

BYFORD TOWN CENTRE PUBLIC REALM GUIDELINES

LOCAL PLANNING POLICY 3.5 April 2023





Local Planning Policy 3.5 Byford Town Centre Public Realm Guidelines

Responsible Directorate	Development Services
Responsible Business Unit/s	Strategic Planning
Responsible Officer	Manager Strategic Planning
Affected Business Units	Strategic Planning Subdivision and Environment Statutory Planning and Compliance Community Services

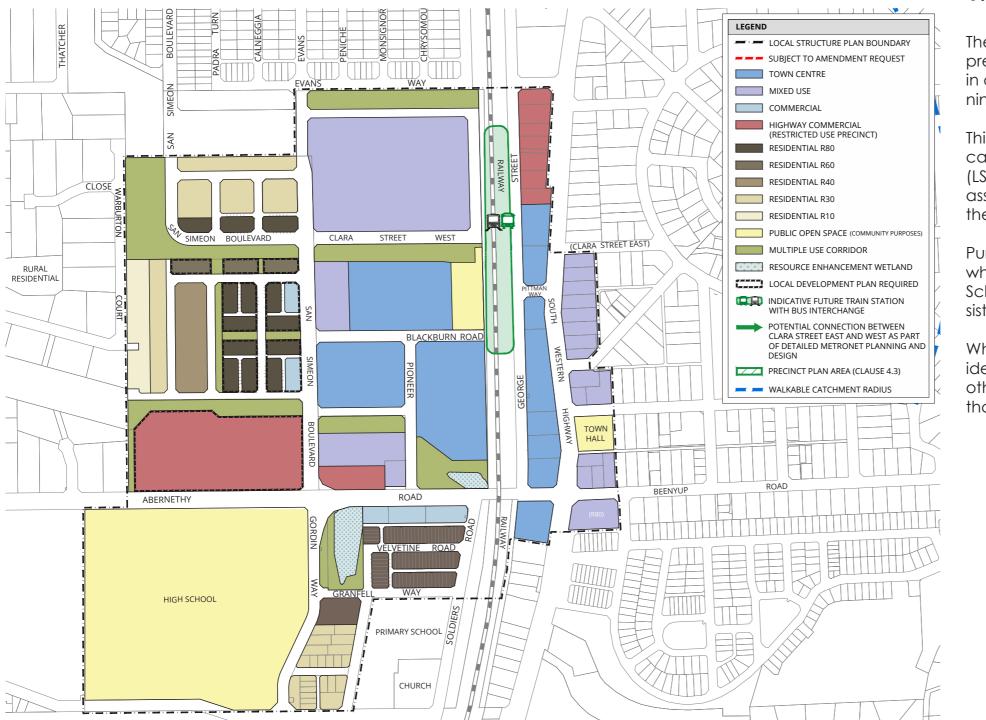
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1.0 INTRODUCTION

Figure 1: Byford Town Centre Local Structure Plan



1.1 BACKGROUND

The Byford Town Centre Public Realm Guidelines have been prepared and adopted as a Local Planning Policy (LPP 3.5) in accordance with Planning and Development (Local Planning Scheme) Regulations 2015.

This Policy applies to all subdivision and development applications within the Byford Town Centre Local Structure Plan (LSP) area and will guide the provision of infrastructure and assessment of applicants with regards to the built forms within the structure plan area (Figure 1).

Pursuant to Clause 32 (2) of Local Planning Scheme No.3, where any inconsistency arises between this Policy and the Scheme, the Scheme shall prevail to the extent of that inconsistency.

Where any inconsistency arises between this Policy, the Residential Design Codes of Western Australia (R-Codes) or any other LPP of the Shire, this Policy shall prevail to the extent of that inconsistency.

1.0 INTRODUCTION

1.2 PLANNING FRAMEWORK

The Byford 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), Byford Town Centre Public Realm Guidelines (LPP 3.5) and Local Development Plans for the Byford Town Centre LSP area.

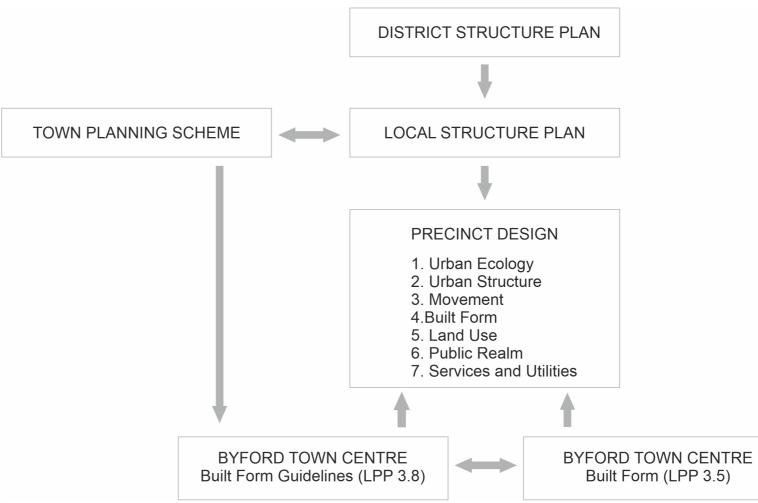
This policy constitutes the Public Realm Guidelines for the Town Centre and is to be read and applied in conjunction with the Scheme, The Byford Town Centre LSP, the Byford Town Centre Built Form Guidelines (LPP 3.8) local planning policy and other local planning policies which are deemed relevant.

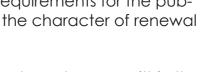
1.3 PURPOSE / OBJECTIVE

This Policy has been prepared to facilitate and coordinate desired public realm outcomes within the Byford Town Centre LSP area.

The drafting and approval of a Local Planning Policy for the Public Realm as well as a Local Planning Policy for Built Form is required. The implementation of the vision for the Byford Town Centre requires the application of a number of tools and interventions. Whilst the LSP focuses on the broader land use and design framework, the Design Guidelines identify the requirements for the public realm within new development. Local Planning Policy 3.5 - Byford Town Centre Public Realm Guidelines provides requirements for the public realm which will be applied through new development as well as determining the character of renewal work undertaken by the Local Government.

This local planning policy is intended to facilitate and coordinate desired public realm outcomes within the Byford Town Centre LSP area.





1.0 INTRODUCTION

1.4 OPERATION / SCOPE

The Byford Town Centre LSP area has been divided into four precincts as per Section 6.1. Applications will be assessed against Policy Provisions.

This LPP has been prepared to assist in realising the development vision and objectives for the Byford Town Centre as per Section 5.1. Proponents seeking to develop wholly or partly within the Policy 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. Furthermore, the Shire's preparedness to apply this Policy in a flexible manner will depend on the applicant demonstrating that the urban village atmosphere of Byford Town Centre will not be compromised and that urban design and economic development advantages to the centre would result from the proposal.

Proponents are strongly encouraged to liaise with the Shire or Design Panel as early as possible in the design process to ensure the intent and requirements of the Policy and the Byford Town Centre Public Realm Guidelines are satisfactorily addressed. Developers are also strongly encouraged to engage the services of a suitably experienced and qualified 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 Policy and other relevant requirements.

The pre-application procedure is as follows:

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

The Byford Town Centre Public Realm Guidelines is a formally adopted guideline for all development within the public realm. The guidelines are a supplementary document to the relevant Western Australian Planning Commission standards and the Byford Town Centre Local Structure Plan.

The Byford Town Centre Public Realm Guidelines should be used by all those who are involved in either shaping or looking after Byford's public realm including: Shire of Serpentine Jarrahdale teams involved in design, delivery and maintenance of public realm projects; developers and their consultants. The Guide is obligatory for all future Shire projects. The application of this guidance will be monitored and, if necessary, the Guidelines will be reviewed in order to accommodate lessons learnt and new guidance.

2.0 VISION AND PRINCIPLES

2.1 VISION AND PRINCIPLES

The following vision objectives are identified within the Byford Town Centre LSP and apply to these Byford Town Centre Public Realm Guidelines:



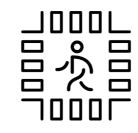
5.1.1 A Vibrant and Integrated **District Centre**

- A vibrant town centre containing a mix of retail, commercial, civic, recreation, residential uses consistent with its role as a District Centre.
- The existing and expansion areas of the town centre are seamlessly integrated and connected, and demonstrate historical and contemporary reflections of the local rural character.
- The location of major store anchors, high quality shop front environments and car parking areas contribute to an active main street environment.



5.1.2 Identifiable Character and **Distinct Sense of Place**

- Natural, cultural and heritage features, landmarks and public art within the public realm, contribute to sense of place.
- A network of public space and open space corridors contribute to the rural and bushland feel of the area.



5.1.3 A Safe Pedestrian and **Transit Oriented Place**

- There are many streets and pedestrian routes leading to a transit hub.
- Open space areas are provid-٠ ed with passive surveillance.
- The street network and urban environment provides high levels of connectivity and legibility.



5.1.4 A Place that Capitalise on its Environmental Assets

- Existing natural assets such as mature and remnant vegetation and streams are central to public realm theming.
- The main street environment is sheltered from strong easterly winds.
- Existing views and vistas to and from the centre are maintained.

The above vision objectives are illustrated within the Byford Town Centre Built Form Guidelines document through reference images and concept plans. The concept plans are used for illustrative purpose only to indicate the design intent.



es s	5.1.5 A Water Integrated Place
- to	• Bio-retention tree pits, living streams and swales are a fea- ture of the town centre and contribute to sense of place as well as perform a drainage, bio-retention and recreation function.
nd	

PUBLIC REALM GUIDELINES BYFORD TOWN CENTRE 5

Figure 3: Byford Destination



Pedestrian connections

3.1 LOCAL CHARACTER

The Byford Town Centre has two parts divided by the railway:

- Old Town Centre

- New Town Centre

Each part has existing points of attraction (shown in red) and future points of attraction (shown in green) that together create Byford as a destination (Figure 3).

Connectivity between attractions is important as it creates an integrated Town Centre with unique sense of place.

The Byford area has many local attributes that can be integrated into the design and material palettes. The following chapter analyses the Byford area in terms of the following aspects:

- ical built form
- al recommendations

Contextual Analysis - the local environment and typ-

• Contextual Identification - shape, colour and materi-

Contextual Interpretation - how it can be reflected

3.2 CONTEXTUAL ANALYSIS

There are five main themes that reflect the exisitng unique character of the Byford Town Centre:

- Natural Environment .
- Public Art
- Equine Culture
- Materials
- Built Forms

Landscape forms a pivotal role in society - not only as an aesthetic backdrop, but also as a structuring element that creates a sense of place and a specific identity, forming a location that facilitates and encourages social interaction and community spirit.

The existing Byford Town Centre can be described as having a semi-rural feel with strong visual connections to the Darling Scarp. Seasonal waterways and damp-lands dissect the town centre with some remnant bushland. This contributes to a rural town sensitivity with open spaces, peacefulness and a connection to natural features. Byford is located at the foot of the Darling Scarp, where it starts to form the Swan Coastal Plain. It has hot, dry summers with strong easterly winds which reduce to light winds in winter. The Town Centre is made up of diverse land uses; with Residential, Semi-rural residential, Commercial, Retail and Mixed Uses as well as wetlands and public open space. This mix of uses produces a variety of scales and densities. The Town Centre is traversed by the South Western Highway with high traffic volumes, a planned passenger train line, and Abernethy Road. Currently high traffic volumes on South Western Highway separate the old town site from the commercial area and the town has a propensity to flood. Understanding these physical conditions and the community's enjoyment of their diverse lifestyle will be the key in shaping further development within the Town Centre.





Existing Public Art



Old Town Centre



Typical Built Form for Old Town

Centre





Attractive Built Form



Cockatoo



Built Form of new Town Centre



Furniture as Public Art

Rural Lifestyle Built Form

IDENTIFIED MATERIALS

Brick



Natural environment

Water



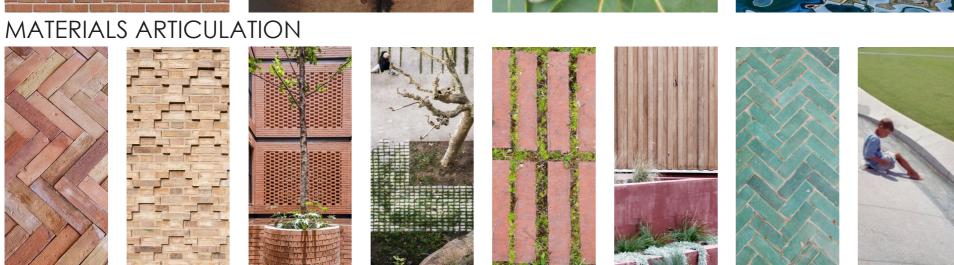
Colour, texture, form and materials can be selected based on the study of the local character and the unique environmental locale to create a design that identifies the site character and works within the context in which it sits.

Four main elements were identified through analisys of the existing architecture and public art in Byford Town Centre and natural environment of the area:

- Brick
- Timber
- Water

Particular shape of buildings and building materials are reapeated throughout the site. The use of similar shapes and metarials can help to enhance the identity of local area.

Vegetation and street trees should be consistent and support the rural village character of the area as repetition of shapes and built form help to create a sense of place.



URBAN RURAL BYFORD TOWN CENTRE FEEL



Built form and Urban Forest

3.3 CONTEXTUAL IDENTIFICATION

- Natural environment (trees/vegetation)

3.4 CONTEXTUAL INTERPRETATION

To create a unique atmosphere of Byford with rural lifestyle and urban liveliness it is important to create the same architectural language and the same style within the old and new town centres. The same materials and built forms should be repeated with variation in form throughout the site. The "old" town centre is rich with sculptures on the brick basement so the same principle should appear in the new part of the development as well in the pavement, street furniture, public art and buildings.

Rural lifestyle character can be preserved by the use of repetitive vegetation and greening of the area with a focus on pedestrians to facilitate a higher level of walkability and cycling apportunities.







Permeable surface



Blue / Green / Red colour combination



Water element



Welcoming Architecture



Human Scale



Pedestrian bridge

Local Built Forms repetition

4.1 DESIGN ELEMENT: URBAN ECOLOGY

Bio-retention develops a network of multi-use corridors / greenways throughout the town. Bio-retention will improve water quality entering receiving water bodies and will enhance the beneficial use of all watercourses and wetlands in the Town Centre.

Providing connectivity for biodiversity and pathways for migration is essential for the ecosystem to withstand potential impacts of climate change. Planting in local parks, green spaces and multi-use corridors should be complemented by smaller patches with suitable habitat vegetation. Habitat networks can be created by connected and planted roadside verges, median strips, laneways, green spaces in schools, green roofs and walls of businesses and the gardens of residential homes and through biophilic urban design.

DESIGN OBJECTIVES

Water Sensitive Urban Design to be incorporated where possible.

Expand the urban forest and

rage.

2018-2028)

increase level of canopy cove-

(Urban and Rural Forest Strategy

POLICY REQUIREMENTS

- Bio retention used in medians, verges and Public Open Space. •
- Bio-retention used adjacent to car parking to improve water quality and biodiversity.
- Bio-retention used as a green network and to improve water quality and enhance biodiversity.
- Buildings to be set within an informal perimeter of vegetation, including street trees, bio-retention shrub beds and minimal grass.
- Carparks are to be designed, and stormwater managed in Ine with water sensitive urban design principles.
- Street trees to be located at regular intervals to create a pedestrian scale environment and provide shade.
- Mitigate the urban heat island effect in the design and delivery of the public realm and private developments accordant with desired urban greening outcomes and standards.
- Expand the urban forest through streetscape designs that proide space for street trees and people movement in terms of the relevant Council strategy/policy in this regard.

Promote the use of soft landscape

- To incorporate water wise and endemic species and/or non-native species where appropriate. (DESIGN WA Precinct Design)
- Proposals should seek to maximise the provision of soft landscaping including green walls, green roofs and trees to contribute to a healthy ecosystem and deal with pollution.
- Promote the use of soft landscaping within the train station site and public spaces to reduce the heat island effect and create comfortable spaces for the public.
- Ensure a suitable connection between the landscape and the building.





veraes/medians

io-retention in roadside verae



Bio-retention in car parking



Opportunity to support habitat enhancement



design

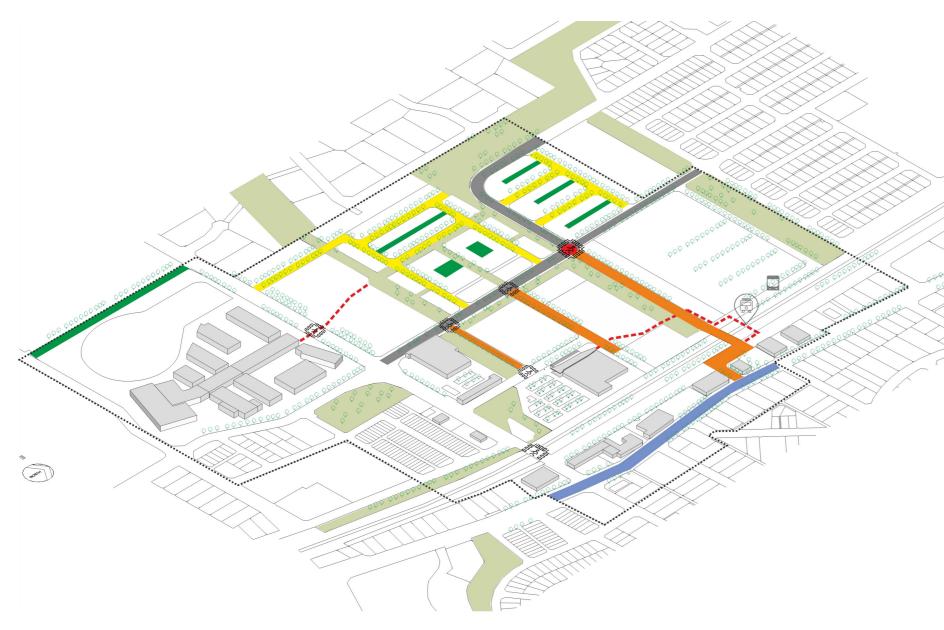


Bio-retention in green network



Soft landscaping and Urban Fores

Diagram 2: Street network



Neighbourhood Connector A Access Street B (Community-oriented streets) Potential shared streets / areas Soft streets South Western Highway Greenway Pedestrian Access

4.2 DESIGN ELEMENT: STREETSCAPE

Streetscape is an important structuring element in the creation of a sense of place.

Wide roads result in spatial relationships not well scaled for the pedestrian. This scale needs to be visually reduced in order to create a vibrant, people friendly environment. This can be achieved through avenue tree planting which visually fills and softens the road reserve space, creating visual interest with seasonal change and providing shade and shelter. Also, generous verges provide for pedestrian movement, al fresco dining and greening opportunities that create people-friendly environments. As a principle these verges shall not be turfed or reticulated to encourage a water-wise treatment although trees shall be irrigated by bubblers. Subsurface drainage shall be provided to nodal areas of interest.

The provision of a cohesive bike network through the Town Centre will further support Byford as a place for people.

To increase legibility and way finding within the Town Centre, paved thresholds herald the entry points. This surface treatment will link across from the old town to the new centre to strengthen the connectivity of the two areas. A common paved threshold treatment to residential areas helps define these zones. Feature trees and / or sculpture at key points into the Town Centre are visual markers that also aid in way finding and herald arrival.

The public realm should accommodate a variety of uses and users. It should be designed for people of all backgrounds, ages, pedestrians, cyclists and for any social activities whether temporary or regular, during different times of the day and at night. It should be functional, accessible, safe and facilitate movements through the Town Centre.

DESIGN OBJECTIVES

POLICY REQUIREMENTS

- Streets and open space are welcoming and maintain human scale.
- To ensure public realm structure and land uses support each other.
 - Where a railway station or public transport interchange interfaces with a public space, provide active uses at ground level at the station or interchange interface with the public space.

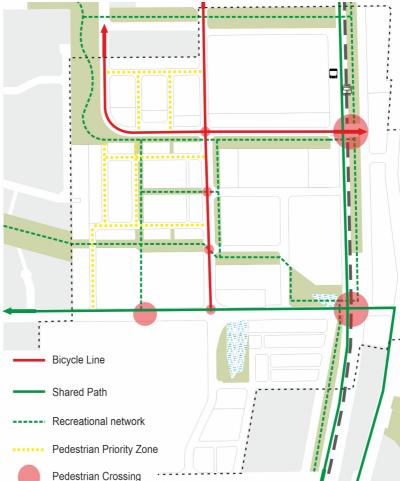
The public realm structure provides high amenity and safe interface between different uses.

Streets are to enable safe, convenient and comfortable travel and access for users of all ages and abilities, and prioritise walking, cycling, public transport and shared mobility, and reduces car dependency.

Create a Byford inspired icon recognisable to vehicular passengers and visitors

Create clear and permeable sightlines and access ways between the new and old Town

- Provide space within the streets for trees, landscaping and to accommodate social activities and utility infrastructure.
- Provide commercial lots with service access lanes or service courts separated from pedestrian access.
- Provide rear vehicle access to off-street parking where possible.
- Where lots border a public open space, provide an active frontage towards the POS.
- Larger sites should be designed to interconnect streets and allow pedestrian and cycle movement thought the site.
- Clearly identify all pedestrian crossovers.
- Develop pedestrian focused environments through the incorporation of street trees, appropriate seating, bins, bike racks and drinking fountains and prominent well-defined crossing locations.
- Standard seating to be located at regular intervals.
- Seating arrangement to encourage interaction.
- Plan and design the public realm to provide weather protection all year round where appropriate.
- Public places meet accessibility standards and cater for all levels of mobility, age, cognitive ability and different cultural backarounds.
- Ensure all new development suitably connects with the existing buildings, paving and vegetation.
- Integrate existing site features such as sculptures in a meaningful way to create a feature and destination of Byford Town Centre. Prominent entry statement in the approaches to the Town Cen-
- tre.
- Embed passive surveillance and spatial legibility by reducing visual obstructions.
- Integrate with surrounding wayfinding and ensure clear signage for connections to the station and other local destinations.

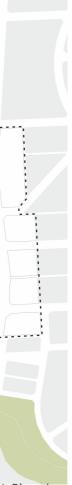


Shared Path is a Dual Use Path for Pedestrians and Cyclists (WA Bicycle Network Plan)



High amenity and safe interface between different uses

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rossove







Nelcoming space

The road reserve design guidelines in Liveable Neighbourhoods have been acknowledged, the following street sections are the preferred outcome for the Byford Town Centre.

30 m ROAD RESERVES

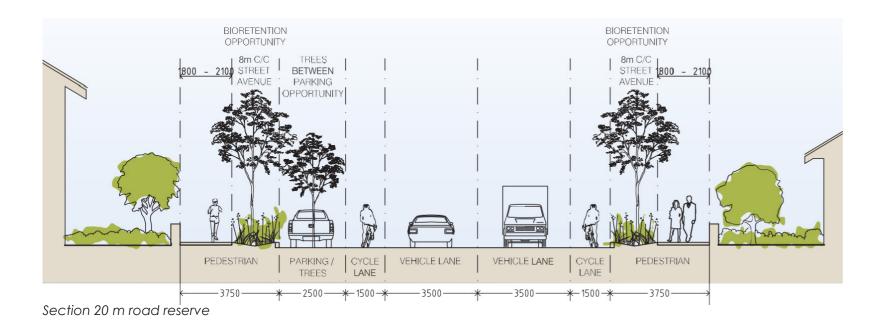
A. 30 m ROAD RESERVES (ABERNETHY ROAD & SANSIMEON BOULEVARD)

Final road reserve design will be subject to future detailed design prior to construction.

30m road reserves will be used to accommodate a variety of case scenarios within the Byfrod Town Centre to acheive safe transportation options for a number or road uses.

The traffic island/median is a minimum of 1.5m with a planted tree line at 16m centres, increasing urban tree canopy and providing a island for safe pedestiran crossings.

The road reserve incorporates shared-use pathways commuter cycle movements to promote and encourage a range of active transportation methods and create safe envrionments for active transportation users.



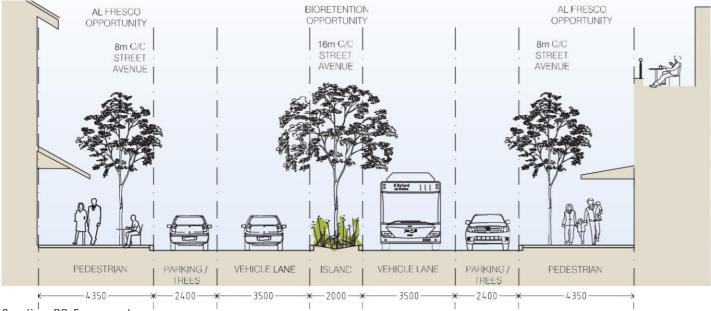
B. 20 m ROAD RESERVE (SOLDIERS ROAD)

20m road reserve forms part of the bicycle path network. Verges are 3.7m wide with avenue tree planting at 8m centres, there is parking one side of the road and bicycle lanes on both sides of the road.

On verges with a 1.8m-2.1m paved footpath, the remaining verge area can be utilized for shrub planting and bio-retention systems. As a principle these verges shall not be turfed or reticulated to encourage a waterwise treatment. In addition to the 8m centre avenue planting on the verges, where desirable, a second tree line can be planted between the parking bays (at one tree every two bays) in order to create a more intimate, residential scale and to provide additional green effect. Trees planted in this zone should be protected by bollards to prevent damage from cars.

D. 22.5 m ROAD RESERVES / MAIN STREET (Refer to Shared Streets/Areas

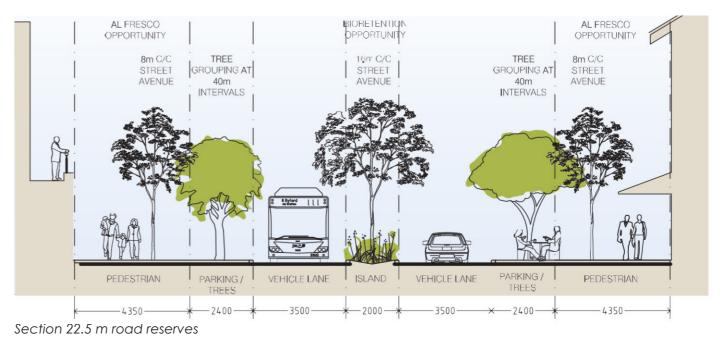
These roads form the towns structure, they are articulated to promote and facilitate pedestrian traffic, alfresco dining and retail opportunities within a 4.35m paved verge. The median island provides a location for shrub-planting, tree planting at 16m centres and bio-retention systems. Cuts in kerbs allow for bio-retention. Permeable paving under groups of trees allow for pedestrian movement. The avenue trees on the verges are placed at approximate 8m centres having regard for building and awning design, interrupted every 40m by an informal group/cluster of "colourful" trees. At these nodes, the verge is widened into the parking strip to become 6.75m wide, creating a space that can be utilized by the adjoining commercial, retail and mixed-use buildings.

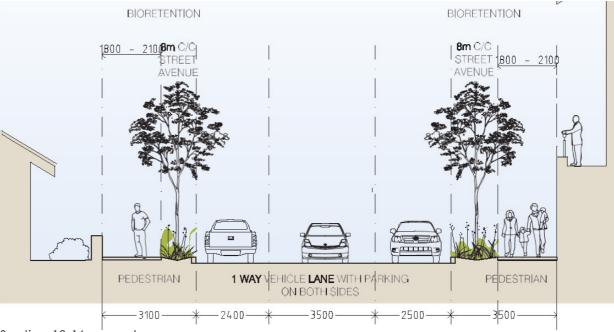


Section 22.5 m road reserves

E. 13-16m ROAD RESERVES (Refer to Community-Orientated Streets)

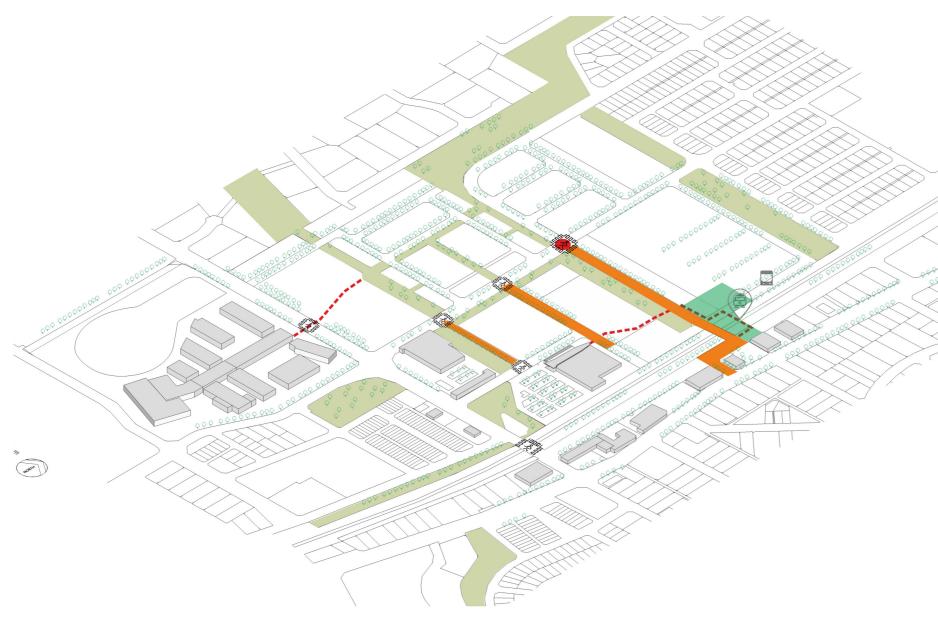
13-16m road reserves are typical to the residential zones. The verges accommodate a paved footpath of between 1.8m-2.1m, with the left-over verge space containing avenue tree-planting at 8m centres, shrub planting and bio-retention systems. As a principle these verges shall not be turfed or reticulated to encourage a water-wise treatment.





Section 13-16 m road reserves

Diagram 3: Shared streets and civic spaces



4.3 SHARED STREETS AND CIVIC SPACES

Areas designated for potential shared streets and main streets are destination streets that provide a public realm focused on pedestrians and creating an inviting street to be within.

Usually civic space is attached to main or shared streets and provide a meeting or gathering space. Each civic space is unique and offers variety in activation and interaction. Civic space is a pedestrianised space that is inviting and pleasnt to be within.

It is important to create plaza in front of train station as it will become an iconic destination place.

legibility of the Town Centre.

required.

Potential shared streets / areas Pedestrian Access Civic Spaces Greenway

Pedestian strips are encauraged withing a large development sites. Encreased pedestrianisation will benefit new development in designated areas and provide

All streets, including shared streets, will be subject to further detailed design. Where shared streets are proposed together with bus routes, consultation with PTA is

DESIGN OBJECTIVES

POLICY REQUIREMENTS

Iconic character

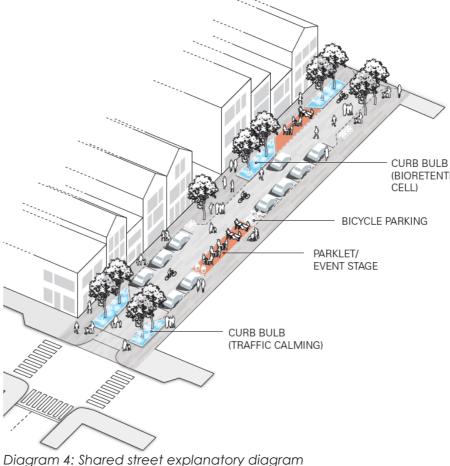
- Iconic street tree planting to provide amenity, visual scale and sense of arrival.
- Function as a retail, cafe, dining and tourist strip.
- Provide a vibrant and comfortable public realm supported by high quality furniture, lighting, wayfindings and public art.

A prioritisation to pedestrians over traffic

- Slow speed shared use corridor. •
- Extended footpaths for shopfront activation.
- Active frontages.
- Open flexible space.

Promote the use of soft landscape

- To incorporate water wise and endemic species and/or non-native species where appropriate. (DESIGN WA PRECINCT)
- Proposals should seek to maximise the provision of soft landscaping including green walls, green roofs and trees to contribute to a healthy ecosystem and deal with pollution
- Promote use of soft landscape within the train station site to reduce the heat island effect and create comfortable spaces for the public





Shared street with trees and welcoming lighting





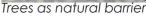
Local park



Pedestrian focused street

(BIORETENTION







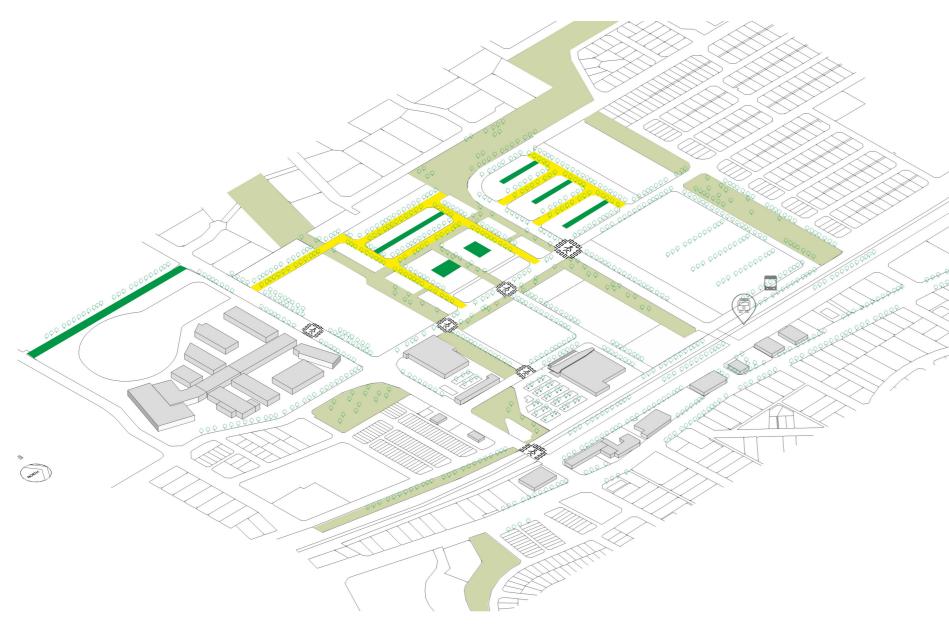
Colour pallette and urban fores





Pavement of the shared street

Diagram 5: Community-oriented streets



Access Street B (Community-oriented streets) Soft streets Greenway

4.4 COMMUNITY-ORIENTED STREETS

Community-oriented streets are located in residential area and carry a low volume traffic. Residential-oriented development is free of through traffic and mostly handle local traffic only.

Local streets provide access to residential allotments and have a strong community value and ownership. To enhance the focus on residents some on-street car parking lots can be given to different community uses depending on current needs:

- Bike corral,
- Street cafe,
- Open gym,
- Transit stop,
- Bioretention cell,
 - Street furniture,

- Pocket park.

Permeable pavement for access lanes within the residential development is encauraged as it contributes to local environment, recharges ground water and enhance biodiversity.

Soft street concept with permeable surface for street and car parking will contribute to the area between two schools to provide access from Mead Street and-Abernethy Rd and among residential lots.

DESIGN OBJECTIVES

POLICY REQUIREMENTS

Support walking and cycling

Slow speed traffic corridor

- Provide continuous and high quality footpaths
- Accommodate street trees that contribute to character and provide shade.
- Support reduced traffic speeds and volumes through traffic calming devices including raised pedestrian crossings and the use of textual surface changes.
- Pedestrian priority zones designed to accommodate service vehicle access and slower moving cyclists.
- 20 km/hr speed limit should apply through this area and apply to bicycles, service vehicles and private cars to prioritise pedestrians.

Promote urban ecology

• Provide verge gardens and water sensitive urban design.

Diagram 6: Community-oriented street explanatory diagram



Permeable pavement in residential area





Community-oriented street visualisation

CURB BULBS





CURB BULB/CHICANE (BIORETENTION CELL)

GREENWAY MARKINGS

NEIGHBORHOOD

SPEED HUMP

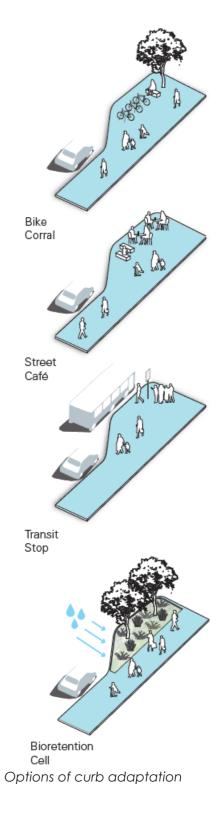




Diagram 7: Greenways



The Greenway corridors running east-west align themselves with the sites natural drainage and the north-south corridor aligns itself with the main road.

dors:

Recreational Opportunities are to be provided through a cycle/ pedestrian path network and through recreational nodes, their precise placement to be in accordance with the local water management strategy, above the one in five year flood-line where possible.

The surface drainage comprises of a bio-retention system within the urban fabric and vegetated drainage basins and swales within the greenways. The drainage basins and swales are to be designed in such a way that they have a natural appearance and form, integrating seamlessly into the landscape. Care should be taken to avoid "engineered" designs, uniform slopes, straight segments, flat surfaces etc. Some localised areas of drainage basins and swales may require rock spalling in areas of high volume and velocity.

Before the drainage system is constructed, identification of viable indigenous vegetation should be undertaken and the vegetation replanted to suitable locations within the greenways.

Greenways should encourage interaction with nature and provide public meeting space.

Section Greenway

4.5 DESIGN ELEMENT: GREENWAYS

The Greenways are intended to be multiple-use corri-

conserving existing vegetation, promoting indigenous revegetation, providing recreational opportunities, serving a surface drainage function.

DESIGN OBJECTIVES

POLICY REQUIREMENTS

- Create activity "nodes" throughout the Greenway
- Incorporate amenities such as play equipment, shelters, appropriate seating, barbeques, drink fountains and bins.
- Design rural and nature inspired, universal access approved playgrounds, with appropriate amenities

Greenway is open and accessible to public

- Develop a cycle path circuit/ dual Use Paths to Cycle West standards, including appropriate signage.
- Create a pedestrian access to Warburton Ct.





Art as nature

Promote the bio-retention and urban eclogy principles

- Utilise native and site specific shrubs and trees, minimising the use of manicured grass areas.
- Create Bio-retention zones, with native reed plantings.
- Retain and enhance the existing vegetation.

built form and greenways

Create relationships between • Buildings to face onto the greenway and bio-retention swales. • Ensure all new development suitably connects with the existing buildings, paving and vegetation.





Interface of built form and greenway

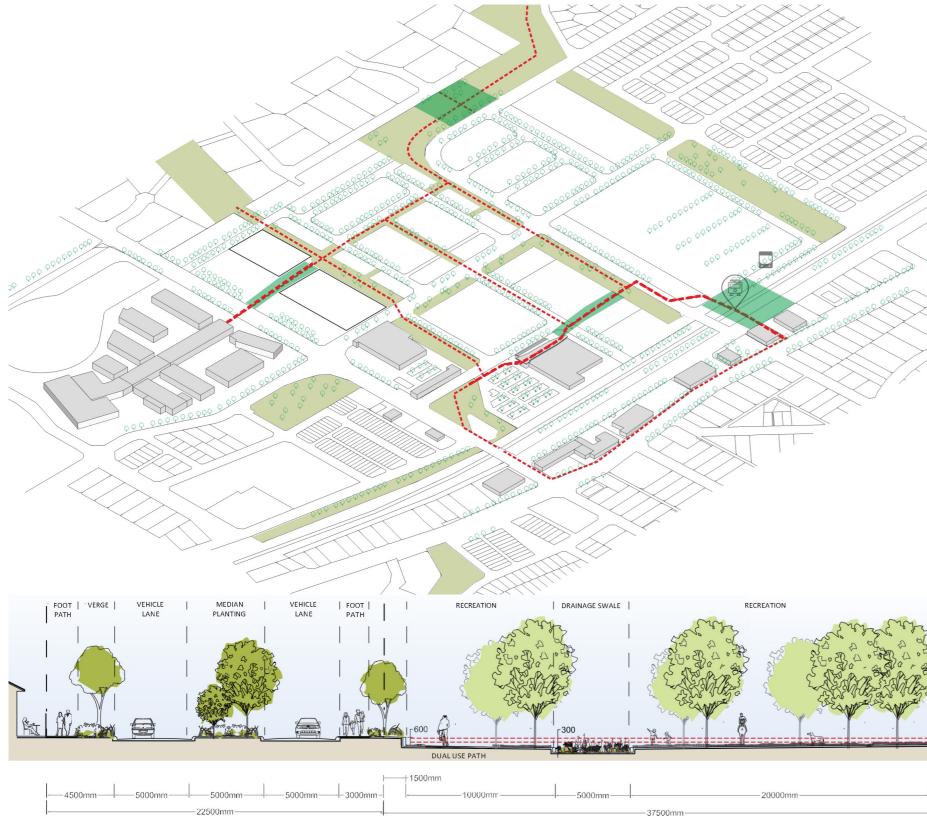
Local materials in water-channel



Art as nature



Diagram 8: Public Open Space



4.6 DESIGN ELEMENT: PUBLIC OPEN SPACE

Public open spaces should vary in size, provide different experiences for people, and be rich environments for local flora and fauna.

Careful site programming is essential to provide adequate services for natural habitat and residents. Design should reflect local landscape and heritage.

Function should follow the site character - nature, recreation or sport. Age specific activities, family inclusive spaces, long stay parks and sensory experiences should be provided in each precinct.

Sustainable and renewable materials, and local resources, should be the priority when designing playgrounds, street furniture or signage for public open spaces as they help to minimise carbon footprint.

Nature play areas, bird watching sites, areas for reflection, and walking trails through vegetation areas and along foreshores should be well connected to residential areas and well designed.

Art installations, workshops and interpretive signage can explain native plantings and create a unique atmosphere of the area. Natural sculptures can be local attractions and tourist destinations, platforms for students' and artists' creativity.

Public spaces can serve the traditional practices and ceremonies of Traditional Owners and introduce the six seasons through artistic and habitable metaphor.

Section Greenway with Public Open Space

DESIGN OBJECTIVES

POLICY REQUIREMENTS

A variety of play options within the public realm should be encouraged.

POS should promote healthy living

- Play spaces that appeal to children of all ages should be designed to provide a variety of play opportunities.
- A significant proportion of inclusive play equipment should be provided for different needs and types of disabilities/abilities.

Outdoor gyms that test balance and strength, designed for teenagers and adults should be considered in parks.

- Multifunctional play objects integrated in the built environment are encouraged.
- Integration of street art and play is especially encouraged

Natural materials and surfaces are preferred.

- Natural features such as logs, planting and rocks should be integrated into play areas.
- Play areas should also incorporate educational elements related to local heritage and natural resources.

Open space to manage flooding

- Increase tree canopy cover where possible.
- Integrate water element as a part of play or passive reacreation.
- Increase biodiversity.

•

Balance hardscape and softscape areas.







Multifunctional play objects, intergation of art and play



Civic Space







Pedestrian access through commercial area



Creative play





Intellectual play





Inclusive environment

Diagram 9: Potential locations of public art and landmark architecture



Public art should:

- Enhance visual amenity;
- Allow expression of cultural diversity;
- Promote a sense of place, local identity and public ownership;
- Promote social engagement, public ownership and civic pride;
- Celebrate Byford.

4.7 PUBLIC ART

The following section underlines the importance of public art as an important component in the creation of unique, high quality spaces.

The main public art themes were identified through community engagement and research, responding to the Shire's environment, culture and history in the Public Art Strategy and Public Art Masterplan 2019-2023:

- •
- Belong
- Playfulness ٠

art.

Natural Environment

These themes should be utilised when considering public

Projects/developments in the vicinity of the Byford Station are encouraged to have regard for the METRONET BRE Public Art and Interpretation – Public Art Plan.

PUBLIC ART PERFORMANCE CRITERIA

Public art is as an asset for the town of Byford and enhances the quality of life for residents and visitors. The primary crieria for public art are:

1.Public art is to maintain high aesthetic standards and should be durable and low maintenance, uplifting the quality of public spaces.

2.Recycling of materials or reus-ing of potential landfill waste ("Public Art from Trash") should be encouraged to bring awareness about the scares resources and boost creativity among community.

3.Public art should be contextually significant and specificly appropriate and meaningful to the Town of Byford.

4.Public Art should connect Old & New Town Centres through the same themes, materials and style of art with a consistent narrative about the local history, including the recycling of material (such as bricks from the former State Brickworks, for example).

5.Public art should enhance local biodiversity by creating constructed sculptural habitat to tell stories for people and to provide shelter for insects, reptiles and birds.

6.Outdoor utility boxes, backflow enclosures, blank building walls, delivery lines and car parking should be hidden from the public or complimented by design of the utilities or landscaping.

7.Local artist can be involved to create murals or could be used the wrapping of enclosure to improve the aesthetics of the area (Public Art Strategy and Public Art Masterplan 2019-2023).

8.All public art should comply with latest approved policy guidelines.







Art as gathering place



Building wall art from recycled materials



Art as insect shelter





Art as shelter for birds



Sculpural Habitat as Landscape Marker

Art as delivery road or paving



Utility box as an Art

Diagram 10: Potential locations for activation of public realm



Flexible space

Pop-up library

Space Activatio

4.8 ACTIVATION OF PUBLIC REALM

The Public Realm Guidelines reinforce placemaking principles to create a lively neighbourhood and inviting public spaces.

Public spaces are a necessary component of town development as they:

action:

- Placemakina;
- 'Creative Communities'.

be done.

Spaces should be allowed to facilitate pop up activation to support the activation of the precinct.

Provide activity zones around and integrated with the terraces for gatherings, activation and food/beverage uses.

In order to fulfil the above performance and planning requirements, public spaces need to be carefully considered in their design and articulation. It is a given that public spaces adhere to certain planning requirements such as:

- Access and movement.
- Safety and security.
- Comfort and performance.

• Facilitate recreational opportunities and social inter-

• Promote retail and business opportunities; • Enhance the quality of the living environment;

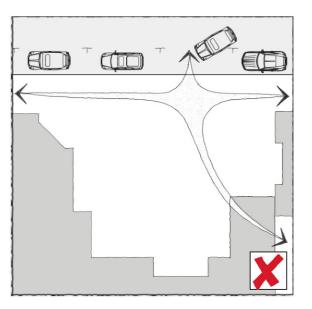
When it is possible and necessary to organise a temporary trial before delivering a permanent solution it should

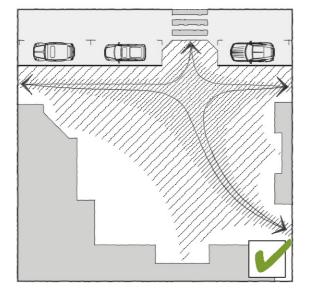
4.8.1 ACTIVATION: ACCESS AND MOVEMENT

There should be a user-friendly interface between vehicles and pedestrians. Pedestrians and universal access and movement is crucial for generation moreover of vibrant, useful public spaces.

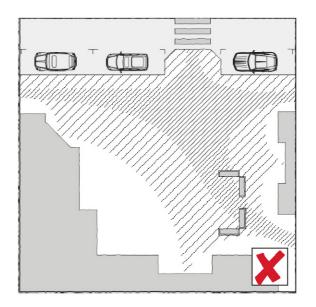
Accessible and safe pedestrian road crossings need to be designed to allow for ease of access and safe access, particularly around future bus routes and existing routes along South Western Highway and Abernethy Road.

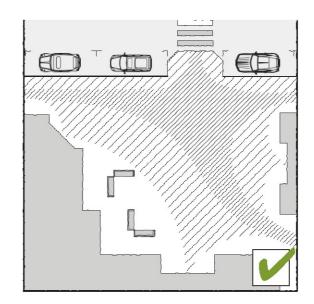
Safe pedestrian crossings must provide a high degree of accessibility for all pedestrian users of all ability and must ensure an efficient, safe and prioritised pedestrian movement network and universal access.



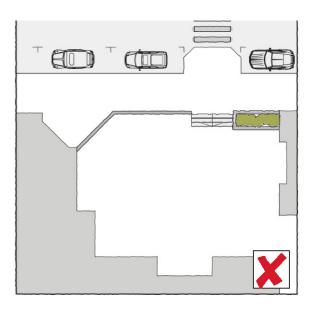


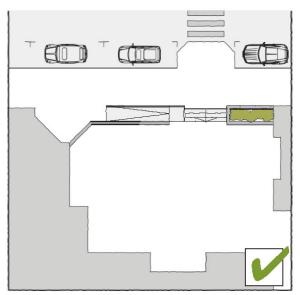
Pedestrian access: facilitate desirelines



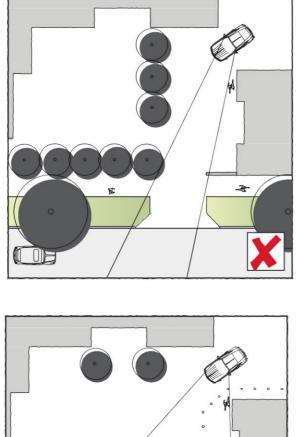


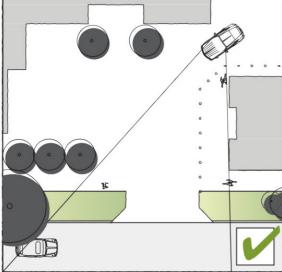
Pedestrian movement: facilitate movement and flow through the correct placement of furniture and elements so that they do not obstruct, but simultaneously are not completely isolated.



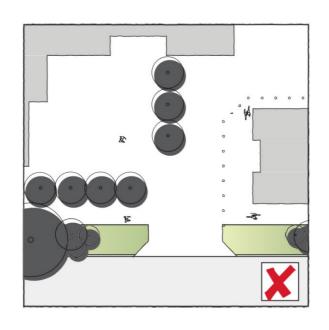


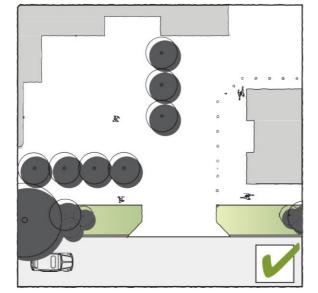
Universal access: in the event of level changes, universal access should be provided in a carefully considered and integrated manner.



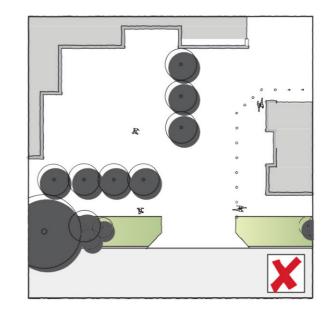


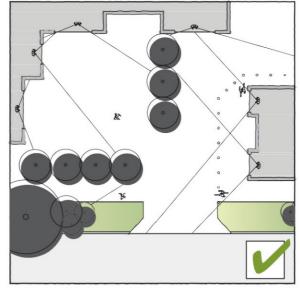
Maintain sightlines





Lighting levels





Overlookingsurveillance

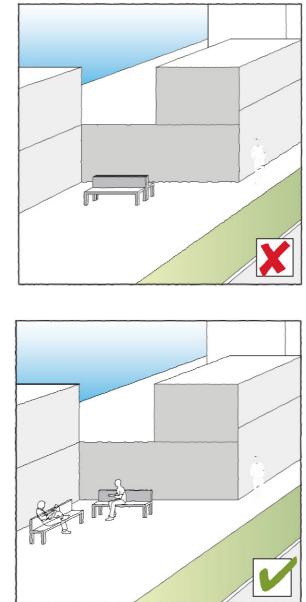
4.8.2 ACTIVATION: SECURITY AND SAFETY

Core needs to be taken through to avoid "over policing" which can lead to sterility and a lack of atmosphere

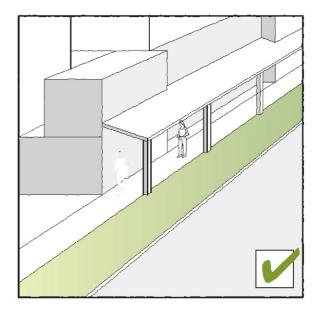
Public spaces need to provide a good level of safety and security in the form of lighting, sight-liness and surveillance in order to become positively charged and utilised spaces.

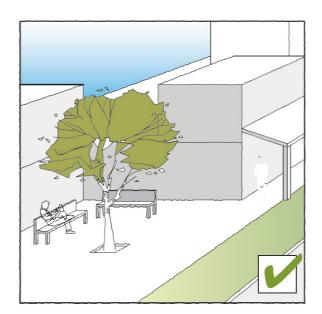
4.8.3 ACTIVATION: COMFORT AND PERFORMANCE

Successful public spaces are comfortable, human-scaled pedestrian environments with good grouping of furniture and elements, shelter and aesthetic appeal.

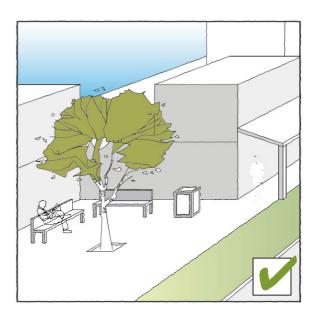


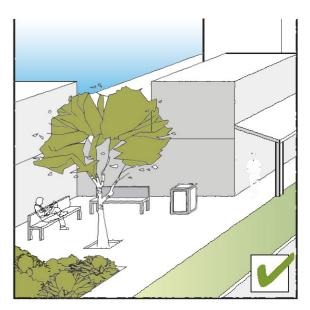
Bench placement to aid social interaction





Shelter and aesthetic appeal through tree planting and canopy





Good grouping of furniture (eg. bin placement in relation to benches and people passing by). Additional planting to create aesthetic appeal, intimacy and definition of space.

4.9 FURNITURE

4.9.1 SEATING

Furniture should be made of are local brick and timber (preferably reusable). The shape of furniture can vary and local community can be involved into design and building process.

The seating options out of brick and timber can contrib-ute as a "signature piece" to an identity of Byford and link old and new town centres.

The seating range consists of various options and configurations:

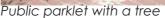
- simple bench with no backrest; •
- bench with backrest;
- multifunctional brick bench; .
- individual seats; .
- picnic setting and public BBQ;
- public parklet with trees/bycicly parking.

Desirable locations within the Town centre for seating and other related furniture are:

- Sidewalks/footpaths; .
- Plaza's /Squares;
- Pause/meeting places within the public realm;
- Bus Stops;
- POS adjacent to cycle/foot path;
- POS activity nodes. •

Seating, bins, lighting, bike racks, water fountains should be grouped locations to form functional outdoor meeting/waiting places.











ick seatina-stairs





ndividual seat



Picnic setting (brick or timber)



Bench with backrest and bicycle parking







Simple bench with no backres (brick or timber)

4.9.2 BIKE RACK



The classic U-type bike rack was chosen for its versatility and dura-bility.

This type of bike rack allows to lock both the frame and the wheels of the bike for added security.

For special events, such as a farmers market, for example, the bike racks should be customisable according to the theme of event and be removable after the event.

Bike racks should be provided at all architectual landmarks.

4.9.3 WATER FOUNTAIN



Water fountains are to be installed at seating locations, along main bicycle routes and public open spaces, grouped with other furniture.

If drinking fountain stands alone it should have a reflective band addition.

The drinking fountain should be pet friendly.

Water fountains should be provided within 400m intervals.

4.9.4 BOLLARDS



Bollards are to be installed at locations where vehicle control and pedestrian priority is requires.

Suggested size: 200mm Square; 900 mm above the ground

Bollards should be square and manufactured from 100% recycled materials (timber or plastic) such as The Pewsham Bollard PBD403. Alternatively, a bollard should be a fixed timber or recycled plastic with an optional reflective band addi-tion such as The Sheldon Bollard SBD300.

4.9.5 RECYCLING BINS



Recycling bins are to be installed at seating and stra-tegically important (train station/POS locations, grouped with oth-er furniture.

Recycling bins should be part of an agreed layout for street furni-ture and be integrated into the design from early stages.

Recycling stations should contain three separate bins for landfill, recycle and compost



Permeable surface



Movable festival bike rack



Furnishings



Recycled plastic bollards Illuminated bollards





4.9.6 LIGHTING



Lighting should be provided as agreed to by the infrastructure directorate.

Lighting should be energy efficient and different lighting should be considered for each character area, for main roads, public open spaces, for navigation and decorative lighting for festival time.

Street Furnishings



Recycled plastic bollards

4.10 HARD WORKS

4.10.1 PAVING

The range of paving for Byford Town Centre provides for warmth and earthiness that is reflective of the rural set-ting with a grey undertone inspired by the local stone of grey granites and dark grey diorite. The paving palette is durable and has the ability to "age well" in terms of staining and wear.

Red brick is also encauraged as the use of the same material in Old and New town centres can help to connect them visually and stylistically.

The proposed paving palette is robust and its ability to withstand staining and long-term wear. Any variation should adhere to these principles.

The intention is that the Town Centre Public Spaces pav-ing or small squares and activity nodes outside the town centre be more detailed and refined, using one materi-al as the field paver and different as detailed accents, banding or edging.

Footpaths in the Town Centre are to be red brick or grey paving with unit paving or insitu concrete (warm grey tones or white) and detailed accents, banding or edg-ing.

Footpaths in Residential areas are to be insitu concrete (warm grey tones or white) field paving or red brick and grey detailed accents, banding or edging.

Cycle lanes are to be red asphalt. Where cycle lanes are part of the road way and in areas of high conflict such as intersections with left turning lanes, green as-phalt will be used to highlight that the cycle lane contin-ues through the intersection.

Should the Shire not wish for bus stops to have the PTA's default paving design requirements, the Shire may request a bus stop to be paved to match the existing environment with the mutual agreement of the PTA.













Coloured brick



Permeable option







imestone





Pavement desian



Permeable car parking

4.10.2 INTERSECTIONS

Intersections should provide a distinctive, intimate paving pattern to define key intersections

- Pedestrian crossing
- Key footpath intersections

• Incidental community gathering spaces

• Alfresco spaces

Materials

Unit paving or red brick in distinctive pattern



Elevated crossover



Intersection in red brick

4.10.3 CYCLE PATHS

Cycle paths should provide a practical dual use path (DUP) and meet bike west standards.

Materials

Red Asphalt with concrete edge beam within Town Centre precinct. Where cycle lanes are part of the road way and in areas of high conflict, green asphalt will be used.



Dual Use Path design



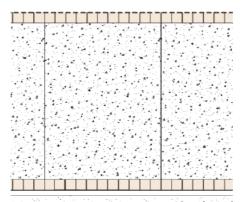
Dual use path in red brick

4.10.4 FOOTPATHS

Allow for unit paving to lot boundary and back of kerb.
Allow for unit paving to ensure pits/conduits/cabling meet servicing requirements to avoid necessity for cutting paving

Provide pram ramps and tactile indicators at required pedestrian crossing points. Pram ramps shall comply to Australian standards.

Provide tactile indicators at required pedestrian crossing points in accordance to Australian standards.



Foorpath

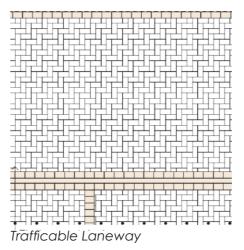


Footpath & POS

4.10.5 TRAFFICABLE LANEWAYS

Predominately trafficable unit paving with flush concrete kerbs asphalt in Residential zones. As this is a shared space between cars and pedestrians, bollards, flush concrete kerbs and tactiles indicators shall be used to define significant and safe pedestrian walkways and crossings.

Allow for trafficable paving to lot boundary, front and back of kerb.
Allow for trafficable paving to ensure pits/conduits/cabling meet servicing requirements to avoid necessity for cutting paving.





Shared Space

4.10.6 PUBLIC SPACES

To provide bold feature paving to articulate significant public spaces. To reinforce sense of intimacy the paving will be a bold pattern made up of small unit pavers.

• Allow for unit paving to ensure pits/conduits/cabling meet servicing requirements to avoid necessity for cutting paving

• Be permeable



Public space



Permeable pavement

4.11. PUBLIC FACILITIES AND INFRASTRUCTURE

4.11.1 BUS PORT

Bus shelters should be similar to the Single sided WA inspired range bus shelters. This bus shelter is shown under the "Urban" range from the Bus Shelters Buyers Guide. Where possible the shelters should be integrated with other street furniture such as skateboard ramps or play equipment

4.11.2 PUBLIC TRANSPORT STATIONS

The Metronet Byford Station should reflect the character of Byford and utilise 3.0 Design Source information to establish a suitable connection with the history and current community of Byford. Adequate and integrated lighting is a crucial aspect of design and should be a priority design feature.

4.11.3 BIKE PORT

Bike ports should be provided at prominent intermodal sites including the Metronet station and Byford library.

4.11.4 BIKE SHELTER

Bike shelters should not only be functional but also need to promote the active use of bicycles to access the town centre and activate the prominent activity areas. They should be provided at all prominent intersections of cycle paths.



Skateboard ramp / Denmark



Bus Station Swings / Canada



Solar Powered Lightning Bus Station / Netherlands



Solar Powered Lighting System



TriMet Bike Shelter / Portland, OR



TriMet Bike Shelter / Portland, OR



Locable Bike Shelter



Open Bike Shelter

4.11.5 PUBLIC TOILETS

Public toilets should be provided near the Public Transport Station and should reflect the character of Byford.





Public Toilets in the Tête d'Or Park Jacky Suchail Architects

5.1 TREES

Street trees have been selected for their form, height and seasonality change. Tree spacing relates to the scale and use of the street and requirements for viewing signage. As a general rule, wider road reserves are planted with larger tree species. Colourful tree species are used in groups along the 22.5m road reserve within the Town Centre. Deciduous Species have been used on the East – West 22.5m road reserve within the Town Centre to introduce passive solar design. Deciduous trees are planted to the activity nodes to allow for passive solar design where people will be congregating.

The Trees shown are preferred and will be reviewed on a case by case basis.

5.2 TREE SCHEDULE AND LOCATIONS

Location in Town Centre	Tree Species	Common Name	Recommended size at installation
30m road			armstallation
reserve			
(eserve	Eucalyptus accedens	Powderbark Wandoo	45L
	Eucalyptus	Tuart	45L
	gomphocephala	100h	AGE
22.5m road reserve			
Avenue (E-W)	Pyrus ussuriensis	Ornamental Pear	200L
Avenue (N-S)	Eucalyptus accedens	Powderbark Wandoo	45L
Groups	Corymbia ficifolia	Red Flowering Gum	45L
20m road reserve			
	Agonis flexuosa	Peppermint	45L
	Eucalyptus torquata	Coral Gum	45L
13-16m road reserve	100 de		5.
000170	Eucalyptus vitrix	Little Ghost Gum	45L
	Eucalyptus torquata	Coral Gum	45L
Highlight trees	Coodipitorioidoura	0000000	- TOL
Roundabouts	Erythrina indica	Indian Coral Tree	200L
	Jacaranda mimosifolia	Jacaranda	200L
	Fraxinus x Raywoodii	Cloret Ash	
Town Square	Eucalyptus accedens	Powderbark Wandoo	45L
	Jacaranda mimosifolia	Jacaranda	200L
	Erythring indica	Indian Coral Tree	200L
	Liquidamber styraciflua	Sweetgum	
	Sapium sebiferum	Chinese Tallow Tree	
	Ulmus parviflore	Chinese Elm	
Parkland	Banksia attenuata	Candle Stick Banksia	45L
Paikana	Nuytsia floribunda with host tree	Native Christmas tree	45L
	Acacia acuminata		
Public Open Space	Eucalyptus rudis	Flooded Gum	45L
	Corymbia calophylla	Marri	45L
	to shrub beds		
	Melaleuca preissiana	Moonah	45L
	Melaleuca rhaphiophylla	Swamp Paperbark	45L

The planting has been informed predominantly by the local shires proposed planting list of indigenous West Australian plants. In key locations deciduous trees have been selected to facilitate passive solar design.



Acacia acuminata - Jam



Agonis flexuosa - Native Peppermint



Allocasuarina fraseriana - Sheoak



Banksia attenuata - Candle Stick Banksia

Corymbia calophylla - Marri



Eucalyptus accedens - Powderbark Wandoo



Eucalyptus torquata - Coral Gum



Banksia menziesii - Firewood Banksia



Corymbia ficifolia - Red Flowering Gum



Eucalyptus gomphocephala - Tuart



Eucalyptus vitrix - Little Ghost Gum



Banksia grandis - Bull Banksia



Erythrina indica - Indian Coral Tree



Eucalyptus rudis - Flooded Gum



Jacaranda mimosifolia - Jacaranda





Nuytsia floribunda - Native Christmas Tree





Sapium sebiferum - Chinese Tallow Tree





Pyrus ussuriensis - Ornamental Pear

5.3 SCREEN PLANTING

Plants shall be water wise and selected from the proposed planting list of indigenous Western Australian species. Height restrictions will apply to adhere to Main Roads and CPTD standards.

The Screening planting shown illustrate the design intent and will be reviewed on a case by case basis.



Acacia alata - Winged Wattle (-2m)



Adenanthos cygnorum - Wooly Bush (-3m)



Banksia sessilis



Acacia microbotrya - Manna Wattle (-3m)



Allocasuarina humilis - Dwarf Sheoak (-2m)



Callistermonphoeniceus-LesserBottlebrush(-3m)



Acacia pulchella - Prickly Moses (-2m)



Astartea fascicularis - (-2m)



Calothamnus rupestris - Mouse Ears (-3m)





Conospermumstoechadis - Common Smokebush (-2m,



Grevillea endlicheriana - Spindly Grevillea (-2m)



Hakea undulata

5.4 SHRUBS

Plants shall be water wise and selected from the local shires proposed planting list of indigenous West Australian Species.

The Shrub planting shown illustrate the design intent and will be reviewed on a case by case basis.





Chorizema cordatum - (-1.5m)

Hypocalymma angustifolium - White Myrtle (-1m)





Conostylis candicans

Hypocalymmarobustum-SwanRiverMyrtle(-1m)



Grevillea obtusifolia - Gin Gin Gem (-1m)



Kingia australis - Kingia (-8m)





Xanthorrhoea preissii - Grass Tree (-5m)



Verticordia densiflora - Compacted Feather Flower (-1m)



Verticordia plumosa - Plumed Feather Flower (-1m)



Acacia drummondii - Drummond's Wattle (-1m)



Baeckeacamphorosmae- Camphor Myrtle(-0.5m)





Calothamnus sanguineus - Silky Leaved Bloodflower (-1.5m)



Acacia lasiocarpa - Dune Moses (-1m)



Banksia dallanneyi - Couch Honeypot (-.4m)



Beaufortia squarrosa - Sand Bottlebrush (-1.5m)





Acacia wildenowiana - Grass Wattle (-1m)



Banksia nivea - Honeypot Banksia (-1m)



Calothamnus quadrifidus - 'Bronze Blaze' (-1.5m)





Calytrix angulata - Yellow Star Flower (-1m)

Calytrix flavescens - Summer Star Flower (-1m)

5.5 WETLAND

Wetland species shall be selected from the local shires proposed planting list of indigenous West Australian Species.

Species highlighted in orange are suitable for areas adjacent to, or within permanent water bodies. The other species are suitable for areas that are seasonally waterlogged or inundated for short periods.

The Wetland species shown illustrate the design intent.





Anigozanthos viridus - Green Kangaroo Paw (-1m)

Baumea juncea - Bare Twig Rush (-1m)



Anigozanthos manglesii - Mangles Kangaroo Paw (-1m)



Ficinia nodosa - Knotted Club Rush (-0.5m)



Chorizandra enodis - Black Bristlebrush (-1m)



Dianella revoluta - Blueberry Lily (-0.5m)



Juncus kraussii - Sea Rush (-1.2m)

5.6 GROUNDCOVERS / CLIMBERS

Groundcovers/ climbers shall be selected from the local shires proposed planting list of indigenous West Australian Species.

The plant species shown illustrate the design intent.







Grevillea bipinnatifida - 'Prostrate' Fuscia Grevillea

Grevillea quercifolia - Oak Leaf Grevillea



Acacia lanuginophylla



Grevillea nudiflora



Hardenbergia comptoniana - Native Wisteria



Adenanthos miesnerii - Prostrate Wooly Bush



Grevillea preissii - 'Gilt Dragon'



Hemiandra pungens - Snake Bush



Kennedia coccinea - Coral Vine



Kennedia prostrata - Running Postman



Lechenaultia biloba

Office Use Only						
Relevant Delegations						
Council Adoption	Date		Resolution #			
Reviewed / Modified	Date		Resolution #			
Reviewed / Modified	Date		Resolution #			



PUBLIC REALM GUIDELINES BYFORD TOWN CENTRE 42