



COCKBURN COAST

PUBLIC REALM DESIGN GUIDELINES
JULY 2014



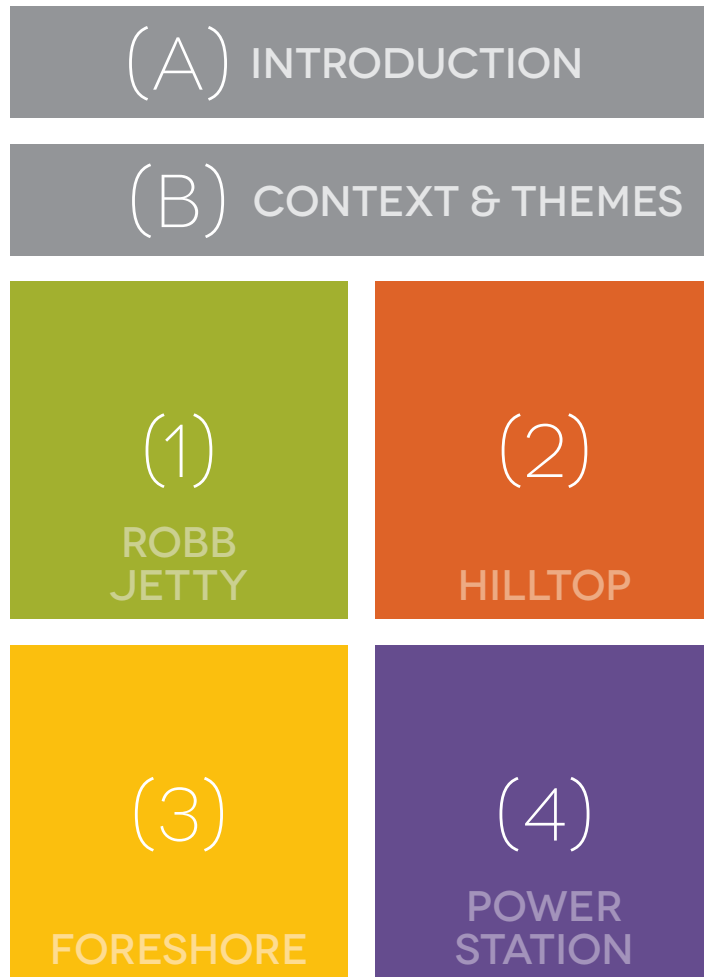
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DATE	CHANGES	REASON	APPROVED

COCKBURN COAST PUBLIC REALM GUIDELINES – JULY 2014



Contents:

A Introduction

B Context and Themes

1 Robb Jetty

C Typologies

D Selections

3 Foreshore

C Typologies

D Selections

2 Hilltop

C Typologies

D Selections

4 Power Station

C Typologies (to be completed following LSP)

D Selections (to be completed following LSP)





Part A: Introduction

Contents

- (A)_Introduction
- 0.1 Introduction
- 0.2 Application
- 0.3 Relationship to other documents
- 0.4 Timing of Use of PRDG
- 0.5 Planning Framework
- 0.6 Operation
- 0.7 Development Vision
- 0.8 Application Process





(A) INTRODUCTION

0.1 Introduction

The Cockburn Coast District Structure Plan (DSP) vision and objectives form the basis of the Public Realm Design Guidelines (PRDG). The PRDG supports the development of Cockburn Coast by providing a response to the place, its unique nature and ensuring the delivery of the Vision aspirations within the public realm. It aims to define the considerations and opportunities that inform the design and assessment process for all public areas in Cockburn Coast and provide a comprehensive and user friendly framework that reinforces the Vision for the place and ensure consistency of quality and aesthetics in the delivery of the project over its lifespan.

The PRDG has been established to articulate the important interface between Public Open Spaces and streetscapes; as well as establishing continuity between the various development areas and precincts within the Cockburn Coast.

This document shall be utilised in guiding the development of the public realm, and giving assessors a framework to adequately assess if the specific requirements of each developed public realm space are achieved.

The project vision is to create:

“A vibrant, landmark destination that is connected, integrated, diverse and accessible”

0.2 Application

The Cockburn Coast Public Realm Design Guidelines have been prepared and adopted as a Local Authority Guideline in accordance with the City of Cockburn requirements. This Guideline applies to all subdivision and development applications within the Cockburn Coast District Structure Plan (DSP) area (Figure 1) including:

- Emplacement Local Structure Plan Area
- Robb Jetty Local Structure Plan Area
- Power Station Local Structure Plan Area
- Cockburn Coast Foreshore (as defined by the Cockburn Coast Foreshore Management Plan June 2012)




Where any inconsistency arises between this document and the Scheme, the Scheme shall prevail to the extent of that inconsistency.















The purpose of this document is to assist and guide the development of public open spaces (POS) and streetscapes. Further development of each allocated POS space is required, as this document aims only to suggest possible general arrangements and amenity.

All concepts of POS areas in this document are indicative only, and aim to articulate the principles of what is required in each stage and precinct. Further development of each concept is required

The development of all built form within the lot boundaries not pertaining to public realm, including interface with the public realm, is covered in the Cockburn Coast Built Form Design Guidelines, and as such should be referred to in conjunction with the PRDG.

Legend

-  Robb Jetty Precinct_POS Area
-  Hill Top Precinct_POS Area
-  Foreshore Precinct_POS Area

-  Streetscape Hierarchy (refer to Part C: Typologies for additional information)
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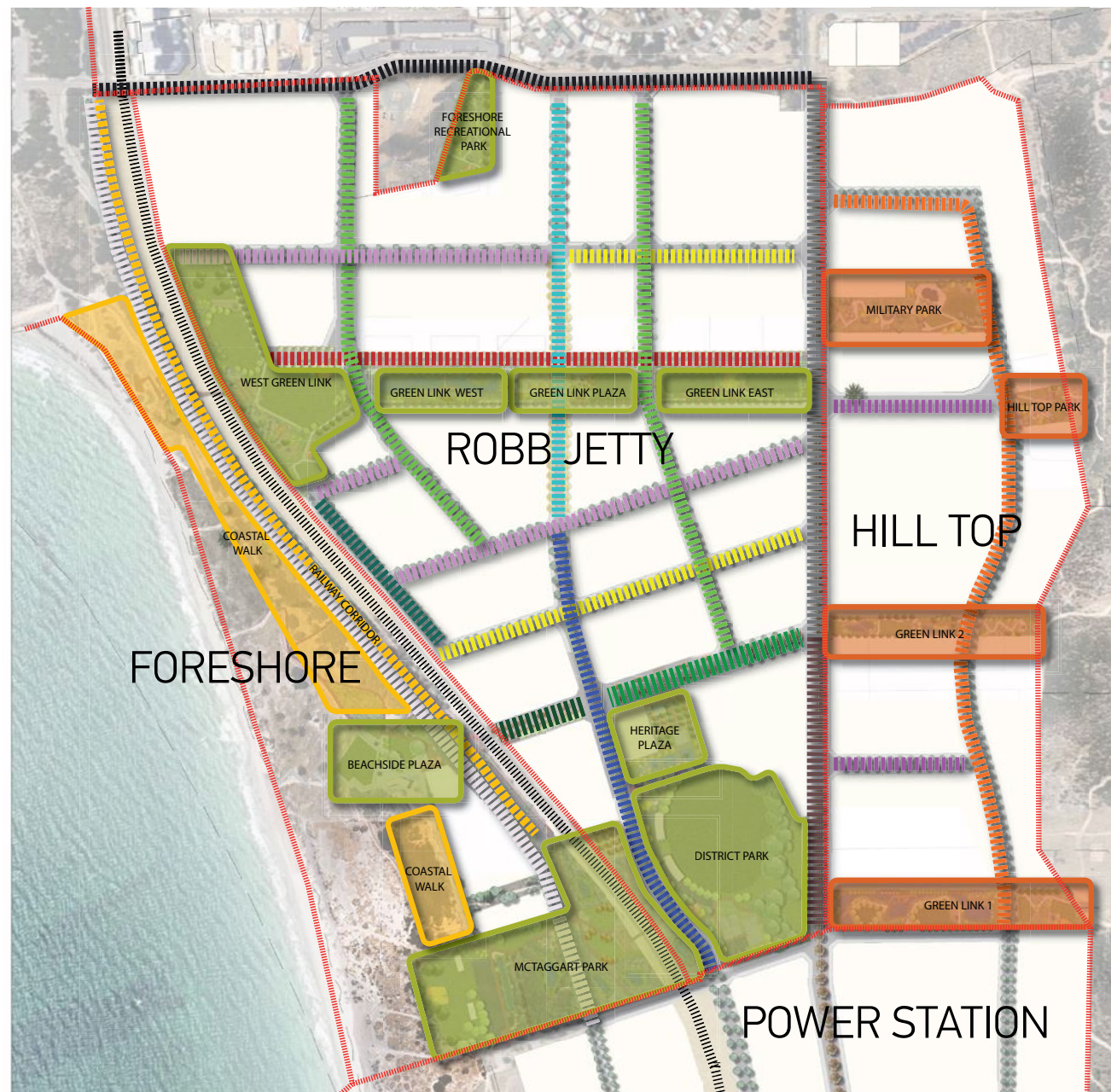


FIGURE 1 - Cockburn Coast Development Area



(A) INTRODUCTION

0.3 Relationship to other documents

The Cockburn Coast PRDG has been developed with reference to several other key documents to assist developers and approval agencies with the visioning for the various POS and streetscapes within the development.

It is encouraged that at the concept design phase that the following documents are read in conjunction with the PRDG:

- Built Form Design Guidelines
- Public Art Strategy
- Place Making Strategy
- Heritage Strategy

Place Making Strategy (Place Partners)

The Place Making Strategy and Public Art Strategy documents have an important correlation to the PRDG as they have informed of the identity of the POS areas within the precincts of the Cockburn Coast development. Reference to these documents is critical to understand a wholistic vision of the precincts and how the place making, amenity and art work have informed the visioning in this document.

Built Form Guidelines (HASSELL)

The Built Form Design Guidelines have played an important role in determining the interface between the built form potential and the public realm. Built form interface has specifically informed the development of the streetscapes and the attempt to create healthy, habitable, safe and functioning spaces.

Local Structure Plans (HASSELL)

The PRDG has expanded on some of the concepts, ideas and strategies outlined in the Local Structure Plans for both the Robb Jetty and Hill Top (Emplacement) precincts.

The Heritage Strategy Document has informed the PRDG in helping establish the thematic responses to the site, as well as the key characteristics of specific POS areas and art works. This document promotes the retention and protection of heritage elements located within the site.

0.4 Timing of Use of PRDG

The Cockburn Coast Public Realm Design Guidelines should be referred to at the initiation of the project design phase of all POS and streetscape developments to ensure that the relevant information is embedded into all works at an early stage.

Additionally, it should be referenced throughout the subsequent design phases to ensure continuity of vision keeping and will be used as an assessment mechanism by approval agencies.

Cross reference and coordination with the engaged civil engineers is required to ensure the functionality of the POS and streetscapes are maximised.

Figure 1 illustrates the typical phases of the development of the public realm, and outlines the appropriate period of reference to the Public Realm



Public Realm Guidelines

- Phase 1. Project Initiation
- Phase 2. Concept Design
- Phase 3. Design Development
- Phase 4. Contract Documentation
- Phase 5. Contract Administration
- Phase 6. Defects Liability Period

FIGURE 1 - Typical phases and document reference

This image represents the framework in which the PRDG has been developed. Specific reference should be given to the Built Form Guidelines, Place Making Strategy and Public Art Strategy when designing the various POS and streetscapes within the development.

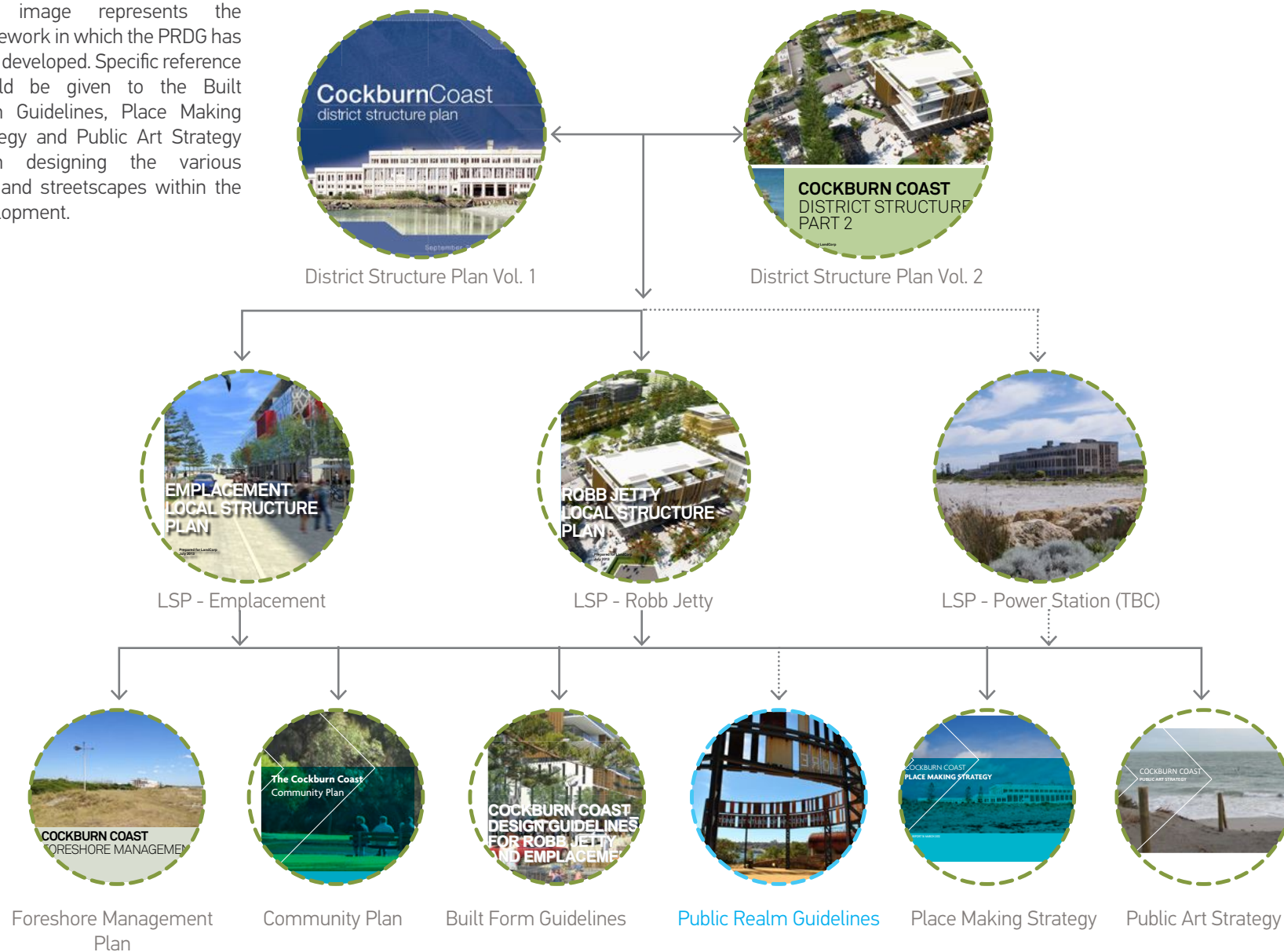


FIGURE 2 - Cockburn Coast Development Framework



(A) INTRODUCTION

0.5 Planning Framework

The Cockburn Coast District Structure Plan (DSP) has been prepared to coordinate and facilitate subdivision and development of the study area. The DSP requires the preparation of a Local Structure Plan (LSP), Design Guidelines and Detailed Area Plans for the Cockburn Coast LSP areas.

Where any inconsistency arises between this document and the Scheme, the Scheme shall prevail to the extent of that inconsistency.

This operational guidelines document constitutes the Public Realm Design Guidelines for all areas contained within the DSP and has been prepared in accordance with the provisions set out in the following documents:

- Emplacement Local Structure Plan Area
- Robb Jetty Local Structure Plan Area
- Power Station Local Structure Plan Area

The PRDG is to be read and applied in conjunction with the following:

- City of Cockburn Policy SEW1 – Maintenance of Verges/Public Open Space Following Residential Subdivisions
- City of Cockburn Policy SEW2 – Street and Public Area Lighting
- City of Cockburn Policy APD4 – Public Open Space
- Local Planning Policy APD20 – Incorporating Natural Areas in Public Open Space and/or Drainage Areas
- City of Cockburn Guidelines and Standards for the

Design, Construction and Handover of Subdivision within the Municipality

- City of Cockburn POS Development Guidelines October 2013 Rev F
- City of Cockburn Land Management Strategy 2011-2016
- City of Cockburn Public Artworks Strategy
- City of Cockburn Crime Prevention Plan
- The Cockburn Coast Community Plan (Final Draft Dec 2011)
- Cockburn Coast Place Making Strategy
- Cockburn Coast Foreshore Management Plan
- Cockburn Coast Design Guidelines for Robb Jetty and Emplacement
- The Changing Cockburn Coast; European Heritage
- The Changing Cockburn Coast; Indigenous Heritage various public realm areas by precinct
- Part D: Selections - Design intent and performance criteria established for all public realm elements by precinct.



0.6 Operation

The Cockburn Coast DSP area has been divided into 4 precincts:

- Robb Jetty
- Hilltop (Emplacement)
- Foreshore
- Power Station

Applications will be assessed against the General Guideline Requirements and the relevant Precinct Specific Guideline Requirements, as well as against the PDRG.

This Public Realm Design Guideline document provides strategic directions and detailed recommendations for the development of a unique place character for Cockburn Coast and its precincts. It synthesises the key findings from primary and secondary research and identifies influences, drivers and considerations in delivering the character of the Cockburn Coast. The Guidelines build upon this research to define place character and provides strategic directions recommendations and requirements for its delivery.

The following pages provide a summary of the PRDG which is divided into four parts

- Part A: Introduction - Guideline Statement, Document Use Guidelines and Explanatory Notes
- Part B: Context and Themes – Overall Masterplan thematic element, character areas and themes that unify and define each precinct.
- Part C: Typologies - Public realm concepts that define typical design response and considerations for various public realm areas by precinct
- Part D: Selections - Design intent and performance criteria established for all public realm elements by

0.7 Development Vision

The following vision objectives are identified within the Cockburn Coast DSP and apply to this PRGD:

- Responsive to the context – regionally and the immediate environment
- Establish a sustainability framework for future detailed planning and design
- Transit orientated development with appropriate density
- Inclusive / participatory planning and consultation process
- Create a place with a mix of people, housing, uses, experience and lifestyle
- Establish an urban development framework that provides guidance for implementation

The following PRDG objectives respond to the DSP Objectives and aim to support the realisation of these within the public realm:

- Leverage existing assets; natural and heritage, with creative and innovative opportunities for re-interpretation and use
- Define both a point of difference and unifying components that will set this place apart from others creating a locational advantage that is complimentary to surrounding centres and their character
- Concentrate activity and amenity around key places and connect destinations with quality pedestrian experiences and public transport
- Build place-based character that will evolve and strengthen over time

- Provide supporting infrastructure and amenity to a defined range of community uses and destinations that will generate social sustainability and social cohesion
- Provide a design framework that is site and place responsive that embodies the heritage, character and place making ideals of the project that will support the emerging character of the Cockburn Coast
- Ensure the PRDG is consultative and supported in its development and application
- Develop a framework approach that is flexible and timeless to manage the development of the Cockburn Coast public realm over a prolonged time frame



(A) INTRODUCTION

0.8 Application Process

This Public Realm Design Guideline has been prepared to assist in realising the above development vision and objectives for the Cockburn Coast. Proponents seeking to develop wholly or partly within the PRDG area will be expected to carefully consider the context of their proposal and identify the Policy Provisions which apply. In order to depart from any provisions, rationale will have to be presented based on the particular circumstances of the site and justified against the development vision and relevant Design Objectives. The City's preparedness to apply this Guidelines document in a flexible manner will depend on the applicant demonstrating that the urban village atmosphere of Cockburn Coast will not be compromised and that urban design and economic development advantages to the whole development would result from the proposal.

Proponents are strongly encouraged to liaise with the City or Design Panel (if established) as early as possible in the design process to ensure the intent and requirements of the Guidelines and the Vision are satisfactorily addressed. Developers are also strongly encouraged to engage the services of a suitably experienced and qualified Landscape Architect, Architect and/or Planner who can respond to the local context in an innovative and contemporary way.

Overall, all applications will be determined on their individual merits, having regard to the requirements of this document and other relevant requirements.

The application procedure is as follows:

- Engagement with representatives of the City and other relevant authorities to identify potential issues and, if necessary, clarify requirements or an acceptable approach;
- Prepare designs/plans;
- Liaison with City/Design Panel (if established) prior to development application;
- Submit application to the City.

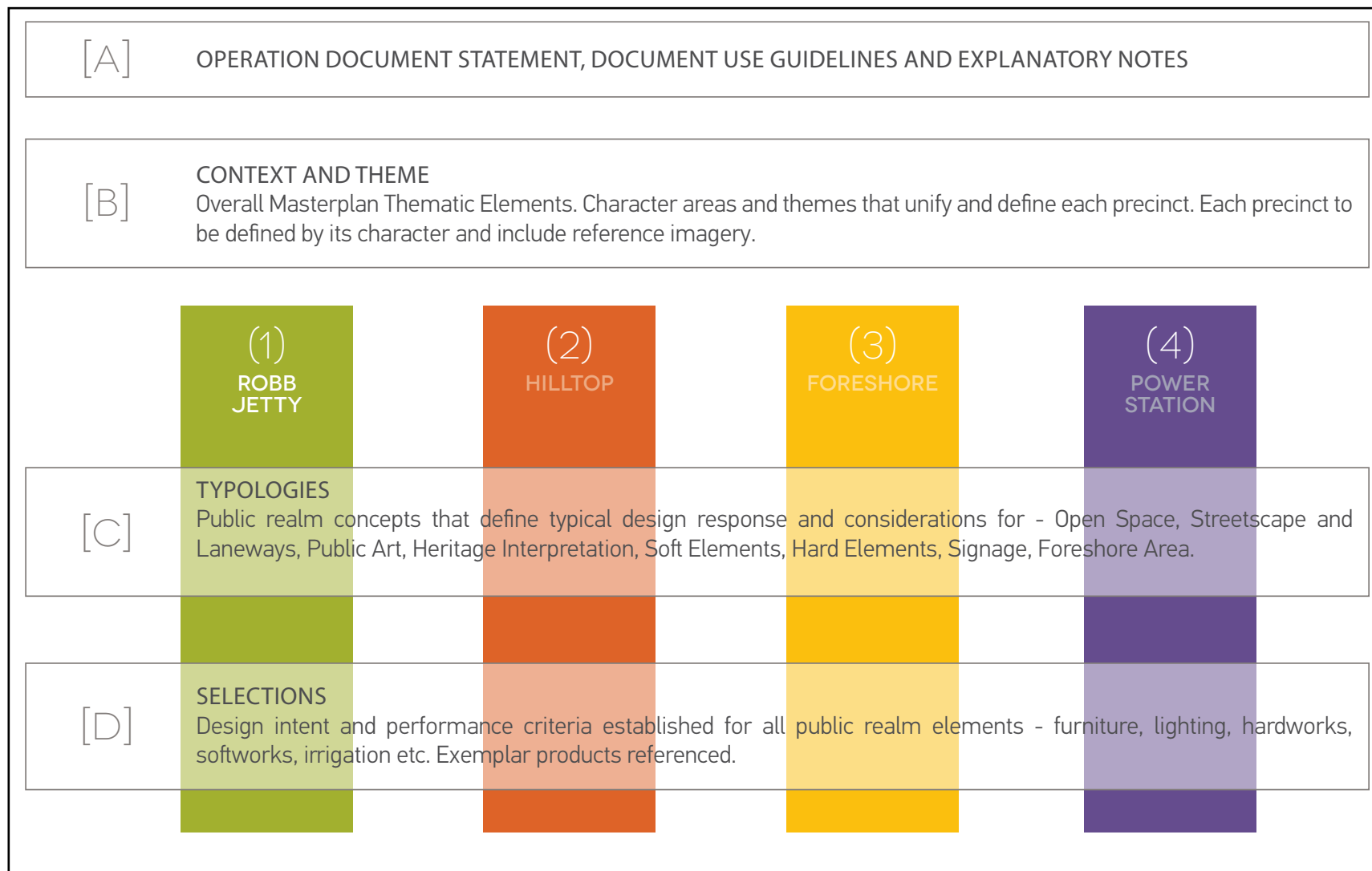


FIGURE 3 - PRDG Document Structure





Part B: Context & Themes

Contents

- 0.9 Project History
- 0.10 Context
- 0.11 Master Plan
- 0.12 Layers
- 0.13 Precincts
- 0.14 Themes



(B) CONTEXT & THEMES

Part B: Context and Themes of the PRDG provides an overview to the development area and defines both the four individual precinct character areas and the overall Masterplan thematic ideas.

The information in this section has been sourced from the following:

Place Partners – Cockburn Coast Place Making Strategy TPG in association with Yates Heritage & Big Island Research

Hassell – Cockburn Coast District Structure Plan, Volumes 1 and 2

Hassell – Cockburn Coast Foreshore Management Plan Site investigations undertaken by Urbis, December 2013

0.9 Project History

The proposal to develop the Cockburn Coast area was tabled in 2005 by the Western Australian Government at a forum that aimed to seek the opinions of the community in designing a future vision for the area. This dialogue provided the foundation for the development

of the Cockburn Coast District Structure Plan (DSP), setting out the vision for transforming the site into a mixed use urban community.

The Cockburn Coast District Structure Plan was prepared by the Department of Planning, on behalf of the Western Australian Planning Commission.

Guided by a Steering Committee, comprising of State and local government representation, the plan was prepared with the input of the Cockburn Coast reference group, including landowners, local community members and stakeholders.

In May 2011 the Cockburn Coast Masterplan, a further iteration of the DSP, was delivered. The Masterplan is a comprehensive plan for the site and details how the vision will be delivered. Additional Statutory and Guideline documents have subsequently been produced.



0.10 Context

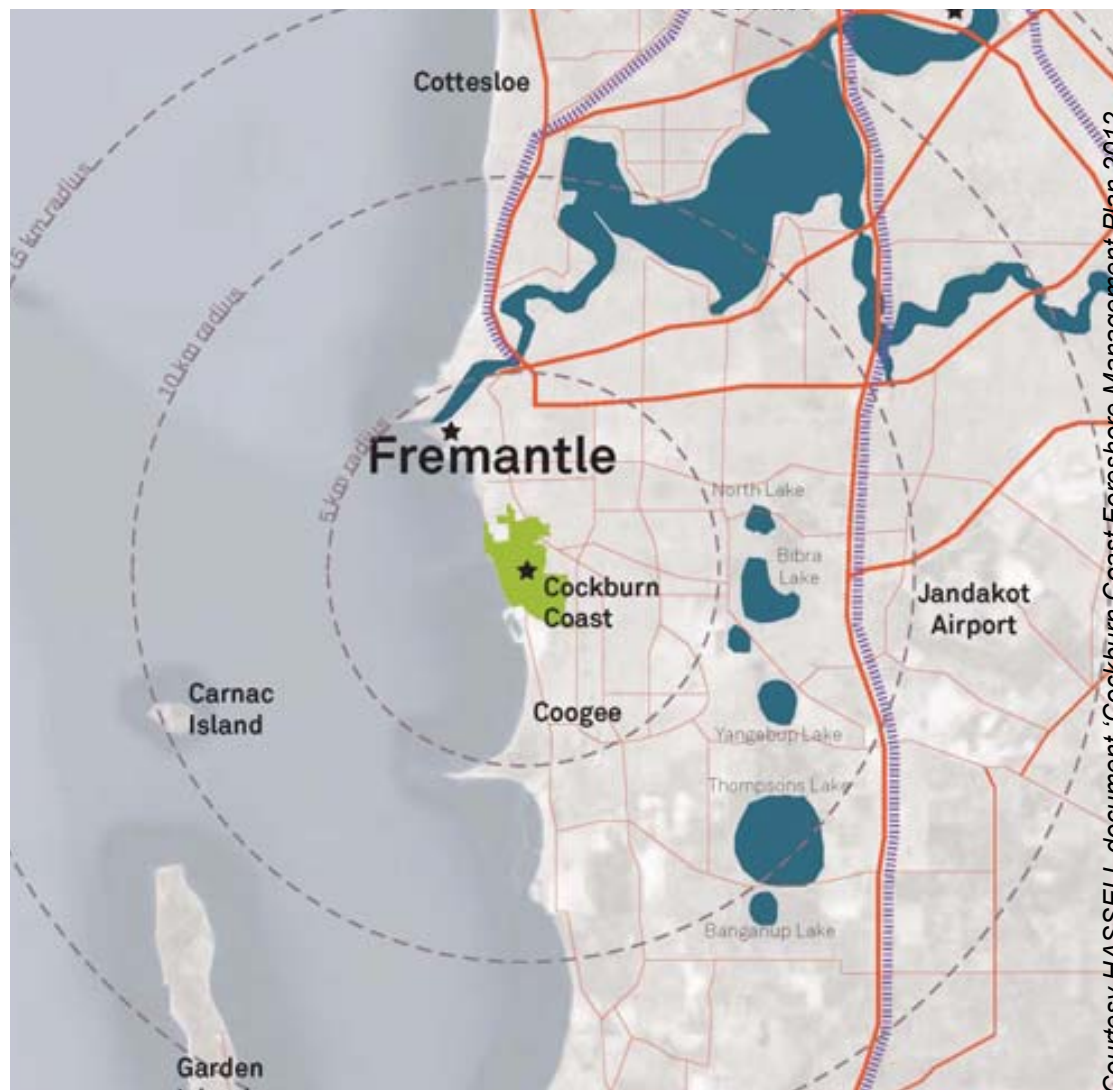
The following section provides an overview of the existing site conditions and influences as determined in September 2013. While this provides an important overview of the place, its context and considerations, independent due diligence should be undertaken at the time of individual project review.

Regional Context

Cockburn Coast is a 98ha developable site located on the Indian Ocean, approximately 18km south-west of Perth and 4km south of Fremantle between the recent developments of South Beach and Port Coogee. The site falls within the City of Cockburn LGA and within the boundaries of three suburbs – North Coogee, Hamilton Hill, and Spearwood.

The site is bound by the Indian Ocean to the west and is afforded spectacular views across the ocean for the length of the site, including magnificent views to Carnac, Garden and Rottnest Islands. Beeliar Regional Park is located to the east of the site, which includes Manning Lake, Azelia Homestead and provides a wilderness experience in the natural bushland and sand dunes within the reserve.

The project area historically accommodated a range of industrial businesses and includes the South Fremantle Power Station and switch yard. While there are a number of industrial uses still operating, a majority of the land is now available for redevelopment.





(B) CONTEXT & THEMES

EXISTING LANDSCAPE

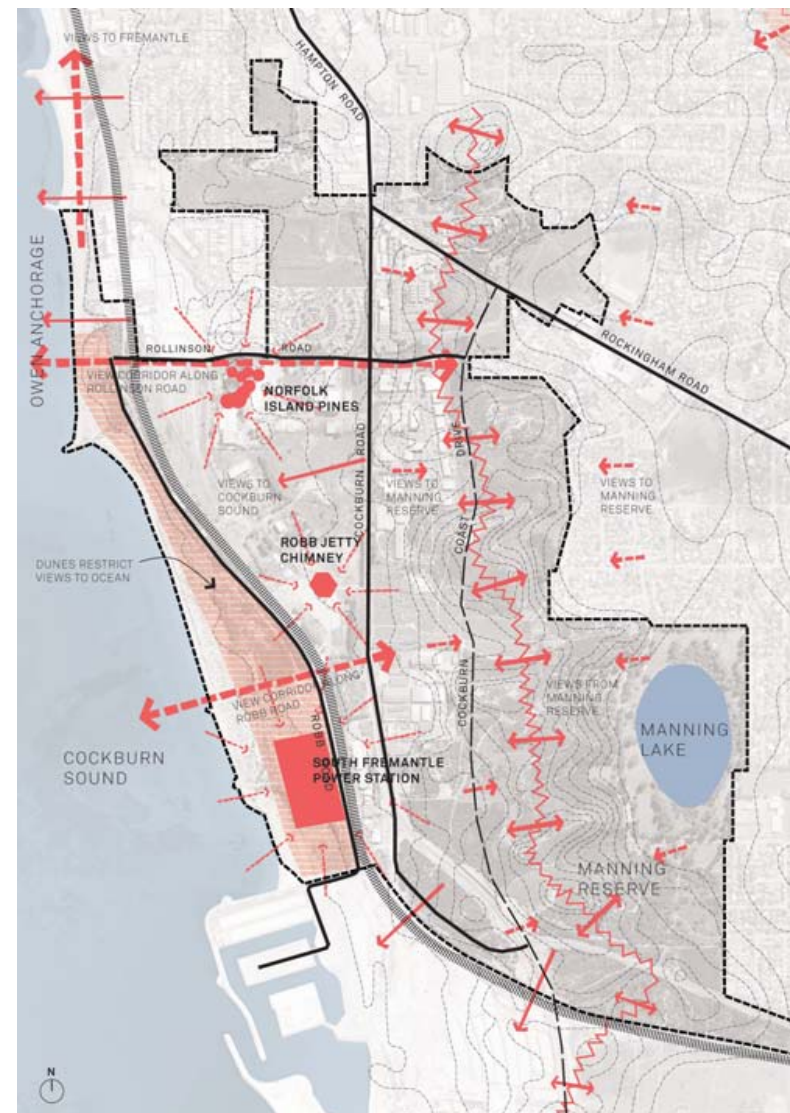
The site runs parallel to the Cockburn Sound and Indian Ocean to its west and from the eastern ridge line, offers significant views to the coast. The Carnac, Garden and Rottne Islands can be viewed from the shore and ridge line providing a point of interest on the horizon.

The landscape of the Cockburn Coast has been significantly modified by past industrial use. Along the coast, six groynes, a seawall and jetty, and infrastructure associated with the development of the South Fremantle Power Station have all impacted on the natural coastline

Views

While the project area is relatively flat, there are a number of vantage points with views to the coast, in particular from the eastern ridge line which is afforded uninhibited views of the coast.

Views to a number of other character points should also be maximised including a line of Norfolk Island pines in the north, the Robb Jetty Chimney, South Fremantle Power Station and potentially, views to Manning Lake from the ridge line.



View analysis

Existing Vegetation

Many different vegetation groups exist within the foreshore reserve and Manning reserve and these will be protected and reinstated. A number of Norfolk Island pines, which are representative of earlier European settlement, exist within Water Corporation's sewer pump station reserve. These mature tree species will be protected and incorporated within the public realm as they have significant cultural and heritage value and act as way finding within the site.

The project area contains limited vegetation between the rail reserve and Cockburn Road due to clearing related to past industrial activities, however, notable within this area are linear plantings of Fig, Casuarina, Tamarisk and Melaleuca. The condition of remnant vegetation is generally degraded, with weed infestation resulting from a lack of understorey

Dunal Landscape

An extensive dune system, covering 29ha of the Foreshore Reserve west of Robb Jetty Road is one of the most significant features of the Cockburn Coast. The height of the dune and the dense covering of vegetation limit short and mid-range views to the ocean and islands beyond.

Climate

The high and low gradients of the landscape mimic the variations in seasonal climate similar to that of a Mediterranean climate, with hot dry summers and cool wet winters. The 'Fremantle doctor', strongest from December to February, sends a cooling south westerly across the Cockburn Coast and is a welcome relief during the summer months. However the intensity and strength of this phenomenon has the potential to create an unpleasant public realm experience and discourage use of outdoor spaces.

Topography

The topography of the site is indicative of its coastal location, which consists of a primary dune system of around 5 metre AHD in the west and a secondary dune system in some sections.

The site ranges from being relatively flat between the rail reserve and Cockburn Road and gently rises up to a ridge line that runs north-south through the eastern section of the project area.

This ridge line is steep in parts and also consists of some east west valley formations. The ridge line reaches heights of 50 metre AHD in parts.

Water

The Cockburn Coast is located parallel to the Indian Ocean and is bordered by Manning Lake to the east. The C Y O'Conner beach, named after one of Western Australia's greatest engineers, is the site's local beach. The C Y O'Conner beach is promoted as one of region's 'dog friendly' beaches and is frequently used as a horse training beach by Randwick Stables. The award winning Coogee beach to the south, offers a wide range of services and facilities, and is the City of Cockburn's primary recreational beach. South Beach to the north of the site, maintains its equestrian heritage with horses, both recreational and commercial.

Surface water flow is influenced by the following factors:

- Ridge line runs north-south through site approximately 1.5km east of the coastline which divides the site into two catchments, east and west
- Drainage valleys run east-west
- Surface runoff is minimal due to high infiltration rates of sandy soils





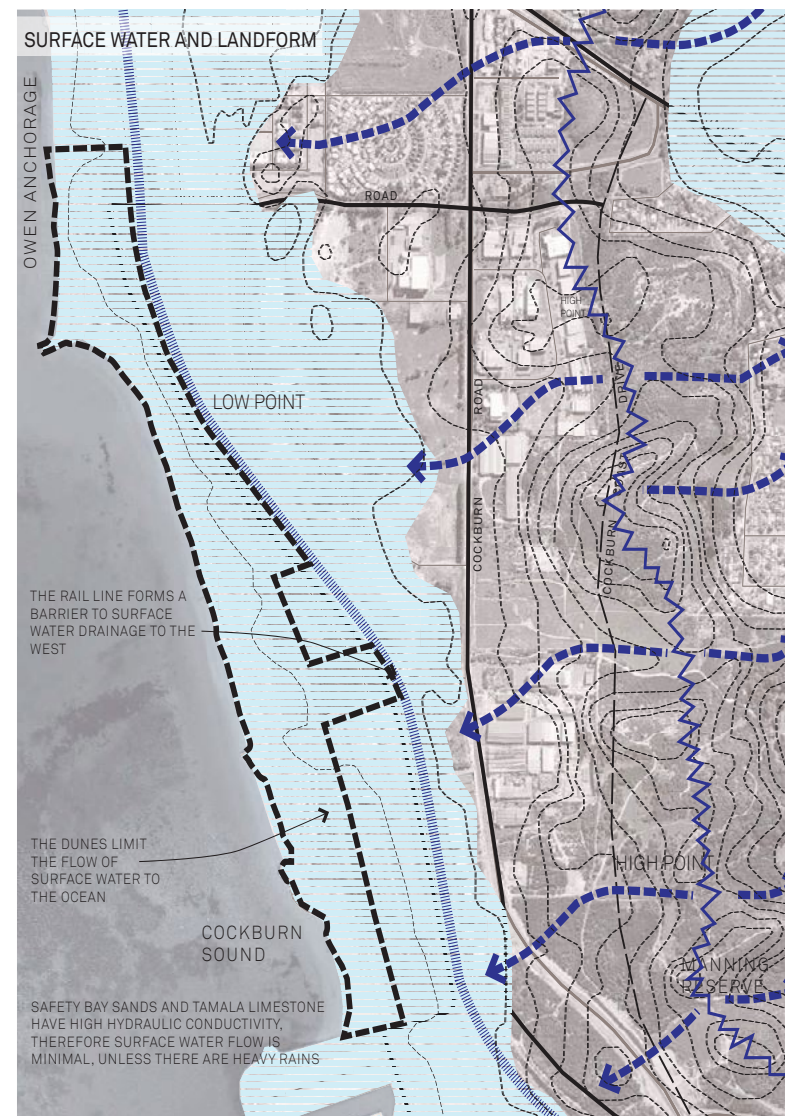
(B) CONTEXT & THEMES

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Cockburn Coast Topography and Surface Water

Plans courtesy of HASSELL_Cockburn Coast Foreshore Management Plan

BUILT FORM

The Cockburn Coast supports a diverse but degraded landscape. As the traditional custodians of the land, the indigenous legacy shadows that of the post settlement, where the adverse impacts from industrial uses continue to the current day. The presence of historic industrial buildings, including the heritage listed South Fremantle Power Station and Robb Jetty Chimney, connect with the continued evolution of the site as an economic driver. The most significant built form on the site is the Power Station, switch yard and the freight rail line.

Power Station

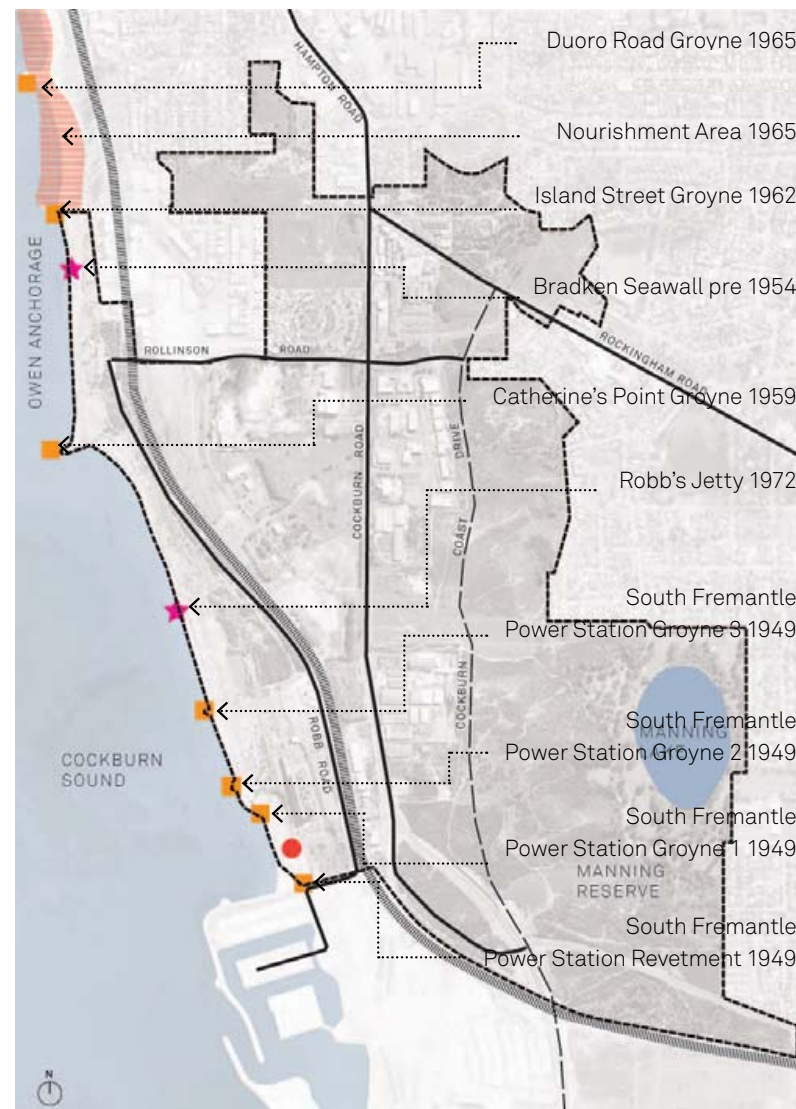
The South Fremantle Power Station officially opened in 1951 to supply the South-West with electricity. It closed in 1985. The site has been registered as a prominent building with a strong functionalist structural industrial form. The building is currently abandoned and has been heavily vandalised. The power house building is listed on the State Register of Heritage Places.

Freight Rail

The western boundary of the site is dominated by a freight railway connecting to the Fremantle inner harbour. It currently services approximately 22 trains (44 movements) per week. Fremantle Ports has advised that future freight rail is likely to increase to 56 trains per week (112 movements) and is expected to be approximately 600m long. This increase in freight rail movement's accords with key government policy to transfer freight movement from roads to rail, but presents a significant barrier for other transport and pedestrian movements throughout the site.

Industrial

The existing industrial built form on site is predominantly 2 storey warehouses scattered throughout the precinct but concentrated along Cockburn Road.



Industrial history of Foreshore

Plans courtesy of HASSELL_Cockburn Coast Foreshore Management Plan





(B) CONTEXT & THEMES

HERITAGE

Indigenous Heritage

Prior to European settlement, the Nyungar people used the area as a camping ground and traveling route. The Robb Jetty camp site, an important resting area near Catherine Point, was used for camping and hunting as part of the coastal 'pad' or traveling route. Clontarf Hill to the north of the site is regarded as an important ceremonial, mythological and artifact site, and as a hunting place and a natural feature for the Nyungar people. As traditional custodians of the land Aboriginal People share a sacred connection to land and their way of knowing, the dream time. The Nyungar people describe a time when the islands now known as Rottnest, Carnac and Garden formed part of mainland before a 'great noise' separated them from the mainland and the sea 'rused in between'. The Indian ocean carries important mythological significance for the Nyungar people.

European Heritage

The Cockburn Coast area has a rich European heritage dating back to early Colonial times, with some of the original practices and themes continuing today.

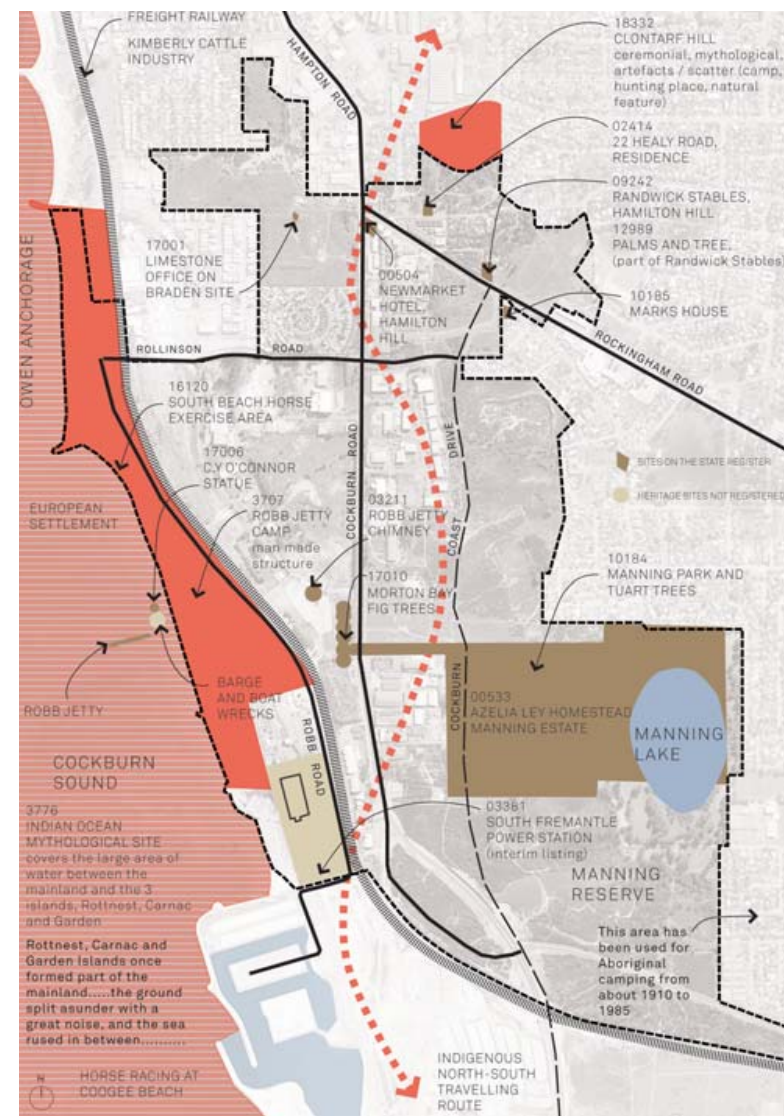
The 1830s saw the first white settlers coming to the area. The original Robb Jetty was the focal point of the settlement of the northern Cockburn coast and its long association with the meat trade. The jetty was the first obvious landmark in the area.

Robb Jetty Chimney (on the State Register) is the only remnant of the Robb Jetty abattoir, which was built in 1919 and closed in 1993. In the early days the abattoir at Robb Jetty literally fed the metropolitan area and Goldfields. The heritage-listed Moreton Bay Fig Trees were part of the Robb Jetty Abattoir complex and are located in the vicinity of the Robb Jetty chimney.

In 1902 C. Y. O'Connor tragically took his life at South Beach, believing that his Perth to Kalgoorlie pipeline project was a failure. The site of the tragedy has since been interpreted through a bronze statue of O'Connor on his horse.

Horse racing and training is the most enduring historic theme of the Cockburn Coast. The Cockburn foreshore has been used as a horse exercise area since 1833, when it was the site of the first official horse race in Western Australia, and still continues today."

Accompanying the Robb Jetty Chimney on the State's heritage register is the Manning estate, which includes Azelia Homestead, Power Station and the South Beach horse exercise area. Other culturally important sites of heritage significance have been identified as Owen Anchorage, the original Robb Jetty, Afghan camps at Davilak and World War 2 gun emplacements.



Cultural Heritage of Foreshore

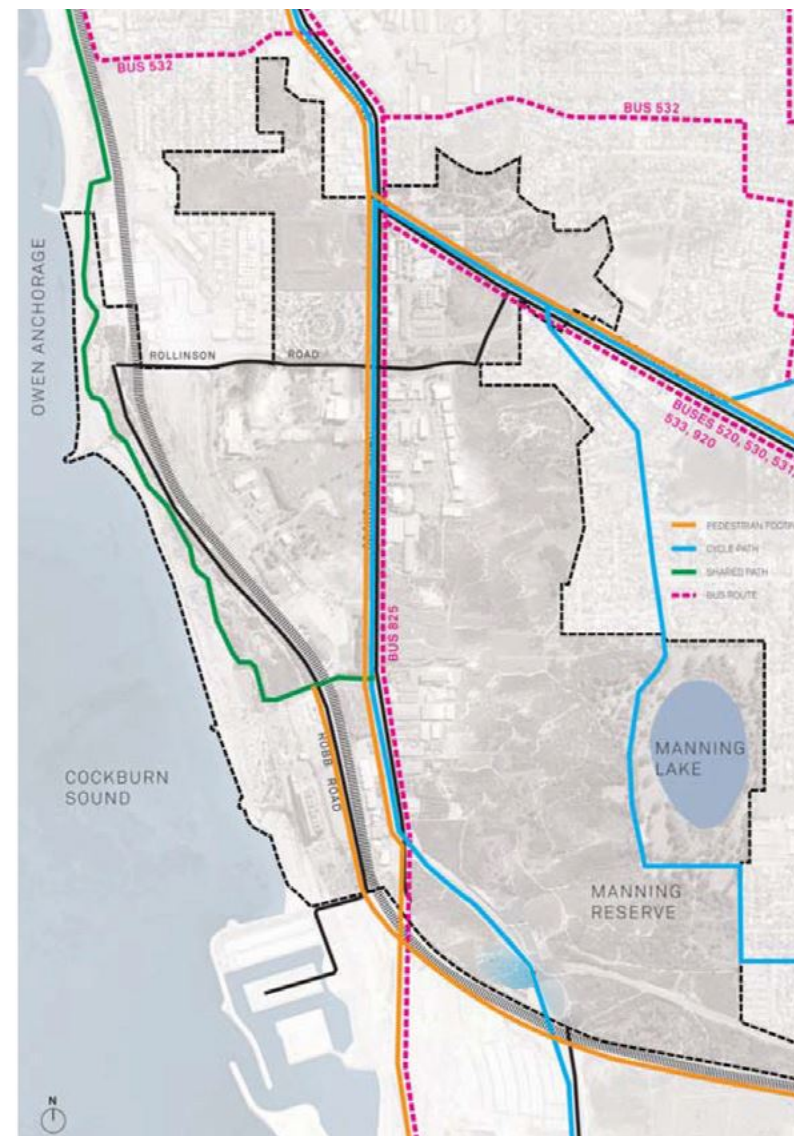
Plans courtesy of HASSELL_Cockburn Coast Foreshore Management Plan



CIRCULATION

Movement through Cockburn Coast is currently defined by the existing transport network. North-south movements are generally well catered for within Cockburn Road, Bennet Avenue, Robb Road and the freight rail alignment.

There is a lack of east west links connecting through to the coast due to the historic movement network between Fremantle and the industrial areas to the south, which is predicated on the north-south freight rail and Cockburn Road. Rollinson Road is the sole east-west access through the project area in the north of the site, while McTaggart Cove provides a connection at grade across the rail in the south.



Plans courtesy of HASSELL, Cockburn Coast Foreshore Management Plan

Existing circulation network within Cockburn Coast



(B) CONTEXT & THEMES



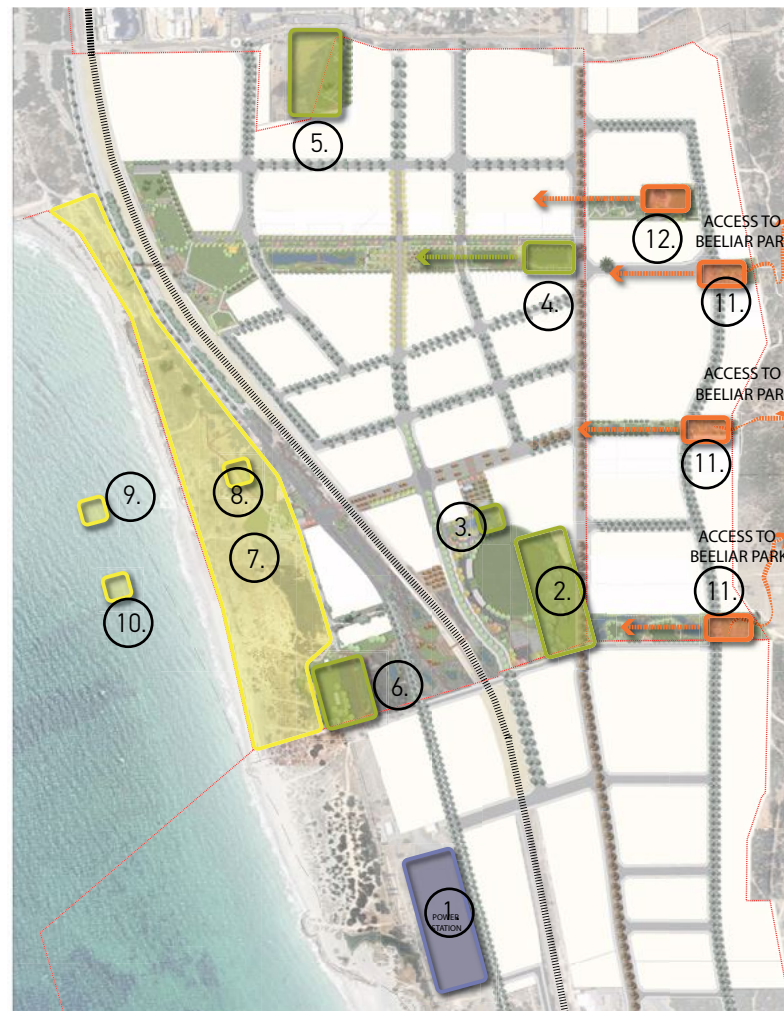
Existing access infrastructure for foreshore

Plans courtesy of HASSELL, Cockburn Coast Foreshore Management Plan

SITE ASSETS

The following map and photos illustrate the existing physical elements that contribute to the unique character of the site. These should be integrated into the detailed planning for the place providing a layer of authenticity and experience to the development.

1. Power Station
2. Robb Jetty Precinct_Fig trees - heritage listed, shade and protection from Cockburn Coast Rd
3. Robb Jetty Precinct_Chimney Stack - remnant of industrial past
4. Robb Jetty Precinct_Views
5. Robb Jetty Precinct_Norfolk Pines surrounding Sewer Pump Station
6. Robb Jetty Precinct_Dog park and BBQ facilities
7. Foreshore Precinct_Primary Dunal System
8. Foreshore Precinct_‘Human Race’ artwork
9. Foreshore Precinct_C.Y O'Connor Statue, and James and Diana ship wreck remains
10. Foreshore Precinct_Robb Jetty remains
11. Emplacement Precinct_Views
12. Emplacement Precinct_Gun Emplacement





(B) CONTEXT & THEMES

0.11 Masterplan

The Masterplan developable area consists of approximately 98 hectares of post industrial land. The DSP proposes a mixed use development to house between 10-12,000 people in a medium density, transport oriented development. Two primary retail/commercial centres are proposed, one at the power station and another at Robb Jetty. Other retail will be spread across the site and existing land uses are expected to continue in the north-west of the site. The employment objective is c.3000 jobs for local and neighbouring residents.

Local Structure Plans

The DSP has defined three Local Structure Plan Areas (LSP Areas) in accordance with the City of Cockburn's Development Zone. These LSP Areas comprise of:

- Robb Jetty LSP Area
- Hill Top/Emplacement LSP Area
- Power Station LSP Area

The PRDG has been developed in cognizance of the design intent detailed in the LSP's.

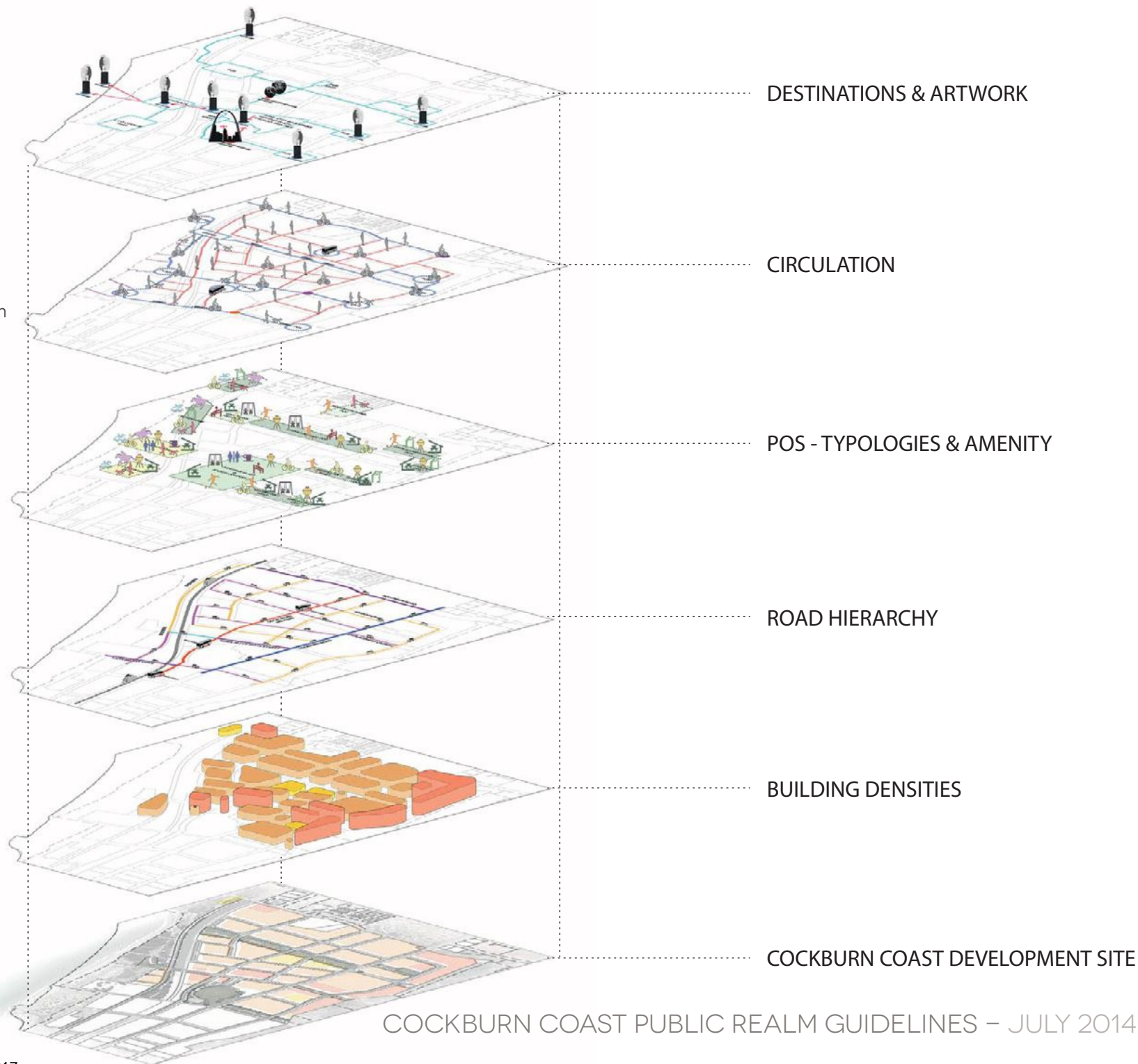
Plans courtesy of HASSELL_Cockburn Coast Foreshore Management Plan





0.12 Layers

The following diagram articulates the layers and considerations that make up the Masterplan and inform the PRDG.



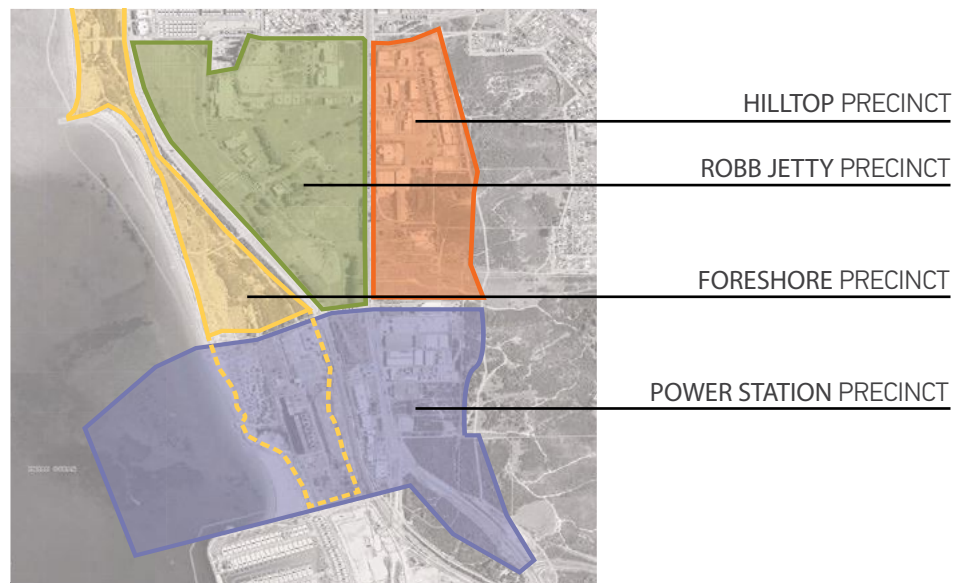


(B) CONTEXT & THEMES

0.13 Precincts

Under the Place Partners Cockburn Coast Place Making Strategy and the Cockburn Coast DSP, three precinct character areas were determined; Robb Jetty, Hilltop and Power Station. These precincts were used to define the LSP Areas.

The PRDG has adopted these same areas to describe the site and has included the Foreshore reserve as the fourth precinct.



ROBB JETTY

Robb Jetty is primarily a place for local residents and businesses, a walkable village that is intimate in scale and 'soft' in character. In Robb Jetty the beach comes to the main street, locals walk barefoot and the stories of the past and its people are part of everyday life.

A variety of small but connected public places offer a range of experiences from the quiet to the communal, the sheltered to the open, the organic to the formal.

Robb Jetty is a place to build meaningful and lasting relationships; to share a chat on the bus, to know the local newsagent, to have your favourite seat in the park.



robb jetty precinct_vibe image

Hilltop

Hilltop is a place in the early stages of transition, an established industrial area, its future is residential. Located along the ridge line separating the coast from the bush, Hilltop will be the new high point, a manufactured horizon line that offers the opportunity for a new architectural topography, an integrated landscape of nature and built form.

Residents enjoy the expansive views but also the sense of containment and groundedness. Facades and balconies host vertical parkland's that shade and veil occupants. Ground level public realm is internalised and focused on the residential community's common interests.



emplacement precinct_vibe image

POWER STATION

The Power Station is an iconic landmark, its physical dominance should translate into the area's primacy as the key regional destination for the Coast. The centre of recreation and leisure activity Power Station is the place where community celebrations are held and tourists enjoy multiple experiences that vary with each visit. New and old are juxtaposed, events showcase the innovative and challenging. Creative entrepreneurship is encouraged across multiple fields from energy production, to arts, culture, experiential tourism and business.

Self sustainability for this precinct is key - activity has to be self generating and infrastructure flexible and attractive to a range of users on weekdays, evenings and weekends in summer and winter.



power station precinct_vibe image

FORESHORE

The foreshore reserve is an area constantly in transition and contains a variety of coastal experiences. It will exemplify the West Australian relationship with the coast through a series of discrete and focused interventions that provide a variety of experiences and create both a local and regional destination. From individual recreation to community events and animal exercise to ecological restoration, the Cockburn Coast will be a place for all, embracing its rich heritage while being resilient and sustainable.



foreshore precinct_site image



(B) CONTEXT & THEMES

0.14 Themes

While PRDG has adopted the precincts as defined in the DSP to describe the site, in examining the inherent and possible themes under the public realm framework, a further set of themes applicable to the structuring of the project precincts were identified.

These themes overlap the precinct boundaries and form an additional layer of interpretation applicable to the public realm. These themes and their application to the PRDG embody the overall development theme of 'transition' and are to be applied in conjunction with the overall projects theming contained in the Cockburn Coast Place Making Strategy.

PROJECT THEMES

The Place Partners 'Cockburn Coast Place Making Strategy' identify four key place drivers for Cockburn Coast - Intensity, Duality, Honesty and Legacy.

These place drivers all embody the place character theme of 'Transition'. The idea of transition is particularly valid at Cockburn Coast because of its already rich history of change and the planned future evolution.

Refer Place Partners 'Cockburn Coast Place Making Strategy' for additional information on the application of the following themes within the Cockburn Coast.

Intensity

Intensity can be both exciting and challenging. This driver describes social, cultural and physical aspects of the place from its productive, and sometimes dramatic past, to its planned future where intensity refers to a concentration of activity and amenity.

The theme of intensity is particularly applicable to the design and delivery of the Main Street and Activity Nodes.

The heritage aspects of the site that are incorporated into the theme of intensity include the South Fremantle Power Station, the Robb Jetty entry port, the CY O'Connor story, shipwrecks and the abattoirs. They all contribute a highly charged, emotional response to former activities and events on the site and should be incorporated into the public realm where applicable.

Consideration should also be given to providing the opportunity for temporary interventions, provocative, experiential discoveries and installations, all of which would all reflect this theme.

Duality

This driver reflects the contrasts inherent on and around the site. Internally it is a place of dualities; from beach to dune, from bush to road, from industry to nature. Each contrast provides an opportunity for an authentic set of experiences that are unique to the site.

There is an opportunity to explore and enhance these place based experiences to provide a diversity of transitions that reflect the larger regional context and the shift between the suburban and the semi-urban.

Duality plays out, in terms of heritage, in highlighting the differences and commonalities between the old and the new, the natural and the man made, and the tangible and intangible. There is wide scope for considering both dramatic and seamless transitions between these, depending on where they are located.

This theme can also be explored through a response to the intimate and the grand, the hand made and the high tech, the architectural and the artistic. What is a piece of art and what is a creative landscape?

The contrast of ecological principles applied to the urban context and the transition from natural to urban to natural should also be considered.



Honesty

There is real sense of the 'down to earth' nature of the site and its people, a rawness that is appealing and essentially honest. Textures of industry, past and present combine in a sincere expression of hard work and integrity.

However, this driver is deeper than the physical only, it involves sharing the story of the place, its planned evolution and listening and responding to community needs.

There is a wide breadth of heritage elements that input into this theme, from the site's indigenous past, to the early settlers and rawness of the military and industry uses.

Engaging with the honesty theme in design the public realm will need to consider not 'idealised behaviors' but be based on a realistic appreciation of the day to day activities of local residents and visitors, their needs first and aspirations second.

Legacy

This driver is an important aspect of the place, reflecting both tangible and intangible place based assets of the current site that are valuable to the local community and the history of Perth's development.

Its also suggests a need for robust and considered design responses that take a long term view that considers public space as a communal asset and investment. Sustainability, in all its forms is critical in our ability to pass on a positive contribution to future generations.

The legacy theme reflects the value of the cultural use of the site, current assets including the power station, the beach horse riding, landscape features, even the dog walking. Consideration should be given to the creation of future heritage that does not diminish current assets.

One of the greatest legacies that this project can offer is in terms of cultural change from suburban living to semi-urban lifestyles and the associated walk-ability, use of public transport, local shopping and community cohesion. The provision of amenity and legibility in the public realm to support this theme is essential.

Transition

Transition reflects the ongoing and organic change that occurs at all places and in all communities. It can be considered strategically, spatially as well as through time. Transition questions the notion that a drawing can determine all aspects of the future needs of a place, especially one with such a long development horizon.

Transition also considers that at the completion of the thirty year development time line the place will continue to change. Flexibility and responsiveness are key to building in resilience in both the place and its people.

The design process needs to consider how the essence of transition with all its myriad possibilities can be ingrained into the environment and experience offered. Cockburn Coast needs an overarching story of change that can itself evolve to engage with current and future residents and visitors to the area.

(B) CONTEXT & THEMES

SITE SPECIFIC THEMES

Urban Corridor

The Urban Corridor will generate from 'The Heritage Hub', located in the Heritage Plaza, to the west towards 'The Beach side Hub', and to the east up to 'The Hilltop Hub'.

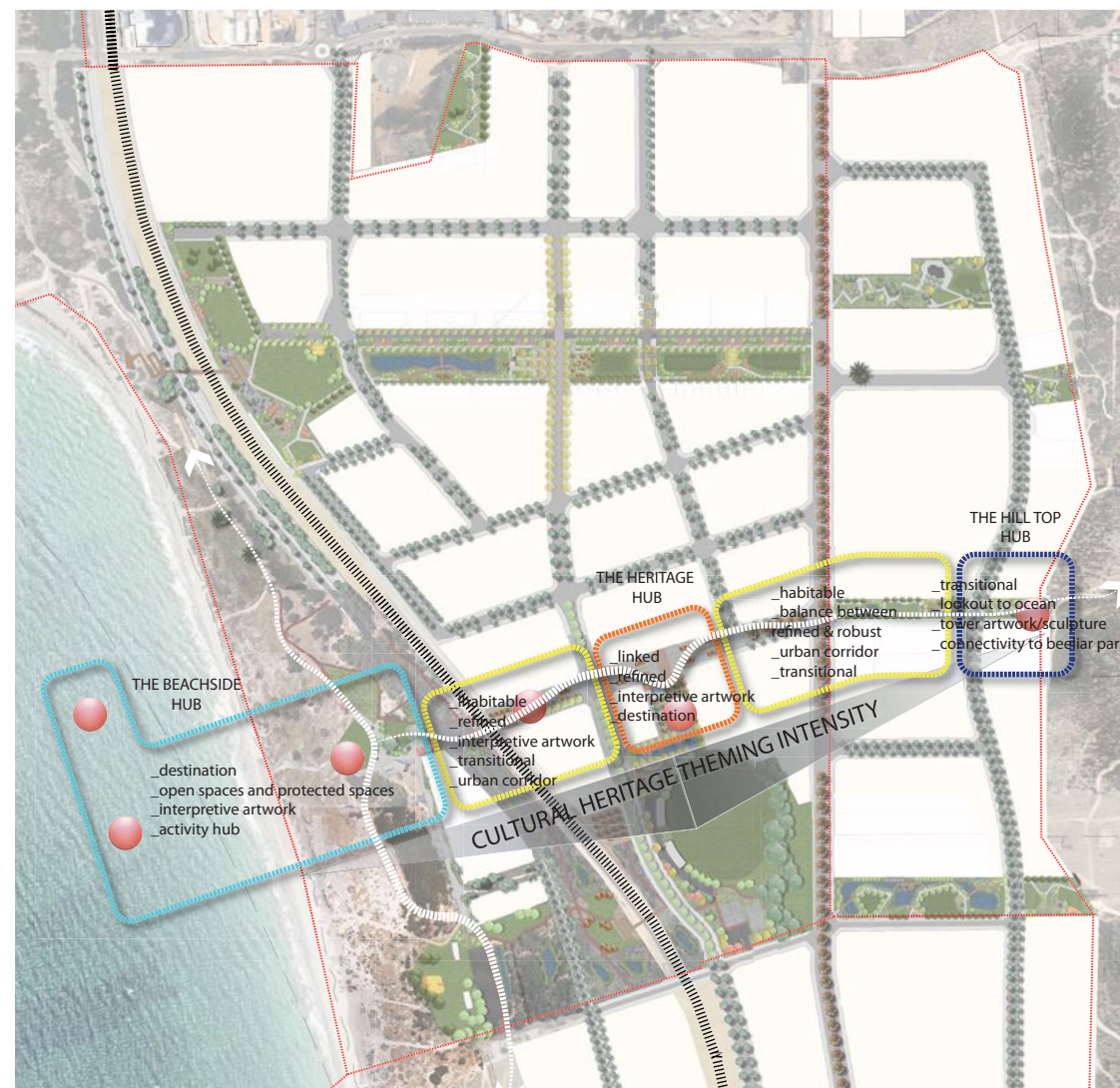
Thematic responses should embrace the opportunity to explore the strong industrial heritage of the site.

The heritage listed Robb Jetty Chimney is the only remnant of the Robb Jetty abattoir, which was built in 1919 and closed in 1993. Interpretive artwork, sculptures and materiality should be expressed with a strong correlation to this landmark icon.

Similarly, the design of custom furniture should explore the opportunity to inform of the heritage of the abattoir in a refined and contemporary manner.

These heritage stories should bleed into the urban corridor and dissipate as the stories of the 'The Beach side Hub' and 'The Hilltop Hub' start to interweave into the urban fabric.

Refer to Place Partner's 'Cockburn Coast Place Making Strategy' Document (March 2012) for information regarding public artwork and place making strategies.



Agricultural/Military Corridor

The Agricultural/Military Corridor will be a response to the strong agricultural and military heritage of the site.

'The Military Hub' is located in the Hilltop precinct and houses World War 2 gun emplacements. As such, built elements such as shelters, wall, balustrades and bbq's should embrace the opportunity to express stories related to the rich military past.

Agricultural thematic responses should be explored through relocation of existing and supplementary artworks, and planting suggestions. These are to occur throughout the Green Links in the Robb Jetty precinct.

'The Melting Pot Hub' is to reference both thematic themes and is to act as transition point. It should be a refined and balanced space.

Refer to Place Partner's 'Cockburn Coast Place Making Strategy' Document (March 2012) for information regarding public artwork and place making strategies.





(B) CONTEXT & THEMES

Recreational Corridor

The Recreational Corridor will bleed out from 'The Sporting Hub', located around the District Park, and establish a similar thematic response to the west and east of the recreational heart.

'The Sporting Hub' will consist of the District Park, supplementary sporting facilities and viewing opportunities. Signage and way finding should be influenced by this theme

'The Secondary Beach Hub' has a rich history as an activity launch pad and should look to maintain its past.

'The Lookout Hub' should, like much of the Hilltop precinct, embrace its industrial heritage. These stories should bleed down through the Green Link and inform the character of 'The Sporting Hub' and 'The Secondary Beach Hub'.

Refer to Place Partner's 'Cockburn Coast Place Making Strategy' Document (March 2012) for information regarding public artwork and place making strategies.





Coastal Corridor

The Coastal Corridor will be a response to the strong existing conditions on site and will look to embrace a balance between outlook and nestled opportunities.

'The Coastal Hub' is located to the north of the corridor and at the end of the pedestrian bridge elevated over the existing railway reserve. This area should look to maximise views out over the site looking north to Catherine Point, south towards the Power Station and west towards the ocean.

A transitional zone before 'The Beach side Hub' should look to embrace the existing fabric of the coastal walk, yet seek out opportunities for outlook and informal beach access.

'The Beach side Hub' offers the opportunity to speak of the coastal heritage of the site in a vibrant, engaging and contemporary manner.

A more formalised transition towards 'The Secondary Beach Hub' should embrace coastal stories in a more formalised setting, yet tread lightly over the existing terrain.

Refer to Place Partner's 'Cockburn Coast Place Making Strategy' Document (March 2012) for information regarding public artwork and place making strategies.



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Part C: Typologies

Contents

- 1.0 Street Tree Hierarchy
- 2.0 Streetscape Typologies
- 3.0 POS Typologies
- 4.0 POS Tree Hierarchy
- 5.0 Planting Typologies

Part C: Typologies outlines the design parameters for streetscapes, designated POS areas, and tree and shrub plantings.

The information in this section has been adapted and expanded from the following:

Place Partners – Cockburn Coast Place Making Strategy
TPG in association with Yates Heritage & Big Island Research
Hassell – Cockburn Coast District Structure Plan, Volumes 1 and 2
Hassell – Cockburn Coast Foreshore Management Plan
Site investigations undertaken by Urbis, December 2013





(C) TYPOLOGIES

1.1 Street Tree Hierarchy

Design Intent

The selections of the street trees throughout the various streetscapes are driven by the following factors:

- exposure to prevailing winds
- proximity to built form
- shading from building heights
- soil conditions
- coastal exposure
- overall themes
- location/proximity to POS areas
- striking a endemic vs exotic balance with regards to indigenous and european heritage

The following design factors should be considered when selecting the final tree species:

- changing of street tree species where street interfaces with POS area to mark the entry to the various parks within the development
- selecting landmark trees where appropriate to mark gateways into the various precincts
- establishing habitable spaces below canopies on main streets
- interface with public transport infrastructure to ensure remedial works are minimised when trees mature.
- underground service requirements.

The proponent will require the approval on all species from the City.

Figures 1 and 2 outline acceptable species to establish each streetscape typology, however, approval on final species from local authority will be required.

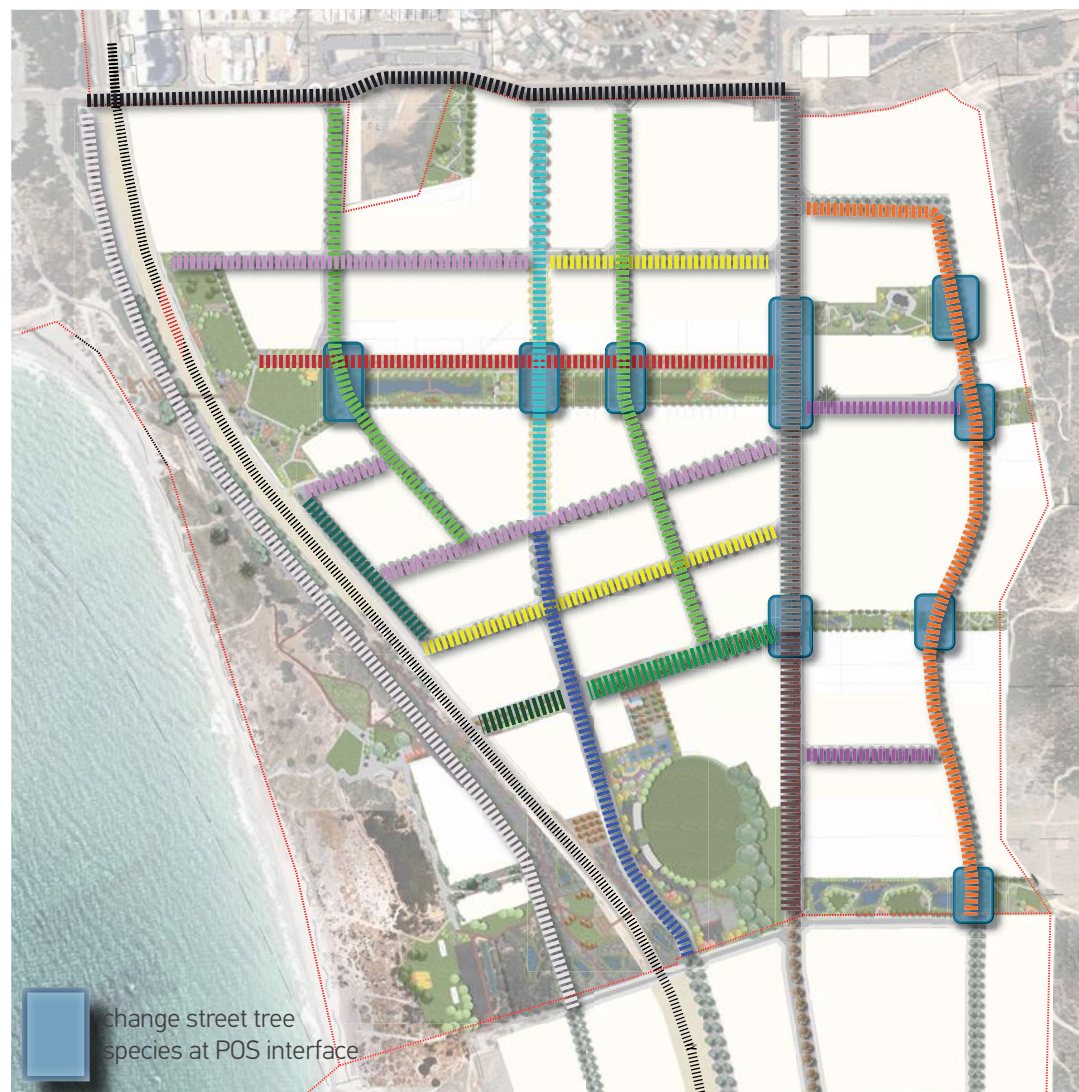


Figure 1_street tree hierarchy plan

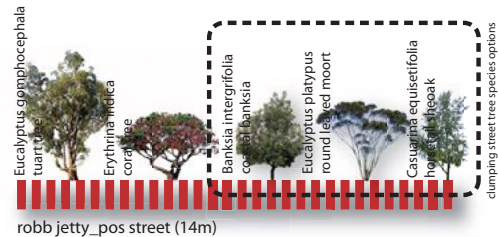
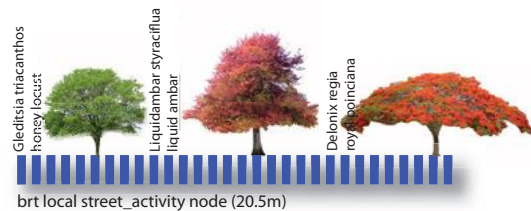
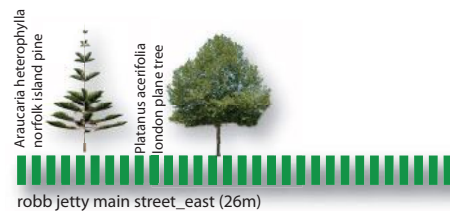
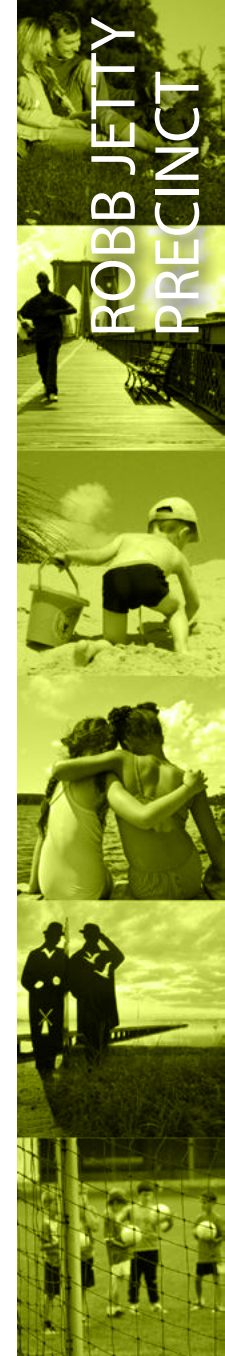
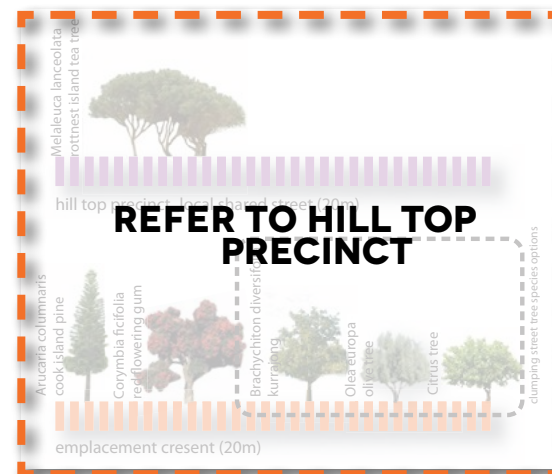
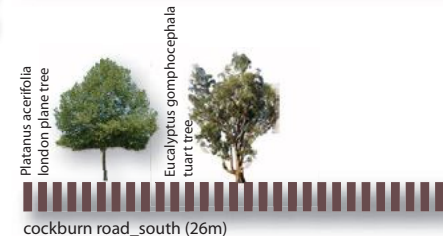
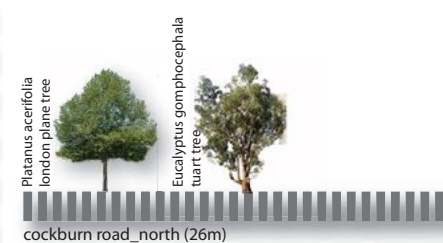
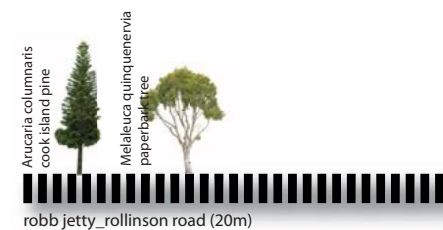
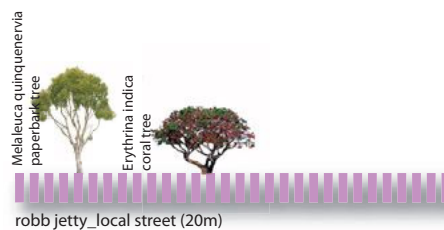
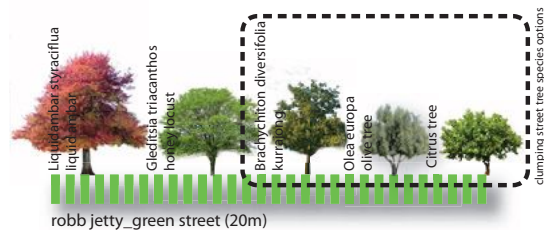


Figure 2_street tree species





(C) TYPOLOGIES_STREETSCAPES

2.1 Streetscape Typologies

Design Intent

The streetscapes have been designed with coordination with the City to create serviceable, habitable streets that have high functional and aesthetic outcomes. They are an evolution of the design intent expressed in the LSP.

Each street typology is distinct to itself in terms of its functional requirements, with a standard minimum aesthetic being applied to all streets.

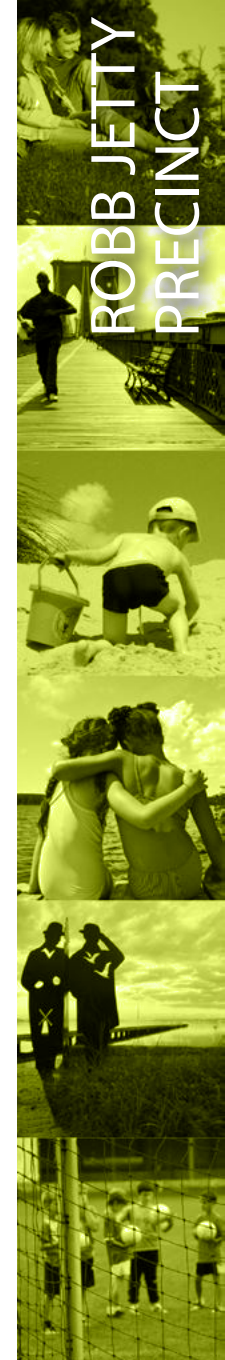
The streetscape designs promote shared surfaces where possible, and a low speed environment to encourage pedestrian and cycling emphasis over vehicular use

The streetscape typologies have been designed in conjunction with the following considerations:

- Public transport infrastructure and network
- Pedestrian and cyclist networks
- Street Tree Hierarchy
- Material selections
- Proprietary and custom furniture selections
- Planting palettes
- On street parking solutions
- Way finding and signage
- Public Art Strategy
- Water Sensitive Urban Design Principles
- Precinct theming strategies



streetscape typologies location plan



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(C) TYPOLOGIES_STREETSCAPES

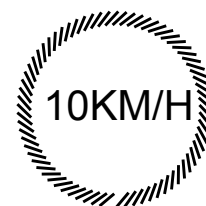
2.2 Robb Jetty Main Street West

Robb Jetty Main Street West is to be a refined, high quality shared street that incorporates the following principles:

- Significant tree transplants with low, spreading canopies as the primary street tree selection
- Additional supplementary street tree selections chosen from a suite of species
- Implements strong water sensitive urban design principles
- Has planted zones that act as rain gardens that allows for water run off infiltration. Will have a supplementary automatic irrigation system.
- Has adequate parking bays located both sides of the streets that is integrated between street trees, planting, dedicated furniture/bicycle parking/moped parking zones and disabled parking bays
- Streetscape furniture selections to be refined and slim line in nature
- Has a generous, habitable width on the southern side of the street to create a pleasant winter environment.
- Unwanted verge parking to be deterred through bollards, positioning of street furniture and planting beds.

An important aspect of the streetscape is the interface with the existing rail line and transition to the Beach side Plaza.

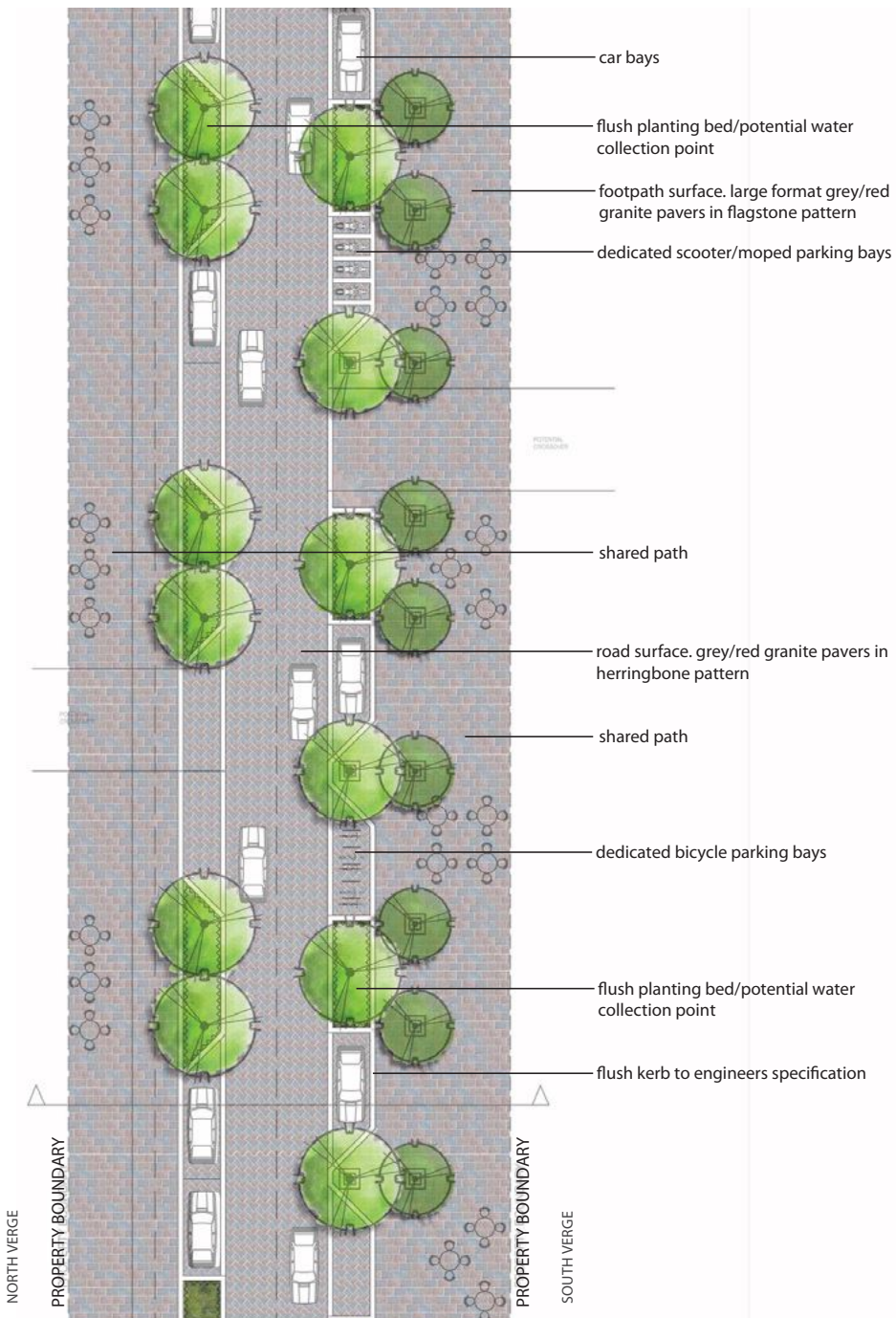
The design is to ensure that pedestrian crossing of this area maximises safe passage, considers vehicular queuing, maintains high quality in design and construction, has effective signage and way finding elements, and has significant visual queues that link the Main Street and the Beach side Plaza.



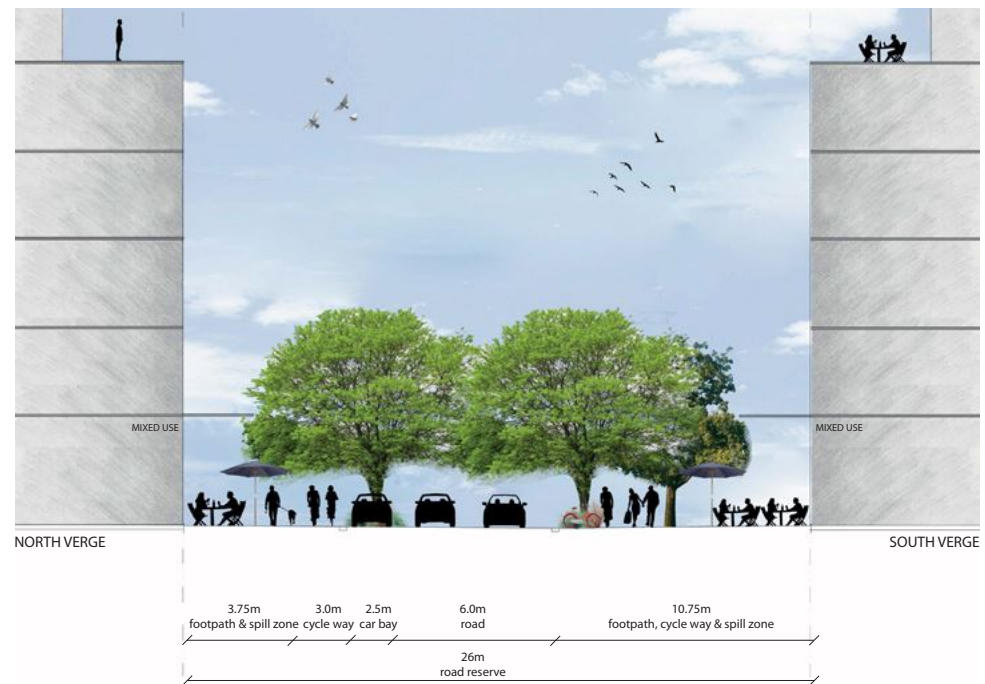
location plan



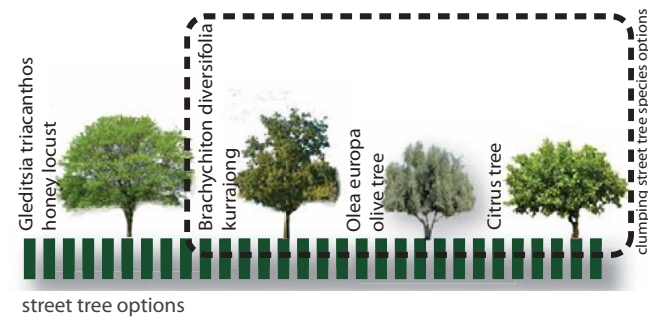
vibe images



Robb Jetty Main Street West - Typical Plan



Robb Jetty Main Street West - Typical Section





(C) TYPOLOGIES_STREETSCAPES

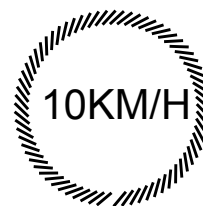
2.3 Robb Jetty Main Street East

Robb Jetty Main Street East is to be a refined, high quality shared street that incorporates the following principles:

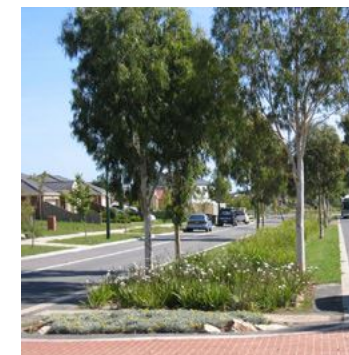
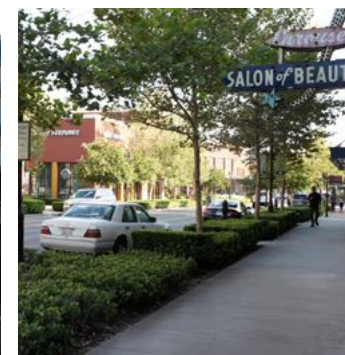
- Landmark, significant tree transplants that reflect building scale and mark the entry to the Main Street as the primary street tree selection
- Additional supplementary street tree selections that provide significant shading to the street
- Implements strong water sensitive urban design principles
- Has a central planted median that acts as a rain garden and has a raised and segmented kerb that allows water run off to infiltrate the median. Will have a supplementary automatic irrigation system.
- Has adequate parking bays located both sides of the streets that is integrated between street trees, planting, dedicated furniture/bicycle parking/moped parking zones and disabled parking bays.
- Streetscape furniture selections to be refined and slim line in nature

An important aspect of the streetscape is the interface with the proposed primary school, and the entry off Cockburn Road.

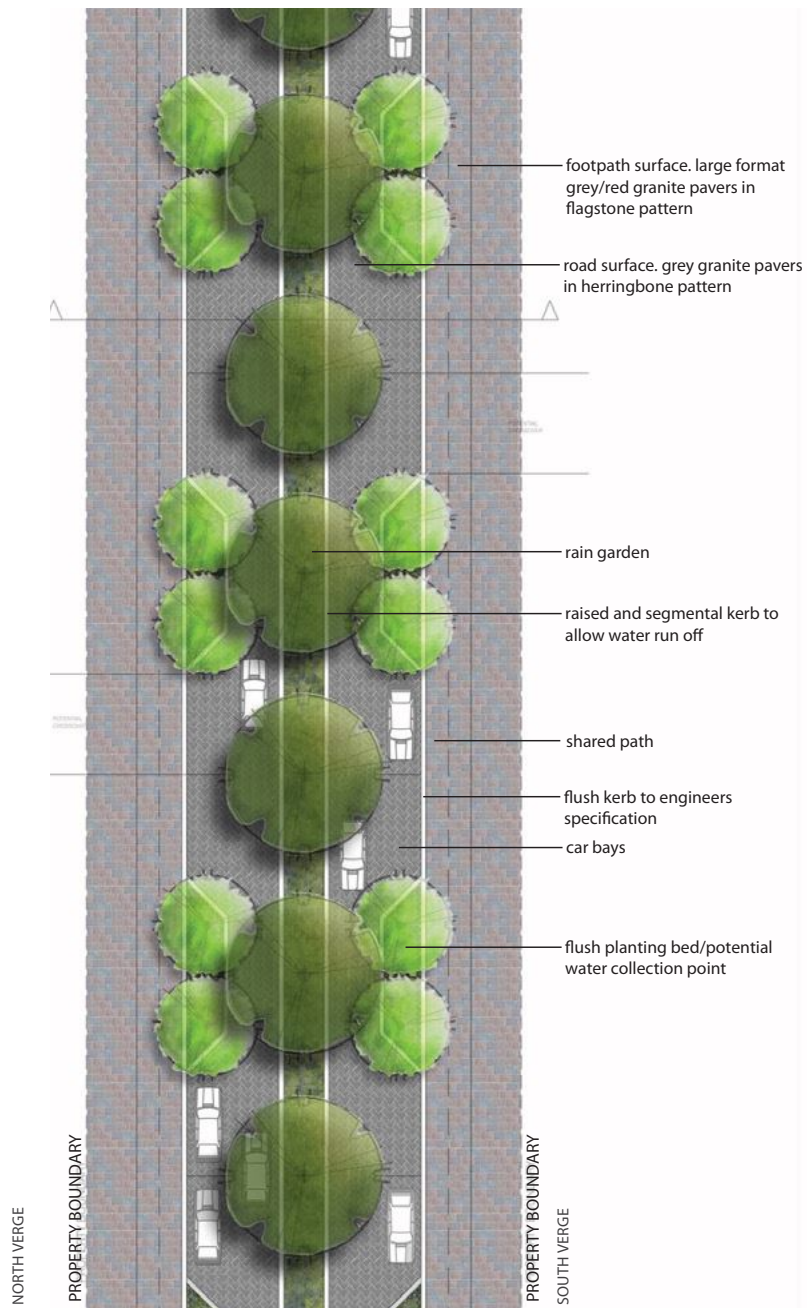
The streetscape should have a distinct feel and scale upon entry that promotes a shared surface, and assists with minimising vehicular speeds.



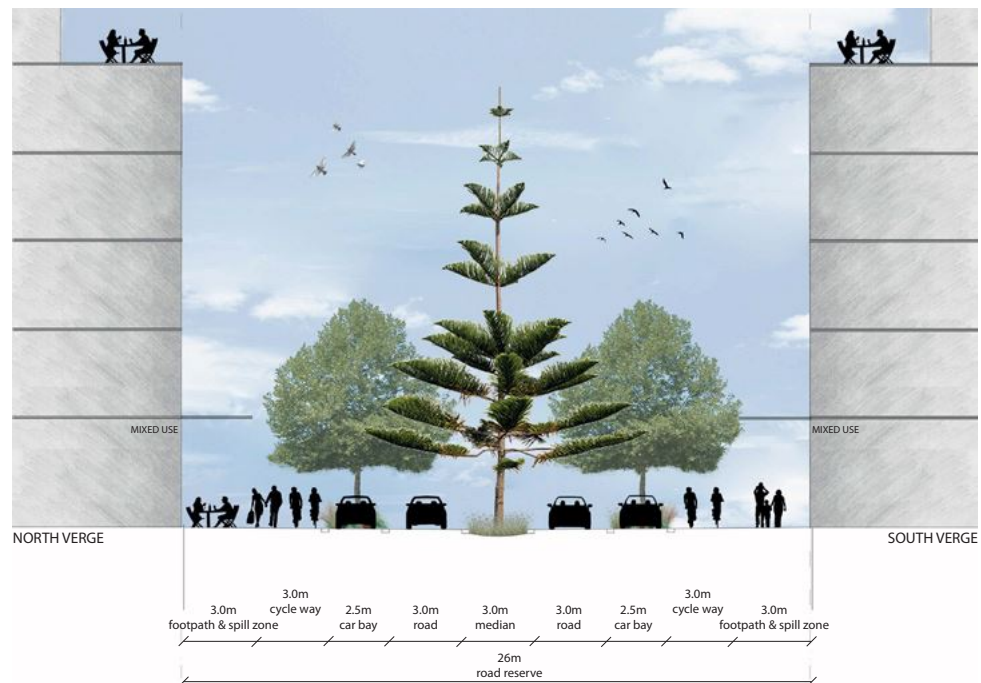
location plan



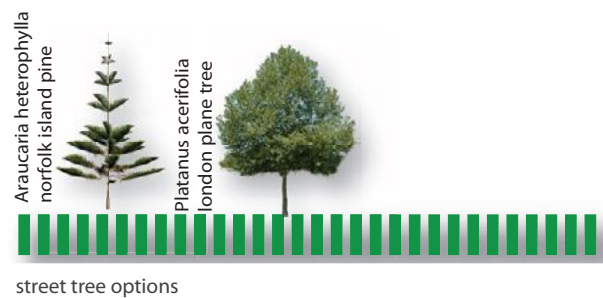
vibe images



Robb Jetty Main Street East - Typical Plan



Robb Jetty Main Street East - Typical Section



street tree options





(C) TYPOLOGIES_STREETSCAPES

2.4 BRT Local Road_Activity Zone

The BRT Local Road is to be a robust high quality street that incorporates the following principles:

- Tree selections that provide a distinct feel to the street
- Limited under-story planting restricted around bus stop locations to assist in creating 'station precincts'
- Has generous shared surfaces either side of the street to allow for informal pedestrian and casual cyclists to utilise the street
- Furniture is to be refined yet robust, and located in positions that reduces remediation in the event that the LRT is built in the future.
- Furniture to be readily available and easily maintained.
- The street is to have raised kerbs with traditional side entry pits to which the water run off will fall to with the assistance of a crowned road surface.
- Consider change in tree species where streetscape interfaces with POS

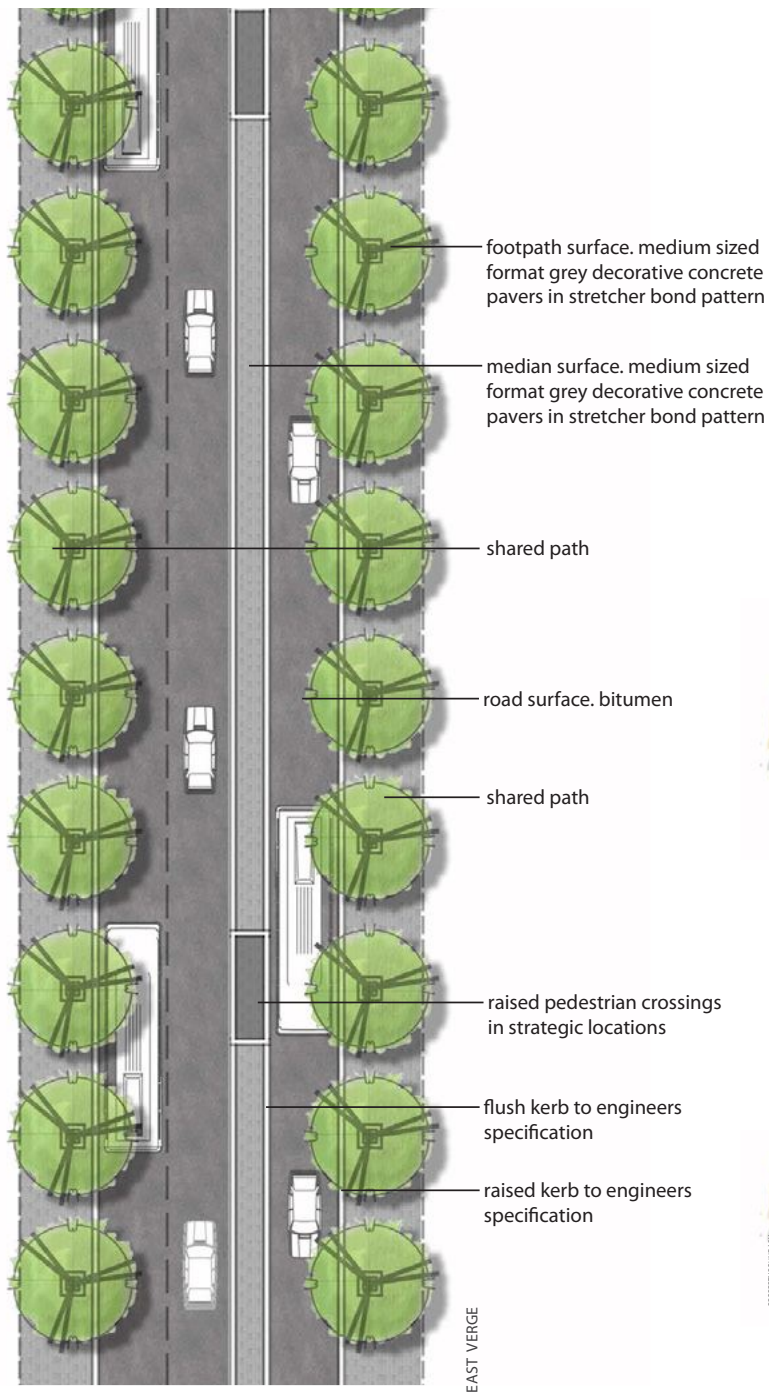


location plan

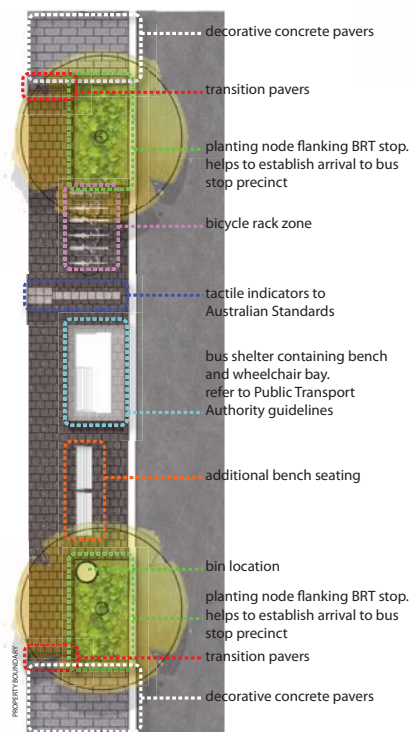


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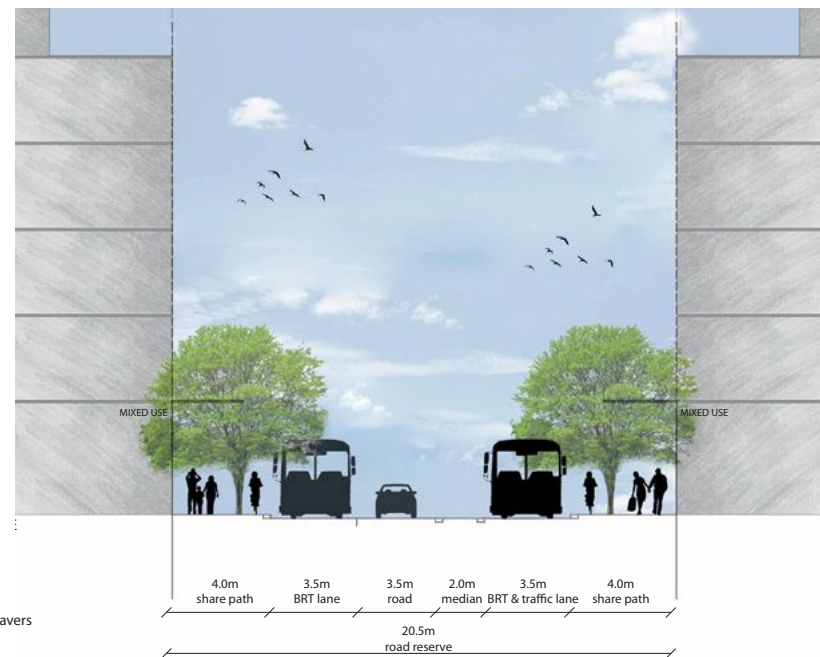




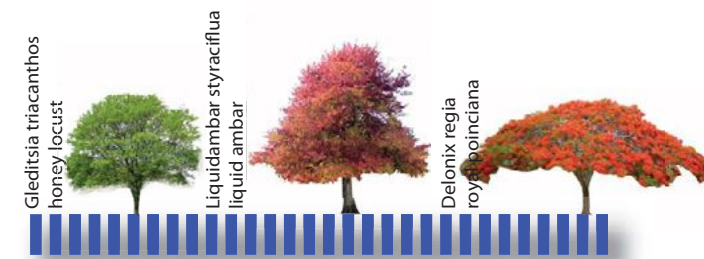
BRT Local Road_Activity Zone - Typical Plan



BRT Stop - Typical Plan



BRT Local Road_Activity Zone - Typical Section



street tree options





(C) TYPOLOGIES_STREETSCAPES

2.5 BRT Local Road_Residential Zone

The BRT Local Road is to be a robust high quality street that incorporates the following principles:

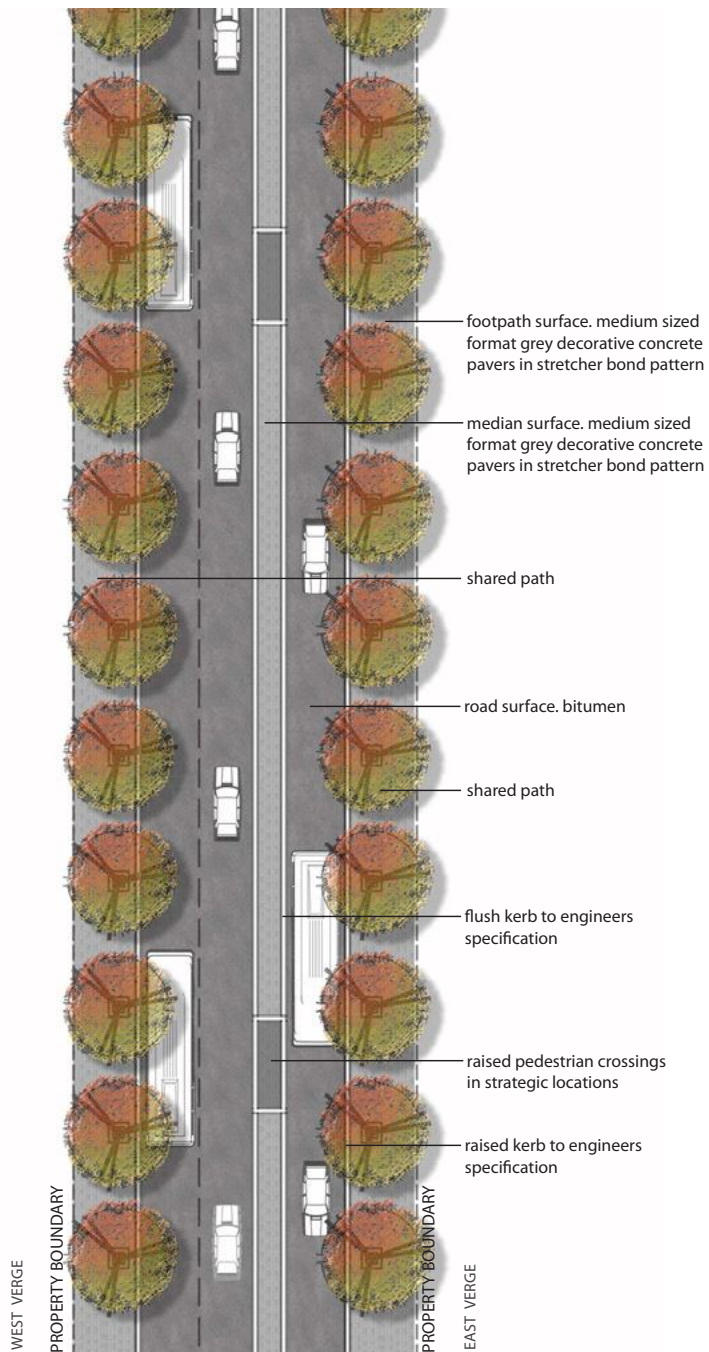
- Tree selections that provide a distinct feel to the street
- Limited under-story planting restricted around bus stop locations to assist in creating 'station precincts'
- Has generous shared surfaces either side of the street to allow for informal pedestrian and casual cyclists to utilise the street
- Furniture is to be refined yet robust, and located in positions that reduces remediation in the event that the LRT is built in the future.
- Furniture to be readily available and easily maintained.
- The street is to have raised kerbs with traditional side entry pits to which the water run off will fall to with the assistance of a crowned road surface.
- Consider change in tree species where streetscape interfaces with POS
- Differs from BRT Local Street Activity Zone through change in tree species.



location plan



vibe images



BRT Local Road_Residential Zone - Typical Plan



BRT Local Road_Residential Zone - Typical Section



street tree options



ROBB JETTY
PRECINCT



(C) TYPOLOGIES_STREETSCAPES

2.6 LRT Local Road_Activity Zone (BRT Local Street evolution)

The LRT Local Street Activity Zone is an adaption of the BRT Local road and is to be a robust high quality street that incorporates the following principles:

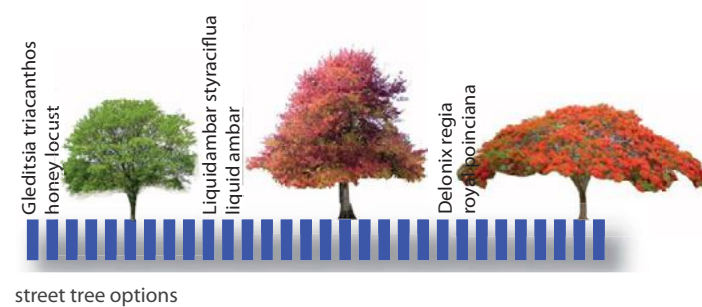
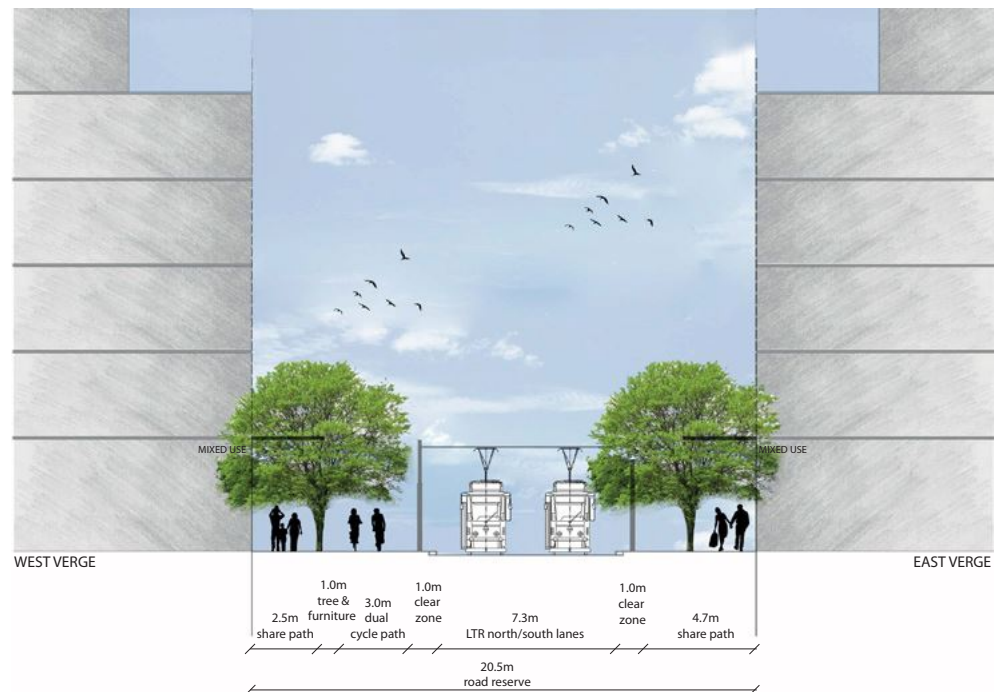
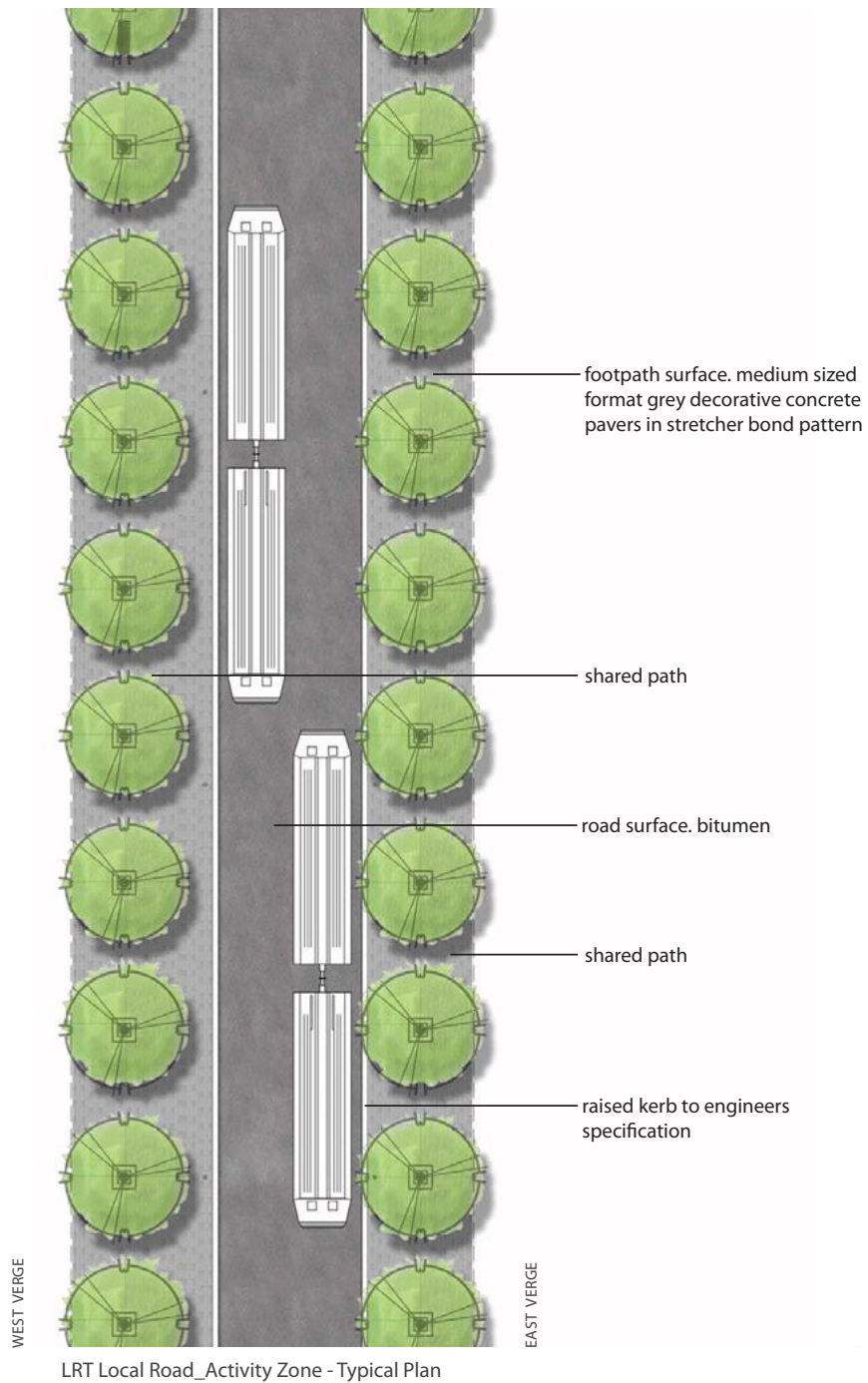
- Tree selections that provide a distinct feel to the street
- Limited under-story planting restricted around bus stop locations to assist in creating 'station precincts'
- Has generous shared surfaces either side of the street to allow for informal pedestrian and casual cyclists to utilise the street
- Furniture is to be refined yet robust, and located in positions that reduces remediation in the event that the LRT is built in the future.
- Furniture to be readily available and easily maintained.
- The street is to have raised kerbs with traditional side entry pits to which the water run off will fall to with the assistance of a crowned road surface.
- Consider change in tree species where streetscape interfaces with POS



location plan



vibe images





(C) TYPOLOGIES_STREETSCAPES

2.7 LRT Local Road_Residential Zone (BRT Local Street evolution)

The LRT Local Street_Residential Zone is an adaption of the BRT Local road and is to be a robust high quality street that incorporates the following principles:

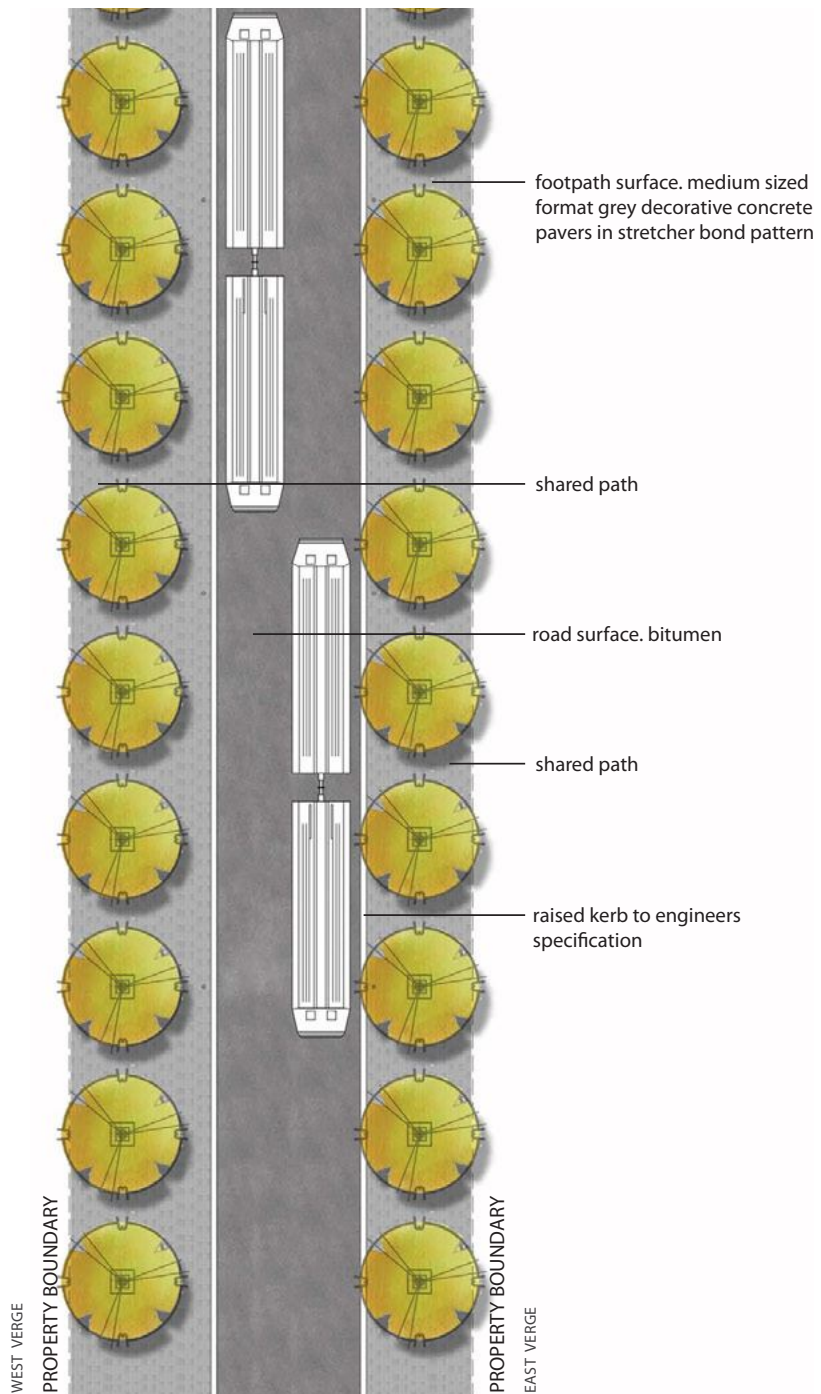
- Tree selections that provide a distinct feel to the street
- Limited under-story planting restricted around bus stop locations to assist in creating 'station precincts'
- Has generous shared surfaces either side of the street to allow for informal pedestrian and casual cyclists to utilise the street
- Furniture is to be refined yet robust, and located in positions that reduces remediation in the event that the LRT is built in the future.
- Furniture to be readily available and easily maintained.
- The street is to have raised kerbs with traditional side entry pits to which the water run off will fall to with the assistance of a crowned road surface.
- Consider change in tree species where streetscape interfaces with POS



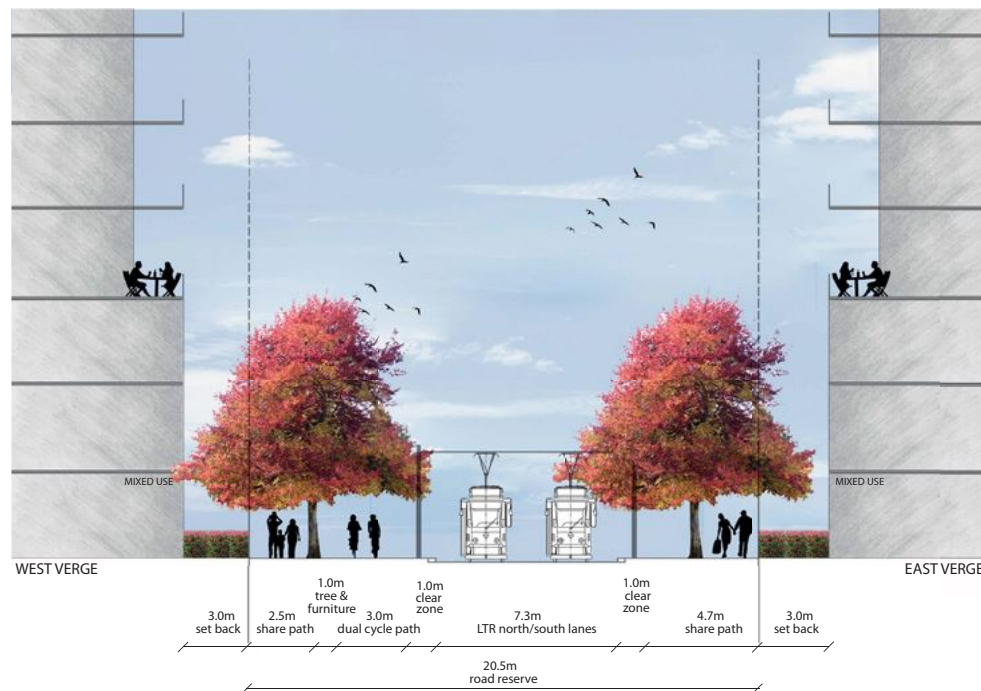
location plan



vibe images



LRT Local Road_residential Zone - Typical Plan



LRT Local Road_Residential Zone - Typical Section



street tree options





(C) TYPOLOGIES_STREETSCAPES

2.8 Cockburn Road_Mixed Use Zone

Cockburn Road is to be a robust connector road that incorporates the following principles:

- Tree selections that provide a distinct feel to the street
- Limited under-story planting restricted to median strip, and alternates with zones aimed at providing a safe zone for pedestrians as they cross the street
- Has generous shared surfaces either side of the street to allow for informal pedestrian and casual cyclists to utilise the street
- Furniture is to be robust located in areas that does not put users at risk with in relation to the busy road. Furniture to be readily available and easily maintained.
- The street is to have raised kerbs with traditional side entry pits to which the water run off will fall to with the assistance of a crowned road surface.
- Maximises opportunities for branding/creating sense of arrival through use of banner light poles and additional customisation of standard furniture selections
- Consider change in tree species where streetscape interfaces with POS
- Clear delineation between cycle path and pedestrian footpath required.

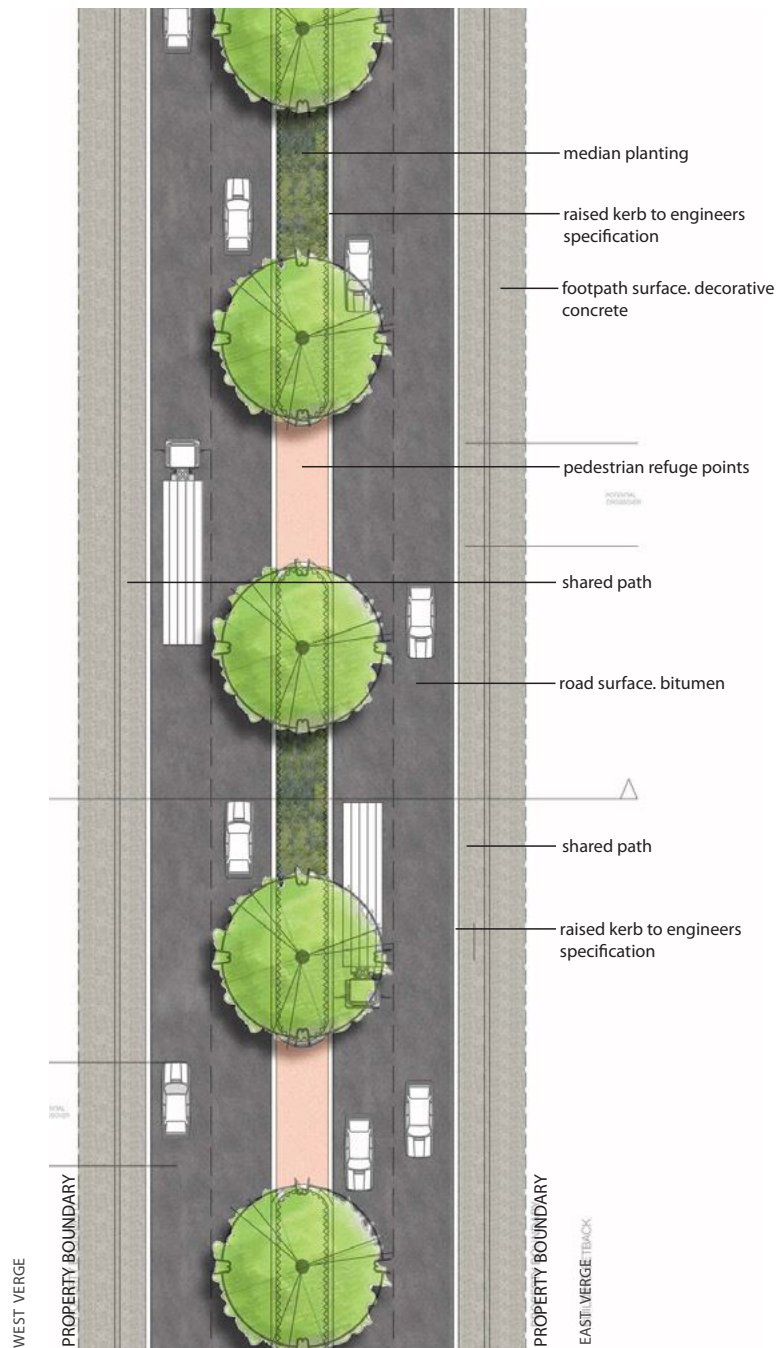
Cockburn Road will be the main north/south connector throughout the development and needs to be considered with regards to traffic speeds, pedestrian crossings, maximising traffic visual and noise reductions, and entry into the Robb Jetty and Hilltop precincts.



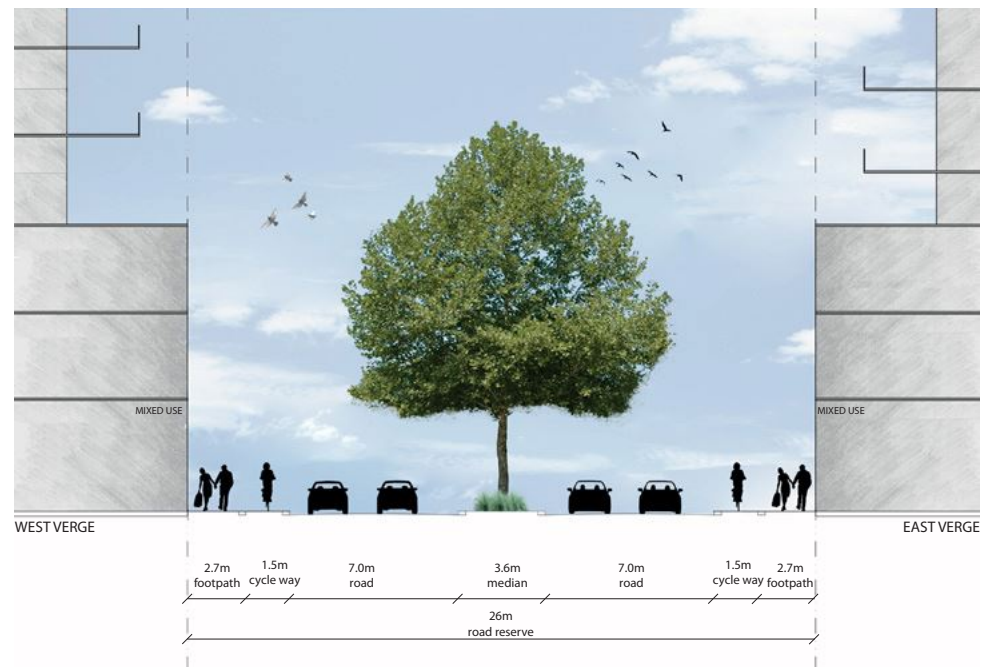
location plan



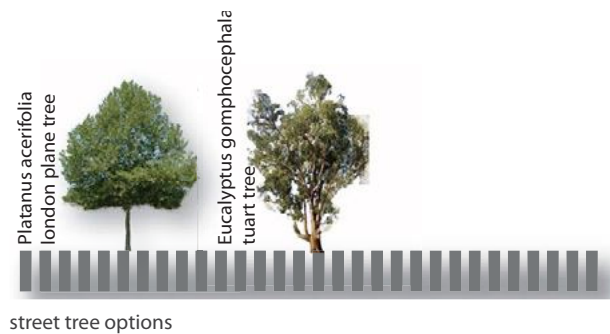
vibe images



Cockburn Road Mixed Use Zone - Typical Plan



Cockburn Road Mixed Use Zone - Typical Section



street tree options



ROBB JETTY
PRECINCT



(C) TYPOLOGIES_STREETSCAPES

2.9 Cockburn Road_POS Zone

Cockburn Road is to be a robust connector road that incorporates the following principles:

- Tree selections that provide a distinct feel to the street
- Limited under-story planting restricted to median strip, and alternates with zones aimed at providing a safe zone for pedestrians as they cross the street
- Has generous shared surfaces either side of the street to allow for informal pedestrian and casual cyclists to utilise the street
- Furniture is to be robust located in areas that does not put users at risk with in relation to the busy road. Furniture to be readily available and easily maintained. The street is to have raised kerbs with traditional side entry pits to which the water run off will fall to with the assistance of a crowned road surface.
- Maximises opportunities for branding/creating sense of arrival through use of banner light poles and additional customisation of standard furniture selections
- Considers interface with District Park and how to provide visual amenity in creating a gateway into the precinct.
- Clear delineation between cycle path and pedestrian footpath required.

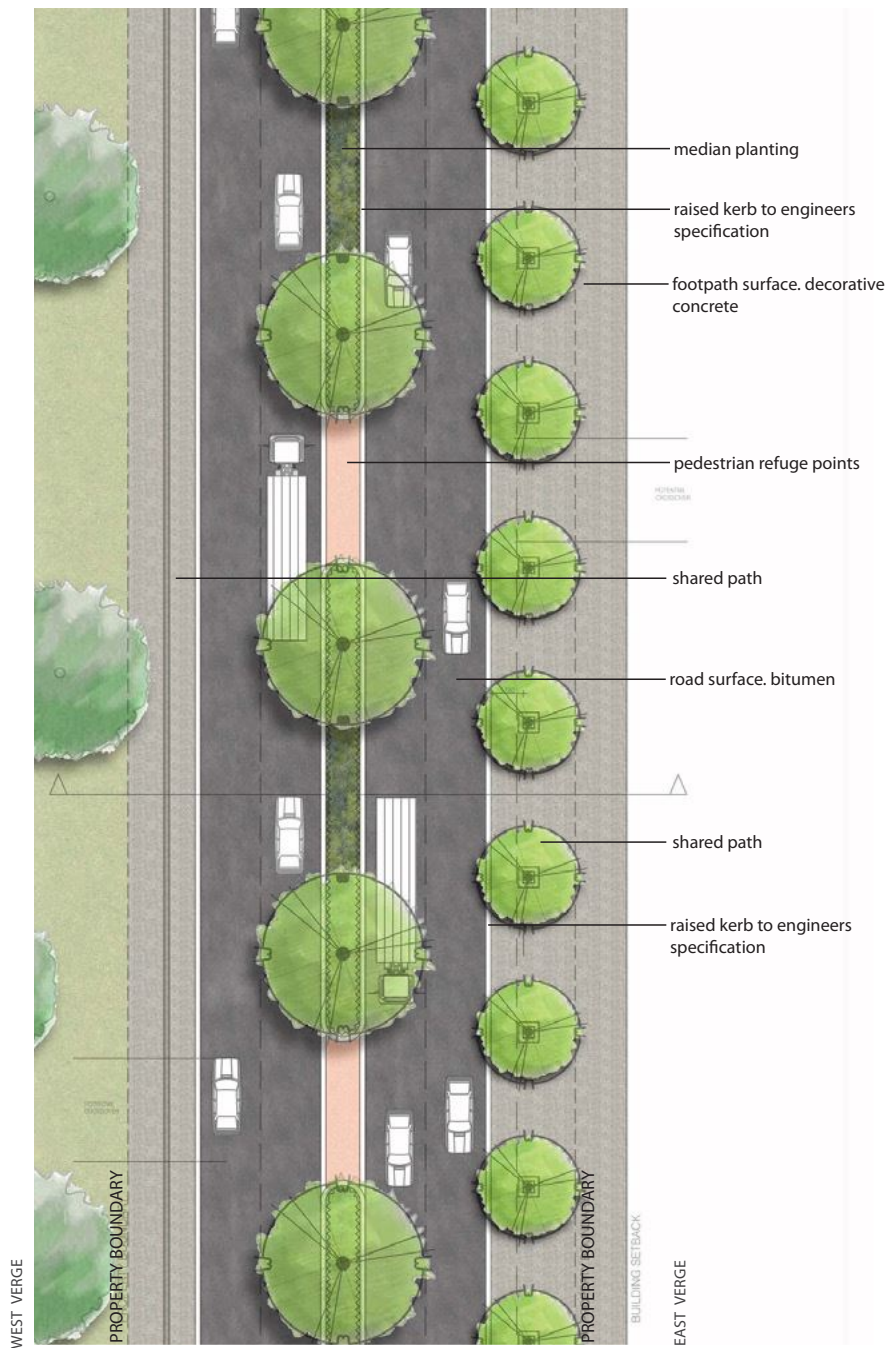
Cockburn Road will be the main north/south connector throughout the development and needs to be considered with regards to traffic speeds, pedestrian crossings, maximising traffic visual and noise reductions, and entry into the Robb Jetty and Hilltop precincts.



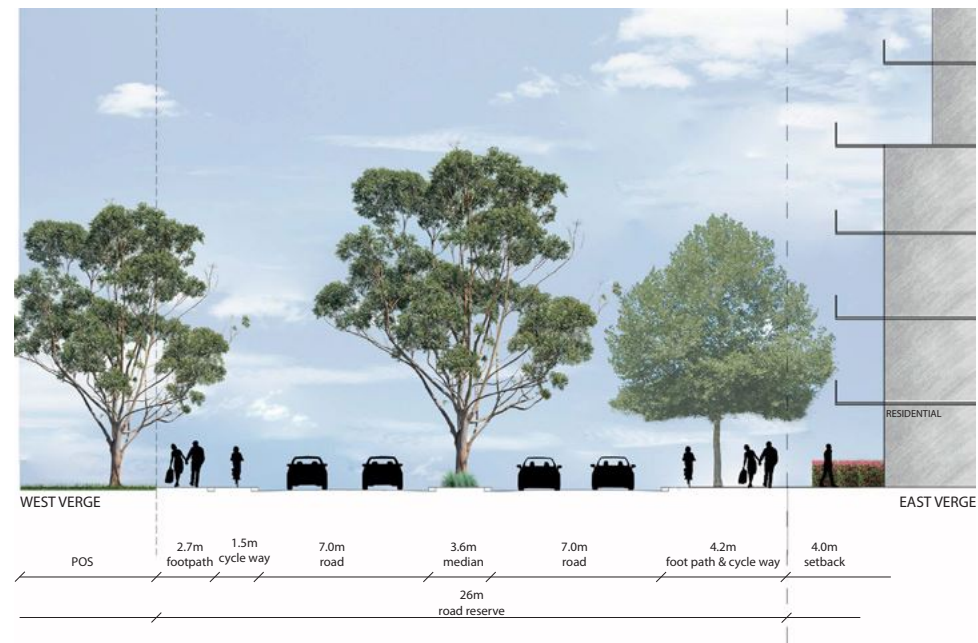
location plan



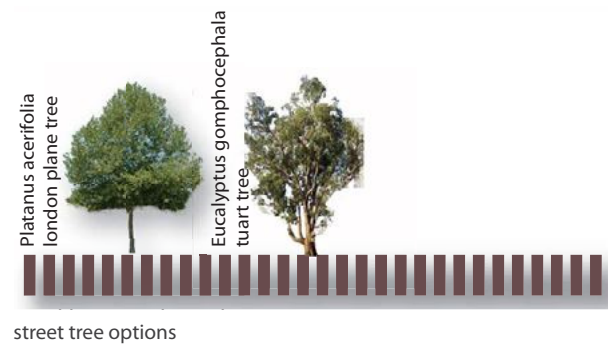
vibe images



Cockburn Road POS Zone - Typical Plan



Cockburn Road POS Zone - Typical Section





(C) TYPOLOGIES_STREETSCAPES

2.10 Green Street_North

The Green Street_North are north/south running streets that incorporate the following principles:

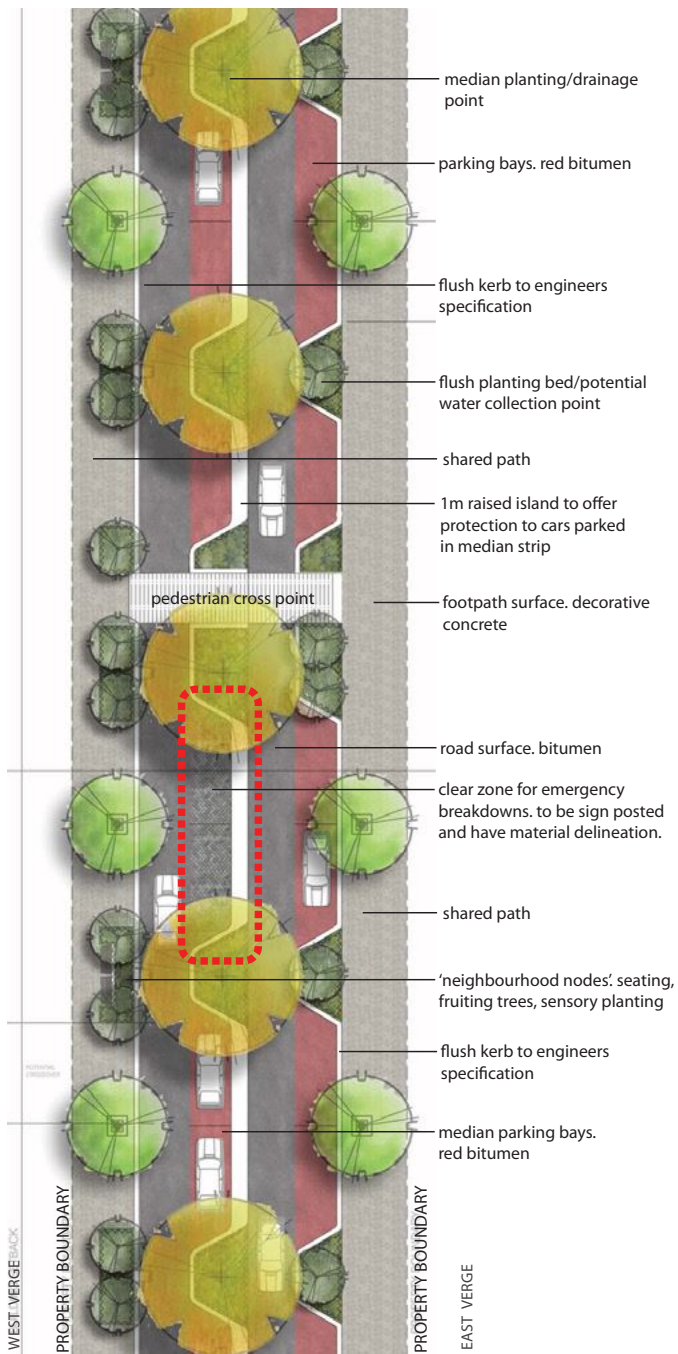
- Median street tree selections that provide a distinct feel to the street
- Supplementary tree species selected from a suite of trees that help create 'neighborhood nodes'.
- To consist of 'neighbourhood nodes' which include sensory and edible experiences through the selection of tree and plant species, and furniture selections that allow habitable zones which promotes ownership of the street
- Implements strong water sensitive urban design principles
- Has generous shared surfaces either side of the street to allow for informal pedestrian and casual cyclists to utilise the street
- Parking bays located in median zone which helps promote a low speed environment. Parking bays to be a minimum of 3.0m wide to allow for car door swings.
- Has raised and segmental kerb located in median that allows for water run off to tree wells and assists with directional parking.
- Furniture to be robust, readily available and easily maintained.
- Consider change in tree species where streetscape interfaces with POS
- Ensure sightlines lines are not compromised by planting heights at pedestrian crossing points.
- Clear zones required in the event of a breakdown. These allow traffic to overtake in specific locations



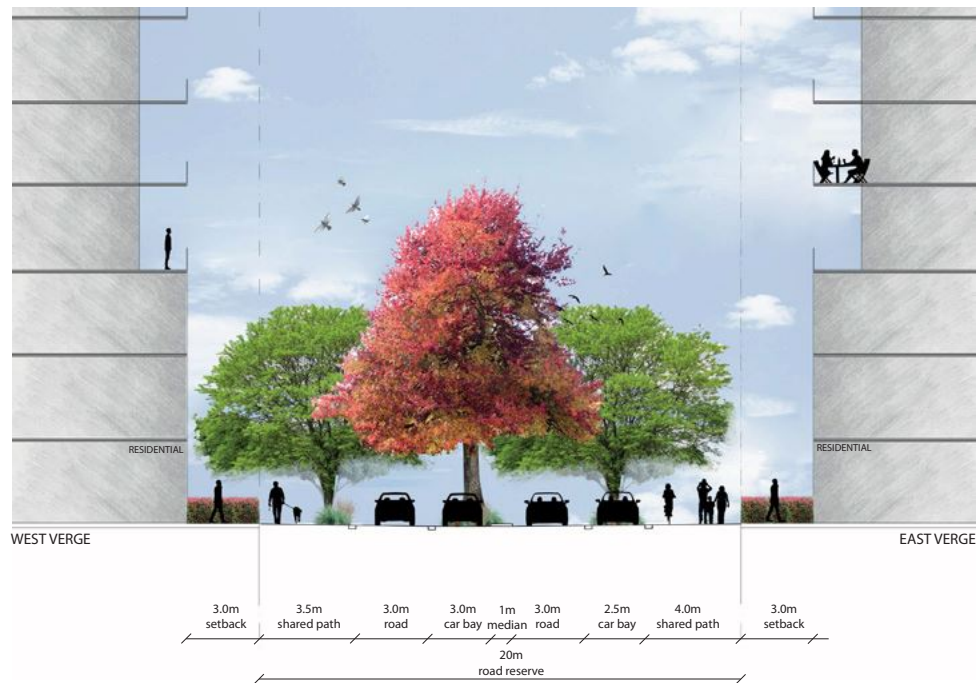
location plan



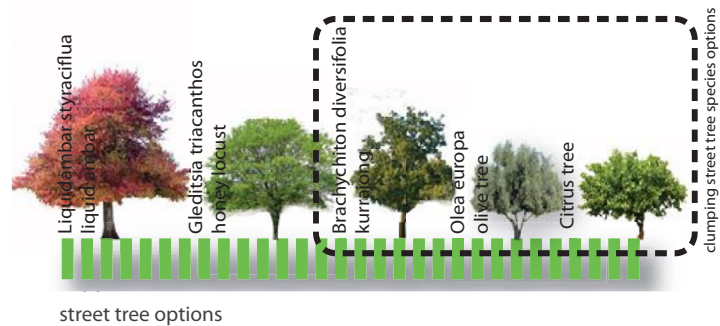
vibe images



Green Street - Typical Plan



Green Street - Typical Section





(C) TYPOLOGIES_STREETSCAPES

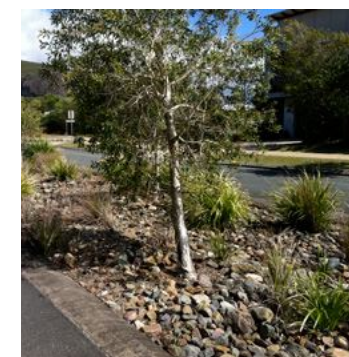
2.11 Green Street South

The Green Street_South are north/south running streets that incorporate the following principles:

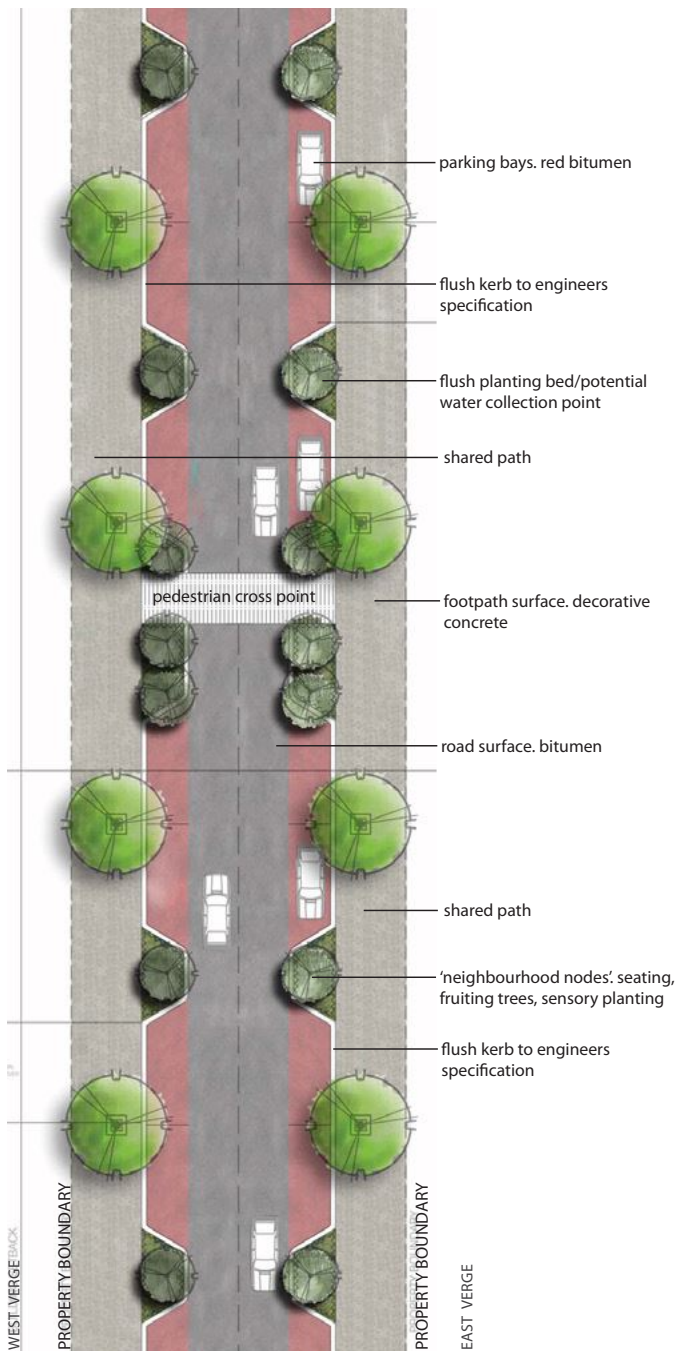
- Tree species selected from a suite of trees that help create 'neighborhood nodes'.
- To consist of 'neighbourhood nodes' which include sensory and edible experiences through the selection of tree and plant species, and furniture selections that allow habitable zones which promotes ownership of the street
- Implements strong water sensitive urban design principles
- Has generous shared surfaces either side of the street to allow for informal pedestrian and casual cyclists to utilise the street
- Parking bays located both sides of the street which helps promote a low speed environment.
- Has raised and segmental kerb located in median that allows for water run off to tree wells and assists with directional parking.
- Furniture to be robust, readily available and easily maintained.
- Consider change in tree species where streetscape interfaces with POS
- Ensure sightlines lines are not compromised by planting heights at pedestrian crossing points.



location plan



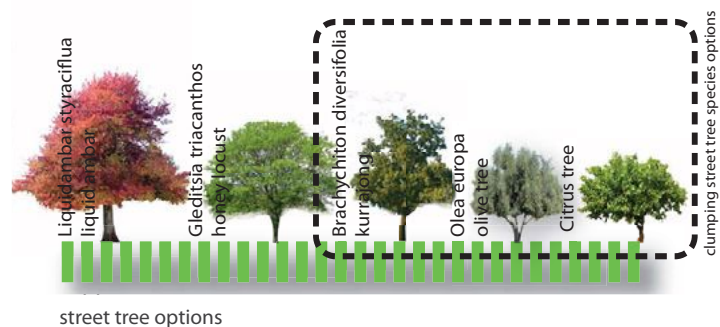
vibe images



Green Street South - Typical Plan



Green Street - Typical Section



street tree options



ROBB JETTY
PRECINCT

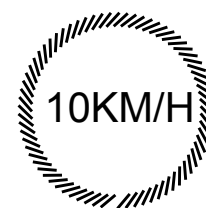


(C) TYPOLOGIES_STREETSCAPES

2.12 POS Street

The POS Street is west/east running street that interfaces with the Green Link POS and incorporates the following principles:

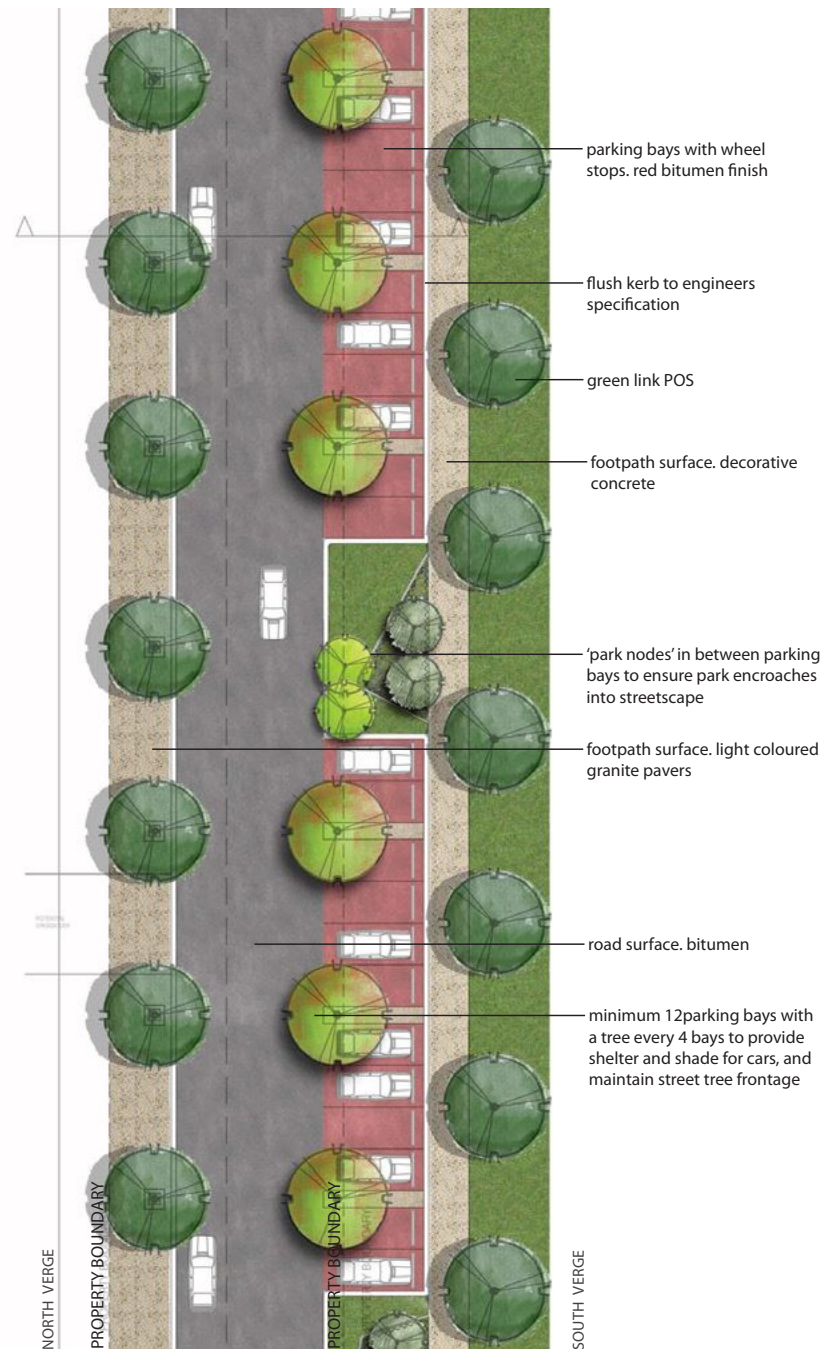
- Street tree selections that provide a distinct feel to the street
- Supplementary tree species selected from a suite of trees that help create a distinct Western Australian feel to the street.
- Has 'park nodes' inter-dispersed between parking bays to ensure the park condition is brought to the streetscape.
- Parking bays to be allocated in minimum of 12 bays with a tree integrated every 4 bays to provide shading and help create a parkland feel along the street.
- Surface treatment is to be of a high quality to assist in creating a streetscape hierarchy within the precinct.
- Furniture to be robust, readily available and easily maintained.
- Ensure sightlines lines are not compromised by planting heights in 'park nodes'.



location plan



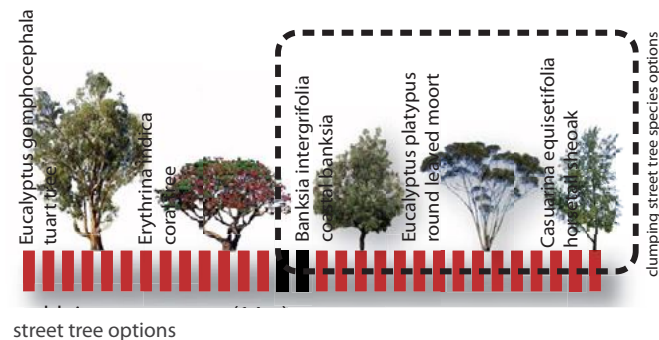
vibe images



POS Street - Typical Plan



POS Street - Typical Section



street tree options





(C) TYPOLOGIES_STREETSCAPES

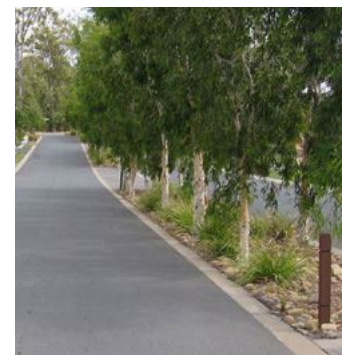
2.13 Robb Jetty Local Street 1

The Robb Jetty Local Street 1 is west/east running street that incorporates the following principles:

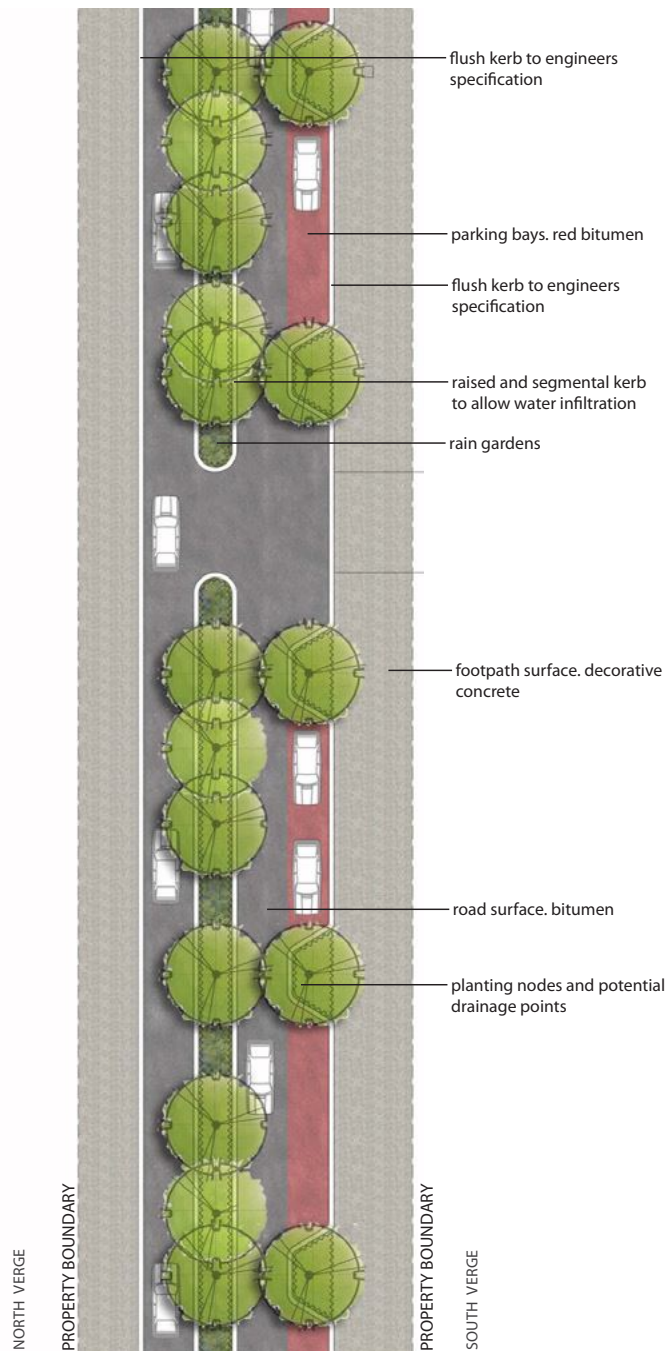
- Is a shared street with central median and allows for water run off through the implementation of a raised and segmented kerb.
- Street tree and median tree selections that provide a distinct feel to the street. Median trees should be clustered together to create a more informal feel in the street.
- Adequate parking bays allocated on south side of street, in between tree planting nodes.
- Furniture to be robust, readily available and easily maintained.
- Implements strong water sensitive urban design principles



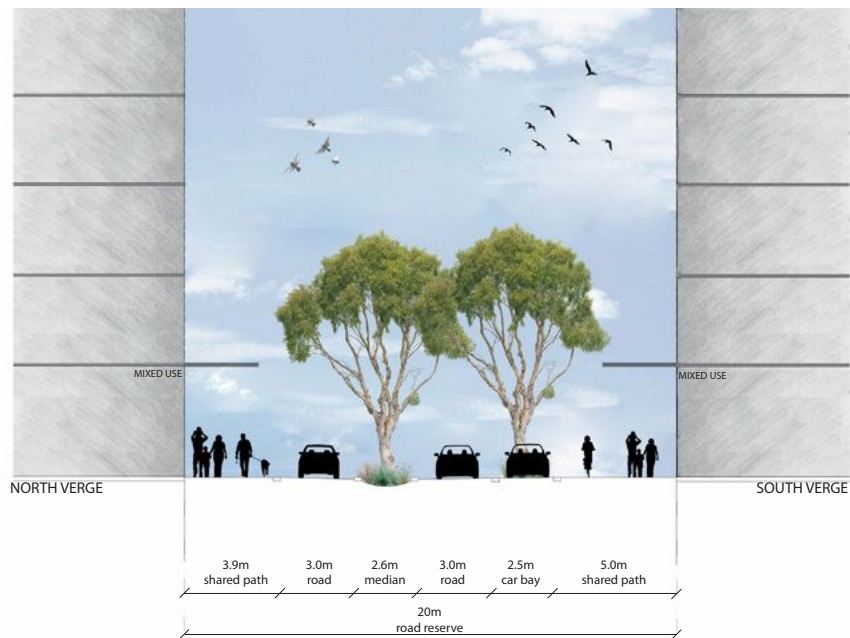
location plan



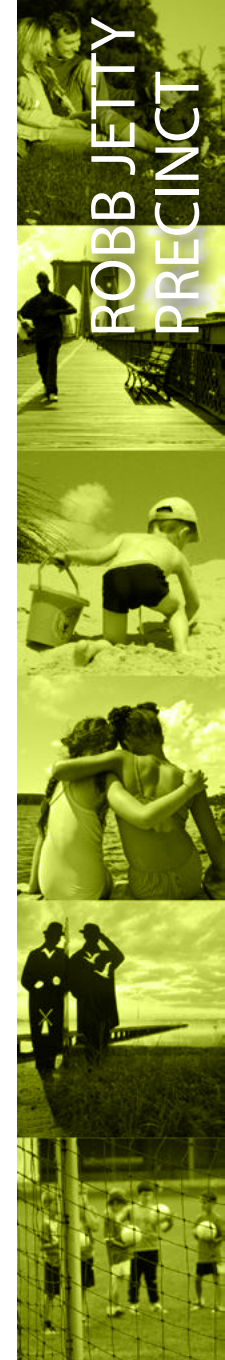
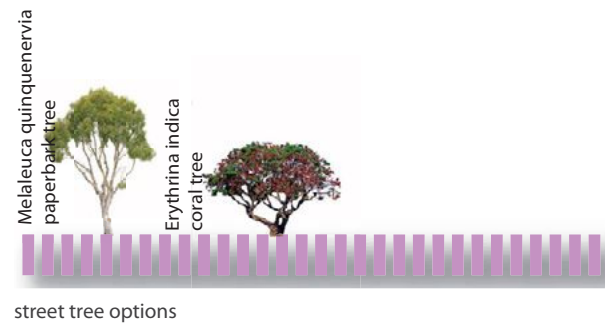
vibe images



Robb Jetty Local Street 1 - Typical Plan



Robb Jetty Local Street 1 - Typical Section



ROBB JETTY
PRECINCT

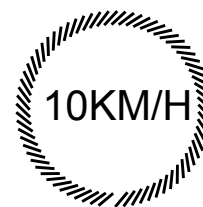


(C) TYPOLOGIES_STREETSCAPES

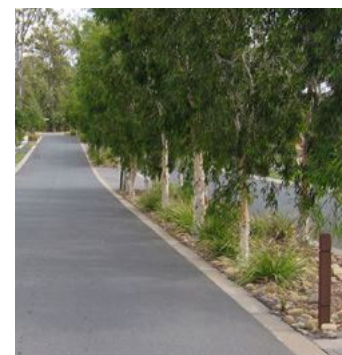
2.14 Robb Jetty Local Street 2

The Robb Jetty Local Street 2 are west/east running streets that incorporate the following principles:

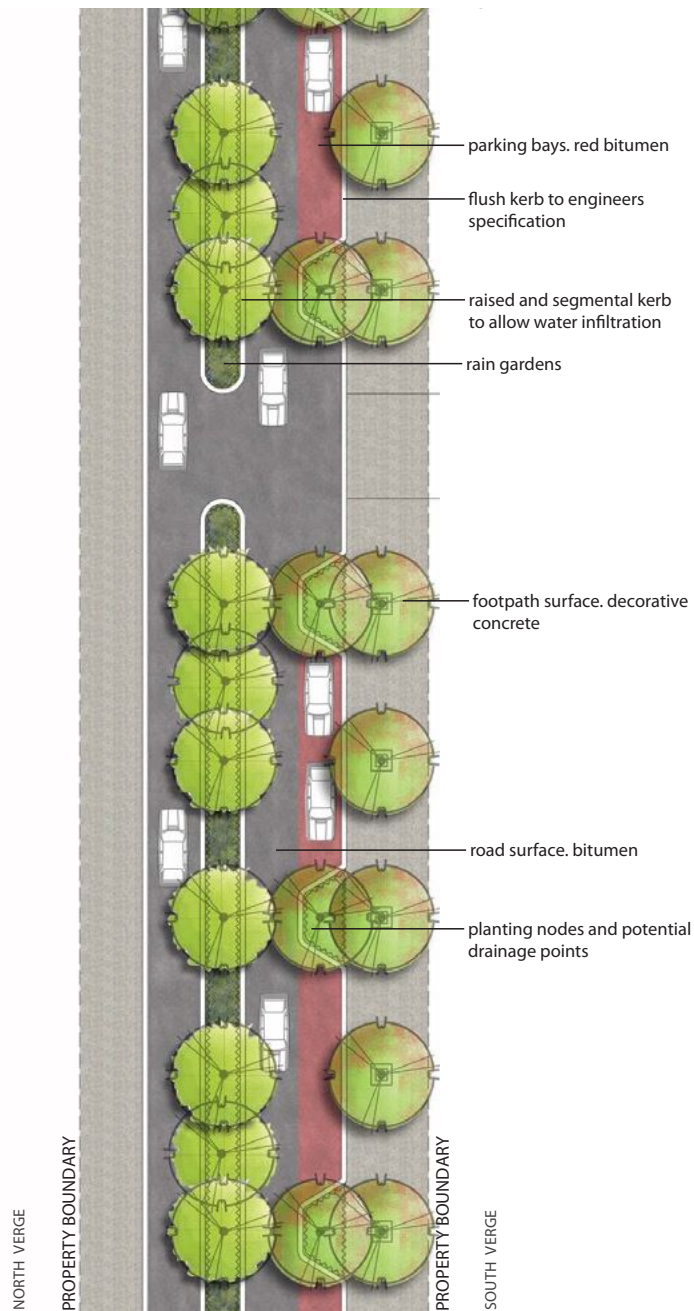
- Are shared streets with central medians and allow for water run off through the implementation of raised and segmented kerbs
- Street tree and median tree selections provide a distinct feel to the street. Median trees should be clustered together to create a more informal feel in the street.
- Adequate parking bays allocated on south side of street, in between tree planting nodes.
- Furniture to be robust, readily available and easily maintained.
- Implements strong water sensitive urban design principles



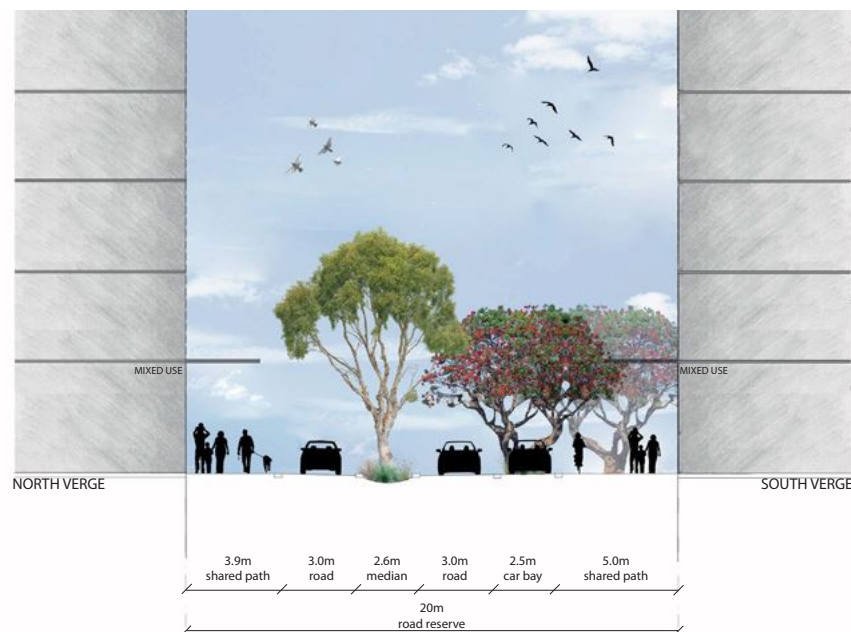
location plan



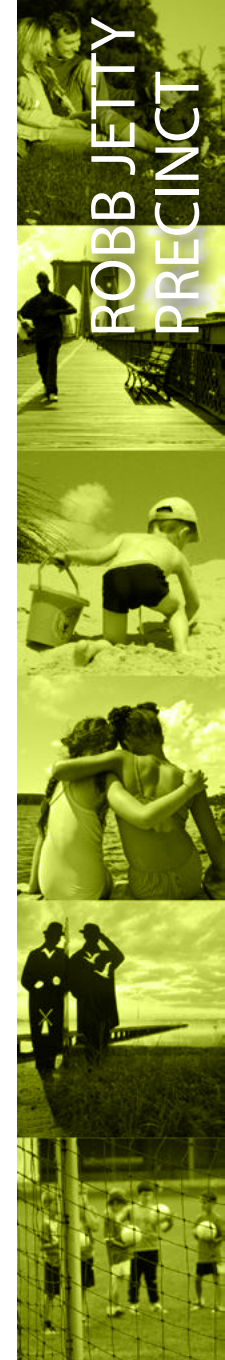
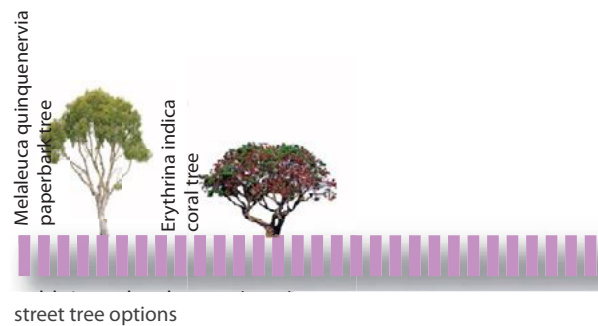
vibe images



Robb Jetty Local Street 2 - Typical Plan



Robb Jetty Local Street 2 - Typical Section



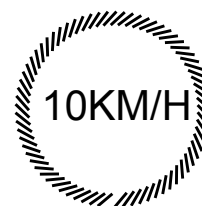


(C) TYPOLOGIES_STREETSCAPES

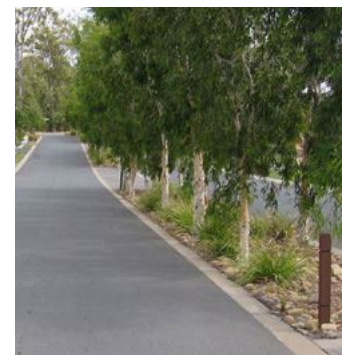
2.15 Robb Jetty Local Street 3

The Robb Jetty Local Street 3 are west/east running streets that incorporate the following principles:

- Are low speed environments with car bays allocated to the southern verge, with street trees located in between the car bays.
- Street tree selection provide a distinct feel to the street.
- Road to be crowned with semi-mountable kerbs installed to assist with water run off.
- Furniture to be robust, readily available and easily maintained.
- Implements strong water sensitive urban design principles



location plan



vibe images

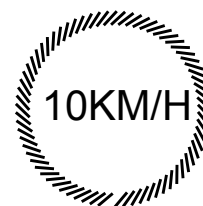


(C) TYPOLOGIES_STREETSCAPES

2.16 Robb Jetty Railway Road

The Robb Jetty Railway Road is a unique section of north/south running street that is located adjacent to the railway reserve. It incorporate the following principles:

- Is a shared street with custom design elements to create a unique streetscape environment within the precinct, and has strong visual connections to the railway reserve
- Street tree selections provide a distinct feel to the street.
- Understorey planting selections that provide a visual link to the western side of the railway track and dunal system beyond.
- Paving patterns that pick up on the rhythm and character of the railway tracks
- Resting nodes that allow for visual interaction with the rail reserve and adjacent railway corridor.

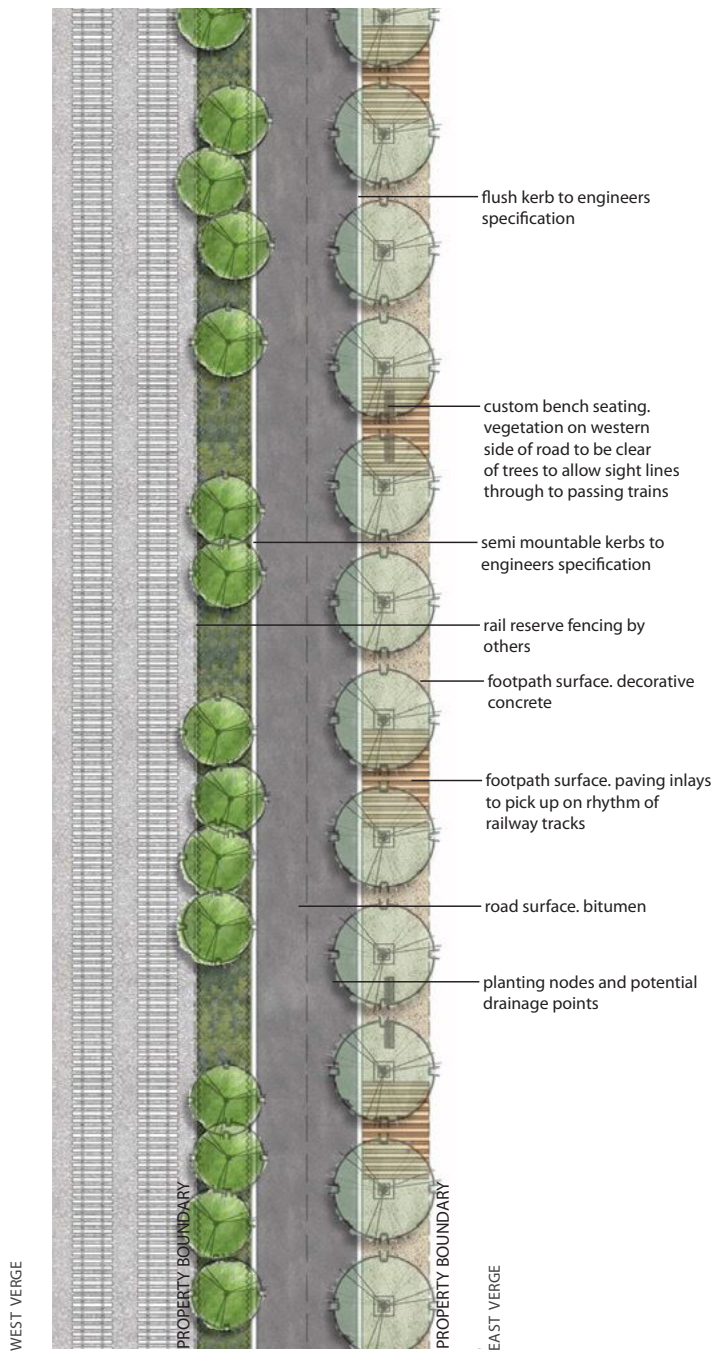


location plan

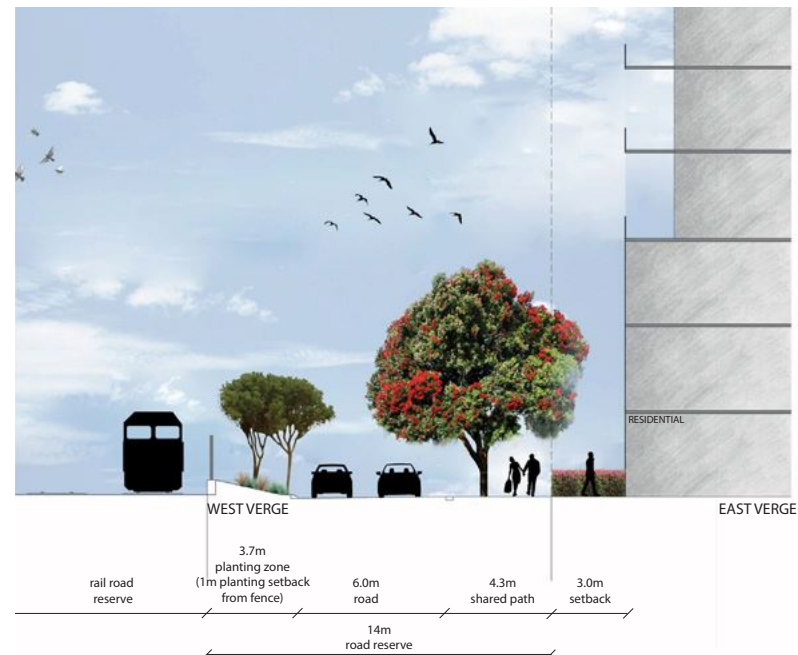


vibe images

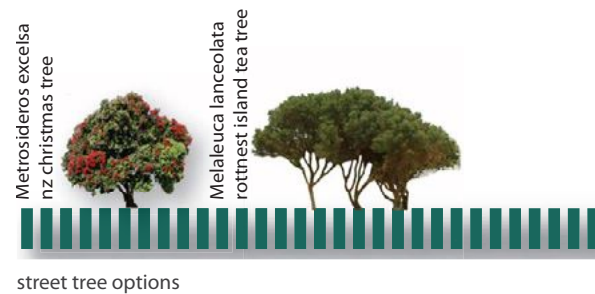




Robb Jetty Railway Road - Typical Plan



Robb Jetty Railway Road - Typical Section



street tree options



ROBB JETTY
PRECINCT



(C) TYPOLOGIES_STREETSCAPES

2.17 Rollinson Road East

Rollinson Road East is an east/west running portion of road that incorporates the following principles:

- Street tree selections that provide a distinct feel to the street and act as an entry marker into the precinct.
- Supplementary tree species selected from a suite of trees that help create a distinct Western Australian feel to the street.
- Furniture to be robust, readily available and easily maintained.

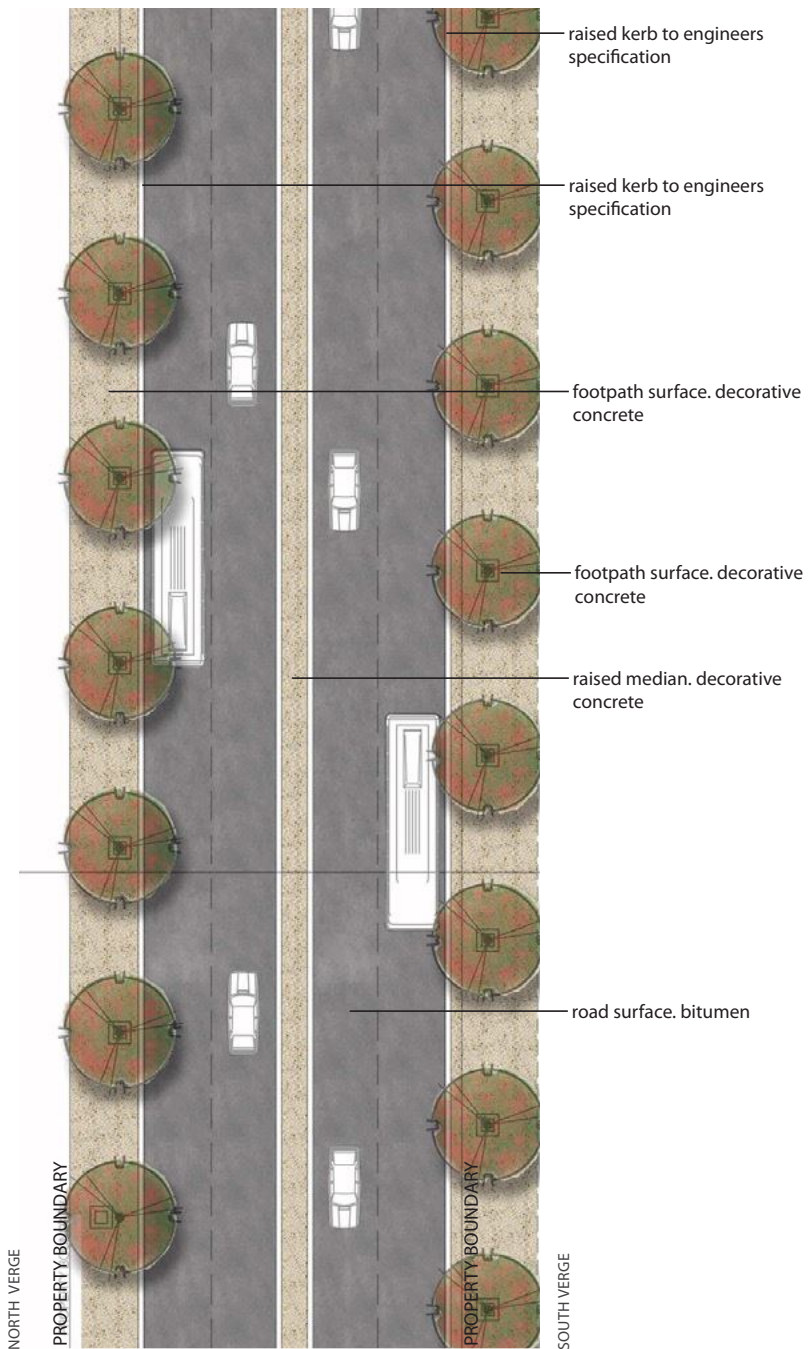
An important aspect of the streetscape is the interface with Cockburn Road. This will be a busy intersection with limited opportunity for landscape intervention. However, every opportunity should be taken to assist in creating a habitable, safe pedestrian environment through surface material changes, branding opportunities and traffic calming measures.



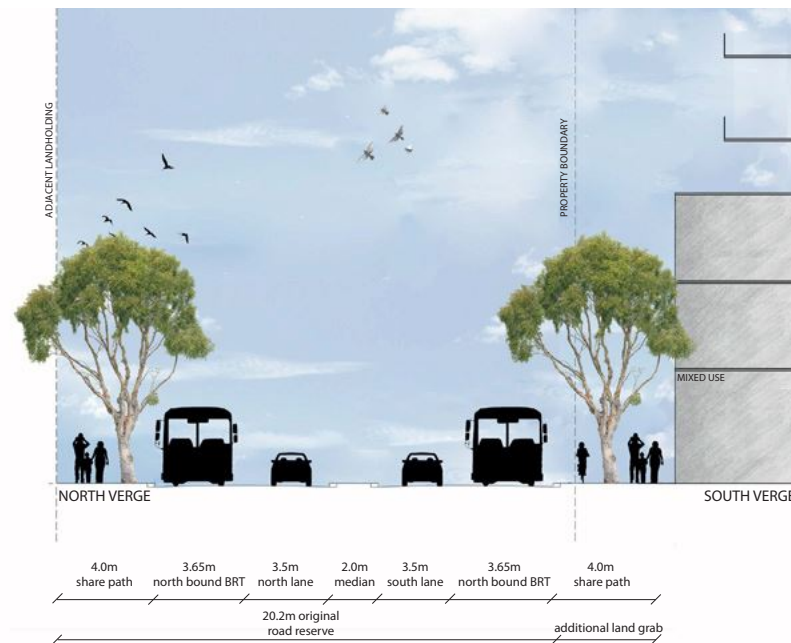
location plan



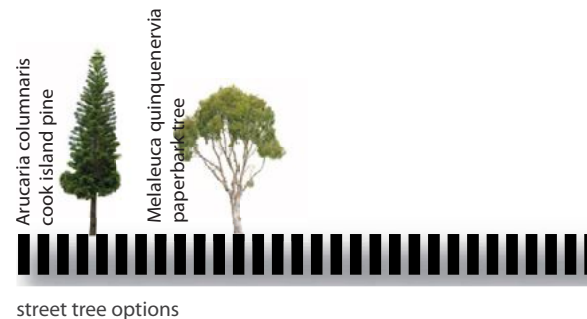
vibe images



Rollinson Road East - Typical Plan



Rollinson Road East - Typical Section



street tree options



ROBB JETTY
PRECINCT



(C) TYPOLOGIES_STREETSCAPES

2.18 Rollinson Road West

Rollinson Road West is an east/west running portion of road that incorporates the following principles:

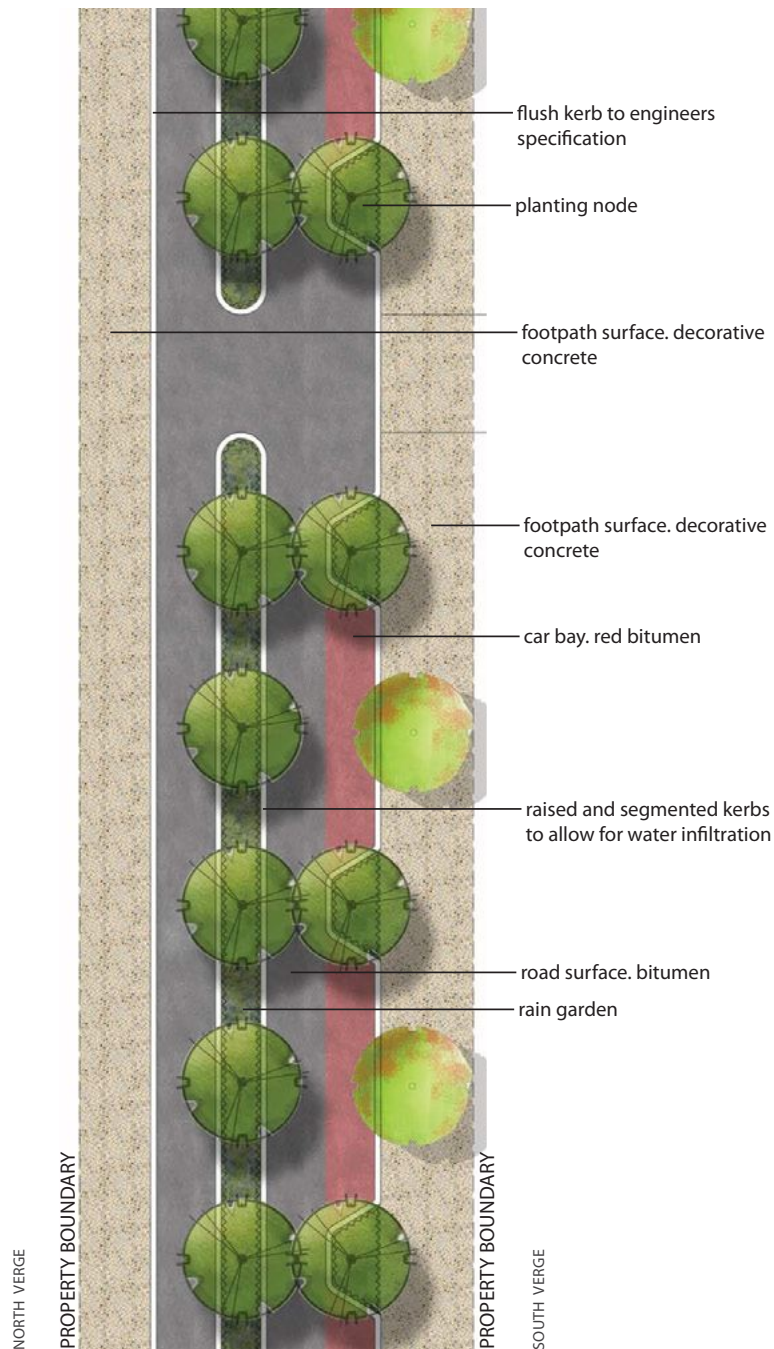
- A shared street surface with a central median that allows for water run off through the implementation of raised and segmented kerbs
- Street tree and median tree selections provide a distinct feel to the street.
- Adequate parking bays allocated on south side of street, in between tree planting nodes.
- Furniture to be robust, readily available and easily maintained.
- Implements strong water sensitive urban design principles



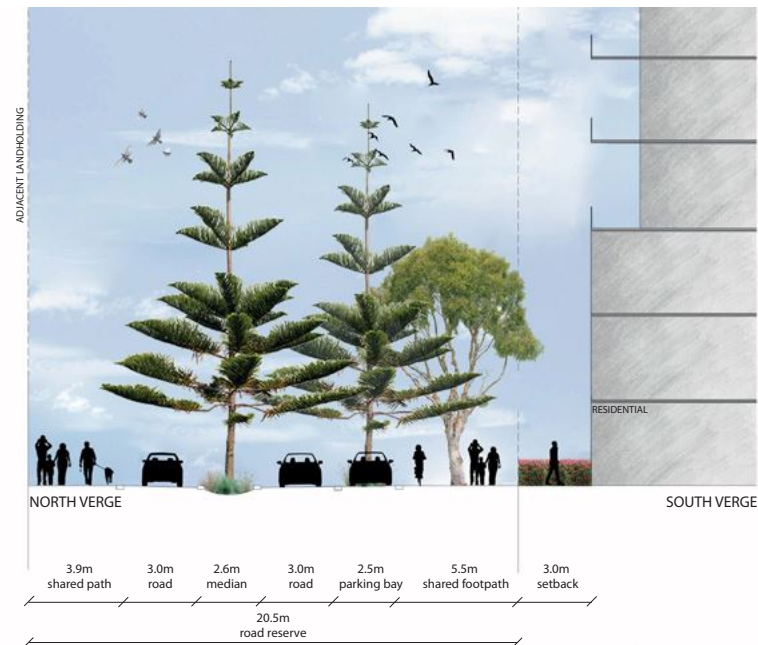
location plan



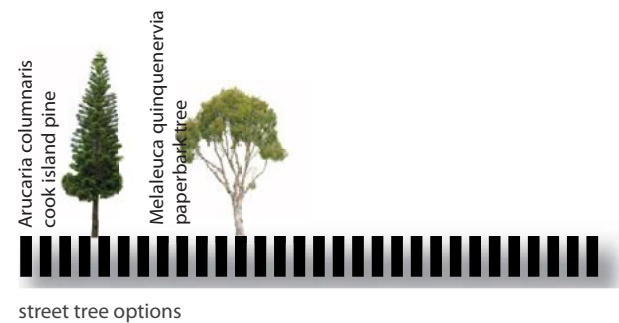
vibe images



Rollinson Road West - Typical Plan



Rollinson Road West - Typical Section



street tree options



ROBB JETTY
PRECINCT



(C) TYPOLOGIES_STREETSCAPES

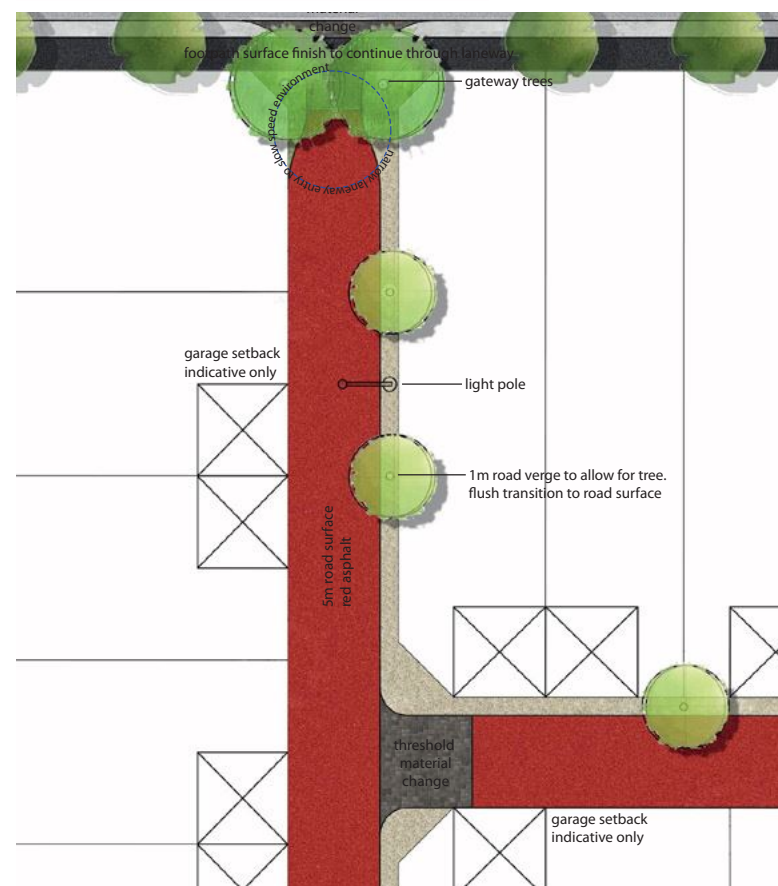
2.19 Lane ways

The Lane ways located in the Robb Jetty precinct are to incorporate the following principles:

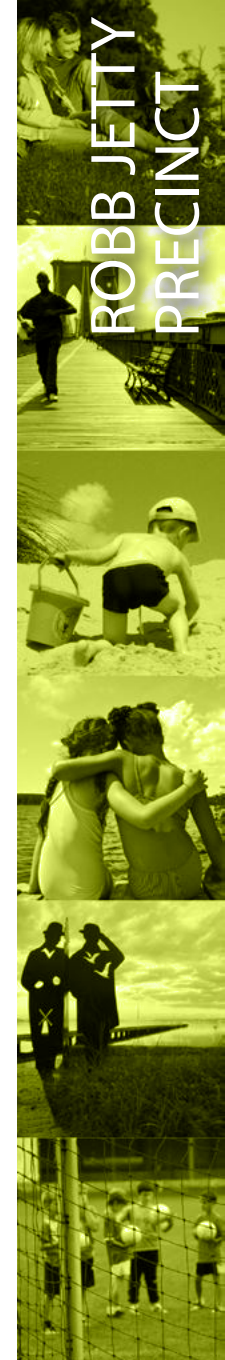
- Street tree selections provide a distinct feel to the lane ways.
- Lane way entry off street to be narrow as a traffic calming device
- Gateway trees to be located at entry of lane way to establish sense of arrival
- Implements strong water sensitive urban design principles
- 1m road verge where laneway tree will be located.
- Flush transition between road surface and road verge.
- Garage setbacks are indicative only.
- Tree species to be agreed at Design Development phase
- Traffic calming measures to be considered throughout the Design Development phase of the project.



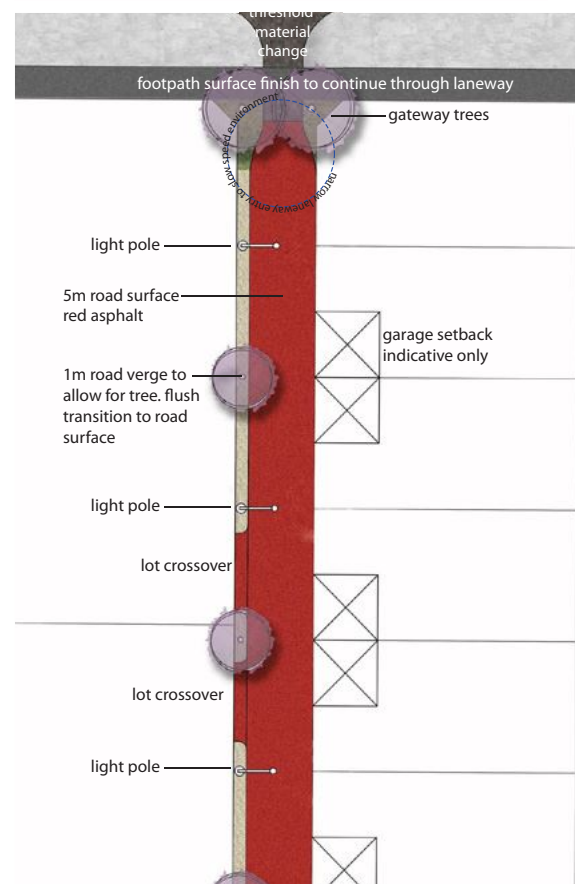
location plan



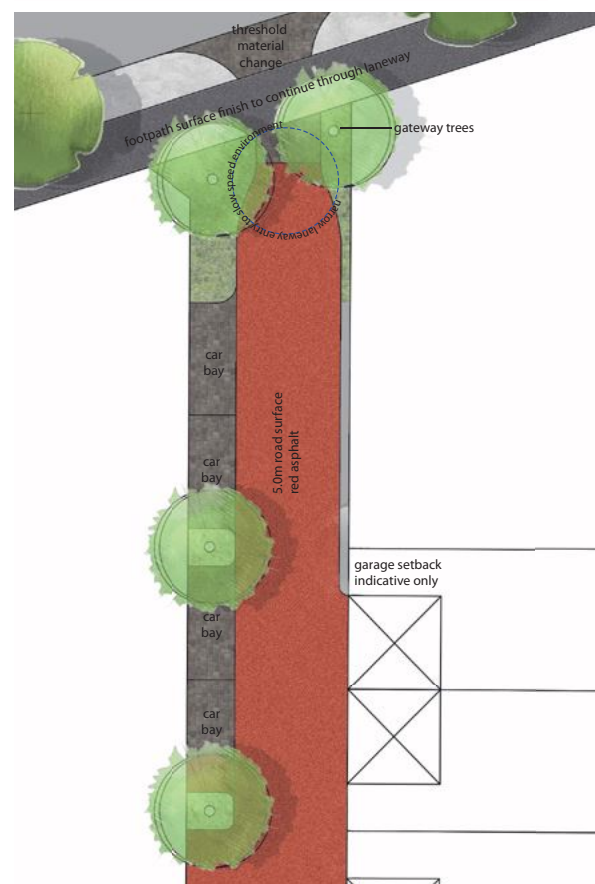
typical 6m lane way



ROBB JETTY PRECINCT



typical 6m lane way



typical 8.5m lane way



(C) TYPOLOGIES_STREETSCAPES

2.19 Surface Treatment Changes

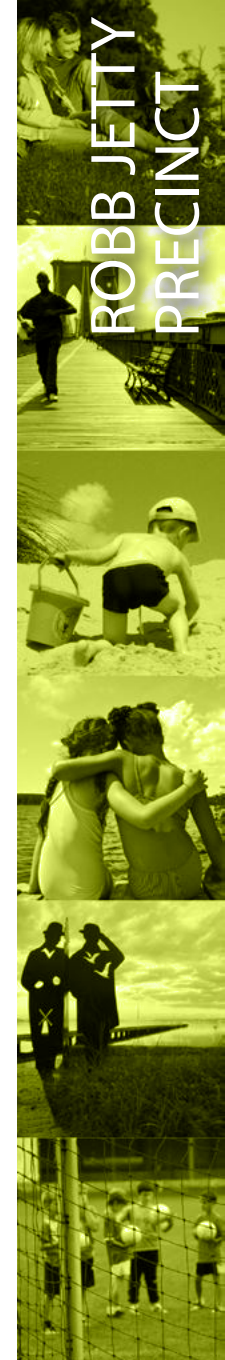
Design Intent

Surface materials changes should be considered at the following street junctions:

1. Robb Jetty Main Street/Cockburn Road_change of surface material to signify entry onto Main Street and create gateway into Robb Jetty Precinct.
2. Green Link/Cockburn Road_change of surface material to signify entry to Cockburn Coast development on arrival from Fremantle.
3. Green Link Plaza_BRT Local Road_change in surface material to signify change from street to POS, to enforce a low speed environment, and to create a landscape hierarchy over transport hierarchy.
4. Green Link/Green Streets_change in surface material to signify the arrival at the POS.
5. BRT Local Road/Rollinson Road_change in surface material to signify the entry on/off the BRT Local Road.



surface treatment changes location plan



3.1 POS Typologies

Design Intent

The POS typologies have been developed as a response to the functional, overall thematic, and individual precinct requirements within the development.

Each POS typology is distinct to itself in terms of its functional requirements, with a standard aesthetic requirement to be achieved within each POS area.

The POS typologies have been designed in conjunction with the following principles:

- Response to heritage elements
- Response to drainage requirements
- Response to soil contaminants
- Response to built form and building use
- Public transport infrastructure and network
- Functionality requirements
- Pedestrian and cyclist networks
- POS Tree Hierarchy
- Material selections
- Proprietary and custom furniture selections
- Planting palettes
- On street parking solutions
- Way finding and signage
- Public Art Strategy
- Water Sensitive Urban Design Principles
- Precinct theming strategies
- Exercise networks



POS typologies location plan



(C) TYPOLOGIES_POS

3.2 POS Functionality

Functionality allocation

The functionality and amenity assigned to each POS is a refinement of the allocated amenity in Place Partner's 'Cockburn Coast Place Making Strategy' Document (March 2012).

Functionality and amenity allocation has been determined by the following factors:

- existing amenity
- historical/heritage considerations
- areas intended for high use/gathering hubs
- proximity to population density
- proximity to public transport links
- proximity to similar amenity
- proximity to building occupation



bbq area



bicycle track



cafe



dedicated dog park



exercise station



horse exercise location



kickabout area



lookout



play ground



shelter



swimming area



toilets/change rooms



skate park



playground



adventure
playground



outdoor bocce



water play



outdoor
table tennis

POS ACTIVATORS



community
gardens



community
gardens

COMMUNITY AMENITY



bicycle
racks



pavillion
structure



pavillion
structure



beachside
vernacular



beachside
vernacular



gathering on
boardwalks



eco-underpass



beach kiosk/
cafe vernacular



ground plane
reflective water feature

BUILT ELEMENTS IN POS



bosque/plaza



bosque/plaza



alfresco dining

POS PLACE MAKERS





(C) TYPOLOGIES_POS

3.3 Beach side Plaza

The Beach side Plaza is located to the western end of the Robb Jetty Main Street and is to be a major destination within the development.

The plaza will be considerate of the existing condition of the coast line and look to enhance rehabilitation and ecoscapes; whilst providing a combination of habitable, nestled and protected spaces and habitable, open, robust spaces with significant outlook towards the ocean.

The plaza will be flexible in its functionality, and provide adequate space for pop up events, markets, community gatherings, cafes, change rooms and shelters. The spaces should be designed so that it feels habitable in varying weather conditions and intensity of usage.

Furniture and material selections will be both proprietary and custom. They should be robust, vibrant, sculptural and enhance the overall themes outlined.

Special consideration should be given to how the plaza links back to Robb Jetty Main Street through common materials and visual queues.

Parking is to be provided in the Railway Corridor to the south of Main Street, therefore enhancing the need for considered design from the Main Street to the Beach side Plaza.



beach side plaza_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



beach side plaza_general arrangement





(C) TYPOLOGIES_POS

3.4 District Park

The District Park will be designed in conjunction with the City to determine specific functional and spacial requirements of the area.

The general arrangement plans demonstrate the flexibility of the site, and include the following amenity:

- Sports oval fit for use by local sporting clubs
- Club rooms
- Parking
- Basketball and tennis courts
- Playground
- Lighting

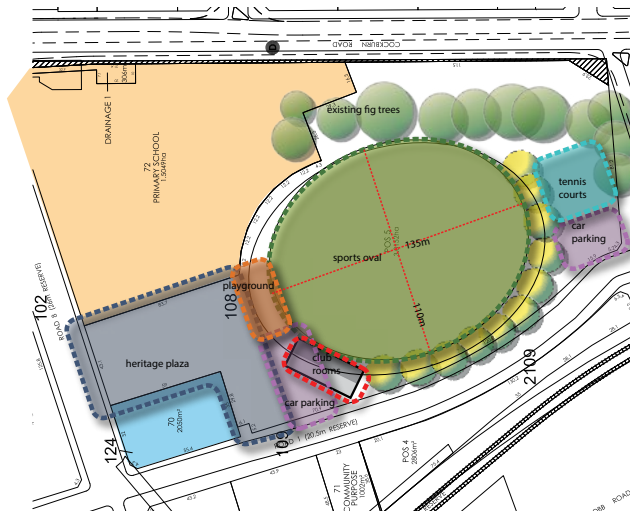
The following items should be considered throughout the design phase of the District Park:

- Proximity to heritage listed fig trees
- Proximity to primary school
- Proximity to BRT Local Street
- Number of parking bays required
- Drainage requirements
- Size of oval required
- Requirement for 525sqm of club room floor area
- Interface and protection of heritage listed chimney stack.
- Connectivity to Heritage Plaza
- Pedestrian overpass towards McTaggart Park.



district park_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



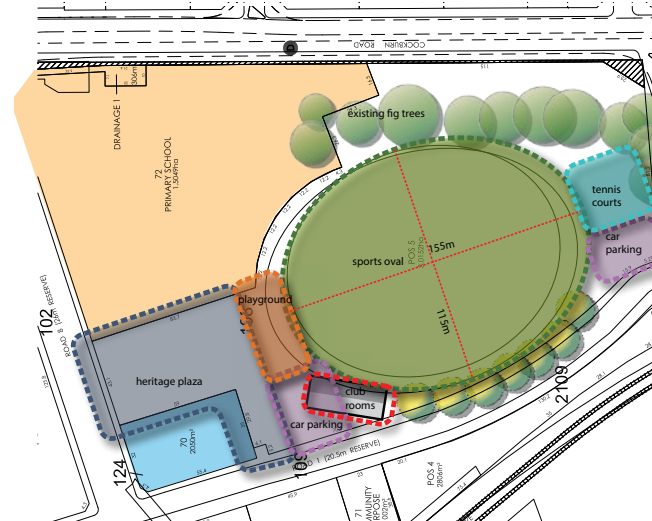
COCKBURN COAST_SPORTS PRECINCT GENERAL ARRANGEMENT
OPTION 1

PRO'S

1. Club rooms on 45 degree angle from oval. Best viewing option.
2. Car parking near club rooms helps activate heritage plaza.
3. Smaller oval size allows for adequate grading and space between all amenities.
4. Playground location potential shared use with school and heritage plaza.

CON'S

1. Smaller oval size not to City of Cockburn's preferences.
2. Playground behind football posts is potential hazard



COCKBURN COAST_SPORTS PRECINCT GENERAL ARRANGEMENT
OPTION 2

PRO'S

1. Larger oval size meets City of Cockburn's requirements.
2. Club room position of north west of oval allows for best viewing location.
3. Club rooms have adequate parking which will in turn help activate heritage plaza and playground.
4. Playground potential share use with school.

CON'S

1. Larger oval size make grading more difficult and less space for additional amenities such as tennis courts and parking.
2. Playground behind football posts creates potential hazard.

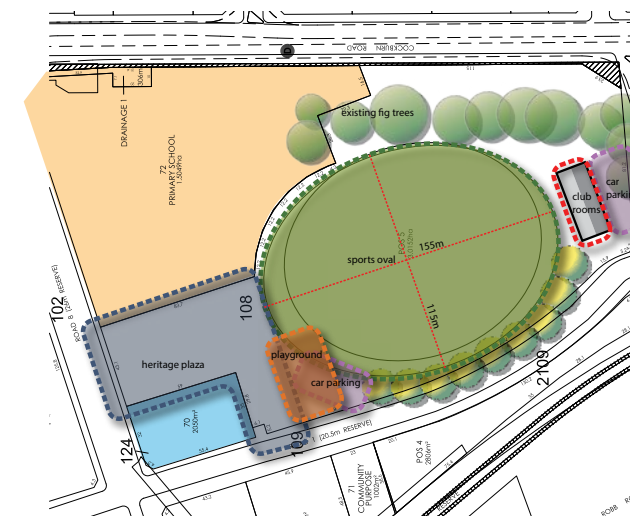
3.4 District Park

General Arrangement Option 1_smaller oval size with club rooms on north western edge, with car parking to north and south of oval, and additional sporting amenity such as tennis courts to the south.

General Arrangement Option 2_larger oval size with club rooms on north western edge, with car parking to north and south of oval, and additional sporting amenity such as tennis courts to the south.

General Arrangement Option 3_larger oval size with club rooms on southern edge, with car parking to north and south of oval.

Refer to specific notes of each option for more detail.



COCKBURN COAST_SPORTS PRECINCT GENERAL ARRANGEMENT
OPTION 3

PRO'S

1. Adequate parking located around club rooms.
2. Car parking to north west helps activate playground and heritage plaza.

CON'S

1. Larger oval size make grading more difficult and less space for additional amenities such as tennis courts and parking.
2. No tennis courts allowed for.
3. Club room location not ideal viewing position at south of oval.
4. Club rooms located at southern end of oval does not assist in helping to activate the heritage plaza.



ROBB JETTY
PRECINCT



TYPOLOGIES_POS

3.5 Heritage Plaza

The Heritage Plaza is located on Robb Jetty Main Street East and is to be a major destination within the development.

The plaza will embrace the rich history of the site and have a strong connectivity to both Robb Jetty Main Street and the BRT Local Street.

The plaza will provide varying amenity including alfresco dining, interpretive artwork, formal and informal gathering spaces, a sheltered pavilion that echoes the materiality of the existing heritage listed chimney stack. and a water play area that mimics the scale of the chimney stack and assists with the activation of the plaza.

Furniture and material selections will be both proprietary and custom designed and should be of a high quality, slim line, elegant and enhance the overall themes outlined.

Special consideration should be given to how the plaza links to the adjoining District Park, as well as the interface with potential bus stops on the BRT Local Street.

Tree species selections should be considerate of both the indigenous and european heritage of the site.



location plan



heritage plaza_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



heritage plaza_general arrangement





TYPOLOGIES_POS

3.6 West Green Link Park

The West Green Link Park is located the western end of the Green Link and is to be a major destination within the development.

The park will provide passage over the existing rail reserve through the implementation of a significant pedestrian bridge.

In addition, the park will house a considerable adventure playground to be located near the pedestrian bridge to assist with activating the park and providing a unique rail side interface.

There are to be significant areas allocate for kick around, shelters with associated bbq'ing facilities, outlook opportunities through the implementation of land berming, exercise stations as a part of a larger exercise network, and planted areas.

Furniture and material selections will be robust and enhancing of the overall themes outlined.

Special consideration needs to be considered to treatment of contaminated soils in this location as it will impact on the capacity to dig down into the existing levels.

Tree species selections should be predominately Western Australian to support the ecological corridor.



location plan



west green link park_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



west green link park_general arrangement





(C) TYPOLOGIES_POS

3.7 Green Link Plaza

The Green Link Plaza is located centrally along the Robb Jetty Green Link and serves as a gathering place along the BRT Local Street.

The plaza will provide a secure and safe zone that flanks the BRT Local Street, in turn helping activate the plaza.

The plaza will provide public amenity that promotes social gatherings as well as providing a functional aspect in serving the BRT Local Street through the implementation of bicycle racks, bus stops and waiting facilities.

Interactive and engaging elements such as outdoor bocce and table tennis with associated shelters will assist in activating the site, as will the implementation of a civic space and interactive artworks.

There are to be areas allocate for kick around, exercise stations as a part of a larger exercise network, and planted areas.

Furniture and material selections will be more refined compared to the rest of the Green Link, however will still enhance the overall themes outlined.

Tree species selections should be predominately Western Australian to support the ecological corridor, however the inclusion of european species will be considered to infer a point of difference along the entirety of the Green Link. Trees should be located with consideration of through views to the ocean.



green link plaza_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



green link plaza_general arrangement





(C) TYPOLOGIES_POS

3.8 Green Link West

Green Link West is the western portion of the Green Link and will primarily serve as a drainage basin with gathering places and pedestrian networks integrated within.

The POS will serve as an ecological corridor and as such the selection of the tree and planting species should primarily be limited to Western Australian endemic species.

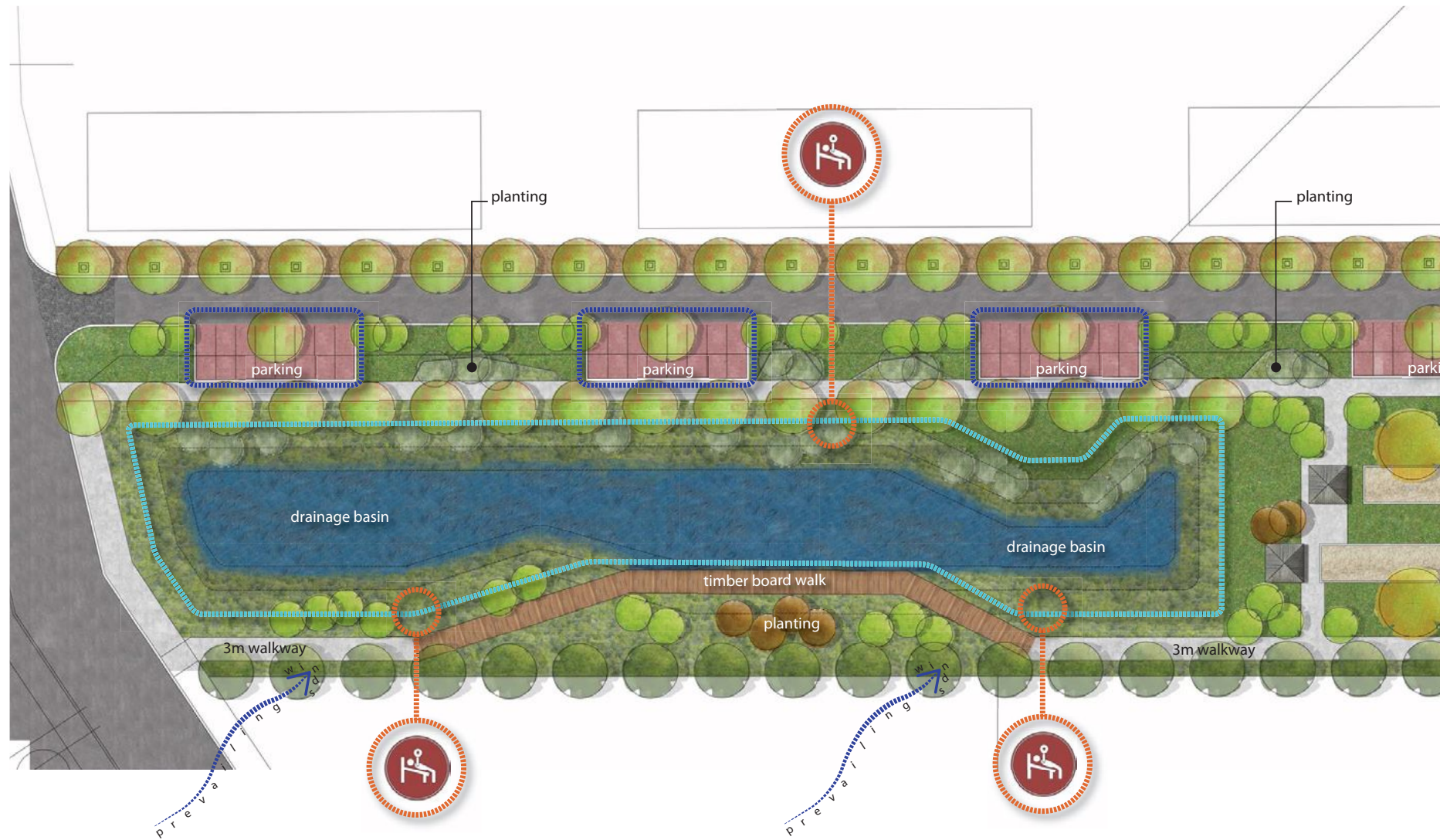
In addition, the park will integrate exercise stations as a part of a larger exercise network, small turf areas for gathering purposes, interpretive signage and an abundance of planting areas.

Trees are to be positioned where views through to the ocean from further east in the Green Link are considered and not compromised.



green link west_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



green link west_general arrangement





(C) TYPOLOGIES_POS

3.9 Green Link East

Green Link East is the eastern portion of the Green Link and will primarily serve as a kick bout park with gathering places and pedestrian networks integrated within.

Additionally, the POS will serve as an ecological corridor and as such the selection of the tree and planting species should primarily be limited to Western Australian endemic species.

The park should consider outlook opportunities toward the ocean to the west, and consider the interface with the busy Cockburn Road. Ecological underpasses should be considered to assist with fauna migration from Beeliar Regional Park through to the coast.

In addition, the park will integrate exercise stations as a part of a larger exercise network, a playground, small turf areas for gathering purposes, interpretive signage and an abundance of planting areas.

Trees are to be positioned where views through to the ocean from further east in the Green Link are considered and not compromised.



green link east_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



green link east_general arrangement





(C) TYPOLOGIES_POS

3.10 Dog Park

The Foreshore Recreational Park is located to the south of Rollinson Road West with its major function being dedicated to a dog exercise park.

The park should have a naturalistic feel whilst being a safe and secure environment to exercise dogs.

The park should consider the significant level change to the west of the site around the existing pump station and maximise any view opportunities throughout this area.

The park should also offer small kick about areas, a welcoming frontage to Rollinson Road, and formal and informal paths throughout the POS to offer interesting access routes throughout.



foreshore recreational park_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



foreshore recreational park_general arrangement





(C) TYPOLOGIES_POS

3.11 McTaggart Park

McTaggart Park is located to the south of the proposed Beach side Plaza and to the west of the District Park.

It should retain the majority of its existing functions with whilst have sensitive insertions to help promote the overall themes of the development.

A small playground should be considered in the existing POS, as well as additional tree plantings and walls to offer protection from the prevailing winds.

The portion of land directly to the east of the existing park should primarily be retained and protected, with a formalised edge to the north adjoining the building lot property, and sensitively located drainage basins throughout the existing vegetation.

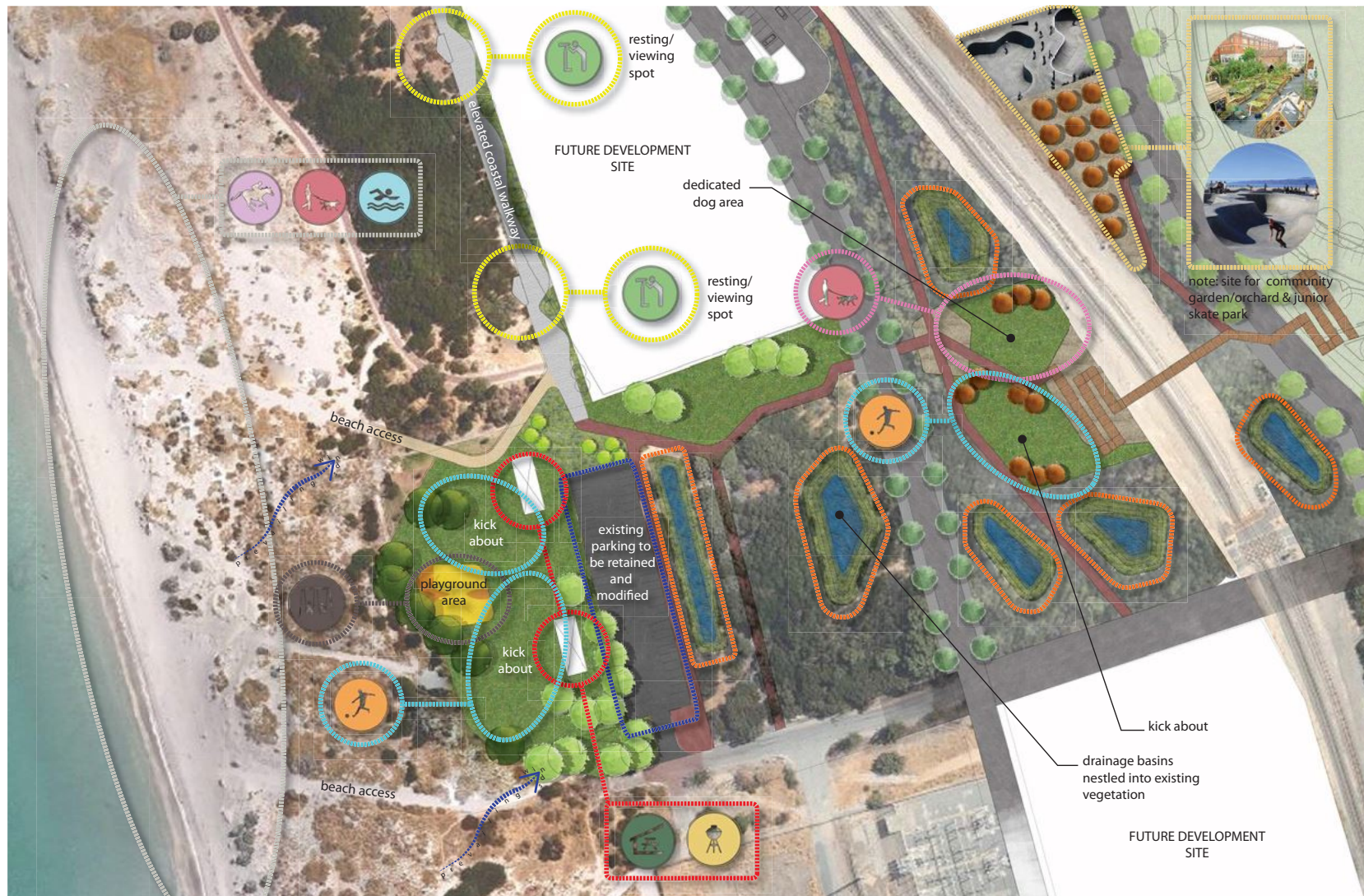
A dedicated dog park should be considered below the pedestrian bridge in an effort to activate the space, and a community garden is to be located to the south of the designated community building.

Any planting palettes not related to streetscape should be made up entirely of Western Australian endemic species.



mctaggart park_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



mctaggart park_general arrangement





(C) TYPOLOGIES_POS

4.0 POS Tree Hierarchy

Design Intent

The selections of the street trees throughout the various POS areas are driven by the following factors:

- exposure to prevailing winds
- proximity to built form
- shading from building heights
- soil conditions
- coastal exposure
- heritage influences
- overall themes
- striking a endemic vs exotic balance with regards to indigenous and european heritage
- suitability for drainage requirements
- providing variety throughout the development that promotes fauna diversity and habitation.
- safety and surveillance

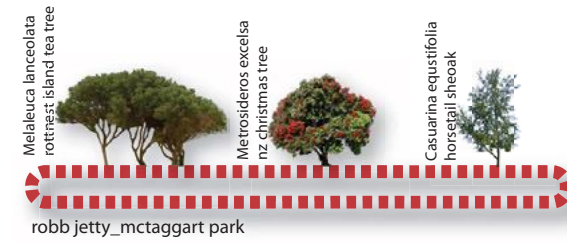
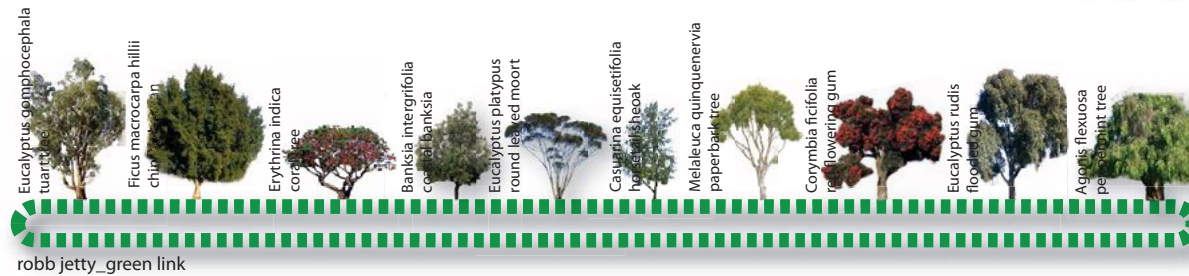
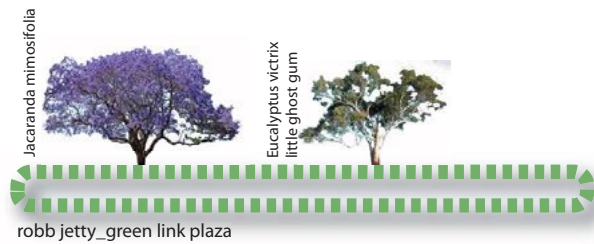
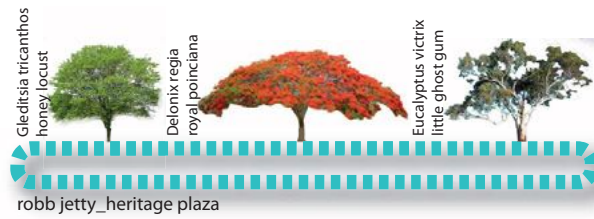
The following design factors should be considered when selecting the final tree species:

- selecting landmark trees where appropriate to mark gateways into the various precincts
- establishing habitable spaces below canopies in kick about areas
- selecting appropriate species in areas of water inundation
- underground service requirements.

The designer will require the sign off on all species from the City.



pos tree hierarchy plan





TYPOLOGIES_PLANTING

5.0 Planting typologies

Design Intent

The selections of the plant species throughout the various POS areas and streetscapes are driven by the following factors:

- exposure to prevailing winds
- shading from building heights
- soil conditions
- coastal exposure
- heritage influences
- overall themes
- suitability for drainage requirements
- providing variety throughout the development that promotes fauna diversity and habitation.

The following design factors should be considered when selecting the final plant species:

- selecting plant species that provide sensory diversity
- selecting plant species that are adaptable and can be presented in a number of aesthetic scenarios, ie, natural form and hedge form
- selecting appropriate species in areas of water inundation
- selecting species that will cope with little to no irrigation
- underground service requirements.

Irrigation requirements shall be agreed with the local authority and designed by a certified irrigation designer.

The designer will require the sign off on all species from the City.

Robb Jetty_Beachside Plaza

The 'Beach side Plaza' is to have species endemic to Western Australia to help establish a healthy dunal system and a strong coastal sense of place.

Area	Type	Genus species	Common Name	WA Native or Exotic	Notes
Beachside Plaza		Angianthus cunninghamii	Coast Angianthus	WA Native	
		Atriplex cinerea	Grey Saltbush	WA Native	
		Olearia axillaris	Coastal Daisybush	WA Native	
		Spinifex hirsutus	Hairy spinifex	WA Native	
		Spinifex longifolius	Beach Spinifex	WA Native	
		Sporobolus virginicus	Saltwater couch	WA Native	
		Threlkeldia diffusa	Coast Bonefruit	WA Native	



location plan

Robb Jetty_Heritage Plaza & Main Street

The Robb Jetty Main Street and Heritage Plaza are to have a mix of Western Australian native and exotic plant species to create a colourful, vibrant precinct that draws on both the indigenous and European history of the site.

The plant species should thrive in an urban environment, have a connection to the coastal species but also be more formal in their presentation.

Year round colour throughout the various species is recommended.

Area	Type	Genus species	Common Name	WA Native or Exotic	Notes
Main Street & Heritage Plaza	Small Shrub to 1m	Westringia dampieri	Coastal Rosemary	WA Native	
		Rosmarinus officinalis	Rosemary	Exotic	Edible
		Rhagodia spinescens	Creeping Saltbush	Australian Native	
	Medium Shrub to 2m	Callistemon viminalis	Dwarf Bottlebrush "Tom Thumb"	WA Native	
		Leucophyta brownii	Cushion Bush	WA Native	
		Pimelea ferruginea	Pink Rice Flower	WA Native	
		Atriplex nummularia	Saltbush	WA Native	
		Atriplex cinerea	Grey Saltbush	WA Native	
	Large shrubs 2m+	Alyogyne hakeifolia	Native Hibiscus	WA Native	
		Chamaelucium uncinatum	Geraldton Wax	WA Native	
		Callistemon glaucus	Albany Bottlebrush	WA Native	
		Hakea laurina	Pincushion Hakea	WA Native	
		Callistemon glaucus	Albany Bottlebrush	WA Native	



location plan

Note : The species list is a pre-approved list only. Additional species would be acceptable subject to sign off from the City.



(C) TYPOLOGIES_PLANTING

Robb Jetty_Green Link Plaza

The 'Green Link Plaza' should have strong similarities to the rest of the Green Link, however be presented in a more formal aesthetic. Species should be proven in an urban environment, be water wise and display varying textures and colours.



location plan

Area	Type	Genus species	Common Name	WA Native or Exotic	Notes
Green Link Plaza	Swale & Retention Basin Planting	Baumea articulata	Jointed Twig Rush	WA Native	
		Baumea vaginalis	Sheath Twig Rush	WA Native	
		Bolboschoenus caldwelli	Salt Club Sedge	WA Native	
		Ficinia nodosa	Knobby Club Rush	WA Native	
		Gahnia trifida	Coast Saw Sedge	WA Native	
		Juncus kraussii	Salt Marsh or Sea Marsh	WA Native	
		Juncus pallidus	Pale Rush	WA Native	
		Grevillea crithmifolia	Green Carpet Flower	WA Native	
		Grevillea thelemanniana	Spidernet Grevillea	WA Native	
		Grevillea obtusifolia	Gin Gin Gem	WA Native	
	Groundcovers	Acacia lasiocarpa	Glow Wattle	WA Native	
		Eremophilla glabra	Kalbarri Carpet	WA Native	
		Grevillea preissii	"Sea Spray"	WA Native	
		Hemidra pungens	Snakebush	WA Native	
		Leucophyta brownii	Cushion Bush	WA Native	
		Rhagodia baccata	Berry Saltbush	WA Native	
		Calothamnus villosus	Silky Net bush	WA Native	
		Calothamnus quadrifidus	One sided Bottle brush	WA Native	
		Callistemon viminalis	Dwarf Bottlebrush "Little John"	WA Native	
		Kunzea baxterii	Scarlett Kunzea	WA Native	
	Small Shrub to 1m	Pimelea ferruginea	Pink Rice Flower	WA Native	
		Olearia axillaris	Coastal Daisy Bush	WA Native	
		Melaleuca huegelii	Chenille Honey Myrtle	WA Native	
		Alyogyne huegelii	Native Hibiscus	WA Native	
		Alyogyne hakeifolia	Native Hibiscus	WA Native	
		Acacia cyclops	Red eyed Wattle	WA Native	
		Hakea laurina	Pincushion Hakea	WA Native	
		Callistemon glaucus	Albany Bottlebrush	WA Native	
		Viburnum tinus	Viburnum	Exotic	
		Hibiscus tiliaceus	Cottonwood	Exotic	
	Large shrubs 2m+	Rhaphiolepis indica	Indian Hawthorn	Exotic	

Note : The species list is a pre-approved list only. Additional species would be acceptable subject to sign off from the City.

Robb Jetty_Green Link

The Green Link is to be Western Australian endemic species that promote flora and fauna diversity.

Species should be proven in an urban environment, be able to tolerate inundations in drainage basins, and display varying textures and colours.

Area	Type	Genus species	Common Name	WA Native or Exotic	Notes
Robb Jetty Green Links & Ecological Corridors	Swale & Retention Basin Planting	Baumea articulata	Jointed Twig Rush	WA Native	
		Baumea vaginalis	Sheath Twig Rush	WA Native	
		Bolboschoenus caldwellii	Salt Club Sedge	WA Native	
		Ficinia nodosa	Knobby Club Rush	WA Native	
		Gahnia trifida	Coast Saw Sedge	WA Native	
		Juncus kraussii	Salt Marsh or Sea Marsh	WA Native	
	Groundcovers	Juncus pallidus	Pale Rush	WA Native	
		Grevillea crithmifolia	Green Carpet Flower	WA Native	
		Grevillea thelemanniana	Spidernet Grevillea	WA Native	
		Grevilla obtusifolia	Gin Gin Gem	WA Native	
		Acacia lasiocarpa	Glow Wattle	WA Native	
		Myoporum parvifolium	Creeping boobiala	WA Native	
	Small Shrub to 1m	Thryptomene baekeacea	Nil	WA Native	
		Eremophilla glabra	Kalbarri Carpet	WA Native	
		Grevillea preissii	"Sea Spray"	WA Native	
		Hemiantra pungens	Snakebush	WA Native	
		Scaevola crassifolia	Thicked Leafed Fan Flower	WA Native	
		Calothamnus quadrifidus	One sided Bottle brush	WA Native	
	Medium Shrub to 2m	Pimelea ferruginea	Pink Rice Flower	WA Native	
		Olearia axillaris	Coastal Daisy Bush	WA Native	
		Melaleuca heugelii	Chenille Honey Myrtle	WA Native	
		Alyogyne huegelii	Native Hibiscus	WA Native	
		Alyogyne hakeifolia	Native Hibiscus	WA Native	
		Acacia cyclops	Red eyed Wattle	WA Native	
	Large shrubs 2m+	Hakea laurina	Pincushion Hakea	WA Native	
		Callistemon glaucus	Albany Bottlebrush	WA Native	
		Hakea bucculenta	Hakea Red Pokers	WA Native	



location plan

Note : The species list is a pre-approved list only. Additional species would be acceptable subject to sign off from the City.



(C) TYPOLOGIES_PLANTING

Robb Jetty_Green Streets

The Green Streets should be a sensory experience with a variety of native and exotic species, and should be sheltered, green and lush. Plant species should explore the themes of smell, touch and taste, with the palette working with the street trees to create 'edible streets' Species should be proven in an urban environment, be water wise and display varying textures and colours.

Area	Type	Genus species	Common Name	WA Native or Exotic	Notes
Robb Jetty Green Streets	Swale & Retention Basin Planting	Baumea articulata	Jointed Twig Rush	WA Native	
		Baumea vaginalis	Sheath Twig Rush	WA Native	
		Bolboschoenus caldwelli	Salt Club Sedge	WA Native	
		Ficinia nodosa	Knobby Club Rush	WA Native	
		Gahnia trifida	Coast Saw Sedge	WA Native	
		Juncus kraussii	Salt Marsh or Sea Marsh	WA Native	
	Grasses	Juncus pallidus	Pale Rush	WA Native	
		Cymbopogon citratus	Lemongrass	Exotic	Edible
		Dianella caerulea	Flax lily	WA Native	
		Tulbaghia violacea	Society Garlic	Exotic	
	Small Shrub to 1m	Lavendula dentata	Lavender	Exotic	
		Rosmarinus officinalis	Rosemary	Exotic	Edible
		Aloysia citrodora	Lemon verbena	Exotic	Edible
		Ocimum basilicum	Perennial Basil	Exotic	Edible
	Medium Shrub to 2m	Alyogyne huegelii	Native Hibiscus	WA Native	
		Alyogyne hakeifolia	Native Hibiscus	WA Native	
	Large shrubs 2m+	Laurus nobilis	Bay Tree	Exotic	Can be kept pruned as a hedge
		Viburnum tinus	Viburnum	Exotic	
		Hibiscus tiliaceus	Cottonwood	Exotic	
		Rhaphiolepis indica	Indian Hawthorn	Exotic	
		Murraya paniculata	Orange Jessamine	Exotic	
		Chamaelirium uncinatum	Geraldton Wax	WA Native	



location plan

Note : The species list is a pre-approved list only. Additional species would be acceptable subject to sign off from the City.

Robb Jetty_Local Streets

The Local Street trees should be proven in an urban environment, be water wise and display varying textures and colours. Species should be able tolerate an inundation of water run off.

Area	Type	Genus species	Common Name	WA Native or Exotic	Notes
Robb Jetty Local Streets	Rain Garden Planting	Baumea vaginalis	Sheath Twig Rush	WA Native	
		Ficinia nodosa	Knobby Club Rush	WA Native	
		Gahnia trifida	Saw Sedge	WA Native	
		Juncus kraussii	Salt Marsh or Sea Marsh	WA Native	
		Juncus pallidus	Pale Rush	WA Native	



location plan



Robb Jetty_Internal Lots

Internal planting within the lots should be mainly Western Australian natives with approved exotic species complimenting the native palette. Species should be proven in an urban environment, be water wise and display varying textures and colours. All species to be hardy, easily maintained and well presented.

Area	Type	Genus species	Common Name	WA Native or Exotic	Notes
Robb Jetty_Internal Lots	Grasses / Sedges	Liriope muscari	Evergreen Giant	Exotic	
		Limonium preissii	Sea Lavender	Exotic	
		Tulbaghia violacea	Society Garlic	Exotic	
		Lomandra confertifolia	Lomandra Seascape	Australian Native	
		Conostylus candicans	Grey cottonheads	WA Native	
		Ficinia nodosa	Knobby Club Rush	WA Native	
		Lepidosperma gladiatum	Coastal Sword Sedge	WA Native	
		Poa poliformis	Coast Tussock Grass	Australian Native	
		Pennisetum 'rubrum'	Purple Fountain Grass	Exotic	
		Anigozanthos sp.	Kangaroo Paws	WA Native	
	Small Shrub to 1m	Conostylus aculeata	Cottonhead	WA Native	
		Lavendula dentata	Lavender	Exotic	
		Rosmarinus officinalis	Rosemary	Exotic	
		Scaevola crassifolia	Thick Leafed Fan Flower	WA Native	
		Pimelea ferruginea	Pink Rice Flower	WA Native	
		Rhagodia baccata	Berry Saltbush	WA Native	
		Correa alba	White Flowered Correa	Australian Native	
	Succulents	Aeonium arborescens	House Leek	Exotic	
		Cotyledon orbiculata	Pigs Ear	Exotic	
		Agave attenuata	Swan Necked Agave	Exotic	
	Medium Shrub to 2m	Olearia axillaris	Coastal Daisy Bush	WA Native	
		Alyogyne huegelii	Native Hibiscus	WA Native	
		Alyxia buxifolia	Sea Box	WA Native	
		Alyogyne hakeifolia	Native Hibiscus	WA Native	
	Large shrubs 2m+	Viburnum tinus	Viburnum	Exotic	
		Hibiscus tiliaceus	Cottonwood	Exotic	
		Raphiolepis indica	Indian Hawthorn	Exotic	

Note : The species list is a pre-approved list only. Additional species would be acceptable subject to sign off from the City.





Part D: Specification and Selections

Contents

1.0 General Specification

2.0 Selections

Part D: 'Specification and Selections' outlines material selections, design components and their associated considerations, and specifications of the streetscapes, and designated POS areas.





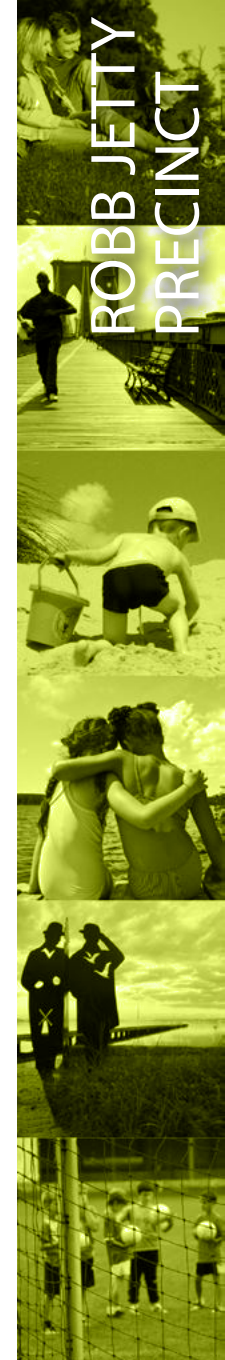
(D) GENERAL SPECIFICATION

1.0 General Specification and Requirements

Part 1 - Vision

To create a vibrant landmark destination that is connected, diverse and accessible.

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
1.0	Furniture and Fixtures				
1.1	Generally 'Furniture and Fixtures' refers to all outdoor furniture and fixtures included within the public realm intended for public use.	Provide elements that embody the industrial and military heritage of the area through form and material selection. Ensure appropriate placement of thematic selections as per Parts B and C of the PRDG. These elements are critical to establishing the identity of each precinct and sub-precinct	Ensure that the significant coastal exposure of this precinct is addressed in both material selection and furniture placement		
			Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
			Comply with all relevant Australian Standards		
			Ensure all furniture and fixtures are readily available from local suppliers or distributors.		
			Custom elements must: - use readily available local materials - meet all construction and safety standards - meet the thematic requirements set out in this document - minimise maintenance - embody design excellence		
			Equal access should be considered in the selection of furniture. Preference will be given to furniture that is accessible for wheelchair-bound visitors.		
			Furniture is to be located where appropriate for its function. CPTED principles to be considered in the placement of furniture.		
			Preference will be given for furniture designs that employ sustainable materials		

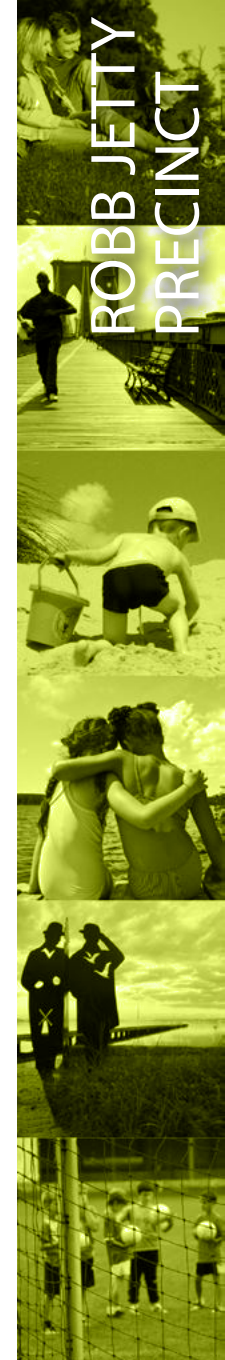


ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
2.0	Lighting				
	Generally 'Lighting' refers to public lighting within the public realm, including but not limited to: - Area lighting - Pedestrian lighting - Feature lighting - Sports lighting - Solar lighting	Lighting is a key component of the activation and livability of the area. Careful consideration should be given to the placement, aesthetics and management of design choices to ensure the lighting design fulfills the safety and activation requirements.	Comply with all relevant Australian Standards		
			Ensure all lighting poles and fixtures are readily available from local suppliers or distributors.		
			Lighting is to be low energy use, long life LED lighting.		
			Designer must refer to the City of Cockburn - Open Spaces Lighting Guidelines		
			Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
			Area lighting is not to be located within 10m of residential properties (streets excluded)		
			Lighting adjacent to bushland is to be located and specified to minimise light spill into habitat areas.		
			A 'PE' cell and timer control system is to be installed for all lighting. All control gear is to be easily accessible for maintenance		
			Only fittings specifically designed for outdoor conditions shall be used		
			In-ground feature lighting is to be installed flush with the surrounding surface, but is not supported on streetscapes. To be installed only around areas of interest.		
			Preference to be given to lighting powered by renewable energy sources (solar and wind)		
			CPTED principles to be considered throughout the design		



GENERAL SPECIFICATION

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
3.0	Play Spaces				
	Generally 'Play space' refers to areas within a landscape of which the primary function is to provide play value for children	Play spaces are to be multi functional and cater to a variety of age groups and abilities. Play spaces are key to the activation, education and livability of the development and should embody the thematic components of each precinct.	Comply with all relevant Australian Standards		
			Play spaces are to be designed to encourage a variety of sensory experiences and will incorporate various play opportunities including: - active / physical play - cognitive play - social play		
			Equal opportunity for access should be considered in the design and location of play spaces.		
			Play spaces should provide risk and challenge, however are safe and free of hazards.		
			Play spaces are to be located a minimum of 8m away from roads and water bodies.		
			Both custom and off-the-shelf play equipment may be included in a play space		
			Locate play spaces to ensure adequate shade provision. Design to minimise the necessity for solid or tensile shade structures where possible		
			Play spaces to be designed to accommodate a variety of age groups. However consideration to be given to ensuring sufficient separation between user groups to avoid conflicts.		
			Preference is to be given to washed play sand and play mulch over wet-pour rubber soft fall		
			CPTED principles to be considered throughout the design		
			Maintenance and emergency services access to play space areas should be incorporated into the placement of play space areas		

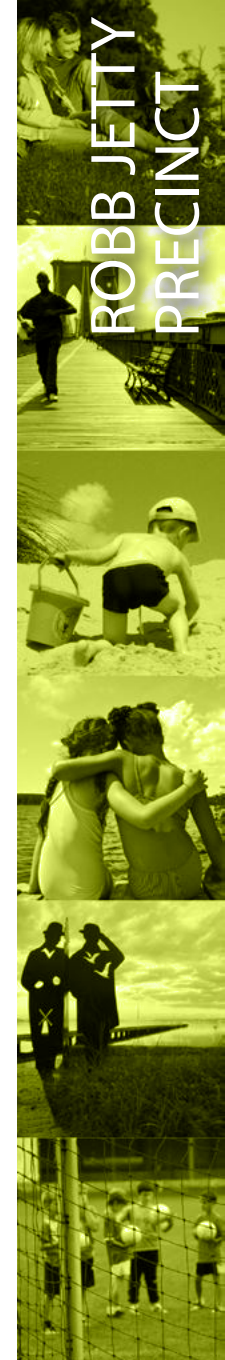


ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
4.0	Public Art				
	<p>'Public Art' refers to artworks within the public realm, including but not limited to:</p> <ul style="list-style-type: none"> - Sculptures - Lighting Installations - Temporary interventions - Way Finding - Landmark Artworks - Landscape Art - Built form interventions - Gateway Icons - Interpretative artworks - Heritage Markers - Way Finding 	<p>Public Artworks are to be designed to express the cultural and historical past of the site, specifically highlighting areas of interest as well as helping form precincts within the development.</p> <p>Public art can be used as a mechanism for educating and way finding, and enhance the overall cultural aspect of the development.</p>	Refer to Appendix A: Place Partners document 'Place Making Strategy for guidelines.		
			All artworks should comply with Australian Standards		
			All artworks should be designed to encourage a variety of sensory experiences		
			All artworks should be designed to promote the historical, social and cultural context of the site		
			All artworks should contribute to creating a sense of place within the various precincts as well as specific areas of interest		
			Should have area lighting to the appropriate standards. Refer to Item 2.0: Lighting for further information		
			Ensure universal access is accommodated where required.		
			Access for maintenance is considered		
			All sculptures to be constructed shall obtain a Certificate of Design Compliance by an independent registered building surveyor prior to lodging a building permit application		



GENERAL SPECIFICATION

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
5.0	Signage				
	Signage' refers to all permanent and temporary within the development, including but not limited to: - Way Finding - Interpretive signage - Advertising - Marketing	Signage is to be designed in such as way that it assists with the functionality of the development, both internally and the broader area ie Fremantle, Kwinana, Port Coogee	All signage should comply with the appropriate standards		
			Signage for advertising purposes shall be of a temporary nature and subject to planning approval		
			Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
			Materials proposed shall be durable and hard-wearing, sustainable and readily available from local sources		
6.0	Structures				
	Generally Structures refer to all vertical built form elements within the public realm	Structures	Comply with all relevant Australian Standards		
			All structures to be constructed shall obtain a Certificate of Design Compliance by an independent registered building surveyor prior to lodging a building permit application		
			Materials proposed for use in structures shall be durable and hard-wearing, sustainable and readily available from local sources		
			Ensure siting of structures considers: - universal access - views to and from the structure - servicing requirements		
			Structures are to incorporate the character intent of the precinct		
			Ensure structures allow for all weather conditions		
			Incorporate 3phase power connection and water connection into each shelter		

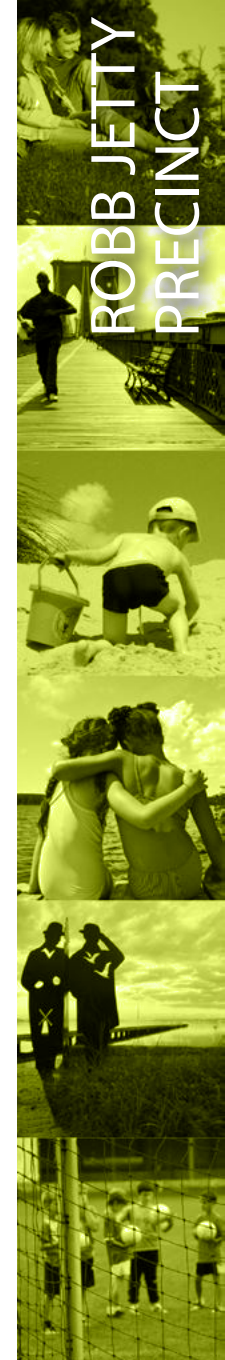


ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
7.0	Surface Treatments (Hard)				
	Generally		Comply with all relevant Australian Standards		
			Adhere to the themes, colours and materials as indicated in this document		
			Provide high quality functionality without compromising the aesthetic standards required		
			All paved surfaces are to be graded to drain to turf and planting areas		
			Paths are generally to be located to accommodate natural pedestrian desired lines of travel		
			All concrete, asphalt and paving within the public realm shall be designed to be trafficable by maintenance vehicles		
			Paving areas and pedestrian paths shall be a minimum width of 1500mm. Designated dual-use (pedestrian and cyclist) paths shall be a minimum width of 3500mm.		
			Loose granular surfaces are not supported for pedestrian areas, unless stabilised		
			Be cost effective in supply, installation and ongoing maintenance		
			Ensure liaison with infrastructure engineers to minimise conflicts between services and paved areas		
			Transitions between precincts to be based on the design rational establishes in this document		



GENERAL SPECIFICATION

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
8.0	Surface Treatments (Soft)				
	Generally	The softworks elements of the project have been designed to ensure a distinctive and coherent sense of place, character and image for the Cockburn Coast. The provision of a sustainable and high integrity soft landscape is critical to the definition of the project. In this regard emphasis has been placed on the use of climatically appropriate species that respond to the micro-climate conditions produced by the development and provide a high level of amenity within the public realm.	Adhere to the themes and aspirations as indicated in parts B and C of this document		
	Soft surface treatments refers to all trees, shrubs and grass surfaces that form part of the public realm		Ensure liaison is undertaken with services, alignments/pits, crossover locations and lighting		
			Ensure existing vegetation to be retained is protected and managed during construction		
			Review the availability of plant stock early in each development phase and assess the need for contract growing/per-ordering		
			Ensure planting does not compromise vehicle sight lines or pedestrian/cyclist safety		
			Ensure maintenance requirements are considered within the design		
			Ensure planting is designed to minimise water consumption where possible		
			Salvaging of materials unable to be retained during construction is preferred		
			Crime Prevention Through Environmental Design (CPTED) principals shall be considered in the design		



ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
9.0	Water Elements				
	Generally	The design of water elements needs to be considered on a location-by-location basis. Potential water features and drainage areas have been identified for a number of locations within the various precincts. These elements are critical to the character, ecology and activation of the spaces.	Comply with all relevant Australian Standards		
			Ensure filtration/aeration/circulation of water is adequate to provide an acceptable level of water quality for the proposed purpose		
			Ensure gradients into water bodies (permanent and seasonal) are at 1:4 for a minimum of 3 metres		
			Ensure water depths do not exceed 400mm at edges for a minimum of 1 metre at edges		
			Ensure water bodies have adequate balustrading to address safety issues where the above requirements of water edge depths and slope gradients into water bodies cannot be achieved		
			Ensure pump and filtration systems are adequately housed to reduce noise issues (to Australian Standards) and are visually integrated into the surrounding landscape		
			Provide edge treatment appropriate to use, which provides highest quality aesthetic outcome		
			Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
			Ensure best practice Water Sensitive Urban Design principles are embedded in all design outcomes		



(D) SELECTIONS

2.0 Selections - Robb Jetty

Vision -Seamless - Soft - Intimate

The Robb Jetty Precinct will draw on the industrial, agricultural and military heritage of the site to inform how the spaces are created and feed into the adjacent landscape precincts.

It will look to utilise views towards the west to maximise a response from the proposed building developments.

Other key ideas include:

- Seamless - the intent is to ensure a seamless integration with the surrounding Precincts, ensuring major transport divides are mitigated through smart design
- Soft - integrate a soft palette that reduces the impact of the built environment and creates habitable spaces and streetscapes that promote a pedestrian friendly atmosphere
- Intimate - create spaces that are inviting and cause people to pause and ponder"

Furniture and Fixtures

BBQ

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
									✓	✓		✓	✓	✓	✓		✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide BBQ's that are in keeping with the thematic character of the precinct of sub-precinct

CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the BBQ selection or design
- Ensure BBQ material is of an appropriate durability for location
- Consider mitigating 'hot to touch' surfaces
- Consider lockability of access doors
- Consider location to roads/accessibility/potential views back to ocean

MATERIAL OPTIONS

- Exposed Concrete
- Stone
- Tile
- Steel

FINISH

- Class 2 finish Concrete
- Rough cut/sawn
- Glazed
- Galvanised/Stainless Steel



Balustrade

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
									✓		✓	✓	✓	✓	✓		
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide balustrades that are robust, functional and easily maintained.

CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the balustrade design
- Ensure balustrade material is of an appropriate durability for location
- Finish to all balustrade systems to be minimum standard Hot dip galvanised steel.

MATERIAL OPTIONS

- Steel

FINISH

- Powder coat
- Hot Dip Galvanised
- Stainless Steel

- Timber

Bike Racks

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓	✓		✓	✓			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide bike racks which are functional and easily maintained
- To provide an urban element that has a sculptural approach and contributes to the thematic character of the precinct or sub-precinct

CONSIDERATIONS/OBJECTIVES

Assess the location of bike rack to the following criteria:

- Proposed planning uses
- Destinations
- Access

Material selections, alignment and form should reflect the character of the precinct/sub-precinct

MATERIAL OPTIONS

- Steel

FINISH

- Powder coat
- Hot Dip Galvanised
- Corten Steel
- Stainless Steel

typical bike racks for:

- main street west
- main street east
- green street
- rollinson road
- beach side plaza
- heritage plaza
- green link plaza



typical bike racks for:

- west green link
- green link west
- green link east
- mctaggart park



typical bike racks for:

- brrt/ltr local road
- district park
- local streets





(D) SELECTIONS

Bin Surrounds

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANEWAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- Provide bin surrounds to meet the requirement of the management authority
- Utilise colour variation to signify changes in precinct

CONSIDERATIONS/OBJECTIVES

Assess the location of bins to the following criteria:

- Accessibility for servicing
- Located within main circulation associated with seating/nodal areas
- Site away from seating areas
- Bins adjacent to paths to be located in hardstand areas. Minimum hardstand dimensions to be 500 x 500mm
- Ensure adequate allowance is made for recycling collection/sorting as per local authorities requirements.

MATERIAL OPTIONS

- Steel

FINISH

- Powder Coat
- Painted Steel
- Corten Steel
- Galvanised Steel

typical bin surrounds for:

- main street west
- main street east
- brt/lrt local road
- rollinson road
- heritage plaza
- green link plaza



typical bin surrounds for:

- green streets
- local streets
- cockburn road
- beach side plaza
- west green link
- green link west
- green link east

typical bin surrounds for:

- mctaggart park



Bollard

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANEWAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓			✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide an attractive bollard to be installed into tree wells within road reserves, protect POS areas from vehicle intervention
- To contribute to the character of the precinct through material, colour and design resolution

CONSIDERATIONS/OBJECTIVES

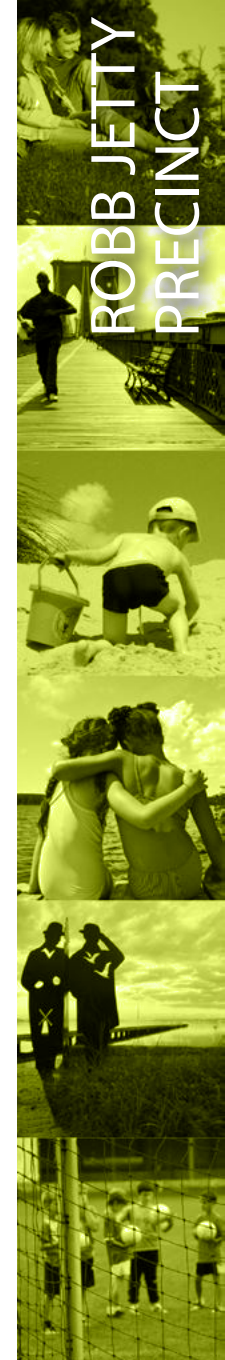
- Bollards to be located to protect trees in road reserves and to have reflectors to Main Roads WA standards
- Consider collapsible version for maintenance and access purposes

MATERIAL OPTIONS

- Steel
- Timber

FINISH

- Powder coat
- Galvanised Steel
- Stainless Steel
- Oiled
- Painted



typical bollard for:
♦ beach side plaza



typical bollard for:
♦ railway road



typical bollard for:
♦ west green link
♦ green link west
♦ green link east



typical bollard for:
♦ heritage plaza
♦ green link plaza



typical bollard for:
♦ mctaggart park

Drinking Fountain

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓			✓						✓	✓	✓	✓	✓		✓		✓
ADDRESSED?													YES / NO				



typical drink fountain for:
♦ west green link
♦ green link west
♦ green link east

DESIGN INTENT

- Provide a contemporary drinking fountain that contributes to the precinct character and thematic ideas

CONSIDERATIONS/OBJECTIVES

Drinking Fountains to be located as follows:

- Locate on major circulation routes and at key nodal locations
- Locate where practical to access potable water
- Locate to ensure accessibility outcomes are achieved
- Ensure pet drinking options are incorporated
- Minimise maintenance and vandalism opportunities
- Filtered water option preferable
- Water bottle fill up option preferable

MATERIAL OPTIONS

- Steel

FINISH

- Powder coat
- Galvanised



SELECTIONS

Flag Poles

ROBB JETTY MAIN ST	✓	
BRT LOCAL ROAD		
COCKBURN ROAD	✓	
GREEN ST		
POS ST		
LOCAL STREETS		
RAILWAY ROAD		
ROLLINSON ROAD		
LANEWAYS		
BEACH SIDE PLAZA	✓	
DISTRICT PARK	✓	
HERITAGE PLAZA	✓	
WEST GREEN LINK		
GREEN LINK PLAZA		
GREEN LINK WEST		
GREEN LINK EAST		
FORESHORE PARK		
MCTAGGART PARK		
ADDRESSED?		YES / NO

DESIGN INTENT

- To provide an attractive and functional pole fit for intended purpose

MATERIAL OPTIONS

- Steel

FINISH

- Polished stainless steel

Handrails

ROBB JETTY MAIN ST		
BRT LOCAL ROAD		
COCKBURN ROAD		
GREEN ST		
POS ST		
LOCAL STREETS		
RAILWAY ROAD		
ROLLINSON ROAD		
LANEWAYS		
BEACH SIDE PLAZA	✓	
DISTRICT PARK	✓	
HERITAGE PLAZA	✓	
WEST GREEN LINK	✓	
GREEN LINK PLAZA	✓	
GREEN LINK WEST	✓	
GREEN LINK EAST	✓	
FORESHORE PARK	✓	
MCTAGGART PARK	✓	
ADDRESSED?		YES / NO

DESIGN INTENT

- provide an attractive and functional handrail that is robust and that contributes to the character of the precinct through material selection

CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the handrail design
- Ensure balustrade material is of an appropriate durability for location
- Finish to all handrail systems to be minimum standard Hot dip galvanised steel.
- Handrail should have strong aesthetic correlation to balustrade design

MATERIAL OPTIONS

- Steel

- Timber

FINISH

- Powder coat
- Hot Dip Galvanised
- Stainless steel
- Oiled

Planter Boxes

ROBB JETTY MAIN ST	✓	
BRT LOCAL ROAD		
COCKBURN ROAD		
GREEN ST	✓	
POS ST		
LOCAL STREETS		
RAILWAY ROAD		
ROLLINSON ROAD		
LANEWAYS		
BEACH SIDE PLAZA		
DISTRICT PARK	✓	
HERITAGE PLAZA		
WEST GREEN LINK	✓	
GREEN LINK PLAZA	✓	
GREEN LINK WEST	✓	
GREEN LINK EAST		
FORESHORE PARK		
MCTAGGART PARK		
ADDRESSED?		YES / NO

DESIGN INTENT

- To contribute to the character of the precinct through material selection and utilise colour variations

CONSIDERATIONS/OBJECTIVES

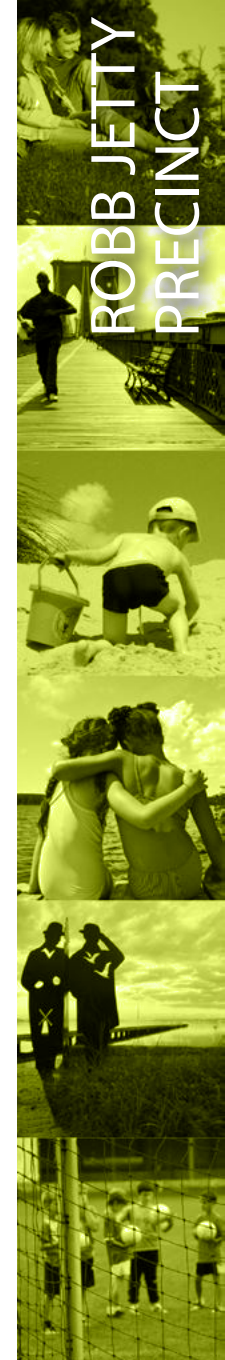
- Consider form of existing historical features of the precinct, i.e. dimensions of jetty, abattoir, etc and work with similar forms
- Ensure material is of an appropriate durability for location

MATERIAL OPTIONS

- Steel
- Concrete

FINISH

- Rough texture



Seats and Tables

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANEWAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To contribute to the character of the precinct through material selection whilst being robust with a long life cycle

CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the furniture selection
- Ensure seats and table material is of an appropriate durability for location
- Should have strong correlation to benches and streetscape furniture suite

MATERIAL OPTIONS

- Steel
- Concrete
- Timber

FINISH

- Hot Dip Galvanised steel
- Stainless Steel
- Aluminium
- Honed concrete
- Oiled



typical bench seat for:

- ♦ main street west
- ♦ main street east
- ♦ heritage plaza



typical bench seat for:

- ♦ heritage plaza
- ♦ green link plaza



typical table and bench seat for:

- ♦ main street west
- ♦ heritage plaza



typical custom bench seat for:

- ♦ beach side plaza



(D) SELECTIONS



typical custom bench seat for:
♦ beach side plaza



typical custom bench seat for:
♦ heritage plaza



typical table and bench seat for:
♦ west green link
♦ green link west
♦ green link east
♦ mctaggart park



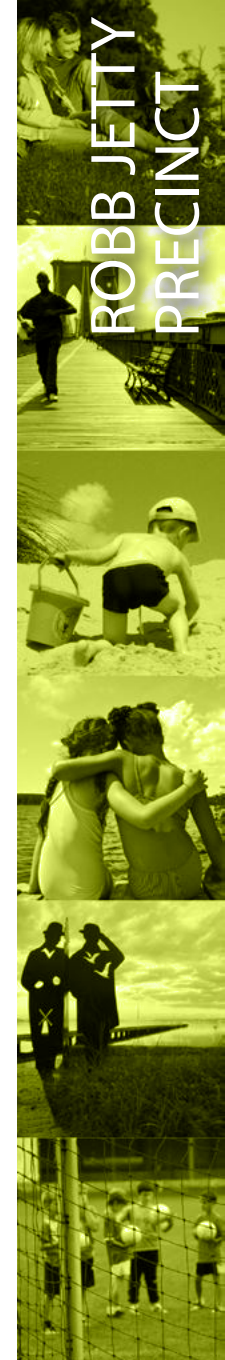
typical bench seat for:
♦ beach side plaza
♦ west green link
♦ green link west
♦ green link east
♦ brt/lrt local road
♦ green street
♦ local road
♦ cockburn road
♦ green link east
♦ mctaggart park



typical bench seat for:
♦ railway road



typical bench seat for:
♦ railway road



Shower

ROBB JETTY MAIN ST	
BRT LOCAL ROAD	
COCKBURN ROAD	
GREEN ST	
POS ST	
LOCAL STREETS	
RAILWAY ROAD	
ROLLINSON ROAD	
LANE WAYS	
BEACH SIDE PLAZA	✓
DISTRICT PARK	✓
HERITAGE PLAZA	
WEST GREEN LINK	
GREEN LINK PLAZA	
GREEN LINK WEST	
GREEN LINK EAST	
FORESHORE PARK	
MCTAGGART PARK	
ADDRESSSED?	
YES / NO	

DESIGN INTENT

- To contribute to the character of the precinct through material selection whilst being robust with a long life cycle

CONSIDERATIONS/OBJECTIVES

Showers to be located as follows:

- Locate on major pedestrian access points to the beach
- Locate where practical to access potable water
- Locate to ensure accessibility outcomes are achieved
- Attach to wall to provide shelter
- Low water usage options preferable.
- Allow over provision of drainage.
- Ensure fixtures are integral rather than extruding to minimise vandalism

MATERIAL OPTIONS

- Steel

FINISH

- Stainless steel

Skate Deterrents

ROBB JETTY MAIN ST	
BRT LOCAL ROAD	
COCKBURN ROAD	
GREEN ST	
POS ST	
LOCAL STREETS	
RAILWAY ROAD	
ROLLINSON ROAD	
LANE WAYS	
BEACH SIDE PLAZA	✓
DISTRICT PARK	✓
HERITAGE PLAZA	✓
WEST GREEN LINK	✓
GREEN LINK PLAZA	✓
GREEN LINK WEST	✓
GREEN LINK EAST	✓
FORESHORE PARK	✓
MCTAGGART PARK	✓
ADDRESSSED?	
YES / NO	

DESIGN INTENT

- To provide an attractive and robust solution to protecting furniture from skate and BMX vandalism

CONSIDERATIONS/OBJECTIVES

- Ensure material is robust.
- Ensure visual appearance does not dominate custom furniture design.
- Opt for integral option rather than fixed option

MATERIAL OPTIONS

- Steel

FINISH

- stainless steel/iron



integral skate deterrent



SELECTIONS

Tree Grates

ROBB JETTY MAIN ST	✓	ADDRESSED?	YES / NO
BRT LOCAL ROAD	✓		
COCKBURN ROAD			
GREEN ST	✓		
POS ST			
LOCAL STREETS			
RAILWAY ROAD			
ROLLINSON ROAD			
LANEWAYS			
BEACH SIDE PLAZA	✓		
DISTRICT PARK			
HERITAGE PLAZA	✓		
WEST GREEN LINK			
GREEN LINK PLAZA	✓		
GREEN LINK WEST			
GREEN LINK EAST			
FORESHORE PARK			
MCTAGGART PARK			

DESIGN INTENT

- To contribute to the character of the precinct through customisation, patterning etc.

CONSIDERATIONS/OBJECTIVES

- Minimise maintenance and vandalism opportunities.
- Allow for an appropriate amount of permeability in grates to allow water permeation.
- Allow for segmental design to allow for maturation of tree specimen.
- Ensure finish meets trafficable and slip rating requirements
- Ensure irrigation is integrated and seamless
- Allow for root control barriers in accordance with local authority requirements.

MATERIAL OPTIONS

- Steel

FINISH

- Corten steel
- Iron



typical custom tree grates with specific patterning depending on precinct and theming area

Service Pit Covers

ROBB JETTY MAIN ST	✓	ADDRESSED?	YES / NO
BRT LOCAL ROAD	✓		
COCKBURN ROAD	✓		
GREEN ST	✓		
POS ST	✓		
LOCAL STREETS	✓		
RAILWAY ROAD	✓		
ROLLINSON ROAD	✓		
LANEWAYS	✓		
BEACH SIDE PLAZA	✓		
DISTRICT PARK	✓		
HERITAGE PLAZA	✓		
WEST GREEN LINK	✓		
GREEN LINK PLAZA	✓		
GREEN LINK WEST	✓		
GREEN LINK EAST	✓		
FORESHORE PARK	✓		
MCTAGGART PARK	✓		

DESIGN INTENT

- To be well presented, aligned with paving treatment and in keeping with industrial nature of the precinct

CONSIDERATIONS/OBJECTIVES

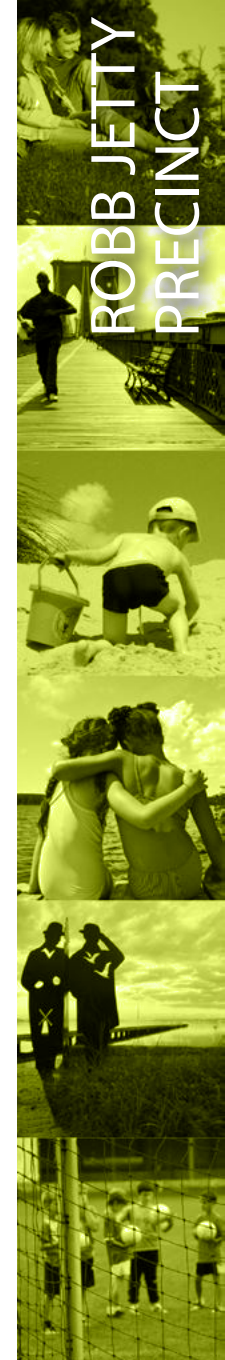
- Must meet vehicle loading requirements

MATERIAL OPTIONS

- Steel

FINISH

- Iron



Lighting

Street Lighting

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANEWAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓	✓	✓	✓	✓	✓	✓	✓	✓									
ADDRESSED?												YES / NO					

DESIGN INTENT

- To be well presented, easily maintained and discrete on the street
- To be decorative in the following key locations: Robb Jetty Main St, BRT Local Street, Railway Road to enhance precinct

CONSIDERATIONS/OBJECTIVES

- Must meet local authorities requirements for performance and maintenance
- Street lighting including suitable illumination of traffic management treatments, to the newly created subdivision is to be provided in accordance with Western Power Corporation specification for illumination levels, materials and installation. Lighting design shall be in accordance with the latest edition of Australian Standards AS 1158-2005 and light pole types, colours and light fixtures to be similar and consistent with the adjoining development and approved separately by the City.

development and approved separately by the City.

- Council is moving towards sustainable street lighting, the developer will therefore be encouraged to liaise with Western Power to use fluorescent street lighting, compact fluorescent (CFL) street lighting to reduce energy and green house gas emissions.
- Illumination is not to spill beyond the front building line of the adjacent properties unless required for security purposes.
- Uplighting on streetscapes is not supported.
- Developer is to refer to the Local Authority Lighting Policy for further guidelines.
- All street lights to be Western Power standards except Robb Jetty Main Street and the BRT Local Street, where more decorative fixtures are to be considered.

MATERIAL OPTIONS

- Steel

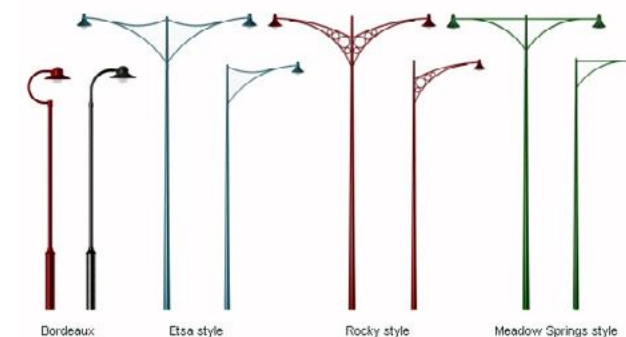
FINISH

- Galvanised Steel
- Powder Coat
- Anti corrosive coating



typical street lighting for:

- ♦ main street west
- ♦ main street east
- ♦ brt/lrt local street



Western Power Standard lighting for:

- ♦ green streets
- ♦ local streets
- ♦ cockburn road



(D) SELECTIONS

POS Lighting

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANEWAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
									✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To be well presented, easily maintained and discrete on the street
- To be decorative in the following key locations: Beach side Plaza, Heritage Plaza, Green Link Plaza"

CONSIDERATIONS/OBJECTIVES

- Must meet local authorities requirements for performance and maintenance
- All light fixtures to be LED light fixture
- Flush uplighting at street edge of POS to create distinct entry to parks
- Single outreach, tapered light pole with oval shaped light encasing and LED light fixture. Solar lighting to be considered
- POS lighting to be lit until 11pm each night for activation and security purposes
- Consider powder coating poles to give each POS a distinct character
- Bollard lighting not to be used for maintenance and performance reasons

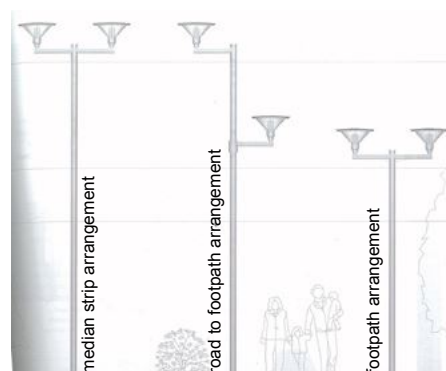
- Uplighting in POS is general not supported, however consideration will be given to feature uplighting on submission of lighting designs.
- Developer is to refer to the Local Authority Lighting Policy for further guidelines.
- Lighting to District Park to be 'fit for use' lighting design to allow night activities to take place. Lux levels to be determined with the City's input.
- Designers must refer to the City of Cockburn - Open spaces Lighting Guidelines for additional information.

MATERIAL OPTIONS

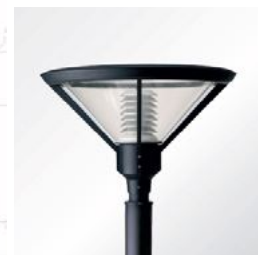
- Steel

FINISH

- Galvanised Steel with powder coat option



typical street lighting for:
♦ heritage plaza
♦ green link plaza



typical street lighting for:
♦ beach side plaza



typical street lighting for:
♦ west green link
♦ green link west
♦ green link east
♦ mctaggart park

Play Elements

Adventure Play

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
											✓	✓					
ADDRESSED?												YES / NO					

DESIGN INTENT

- To create play environments that blend natural materials, features, and indigenous vegetation with creative landforms to create purposely complex interplays of natural, environmental objects in ways that challenge and fascinate and educate children
- To enhance the overall themes of the precinct or sub-precinct

CONSIDERATIONS/OBJECTIVES

- To be located in key positions relative to pedestrian access, vehicles networks and POS location
- Ensure playground is integrated with sheltered areas that protect from sun and rain
- The design of playgrounds should minimise maintenance and vandalism opportunities
- Design of the playground should strongly reflect the themes and character of the precinct
- All playgrounds should have appropriate structural engineering sign off

- Should be meet Australian Standards
- Should explore opportunities to integrate artwork, seating, bbq's, bins, picnic settings etc.
- Play components may include earth shapes (sculptures), environmental art, indigenous vegetation, boulders or other rock structures, dirt and sand, natural fences (stone, willow, wooden), textured pathways, and natural water features
- Equal opportunity for access should be considered in the design and location of play spaces.

MATERIAL OPTIONS

- Timber
- Steel
- Concrete
- Stone
- Found objects

FINISH

- rustic





(D) SELECTIONS

Playgrounds

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
												✓		✓			✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To create play environments that promote community engagement, interaction, education, development of physical coordination, strength, and flexibility, as well as providing recreation and enjoyment
- To enhance the overall themes of the precinct or sub-precinct

CONSIDERATIONS/OBJECTIVES

- To be located in key positions relative to pedestrian access, vehicles networks and POS location
- Ensure playground is integrated with sheltered areas that protect from sun and rain
- The design of playgrounds should minimise maintenance and vandalism opportunities
- Design of the playground should strongly reflect the themes and character of the precinct
- All playgrounds should have appropriate structural engineering sign off
- Should be meet Australian Standards

- Should explore opportunities to integrate artwork, seating, bbq's, bins, picnic settings etc.
- Should consider proximity and integration of additional elements such as exercise equipment, sports facilities (soccer pitches, half basketball courts etc) to further promote a community feel
- Equal opportunity for access should be considered in the design and location of play spaces.

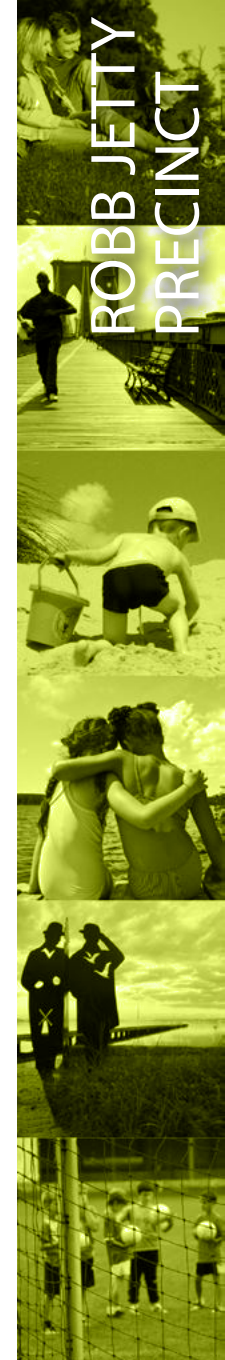
MATERIAL OPTIONS

- Sustainable plastics
- Steel
- Concrete
- Stone
- Found objects

FINISH

- As per manufacturers specifications





Public Art

Public Art

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓									✓		✓						
ADDRESSED?												YES / NO					

DESIGN INTENT

- The Public Art Strategy shall set out the framework to enhance precinct through the appropriate integration of public art within the Development Area by detailing the following:
 - Influences for public art and possible public art themes for each precinct;
 - Indicative locations for artworks where they will enhance the amenity and the interpretation of the public realm, contribute to way finding, and enhance the sense of place;
 - Management arrangements and responsibilities for public art

CONSIDERATIONS/OBJECTIVES

- Should consider covering a broad range of options for artists to interact with the built and natural environment across the Cockburn Coast development. This includes options for the integration of artworks into the fabric of buildings and urban infrastructure of all types.
- Developing integrated options for artworks for building facades, streetscape elements and road infrastructure can provide a cost effective option with the artwork funds value adding to the capital works budget.
- Integrated artworks should result from collaboration between artist and architect, urban designer or landscape architect.
- The approach to stand alone projects should have a strong focus on the quality of the artist's concept and sense of place. Such works as sculptural features and landmarks can provide significant focal points and precinct identifiers.
- In addition to the direct interpretation of a place and its history through interpretive signage and commemorative features, there is a role for artworks that creatively explore a place's past and the stories of a community. Artists can be commissioned to create works that, while not addressing history in a didactic form, explore themes of relevance to local histories.

- Consultation required with the Cockburn Aboriginal Reference Group for all major artworks.
- Consultation required with the Cockburn Reference Group for all major artworks.
- Ensure artworks are in keeping with heritage items and 'add value' to its location and the precinct as a whole.
- Ensure materials are sustainable and maximise opportunities to recycle/up-cycle where possible.
- Ensure local artists are engaged where appropriate to ensure a local sense of place is maximised.

MATERIAL OPTIONS

Refer to 'Cockburn Coast Public Art Strategy' by Place Partners, March 2012 for exemplars and additional information.



(D) SELECTIONS

Signage

Street signage

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓	✓	✓	✓	✓	✓	✓	✓	✓									
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide effective street signage that meets the requirements of the local authority

CONSIDERATIONS/OBJECTIVES

- Street name plates be constructed using 200mm blades with 100mm or 150mm letters, coloured with blue letters on a reflective white background and, where practical, incorporating 50mm blue house numbers and Council's Corporate Logo (as per City of Cockburn Specification Policy).
- Minimise clutter
- Integrate way finding and interpretive artwork into signage strategy

MATERIAL OPTIONS

- Steel

FINISH

- As required

POS signage

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
									✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide effective signage to each POS that clearly defines and identifies the POS and its location within the precinct.

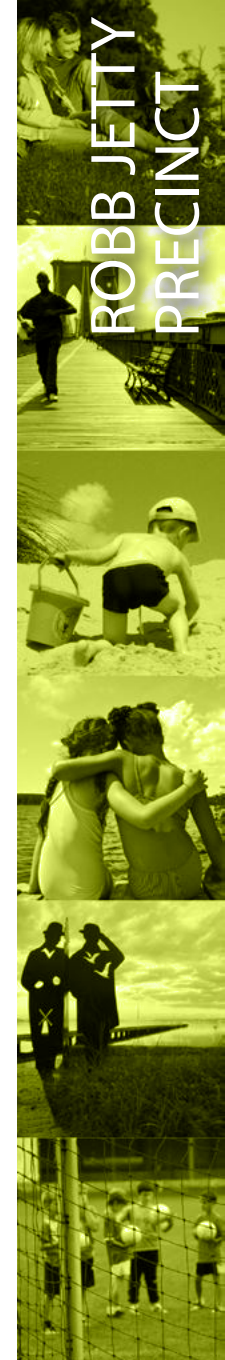
CONSIDERATIONS/OBJECTIVES

- The subdivision developer shall furnish and install a park name sign for each new POS site developed by the subdivision process.
- The City has resolved in its Aboriginal Reconciliation Action Plan to list an Aboriginal/English dictionary the reverse side of its parks name sign.
- Minimise clutter
- Integrate way finding and interpretive artwork into signage strategy

MATERIAL OPTIONS

- Timber
- Steel
- Concrete

FINISH



Structures

Shelters

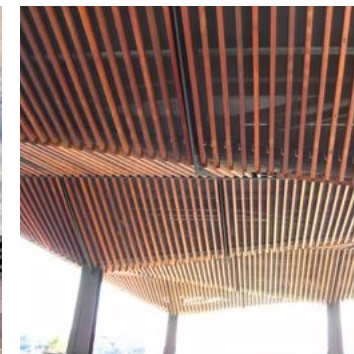
ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
									✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?										YES / NO							

MATERIAL OPTIONS

- Timber
- Steel
- Concrete

FINISH

- Rustic



DESIGN INTENT

- To provide shelters that are unique to the precinct or sub-precinct and enhance the overall character of the precinct
- To provide public amenity that contributes to the activation of Public Open Space

CONSIDERATIONS/OBJECTIVES

- To be located in key positions relative to pedestrian access, vehicles networks and POS location
- Ensure shelter materials are of an appropriate durability for location
- The design of shelters should minimise maintenance and vandalism opportunities
- Design of the shelter should strongly reflect the themes and character of the precinct
- All shelters should have appropriate structural engineering sign off
- Should be meet Australian Standards
- Should explore opportunities to integrate artwork, seating, bbq's, bins, picnic settings etc.



SELECTIONS

Walls

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
									✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To reflect the strong heritage of the site
- To reflect the existing materiality of the site

CONSIDERATIONS/OBJECTIVES

- All walls to have appropriate structural engineering sign off
- Ensure wall materials are of an appropriate durability for location
- Should explore opportunities to integrate seating, wall mounted bins, signage and artwork
- Should be meet Australian Standards
- Consider and adopt skate-able edges to walls.

MATERIAL OPTIONS

- Concrete
- Stone
- Gabion (maximum 600mm high restriction)
- Brick
- Limestone

FINISH

- Varying

BEACH SIDE PLAZA



wall material_
formed concrete walls



wall material_
chunky timber walls



wall material_
random limestone

HERITAGE PLAZA



wall material_
formed concrete walls



wall material_
recycled brick walls

GREEN LINK PLAZA



wall material_
formed concrete walls

GREEN LINK & MCTAGGART PARK



wall material_
formed concrete walls



wall material_
corten steel cladding

Stairs

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
									✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To reflect the strong heritage of the site
- To reflect the existing materiality of the site
- To be located where views are maximised back to ocean

CONSIDERATIONS/OBJECTIVES

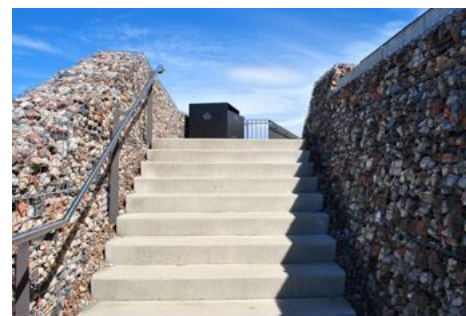
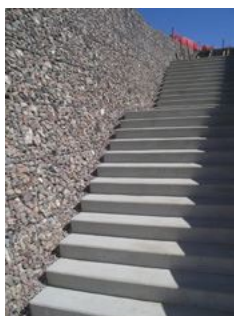
- All stairs to have appropriate structural engineering sign off
- Ensure stair materials are of an appropriate durability for location
- Should explore opportunities to integrate seating, signage and artwork
- Should be meet Australian Standards
- Should have varying degrees of formality, i.e. stone clad stairs vs. informal timber and stabilised gravel stairs

MATERIAL OPTIONS

- Timber
- Steel
- Concrete
- Stabilised gravel

FINISH

- As required





(D) SELECTIONS

Bridges/boardwalks

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
									✓			✓	✓	✓	✓		
ADDRESSED?												YES / NO					

DESIGN INTENT

- To enhance the overall character of the precinct or sub-precinct
- Should provide passage through drainage basins and maximise opportunities to pause and ponder

CONSIDERATIONS/OBJECTIVES

- All bridges to have appropriate structural engineering sign off
- Ensure bridge materials are of an appropriate durability for location
- Should explore opportunities to integrate seating, signage and artwork, shelters
- Should be meet Australian Standards
- Should take interesting paths through site rather than be lineal and straight
- Should explore use of sustainable materials

MATERIAL OPTIONS

- Timber
- Steel and steel meshes
- Composite Timbers

FINISH

- Oiled
- Galvanised, corten
- Composite Timbers





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(D) SELECTIONS

Surface Treatments (Hard)

Edge restraints

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANEWAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide a robust and durable solution to separating surfaces varying in materiality

CONSIDERATIONS/OBJECTIVES

- Ensure materials are of an appropriate durability for location
- Should meet Australian Standards
- Should minimise maintenance and vandalism opportunities
- Should explore use of sustainable materials
- Should explore opportunities to be custom designed in key locations to add to the overall character of the precinct or sub-precinct

MATERIAL OPTIONS

- Concrete
- Steel

FINISH

-

Paving

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANEWAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide adequate surface finishes that meet the requirements of varying uses such as pedestrian activity, cycleways and vehicles
- Should be of varying materials, finishes and patterns to establish streetscape and POS hierarchy's within the precinct

CONSIDERATIONS/OBJECTIVES

- Ensure materials are of an appropriate durability for location
- Should meet Australian Standards
- Should minimise maintenance and vandalism opportunities
- Should explore use of sustainable materials
- Should explore opportunities to integrate artwork
- Should clearly establish and help delineate between differing uses, i.e. cycle path vs. pedestrian path
- Should be sufficiently engineered to withstand service vehicle loadings

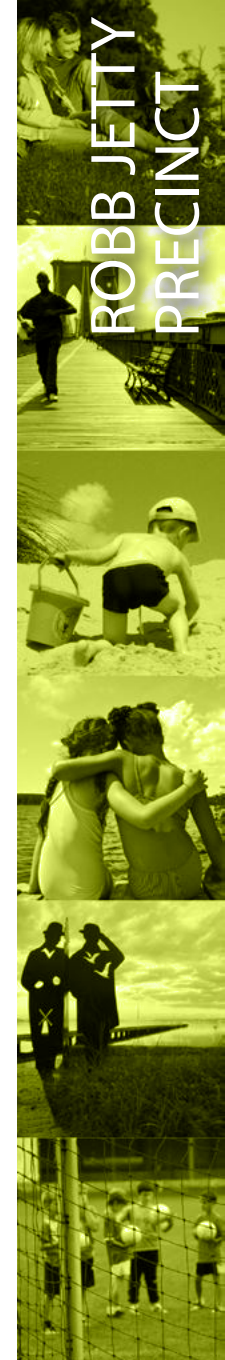
- Should meet the appropriate slip ratings

MATERIAL OPTIONS

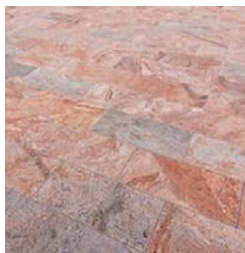
- Poured concrete
- Decorative poured
- Decorative concrete pavers
- Liquid limestone
- Red asphalt
- Stabilised gravel

FINISH

- Broom
- Washed Aggregate
- Milled
- Compacted



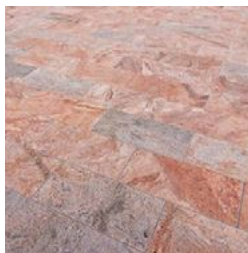
ROBB JETTY MAIN ST WEST



shared path_
red/grey granite



road surface_
red/grey granite

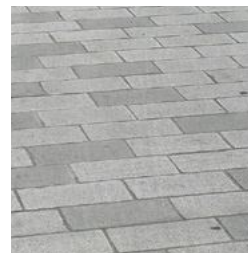


parking bays_
red/grey granite

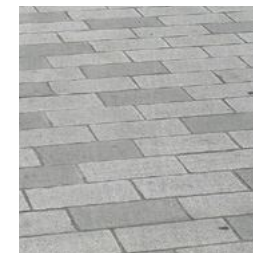
ROBB JETTY MAIN ST EAST



shared path_
red/grey granite



road surface_
grey granite



parking bays_
grey granite

BRT/LRT LOCAL ROAD



shared path & median_
milled concrete pavers

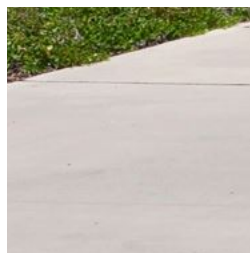


feature paving_
concrete pavers



road surface_
asphalt

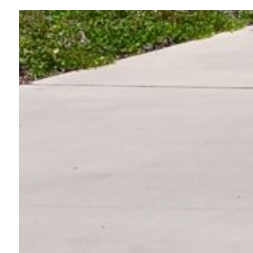
COCKBURN ROAD



shared path_
brushed concrete



road surface_
asphalt

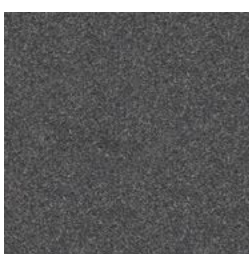


cycle path_
brushed concrete

GREEN STREET



shared path_
washed aggregate
concrete



road surface_
asphalt

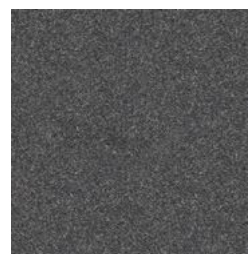


parking bays_
red asphalt

POS STREET



shared path_
light coloured granite pavers



road surface_
asphalt



parking bays_
red asphalt

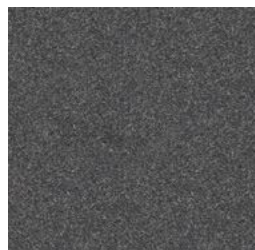


(D) SELECTIONS

LOCAL STREETS



shared path_
washed aggregate
concrete



road surface_
asphalt

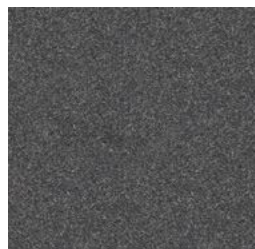


parking bays_
red asphalt

ROLLINSON ROAD



shared path_
washed aggregate
concrete



road surface_
asphalt



parking bays_
red asphalt

DISTRICT PARK



shared path_
washed aggregate concrete



shared path_
recycled brick

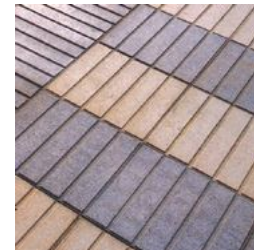


surface treatment_
stabilised gravel

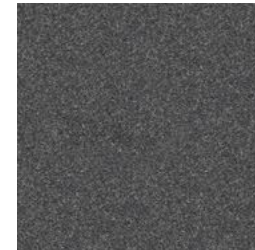
RAILWAY ROAD



shared path_
washed aggregate concrete



paving inlays_
repetition of long, narrow
paves

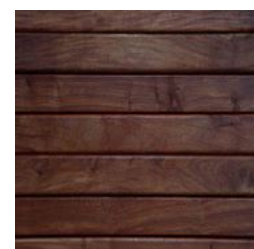


road surface_
asphalt

BEACH SIDE PLAZA



shared path_
washed aggregate concrete



shared path_
timber boardwalks



surface treatment_
stabilised gravel

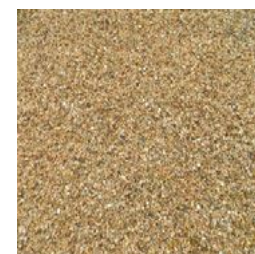
HERITAGE PLAZA



shared path_
grey granite cobbles



shared path_
recycled brick



surface treatment_
stabilised gravel

GREEN LINK



shared path_
washed aggregate concrete



shared path_
timber boardwalks



surface treatment_
stabilised gravel

FORESHORE RECREATIONAL PARK



shared path_
washed aggregate
concrete



surface treatment_
stabilised gravel

GREEN LINK PLAZA



shared path_
grey granite cobbles



shared path & median_
milled concrete pavers



surface treatment_
stabilised gravel

MCTAGGART PARK



shared path_
washed aggregate
concrete



surface treatment_
stabilised gravel





(D) SELECTIONS

Surface Treatments (Soft)

Turf

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANEWAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
									✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide a low cost surface treatment to POS areas which allows activity to occur

CONSIDERATIONS/OBJECTIVES

- Should be adequately irrigated
- Should be meet Australian Standards

MATERIAL OPTIONS

- Kikuyu pennisetum

FINISH

-

Mulch

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANEWAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- "To provide an organic matter that promotes growth in planted areas

CONSIDERATIONS/OBJECTIVES

- Should meet Australian Standards

MATERIAL OPTIONS

- Wood Chip
- Granitic sands

FINISH

-

Shrub Planting

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANEWAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide planted areas that promote flora and fauna biodiversity
- Planting palettes should enhance the character of the precinct of sub-precinct

CONSIDERATIONS/OBJECTIVES

- Should be meet Australian Standards
- Should minimise maintenance and vandalism opportunities
- Should assist in surveillance within POS areas, i.e. does not interfere with sight lines through POS
- Should consider interface with property boundaries and streetscapes
- Should be adequately irrigated and promote Water Sensitive Urban Design principles

MATERIAL OPTIONS

- Mix of native and exotic species suited to conditions

FINISH

-

Additional Water Play

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
											✓						
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide an interactive, water sensitive design element that reflects the scale of the existing heritage listed chimney stack, and to assist with activating the Heritage Plaza.

CONSIDERATIONS/OBJECTIVES

- Public health and safety
- Ensure water meets requirements fit for public consumption
- The design of water features should minimise maintenance and vandalism opportunities
- Design of the water features should strongly reflect the themes and character of the precinct
- Should reflect the scale of the heritage listed chimney stack
- Should be interactive to assist with activation
- Should promote sound water sensitive urban design principles.





(D) SELECTIONS

Skate Park

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
																	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide an purpose built, activated, public space that promotes recreation and gathering in the precinct.

CONSIDERATIONS/OBJECTIVES

- Public health and safety
- Should be meet Australian Standards
- Consider integration with overhead pedestrian bridge
- Consider interface with railway corridor
- Consider interface with potential adventure playground
- Ensure design promotes the themes of the precinct or sub-precinct
- Ensure adequately lit, using sustainable lighting sources, to allow night activation

MATERIAL OPTIONS

- Concrete
- Timber
- Bricks

FINISH

- Polished
- Sanded and sealed
- Sealed



Designated Dog Park

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
																✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide designated areas to exercise dogs in a parkland setting.

CONSIDERATIONS/OBJECTIVES

- Design will be meet Australian Standards
- Adequately fenced to segregate dog areas from non-dog areas
- Integrated dog play/exercise equipment
- Should minimise maintenance and vandalism opportunities
- Should assist in surveillance within POS areas, i.e. does not interfere with sight lines through POS
- Should consider interface with property boundaries and streetscapes

MATERIAL OPTIONS

- Considered on design submission

FINISH

- Considered on design submission



SELECTIONS

Drainage Basins

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
										✓			✓	✓	✓	✓	✓
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide locations for water inundation that assist with the development functionality with a naturalistic aesthetic, and helps promote flora and fauna diversity.

CONSIDERATIONS/OBJECTIVES

- Public health and safety
- Should be meet Australian Standards
- Consider pedestrian networks
- Ensure planting selections are able to withstand water inundation
- Ensure planting selections promote diversity and encourage fauna habitation.
- Ensure design promotes the themes of the precinct or sub-precinct
- Ensure adequately lit, using sustainable lighting sources, to allow night activation
- Ensure standing/still water is filtrated
- Consider water circulation



Swales

ROBB JETTY MAIN ST	BRT LOCAL ROAD	COCKBURN ROAD	GREEN ST	POS ST	LOCAL STREETS	RAILWAY ROAD	ROLLINSON ROAD	LANE WAYS	BEACH SIDE PLAZA	DISTRICT PARK	HERITAGE PLAZA	WEST GREEN LINK	GREEN LINK PLAZA	GREEN LINK WEST	GREEN LINK EAST	FORESHORE PARK	MCTAGGART PARK
✓			✓	✓	✓	✓	✓										
ADDRESSED?												YES / NO					

DESIGN INTENT

- To provide locations for water inundation that assist with the development functionality with a naturalistic aesthetic, and helps promote flora and fauna diversity.

CONSIDERATIONS/OBJECTIVES

- Public health and safety
- Should be meet Australian Standards
- Consider pedestrian networks
- Ensure planting selections are able to withstand water inundation
- Ensure planting selections promote diversity and encourage fauna habitation.
- Ensure design promotes the themes of the precinct or sub-precinct
- Ensure adequately lit, using sustainable lighting sources, to allow night activation
- Ensure standing/still water is filtrated
- Consider water circulation



ROBB JETTY
PRECINCT

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(2) HILLTOP





Part C: Typologies

Contents

- 1.0 Street Tree Hierarchy
- 2.0 Streetscape Typologies
- 3.0 POS Typologies
- 4.0 POS Tree Hierarchy
- 5.0 Planting Typologies

Part C: Typologies outlines the design parameters for streetscapes, designated POS areas, and tree and shrub plantings.

The information in this section has been adapted and expanded from the following:

Place Partners – Cockburn Coast Place Making Strategy
 TPG in association with Yates Heritage & Big Island Research
 Hassell – Cockburn Coast District Structure Plan, Volumes 1 and 2
 Hassell – Cockburn Coast Foreshore Management Plan
 Site investigations undertaken by Urbis, December 2013





(C) TYPOLOGIES_STREETSCAPES

1.1 Street Tree Hierarchy

Design Intent

The selections of the street trees throughout the various streetscapes are driven by the following factors:

- exposure to prevailing winds
- proximity to built form
- shading from building heights
- soil conditions
- coastal exposure
- overall themes
- location/proximity to POS areas
- striking a endemic vs exotic balance with regards to indigenous and european heritage

The following design factors should be considered when selecting the final tree species:

- changing of street tree species where street interfaces with POS area to mark the entry to the various parks within the development
- selecting landmark trees where appropriate to mark gateways into the various precincts
- establishing habitable spaces below canopies on main streets
- interface with public transport infrastructure to ensure remedial works are minimised when trees mature.
- underground service requirements.

The proponent will require the approval on all species from the City.

Figures 1 and 2 outline acceptable species to establish each streetscape typology, however, approval on final species from local authority will be required.

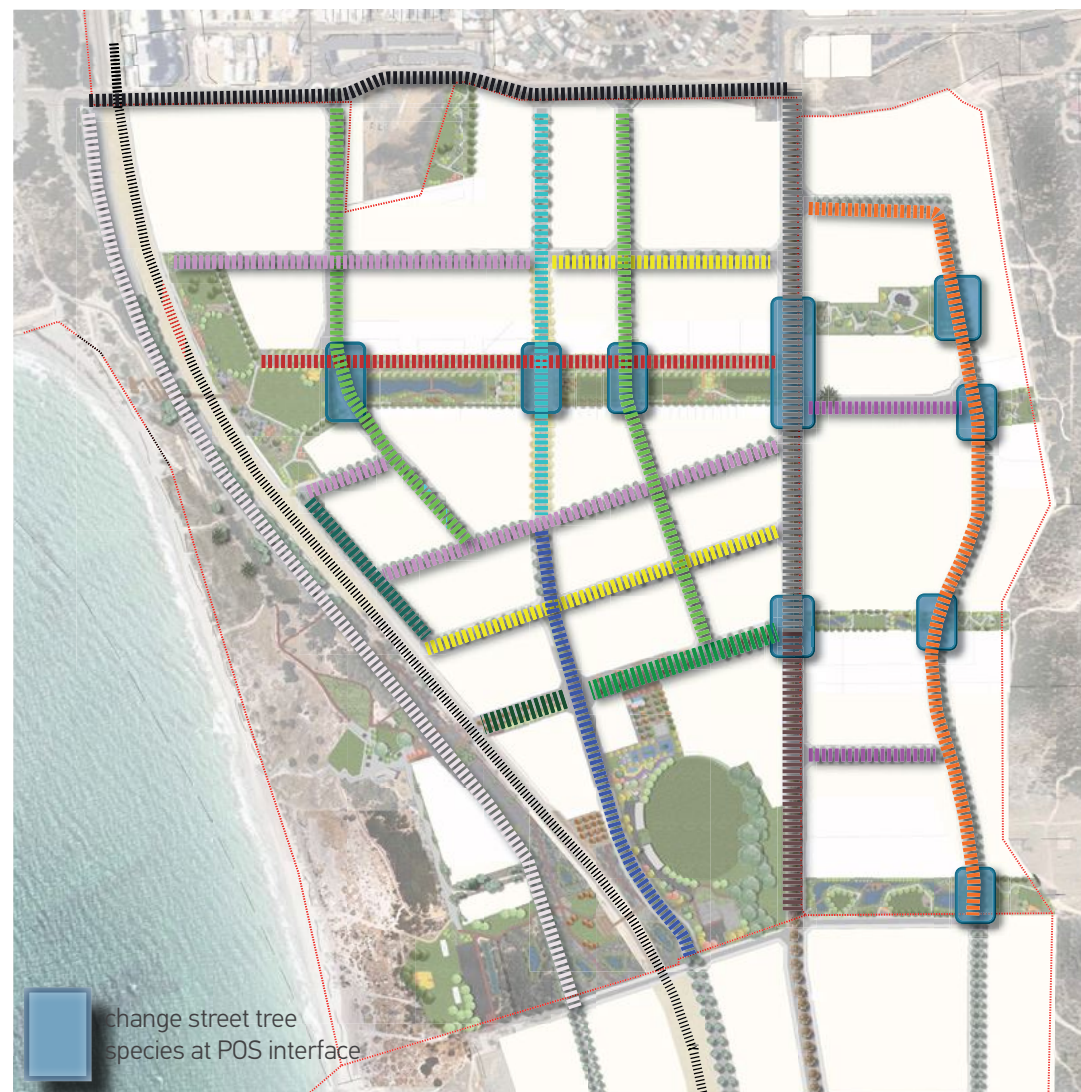


Figure 1_street tree hierarchy plan



Figure 2_street tree species





(C) TYPOLOGIES_STREETSCAPES

2.1 Streetscape Typologies

Design Intent

The streetscapes have been designed with coordination with the local authority and civil engineer to create serviceable, habitable streets that have high functional and aesthetic outcomes. They are an evolution of the design intent expressed in the LSP.

Each street typology is distinct to itself in terms of its functional requirements, with a standard minimum aesthetic being applied to all streets.

The streetscape designs promote shared surfaces where possible, and a low speed environment to encourage pedestrian and cycling emphasis over vehicular use

The streetscape typologies have been designed in conjunction with the following considerations:

- Public transport infrastructure and network
- Pedestrian and cyclist networks
- Street Tree Hierarchy
- Material selections
- Proprietary and custom furniture selections
- Planting palettes
- On street parking solutions
- Way finding and signage
- Public Art Strategy
- Water Sensitive Urban Design Principles
- Precinct theming strategies



streetscape typologies location plan



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(C) TYPOLOGIES_STREETSCAPES

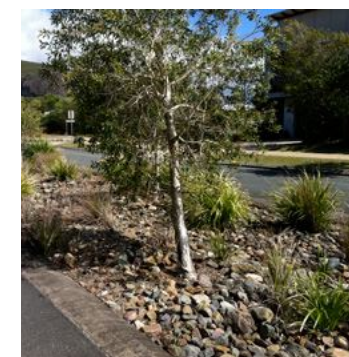
2.2 Emplacement Crescent Shared Street 1

Emplacement Crescent Shared Street 1 incorporates the following principles:

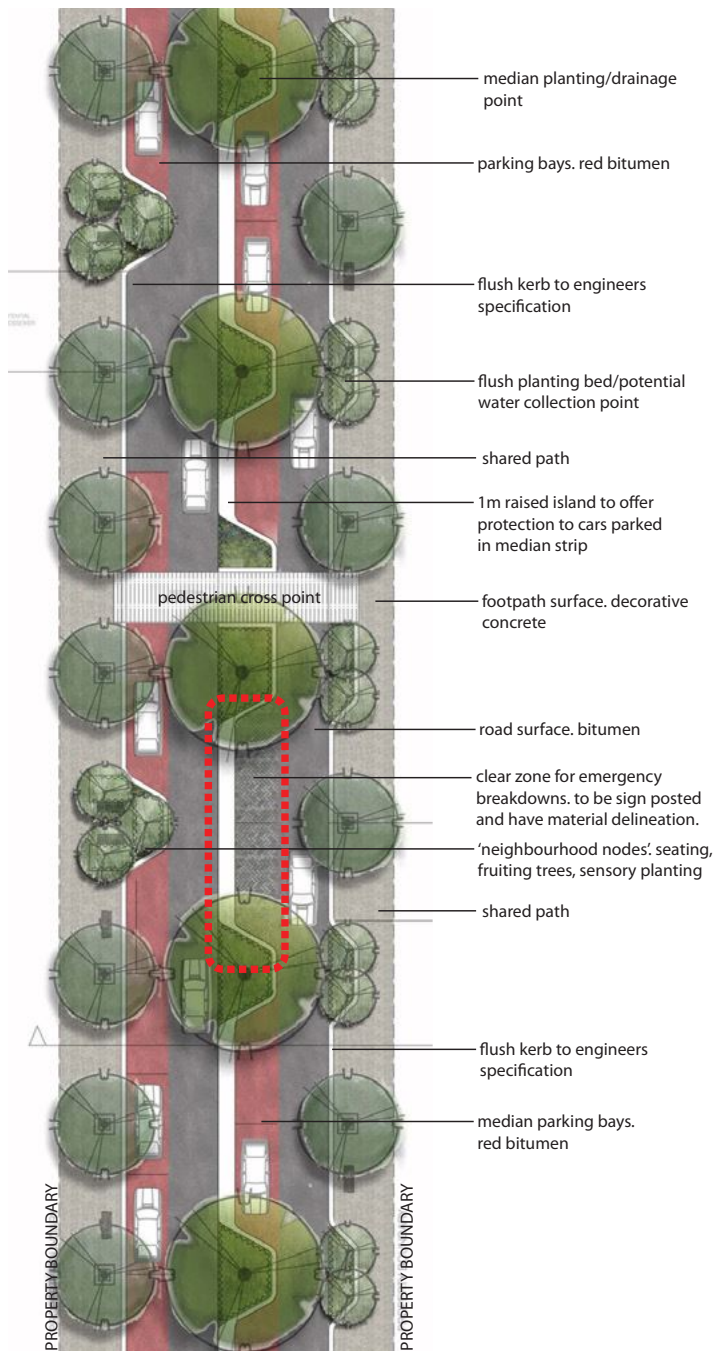
- Median street tree selections that provide a distinct feel to the street
- Supplementary tree species selected from a suite of trees that help create 'neighborhood nodes'.
- To consist of 'neighbourhood nodes' which include sensory and edible experiences through the selection of tree and plant species, and furniture selections that allow habitable zones which promotes ownership of the street
- Implements strong water sensitive urban design principles
- Has generous shared surfaces either side of the street to allow for informal pedestrian and casual cyclists to utilise the street
- Parking bays located in median zone which helps promote a low speed environment. Parking bays to be a minimum of 3.0m wide to allow for car door swings.
- Has raised and segmental kerb located in median that allows for water run off to tree wells and assists with directional parking.
- Furniture to be robust, readily available and easily maintained.
- Consider change in tree species where streetscape interfaces with POS
- Clear zones required in the event of a breakdown. These allow traffic to overtake in specific locations



location plan



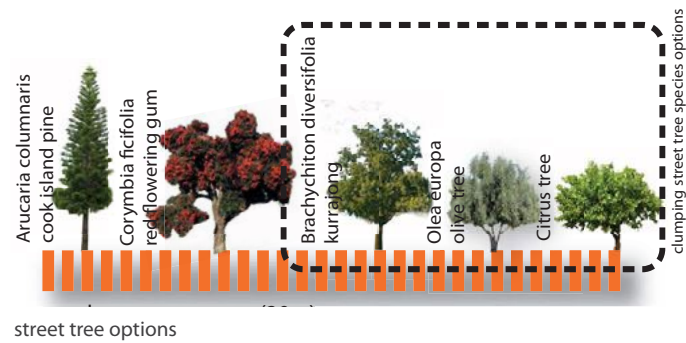
vibe images



Emplacement Crescent Shared Street 1 - Typical Plan



Emplacement Crescent Shared Street 1 - Typical Section





(C) TYPOLOGIES_STREETSCAPES

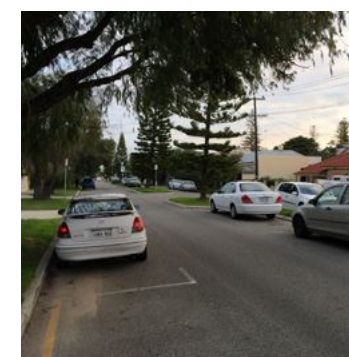
2.3 Emplacement Crescent Shared Street 2

Emplacement Crescent Shared Street 2 incorporates the following principles:

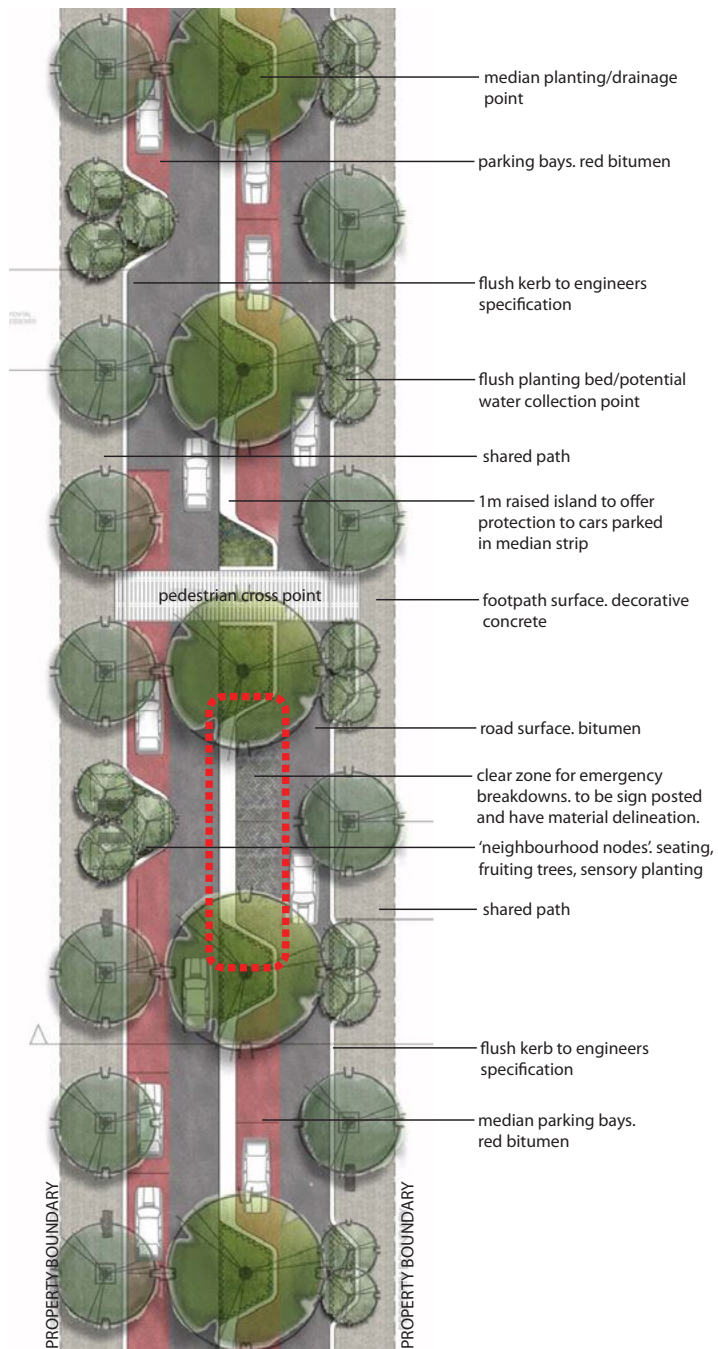
- Median street tree selections that provide a distinct feel to the street
- Supplementary tree species selected from a suite of trees that help create 'neighborhood nodes'.
- To consist of 'neighbourhood nodes' which include sensory and edible experiences through the selection of tree and plant species, and furniture selections that allow habitable zones which promotes ownership of the street
- Implements strong water sensitive urban design principles
- Has generous shared surfaces either side of the street to allow for informal pedestrian and casual cyclists to utilise the street
- Parking bays located in median zone which helps promote a low speed environment. Parking bays to be a minimum of 3.0m wide to allow for car door swings.
- Has raised and segmental kerb located in median that allows for water run off to tree wells and assists with directional parking.
- Furniture to be robust, readily available and easily maintained.
- Consider change in tree species where streetscape interfaces with POS
- Clear zones required in the event of a breakdown. These allow traffic to overtake in specific locations



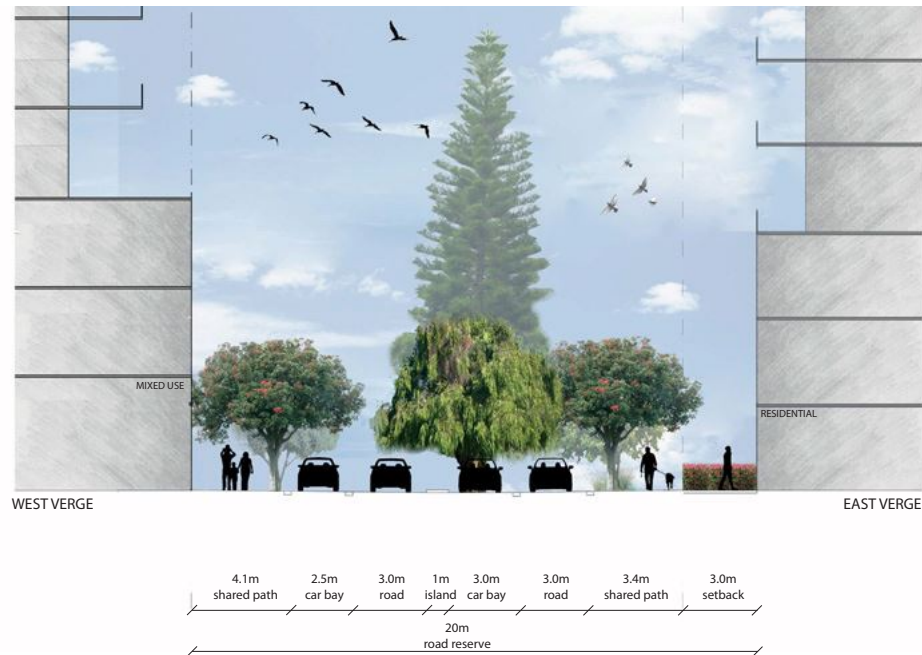
location plan



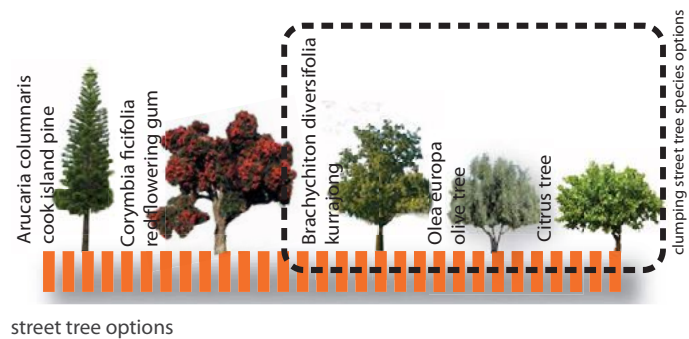
vibe images



Emplacement Crescent Shared Street 2 - Typical Plan



Emplacement Crescent Shared Street 2 - Typical Section



street tree options



HILL TOP
PRECINCT

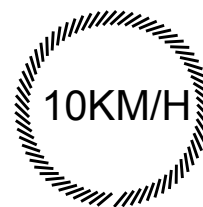


(C) TYPOLOGIES_STREETSCAPES

2.4 Hilltop Local Street

Hilltop Local Street incorporates the following principles:

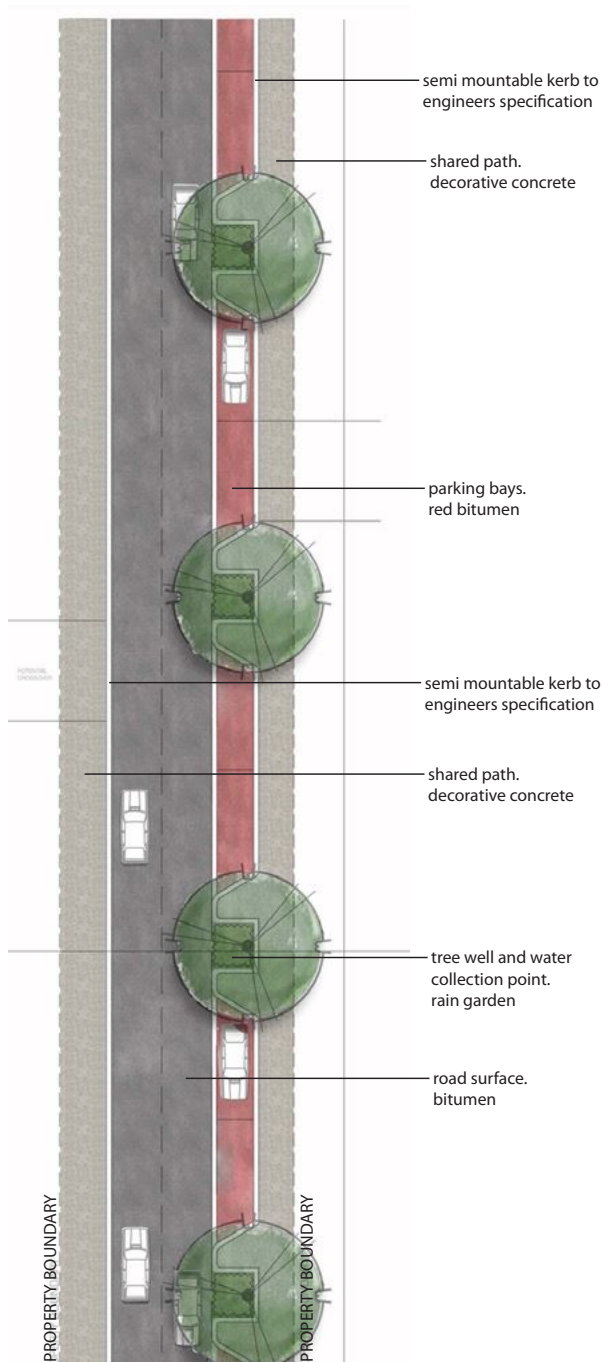
- Street tree selections that provide a distinct feel to the street
- Implements strong water sensitive urban design principles
- Parking bays located in southern side of street in between street trees and water run off collection points
- Furniture to be robust, readily available and easily maintained.



location plan



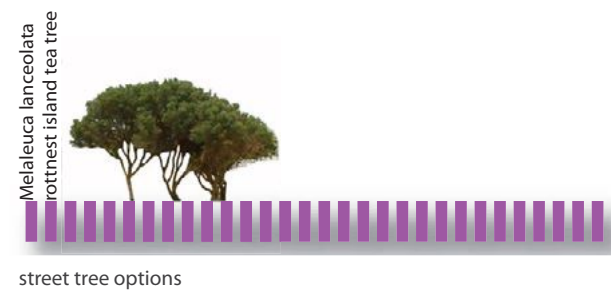
vibe images



Hilltop Local Street - Typical Plan



Hilltop Local Street - Typical Section



HILLTOP
PRECINCT



(C) TYPOLOGIES_STREETSCAPES

2.5 Surface Treatment Changes

Design Intent

Surface materials changes should be considered at the following street junctions:

1. Green Link 1/Emplacement Crescent_change in surface material to signify arrival at the POS.
2. Green Link 2/Emplacement Crescent_change in surface material to signify arrival at the POS.



surface treatment changes location plan

(C) POS LOCATIONS

3.1 POS Typologies

Design Intent

The POS typologies have been developed as a response to the functional, overall thematic, and individual precinct requirements within the development.

Each POS typology is distinct to itself in terms of its functional requirements, with a standard aesthetic requirement to be achieved within each POS area.

The POS typologies have been designed in conjunction with the following principles:

- Response to heritage elements
- Response to drainage requirements
- Response to soil contaminants
- Response to built form and building use
- Public transport infrastructure and network
- Functionality requirements
- Pedestrian and cyclist networks
- POS Tree Hierarchy
- Material selections
- Proprietary and custom furniture selections
- Planting palettes
- On street parking solutions
- Way finding and signage
- Public Art Strategy
- Water Sensitive Urban Design Principles
- Precinct theming strategies
- Exercise networks



POS typologies location plan





TYPOLOGIES_POS

3.2 POS Functionality

Functionality allocation

The functionality and amenity assigned to each POS is a refinement of the allocated amenity in Place Partner's 'Cockburn Coast Place Making Strategy' Document (March 2012).

Functionality and amenity allocation has been determined by the following factors:

- existing amenity
- historical/heritage considerations
- areas intended for high use/gathering hubs
- proximity to population density
- proximity to public transport links
- proximity to similar amenity
- proximity to building occupation



bbq area



kickabout area



bicycle track



lookout



cafe



play ground



dedicated dog park



shelter



exercise station



swimming area



horse exercise location



toilets/change rooms



skate park



playground



adventure
playground



outdoor bocce



water play



outdoor
table tennis

POS ACTIVATORS



community
gardens



community
gardens

COMMUNITY AMENITY



bicycle
racks



pavillion
structure



pavillion
structure



beachside
vernacular



beachside
vernacular



gathering on
boardwalks



eco-underpass



beach kiosk/
cafe vernacular



ground plane
reflective water feature

BUILT ELEMENTS IN POS



bosque/plaza



bosque/plaza



alfresco dining

POS PLACE MAKERS



(C) TYPOLOGIES_POS

3.3 Military Park

Military Park is located in the northern portion of the Hilltop Precinct. Its primary function is to serve as a gathering space for residents and employees whilst providing drainage and access capabilities throughout the site.

The park has a distinct change in levels and should look to integrate the theming of the precinct into any build elements such as wall, balustrades, shelters and handrails.

The existing gun plinth is to be retained and enhanced through additional sculptures, interpretive signage and facilities, and is a key driver in informing the rest of the Hilltop precinct.

A kick about area located at the top of the hill, as well as bbq and playground facilities should assist in activating the park.

A combination of Western Australian and european tree and plant species should be selected in order to enhance the military and industrial stories of the site.

Similarly, furniture selections should be robust and of an industrial nature which equally assist in telling these stories.



military park_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



military_general arrangement





((C)) TYPOLOGIES_POS

3.4 Hill Top Park

Hill Top Park is located to the east of Hilltop Local Street and has direct access to the Beeliar Regional Park.

The park has a distinct change in levels and should look to integrate the theming of the precinct into any build elements such as wall, balustrades, shelters and handrails.

Equally, the POS should embrace the opportunity for lookout back towards the ocean, and this in turn should inform the artwork strategy for this location.

A kick about area located at the top of the hill, as well as bbq and playground facilities should assist in activating the park.

A combination of Western Australian and european tree and plant species should be selected in order to enhance the industrial stories of the site.

Similarly, furniture selections should be robust and of an industrial nature which equally assist in telling these stories.



hill top park_vibe imagery

LL TOP RECINCT



PO21



((C)) TYPOLOGIES_POS

3.5 Green Link 1

Green Link 1 is located on the southern border of the Hilltop Precinct. The primary function of the eastern portion of the park is to offer public amenity, outlook opportunities and access to Beeliar Regional Park; whilst the western portion of the park concentrates on assisting drainage functionality and access throughout.

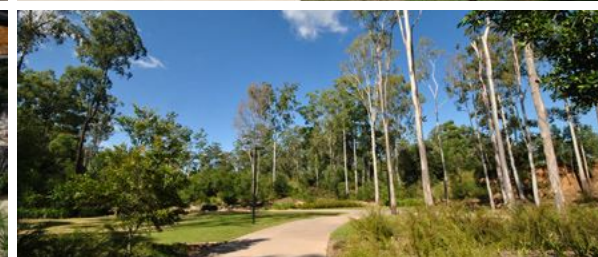
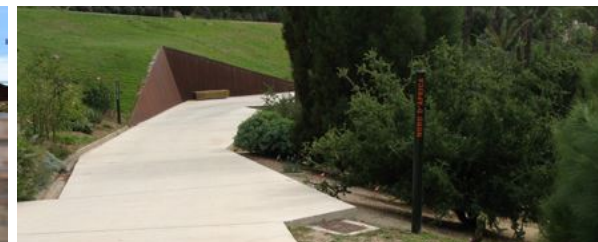
The park has a distinct change in levels and should look to integrate the theming of the precinct into any build elements such as wall, balustrades, shelters and handrails.

Kick about areas are to be inter-dispersed throughout the drainage basin dominated POS areas, and should be assisted by facilities such as bbq's, shelters, playgrounds and naturescape play areas.

Pedestrian bridges, platforms and lookouts are to be integrated within the POS and take interesting routes that lead the public past the offered amenity and through the naturalistic drainage basin.

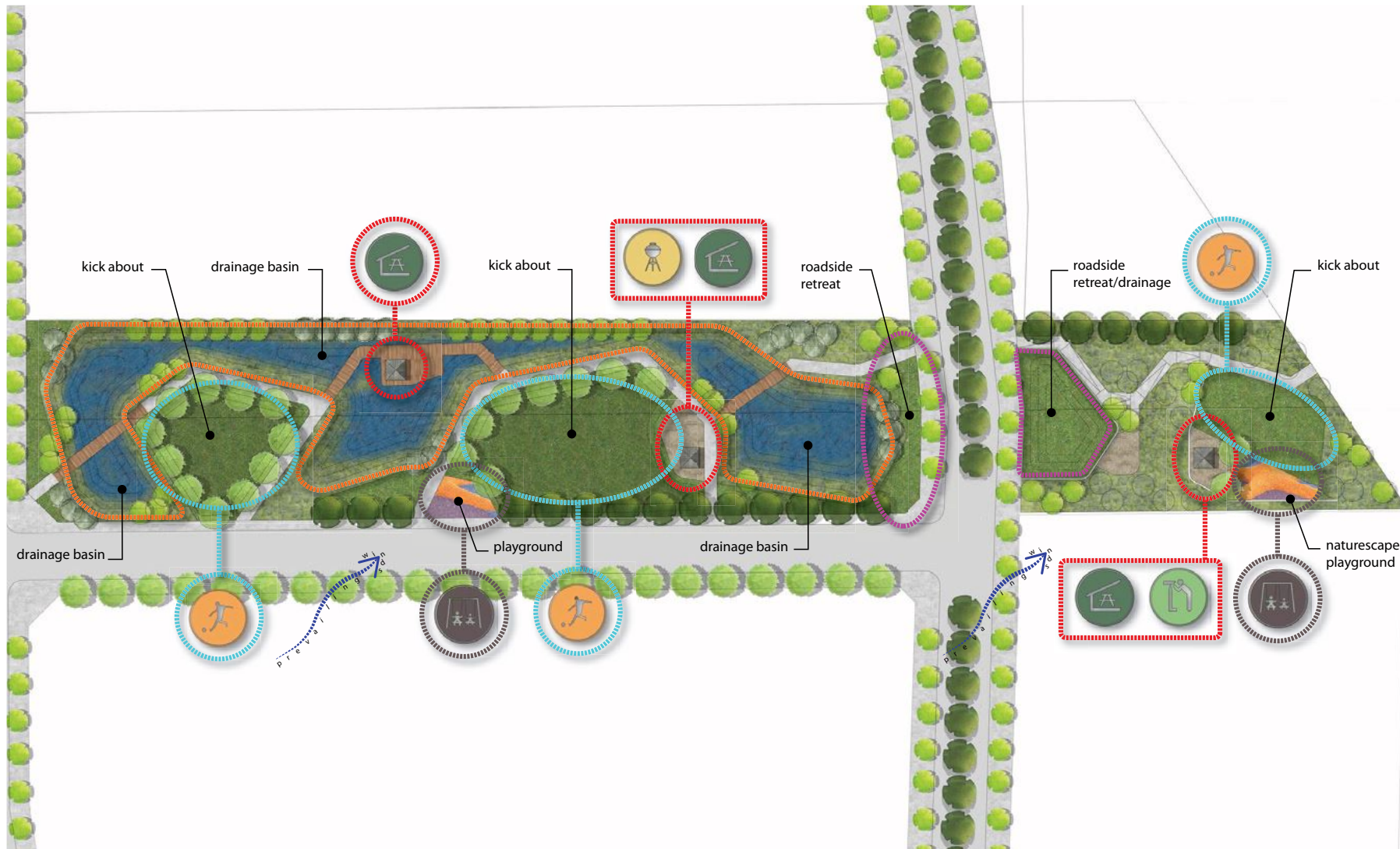
Tree and planting species should primarily be Western Australian natives with a few key european species in order to create a space that promotes flora and fauna diversity.

Furniture selections should be robust and of an industrial nature which assist the theming of the precincts.



green link 1_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



HILL TOP
PRECINCT



(C) TYPOTOLOGIES_POS

3.6 Green Link 2

Green Link 1 is located on the southern border of the Hilltop Precinct. The primary function of the eastern portion of the park is to offer public amenity, outlook opportunities and access to Beeliar Regional Park; whilst the western portion of the park concentrates on assisting drainage functionality and access throughout.

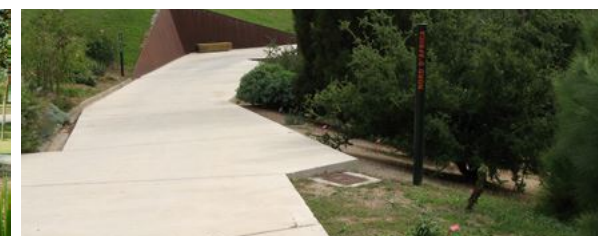
The park has a distinct change in levels and should look to integrate the theming of the precinct into any build elements such as wall, balustrades, shelters and handrails.

Kick about areas are to be inter-dispersed throughout the drainage basin dominated POS areas, and should be assisted by facilities such as bbq's, shelters, playgrounds and naturescape play areas.

Pedestrian bridges, platforms and lookouts are to be integrated within the POS and take interesting routes that lead the public past the offered amenity and through the naturalistic drainage basin.

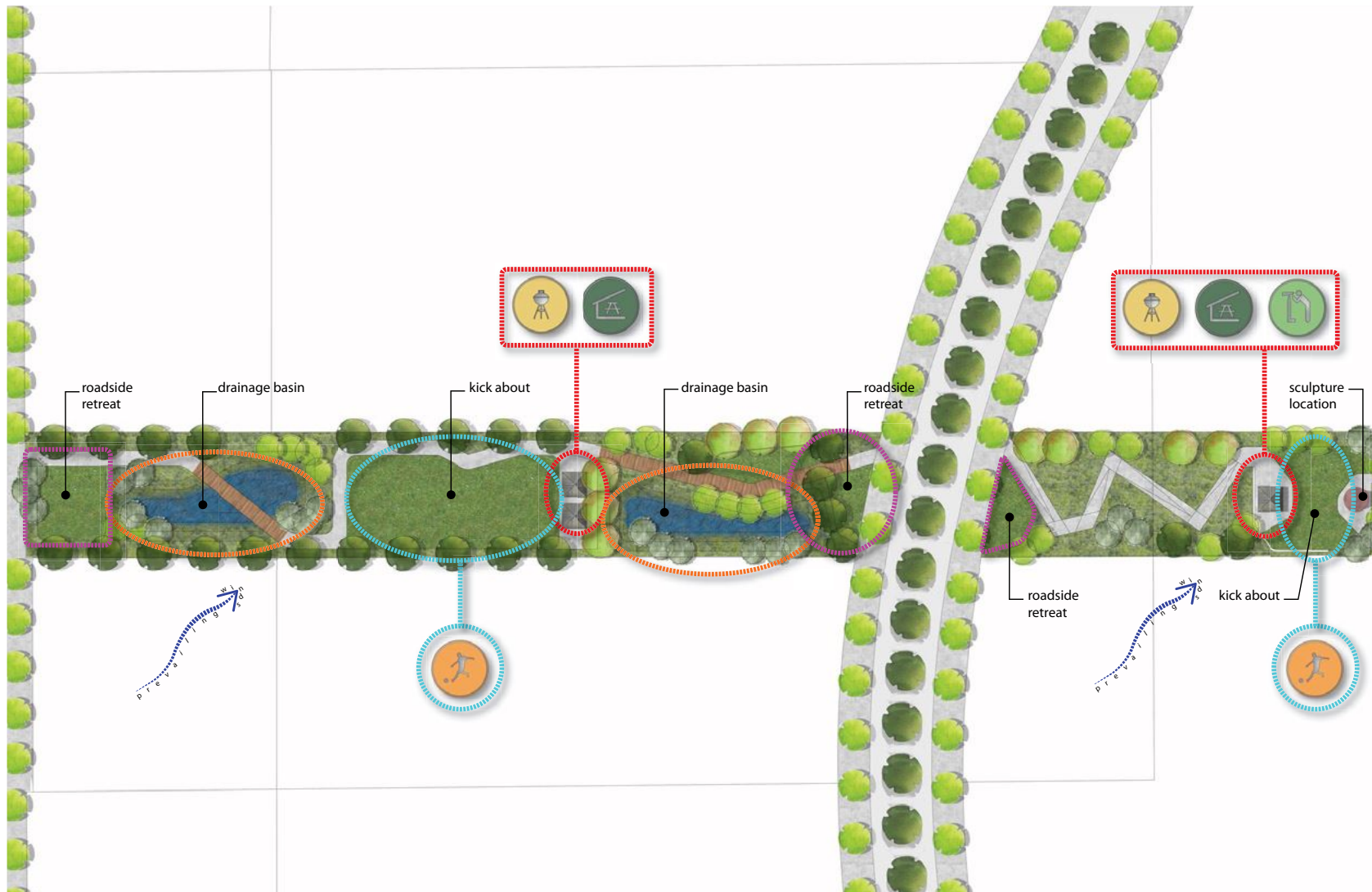
Tree and planting species should primarily be Western Australian natives with a few key european species in order to create a space that promotes flora and fauna diversity.

Furniture selections should be robust and of an industrial nature which assist the theming of the precincts.



green link 2_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



green link 2_general arrangement





(C) TYPOLOGIES_POS

4.0 POS Tree Hierarchy

Design Intent

The selections of the street trees throughout the various POS areas are driven by the following factors:

- exposure to prevailing winds
- proximity to built form
- shading from building heights
- soil conditions
- coastal exposure
- heritage influences
- overall themes
- striking a endemic vs exotic balance with regards to indigenous and european heritage
- suitability for drainage requirements
- providing variety throughout the development that promotes fauna diversity and habitation.
- safety and surveillance

The following design factors should be considered when selecting the final tree species:

- selecting landmark trees where appropriate to mark gateways into the various precincts
- establishing habitable spaces below canopies in kick about areas
- selecting appropriate species in areas of water inundation
- underground service requirements.

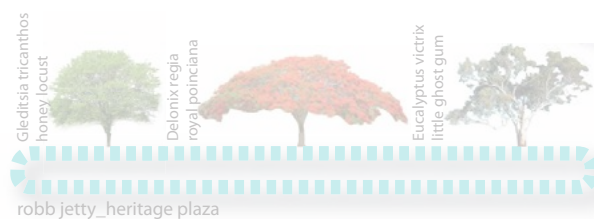
The designer will require the sign off on all species from the City.



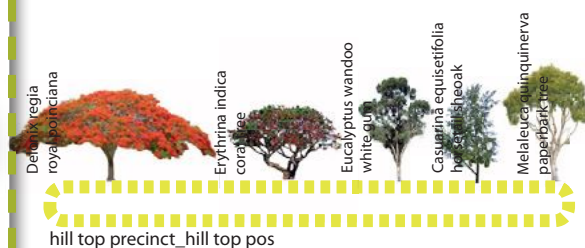
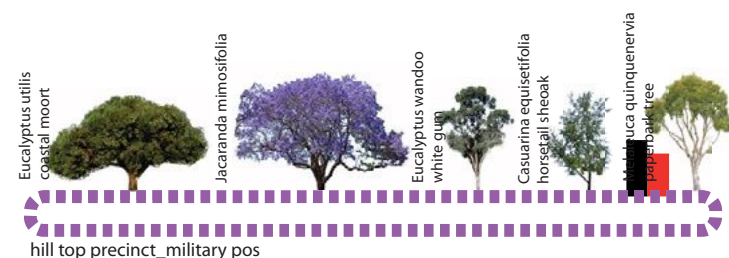
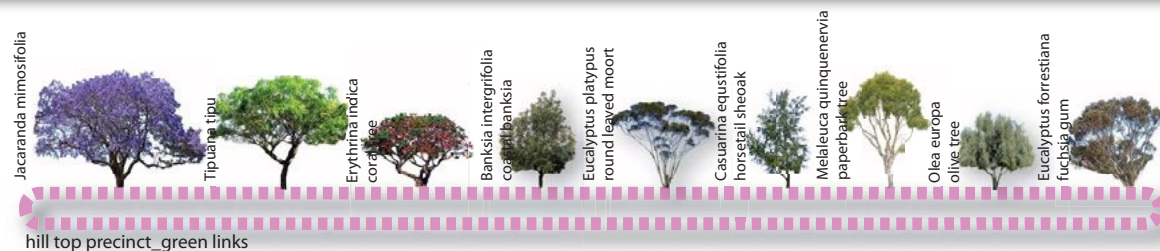
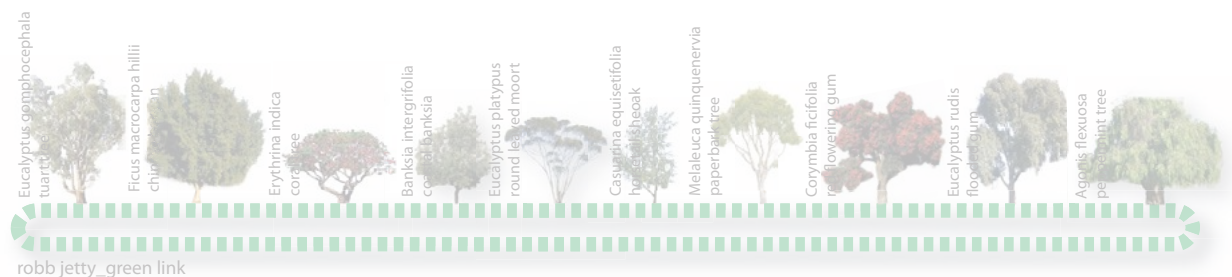
pos tree hierarchy plan



HILL TOP PRECINCT



REFER TO ROBB JETTY PRECINCT





TYPOLOGIES_PLANTING

5.0 Planting Typologies

Design Intent

The selections of the plant species throughout the various POS areas and streetscapes are driven by the following factors:

- exposure to prevailing winds
- shading from building heights
- soil conditions
- coastal exposure
- heritage influences
- overall themes
- suitability for drainage requirements
- providing variety throughout the development that promotes fauna diversity and habitation.

The following design factors should be considered when selecting the final plant species:

- selecting plant species that provide sensory diversity
- selecting plant species that are adaptable and can be presented in a number of aesthetic scenarios, ie, natural form and hedge form
- selecting appropriate species in areas of water inundation
- selecting species that will cope with little to no irrigation
- underground service requirements.

Irrigation requirements shall be agreed with the local authority and designed by a certified irrigation designer.

The designer will require the sign off on all species from the City.

Hilltop Precinct_POS

POS's should be a sensory experience with a variety of native and exotic species.

Plant species should explore the opportunity to enhance any military, industrial or other themes established in the POS design development phase.

Species should be proven in an urban environment, be water wise and display varying textures and colours.

Area	Type	Genus species	Common Name	WA Native or Exotic	Notes
Emplacement Park	Grasses/Sedge	Lomandra longifolia sp.	Lomandra	Australian Native	
		Anigozanthos sp.	Kangaroo Paws	WA Native	
	Groundcovers	Acacia lasiocarpa	Glow Wattle	WA Native	
		Eremophilla glabra	Kalbarri Carpet	WA Native	
		Grevillea preissii	"Sea Spray"	WA Native	
	Small Shrub to 1m	Lavendula dentata	Lavender	Exotic	
		Westringia dampieri	Coastal Rosemary	WA Native	
		Rosmarinus officinalis	Rosemary	Exotic	
		Leuchophyta brownii	Cushion Bush	WA Native	
		Chrysocephalum apiculatum	Yellow Buttons	Australia Wide	
	Medium Shrub to 2m	Olearia axillaris	Coastal Daisy Bush	WA Native	
		Alyogyne huegelii	Native Hibiscus	WA Native	
		Alyogyne hakeifolia	Native Hibiscus	WA Native	
	Other	Xanthorrea preissii	Grass Tree	WA Native	



location plan

Hilltop Precinct_Internal Lots

Internal planting within the lots should be mainly Western Australian natives with approved exotic species complimenting the native palette.

Species should be proven in an urban environment, be water wise and display varying textures and colours.

All species to be hardy, easily maintained and well presented.

Area	Type	Genus species	Common Name	WA Native or Exotic	Notes
Emplacement Park_Internal Lots	Grasses / Sedges	Liriope muscari	Evergreen Giant	Exotic	
		Limonium preissii	Sea Lavender	Exotic	
		Tulbaghia violacea	Society Garlic	Exotic	
		Lomandra confertifolia	Lomandra Seascape	Australian Native	
	Small Shrub to 1m	Conostylus candicans	Grey cottonheads	WA Native	
		Strelitzia reginae	Bird of Paradise	Exotic	
		Anigozanthos sp.	Kangaroo Paws	WA Native	
		Lavendula dentata	Lavender	Exotic	
	Medium Shrub to 2m	Juniper conferta	Shore Juniper	Exotic	
		Rosmarinus officinalis	Rosemary	Exotic	
		Scaevola crassifolia	Thicket Leafed Fan Flower	WA Native	
		Pimelea ferruginea	Pink Rice Flower	WA Native	
	Large shrubs 2m+	Echium candicans	Pride of Madeira	Exotic	
		Alyogyne huegelii	Native Hibiscus	WA Native	
		Alyxia buxifolia	Sea Box	WA Native	
		Viburnum tinus	Viburnum	Exotic	



location plan

Note : The species list is a pre-approved list only. Additional species would be acceptable subject to sign off from the City.



HILL TOP PRECINCT





Part D: Specification and Selections

Contents

1.0 General Specification

2.0 Selections

Part D: 'Specification and Selections' outlines material selections, design components and their associated considerations, and specifications of the streetscapes, and designated POS areas.



HILL TOP
PRECINCT



(D) GENERAL SPECIFICATION

1.0 General Specification and Requirements

Part 1 - Vision

To create a vibrant landmark destination that is connected, diverse and accessible.

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
1.0	Furniture and Fixtures				
1.1	Generally 'Furniture and Fixtures' refers to all outdoor furniture and fixtures included within the public realm intended for public use.	Provide elements that embody the industrial and military heritage of the area through form and material selection. Ensure appropriate placement of thematic selections as per Parts B and C of the PRDG. These elements are critical to establishing the identity of each precinct and sub-precinct	Ensure that the significant coastal exposure of this precinct is addressed in both material selection and furniture placement		
			Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
			Comply with all relevant Australian Standards		
			Ensure all furniture and fixtures are readily available from local suppliers or distributors.		
			Custom elements must: - use readily available local materials - meet all construction and safety standards - meet the thematic requirements set out in this document - minimise maintenance - embody design excellence		
			Equal access should be considered in the selection of furniture. Preference will be given to furniture that is accessible for wheelchair-bound visitors.		
			Furniture is to be located where appropriate for its function. CPTED principles to be considered in the placement of furniture.		
			Preference will be given for furniture designs that employ sustainable materials		



ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
2.0	Lighting				
	Generally	Lighting is a key component of the activation and livability of the area. Careful consideration should be given to the placement, aesthetics and management of design choices to ensure the lighting design fulfills the safety and activation requirements.	Comply with all relevant Australian Standards		
	'Lighting' refers to public lighting within the public realm, including but not limited to:		Ensure all lighting poles and fixtures are readily available from local suppliers or distributors.		
	- Area lighting		Lighting is to be low energy use, long life LED lighting.		
	- Pedestrian lighting		Designers must refer to the City of Cockburn - Open spaces Lighting Guidelines for additional information.		
	- Feature lighting		Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
	- Sports lighting		Area lighting is not to be located within 10m of residential properties (streets excluded)		
	- Solar lighting		Lighting adjacent to bushland is to be located and specified to minimise light spill into habitat areas.		
			A 'PE' cell and timer control system is to be installed for all lighting. All control gear is to be easily accessible for maintenance		
			Only fittings specifically designed for outdoor conditions shall be used		
			In-ground feature lighting is to be installed flush with the surrounding surface, but not supported in streetscapes. To be installed only around areas of interest.		
			Preference to be given to lighting powered by renewable energy sources (solar and wind)		
			CPTED principles to be considered throughout the design		



GENERAL SPECIFICATION

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
3.0	Play Spaces				
	Generally 'Play space' refers to areas within a landscape of which the primary function is to provide play value for children	Play spaces are to be multi functional and cater to a variety of age groups and abilities. Play spaces are key to the activation, education and livability of the development and should embody the thematic components of each precinct.	<p>Comply with all relevant Australian Standards</p> <p>Play spaces are to be designed to encourage a variety of sensory experiences and will incorporate various play opportunities including:</p> <ul style="list-style-type: none"> - active / physical play - cognitive play - social play <p>Equal opportunity for access should be considered in the design and location of play spaces.</p> <p>Play spaces should provide risk and challenge, however are safe and free of hazards.</p> <p>Play spaces are to be located a minimum of 8m away from roads and water bodies.</p> <p>Both custom and off-the-shelf play equipment may be included in a play space</p> <p>Locate play spaces to ensure adequate shade provision. Design to minimise the necessity for solid or tensile shade structures where possible</p> <p>Play spaces to be designed to accommodate a variety of age groups. However consideration to be given to ensuring sufficient separation between user groups to avoid conflicts.</p> <p>Preference is to be given to washed play sand and play mulch over wet-pour rubber soft fall</p> <p>CPTED principles to be considered throughout the design</p> <p>Maintenance and emergency services access to play space areas should be incorporated into the placement of play space areas</p>		



ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
4.0	Public Art				
	<p>'Public Art' refers to artworks within the public realm, including but not limited to:</p> <ul style="list-style-type: none"> - Sculptures - Lighting Installations - Temporary interventions - Way Finding - Landmark Artworks - Landscape Art - Built form interventions - Gateway Icons - Interpretative artworks - Heritage Markers - Way Finding 	<p>Public Artworks are to be designed to express the cultural and historical past of the site, specifically highlighting areas of interest as well as helping form precincts within the development.</p> <p>Public art can be used as a mechanism for educating and way finding, and enhance the overall cultural aspect of the development.</p>	Refer to Appendix A: Place Partners document 'Place Making Strategy for guidelines.		
			All artworks should comply with Australian Standards		
			All artworks should be designed to encourage a variety of sensory experiences		
			All artworks should be designed to promote the historical, social and cultural context of the site		
			All artworks should contribute to creating a sense of place within the various precincts as well as specific areas of interest		
			Should have area lighting to the appropriate standards. Refer to Item 2.0: Lighting for further information		
			Ensure universal access is accommodated where required.		
			Access for maintenance is considered		
			All sculptures to be constructed shall obtain a Certificate of Design Compliance by an independent registered building surveyor prior to lodging a building permit application		



GENERAL SPECIFICATION

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
5.0	Signage				
	Signage' refers to all permanent and temporary within the development, including but not limited to: - Way Finding - Interpretive signage - Advertising - Marketing	Signage is to be designed in such as way that it assists with the functionality of the development, both internally and the broader area ie Fremantle, Kwinana, Port Coogee	All signage should comply with the appropriate standards		
			Signage for advertising purposes shall be of a temporary nature and subject to planning approval		
			Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
			Materials proposed shall be durable and hard-wearing, sustainable and readily available from local sources		
6.0	Structures				
	Generally Structures refer to all vertical built form elements within the public realm	Structures	Comply with all relevant Australian Standards		
			All structures to be constructed shall obtain a Certificate of Design Compliance by an independent registered building surveyor prior to lodging a building permit application		
			Materials proposed for use in structures shall be durable and hard-wearing, sustainable and readily available from local sources		
			Ensure siting of structures considers: - universal access - views to and from the structure - servicing requirements		
			Structures are to incorporate the character intent of the precinct		
			Ensure structures allow for all weather conditions		
			Incorporate 3phase power connection and water connection into each shelter		



ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
7.0	Surface Treatments (Hard)				
	Generally		Comply with all relevant Australian Standards		
			Adhere to the themes, colours and materials as indicated in this document		
			Provide high quality functionality without compromising the aesthetic standards required		
			All paved surfaces are to be graded to drain to turf and planting areas		
			Paths are generally to be located to accommodate natural pedestrian desired lines of travel		
			All concrete, asphalt and paving within the public realm shall be designed to be trafficable by maintenance vehicles		
			Paving areas and pedestrian paths shall be a minimum width of 1500mm. Designated dual-use (pedestrian and cyclist) paths shall be a minimum width of 3500mm.		
			Loose granular surfaces are not supported for pedestrian areas, unless stabilised		
			Be cost effective in supply, installation and ongoing maintenance		
			Ensure liaison with infrastructure engineers to minimise conflicts between services and paved areas		
			Transitions between precincts to be based on the design rational establishes in this document		



GENERAL SPECIFICATION

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
8.0	Surface Treatments (Soft)				
	Generally Soft surface treatments refers to all trees, shrubs and grass surfaces that form part of the public realm	The softworks elements of the project have been designed to ensure a distinctive and coherent sense of place, character and image for the Cockburn Coast. The provision of a sustainable and high integrity soft landscape is critical to the definition of the project. In this regard emphasis has been placed on the use of climatically appropriate species that respond to the micro-climate conditions produced by the development and provide a high level of amenity within the public realm.	Adhere to the themes and aspirations as indicated in parts B and C of this document		
			Ensure liaison is undertaken with services, alignments/pits, crossover locations and lighting		
			Ensure existing vegetation to be retained is protected and managed during construction		
			Review the availability of plant stock early in each development phase and assess the need for contract growing/per-ordering		
			Ensure planting does not compromise vehicle sight lines or pedestrian/cyclist safety		
			Ensure maintenance requirements are considered within the design		
			Ensure planting is designed to minimise water consumption where possible		
			Salvaging of materials unable to be retained during construction is preferred		
			Crime Prevention Through Environmental Design (CPTED) principals shall be considered in the design		



ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
9.0	Water Elements				
	Generally	The design of water elements needs to be considered on a location-by-location basis. Potential water features and drainage areas have been identified for a number of locations within the various precincts. These elements are critical to the character, ecology and activation of the spaces.	Comply with all relevant Australian Standards		
			Ensure filtration/aeration/circulation of water is adequate to provide an acceptable level of water quality for the proposed purpose		
			Ensure gradients into water bodies (permanent and seasonal) are at 1:4 for a minimum of 3 metres		
			Ensure water depths do not exceed 400mm at edges for a minimum of 1 metre at edges		
			Ensure water bodies have adequate balustrading to address safety issues where the above requirements of water edge depths and slope gradients into water bodies cannot be achieved		
			Ensure pump and filtration systems are adequately housed to reduce noise issues (to Australian Standards) and are visually integrated into the surrounding landscape		
			Provide edge treatment appropriate to use, which provides highest quality aesthetic outcome		
			Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
			Ensure best practice Water Sensitive Urban Design principles are embedded in all design outcomes		



(D) SELECTIONS

2.0 Selections - Hilltop

Vision - Contained - Shared - Prospect

The Hilltop Precinct will draw on the industrial and military heritage of the site to inform how the spaces are created and feed into the adjacent landscape precincts. It will look to utilise views towards the west to maximise a response from the proposed building developments.

Other key ideas include:

- Prospect - maximise the broad views both from and into the precinct. Create sheltered intimate refuges as counterpoint
- Landscape Art as integrated landmarks.
- Contained and shared spaces that offer a variety of public spaces – passive, reflective, interpretive
- Military and industrial materiality, formal setting (planted avenues) contrasted with soft surfaces and comfort.

Furniture and Fixtures

BBQ

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To provide BBQ's that are in keeping with the thematic character of the precinct of sub-precinct

CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the BBQ selection or design
- Ensure BBQ material is of an appropriate durability for location
- Consider mitigating 'hot to touch' surfaces
- Consider lockability of access doors
- Consider location to roads/accessibility/potential views back to ocean

MATERIAL OPTIONS

- Exposed Concrete
- Stone
- Tile
- Steel

FINISH

- Class 2 finish Concrete
- Rough cut/sawn
- Glazed
- Galvanised/Stainless Steel

Balustrade

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To provide balustrades that are robust, functional and easily maintained.

CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the balustrade design
- Ensure balustrade material is of an appropriate durability for location
- Finish to all balustrade systems to be minimum standard Hot dip galvanised steel.

MATERIAL OPTIONS

- Timber
- Steel

FINISH

- Oiled
- Powder coat
- Hot Dip Galvanised
- Stainless Steel



Bike Racks

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

typical bike racks for:

- ♦ emplacement crescent
- ♦ military park
- ♦ hill top park
- ♦ green link 1
- ♦ green link 2



typical bike racks for:

- ♦ green link 1
- ♦ green link 2



DESIGN INTENT

- To provide bike racks which are functional and easily maintained
- To provide an urban element that has a sculptural approach and contributes to the thematic character of the precinct or sub-precinct

CONSIDERATIONS/OBJECTIVES

- Assess the location of bike rack to the following criteria:
- Proposed planning uses
- Destinations
- Access
- Material selections, alignment and form should reflect the character of the precinct/sub-precinct

MATERIAL OPTIONS

- Steel

FINISH

- Powder coat
- Hot Dip Galvanised
- Corten Steel

Bin Surrounds

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- Provide bin surrounds to meet the requirement of the management authority
- Utilise colour variation to signify changes in precinct

CONSIDERATIONS/OBJECTIVES

Assess the location of bins to the following criteria:

- Accessibility for servicing
- Located within main circulation associated with seating/nodal areas
- Site away from seating areas
- Bins adjacent to paths to be located in hardstand areas. Minimum hardstand dimensions to be 500 x 500mm
- Ensure adequate allowance is made for recycling collection/sorting as per local authorities requirements.

MATERIAL OPTIONS

- Steel

FINISH

- Powder Coat
- Painted Steel
- Corten Steel



(D) SELECTIONS



typical bin surrounds for:
♦ emplacement crescent
♦ emplacement local streets



typical bin surrounds for:
♦ military park
♦ hill top park
♦ green link 1
♦ green link 2

Bollard

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

DESIGN INTENT

- To provide an attractive bollard to be installed into tree wells within road reserves
- To contribute to the character of the precinct through material, colour and design resolution

CONSIDERATIONS/OBJECTIVES

- Bollards to be located to protect trees in road reserves and to have reflectors to Main Roads WA standards

MATERIAL OPTIONS

- Steel
- Timber

FINISH

- Powder coat
- Galvanised
- Painted Steel
- Painted
- Oiled



typical bollard for:
♦ military park



typical bollard for:
♦ green link 1



typical bollard for:
♦ hill top park
♦ green link 2



Drinking Fountain

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

DESIGN INTENT

- Provide a contemporary drinking fountain that contributes to the precinct character and thematic ideas

CONSIDERATIONS/OBJECTIVES

Drinking Fountains to be located as follows:

- Locate on major circulation routes and at key nodal locations
- Locate where practical to access potable water
- Locate to ensure accessibility outcomes are achieved
- Ensure pet drinking options are incorporated
- Minimise maintenance and vandalism opportunities
- Filtered water option preferable
- Water bottle fill up option preferable

MATERIAL OPTIONS

- Steel

FINISH

- Powder coat
- Galvanised



typical drink fountain for:

- ♦ military park
- ♦ hill top park
- ♦ green link 1
- ♦ green link 2

Flag Poles

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓			
ADDRESSED?			YES / NO		

DESIGN INTENT

- To provide an attractive and functional pole fit for intended purpose

CONSIDERATIONS/OBJECTIVES

-

MATERIAL OPTIONS

- Steel

FINISH

- polished stainless steel



(D) SELECTIONS

Handrails

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To provide an attractive and functional handrail that is robust and that contributes to the character of the precinct through material selection

CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the handrail design
- Ensure balustrade material is of an appropriate durability for location
- Finish to all handrail systems to be minimum standard Hot dip galvanised steel.
- Handrail should have strong aesthetic correlation to balustrade design

MATERIAL OPTIONS

- Steel
- Timber

FINISH

- Powder coat
- Hot Dip Galvanised
- Stainless steel
- Oiled

Planter Boxes

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To contribute to the character of the precinct through material selection and utilise colour variations

CONSIDERATIONS/OBJECTIVES

- Consider form of existing historical features of the precinct, i.e. gun plinth, and work with similar forms
- Ensure material is of an appropriate durability for location

MATERIAL OPTIONS

- Steel/concrete

FINISH

- rough texture



Seats and Tables

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

DESIGN INTENT

- To contribute to the character of the precinct through material selection whilst being robust with a long life cycle

CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the furniture selection
- Ensure seats and table material is of an appropriate durability for location
- Should have strong correlation to benches and streetscape furniture suite

MATERIAL OPTIONS

- Steel
- Timber
- Concrete

FINISH

- Hot Dip Galvanised steel
- Corten Steel
- Painted Steel
- Powder Coat
- Oiled
- Formed



typical table and bench seat for:

- ♦ military park
- ♦ hill top park
- ♦ green link 1
- ♦ green link 2



typical bench seat for:

- ♦ emplacement crescent
- ♦ emplacement local street
- ♦ military park
- ♦ hill top park
- ♦ green link 1
- ♦ green link 2



(D) SELECTIONS

Skate deterrents

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To provide an attractive and robust solution to protecting furniture from skate and BMX vandalism

CONSIDERATIONS/OBJECTIVES

- Ensure material is robust.
- Ensure visual appearance does not dominate custom furniture design.
- Opt for integral option rather than fixed option

MATERIAL OPTIONS

- Steel

FINISH

- stainless steel/iron
-



integral skate deterrent

Tree Grates

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓		✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To contribute to the character of the precinct through customisation, patterning etc.

CONSIDERATIONS/OBJECTIVES

- Minimise maintenance and vandalism opportunities.
- Allow for an appropriate amount of permeability in grates to allow water permeation.
- Allow for segmental design to allow for maturation of tree specimen.
- Ensure finish meets trafficable and slip rating requirements
- Ensure irrigation is integrated and seamless
- Allow for root control barriers in accordance with the City's requirements.

MATERIAL OPTIONS

- Steel

FINISH

- Corten steel
- Iron



typical custom tree grates with specific patterning depending on precinct and theming area

Service Pit Covers

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓	✓	✓	✓	✓
ADDRESSED?			YES / NO		

DESIGN INTENT

- To be well presented, aligned with paving treatment and in keeping with industrial nature of the precinct

CONSIDERATIONS/OBJECTIVES

- Must meet vehicle loading requirements

MATERIAL OPTIONS

- Steel

FINISH

- Iron

Lighting Street Lighting

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓				
ADDRESSED?			YES / NO		

DESIGN INTENT

- To be well presented, easily maintained and discrete on the street

CONSIDERATIONS/OBJECTIVES

- Must meet local authorities requirements for performance and maintenance
- Single outreach, tapered light pole with oval shaped light encasing and LED light fixture
- Street lighting including suitable illumination of traffic management treatments, to the newly created subdivision is to be provided in accordance with Western Power Corporation specification for illumination levels, materials and installation. Lighting design shall be in accordance with the latest edition of Australian Standards AS 1158-2005 and light pole types, colours and light fixtures to be similar and consistent with the adjoining development and approved separately by the City.
- Council is moving towards sustainable street lighting, the developer will therefore be encouraged to liaise with Western Power to use fluorescent street

lighting, compact fluorescent (CFL) street lighting to reduce energy and green house gas emissions.

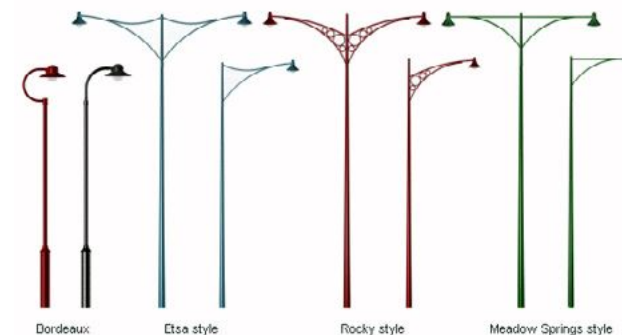
- Illumination is not to spill beyond the front building line of the adjacent properties unless required for security purposes. development and approved separately by the City.
- Uplighting on streetscapes is not supported.
- Developer is to refer to the Local Authority Lighting Policy for further guidelines.
- All street lights to be Western Power standards.

MATERIAL OPTIONS

- Steel

FINISH

- Galvanised Steel
- Painted Steel
- Powder Coat



typical street lighting for:

- ♦ emplacement crescent
- ♦ emplacement local street





(D) SELECTIONS

POS Lighting

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To be well presented, easily maintained, decorative and enhance the themes of the precinct or sub-precinct

CONSIDERATIONS/OBJECTIVES

- Must meet local authorities requirements for performance and maintenance
- Single outreach, tapered light pole with oval shaped light encasing and LED light fixture
- Flush uplighting at street edge of POS to create distinct entry to parks
- Single outreach, tapered light pole with oval shaped light encasing and LED light fixture. Solar lighting to be considered
- POS lighting to be lit until 11pm each night for activation and security purposes
- Consider powder coating poles to give each POS a distinct character
- Bollard lighting not to be used for maintenance and performance reasons

- lighting, compact fluorescent (CFL) street lighting to reduce energy and green house gas emissions.
- Illumination is not to spill beyond the front building line of the adjacent properties unless required for security purposes.
- Uplighting in POS is general not supported, however consideration will be given to feature uplighting on submission of lighting designs.
- Developer is to refer to the Local Authority Lighting Policy for further guidelines.
- Designers must refer to the City of Cockburn - Open spaces Lighting Guidelines for additional information.

MATERIAL OPTIONS

- Steel

FINISH

- Galvanised Steel with powder coat option



typical street lighting for:

- ♦ military park
- ♦ hill top park
- ♦ green link 1
- ♦ green link 2

Play Elements

Adventure Play

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓		✓	
ADDRESSED?		YES / NO			

DESIGN INTENT

- To create play environments that blend natural materials, features, and indigenous vegetation with creative landforms to create purposely complex interplays of natural, environmental objects in ways that challenge and fascinate and educate children
- To enhance the overall themes of the precinct or sub-precinct

CONSIDERATIONS/OBJECTIVES

- To be located in key positions relative to pedestrian access, vehicles networks and POS location
- Ensure playground is integrated with sheltered areas that protect from sun and rain
- The design of playgrounds should minimise maintenance and vandalism opportunities
- Design of the playground should strongly reflect the themes and character of the precinct
- All playgrounds should have appropriate structural engineering sign off
- Meet Australian Standards
- Explore opportunities to integrate artwork, seating,

Playgrounds

- bbq's, bins, picnic settings etc.
- Play components may include earth shapes (sculptures), environmental art, indigenous vegetation, boulders or other rock structures, dirt and sand, natural fences (stone, willow, wooden), textured pathways, and natural water features
 - Equal opportunity for access should be considered in the design and location of play spaces.

- MATERIAL OPTIONS
- Timber
 - Steel
 - Concrete
 - Stone
 - Found objects
- FINISH
- Rustic



EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
				✓	
ADDRESSED?			YES / NO		

DESIGN INTENT

- To create play environments that promote community engagement, interaction, education, development of physical coordination, strength, and flexibility, as well as providing recreation and enjoyment
- To enhance the overall themes of the precinct or sub-precinct

CONSIDERATIONS/OBJECTIVES

- To be located in key positions relative to pedestrian access, vehicles networks and POS location
- Ensure playground is integrated with sheltered areas that protect from sun and rain
- The design of playgrounds should minimise maintenance and vandalism opportunities
- Design of the playground should strongly reflect the themes and character of the precinct
- All playgrounds should have appropriate structural engineering sign off
- Should be meet Australian Standards
- Should explore opportunities to integrate artwork, seating, bbq's, bins, picnic settings etc.

- Should consider proximity and integration of additional elements such as exercise equipment, sports facilities (soccer pitches, half basketball courts etc) to further promote a community feel
- Equal opportunity for access should be considered in the design and location of play spaces.

- MATERIAL OPTIONS
- Sustainable plastics
 - Steel
 - Concrete
 - Stone
 - Found objects
- FINISH
- As per manufacturers specifications





(D) SELECTIONS

Public Art Public Art

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
			✓	✓	✓
ADDRESSED?			YES / NO		

DESIGN INTENT

- The Pubic Art Strategy shall set out the framework to enhance precinct through the appropriate integration of public art within the Development Area by detailing the following:
 - (i) Influences for public art and possible public art themes for each precinct;
 - (ii) Indicative locations for artworks where they will enhance the amenity and the interpretation of the public realm, contribute to way-finding, and enhance the sense of place;
 - (iii) Management arrangements and responsibilities for public art

CONSIDERATIONS/OBJECTIVES

- Should consider covering a broad range of options for artists to interact with the built and natural environment across the Cockburn Coast development.
- This includes options for the integration of artworks into the fabric of buildings and urban infrastructure of all types.

- Developing integrated options for artworks for building facades, streetscape elements and road infrastructure can provide a cost effective option with the artwork funds value adding to the capital works budget.
- Integrated artworks should result from collaboration between artist and architect, urban designer or landscape architect.
- The approach to stand alone projects should have a strong focus on the quality of the artist's concept and sense of place. Such works as sculptural features and landmarks can provide significant focal points and precinct identifiers.
- In addition to the direct interpretation of a place and its history through interpretive signage and commemorative features, there is a role for artworks that creatively explore a place's past and the stories of a community. Artists can be commissioned to create works that, while not addressing history in a didactic form, explore themes of relevance to local histories.
- Consultation required with the Cockburn Aboriginal Reference Group for all major artworks.
- Consultation required with the Cockburn Reference Group for all major artworks.
- Ensure artworks are in keeping with heritage items and 'add value' to its location and the precinct as a whole.
- Ensure materials are sustainable and maximise opportunities to recycle/up cycle where possible.
- Ensure local artists are engaged where appropriate

MATERIAL OPTIONS

- Refer to 'Cockburn Coast Public Art Strategy' by Place Partners, March 2012 for exemplars and additional information.

FINISH

- Refer to 'Cockburn Coast Public Art Strategy' by Place Partners, March 2012 for exemplars and additional information.

Signage

Street Signage

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓				
ADDRESSED?		YES / NO			

DESIGN INTENT

- To provide effective street signage that meets the requirements of the local authority

CONSIDERATIONS/OBJECTIVES

- Street name plates be constructed using 200mm blades with 100mm or 150mm letters, coloured with blue letters on a reflective white background and, where practical, incorporating 50mm blue house numbers and Council's Corporate Logo (as per City of Cockburn Specification Policy).
- Minimise clutter
- Integrate way finding and interpretive artwork into signage strategy

MATERIAL OPTIONS

- Steel

FINISH

- As required

POS signage

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To provide effective signage to each POS that clearly defines and identifies the POS and its location within the precinct.

CONSIDERATIONS/OBJECTIVES

- The subdivision developer shall furnish and install a park name sign for each new POS site developed by the subdivision process.
- The City has resolved in its Aboriginal Reconciliation Action Plan to list an Aboriginal/English dictionary the reverse side of its parks name sign.
- Minimise clutter
- Integrate way finding and interpretive artwork into signage strategy

MATERIAL OPTIONS

- Timber
- Steel
- Concrete

FINISH





(D) SELECTIONS

Structures

Shelters

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To provide shelters that are unique to the precinct or sub-precinct and enhance the overall character of the precinct
- To provide public amenity that contributes to the activation of Public Open Space

CONSIDERATIONS/OBJECTIVES

- To be located in key positions relative to pedestrian access, vehicles networks and POS location
- Ensure shelter materials are of an appropriate durability for location
- The design of shelters should minimise maintenance and vandalism opportunities
- Design of the shelter should strongly reflect the themes and character of the precinct
- All shelters should have appropriate structural engineering sign off
- Should be meet Australian Standards
- Should explore opportunities to integrate artwork, seating, bbq's, bins, picnic settings etc.

MATERIAL OPTIONS

- Timber
- Steel
- Concrete

FINISH

- Rustic



Walls

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To reflect the strong heritage of the site
- To reflect the existing materiality of the site
- Theming and character of the precinct

CONSIDERATIONS/OBJECTIVES

- All walls to have appropriate structural engineering sign off
- Ensure wall materials are of an appropriate durability for location
- Should explore opportunities to integrate seating, wall mounted bins, signage and artwork
- Should be meet Australian Standards
- Consider and adopt skate-able edges to walls.

MATERIAL OPTIONS

- Concrete
- Stone
- Gabion
- Corten Steel

FINISH

- Varying



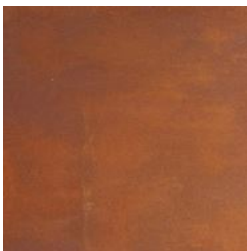
HILLTOP PRECINCT WALL TYPES



wall material_
formed concrete walls



wall material_
gabion walls



wall material_
corten steel cladding

Stairs

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

DESIGN INTENT

- To reflect the strong heritage of the site
- To reflect the existing materiality of the site
- To be located where views are maximised back to ocean

CONSIDERATIONS/OBJECTIVES

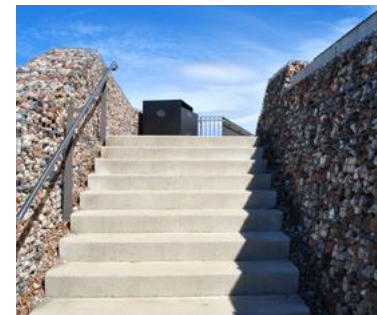
- All stairs to have appropriate structural engineering sign off
- Ensure stair materials are of an appropriate durability for location
- Should explore opportunities to integrate seating, signage and artwork
- Should be meet Australian Standards
- Should have varying degrees of formality, i.e. stone clad stairs vs. informal timber and stabilised gravel stairs

MATERIAL OPTIONS

- Timber
- Steel
- Concrete

FINISH

- Oiled
- Galvanised
- formed





(D) SELECTIONS

Bridges/Boardwalks

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
				✓	✓
ADDRESSED?			YES / NO		

MATERIAL OPTIONS

- Timber
- Steel and steel meshes
- Composite Timbers

FINISH

- Oiled
- Galvanised

DESIGN INTENT

- To enhance the overall character of the precinct or sub-precinct
- Should provide passage through drainage basins and maximise opportunities to pause and ponder

CONSIDERATIONS/OBJECTIVES

- All bridges to have appropriate structural engineering sign off
- Ensure bridge materials are of an appropriate durability for location
- Should explore opportunities to integrate seating, signage and artwork, shelters
- Meet Australian Standards
- Should take interesting paths through site rather than be lineal and straight
- Should explore use of sustainable materials
- Incorporation interpretive/information signage where appropriate





Surface Treatments (Hard)

Edge restraints

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To provide a robust and durable solution to separating surfaces varying in materiality

CONSIDERATIONS/OBJECTIVES

- Ensure materials are of an appropriate durability for location
- Should be meet Australian Standards
- Should minimise maintenance and vandalism opportunities
- Should explore use of sustainable materials
- Should explore opportunities to be custom designed in key locations to add to the overall character of the precinct or sub-precinct

MATERIAL OPTIONS

- Concrete
- Steel

FINISH

Paving

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓	✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To provide adequate surface finishes that meet the requirements of varying uses such as pedestrian activity, cycleways and vehicles
- Should be of varying materials, finishes and patterns to establish streetscape and POS hierarchy's within the precinct

CONSIDERATIONS/OBJECTIVES

- Ensure materials are of an appropriate durability for location
- Should be meet Australian Standards
- Should minimise maintenance and vandalism opportunities
- Should explore use of sustainable materials
- Should explore opportunities to integrate artwork
- Should clearly establish and help delineate between differing uses, i.e. cycle path vs. pedestrian path
- Should be sufficiently engineered to withstand service vehicle loadings
- Should meet the appropriate slip ratings

MATERIAL OPTIONS

- Poured concrete
- Decorative poured concrete
- Decorative concrete pavers
- Liquid limestone
- Red asphalt
- Stabilised gravel

FINISH

- Broom
- Washed aggregate
- Milled
- Compacted

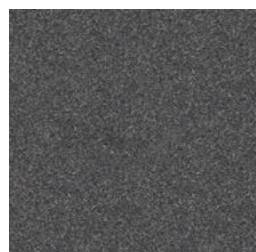


SELECTIONS

EMPLACEMENT CRESENT



shared path_
brushed concrete



road surface_
asphalt

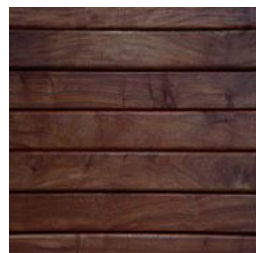


parking bays_
red asphalt

MILITARY PARK



shared path_
washed aggregate concrete



shared path_
timber boardwalks

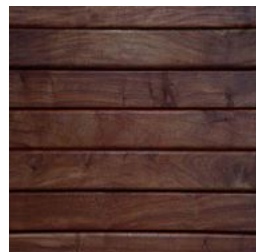


surface treatment_
stabilised gravel

GREEN LINK 1



shared path_
washed aggregate
concrete

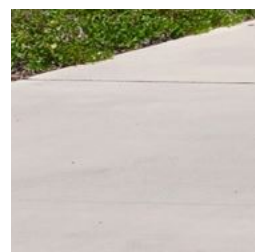


shared path_
timber boardwalks



surface treatment_
stabilised gravel

HILLTOP LOCAL STREET



shared path_
brushed concrete



road surface_
asphalt

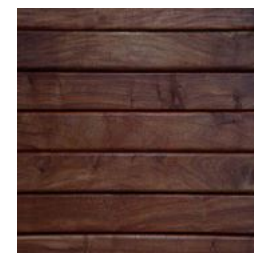


parking bays_
red asphalt

HILL TOP PARK



shared path_
washed aggregate concrete



shared path_
timber boardwalks

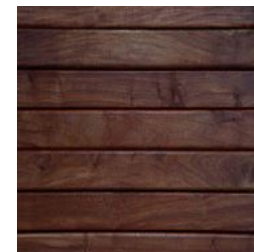


surface treatment_
stabilised gravel

GREEN LINK 2



shared path_
washed aggregate
concrete



shared path_
timber boardwalks



surface treatment_
stabilised gravel



Surface Treatments (Soft)

Turf

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To provide a low cost surface treatment to POS areas which allows activity to occur

CONSIDERATIONS/OBJECTIVES

- Should be adequately irrigated
- Should be meet Australian Standards

MATERIAL OPTIONS FINISH

- Concrete
- Steel

Mulch

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓	✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To provide an organic matter that promotes growth in planted areas

CONSIDERATIONS/OBJECTIVES

- Should be meet Australian Standards

MATERIAL OPTIONS FINISH

- Wood Chip
- Granitic sands

Shrub Planting

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓	✓	✓	✓	✓
ADDRESSED?		YES / NO			

DESIGN INTENT

- To provide planted areas that promote flora and fauna biodiversity
- Planting palettes should enhance the character of the precinct of sub-precinct

CONSIDERATIONS/OBJECTIVES

- Should be meet Australian Standards
- Should minimise maintenance and vandalism opportunities
- Should assist in surveillance within POS areas, i.e. does not interfere with sight lines through POS
- Should consider interface with property boundaries and streetscapes
- Should be adequately irrigated and promote Water Sensitive Urban Design principles

MATERIAL OPTIONS FINISH

- Mix of native and exotic species suited to conditions



(D) SELECTIONS

Tree Planting

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓	✓	✓	✓	✓
ADDRESSED?			YES / NO		

DESIGN INTENT

- To provide trees that promote flora and fauna biodiversity
- Tree planting palettes should enhance the character of the precinct of sub-precinct

CONSIDERATIONS/OBJECTIVES

- Should be meet Australian Standards for planting
- Should minimise maintenance
- Should assist in surveillance within POS areas, i.e. does not interfere with sight lines through POS
- Should consider interface with property boundaries and streetscapes
- Should be adequately irrigated and promote Water Sensitive Urban Design principles

MATERIAL OPTIONS FINISH

- Mix of native and exotic species suited to conditions

Additional Drainage Basins

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

DESIGN INTENT

- To provide locations for water inundation that assist with the development functionality with a naturalistic aesthetic, and helps promote flora and fauna diversity.

CONSIDERATIONS/OBJECTIVES

- Public health and safety
- Should be meet Australian Standards
- Consider pedestrian networks
- Ensure planting selections are able to withstand water inundation
- Ensure planting selections promote diversity and encourage fauna habitation.
- Ensure design promotes the themes of the precinct or sub-precinct
- Ensure adequately lit, using sustainable lighting sources, to allow night activation
- Ensure standing/still water is filtrated
- Consider water circulation





Swales

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓	✓	✓	✓	✓
ADDRESSED?			YES / NO		

DESIGN INTENT

- To provide locations for water inundation that assist with the development functionality with a naturalistic aesthetic, and helps promote flora and fauna diversity.

CONSIDERATIONS/OBJECTIVES

- Public health and safety
- Should be meet Australian Standards
- Consider pedestrian networks
- Ensure planting selections are able to withstand water inundation
- Ensure planting selections promote diversity and encourage fauna habitation.
- Ensure design promotes the themes of the precinct or sub-precinct
- Ensure adequately lit, using sustainable lighting sources, to allow night activation
- Ensure standing/still water is filtrated
- Consider water circulation



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(3) FORESHORE





Part C: Typologies

Contents

- 1.0 Street Tree Hierarchy
- 2.0 Streetscape Typologies
- 3.0 POS Typologies
- 4.0 POS Tree Hierarchy
- 5.0 Planting Typologies

Part C: Typologies outlines the design parameters for streetscapes, designated POS areas, and tree and shrub plantings.

The information in this section has been adapted and expanded from the following:

Place Partners – Cockburn Coast Place Making Strategy
TPG in association with Yates Heritage & Big Island Research
Hassell – Cockburn Coast District Structure Plan, Volumes 1 and 2
Hassell – Cockburn Coast Foreshore Management Plan
Site investigations undertaken by Urbis, December 2013





(C) TYPOLOGIES_STREETSCAPES

1.1 Street Tree Hierarchy

Design Intent

The selections of the street trees throughout the various streetscapes are driven by the following factors:

- exposure to prevailing winds
- proximity to built form
- shading from building heights
- soil conditions
- coastal exposure
- overall themes
- location/proximity to POS areas
- striking a endemic vs exotic balance with regards to indigenous and european heritage

The following design factors should be considered when selecting the final tree species:

- changing of street tree species where street interfaces with POS area to mark the entry to the various parks within the development
- selecting landmark trees where appropriate to mark gateways into the various precincts
- establishing habitable spaces below canopies on main streets
- interface with public transport infrastructure to ensure remedial works are minimised when trees mature.
- underground service requirements.

The proponent will require the approval on all species from the City.

Figures 1 and 2 outline acceptable species to establish each streetscape typology, however, approval on final

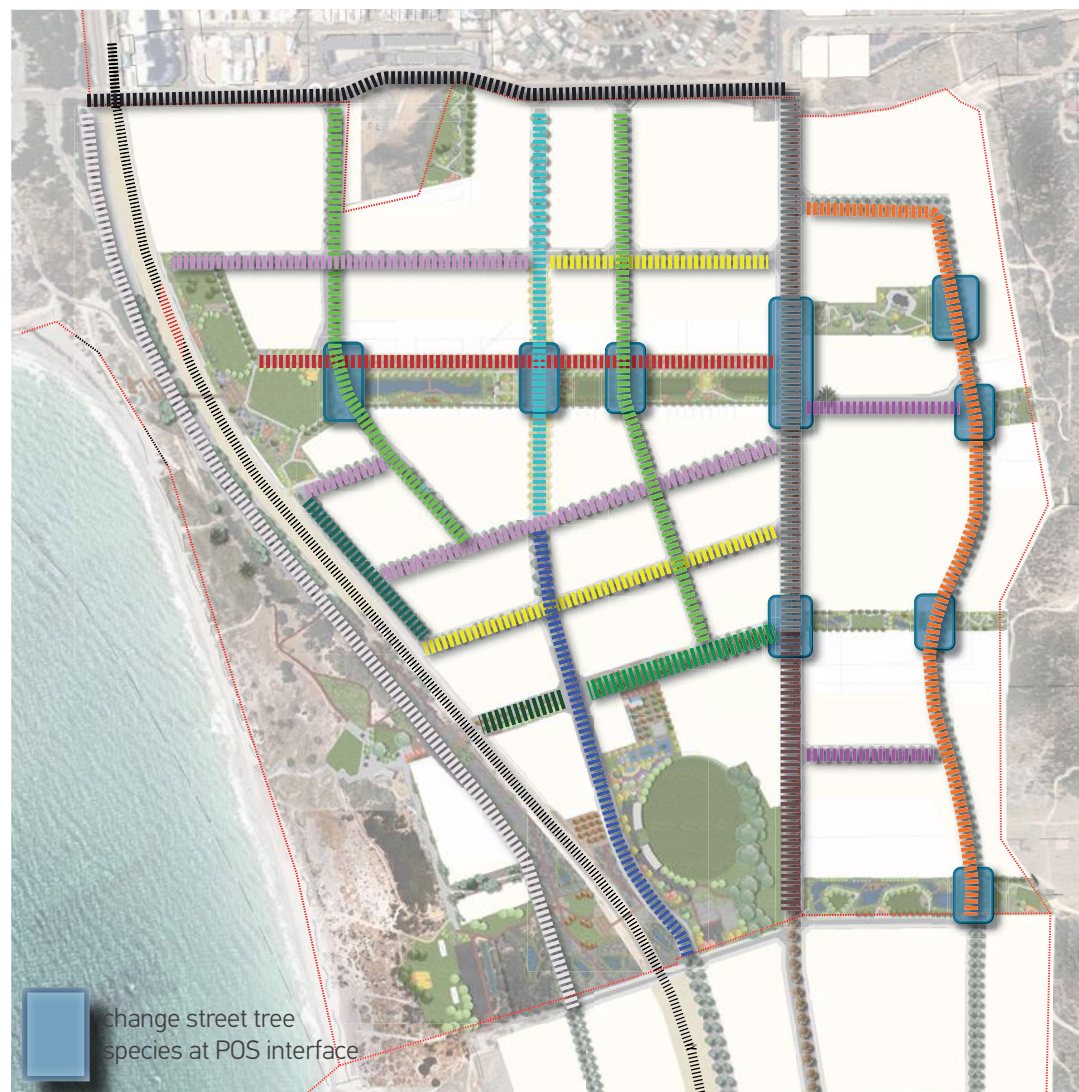


Figure 1_street tree hierarchy plan

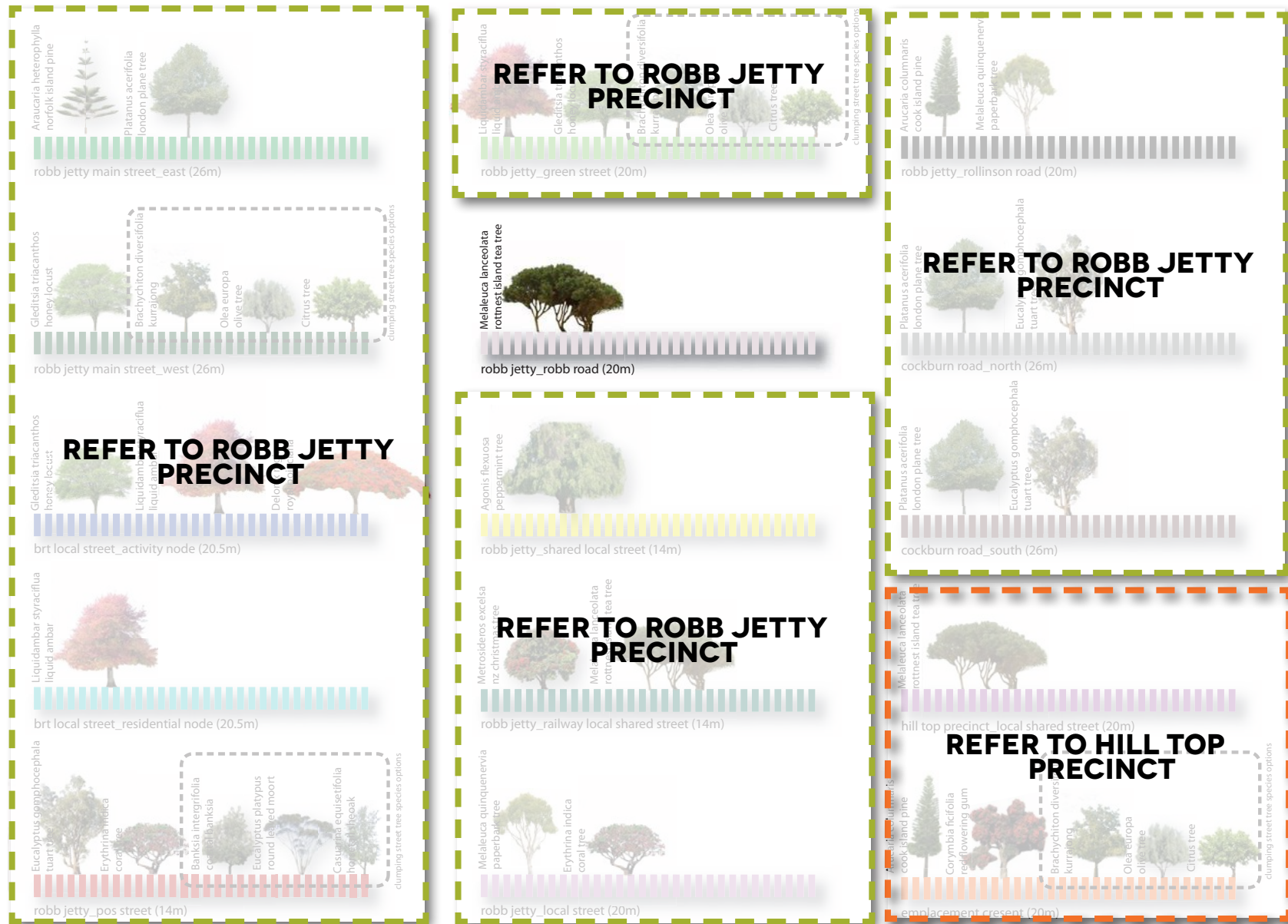


Figure 2_street tree species



(C) TYPOLOGIES_STREETSCAPES

2.1 Streetscape Typologies

Design Intent

The streetscapes have been designed with coordination with the local authority and civil engineer to create serviceable, habitable streets that have high functional and aesthetic outcomes. They are an evolution of the design intent expressed in the LSP.

Each street typology is distinct to itself in terms of its functional requirements, with a standard minimum aesthetic being applied to all streets.

The streetscape designs promote shared surfaces where possible, and a low speed environment to encourage pedestrian and cycling emphasis over vehicular use

The streetscape typologies have been designed in conjunction with the following considerations:

- Public transport infrastructure and network
- Pedestrian and cyclist networks
- Street Tree Hierarchy
- Material selections
- Proprietary and custom furniture selections
- Planting palettes
- On street parking solutions
- Way finding and signage
- Public Art Strategy
- Water Sensitive Urban Design Principles
- Precinct theming strategies



streetscape typologies location plan



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(C) TYPOLOGIES_STREETSCAPES

2.2 Robb Road Local Street

Robb Road Local Street is a north/south running street located between the existing rail reserve and the existing dunal system. It incorporates the following principles:

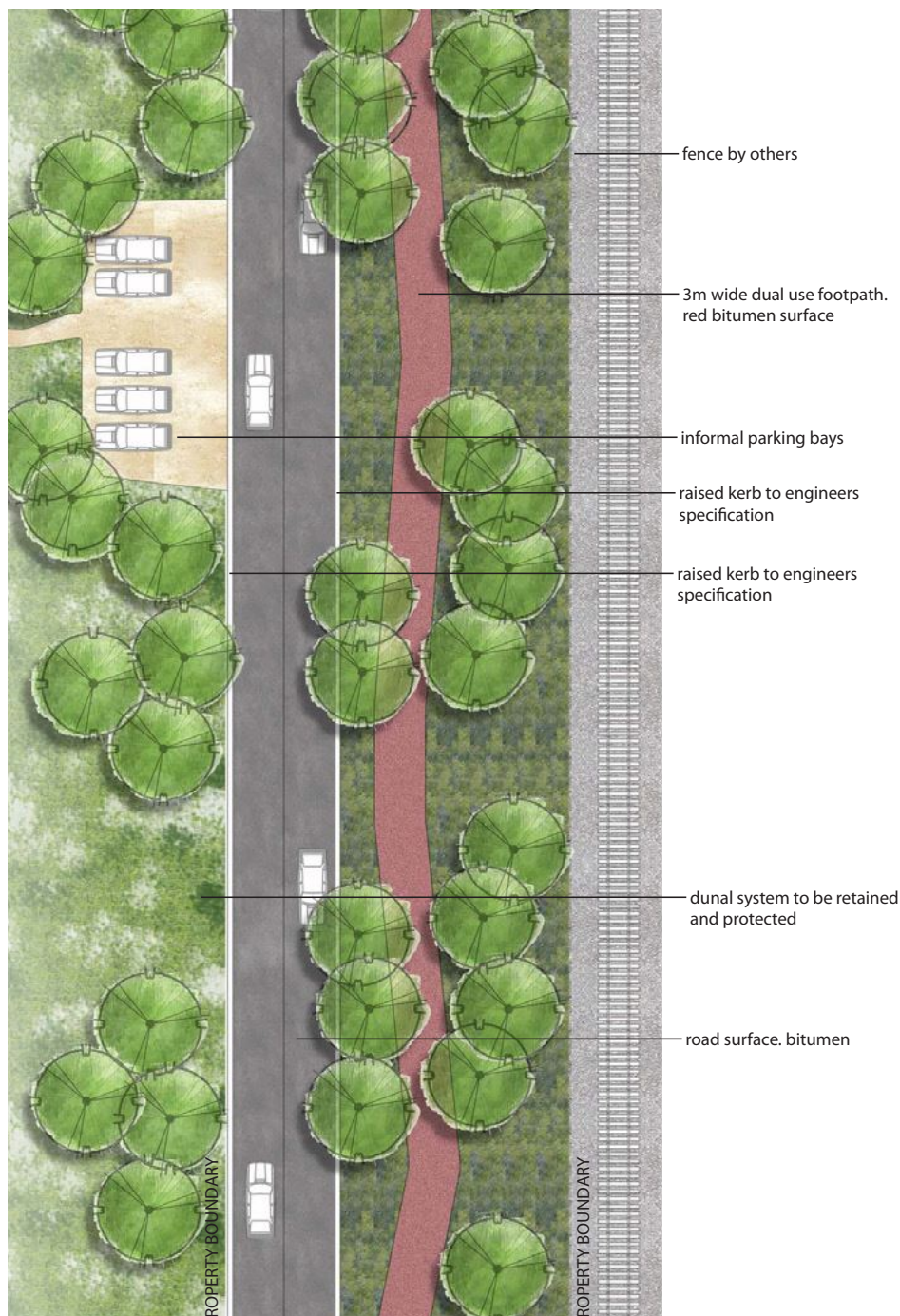
- Street tree selections provide a distinct feel to the street and integrates with the existing vegetation of the dunal systems. Selected species must be able to cope with extreme weather conditions and exposure to strong winds.
- Informal parking bays to be located in areas along Robb Road that does not impact on or degrade existing landscape condition. Parking areas to be compacted limestone (or similar) with informal access to the beach.
- Furniture to be robust, readily available and easily maintained.



location plan



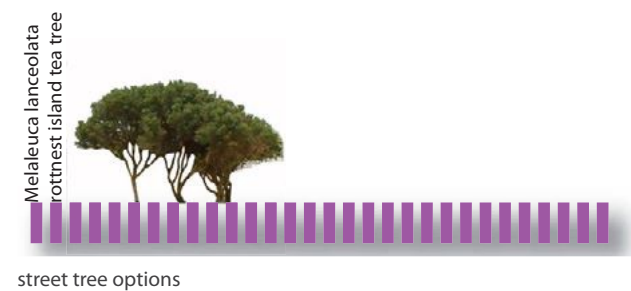
vibe images



Robb Road Local Street - Typical Plan



Robb Road Local Street - Typical Section





TYPOLOGIES_STREETSCAPES

2.3 Surface Treatment Changes

Design Intent

Surface materials changes should be considered at the following street junctions:

1. Robb Jetty Main Street/Beach side Plaza_change in surface material to create visual link between Main Street and Beach side Plaza, and to enforce a low speed environment



surface treatment changes location plan

(C) POS LOCATIONS

3.0 POS Typologies

Design Intent

The POS typologies have been developed as a response to the functional, overall thematic, and individual precinct requirements within the development.

Each POS typology is distinct to itself in terms of its functional requirements, with a standard aesthetic requirement to be achieved within each POS area.

The POS typologies have been designed in conjunction with the following principles:

- Response to heritage elements
- Response to drainage requirements
- Response to soil contaminants
- Response to built form and building use
- Public transport infrastructure and network
- Functionality requirements
- Pedestrian and cyclist networks
- POS Tree Hierarchy
- Material selections
- Proprietary and custom furniture selections
- Planting palettes
- On street parking solutions
- Way finding and signage
- Public Art Strategy
- Water Sensitive Urban Design Principles
- Precinct theming strategies
- Exercise networks



POS typologies location plan





((C)) TYPOLOGIES_POS

3.1 POS Functionality

Functionality allocation

The functionality and amenity assigned to each POS is a refinement of the allocated amenity in Place Partner's 'Cockburn Coast Place Making Strategy' Document (March 2012).

Functionality and amenity allocation has been determined by the following factors:

- existing amenity
- historical/heritage considerations
- areas intended for high use/gathering hubs
- proximity to population density
- proximity to public transport links
- proximity to similar amenity
- proximity to building occupation



bbq area



kickabout area



bicycle track



lookout



cafe



play ground



dedicated dog park



shelter



exercise station



swimming area



horse exercise location



toilets/change rooms



skate park



playground



adventure
playground



outdoor bocce



water play



outdoor
table tennis

POS ACTIVATORS



community
gardens



community
gardens

COMMUNITY AMENITY



bicycle
racks



pavilion
structure



pavilion
structure



beachside
vernacular



beachside
vernacular



gathering on
boardwalks



eco-underpass



beach kiosk/
cafe vernacular



ground plane
reflective water feature

BUILT ELEMENTS IN POS



bosque/plaza



bosque/plaza



alfresco dining

POS PLACE MAKERS





(C) TYPOLOGIES_POS

3.2 Coastal Walk

The Coastal Walk runs the length of the precinct from Catherine Point down to McTaggart Park.

The intent of the coastal walk is to offer access to the beach at key points, assist in rehabilitation and protection of the dunal system, connect to the Robb Jetty precinct at the Beach side Plaza and other destinations, and offer moments to pause and take in the extensive views.

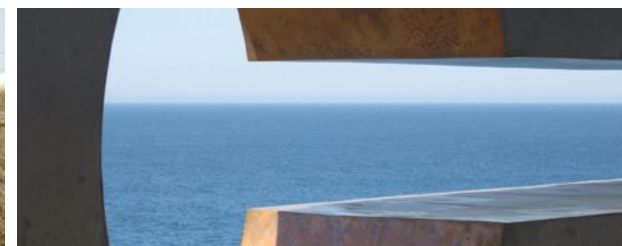
The walk should look to tread lightly and use materials that are robust and long lasting.

It should retain as much of the existing built fabric as possible with insertions at key points that are nuanced and sensitive.

Tree and planting species should be restricted to Western Australian endemic species to establish a healthy and diverse dunal system.

Furniture selections should be robust and long lasting, yet work with the existing fabric with its materiality to ensure a synergy between the two.

Refer to 'Part B_Thematic Responses' for additional information on opportunities within the coastal walk.



coastal walk_vibe imagery

POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project

'There is no risk. One step back and I am safe again, among things hardened and separated by naming and science. One step forward.....sleep.

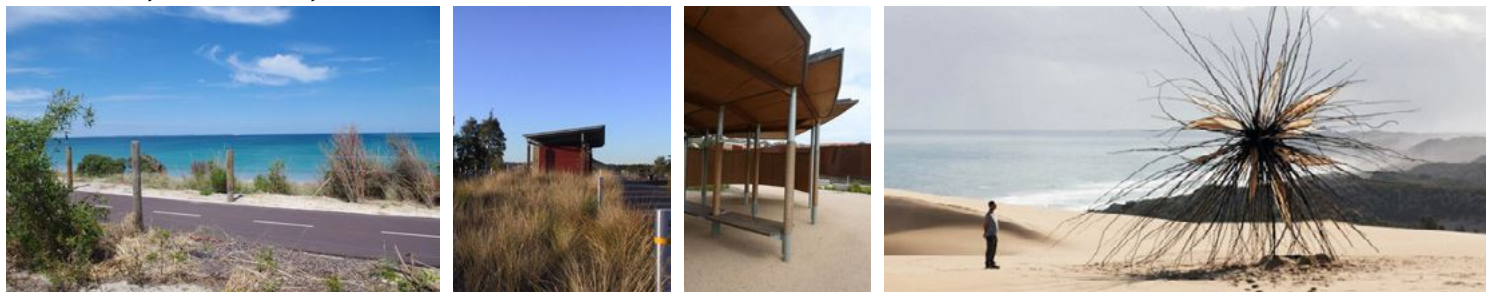


Meanwhile, this narrow littoral, these volumes that merge and separate and merge again without displacement, this double and triple-mindedness,



the various melodies, known and unknown, hinting at a final chord, when the horizontal at last becomes vertical, and movement ceases; the nearest thing to simultaneity, perhaps, This Side.'

"Coast' extract, by Peter Goldsworthy





TYPOLOGIES_POS

3.3 Railway Corridor

The Railway Corridor is located in between the existing rail reserve and Robb Road.

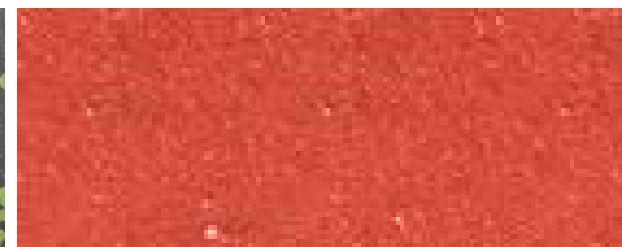
The park offers a unique passage from north to south throughout the site and should engage with the existing rail reserve where possible.

The corridor will consist of a dual use path aimed at providing amenity for higher speed cyclists and runners, whilst also offering moments to pause and engage with the passing trains.

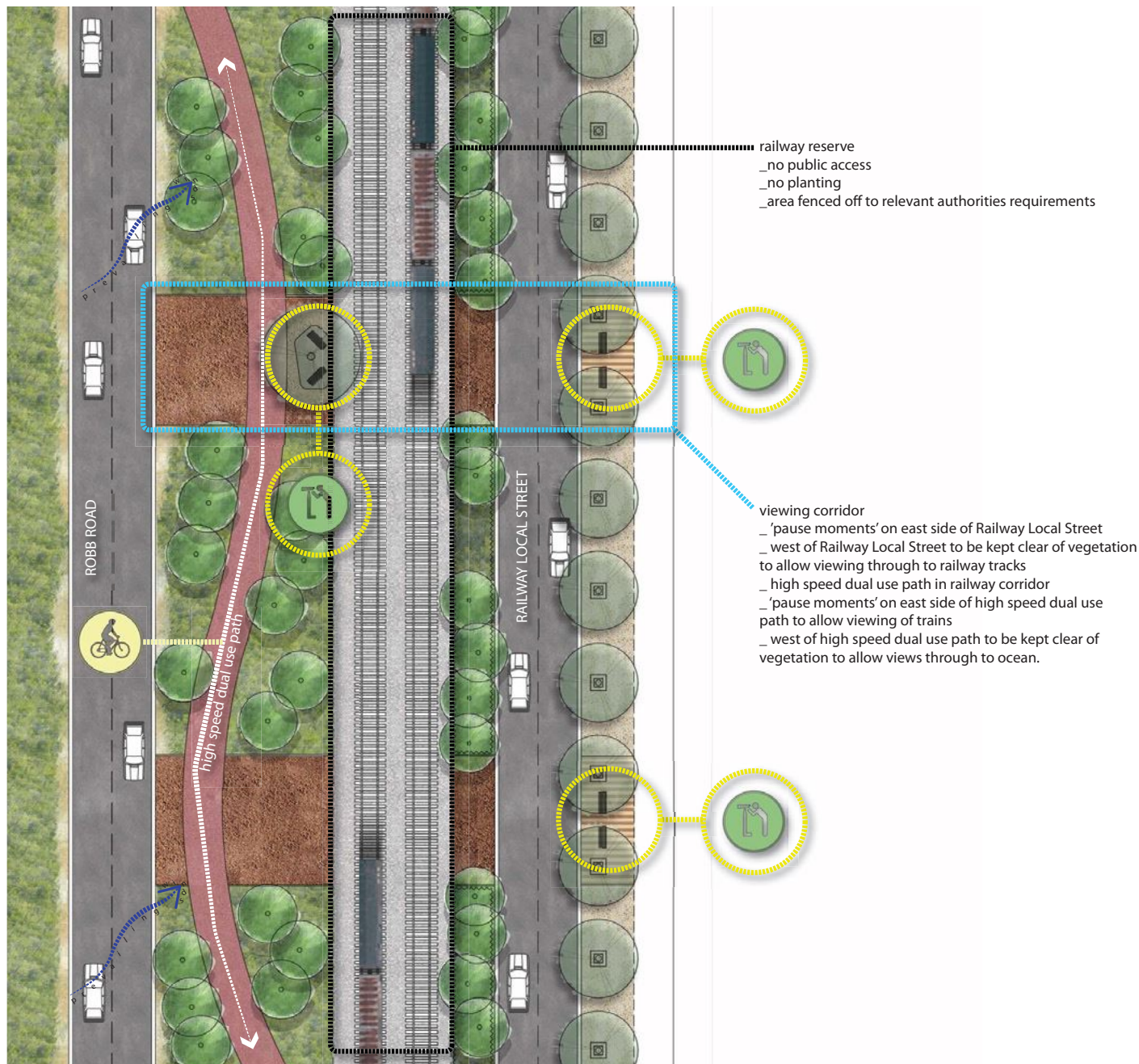
The Railway Corridor should work with the Railway Road streetscape design in providing outlook through the corridor and on to the ocean where possible.

Tree and planting species should primarily be Western Australian natives and tolerant of the coastal conditions. Existing vegetation of health should look to be protected as it plays an important role in retaining a sense of place of the site.

Any furniture selections should be robust, have a direct language with the street furniture of Railway Road, be easily maintained and readily available.



railway corridor_vibe imagery



railway corridor_general arrangement

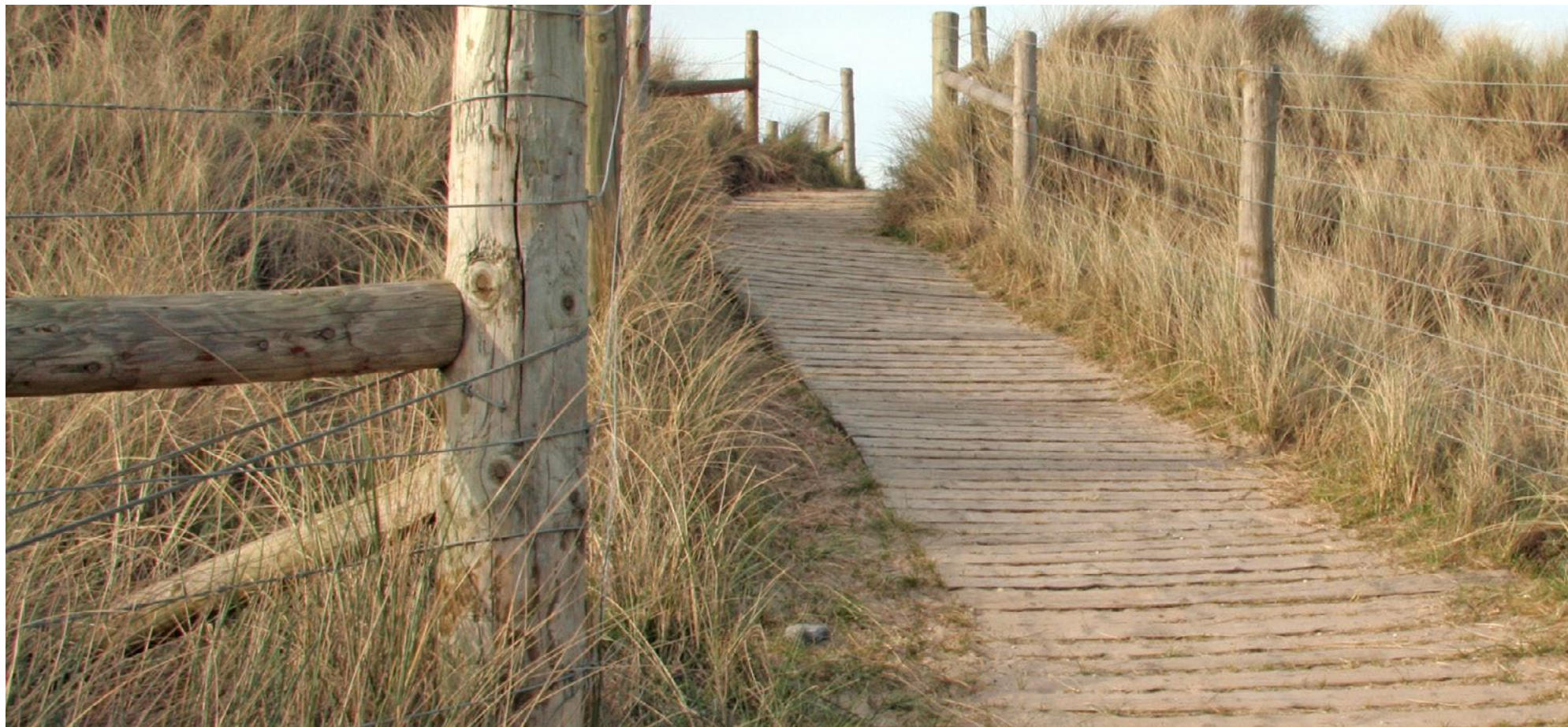
POS Plans demonstrate design intent only and are subject to change throughout the concept design phase of each project



fence style to railway reserve



FORESHORE
PRECINCT





Part D: Specification and Selections

Contents

1.0 General Specification

2.0 Selections

Part D: 'Specifications and Selections' outlines material selections, design components and their associated considerations, and specifications of the streetscapes, and designated POS areas.



(D) GENERAL SPECIFICATION

1. General Specification and Requirements

Part 1 - Vision

To create a vibrant landmark destination that is connected, diverse and accessible.

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
1.0	Furniture and Fixtures				
1.1	Generally 'Furniture and Fixtures' refers to all outdoor furniture and fixtures included within the public realm intended for public use.	Provide elements that embody the industrial and military heritage of the area through form and material selection. Ensure appropriate placement of thematic selections as per Parts B and C of the PRDG. These elements are critical to establishing the identity of each precinct and sub-precinct	Ensure that the significant coastal exposure of this precinct is addressed in both material selection and furniture placement		
			Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
			Comply with all relevant Australian Standards		
			Ensure all furniture and fixtures are readily available from local suppliers or distributors.		
			Custom elements must: - use readily available local materials - meet all construction and safety standards - meet the thematic requirements set out in this document - minimise maintenance - embody design excellence		
			Equal access should be considered in the selection of furniture. Preference will be given to furniture that is accessible for wheelchair-bound visitors.		
			Furniture is to be located where appropriate for its function. CPTED principles to be considered in the placement of furniture.		
			Preference will be given for furniture designs that employ sustainable materials		



ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
2.0	Lighting				
	Generally 'Lighting' refers to public lighting within the public realm, including but not limited to: - Area lighting - Pedestrian lighting - Feature lighting - Sports lighting - Solar lighting	Lighting is a key component of the activation and livability of the area. Careful consideration should be given to the placement, aesthetics and management of design choices to ensure the lighting design fulfills the safety and activation requirements.	Comply with all relevant Australian Standards		
			Ensure all lighting poles and fixtures are readily available from local suppliers or distributors.		
			Lighting is to be low energy use, long life LED lighting.		
			Designers must refer to the City of Cockburn - Open spaces Lighting Guidelines for additional information.		
			Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
			Area lighting is not to be located within 10m of residential properties (streets excluded)		
			Lighting adjacent to bushland is to be located and specified to minimise light spill into habitat areas.		
			A 'PE' cell and timer control system is to be installed for all lighting. All control gear is to be easily accessible for maintenance		
			Only fittings specifically designed for outdoor conditions shall be used		
			In-ground feature lighting is to be installed flush with the surrounding surface, but not supported in streetscapes. To be installed only around areas of interest.		
			Preference to be given to lighting powered by renewable energy sources (solar and wind)		
			CPTED principles to be considered throughout the design		



GENERAL SPECIFICATION

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
3.0	Play Spaces				
	Generally 'Play space' refers to areas within a landscape of which the primary function is to provide play value for children	Play spaces are to be multi functional and cater to a variety of age groups and abilities. Play spaces are key to the activation, education and livability of the development and should embody the thematic components of each precinct.	<p>Comply with all relevant Australian Standards</p> <p>Play spaces are to be designed to encourage a variety of sensory experiences and will incorporate various play opportunities including:</p> <ul style="list-style-type: none"> - active / physical play - cognitive play - social play <p>Equal opportunity for access should be considered in the design and location of play spaces.</p> <p>Play spaces should provide risk and challenge, however are safe and free of hazards.</p> <p>Play spaces are to be located a minimum of 8m away from roads and water bodies.</p> <p>Both custom and off-the-shelf play equipment may be included in a play space</p> <p>Locate play spaces to ensure adequate shade provision. Design to minimise the necessity for solid or tensile shade structures where possible</p> <p>Play spaces to be designed to accommodate a variety of age groups. However consideration to be given to ensuring sufficient separation between user groups to avoid conflicts.</p> <p>Preference is to be given to washed play sand and play mulch over wet-pour rubber soft fall</p> <p>CPTED principles to be considered throughout the design</p> <p>Maintenance and emergency services access to play space areas should be incorporated into the placement of play space areas</p>		



ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
4.0	Public Art				
	<p>'Public Art' refers to artworks within the public realm, including but not limited to:</p> <ul style="list-style-type: none"> - Sculptures - Lighting Installations - Temporary interventions - Way Finding - Landmark Artworks - Landscape Art - Built form interventions - Gateway Icons - Interpretative artworks - Heritage Markers - Way Finding 	<p>Public Artworks are to be designed to express the cultural and historical past of the site, specifically highlighting areas of interest as well as helping form precincts within the development.</p> <p>Public art can be used as a mechanism for educating and way finding, and enhance the overall cultural aspect of the development.</p>	Refer to Appendix A: Place Partners document 'Place Making Strategy for guidelines.		
			All artworks should comply with Australian Standards		
			All artworks should be designed to encourage a variety of sensory experiences		
			All artworks should be designed to promote the historical, social and cultural context of the site		
			All artworks should contribute to creating a sense of place within the various precincts as well as specific areas of interest		
			Should have area lighting to the appropriate standards. Refer to Item 2.0: Lighting for further information		
			Ensure universal access is accommodated where required.		
			Access for maintenance is considered		
			All sculptures to be constructed shall obtain a Certificate of Design Compliance by an independent registered building surveyor prior to lodging a building permit application		



GENERAL SPECIFICATION

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
5.0	Signage				
	Signage' refers to all permanent and temporary within the development, including but not limited to: - Way Finding - Interpretive signage - Advertising - Marketing	Signage is to be designed in such as way that it assists with the functionality of the development, both internally and the broader area ie Fremantle, Kwinana, Port Coogee	All signage should comply with the appropriate standards		
			Signage for advertising purposes shall be of a temporary nature and subject to planning approval		
			Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
			Materials proposed shall be durable and hard-wearing, sustainable and readily available from local sources		
6.0	Structures				
	Generally Structures refer to all vertical built form elements within the public realm	Structures	Comply with all relevant Australian Standards		
			All structures to be constructed shall obtain a Certificate of Design Compliance by an independent registered building surveyor prior to lodging a building permit application		
			Materials proposed for use in structures shall be durable and hard-wearing, sustainable and readily available from local sources		
			Ensure siting of structures considers: - universal access - views to and from the structure - servicing requirements		
			Structures are to incorporate the character intent of the precinct		
			Ensure structures allow for all weather conditions		
			Incorporate 3phase power connection and water connection into each shelter		



ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
7.0	Surface Treatments (Hard)				
	Generally		Comply with all relevant Australian Standards		
			Adhere to the themes, colours and materials as indicated in this document		
			Provide high quality functionality without compromising the aesthetic standards required		
			All paved surfaces are to be graded to drain to turf and planting areas		
			Paths are generally to be located to accommodate natural pedestrian desired lines of travel		
			All concrete, asphalt and paving within the public realm shall be designed to be trafficable by maintenance vehicles		
			Paving areas and pedestrian paths shall be a minimum width of 1500mm. Designated dual-use (pedestrian and cyclist) paths shall be a minimum width of 3500mm.		
			Loose granular surfaces are not supported for pedestrian areas, unless stabilised		
			Be cost effective in supply, installation and ongoing maintenance		
			Ensure liaison with infrastructure engineers to minimise conflicts between services and paved areas		
			Transitions between precincts to be based on the design rational establishes in this document		



GENERAL SPECIFICATION

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
8.0	Surface Treatments (Soft)				
	Generally Soft surface treatments refers to all trees, shrubs and grass surfaces that form part of the public realm	The softworks elements of the project have been designed to ensure a distinctive and coherent sense of place, character and image for the Cockburn Coast. The provision of a sustainable and high integrity soft landscape is critical to the definition of the project. In this regard emphasis has been placed on the use of climatically appropriate species that respond to the micro-climate conditions produced by the development and provide a high level of amenity within the public realm.	Adhere to the themes and aspirations as indicated in parts B and C of this document		
			Ensure liaison is undertaken with services, alignments/pits, crossover locations and lighting		
			Ensure existing vegetation to be retained is protected and managed during construction		
			Review the availability of plant stock early in each development phase and assess the need for contract growing/per-ordering		
			Ensure planting does not compromise vehicle sight lines or pedestrian/cyclist safety		
			Ensure maintenance requirements are considered within the design		
			Ensure planting is designed to minimise water consumption where possible		
			Salvaging of materials unable to be retained during construction is preferred		
			Crime Prevention Through Environmental Design (CPTED) principals shall be considered in the design		



ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
9.0	Water Elements				
	Generally	The design of water elements needs to be considered on a location-by-location basis. Potential water features and drainage areas have been identified for a number of locations within the various precincts. These elements are critical to the character, ecology and activation of the spaces.	Comply with all relevant Australian Standards		
			Ensure filtration/aeration/circulation of water is adequate to provide an acceptable level of water quality for the proposed purpose		
			Ensure gradients into water bodies (permanent and seasonal) are at 1:4 for a minimum of 3 metres		
			Ensure water depths do not exceed 400mm at edges for a minimum of 1 metre at edges		
			Ensure water bodies have adequate balustrading to address safety issues where the above requirements of water edge depths and slope gradients into water bodies cannot be achieved		
			Ensure pump and filtration systems are adequately housed to reduce noise issues (to Australian Standards) and are visually integrated into the surrounding landscape		
			Provide edge treatment appropriate to use, which provides highest quality aesthetic outcome		
			Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
			Ensure best practice Water Sensitive Urban Design principles are embedded in all design outcomes		



(D) SELECTIONS

2.0 Selections - Foreshore

Vision - Transitional - Nuanced - Open

The Foreshore Precinct will draw on the coastal and industrial/agricultural heritage of the site to inform how the spaces are created and feed into the adjacent landscape precincts.

It will look to utilise views towards the west, to offer transition along the north/south coastal corridor, and be respectful whilst enhancing the existing coastal condition.

Other key ideas include:

- Transitional - to offer sensitive yet safe transitions from the Robb Jetty Precinct into the coastal environment of the Foreshore Precinct
- Landscape Art as integrated landmarks.
- Nuanced landscapes - to be considerate of the sensitive and fragile coastal condition, whilst offering amenity that is sculpted in and around the existing terrain and landscape feature
- Open aspects where the coast is exposed and creates vantage points to the ocean

2.1 Furniture and Fixtures

Bike Racks

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	✓
ADDRESSED?		YES / NO

DESIGN INTENT

- To provide bike racks which are functional and easily maintained
- To provide an urban element that has a sculptural approach and contributes to the thematic character of the precinct or sub-precinct

CONSIDERATIONS/OBJECTIVES

Assess the location of bike rack to the following criteria:

- Proposed planning uses
- Destinations
- Access
- Material selections, alignment and form should reflect the character of the precinct/sub-precinct

MATERIAL OPTIONS

- Steel

FINISH

- Powder coat
- Hot Dip Galvanised
- Stainless Steel



Bin surrounds

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	✓
ADDRESSED?		YES / NO

DESIGN INTENT

- Provide bin surrounds to meet the requirement of the management authority
- Utilise colour variation to signify changes in precinct

CONSIDERATIONS/OBJECTIVES

Assess the location of bins to the following criteria:

- Accessibility for servicing
- Located within main circulation associated with seating/nodal areas
- Site away from seating areas
- Bins adjacent to paths to be located in hardstand areas. Minimum hardstand dimensions to be 500 x 500mm
- Ensure adequate allowance is made for recycling collection/sorting as per local authorities requirements.

MATERIAL OPTIONS

- Steel

FINISH

- Powder Coat
- Painted Steel
- Corten Steel
- Galvanised Steel





Bollard

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
✓	✓	✓
ADDRESSED?		YES / NO

DESIGN INTENT

- To provide an attractive bollard to be installed along informal parking bays and Robb Road
- To contribute to the character of the precinct through material, colour and design resolution

CONSIDERATIONS/OBJECTIVES

Bollards to be located to protect existing vegetation and dunal systems and to have reflectors to Main Roads WA standards

MATERIAL OPTIONS

- Timber

FINISH

- Oiled
- Varnished
- Sealed



Drinking Fountain

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	
ADDRESSED?		YES / NO

DESIGN INTENT

- Provide a contemporary drinking fountain that contributes to the precinct character and thematic ideas

CONSIDERATIONS/OBJECTIVES

Drinking Fountains to be located as follows:

- Locate on major circulation routes and at key nodal locations
- Locate where practical to access potable water
- Locate to ensure accessibility outcomes are achieved
- Ensure pet drinking options are incorporated
- Minimise maintenance and vandalism opportunities
- Filtered water option preferable
- Water bottle fill up option preferable

MATERIAL OPTIONS

- Steel

FINISH

- Powder coat
- Galvanised steel



Flag Poles

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	
ADDRESSED?		YES / NO

DESIGN INTENT

- To provide an attractive and functional pole fit for intended purpose

CONSIDERATIONS/OBJECTIVES

- NA

MATERIAL OPTIONS

- Steel

FINISH

- Polished stainless steel



(D) SELECTIONS

Handrails

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	
ADDRESSED?	YES / NO	

DESIGN INTENT

- To provide an attractive and functional handrail that is robust and that contributes to the character of the precinct through material selection

CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the handrail design
- Ensure balustrade material is of an appropriate durability for coastal exposure
- Finish to all handrail systems to be minimum standard Hot dip galvanised steel.
- Handrail should have strong aesthetic correlation to balustrade design

MATERIAL OPTIONS

- Steel/timber

FINISH

- Powder coat
- Hot Dip Galvanised
- Stainless steel

Seats and Tables

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	✓
ADDRESSED?	YES / NO	

DESIGN INTENT

- To contribute to the character of the precinct through material selection whilst being robust with a long life cycle

CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the furniture selection
- Ensure seats and table material is of an appropriate durability for coastal exposure
- Should have strong correlation to benches and streetscape furniture suite

MATERIAL OPTIONS

- Steel

- Timber

FINISH

- Hot Dip Galvanised steel
- Painted Steel
- Powder Coat
- Oiled





Shower

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	
ADDRESSED?		YES / NO

DESIGN INTENT

- To contribute to the character of the precinct through material selection whilst being robust with a long life cycle

CONSIDERATIONS/OBJECTIVES

Showers to be located as follows:

- Locate on major pedestrian access points to the beach
- Locate where practical to access potable water
- Locate to ensure accessibility outcomes are achieved
- Attach to wall to provide shelter
- Low water usage options preferable.
- Allow over provision of drainage.
- Ensure fixtures are integral rather than extruding to minimise vandalism

MATERIAL OPTIONS

- Steel

FINISH

- Stainless steel

Skate deterrents

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	
ADDRESSED?		YES / NO

DESIGN INTENT

- To provide an attractive and robust solution to protecting furniture from skate and BMX vandalism

CONSIDERATIONS/OBJECTIVES

- Ensure material is robust and suited to coastal location. Ensure visual appearance does not dominate custom furniture design.

MATERIAL OPTIONS

- Steel

FINISH

- Stainless steel
- Iron



integral skate deterrent

Service Pit Covers

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
✓	✓	✓
ADDRESSED?		YES / NO

DESIGN INTENT

- To be well presented, aligned with paving treatment and in keeping with industrial nature of the precinct

CONSIDERATIONS/OBJECTIVES

- Must meet vehicle loading requirements

MATERIAL OPTIONS

- Steel

FINISH

- Iron



(D) SELECTIONS

2.2 Lighting Street Lighting

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
✓		
ADDRESSED?		YES / NO

DESIGN INTENT

- To be well presented, easily maintained and discrete on the street
- To be decorative at key locations, ie at junction of Robb Jetty Main Street and Robb Road to enhance the precinct and assist with traffic management

CONSIDERATIONS/OBJECTIVES

- Must meet the City's requirements for performance and maintenance
- Single outreach, tapered light pole with oval shaped light encasing and LED light fixture
- Street lighting including suitable illumination of traffic management treatments, to the newly created subdivision is to be provided in accordance with Western Power Corporation specification for illumination levels, materials and installation. Lighting design shall be in accordance with the latest edition of Australian Standards AS 1158-2005 and light pole types, colours and light fixtures to be similar and consistent with the adjoining development and approved separately by the City.

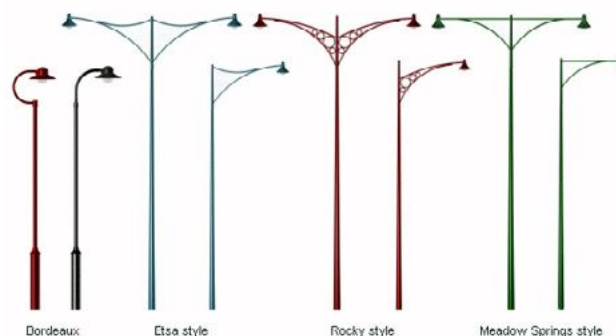
- Council is moving towards sustainable street lighting, the developer will therefore be encouraged to liaise with Western Power to use fluorescent street lighting, compact fluorescent (CFL) street lighting to reduce energy and green house gas emissions.
- Illumination is not to spill beyond the front building line of the adjacent properties unless required for security purposes.
- Uplighting on streetscapes is not supported.
- Developer is to refer to the Local Authority Lighting Policy for further guidelines.
- All street lights to be Western Power standards.

MATERIAL OPTIONS

- Steel

FINISH

- Galvanised Steel
- Painted Steel
- Powder Coat



POS Lighting

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	✓
ADDRESSED?		YES / NO

DESIGN INTENT

- To be well presented, easily maintained, decorative and enhance the themes of the precinct or sub-precinct
- Must enhance public safety and passive surveillance throughout transitional areas

CONSIDERATIONS/OBJECTIVES

- Must meet the City's requirements for performance and maintenance
- Single outreach, tapered light pole with oval shaped light encasing and LED light fixture. Solar lighting to be considered
- POS lighting to be lit until 11pm each night for activation and security purposes
- Consider powder coating poles to give each POS a distinct character
- Bollard lighting not to be used for maintenance and performance reasons
- Uplighting in POS is general not supported, however consideration will be given to feature uplighting on submission of lighting designs.
- Developer is to refer to the Local Authority Lighting Policy for further guidelines.
- Designers must refer to the City of Cockburn - Open spaces Lighting Guidelines for additional information.

MATERIAL OPTIONS

- Steel

FINISH

- Galvanised Steel with powder coat option

2.3 Play Elements

Adventure Play

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
ADDRESSED?	YES / NO	

DESIGN INTENT

- To create play environments that blend natural materials, features, and indigenous vegetation with creative landforms to create purposely complex interplays of natural, environmental objects in ways that challenge and fascinate and educate children
- To enhance the overall themes of the precinct or sub-precinct

CONSIDERATIONS/OBJECTIVES

- To be located in key positions relative to pedestrian access, vehicles networks and POS location
- Ensure playground is integrated with sheltered areas that protect from sun and rain
- The design of playgrounds should minimise maintenance and vandalism opportunities
- Design of the playground should strongly reflect the themes and character of the precinct
- All playgrounds should have appropriate structural engineering sign off
- Should be meet Australian Standards
- Should explore opportunities to integrate artwork, seating, bbq's, bins, picnic settings etc.

- Play components may include earth shapes (sculptures), environmental art, indigenous vegetation, boulders or other rock structures, dirt and sand, natural fences (stone, willow, wooden), textured pathways, and natural water features
- Equal opportunity for access should be considered in the design and location of play spaces.

MATERIAL OPTIONS

- Timber
- Steel
- Concrete
- Stone
- Found objects

FINISH

- Rustic





(D) SELECTIONS

2.4 Public Art

Public Art

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	
ADDRESSED?	YES / NO	

DESIGN INTENT

- The Public Art Strategy shall set out the framework to enhance precinct through the appropriate integration of public art within the Development Area by detailing the following:
 - (i) Influences for public art and possible public art themes for each precinct;
 - (ii) Indicative locations for artworks where they will enhance the amenity and the interpretation of the public realm, contribute to way-finding, and enhance the sense of place;
 - (iii) Management arrangements and responsibilities for public art

CONSIDERATIONS/OBJECTIVES

- Should consider covering a broad range of options for artists to interact with the built and natural environment across the Cockburn Coast development.
This includes options for the integration of artworks into the fabric of buildings and urban infrastructure of all types.
- Developing integrated options for artworks for building facades, streetscape elements and road infrastructure can provide a cost effective option with

the artwork funds value adding to the capital works budget.

- Integrated artworks should result from collaboration between artist and architect, urban designer or landscape architect.
- The approach to stand alone projects should have a strong focus on the quality of the artist's concept and sense of place. Such works as sculptural features and landmarks can provide significant focal points and precinct identifiers.
- In addition to the direct interpretation of a place and its history through interpretive signage and commemorative features, there is a role for artworks that creatively explore a place's past and the stories of a community. Artists can be commissioned to create works that, while not addressing history in a didactic form, explore themes of relevance to local histories.
- Consultation required with the Cockburn Aboriginal Reference Group for all major artworks.
- Consultation required with the Cockburn Reference Group for all major artworks.
- Ensure artworks are in keeping with heritage items and 'add value' to its location and the precinct as a whole.
- Ensure materials are sustainable and maximise opportunities to recycle/up cycle where possible.
- Ensure local artists are engaged where appropriate to ensure a local sense of place is maximised.

- Ensure existing artworks such as the 'human race' is protected and, if applicable, relocated to an appropriate location.

- MATERIAL OPTIONS
- Refer to 'Cockburn Coast Public Art Strategy' by Place Partners, March 2012 for exemplars and additional information.

2.5 Signage

Street Signage

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
✓		
ADDRESSED?	YES / NO	

DESIGN INTENT

- To provide effective street signage that meets the requirements of the local authority

CONSIDERATIONS/OBJECTIVES

- Street name plates be constructed using 200mm blades with 100mm or 150mm letters, coloured with blue letters on a reflective white background and, where practical, incorporating 50mm blue house numbers and Council's Corporate Logo (as per City of Cockburn Specification Policy).
- Minimise clutter
- Integrate way finding and interpretive artwork into signage strategy

MATERIAL OPTIONS

- Steel

FINISH

- As required

POS Signage

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	✓
ADDRESSED?	YES / NO	

DESIGN INTENT

- To provide effective signage to each POS that clearly defines and identifies the POS and its location within the precinct.

CONSIDERATIONS/OBJECTIVES

- The subdivision developer shall furnish and install a park name sign for each new POS site developed by the subdivision process.
- The City has resolved in its Aboriginal Reconciliation Action Plan to list an Aboriginal/English dictionary the reverse side of its parks name sign.
- Minimise clutter
- Integrate way finding and interpretive artwork into signage strategy

MATERIAL OPTIONS

- Timber
- Steel
- Concrete

FINISH





(D) SELECTIONS

2.6 Structures

Shelters

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	
ADDRESSED?	YES / NO	

DESIGN INTENT

- To provide shelters that are unique to the precinct or sub-precinct and enhance the overall character of the precinct
- To provide public amenity that contributes to the activation of Public Open Space

CONSIDERATIONS/OBJECTIVES

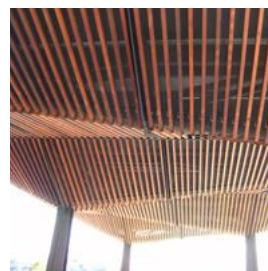
- To be located in key positions relative to pedestrian access, vehicles networks and POS location
- Ensure shelter materials are of an appropriate durability for location
- The design of shelters should minimise maintenance and vandalism opportunities
- Design of the shelter should strongly reflect the themes and character of the precinct
- All shelters should have appropriate structural engineering sign off
- Should be meet Australian Standards
- Should explore opportunities to integrate artwork, seating, bbq's, bins, picnic settings etc.
- Should explore integration and adaption of coastal themes into design of shelters

MATERIAL OPTIONS

- Timber
- Steel
- Concrete

FINISH

- Rustic



Walls

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	
ADDRESSED?	YES / NO	

DESIGN INTENT

- To reflect the strong heritage of the site
- To reflect the existing materiality of the site

CONSIDERATIONS/OBJECTIVES

- All walls to have appropriate structural engineering sign off
- Ensure wall materials are of an appropriate durability for location
- Should explore opportunities to integrate seating, wall mounted bins, signage and artwork
- Should be meet Australian Standards

MATERIAL OPTIONS

- Concrete
- Gabion
- Limestone

FINISH

- Varying



wall material_
formed concrete



wall material_
gabion walls



wall material_
random limestone



Stairs

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	
ADDRESSED?	YES / NO	

DESIGN INTENT

- To tread lightly over existing dunal system
- To reflect the existing materiality of the site
- To be located where views are maximised back to ocean

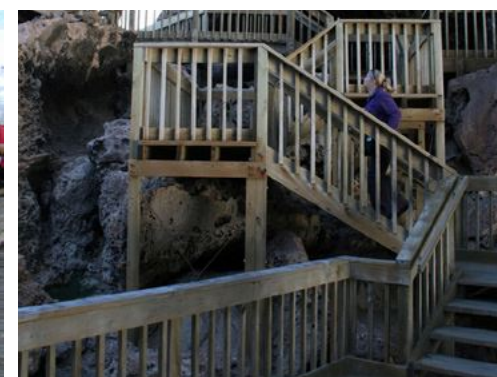
CONSIDERATIONS/OBJECTIVES

- All stairs to have appropriate structural engineering sign off
- Ensure stair materials are of an appropriate durability for location
- Should explore opportunities to integrate seating, signage and artwork
- Should be meet Australian Standards
- Should explore integration and adaption of coastal themes into design of stairs
- Should explore use of sustainable materials

MATERIAL OPTIONS

- Timber
- Steel

FINISH





(D) SELECTIONS

Bridges/boardwalks

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
	✓	
ADDRESSED?	YES / NO	

DESIGN INTENT

- To enhance the overall character of the precinct or sub-precinct
- Should provide passage through dunal system and maximise opportunities to pause and ponder
- To tread lightly over existing dunal system

CONSIDERATIONS/OBJECTIVES

- All bridges to have appropriate structural engineering sign off
- Ensure bridge materials are of an appropriate durability for location
- Should explore opportunities to integrate seating, signage and artwork, shelters
- Should be meet Australian Standards
- Should take interesting paths through site rather than be lineal and straight
- Should explore use of sustainable materials

MATERIAL OPTIONS FINISH

- Timber
- Steel and steel meshes
- Composite Timbers



2.7 Surface Treatments (Hard)

Edge restraints

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
ADDRESSED?	YES / NO	

DESIGN INTENT

- To provide a robust and durable solution to separating surfaces varying in materiality

CONSIDERATIONS/OBJECTIVES

- Ensure materials are of an appropriate durability for location
- Should be meet Australian Standards
- Should minimise maintenance and vandalism opportunities
- Should explore use of sustainable materials
- Should explore opportunities to be custom designed in key locations to add to the overall character of the precinct or sub-precinct

MATERIAL OPTIONS FINISH

- Concrete
- Timber



Paving

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
✓	✓	✓
ADDRESSED?		YES / NO

DESIGN INTENT

- To provide adequate surface finishes that meet the requirements of varying uses such as pedestrian activity, cycleways and vehicles
- Should be of varying materials, finishes and patterns to establish streetscape and POS hierarchy's within the precinct

CONSIDERATIONS/OBJECTIVES

- Ensure materials are of an appropriate durability for location
- Should be meet Australian Standards
- Should minimise maintenance and vandalism opportunities
- Should explore use of sustainable materials
- Should explore opportunities to integrate artwork
- Should clearly establish and help delineate between differing uses, i.e. cycle path vs. pedestrian path
- Should be sufficiently engineered to withstand service vehicle loadings
- Should meet the appropriate slip ratings

MATERIAL OPTIONS

- Poured concrete
- Decorative concrete
- pavers
- Red asphalt
- Stabilised gravel



shared path_
brushed concrete



cycle paths_
red asphalt



surface treatment_
stabilised gravel



(D) SELECTIONS

2.8 Surface Treatments (Soft)

Turf

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
		✓
ADDRESSED?	YES / NO	

DESIGN INTENT

- To provide a low cost surface treatment to POS areas which allows activity to occur

CONSIDERATIONS/OBJECTIVES

- Should be adequately irrigated
- Should be meet Australian Standards

MATERIAL OPTIONS

- Kikuyu pennisetum

Mulch

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
✓	✓	✓
ADDRESSED?	YES / NO	

DESIGN INTENT

- To provide an organic matter that promotes growth in planted areas

CONSIDERATIONS/OBJECTIVES

- Should meet Australian Standards

MATERIAL OPTIONS

- Bark
- Granitic sands

Shrub Planting

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
✓	✓	✓
ADDRESSED?	YES / NO	

DESIGN INTENT

- To provide planted areas that promote flora and fauna biodiversity
- Planting palettes should enhance the character of the precinct of sub-precinct

CONSIDERATIONS/OBJECTIVES

- Should be meet Australian Standards
- Should minimise maintenance and vandalism opportunities
- Should assist in surveillance within POS areas, i.e. does not interfere with sight lines through POS
- Should consider interface with property boundaries and streetscapes
- Should be adequately irrigated and promote Water Sensitive Urban Design principles

MATERIAL OPTIONS

FINISH

- Mix of native and exotic species suited to conditions



Tree Planting

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
✓	✓	✓
ADDRESSED?		YES / NO

DESIGN INTENT

- To provide trees that promote flora and fauna biodiversity
- Tree planting palettes should enhance the character of the precinct of sub-precinct

CONSIDERATIONS/OBJECTIVES

- Should be meet Australian Standards for planting
- Should minimise maintenance
- Should assist in surveillance within POS areas, i.e. does not interfere with sight lines through POS
- Should consider interface with property boundaries and streetscapes
- Should be adequately irrigated and promote Water Sensitive Urban Design principles

MATERIAL OPTIONS

- Mix of native and exotic species suited to conditions

FINISH

2.9 Additional Swales

ROBB ROAD	COASTAL WALK	RAILWAY CORRIDOR
ADDRESSED?		YES / NO

DESIGN INTENT

- To provide locations for water inundation that assist with the development functionality with a naturalistic aesthetic, and helps promote flora and fauna diversity.

CONSIDERATIONS/OBJECTIVES

- Public health and safety
- Should be meet Australian Standards
- Consider pedestrian networks
- Ensure planting selections are able to withstand water inundation
- Ensure planting selections promote diversity and encourage fauna habitation.
- Ensure design promotes the themes of the precinct or sub-precinct
- Ensure adequately lit, using sustainable lighting sources, to allow night activation
- Ensure standing/still water is filtrated
- Consider water circulation



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