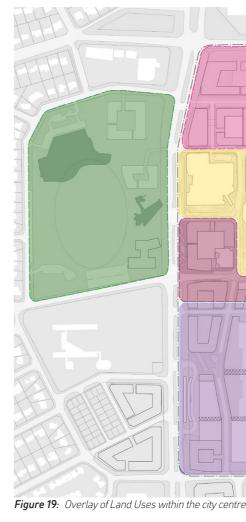
CIVIC/ COMMUNITY

--- CITY CENTRE BOUNDARY

CULTURAL

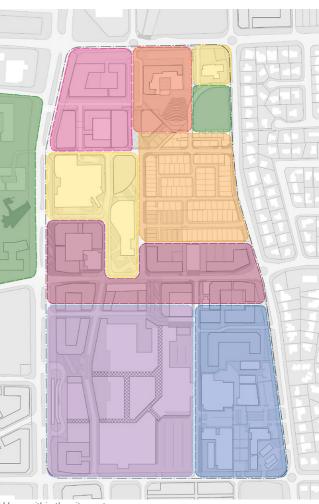
RESIDENTIAL

LARGE FORMAT RETAIL/COMMERCIA RECREATION/OPEN SPACE



#### **DESIGN GUIDANCE**

- + Create synergies between activities during the day and night within the Main Street environment
- + Building design should consider flexibility and adaptability to different ground floor uses over time, providing generous ground level ceiling heights between 3.3m and 4m.
- + Residential developments should provide a range of dwelling sizes and types providing a variety of housing types and affordability options.
- + Consider adaptable building design, such as buildings with floor plan dimensions and ceiling heights suitable for residential and commercial uses.



#### HEIGHT AND MASSING 4.2

Built form, height and massing all influence the 'look and feel' of the neighbourhood, as well as the quality, amenity and usability of internal and external spaces. The building envelope, site coverage, solar access and orientation are also considered for new development within the City Centre to consider.

#### **ATTRIBUTES**

#### **Building Height and Scale**

- + Desirable building heights are illustrated in Figure 21. Low-to-medium rise buildings are indicative of 2 to 5 storeys (9m-18m). Medium-to-high rise buildings are indicative of 3 to 8 storeys (12m-27m).
- + Greater variation of building heights within the Main Street Precinct and on key corner sites promotes interest and articulation of the built form within the city centre.

#### Human Scale

- + Any floor level above podium height (12 metres) is setback a minimum of 3 metres from the property boundary.
- + An increased podium height of up to 3 metres is permitted for corner buildings.

#### **Corner Sites**

- + Achieve more prominent massing and architectural treatment on corners and other important sites (Figure 21).
- + Corner buildings address both frontages to the street and/or the public realm.
- + Buildings that terminate vistas ensure they address that vista.

#### **OUTCOMES**

#### Building Height and Scale

- + Ensures an appropriate building height to street width ratio creating a sense of enclosure and definition to street, reinforcing street types by capacity and character.
- + Promotes a high standard of design guality that provides a strong architectural character and sense of place

Human Scale

+ A variety of setbacks create a visually appealing and diverse built environment whilst also providing the opportunity to integrate the public realm.

#### Corner Sites

+ Corner buildings that have a distinctive presence, reflects their position as a link between streets, a vista termination, or entry statement.

#### DESIGN GUIDANCE

- + Medium-to-high rise built form fronting the Main Street environment should make efficient use of space and provide for generous landscaping and pedestrian pathways.
- + Provide appropriate response to the scale of low-tomedium rise buildings transitioning north and south of the Main Street environment.
- + Incorporate smaller retail and community activities along the perimeter walls of large streets and the internal malls of the Kwinana Marketplace.
- + Medium-to-high rise buildings with consistent setbacks reinforce the public realm.
- + Minimal setbacks at the front and sides of nonresidential developments provides the opportunity to define the street edges.
- + Limit expansive blank walls or reduce the impact by architectural treatment.
- + Architectural detail is encouraged to distinguish corner buildings as a point of visual focus. Examples of such special treatment include; Additional floor height; distinctive roof form; articulation of corner wall elements and a variation in materials and colours.
- + Landmark sites identified as iconic should not adversely impact surrounding development.

MAIN STREET ENVIRONMENT TRANSITIONAL ZONE KEY LANDMARK SITES KEY LANDMARK CORNER/GATEWAY --- TOWN CENTRE BOUNDARY

# RESIDENTIAL RETAIL Top. Mixed Use





### Built Form



Alfresco Footpath Parking Cycle Traffic Lane Cycle Parking Footpath 25m 32m 25m 13m 6m 13m 25m 32m Figure 20: West Facing Street Section - Chisham Avenue Main Street

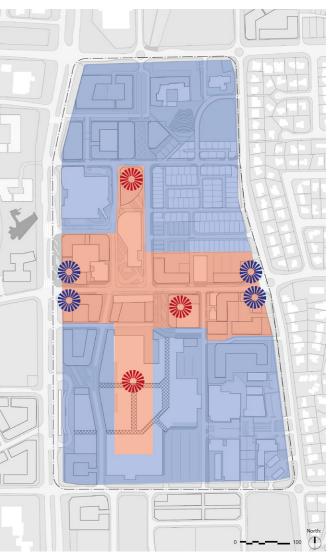


Figure 21: Desirable location of building height fronting the Main Street and at key corner sites

# 4 O Built Form

#### 4.3 ACTIVE FRONTAGES

Consideration of building design, the orientation and location of street level activity and visual connections between internal areas of buildings and the adjacent public realm, all contribute to a sense of liveliness, creating interest and attractive public places.

#### **OUTCOMES**

#### Active Frontages

- + Making frontages 'active', adding interest, life and vitality to the public realm adds to the social interaction of the City Centre.
- + Building frontages contribute to the character and positive identity of the City by defining the street level experience and how people feel and interact with their environment.
- + Encourage appropriate streetscape activation and active participation by the public.

Semi-Active Frontages

+ Frontages defined as 'semi-active' includes commercial and residential frontages that do not directly open to the street, however, provide the opportunity for passive surveillance through the direction of windows and openings.

#### **ATTRIBUTES**

#### Active Frontages

- + Active frontages (Figure 22) addressing the public domain to enhance the interaction with the street.
- + Long lengths of blank walls and infrastructure elements (substations etc) adjacent to primary pedestrian links and public open spaces are avoided.
- + Clear sight lines along footpaths connecting primary pedestrian routes creating active and passive pedestrian zones.

#### DESIGN GUIDANCE

Active building frontages should:

- + address primary pedestrian corridors;
- + provide active, transparent shop frontages onto the street and public spaces to allow the public to see and be seen;
- + provide frequent doors and windows, with few blank walls:
- + have narrow frontage buildings, giving vertical rhythm to the street scene;
- + articulate high quality materials and refined details;
- + provide strong visual connection between internal spaces; and the adjacent public realm.

Semi-active Frontages

+ Semi-active frontages addressing the public domain should contribute to an attractive public realm.

Semi-active building frontages should:

- + enable passive surveillance through the direction of windows and building openings onto all other streets and public spaces;
- + have few blind or passive façades;
- + provide some depth and modelling in the building facade; and
- + accommodate good quality materials and refined details.











Example: Activation of pedestrian laneways linking spaces



Figure 22: Active Frontages to Primary Pedestrian Routes

# 🕥 Built Form

### 4.4 FACADE TREATMENT

The architectural quality of building façades enabling a continuous frontage of activity is beneficial in creating the atmosphere required for a 'Main Street'. If gaps between buildings are too large, the street enclosure is compromised and the intimacy of the environment is lost. To achieve this, buildings require the appropriate composition of elements and textures allowing pedestrians to intuitively understand the intended purpose and function of each building.

Clear glazing at ground level plays an important role in creating a visually interesting pedestrian environment. For cafés and restaurants, it gives passers-by a sense of the activity and atmosphere within.

#### **ATTRIBUTES**

#### **Building Façades**

- + Building façades are of a high architectural quality. appropriate to the 'main street' location enhancing the overall character and sense of place within the City Centre.
- + A high level of fine grain design should be articulated at ground level, to establish a human scale and ensure a positive pedestrian experience.

#### Articulation of Vertical Form

defined.

defined

street boundary.

+ Elements such as individual floor levels, balconies and outdoor spaces create an interesting and complex urban environment

#### **OUTCOMES**

#### Building Façades

+ Ensure individual buildings contribute to pedestrian friendly streets, providing a sense of activity and community at ground level.

Articulation of Vertical Form

+ Vertical and horizontal articulation helps to break up the mass of buildings and creates a human scale that connects and grounds it in the streetscape.

**Building Entrances** 

+ Provide building entrances that are clearly defined and legible within the public realm.

#### **DESIGN GUIDANCE**

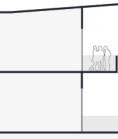
+ Incorporate surface modelling, colour or texture into the building's external walls fronting the streets and public places. + Materials and colours should be well considered. creating interest and complement the public realm. + Generous floor to ceiling heights of ground floor tenancies provides for a diversity of uses over time (Figure 23). + A higher degree of articulation in surfaces above street level, using awnings, balconies and/or the articulation of internal floor levels, vertical divisions of mass and roof spaces help express its contextual relationship within the City Centre. + Vertical articulation is encouraged for taller structures, to assist in grounding the building within the streetscape. + A variety of materials and articulated forms to break up overall building mass is recommended. **Building Entrances** + Pedestrian and vehicle entry points separated and well + Locate pedestrian entrances in prominent and convenient locations and on direct pedestrian paths. + Commercial and residential entries separated and well + Lighting, signage, materials and landscape elements should be utilized to highlight building function and entrances. + Where long ramps are required to any public street frontage, they are provided wholly or partially in the + Provide pedestrian environments with access to sun. building rather than externally to reduce their visual shade and shelter impact and assist in achieving a strong built edge to the



Example: Facade treatment to corner building



Examples: Layering of activity to supermarket frontage



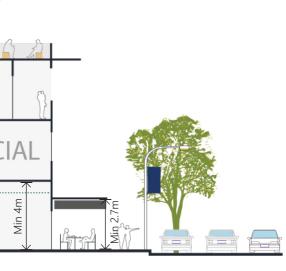
### COMMERCIAL

RETAIL

Mixed Use



Example - Alfresco area under awninas activatina frontaae



Alfresco Footpath Parking Two Way Traffic 2.5m 3m 2.7m Lane 6m

Figure 23: Active Frontage - Southern Facade Chisham Avenue

# 4 O Built Form

#### 4.5 **BUILDING ORIENTATION**

New building designs within the City Centre should create comfortable internal and external environments for its occupants by offering protection from the sun and prevailing winds as well as providing a high standard of acoustic and visual privacy for residential uses.

#### **OUTCOMES**

Solar Access and Ventilation

- + Encourage building designs with envelopes that provide access to good airflow, taking advantage of breezes for passive cooling and natural ventilation in summer.
- + Integrates innovative design, technology and material into the design of buildings to establish high standards of energy efficiency and sustainability of new buildings.

Acoustic and Visual Privacy

- + Use of construction materials and techniques that reduce noise transmission between buildings. Sound insulation is particularly relevant to the conditions experienced within a mixed-use environment.
- + Service doors and other utilitarian features should be located away from street frontages and treated to reduce their visual impact.

#### **ATTRIBUTES**

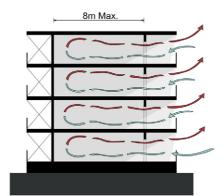
#### Solar Access and Ventilation

- + Building designs that capitalise on solar access for building occupants, neighbouring sites and the public realm.
- + Reduced overall carbon/greenhouse gas emissions and running cost from heating and cooling derived from non-renewable energy.

#### **DESIGN GUIDANCE**

- + Building design should maximise northern facing aspects.
- + Particular attention should be given to the principles of passive solar design to ensure natural cross ventilation to all habitable rooms and as many non-habitable rooms.
- + Selection and location of thermal mass materials should be considered to contribute to the efficiency of a buildings performance.
- + Deciduous trees should be located on the northern side of buildings to provide shade in summer and allow sun in winter.

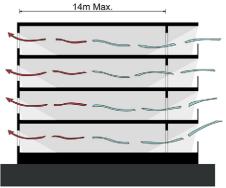
- Acoustic and Visual Privacy
- + Appropriate noise and odour reduction between uses to + Ensure privacy where needed. limit conflict, particularly at the interface between retail and residential uses.
- + The visible impact of roof top plant rooms and lift machinery rooms are minimised from the public realm.
- + Plant equipment should be enclosed and acoustically treated to ensure acceptable noise levels are achievable.
- + Plant and machinery rooms should be designed or screened in an appropriate manner to ensure they contribute to the visual quality of the development.



Example - Cross-ventilation within single aspect apartment



structures



Example - Cross-ventilation through dual aspect apartment





Example - Screening of Services



# 5.0 Interface with the Public Realm

### Aim: Creates a context for people to engage with each other

The public realm is integral to creating an attractive environment focused on the needs of people who use the city – workers, residents, students and visitors, connecting people and places as well as facilitating a greater diversity of activities.

The public realm relates to the area from the building frontage that extends into the public space at ground level, including elements and activities in public spaces such as outdoor dining, landscaping, signage and street furniture. This also considers the opportunity to integrate Water Sensitive Urban Design (WSUD).

### 5.1 VIBRANT PUBLIC REALM

Mixed-use buildings cater for a variety of functions and activities within the city centre. Well-designed buildings that create opportunities for ground level social spaces addressing the location of awnings and overall safety and security enabling pedestrians to 'read' visual cues for navigating the city environment as well as providing a comfortable experience essential for establishing vibrant and activated public realm.

#### ATTRIBUTES

#### Social Spaces

- + Clearly define private public realm.
- + Continuity of materials, finishes, landscape elements between the public and private realms used to diffuse the boundary between the two.

#### Awnings and Weather Shelter

- + Weather protection and awnings projecting a minimum horizontal distance of 2.4m over the adjacent footpath.
- + Awnings providing a consistent clearance height of 2.7 metres from the footpath (Figure 23).

Improving the perception of safety through the built environment is a key consideration in the development of public spaces.. Crime Prevention through Environmental Design (CPTED) principles should be applied in the design of public spaces, providing a response to improving the safety of the urban environment.

### OUTCOMES

#### Social Spaces

+ High quality pedestrian spaces adopted throughout the public realm.

Overhangs and Shading

+ Provide a variety of verandas, balcony and awning types to facilitate a high-level of pedestrian environment.

Private Spaces

- + Provide an appropriate balance between the requirement for privacy and optimisation of the views through to the public realm.
- + Access to functional and usable private open space for all residential dwellings that is suitable for the purpose relaxation and entertainment.

Safety and Surveillance

+ Encourage passive surveillance of the public realm and pedestrian links, through active street frontages and the location of balconies and major openings.

#### **DESIGN GUIDANCE**

- + Provide areas within the public realm that concentrate various activities.
- + Ensure an active interface to adjacent land uses.
- + Allow for flexibility and adaptability of spaces.
- + Provide comfortable, safe and aesthetically stimulating spaces.
- + Awnings with large overhangs should be provided over significant openings on the north, east and west, and to shade outdoor areas.
- + Screens and awnings should inform the architecture in both form and materiality.

### 5.0 Interface with the Public Realm

#### ATTRIBUTES

**Private Spaces** 

- + Upper level dwellings with generous balconies to provide attractive and functional private open space
- + Functional design of private spaces, i.e. restricting airconditioning or other service equipment impacting the comfortable use of the balcony area.

#### Safety and Security

- + Buildings addressing the street/or public realm in a manner that promotes variety and visual interest.
- + Passive surveillance of streets provided by frequent overlooking of ground and upper floor windows, terraces and balconies.



Example: High quality public space enabling city users to gather





Example: Shared street creating pedestrian priority spaces

Example: Lighting of building frontages

#### **DESIGN GUIDANCE**

- + Overlooking between balconies and adjoining residences should be carefully considered and privacy screening provided where necessary.
- The location of Private Open Space (including courtyards and gardens) should consider adjacent (proposed) built form, wind, solar penetration and overlooking.
- Design and development contributing to the public realm should have due consideration for Crime Prevention Through Environmental Design (CPTED) principles, and more particularly the City's adopted Local Policy: Designing Out Crime.





## 50 Interface with the Public Realm

### 5.2 LANDSCAPE

ATTRIBUTES

The design of streetscape and landscaped areas such as parks, civic squares, shared streets, outdoor dining spaces and pathways, includes consideration of materials, microclimate, planting, as well as the physical and social benefits these bring to the community's well-being.

Together, these elements contribute to a distinctive place that supports the sense of identity and community ownership, resulting in safe and well used spaces, as well as providing a valuable contribution to the form, articulation and function of the City Centre environments.

### OUTCOMES

#### Streets as Open Space

+ High quality landscaped environments adding to the City Centre unique sense of place and identity.

#### Spaces between

DESIGN GUIDANCE

+ Creating opportunity for a variety of uses within the City Centre providing for attractive and comfortable environments.

Materials

+ Ensure materials contribute positively to the main street environment and quality of the public realm.

### 5 () Interface with the Public Realm



Example: Streetscapes defining city centre environments

Streets as Open Space						
<ul> <li>Primary pedestrian streets contribute to the City's distinctive sense of place (Figure 24).</li> </ul>	+ Legible and continuous connections to existing open space and recreational social infrastructure will encourage users to explore the city environments and engage in surrounding activities.					
	<ul> <li>Provide regular tree planting along the median and footpath with good canopy coverage to mitigate urban heat, improve biodiversity and provide pedestrian shade.</li> </ul>					
Spaces Between						
<ul> <li>Linking spaces between buildings for users to inhabit and connect with the wider city.</li> </ul>	<ul> <li>Include spaces between blocks for tree planting, landscaping, pedestrian movement and amenity.</li> </ul>					
	<ul> <li>Creating a variety of spaces linking the wider public realm.</li> </ul>					
	<ul> <li>Plant trees clear of foliage between 600mm and 2400mm in height to allow clear sightlines and eliminate opportunities for concealment.</li> </ul>					
	<ul> <li>Avoid landscaping that block views into and out of a building or across the overall site.</li> </ul>					
Materials						
+ Utilise cohesive, high quality materiality to define the transition into the 'main street' and central heart of the City.	+ Fine grain design of the ground plane which effectively uses materials and colour to add interest and a layer of richness to the city centre is encouraged.					
+ Reflect a contemporary character appropriate for the City Centre environments.	<ul> <li>Materials and colours should be responsive to the environment and enhance passive solar design.</li> </ul>					
	+ Durable materials and anti graffiti treatment should be considered within the retail environment.					



Figure 24: Northern Section Robbos Place - Primary pedestrian street



Example: Landscaping enabling defined areas of alfresco dining and pedestrian access

# Interface with the Public Realm

### 5.3 SIGNAGE

Signage is an important component for navigation and business operation throughout the City Centre. However, an excess of signage can impinge on visual amenity. The form and type of signage needs to be carefully managed so this does not overwhelm the visual quality of the public realm.

The use of wayfinding signage helps to connect visitors and locals with public transport, retail areas, historical walks and local facilities, creating better connected communities and encouraging more active and sustainable modes of transport.

#### **OUTCOMES**

#### Main Street Signage

+ Ensure signage is integrated into building design and improves the overall appearance and legibility for residents and visitors.

#### **ATTRIBUTES**

#### Main Street Signage

+ Provide appropriate exposure for local businesses, activities and services.

Large Format Retail Signage

+ Signage is compatible with existing or preferred future character of the area.

Wayfinding

+ Provide a legible set of wayfinding signage for users to easily navigate the city centre environment and links to surrounding activities.

Lighting

- + Provide appropriate levels of lighting for both the private and public realm for safety, security and aesthetic impact.
- **DESIGN GUIDANCE** + Of a scale and design character that + Signage under awnings should provide a minimum clearance of 2.5m from the footpath (figure 25). complements the pedestrian experience and highlight focal points within the city centre environment. above the awning line. + Reflect the architectural composition of the building it serves, without obscuring any of quickly become a recognisable landmark. the building's architectural features. + Signage should be graphically and character of the area. artistically interesting and integrated with the architectural form of the building and precinct character. as trees and lighting Large Format Retail Signage + Ensure building design include defined spaces to accommodate signs that respect building scale, architectural features, 26). signage uniformity and established streetcape design objectives. + Consolidating the number of signs through
- better location and integration.
- + Restrict temporary and portable signs.
- + Prohibit billboards, revolving signs and roof signs on private property.

- + Signage for tenancies above ground level should be a minimum of 1m
- + Creative typography, colours and form help create signage that can
- + Use signage that is compatible with the existing or preferred future
- + Co-ordinated with the placement of other public realm elements such
- + Signage should not impede on glazing. Active, transparent shop frontages should be maintained allowing the public to see and be seen.
- + For each vehicle entrance to a site, signage should be consolidated for multiple tenancies onto a single plinth to reduce visual clutter (Figure
- + Ensure that corporate and advertising signage is consistent with the surrounding urban context in terms of scale, format, materials, colours, illumination, legibility and that it is designed to minimise visual clutter through the integration into the overall building form of the development.
- + Avoid painting buildings to form large, visually intrusive corporate sign.
- + Signage should not impede on glazing. Active, transparent shop frontages should be maintained allowing the public to see and be seen.

# Interface with the Public Realm

#### **ATTRIBUTES**

#### Wayfinding

- + Wayfinding signage that is integrated within streetscapes, designed as a coordinated set of elements contributing to the distinctive character of the City Centre.
- + Increase permeability for walking and cycling through the City Centre as well as improved community wellbeing.
- + Increase retail profitability with more foot traffic and the retention of visitors

#### Lighting

- + Strategically located to highlight focal points and primary pedestrian routes within the City Centre.
- + Concealed under verandah roof overhangs or otherwise shielded to minimise glare.
- + Outdoor lighting directed downward with reduced light spill above the horizontal plane



Fxample: Main Street signage at the pedestrian scale



Figure 25: Main Street signage

### DESIGN GUIDANCE

+ Wayfinding signage should easily and clearly navigate users through the City Centre environment, linking key facilities and activities within the City Centre and surrounding areas, such as the Adventure Park and Skate Park within Calista Oval.

+ Lighting should highlight the key features of buildings and landscapes.

+ Lighting should be used as a method of pedestrian way-finding through secure routes.



Example: Large format retail signage integrated with the building



Figure 26: Large format retail signage

# 5.0 Interface with the Public Realm

### 5.4 STREET FURNITURE

Street furniture contributes to the character and identity of the City Centre. Delivery of a consistent suite of street elements need to support the look and feel and point of difference, whilst also considering a number of factors including comfort, accessibility and materials that are robust, durable and sympathetic to the city context.

Seating provides a valuable resting place, particularly for elderly people and those with mobility difficulties. Comfortable, well-arranged seating also helps to encourage community interaction and public life within the City Centre.

#### OUTCOMES

Seating

- + Seating location and orientation helping to define passive and active pedestrian zones.
- + Enable users to linger within public open spaces with provision of appropriate street furniture.

Street Furniture

+ Consistent installation of street furniture offset and aligned to match other public realm elements such as trees and lighting.

#### ATTRIBUTES

#### Seating

- + Seating location assist with guiding pedestrian circulation instead of obstructing pathways.
- + Seat bases are connected to a continuous accessible path of travel
- + Seats are positioned, where possible, with respect to sun exposure, shade, trees and shelter.
- + Seating installed at a minimum 0.5m offset from the edge of a pathway for safe clearance.

#### Street Furniture

- + Provide a consistent palette of furniture for the public realm that creates unity of the City Centre as a whole.
- Services and other furniture elements such as wayfinding signage and bike racks are grouped to create nodes of activity



Example: Custom designed streetscape furniture elements defining pedestrian areas



Example: Street furniture adding to comfort of outdoor spaces

### 5.0 Interface with the Public Realm

### 5.5 PUBLIC ART

The successful integration of art into public spaces and buildings will assist in fostering a unique sense of character and identity for the City Centre.

#### OUTCOMES

Public Art

- + Enhance the urban environment through the integration of public art in public spaces and buildings.
- + Improve legibility by introducing public art which assists in making streets, open spaces and buildings more identifiable.
- Create adaptable spaces within the public realm to facilitate temporary and interchangeable forms of art. This could include opportunities to integrate public art on façades, within community squares, wide junctions and temporary parklets located along primary pedestrian routes.
- + Establish a sense of shared ownership and accessibility of public spaces.

#### ATTRIBUTES

#### Public Art

+ Public art integrated into the design of buildings and public realm becomes a key contributor to making distinctive and memorable places.

### DESIGN GUIDANCE

- + Provide a variety of seating arrangements for people to socialise within public spaces.
- + Encourage community interaction through provision of seating, lighting, shade and shelter to provide comfort and prolong activity on the street.
- + Include elements such as steps creating opportunity for people to sit in public spaces with good access to views, sun and people watching.
- + Seats are provided at regular intervals along identified pedestrian routes.
- + Allow for bespoke design items (designer, artist) supporting place identity.
- + Ensure materials are robust and design details are of a high quality to ensure minimal maintenance and whole life of costs.



Example: Temporary art



Example: Public art within entry landscape

#### **DESIGN GUIDANCE**

- + Public art should enhance and contribute to the City Centre identity and unique sense of place.
- + Integrate public art as a memorable part of experiencing the City Centre, both for the first time and repeat visitors.
- + Ensure public art is relevant to the site reflecting the area's unique character, history and contemporary use.
- + Buildings are encouraged to respond to local landmarks, public artwork, landscape and street trees to improve legibility of the public realm.

# 5.0 Interface with the Public Realm

### 5.6 WATER SENSITIVE URBAN DESIGN (WSUD)

Water Sensitive Urban Design principles integrated with the landscape design should be integrated within new developments to manage stormwater run-off from driveways, open space and parking.

#### OUTCOMES

Water Sensitive Urban Design

- + Provide a range of stormwater management options for development, including landscape alternatives.
- + Promote use of green infrastructure to improve pedestrian comfort and well-being, and to reduce the urban heat effect.
- + Improve storm water quality entering waterways through the integration of WSUD.
- + Minimise the impacts of storm water on site and the environment.
- + Improve the micro-climate and enhance visual amenity through reduced hard surfacing.



Example - Rain gardens within streetscapes



*Example - Trellis planting integrated within building structures* 

#### ATTRIBUTES

#### Water Sensitive Urban Design

- + WSUD integrated through medians, tree pits and under pavement to mitigate stormwater impact.
- + Ensure plant and tree species are suitable for the climate and the location.

#### **DESIGN GUIDANCE**

- + Stormwater should be treated on site before being discharged to receiving waters.
- + Maximise the percentage of pervious surfaces to allow percolation of stormwater into the ground, such as within swales and planting.
- + Consider the integration of green roofs and green/living walls to capture, detain and treat rainwater before it enters the drainage system.
- + Incorporate permeable pavement systems in upgraded roads and car parking.
- + Reduce the consumption of potable water through the installation of waterwise fixtures and fittings.