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FOREWORD



A CBD Redevelopment Framework has been adopted by Council to provide a 20-year vision and series of strategies for the ongoing redevelopment and activation of the Rockhampton CBD. It is the product of several years of study and collaboration with the community.

The result is a plan to activate the city heart by bringing our unique history and natural assets to life. The plan combines a number of major catalytic projects with activation strategies, both commercial and cultural to stimulate growth, jobs, increased residential living and community use of the CBD.

We are living in an increasingly urban age, where prosperity and community wellbeing can be measured by the success of the area's CBD.

The Framework plans for a city heart, centre and frame area. The heart is bordered by William, Bolsover, Fitzroy and Quay Streets and forms the core of the CBD. Connecting all areas is an outstanding grid pattern of wide streets and laneways with untapped potential to help invigorate the CBD. The redevelopment works along Quay Street demonstrate the contribution streets and laneways can and should make to the function and appeal of the CBD.

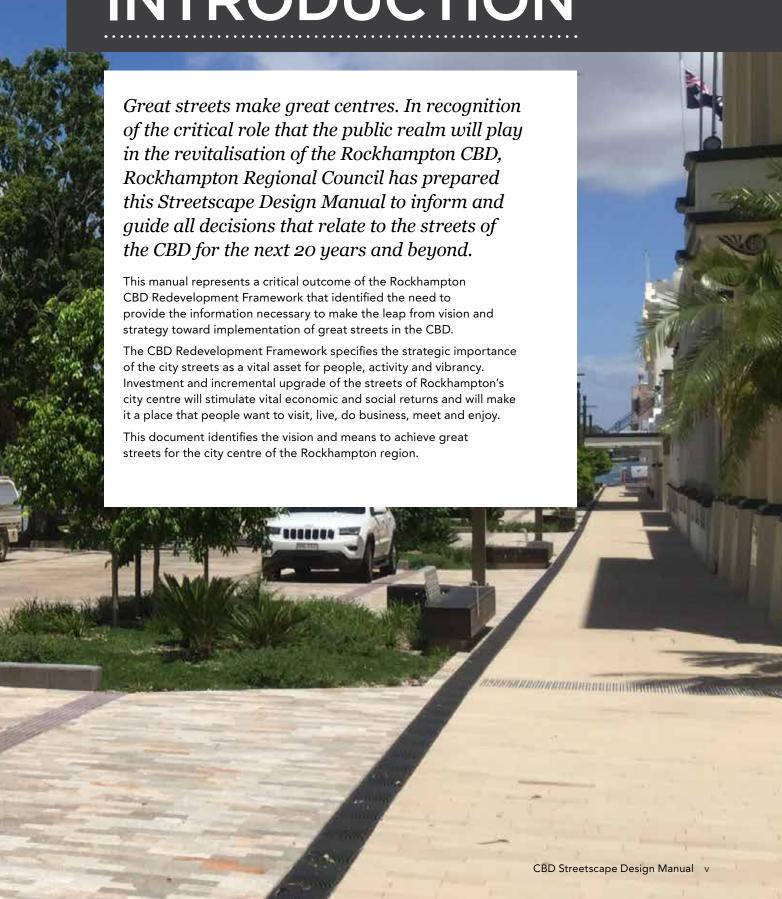
To ensure these vital elements play their part in the future success of the CBD it is important a customised design standard is established for each street. The standard will include fundamental road design measures such as carriageway widths, but also street scaping elements. Street tree selection and placement, lighting design, street furniture design, pavement design and many other features all make a contribution to functionality and street appeal. Most importantly the streets, pavements and laneways must increasingly promote ease of access and a comfortable pedestrian experience.

This Streetscape Design Manual establishes a minimum standard for the detailed design of CBD streets and footpaths until reviewed and superseded.

Margaret Strelow Mayor of Rockhampton







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RELATED STRATEGIES AND STUDIES

OVERARCHING PLANS

HOW THIS DOCUMENT **RELATES TO** OTHER PLANS

The Rockhampton CBD Streetscape Design Manual is closely related to other key Council corporate and operational plans and strategies as described in the diagram below.

The CBD Streetscape Design Manual is a direct outcome of the CBD Redevelopment Framework providing a coordinated and consistent strategy that focuses squarely on upgrading, over time, the public realm and streetscape experience of the CBD.



Corporate Plan



Operational Plan



Community Plan (underway)



CBD Redevelopment Framework



Economic Action Plan 2016-2020



Planning Scheme



Sports, Parks, Active Recreation + Community Strategy (underway)



Rockhampton Principal Rockhampton Region Centre — Car Parking Strategy Review



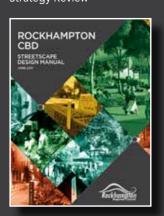
The Smart Way Forward



Economic Development Strategy Summary Report



Mount Archer Activation Master Plan



THIS REPORT CBD Streetscape Design Manual



Rockhampton Recreational Fishing **Development Strategy**



Principal Cycle Network Plan — Central Queensland



Planning Studies + **Associated Documents**







PURPOSE OF THIS DOCUMENT

This manual is intended to operate as a guiding framework for the implementation of a high quality public realm environment for the CBD of Rockhampton. The streets of the city perform a critical function and have the capacity to enhance the everyday experience of people. The approach and design of these key public assets is fundamental to creating a high quality, successful and thriving urban environment for the people of Rockhampton.

The objectives that underpin this Streetscape Design Manual are:

- To crystallise the streetscape typologies that will make up the public realm experience of the centre.
- To identify a coherent strategy for the approach
 to delivery of softscape across the CBD. The goal
 is to deliver street tree planting that will ultimately
 result in a high quality grid of shaded and attractive
 streetscapes that connect the key destinations of the
 centre and encourage civic life, walking, and cycling;
- To identify a coherent strategy and approach to the delivery
 of hardscape such as paving treatment and a suite of
 street furnishings that offers a contemporary but timeless
 character to the streets and spaces of the CBD; and
- To clarify the streetscape vision for key focus areas and to support this with a series of 'general arrangement' drawings that provide guidance on the arrangement of planting, furniture and pavement for each streetscape typology.

THIS MANUAL IS NOT INTENDED TO PROVIDE DETAILED DESIGN SOLUTIONS BUT RATHER INFORM DECISIONS ABOUT INCREMENTAL INVESTMENT IN THE GREENING OF THE CITY CENTRE.

The delivery of the Streetscape Design Manual is intrinsically connected to the change making projects identified in the CBD Redevelopment Framework. The material within this report is relevant to all streets in the CBD.

For every \$1 spent on greening the city there is an estimated \$5.60 return on investment

Source: Melbourne City Council



THE IMPORTANCE OF WELL DESIGNED STREETS

Well-designed streets benefit everyone. They add value to the city for residents and businesses. They attract tourists, encourage people to be outdoors and walking and foster a strong city economy. The design of these critical city public spaces is important and in the context of Rockhampton - vital as CBD open space beyond the riverfront is limited in supply.

The roads and hard surfaces of Rockhampton occupy a staggering 33% of the CBD. Comparatively with other cities, this is a very high percentage.

The streets of the Rockhampton CBD are one of the most critical elements that people experience everyday and are an intrinsic part of the overall brand and image of the city. The streets shape the character of the place and therefore it's important that they are considered as part of the public realm of the CBD and designed as an asset. The streets as assets provide much needed public realm to foster urban life and will enhance and enrich the CBD experience.

The CBD Redevelopment Framework seeks to increase the residential populations in the CBD over the next 20 years. The streets of Rockhampton will need to play an important role in achieving this objective through quality design and improvements ensuring they are sustainable, durable and importantly — liveable.

The people of Rockhampton have repeatedly said they want a city that is welcoming, safe, active and comfortable. Improving the design of the streets will achieve all of these while driving increases in visitation for events and shopping and stimulating investment.

For all of these reasons, committing to the right design of the streets is a key priority for the CBD over the next 20-30 years.

STREETS AND THEIR SIDEWALKS, THE PUBLIC PLACES OF A CITY, ARE ITS MOST VITAL ORGANS. IF A CITY'S STREETS LOOK INTERESTING, THE CITY LOOKS INTERESTING; IF THEY ARE DULL, THE CITY LOOKS DULL — JANE JACOBS

BENEFITS OF WELL DESIGNED STREETS:

Well designed streetscapes incorporate environmental sustainability, social sustainability, neighbourhood character and positive aesthetics to drive increased useability and improved perceptions of safety.

Streetscapes create the look and feel for a city and offer many benefits to the urban environment including:

- · Calming traffic and increasing accessibility
- Improved air quality
- Improved physical health and well-being of the community including demonstrated lowering of stress and anxiety of residents and the wider community
- Increased walkability by providing shade and shelter
- Improved amenity and visual appearance
- Increased perception of safety and reducing antisocial behaviours such as vandalism and graffiti
- Improved opportunity for social and economic activity
- Increased property values
- Increased tourism and business opportunities
- Protection from wind and more extreme weather events
- Providing habitat for native flora and fauna
- Delivering summertime cooling thereby reducing energy needs and potential health issues resulting from exposure to heat
- Reduced urban heat island effect and UV exposure











CONTEXT AND PRINCIPLES

The CBD Redevelopment Framework sets out the strategic direction for the revitalisation of the CBD over a 20 to 30-year time frame. The Framework identifies the greening of the city centre as a key priority to support the revitalisation of the CBD. Therefore the streets of the CBD will need to work harder to deliver much needed green infrastructure to support the revitalisation of the city centre. A series of principles have been developed to inform the approach to the design of the streets and align with the redevelopment objectives of the wider CBD.

This Streetscape Design Manual adds the detail to the strategy — setting out a suite of planting, furniture and materials and indicatively identifying the way in which these elements will come together to form a coherent, elegant, distinctive and high quality streetscapes within the CBD.

In terms of areas of focus, the CBD Redevelopment Framework identifies the CBD Heart as the primary area of focus for investment and revitalisation efforts. This is in order to create momentum, pulse and confidence in the CBD.

The impacts of these changes over time will be felt by not only the wider CBD Frame but also the greater Rockhampton, surrounding suburbs and region as the CBD starts to reaffirm itself as the place to be.

HIGHER ORDER GOALS OF THE STREETSCAPE DESIGN MANUAL



Put people first: For a long time, the car has been given the priority when considering changes to the streets of the CBD. One of the key principles is to challenge this way of thinking and ensure that the design of streets provides comfortable, welcoming and safe environments for people including walking or cycling. Vibrant streets that have a focus on pedestrian experience will assist in improving the perception that cars need to be considered a priority in the design of Rockhampton's streets. The design of each streetscape must be safe and accessible to all users. The perceptions of a safe environment are often based upon the quality, appearance and design of the streetscape.



Improve liveability: Great streets provide backbone to the CBD as a great place to live. It's as simple as that. Streets are a space to recreate for the people who reside in the CBD. It is critical that these streets offer a variety of interest and comfort, a high quality aesthetic, a logical relationship with the built form and have an identifiable character.



Improved activation: Active land uses such as a food and beverage outlets and shops provide activity at the street level. The design of the streetscape must provide the opportunity for outdoor dining in these areas to ensure an improved relationship between the streetscape and the built form.



Maintain existing kerb and channel where ever possible: The wider 30m road reserves across the CBD allow room to introduce trees and greenery. In order to minimise costs associated with changing these environments over time, the existing kerb and channel locations have been kept to avoid moving below grade infrastructure.



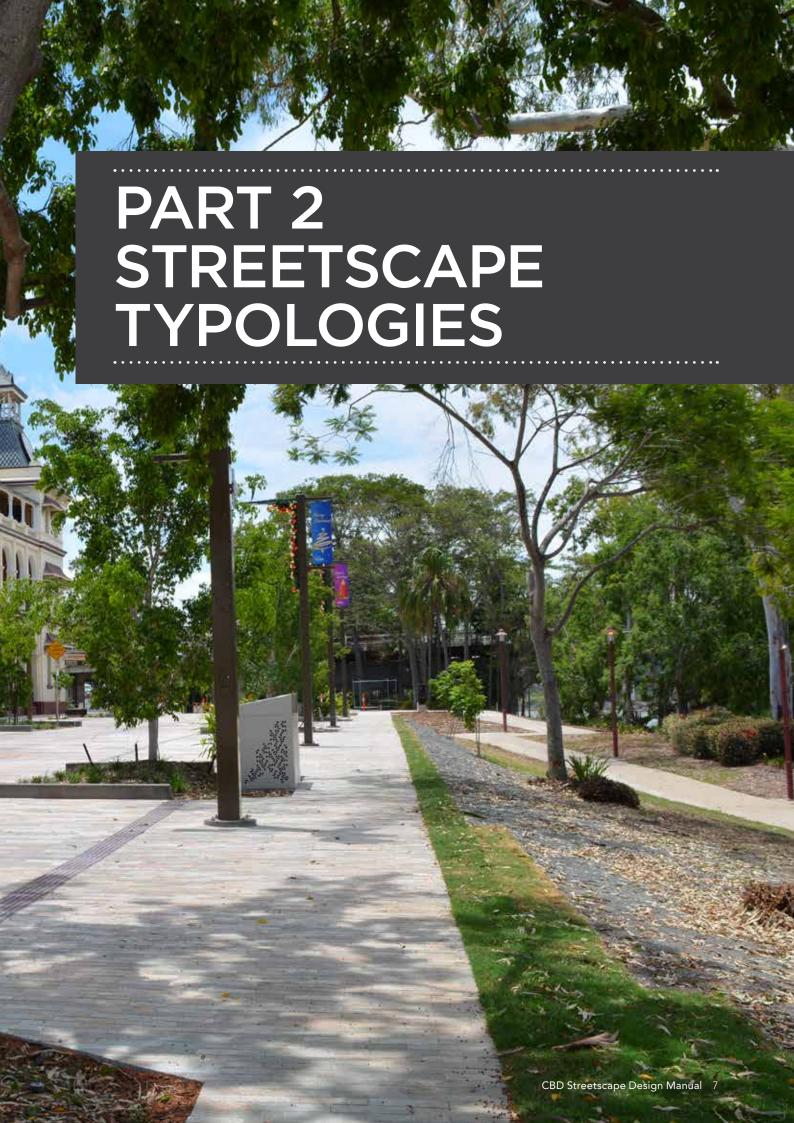
Increase canopy cover: Increasing the amount of shade derived from greenery and trees is a critical goal of this document and will assist in improving community resilience and health. It has been proven that increasing the number of street trees reduces air pollution, reduces the impacts of urban heat island effects, reduces crime rates and increases the value of real estate. Increased canopy provides the opportunity and the environment for people to walk further, hence reducing the dependency for parking within direct proximity to destinations. The visual appeal of street trees and canopy provides a high level of visual amenity and the creation of a high quality urban environment. The application of this manual will result in shaded avenues, massed street side planting, as well as lush roundabouts, medians and traffic islands.



Deliver colour and vibrancy: Consideration to colour and will assist in establishing a vibrant urban aesthetic and intuitive wayfinding in the CBD. In addition to the hardscape materials and furniture selection (bins, seating, drinking fountains, bollards, bike racks etc.), colour will be expressed in the planting palette and may be seasonal in nature. Art integration into the streetscape and wayfinding (signage) also improve the experience for people. Cities with colour and vibrancy inspire visitors and residents to spend longer within the CBD, resulting in economic benefits and investment.







STREETSCAPE TYPOLOGIES

This section forms the main connection between this document and the strategic direction defined in the CBD Redevelopment Framework to achieve leafy and shaded streets and spaces. The CBD possesses quite uniform 30m wide road reserves. The ambition is that these corridors, over time, reinforce a hierarchy and legibility that supports the revitalisation of the CBD. This approach has led to the development of a series of streetscape typologies for all of the streets that define the approach to their reinforcing their role through reconfiguration.

The streetscape typologies described in the opposite diagram are defined in the CBD Redevelopment Framework under the C Strategy to deliver "A Memorable, Sustainable and Enduring CBD". Specifically Figure 2.1 forms a core component of the C2 sub-strategy defined in the CBD Redevelopment Framework. The streetscape typologies described in Figure 2.1 and the C2 sub-strategy are supported by a series of dimensioned typical cross sections and plans in the following pages that provide an overall 'guide' to the allocation and placement of footpaths, planting, parking and traffic lanes.

The typical cross sections within this section have been developed in more detail in Part 4 of this manual as they apply to specific areas of the CBD. There are seven key streetscape typologies which in some instances apply to only one street but reflect the approach to road hierarchy, function and legibility.

The streetscape typologies that will define the CBD are:

- The High Street
- The Urban Avenue*
- The Esplanade
- The Connector*
- Ridge to River Connections
- The CBD Boulevard**
- Laneways and Cross Block Links
- * Alma Street between Fitzroy Street and William Street to be reviewed if heavy vehicle traffic is redirected to Denison Street with removal of existing train line.
- ** The CBD Boulevard typology aligns with Fitzroy Street which is a State controlled road and as such will necessitate a review of the overall functionality of the road and road management responsibilities prior to any design changes being proposed. Due to the complex nature of this arrangement, typical cross sections and plans for this typology have not been included in the Streetscape Design Manual.



STREETSCAPE INFRASTRUCTURE

Supporting the creation of vibrant, green and active streets is the street infrastructure essential to the functionality of the CBD including provision of cycle parking, cycle amenity and specialised on-street parking provision. Ensuring the on-going flow and movement of cars and bikes in a safe way through the CBD will further enhance the vibrancy of the place.

Streetscape infrastructure described in the opposite diagram includes the provision of 1.5m wide on-street cycle lanes incorporated into new streetscape crosssections, bike stations, bike parking (combination of pedal and motor), disabled parking, and loading zones.

For the purposes of this manual, all 1.5m wide on-street cycle lanes have been illustrated 'green'. Not all onstreet cycle lanes need to be painted green. The green colour may only be required where conflicts exist.

It is crucial that existing businesses retain existing nearby streetscape infrastructure such as loading zones and disabled parking bays to ensure businesses are not affected long term with the onset of streetscape revitalisation projects.

The typical streetscape typology cross sections have also been developed with new proposed speed limits and are listed below. The following table provides guidance only, and further discussion is required to ensure the streetscape concepts are achieving the desired outcomes.

STREETSCAPE TYPOLOGY	STREET/LANE NAME	CURRENT SPEED LIMIT	PROPOSED NEW SPEED LIMIT
The High Street East Street		30km/h	30km/h
The Urban Avenue	Bolsover Street	60km/h	50km/h
The Esplanade	Quay Street (between William Street and Fitzroy Street)	20km/h	20km/h
	Quay Street (between William Street and Derby Street)	50km/h	40km/h*
	Victoria Parade	50km/h	40km/h*
The Connector	Alma Street, Derby Street	60km/h	50km/h
Ridge to River Connections	William Street, Denham Street, Archer Street, Cambridge Street	50km/h	50km/h
The CBD Boulevard	Fitzroy Street	60km/h	60km/h
The Laneways	Quay Lane, East Lane, Royal Street, Bolsover Lane, Alma Lane, Little Alma Lane	30km/h	30km/h

^{*} To be reviewed, pending demand for pedestrian connectivity, increased land use activation and future riverfront parkland upgrades. Potentially these Streets could be reduced to 30km/h.



THE HIGH STREET

The High Street represents the highest order of streetscape type in the CBD and is intended to provide, subject to localised constraints, grand, green and shaded corridors that:

- Provides a shaded and contained public realm that supports fine grained mixed use activation;
- Delivers a high quality public realm;
- Delivers a pedestrian priority feel in a slower vehicle environment;
- Retains trees wherever possible; and
- Introduces dedicated on road cycle lanes both sides of the road.

East Street is where this typology occurs and serves as an active street with consistent awning treatment and significant street planting.

Legend

- (01) Laneway / existing driveway access
- Large planting beds provide the best growing environment for trees maximising their potential for increased amenity
- Pedestrian crossing with feature pavement treatment
- Street lighting fixed to smart poles extending 'smart city' capabilities throughout the CBD
- Furniture including bench seating, drinking fountains, bins and other feature items such as art and interpretive signage to be located within surrounding planting
- Bicycle Parking
- Existing awnings



Figure 2.3 The High Street typology intent — plan detail



KEY PLAN

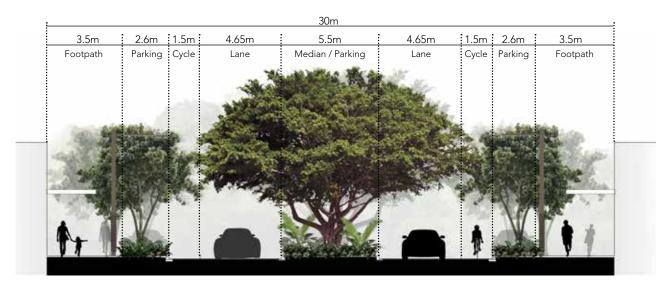


Figure 2.4 The High Street typology intent — street section



Scale: 1:500 @ A4



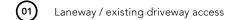
THE URBAN AVENUE

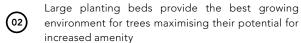
The Urban Avenue typology has been developed to celebrate a number of unique opportunities that exist within the centre to visually and physically tie together key arrival routes into the CBD. The Avenue is intended to be a densely planted corridor that:

- · Acts as gateways to the centre;
- Provides an attractive environment for
- Provides a high level of public realm amenity to satisfy the demand generated by increases in residential density;
- Retains trees wherever possible; and
- Introduces a dedicated on-road cycle lane.

Bolsover Street has been identified as the Urban Avenue delivering a formal urban connection with central green median and acting as gateways to the CBD.

Legend





Pedestrian crossing with feature pavement treatment

Street lighting fixed to smart poles extending 'smart city' capabilities throughout the CBD

Furniture including bench seating, drinking fountains, and bins and other feature items (05) such as art and interpretive signage to be located within surrounding planting



Figure 2.5 The Urban Avenue typology intent - street section



KEY PLAN

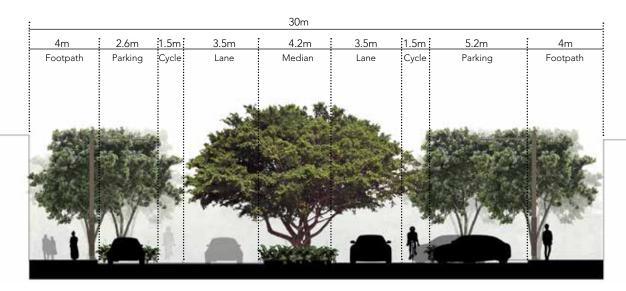
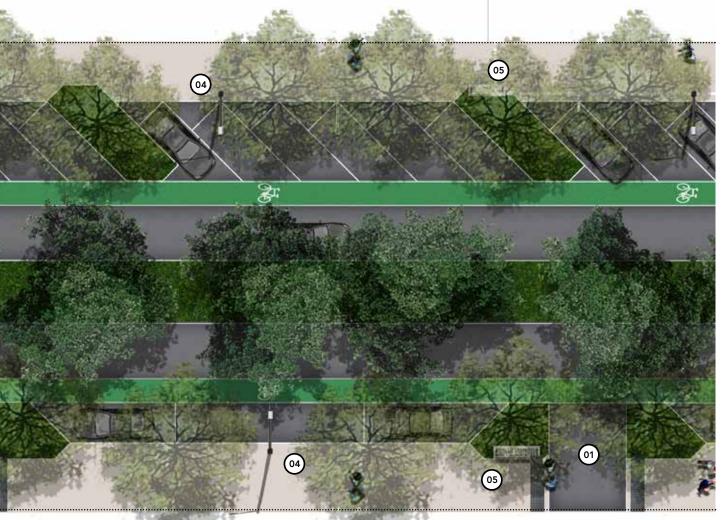


Figure 2.6 The Urban Avenue typology intent — street section



Scale: 1:500 @ A4



THE ESPLANADE

The Esplanade typology has been introduced as an elegant, simple and safe pedestrianised environment where people are the priority over vehicles. Streetscape and landscape unites the river and heritage built form and encourages dining and events.

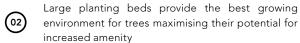
The Esplanade typology extends the Riverside and Quay Street Key Urban Space constructed throughout 2016 and 2017 both north and south. The arrangement illustrated below relates to the southern portion of Quay Street below William Street. Victoria Parade upgrades will align with the overall intent sought in this manual but will need to respond to the specific profile and relationship to the riverfront.

The Esplanade is intended to be a densely planted corridor that:

- Facilitates safe pedestrian and cycle access as a shared zone;
- Maximises opportunities for parking that can evolve into public places of celebration outside of work hours;
- Repeats the one-way crossfall streetscape section established in Quay Street between the Fitzroy Bridge and William Street; and
- Retains trees wherever possible.

Legend





Street lighting fixed to smart poles extending 'smart city' capabilities throughout the CBD

Furniture including bench seating, drinking fountains, and bins and other feature items such as art and interpretive signage to be located within surrounding planting



Figure 2.7 The Esplanade typology intent — street section



KEY PLAN

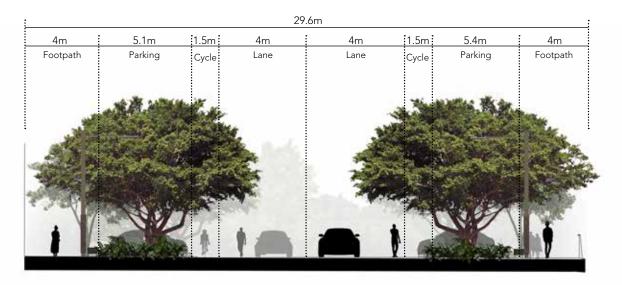
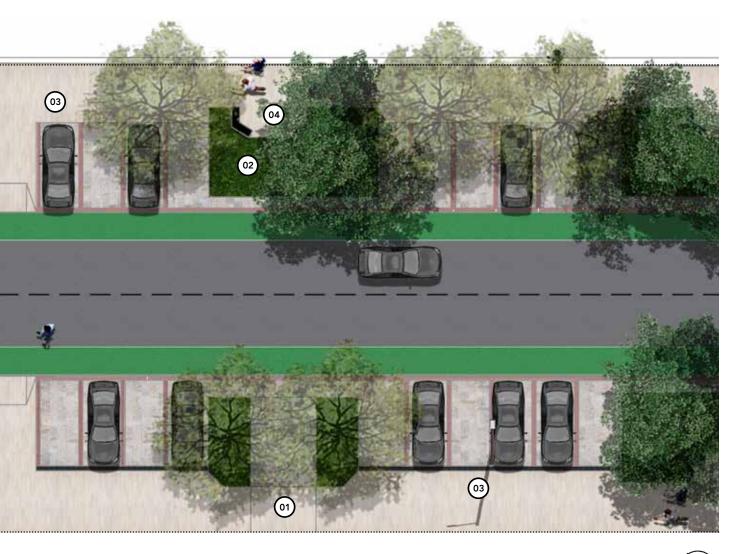


Figure 2.8 The Esplanade typology intent — street section



THE CONNECTOR

The Connector typology has been introduced to facilitate the movement of heavy vehicles through the CBD that:

- Provides efficient, safe and simple vehicle and pedestrian movements;
- Maintains an attractive environment for walking despite the increased vehicle movements through a planted central median;
- Retains trees wherever possible; and
- Provides a high level of public realm amenity to satisfy the demand generated by increases in use of adjoining commercial and retail properties.

Derby Street and Alma Street have been identified as Connectors delivering an efficient gateway connection into the CBD.

Legend

- (01) Laneway / existing driveway access
- Large planting beds provide the best growing (02) environment for trees maximising their potential for increased amenity
- Street lighting fixed to smart poles extending (03) 'smart city' capabilities throughout the CBD
- Furniture including bench seating, drinking fountains, and bins and other feature items (04) such as art and interpretive signage to be located within surrounding planting
- Bike Parking



Figure 2.9 The Connector typology intent — street section



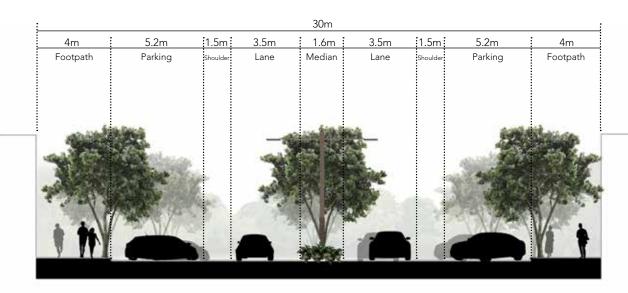
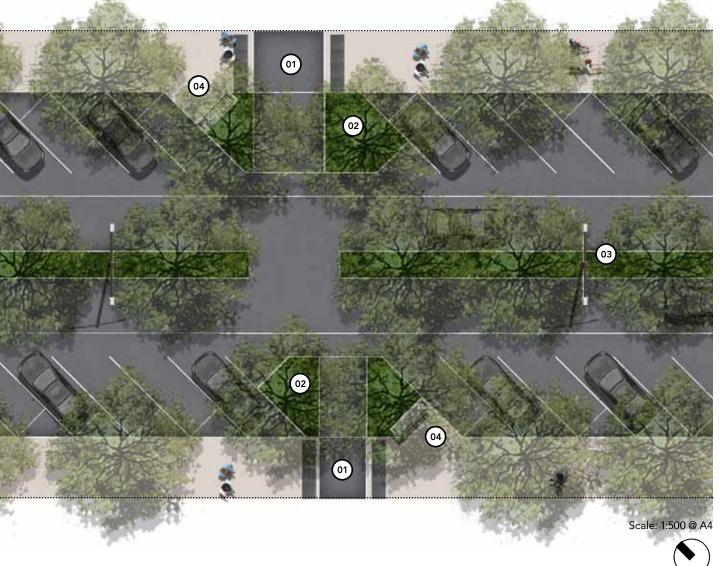


Figure 2.10 The Connector typology intent — street section





RIDGE TO RIVER CONNECTIONS

The Ridge to River Connections typology has been introduced to provide shady and green connections into the CBD. Ridge to River Connections are intended to be densely planted corridors that:

- Facilitate safe pedestrian and cycle access into the city;
- Create iconic entrances into the CBD from the South West through the use of colour and vibrancy in the landscape palette;
- Maximise opportunities for parking between densely planted centre medians;
- Retains trees wherever possible; and
- Provide a high level of public realm amenity through the planting of street trees despite the many and varied existing constraints including existing awnings, loading zones and driveway accesses.

William, Denham, Archer and Cambridge Streets have been identified as Ridge to River Connections delivering iconic connections into the CBD.

Legend

- (01) Laneway / existing driveway access
- Large planting beds provide the best growing (02) environment for trees maximising their potential for increased amenity
- Street lighting fixed to smart poles extending 'smart city' capabilities throughout the CBD
- Furniture including bench seating, drinking fountains, and bins and other feature items such as art and interpretive signage to be located within surrounding planting
- Existing awnings



Figure 2.11 Ridge to river typology intent — street section



KEY PLAN

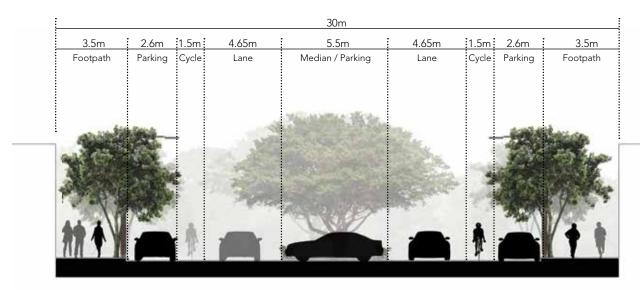
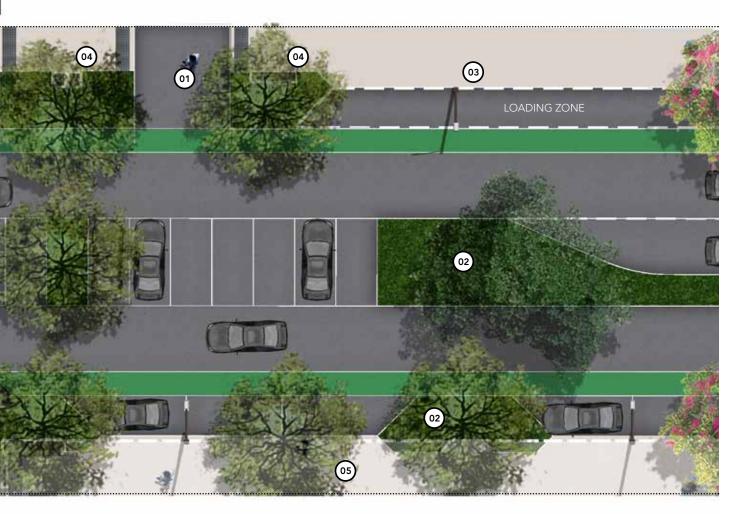


Figure 2.12 ${\sf Ridge\ to\ river\ typology\ intent-street\ section}$



Scale: 1:500 @ A4



LANEWAYS AND CROSS BLOCK LINKS

Laneways within the CBD are generally small scale connections that carry low numbers of vehicles and servicing to rear of properties and development. Laneways and existing and potentially expanded cross-block links support pedestrian connectivity at a finer grain through the CBD.

The Laneways and Cross Block Links typology has been introduced at a strategic level to provide unique secondary connections beyond the street grid that:

- deliver visual interest and variety
- encourages use of the laneways beyond their primary servicing role
- generate greater pedestrian permeability through the CBD
- provide a unique point of difference from other regional centres acting as an attractor and destination drawcard
- creates opportunities for activation through outdoor dining, weekend markets and special events.

The CBD includes a number of these laneways and potential cross block links that can contribute to the diversity of public realm spaces. In order for these spaces to be optimised they must be well designed including provision for adequate lighting, passive surveillance and landscape interventions to ensure safe and usable spaces.

Four possible laneway and cross block linkage design strategies are included below as examples of what is possible. While by no means exhaustive these themes may be deployed as part of a laneway activation strategy. Further work is required to develop an overall laneway story and theme for each section, particularly in the case of Quay Lane. A strong collaboration with laneway residents, property and business owners will be key to realising the untapped potential within these valuable areas.

Strategy 1 — Greening the lane





Strategy 2 — Street and Wall Art





Strategy 3 — Overhead Elements







Strategy 4 — Digital and Lighting Effects





MEASURING OUR SUCCESS

Core to the long term success and delivery of the intents within the Streetscape Design Manual and the projects as outlined in Part 4 and 5 of this document is that each project contributes in a measurable and meaningful way to the vision for revitalisation of the CBD. The table below identifies six key indicators to enable Council to track their progress against targets.

INDICATOR	DESIRED OUTCOME	TIME FRAME	CURRENT SITUATION*	TARGET
Number of trees	Increase the number of trees within the Rockhampton City Centre	Baselined and reported annually	Currently 295** trees exist within the streetscapes of the Rockhampton City Centre	Increase the street tree population within the Rockhampton City Centre to 600 by 2025
Streetscape furniture	Increase the number of seats, bins, bicycle ranks and other streetscape furniture within the Rockhampton City Centre	Baselined and reported every 4 years	Currently 85*** exist within the streetscapes of the Rockhampton City Centre	Increase the streetscape furniture located in the Rockhampton City Centre by 50% by 2025
Canopy Cover	Increase the total tree canopy cover within the Rockhampton City Centre	Baselined and reported every 4 years		Increase the total percentage of canopy cover on streets by at least 30% by 2025
Community Satisfaction	The Rockhampton community are satisfied with the appearance and cooling environment achieved by the streetscape	Baselined and reported every 2 years		Increase the community satisfaction of the Rockhampton CBD streetscapes to 80% positive
Permeable surfaces	Increase the amount of permeable surface within the Rockhampton City Centre by increasing landscaping and reducing bitumen / hardstand areas	Baselined and reported every 4 years		Increase the percentage of landscaped areas within the streetscapes of the Rockhampton City Centre by 20% by 2025
Urban Food Production	Increase the number of opportunities for gardens within the Rockhampton City Centre	Baselined and reported every 4 years	No gardens for food production exist within the Rockhampton City Centre	Develop or support one community or privately operated community garden by 2020

^{*} As at 28 February 2017

^{**} Includes Quay Street reconstruction between Fitzroy Street and William Denham Street. 128 Palm trees currently exist throughout the CBD, which are included within the total figure.

^{***} Streetscape furniture includes seats/benches (50), rubbish bins (29), drinking fountains (2) and bicycle ranks (4).





STREET TREES

The greatest single improvement that can be made to the public spaces of the centre is the implementation of extensive street tree planting. A holistic street tree planting strategy will inform investment in greening the city centre and ensure alignment with the strategic priorities of the CBD.

Tree species have been selected based on:

- Suitability to climate and conditions and previous success within the Rockhampton CBD and surrounds
- Robustness and resilience to pest, drought, excessive heat and humidity, and vandalism
- Overall form and canopy and suitability for use as street trees to increase amenity and comfort for pedestrians
- Maintenance considerations
- Availability within the region, i.e. local providence

Figure 3.1 opposite describes the strategic planting approach to street trees throughout the CBD.

ITEM	SPECIES	COMMON NAME	MATURE HEIGHT	MATURE SPREAD
0	Agathis robusta	Queensland Kauri Pine	12-15m	2.5m
2	Brachychiton populneus	Kurrajong	8-10m	6-8m
3	Buckinghamia celsissima	Ivory Curl	10m	6m
4	Ficus benjamina	Weeping Fig	15-20m	10-15m
5	Ficus microcarpa var. hilli	Hills Weeping Fig	12-15m	5-6m
6	Flindersia australis	Crows Ash	8-10m	3-4m
7	Harpullia pendula	Tulipwood	7-9m	3-5m
8	Nauclea orientalis	Leichhardt Tree	12-15m	6-8m
9	Pleiogynium timoriense	Burdekin Plum	10-12m	5-8m
10	Waterhousia floribunda	Weeping Lilly Pilly	8-10m	5-8m
0		8		



COLOUR AND VIBRANCY

Introducing colour and vibrancy to the CBD planting palette will provide a changing canvas and visual interests while playing an important role in facilitating intuitive wayfinding. The feature tree and understorey planting strategy proposes a series of 'pops' of colour that will, over time, define the streets of the city centre whilst celebrating its history.

Tree and understorey species have been selected based on:

- The ability to create near year-round colour and flowering so that the CBD evolves and changes with the seasons — an explosion of colour at Spring time
- Providing historical links to Rockhampton's CBD when displays of canna lilies dominated William Street
- Colour and vibrancy occupying intersections, round-abouts and centre medians where exposure is maximised.

Figure 3.2 opposite describes the strategic feature tree locations around the CBD to create a vibrant and ever-changing canvas of colour and interest.

TREES

ITEM	SPECIES	COMMON NAME	MATURE HEIGHT	MATURE SPREAD
0	Colvillea racemosa	Colville's Glory	6-8m	4-6m
2	Lagerstromia speciosa	Queens Crape Myrtle (mauve)	6-8m	4-6m
3	Lagerstromia speciosa	Pride of India (pink)	6-8m	4-6m
4	Tabebuia chrysantha	Yellow Trumpet Tree	6-8m	3-4m
5	Tabebuia palmeri	Pink Trumpet Tree	6-8m	3-4m
6	Bauhinia blakeana	Hong Kong Orchid Tree	6-8m	4-5m











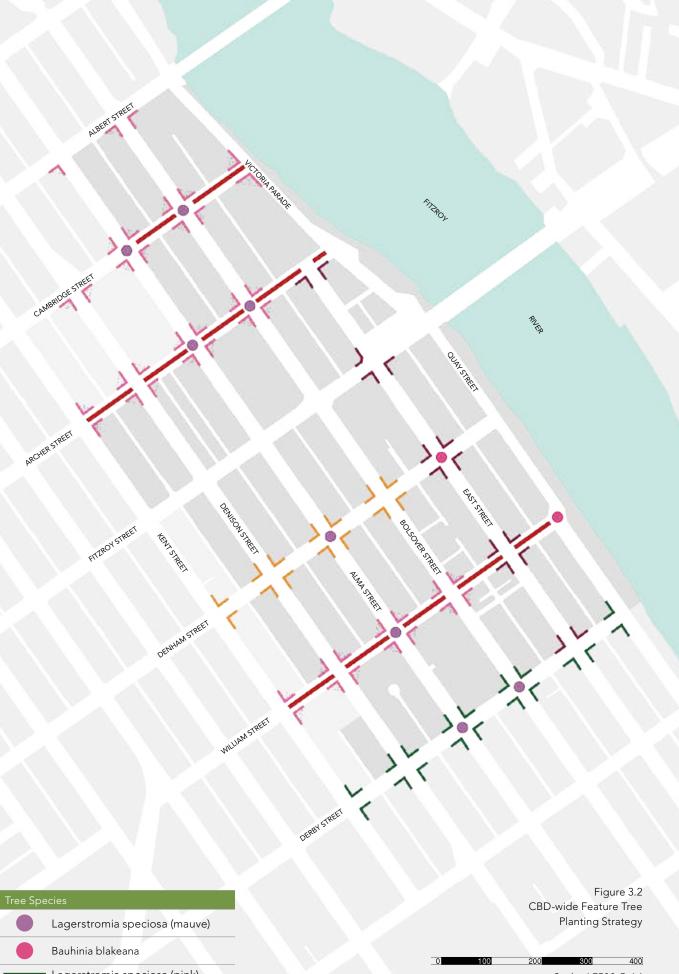


UNDERSTOREY

ITEM	SPECIES	COMMON NAME	COLOUR
7	Canna x generalis	Canna Lily (various)	Various
8	Gazania scandens	Gazania (various)	Various









SEASONAL PALETTE

The flowering street trees will provide a seasonal changing canvas of colour in the CBD. The placement of species has been considered as part of the calendar of colour that will define the core of the city.

The tree calender below demonstrates the strategy to include species of trees in the CBD that flower at different times of the year to create an ever-changing and colourful city experience.

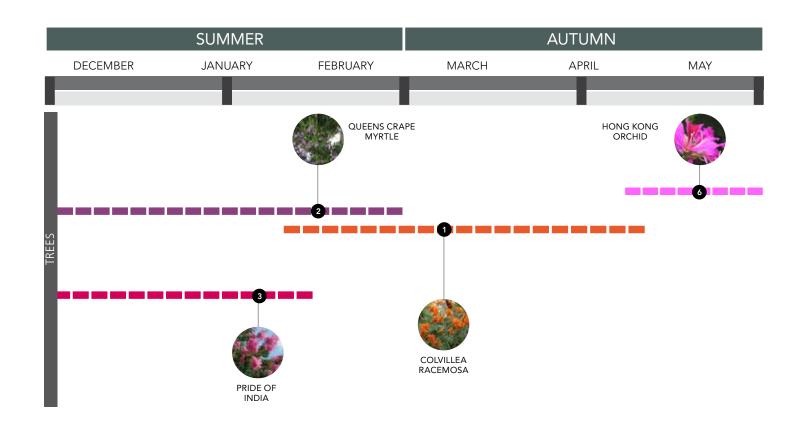
The ambition is to ensure that at any given point during the year the CBD will include bursts of colour. Beyond this, the diverse annual colours provide an opportunity to become synonymous with events occurring within the CBD at various times.



Colvillea racemosa (Colville's Glory)



Lagerstromia speciose (Queens Crape Myrtle - Mauve)





Lagerstromia speciosa (Pride of India - Pink)



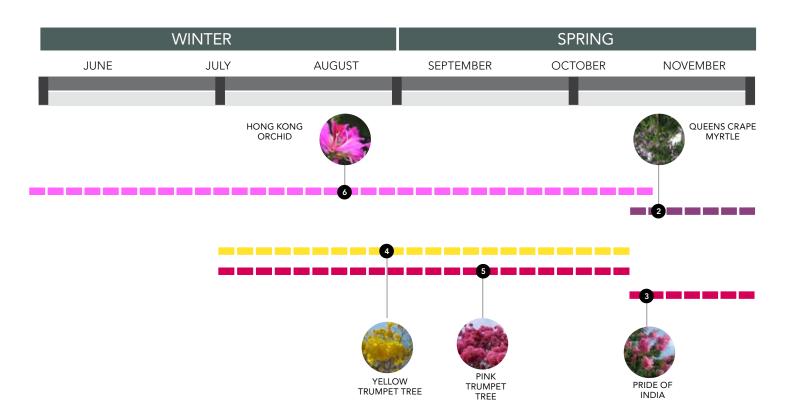
Tabebuia chrysantha (Yellow Trumpet Tree)



Tabebuia palmeri (Pink Trumpet Tree)



Bauhinia blakeana (Hong Kong Orchid Tree)



UNDERSTOREY PLANTING

The planting character of the CBD is a critical component of the overall experience of the precinct. A planting palette has been developed to offer colour, texture, visual delight and species suitable for the Rockhampton climate and context.

Careful thought has been given to a planting palette that will underpin the comfort and visual experience of Rockhampton's CBD streetscapes. A palette dominated by variations of green foliage will provide the perfect contrast to the intricate details of the heritage buildings that dominate the CBD core. The understorey planting will also provide

the perfect foil to increase and exaggerate contrast with the colour and vibrancy species that will dominate intersections, round-a-bouts, and the centre medians connecting ridge to river. Species have been selected for their robust nature, visual aesthetic, suitability to the climate of Rockhampton and suitability for use in a streetscape environment.

SHRU	SHRUBS			
ITEM	SPECIES	COMMON NAME		
0	Aspidistra elatior	Cast Iron Plant		
2	Bowenia serrulata	Byfield Fern		
3	Blechnum indicum	Bungwall		
4	Cordyline murchisoniae	Murchison's Palm Lily		
5	Cyathea cooperi	Cooper's Tree Fern		
6	Cycas ophiolitica	Marlborough Blue		
7	Liriope muscari	Evergreen Giant		
8	Lomandra hystrix	Creek Mat Rush		
9	Lomandra longifolia	Long Leaf Mat Rush		
10	Macrozamia miquelii	Burrawong		
1	Philodendron Imperial Green	Philodendron Green		
12	Zamia furfuracea	Cardboard Plant		

GROU	GROUNDCOVERS			
ITEM	SPECIES	COMMON NAME		
1 3	Crassula ovata	Jade Plant		
14	Evolvus pilosus	Blue Eyes		
15	Ficus pumila	Creeping Fig		
16	Myoporum parvifolium 'Yareena'	Creeping Boobialla		
17	Myoporum ellipticum	Boobialla		
18	Ophiopogan japonicus	Mondo Grass		
19	Philodendron xanadu	Xanadu		
20	Trachelospermum jasminoides	Star Jasmine		
21	Vitex ovata	Coastal Vitex		

ADDIT	ADDITIONAL / OPTIONAL TREES				
ITEM	SPECIES	COMMON NAME			
22	Auranticarpa rhombifolia	Diamond Leaf Pittosporum			
23	Barklya syringifolia	Crown of Gold			
24	Bolusanthus speciosus	Tree Wisteria			
25	Eurochinus falcate	Maidens Blush			
26	Plumeria obtusa	Evergreen Frangipani			
27	Schotia brachypetala	Parrot Tree			
28	Xanthostemon chysanthus	Golden Penda			



LANDSCAPE **ISSUES**

The implementation of a successful street tree, feature tree and understorey planting strategy is subject to the resolution of a number of design issues, which are described below.

PLANT STOCK

Tree specimens must be ex-ground stock or grown in minimum 100 litre container stock. Trees must be a minimum of 3.5m high (from the top of the container) and must have a clear trunk of at least 1.8m.

No street tree is to conflict with existing services.

Landscape plans submitted to Council for approval must contain a plant schedule listing all proposed plant species including minimum canopy height, minimum trunk calliper diameter and minimum clear trunk height for each species proposed.

TREE TRENCH

To allow for the best possible growing conditions, a number of options exist to maximise the growing medium of street trees. Tree trenches are encouraged in order to maximise soil volume and potential for healthy growth of street trees

SOIL

Soil profiles inclusive of depths, soil types and application of fertilisers, are shown indicatively only in this document. Technical details are to be submitted to Council for approval.

SITING AND LOCATION

One of the greatest single challenges for the implementation of the street tree strategy will be addressing conflicts with existing underground infrastructure and above ground building forms such as canopies, awnings, street lighting and signals. This will require in some cases major investment in the realignment of underground services to achieve the master plan vision. In other cases localised and opportunistic solutions will suffice.

Typical street tree spacing is shown in the streetscape typologies. These are the desirable spacing by Council and are to be used as a guide as they will require further scrutiny at the detailed design phase.

Trees are typically setback a minimum of 750mm from the front of street kerb.

Siting of trees will determine the type of typical detailed application. Wherever feasible, the inclusion of Water Sensitive Urban Design (WSUD) principles will be applied in the form of broken and slotted kerbs to allow for stormwater overflow (passive irrigation) into tree pits. Appropriate clear zone distances must be adhered to.

EXISTING TREES

Suitable existing mature trees are to be retained within the streetscape unless at risk to property or life and incorporated into detailed design work.

The CBD contains a number of existing trees that in some cases are in conflict with the street tree planting strategy. It is proposed that these remain in place and are gradually transitioned out of each streetscape as the canopy of the new trees matures.

SPECIES SELECTION

Proposed street tree and understorey planting species have been identified in this document for use within the city's streetscape. This is to be used as a guide as particular site constraints and special sites may require consideration of a different species. The selection of tree species is at the final discretion of Council.

TREE PROTECTION ZONE

Refers to the surrounding spatial "exclusion" area deemed necessary by Council for the protection of existing trees during the construction phase. "Exclusion" area is determined by Council on a case-by-case basis.





Plant stock

Tree trenches and soil





Siting and location

Existing trees





Species selection

Tree protection zone

PAVEMENTS

Pedestrian paths are a critical component of the CBD's infrastructure. The paving and treatment of these footpaths must provide a safe and comfortable walking experience for pedestrians. The paving materials also function as an important visual tool for defining and separating various precincts and nodes within a city.

The roll out of a coordinated approach to CBD paving treatments are defined in Figure 3.4 opposite which outlines a hierarchy of feature, primary and secondary pavements. Pavements have been selected based on a range from an extremely high quality natural stone finish for key streets and spaces (largely round-a-bouts and intersections) through to quality exposed aggregate concrete, and asphalt for streets that are lower in the hierarchy.

Pavement materials must meet all relevant Australian Standards.

This strategic approach to pavement:

- 1. Provides a high quality benchmark and encourages the application of natural stone finishes on the most significant streets and spaces of the centre. Natural stone products:
- Add significantly to the sense of quality associated with a streetscape;
- Are by far the most durable, lasting for many hundreds of years in the right conditions;
- Add a dimension of timelessness to the public realm of the centre.
- 2. Provides opportunities for a number of quality concrete products to be used in areas where the level of investment associated with natural stone is unjustified. Quality concrete products:
- Are readily available and easily manipulated;
- Are cost effective in terms of the level of initial outlay;
- When viewed in the context of streets that are paved in natural stone, reinforce the hierarchy of streetscape types.



Feature Pavement — 'Juperana' Granite or Sandstone pavement with 'China Red' features and highlights

Primary Pavement — Exposed Aggregate Concrete

Secondary Pavement — Coloured Ashpalt

Round-a-bouts — 'Juperana' Granite or Sandstone pavement

Completed stage

Key Pavement Spaces

- Denham Street Plaza (Riverbank Revitalisation)
- **Quay Street** (Riverbank Revitalisation)
- Quay Street Riverfront Extension
- East Street Pedestrian Connection (South-East)
- East Street Pedestrian Connection (North-West)
- Denham Street and Cycle Centre
- Bolsover Street School of Arts and Council Building

Figure 3.4 CBD-wide Pavement Strategy

0 Scale: 1:7500 @ A4



MATERIALS PALETTE

The materials that are introduced into the public realm of the CBD play a key role in defining what types of places they are. Materials need to be simple, clean, robust, and easy to maintain as well as easy on the eye and nice to touch. A person's tactile response to material determines the way they feel and the way that they will use and occupy a space.

The materials selected for the Rockhampton CBD have taken inspiration from the Riverside Revitalisation upgrade of 2016/17 along Quay and Denham Streets in order to tie this major piece of investment into the wider CBD. The Riverside precinct set the highest standard of materiality and the balance of the CBD can take cues from this effort. The material palette selected is simple and enduring and this simplicity will ultimately determine its success. Too many

materials and over use or misapplication of these materials will create confusion. The materials proposed provide a framework for all future selections across the CBD.

All suppliers proposed are suggestions only based on previous completed works within the Riverbank Revitalisation project, however, any alternative but equivalent material proposed for use that matches the description and type will be considered for approval.

ltem	Description / Use	Туре	Supplier
01	Primary — Exposed Aggregate Concrete Pavement	'Apollo' pigment with coloured feature 5-10mm aggregate • 50% 'Metalia' • 50% 'Pink Lilly'	Pigment — CCS Aggregate — Boral
02	Secondary — Coloured Asphaltic Concrete	Streetbond — 'Sage'	Brick N Pave
03)	Feature — Granite Stone Pavement	'Juperana' — Flamed Finish — Stretcher Bond Pattern — Size and Depth Varies • 295mm x 95mm • 595mm x 195mm • 1195mm x 395mm	Stonespec
04	Feature — Sandstone Pavement and Cladding	'Capricorn Buff' with Golden Tones — Diamond Sawn — Stretcher Bond Pattern — Size and Depth Varies • 298mm x 98mm	Capricorn Sandstone Quarries
05)	Granite Stone Pavement Banding and Line marking	'China Red' — Flamed Finish — End- to-End Pattern — Depth Varies • 595mm x 195mm	Stonespec
06)	Granite Stone Tactile Indicator Pavement	'China Red' with TGSI — Flamed Finish — End-to-End Pattern — Depth Varies • 295mm x 295mm	Stonespec
07	Granite Stone Pavement Setts	'China Red' — Flamed Finish — Square Pattern — Depth Varies • 90mm x 90mm	Stonespec
08)	Coloured Concrete Edging and Kerbs	'Onyx' pigment	CCS
09	Drainage Grate	Type 680Q Iron Wave Heelsafe — Anti-Slip grate	Aco Drain
10	Tactile Indicators	316 Marine Grade — Concentric Ring Top Surface and Smooth side face	CTA Australia Pty Ltd
11	Powdercoat	Precis Dark Bronze — YY20BA (Refer Furniture Palette for application)	Interpon
12	Powdercoat	Champagne Riche — YW277G (Refer Furniture Palette for application)	Interpon
13	Timber	Spotted Gum (Corymbia maculata)	n/a



FURNITURE PALETTE

Street furniture plays a very functional and practical role in the fabric of a city. It fulfils a very necessary requirement for comfort and safety. Beyond this, street furniture is an essential ingredient in successful activation of streets.

The following pages set out a palette of custom designed street furniture, signage and smart poles. The intent of this section is to:

- Specify the range and types of furniture likely to be required within the boundaries of the CBD Redevelopment Framework area;
- Provide a view on the range of materials and finishes that are generally seen to be appropriate that have been established within the Riverbank development; and
- Emphasise the importance of delivering a coherent range
 of furniture to strengthen the identity of the centre and
 improve the visual quality of the streets. The design
 approach of the suite of furniture herein has taken inspiration
 from the Riverside Revitalisation upgrade of 2016/17 to
 reinforce a unified and connected approach across the CBD.

All furniture must meet with all relevant Australian Standards. All furniture is proposed to have concealed fixings below pavement surfaces to ensure a high quality of finish throughout the streetscapes.

GUIDE TO STREETSCAPE FURNITURE NUMBERS

The following table provides a guide to street furniture usage

in the CBD area based on the hierarchy of each streetscape typology. The numbers in the table are to provide a general indication. Importantly, street furniture siting and selection should always respond to demand and the physical location. The number of street furniture items should be a direct response to the requirements of the particular space and provide accessibility to all members of the community. Areas of high pedestrian activity such as "The High Street" and "The Esplanade" will require greater quantity and types of street furniture. Further, despite the requirements outlined below, groupings of street furniture may be required to create a sense of place in specific locations.

TYPOLOGY	LITTER BINS	SEATING	DRINKING FOUNTAINS	BICYCLE RACKS
The High Street	4 per street block frontage	East Street to accommodate for 50 - 75 people	1-2 per Street	20-50 spaces per street
	Every 50 metres	Seat per 50 metres	Every 300 metres	Every 200 metres
The Urban Ave	2-3 per street block frontage	Accommodate for 25- 35 people per street	0-2 per Street	20-40 spaces per street
	Every 75 metres	Seat per 75 metres	Every 400 metres	Every 300 metres
The Esplanade	3 per street block frontage	Accommodate for 50- 75 people per street	1-2 per Street	20-50 spaces per street
	Every 50 metres	Seat per 50 metres	Every 300 metres	Every 200 metres
The Connector	1-2 per street block frontage	Accommodate for 15- 25 people per street	0-2 per Street	20-30 spaces per street
	Every 75 metres	Seat per 100 metres	Every 500 metres	Every 400 metres
Ridge to River	2-3 per street block frontage	Accommodate for 25- 50 people per street	0-2 per Street	20-50 spaces per street
Connections	Every 60 metres	Seat per 60 metres	Every 400 metres	Every 200 metres
The CBD Boulevard	*	*	*	*
The Laneways / Cross Block Links	**	**	**	**
Other siting principles	Locate adjacent to: » Food and drink outlet » Outdoor entertainment areas » Parkland / Riverfront » Public buildings	Locate adjacent to: » Taxi rank area » Bus stop area » Parkland / Riverfront » Public buildings » Street trees (to reduce heat impact)	Locate adjacent to: » Parkland » Outdoor entertainment areas » Public buildings	Locate adjacent to: » High priority cycle routes » Recreational areas » Major office buildings » Public buildings

^{*} Subject to consultation with the Department of Transport and Main Roads

Note: Street block frontage meaning: the area of one side of the street between two streets (excludes laneways).

^{**} As determined by RRC and subject to further analysis including determining the role and function of each laneway / cross block linkage.

LANTERN SEAT

The feature lantern seat was developed as a key deliverable of the Riverbank development so its inclusion in the wider CBD Master Plan will be limited so as not to dilute its impact. The lantern seat should be utilised in places of rest and contemplation within view of a feature built form element such as the School of Arts or Council Building.

- Mild Steel
- Zinc Prime / Epoxy Prime / Powdercoat
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors
- Sandstone Plinth
- Internal Lighting

CBD BENCH SEAT — BACKLESS

The CBD Bench Seat is the basic form of bench with no back or arm rest. This bench should be utilised under a street tree and encompassed by lush and verdant landscaping. Ensure proper solar orientation to maximise shadow cast from the feature void pattern.

- L2100mm x W470mm x H450mm
- Mild Steel Seat Body
- Zinc Prime / Epoxy Prime / Powdercoat
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors

CBD BENCH SEAT — SINGLE BACK WITH LEFT ARM REST

The single back and left arm rest provide an alternative bench seat version with single back rest for increased comfort for users. This bench seat version has the ability to utilise both powdercoat colours from the materials palette.

- L2100mm x W620mm x H800mm
- Mild Steel Seat Body
- Zinc Prime / Epoxy Prime / Powdercoat
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors



CBD BENCH SEAT — SINGLE BACK WITH RIGHT ARM REST

The alternate single back and arm rest bench seat version with right arm rest.

- L2100mm x W620mm x H800mm
- Mild Steel Seat Body
- Zinc Prime / Epoxy Prime / Powdercoat
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors

CBD BENCH SEAT — DOUBLE BACK WITH RIGHT ARM REST

The double back and right arm rest provide an alternative bench seat version which increases comfort and amenity through the wider backrest. This bench seat version has the ability to utilise both powdercoat colours from the materials palette.

- L2100mm x W620mm x H800mm
- Mild Steel Seat Body
- Zinc Prime / Epoxy Prime / Powdercoat
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors

CBD BENCH SEAT — DOUBLE BACK WITH LEFT ARM REST

The alternate double back and arm rest bench seat version with left arm rest.

- L2100mm x W620mm x H800mm
- Mild Steel Seat Body
- Zinc Prime / Epoxy Prime / Powdercoat
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors



CBD BENCH SEAT — TIMBER — BACKLESS

The CBD Bench Seat with timber slats is the alternate form of basic seat with no back or arm rest. This bench has not been incorporated in the Riverbank redevelopment so should dominate the CBD Master Plan area.

- L2100mm x W470mm x H450mm
- Mild Steel Seat Body
- Hardwood Kwila Timber Slats
- Zinc Prime / Epoxy Prime / Powdercoat
- Oiled Timber
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors



The single back and left arm rest provide an alternative bench seat version with single back rest for increased comfort for users. This bench seat version has the ability to utilise both powdercoat colours from the materials palette in conjunction with timber.

- L2100mm x W620mm x H800mm
- Mild Steel Seat Body
- Hardwood Kwila Timber Slats
- Zinc Prime / Epoxy Prime / Powdercoat
- Oiled Timber
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors

CBD BENCH SEAT — TIMBER — SINGLE **BACK WITH RIGHT ARM REST**

The alternate single back and arm rest bench seat version with right arm rest.

- L2100mm x W620mm x H800mm
- Mild Steel Seat Body
- Hardwood Kwila Timber Slats
- Zinc Prime / Epoxy Prime / Powdercoat
- Oiled Timber
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors



CBD BENCH SEAT — TIMBER — DOUBLE **BACK WITH RIGHT ARM REST**

The double back and right arm rest provide an alternative bench seat version which increases comfort and amenity through the wider backrest. This bench seat version has the ability to utilise both powdercoat colours from the materials palette in conjunction with the use of timber.

- L2100mm x W620mm x H800mm
- Mild Steel Seat Body
- Hardwood Kwila Timber Slats
- Zinc Prime / Epoxy Prime / Powdercoat
- Oiled Timber
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors



The alternate double back and arm rest bench seat version with left arm rest.

- L2100mm x W620mm x H800mm
- Mild Steel Seat Body
- Hardwood Kwila Timber Slats
- Zinc Prime / Epoxy Prime / Powdercoat
- Oiled Timber
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors

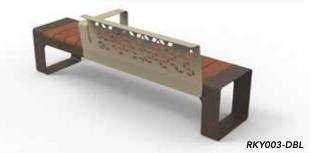
TABLE SETTING

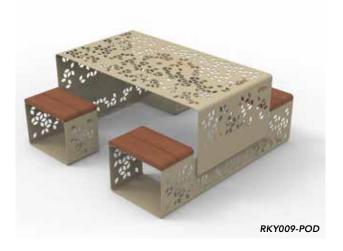
Table settings are to be integrated into special interest zones where the streetscape design allows for a greater area around places of interest, i.e. heritage buildings or places where the adjoining buildings dictate public use in the streetscape.

- L1650mm x W1650mm x H750mm
- Mild Steel Seat Body
- Hardwood Kwila Timber Slats
- Zinc Prime / Epoxy Prime / Powdercoat
- Oiled Timber
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors





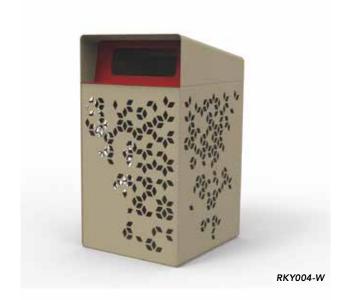




240L BIN SURROUND — WASTE

Public waste bins are to be located in locations approved by Rockhampton Regional Council where they can be readily and easily accessed, emptied and maintained. The intent is to always place them in partnership with recycle bins.

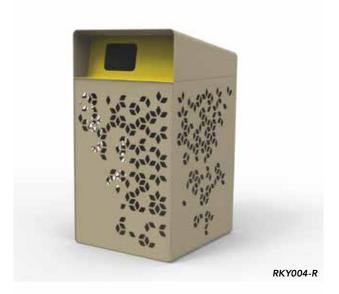
- L840mm x W760mm x H1420mm
- Mild Steel
- Zinc Prime / Epoxy Prime / Powdercoat
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors



240L BIN SURROUND — RECYCLE

The alternate recycle bin surround version to the waste bin with yellow feature colour.

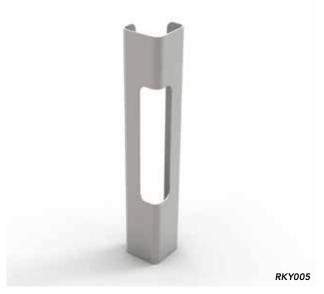
- L840mm x W760mm x H1420mm
- Mild Steel
- Zinc Prime / Epoxy Prime / Powdercoat
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors



BICYCLE BOLLARD (RACK)

Similar to table settings, bicycle bollards are to be integrated into special interest zones where the streetscape design allows for a greater area around places of interest, i.e. heritage buildings or places where the adjoining buildings dictate public use in the streetscape.

- L175mm x W175mm x H100mm
- Stainless Steel
- Bead Blasted
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors



TRAFFIC BOLLARD

Traffic bollards are to be placed in areas where the safety of pedestrians — whether perceived or real — may require additional security from lanes of traffic. Bollards have the ability to utilise both powdercoat colours from the materials palette.

- L175mm x W175mm x H100mm
- Mild Steel Body and Base Plate
- Zinc Prime / Epoxy Prime / Powdercoat
- Sub-Surface Mounted with Caged Rag Bolt
- Articulated Spring Box Assembly
- L200mm x W200 x H300mm



TREE GRATE AND TREE GUARD

Tree grates and tree guards can be used in conjunction with each other where a history of vandalism of street trees dictates additional protection. Alternatively, the tree grate or tree guard can be used independent of each other.

- Grate L1200mm x L1200
- Guard L400mm x W400mm x H1200mm
- Grate Mild Steel Panels and Support Frame
- Guard Stainless Steel
- Zinc Prime / Epoxy Prime / Powdercoat
- Stainless Steel Blasted
- Sub-Surface Mounted Support Frame
- 316 SS M10 Socket Screws / Dyna Bolts
- Chem Set / Drop in Anchors

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WATER STATION

Drinking fountains are to be generously placed throughout the streetscapes of the CBD to ensure pedestrians and cyclists have access to water. This is particularly important given the climactic conditions of the Rockhampton region and CBD in particular. Ensure drainage to stormwater and/ or sewer is considered carefully throughout detailed design.

- L820mm x W120mm x H890mm
- Stainless Steel Body, Dish and Tap Fixtures
- Zinc Prime / Epoxy Prime / Powdercoat
- Bead Blasted Stainless Steel
- Surface Mounted
- 316 SS M10 Socket Screws / Dyna Bolts
- Caged Rag Bolt (Option)



DIRECTIONAL SIGNAGE

Supports major orientation signage whilst providing directional messaging only to primary destinations, areas, facilities, etc.

Note: All signage consistent with RRC way finding strategy

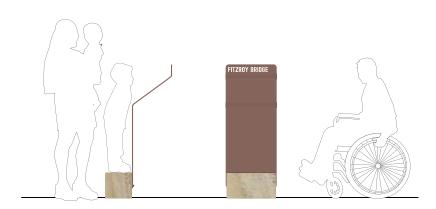
- L275mm x W400mm x H1575mm
- Cast Concrete Base with Local Sandstone cladding
- Folded 10mm Aluminium Signage Panel
- 2 pack painted
- Front applied External Grade Vinyl with Protective Satin Clearcoat



Defines an area or opportunity for storytelling whilst providing supporting information relating to surrounding context, history and / or artwork.

- L175mm x W175mm x H100mm
- Cast Concrete Base with Local Sandstone cladding
- Folded 10mm Aluminium Signage Panel
- 2 pack painted
- Front applied External Grade Vinyl with Protective Satin Clearcoat

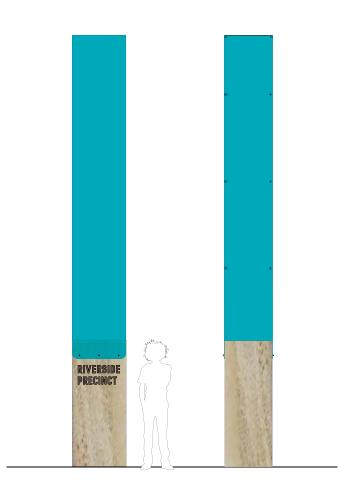




PRECINCT IDENTIFICATION Identifies a precinct. Provides directional

messages to primary precinct destinations. Facilities, etc. Connection to surrounding destinations within the CBD. Provides a CBD branding / site identity.

- L750mm x W680mm x H6000mm
- Cast Concrete Base with Local Sandstone cladding
- Internal Structural SHS Post and Frame with End Plate and Stiffeners
- Fabricated 10mm Acrylic Light Box
- LED Backlights



LIGHT POLE — TYPE 1

The type 1 light pole represents the typical light pole designed specifically for the Riverbank Redevelopment project. The light pole was created as a universal design with the ability to add and subtract various smart pole elements dependent on its need within the CBD and contribution to RRC smart city initiatives.

When and where light poles are able to be replaced as part of CBD upgrade works, the intent is to roll-out this design outcome to ensure a consistent streetscape infrastructure design palette.

- H6200mm x W200mm x L650mm
- Mild Steel Assembly
- Zinc Prime / Epoxy Prime / Powdercoat
- Sub-Surface Footing / Caged Rag Bolt
- Footing Design and Form 15 to be provided at time of detailed design

POLE

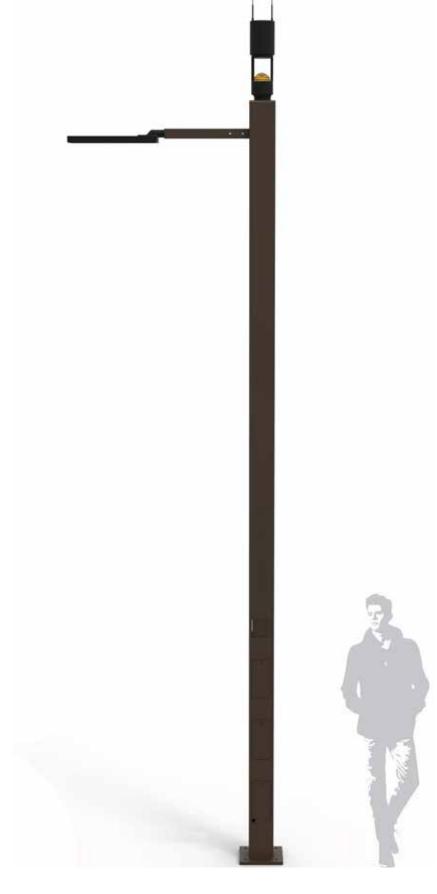
Light poles have a square 200mm hollow section profile ensuring that materials are readily available for their efficient construction as a custom element.

- 200mm SHS / Removable Weathercap / Weep Holes at Base
- 75mm SHS x L650mm Cross Arms / Spigot Mounts

ACCESS PANELS

Access panels have been universally designed should there be a need to provide additional GPO points throughout the CBD streetscape

- Weatherproof Compact Speaker
- Switches / Din Rail Mounted
- Conduit Access Terminations / Circuit Breakers and Fuses
- PDL Weatherproof GPO

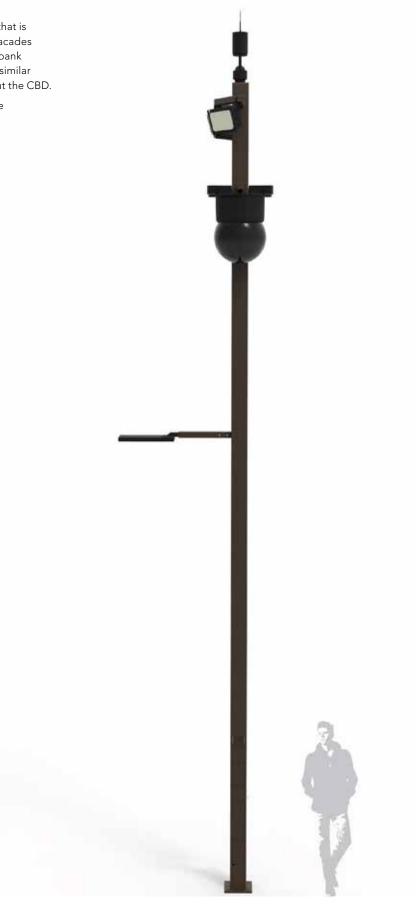


LIGHT POLE — TYPE 2

The type 2 light pole represents the light pole that is typically used in feature areas where heritage facades or moving lights is appropriate within the Riverbank Redevelopment. This light pole can be used in similar $\,$ context as required and appropriate throughout the CBD.

The pole's additional height and outreaches are designed to cater for specialist equipment.

- H10000mm x W200mm x L650mm
- Mild Steel Assembly
- Zinc Prime / Epoxy Prime / Powdercoat
- Sub-Surface Footing / Caged Rag Bolt
- Footing Design and Form 15 to be provided at time of detailed design



POST TOP MODULE ADAPTOR

The operational philosophy of the smart city system controlled by the post top module adaptor is to provide a fast and reliable free public WiFi service to the CBD whilst providing a separate secure wireless network for management and communication of Council infrastructure including:

- Irrinet irrigation system
- Smart parking sensors to all car parks
- Smart bin sensors
- Digital displays
- Able to interface with third party analytic solutions to leverage data collected in research, marketing and advertising
- RGBA Notification Indicator Light



LUMINAIRE

Selection of luminaries are to be ultimately determined by a specialist electrical and lighting engineer to achieve minimum Australian Safety standards, however, there is an overall intent of achieving a consistent family of streetscape infrastructure materials throughout the CBD. As such, the same WE-EF luminaire is to be prioritised pending budgetary and design requirements.

- WE-EF VLF540
- Outreach L650mm Mounted at H6000mm typically

CCTV CAMERA

Similar to luminaire selection, the specification of the CCTV camera is to be determined in conjunction with RRC at the time of design with the overall intent of achieving a consistent look and feel with that established within the Riverside Redevelopment.

- Pelco System
- Outreach L650mm Mounted at H6000mm

SIGNAGE BANNER

Placement of outreaches have been predetermined so that a consistent approach to, and delivery, of signage banners are adhered to throughout the CBD.

- Printed Canvas Graphics
- Outreach L650mm Mounted at H6000mm





DIGITAL DISPLAY

Similar to printed canvas banners; placement of outreaches have been pre-determined so that a consistent approach to, and delivery of, digital signage displays are adhered to throughout the CBD.

- Outreach L650mm Mounted at H6000mm
- LED Screens / Back to Back
- HDMI
- Media Player
- WiFi Ethernet
- Graphics Software



FACADE LIGHTS

Facade lights are to be utilised on light pole type 2 only.

The additional height and placement of facade lights allows the light source to shine down on feature building facades maximising and celebrating the ornate details of heritage buildings.

Facade lights will only be located in positions that value add to after-dark streetscape experience Locations of these are to be determined by RRC as part of the design and development process of the catalyst streetscape projects.

- Specification details TBA
- Weight 20kg each

MOVING LIGHTS

Moving lights are to be utilised on light pole type 2 only.

Moving lights are a feature element that have been integrated into the Riverbank Redevelopment for the purposes of energising the waterfront and providing a spectacle for the community.

Similar to the facade lights, the intent is to not incorporate this feature throughout the CBD but ensure that the opportunity to repeat this element exists should a catalyst streetscape project require it.

- Specification details TBA
- Weight Enclosure 25kg each
- Weight Light 22kg each



PLANTING DETAILS

The diverse range of street typologies and existing infrastructure conditions that will need to be addressed during the implementation of this manual require some flexibility in the way in which trees are planted.

The details set out in this section are intended as a guide only and aim to:

- Demonstrate several acceptable solutions to the planting of street trees;
- Identify ways in which tree pits can be reclaimed as usable footpath space in constrained road corridors;
- Describe the way in which stormwater can be captured for the passive irrigation of street trees; and
- Provide understorey planting and raised planter bed solutions.

Root control barriers must be provided where possible conflicts exist between street trees and underground services or road pavements. Details of provisions made to avoid such conflicts must be provided to Council for their assessment on a case-by-case basis.

The sketch details on the following pages identify the various methods to be used for planting street trees across the centre.

Intent: Integrated tree grate with pavement infill.

Location: Utilise where pedestrian pavement needs

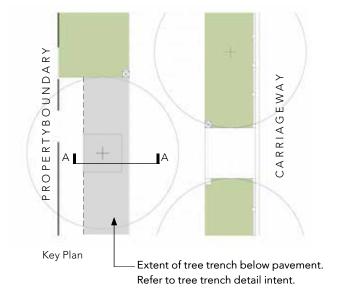
to be maximised and in outdoor eating areas including kerb build-outs to maximise useable space for chairs and tables. Detail can be adapted to include stormwater runoff overflow as per Tree Planting Type 02 detail.

Supplier: Refer furniture palette Materials: Refer materials palette

Dimensions: To allow for flexibility of location and

dimensions from the kerb, it is recommended 2 dimensioned tree grates are developed:

 $1.5 \, \text{m} \times 1.5 \, \text{m}$; and $2 \, \text{m} \times 2 \, \text{m}$



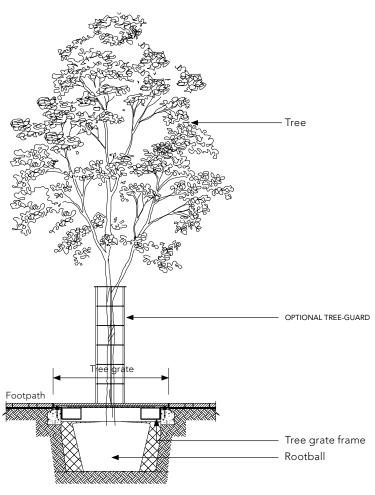


Figure 3.5 Tree planting type 01 — Section

Typical steel tree grate Intent:

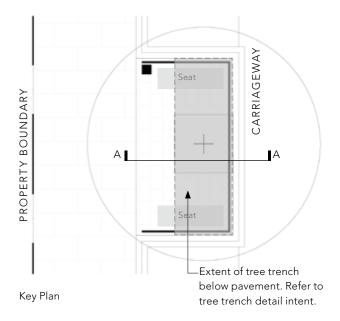
Location: Utilise where pedestrian pavement

> needs to be maximised and in outdoor eating areas including kerb build-outs to maximise useable space for chairs and tables.

Supplier: Refer furniture palette Materials: Refer materials palette

Dimensions: To allow for flexibility of location

> and dimensions from the kerb, it is recommended 2 dimensioned tree grates are developed: $1.5m \times 1.5m$; and $2m \times 2m$



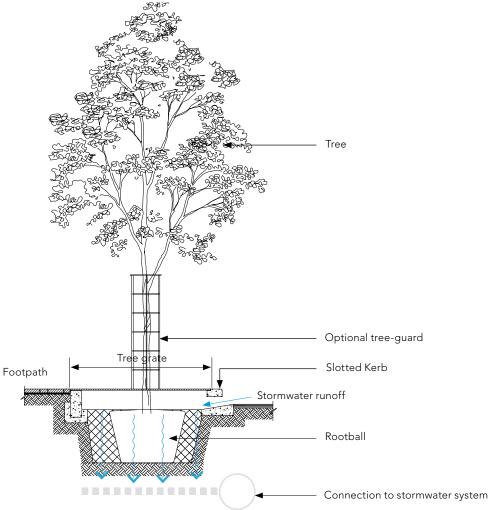


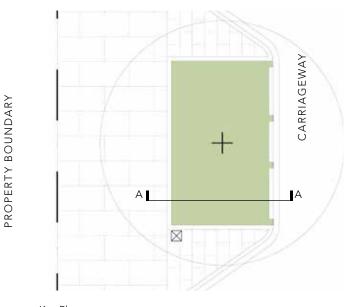
Figure 3.6 Tree planting type 02 — Section

Intent: Tree in kerb build-out allows for

understorey planting and infiltration of stormwater run-off through broken kerb. Raised drainage inlet allows for overflow to enter conventional stormwater drainage system.

Location: Where local grading conditions allow

for collection of stormwater run-off.



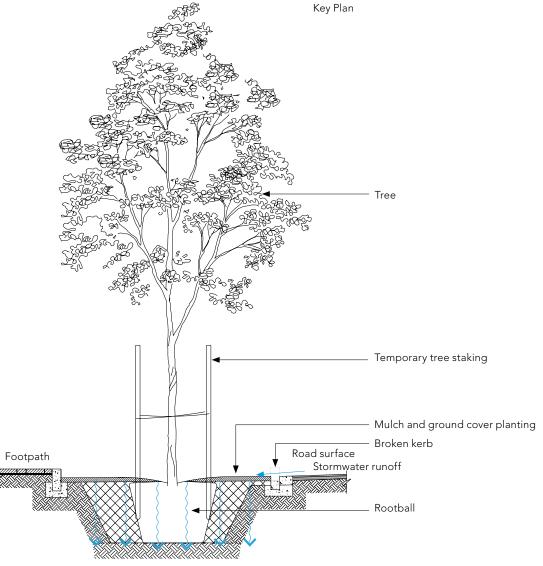
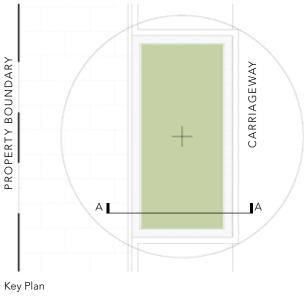


Figure 3.7 Tree planting type 03 — Section

Intent: Tree in raised planting bed to provide tree planting opportunities where local infrastructure does not permit Tree Planting Detail Type 03. Planter walls also allow for seating opportunities.



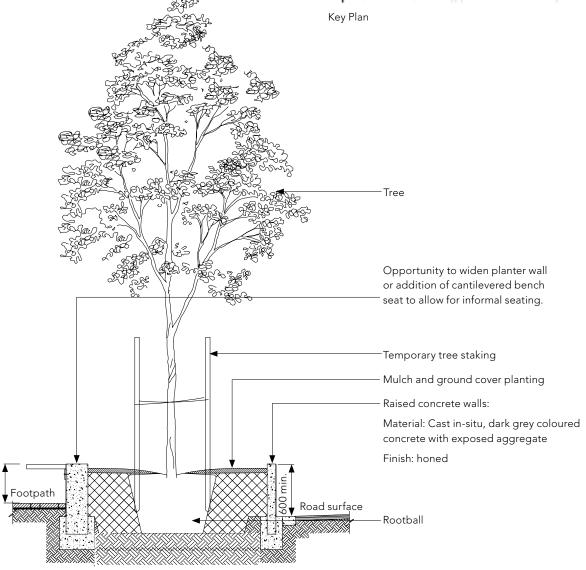


Figure 3.7
Tree planting type 04 — Section

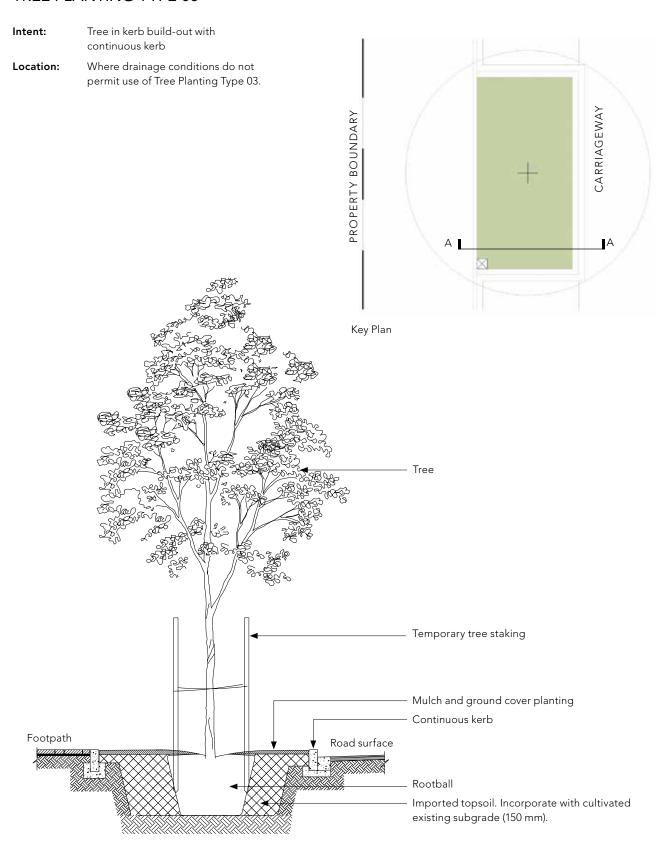


Figure 3.8 Tree planting type 05 — Section

TREE TRENCH DETAIL INTENT

Intent: Tree pits provide maximum growing medium for street trees. The volume of growing medium can be increased below pavement level through Indicative extent the use of suspended slabs over tree trenches. of tree pit below Continuous tree trenches can also be achieved CARRIAGEWAY pavement surface. where feasible to connect a series of street trees. Slotted kerb allows stormwater to enter tree trench. Key Plan Street tree in background Pavement surface Suspended slab over tree trench. Thickened base and appropriate reinforcing required to engineers detail. At locations of slotted kerb, level of top topsoil must be lower than gutter to allow stormwater infiltration. Road surface Planting soil in Stratacell

Figure 3.9 Tree trench detail — Section

min. 1m

AWNINGS

Awnings are an important element that exist in the streetscapes of the Rockhampton CBD and play a key role in providing much needed sun and weather protection for the footpath. The relationship of tree planting to existing and proposed awnings is a critical one. The following pages set out the preferred approach to these items.

Awnings provide greater public amenity and shelter to streets thereby enhancing the pedestrian experience. Council embraces and encourages the construction of awnings that are appropriate within the built context. Their design should fit within a coherent network of awning structures.

Awnings are to be set a minimum of 1500 mm from the kerb face to allow space for street trees.

The following will not be approved by Council:

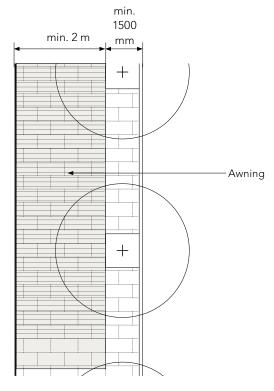
- awnings supported by load bearing posts located within the footpath;
- awnings with drop-down sides, or attached blinds; and
- decorative, non-load bearing posts located within the footpath.

All awnings must be constructed and installed in accordance within the relevant structural requirements under the Building Code of Australia. It is the responsibility of a private certifier issuing development permits for such structures to ensure the owners written consent has been granted.

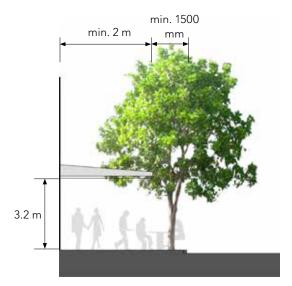
Council's Planning team must be contacted in relation to any work proposed to existing awnings associated with Heritage Buildings. Applications for awnings in these situations will be assessed on a case-by-case basis and approval is at the discretion of Council.

Several options exist to allow for awning structures within the streetscape. Option 02 allows a minimum $600\ mm$ setback from the kerb. This setback is relevant within the retail core and where pavement widths are constrained (less than 3.0m). Option 01 allows a minimum 1500 mm setback from kerbs. Situation will dictate the applicable option which is at the discretion of Council.

Provision of pedestrian shade and weather protection Two scenarios are provided below. Type 02 awning should be utilised only where pavement width is less than 2.6m.

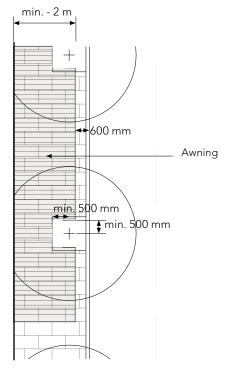


Type 01 Awning — Plan

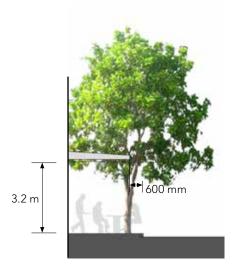


Type 01 Awning — Section

Figure 3.10 Type 01 Awning



Type 02 Castellated Awning — Plan



Type 02 Awning — Section

Figure 3.11 Type 02 Awning

OTHER INFORMATION

Guidance notes for street furniture

- To avoid conflict with traffic, all furniture must be located a minimum of 600mm from nominal face of kerb. Additionally, adjacent items must be appropriately spaced, to allow for ease of movement between them.
- Seating is to be generally located parallel to the kerb, facing away from traffic, and adjacent to street trees for shade.

Staff & Equipment

• The undertaking of improved CBD streetscapes will require additional resources to create, manage, maintain and install trees and streetscapes. These resources include appropriately trained staff members, machinery, vehicles and labourers. In some cases new roles may be required to manage this need.

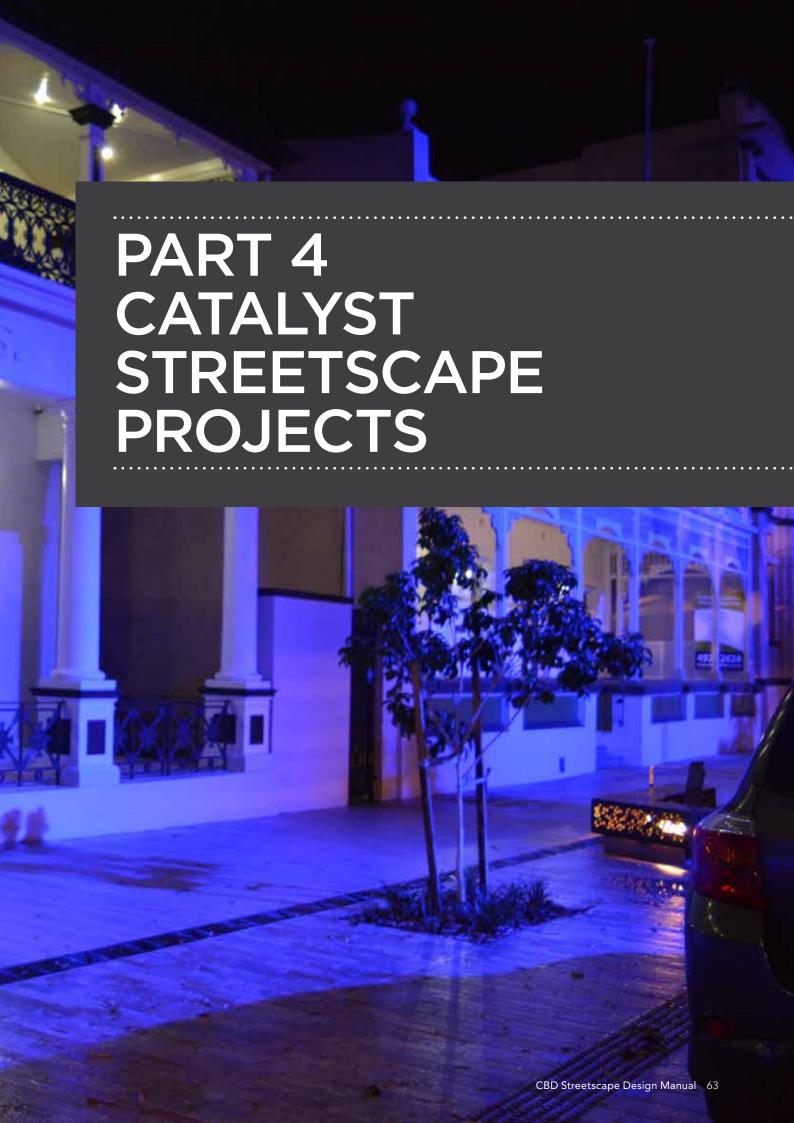
Internal Communication

- Communication between Council staff members involved in maintaining, establishing, changing or inspecting urban trees and designed streetscapes must be regular and ongoing to ensure the best result for Rockhampton's city centre streetscapes. This communication is especially important between Parks, Civil Operations, Strategic Infrastructure / Transport Planning, Strategic Planning, Asset Management, Statutory Planning, Risk Management, Bushland Management, Waste Management and Natural Resources.
- Importantly, variation from the higher order goals outlined in this manual must be approved by Council's leadership team, prior to detailed design work being undertaken. Site specific aspects such as turning lanes, entry points into private access, line of sight distances and the like, while not always represented in detail in this manual, may be appropriate provided that the principles are achieved and are not seen as being conflict with the CBD Streetscape Design Manual.

Interrelationship between Public and Private Property

• Any specialised treatment within private property shall not extend beyond the property line onto the public footpath. A transitional change will be established to ensure satisfactory physical, textural and visual integration of the pavements. Developments undertaken privately within proximity to streetscape are to be in accordance with the CBD Streetscape Manual Design, unless agreed to by Council.





CATALYST STREETSCAPE PROJECTS

This section of the manual provides guidance specific to the implementation of catalyst streetscape projects within the CBD. The short to medium term priority areas identified within this section relate to the catalyst projects identified as part of the CBD Redevelopment Framework.

SHORT-MEDIUM TERM PRIORITY AREAS

The extent and location of the short-term priority areas are described in Figure 4.1 opposite and further detail relating the specific design intent for these areas are outlined in the following pages of the Streetscape Design Manual.

Stage 1

- 1a: East Street between William Street and Derby Street
- 1b: Denham Street between East Street and Bolsover Street
- 1c: Quay Street between William Street and Derby Street
- 1d: East Street between Archer and Fitzroy Street



0 100 200 800 400 Scale: 1:7500 @ A4

1A — EAST STREET

BETWEEN WILLIAM STREET AND DERBY STREET



The upgrade of East Street south of William Street seeks to continue the existing streetscape treatment along the full extent of the connection to Derby Street.

This project is an important move in providing a clear visual "High Street" for the CBD.

Redevelopment of this portion of street will continue the consistency and connection with the balance of East Street, and will encourage greater pedestrian connectivity and stimulate businesses over time with greater foot traffic.

The redesign proposes to introduce the same profile and arrangement that currently exists south of Fitzroy Street including:

- · Centre median planting and perpendicular parking
- Kerbside parallel parking with build outs to accommodate street trees and WSUD elements
- Introduction of a dedicated on-street cycle lane
- Inclusion of safe crossing points



East Street Streetscape Plan — Proposed upgraded configuration



KEY PLAN



Figure 4.5 East Street Streetscape Sectional View - Proposed upgraded configuration



1B — DENHAM STREET

BETWEEN BOLSOVER STREET AND EAST STREET



The upgrade of Denham Street between East and Bolsover streets proposes to build off the language and style that has been developed on East Street.

Retaining the existing central median, the design proposes to introduce a Cycle Centre module on the median itself to activate the space and provide an important resource for the CBD. Cycle lanes to support Denham Street as the primary cycle linkage from the west have been introduced to the street and inform the location of the cycle centre.

The redesign proposes to retain the current street arrangement but introduce greenery and changes including:

• Centre median planting and perpendicular parking

- · Kerbside parallel parking with build outs to accommodate street trees and WSUD elements
- Introduction of a dedicated on-street cycle lane
- Delivery of a CBD cycle centre to encourage active modes of transport to the city centre
- Inclusion of safe crossing points to directly access the cycle centre
- Planting of street trees and feature trees at key threshold points to provide "pops" of colour.



Figure 4.6 Denham Street Streetscape Plan — Proposed upgraded configuration



Figure 4.7 ${\bf Denham\ Street\ Streetscape\ Sectional\ View-Proposed\ upgraded\ configuration}$



1C — QUAY STREET

BETWEEN WILLIAM STREET AND DERBY STREET



The upgrade of Quay Street south of William Street seeks to continue the treatment and feel of the completed Stage 1 riverside upgrades along the full extent of the street to Derby Street.

This project is an important move in providing a clear visual continuation of "The Esplanade" for the CBD and enabling greater connection with the riverfront as a key amenity asset.

Redevelopment of this portion of street will continue the consistency and connection with Stage 1 of Quay Street and will encourage greater pedestrian connectivity and stimulate businesses over time with greater foot traffic.

The redesign proposes to introduce the same profile along the eastern side of the street while extending the profile of the carriageway on the western side to enable to inclusion of:

- 90 degree parking bays to cater for maximum numbers of car parks with build outs to accommodate street trees and WSUD elements
- Introduction of a dedicated on-street cycle lane
- Consistent use of materials to unite this portion of the street with the completed upgrades of Quay Street.





KEY PLAN







1D — EAST STREET

BETWEEN ARCHER STREET AND FITZROY STREET



The upgrade of East Street between Fitzroy Street and Archer Street proposes to introduce the same character and quality that currently exists on East Street (between Fitzroy Street and William Street).

Redevelopment of this portion of street will create a visual consistency and connection between the two sides of Fitzroy Street. Completing this extent of East Street will encourage greater pedestrian connectivity across Fitzroy Street and stimulate businesses over time with greater foot traffic.

The redesign proposes to introduce the same profile and arrangement that currently exists south of Fitzroy Street including:

- Centre median planting and perpendicular parking
- Kerbside parallel parking with build outs to accommodate street trees and WSUD elements
- Introduction of a dedicated on-street cycle lane
- Inclusion of safe crossing points



East Street Streetscape Plan — Proposed upgraded configuration





Figure 4.3 East Street Streetscape Sectional View - Proposed upgraded configuration





PART 5 FUTURE STREETSCAPE PROJECTS



FUTURE STREETSCAPE PROJECTS

Beyond the short-term catalyst streetscape upgrade priorities, the future staged roll-out of streetscape upgrades has been considered in line with the strategic priorities of revitalising the CBD as a whole.

The staged approach to the upgrading of streetscapes in the CBD is described below and supported by Figure 5.1 opposite.

SHORT-MEDIUM TERM PRIORITY AREAS Stage 2

- 2a: William Street between East Street and Bolsover Street
- 2b: Victoria Parade between Fitzroy Street and Archer Street (footpath / crossing upgrades only)
- 2c: William Street between Quay Street and East Street
- 2d: Victoria Parade between Archer Street and North Street

MEDIUM-LONG TERM PRIORITY AREAS Stage 3

- 3a: Cambridge Street between Victoria Parade and Denison Street
- 3b: Derby Street between Quay Street and Bolsover Street including the intersection upgrade at the corner of Quay Street and Derby Street
- 3c: Derby Street between Bolsover Street and Denison Street
- 3d: Denham Street between Bolsover Street and Denison Street
- 3e: William Street between Bolsover Street and Denison Street
- 3f: Intersection upgrade corner of Alma Street and Fitzroy Street (DTMR consultation required)
- 3g: Intersection upgrade corner of Alma Street and Albert Street (DTMR consultation required)
- 3h: Alma Street between Fitzroy Street and Derby Street
- 3i: Alma Street between Fitzroy and Albert Street
- 3i: Derby Street traffic works, Denison Street to Bruce Highway

LONGER TERM PRIORITY AREAS

Stage 4

- 4a: Intersection upgrade corner of Bolsover Street and Fitzroy Street (DTMR consultation required))
- 4b: Bolsover Street between Fitzroy Street and Derby Street
- 4c: Archer Street between Victoria Parade and Denison Street
- 4d: Bolsover Street between Fitzroy Street and Albert Street

Other longer term considerations

- "Landing Area" intersection upgrade corner of East Street / Fitzroy Street (DTMR)
- Future street typology of Denison Street accommodate multi-combination route / cyclist link and future of the rail

