

# Refinements to the 'Ballina Landscape Entry Treatment Master Plan'

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River Street section between Teven and Kerr Street

REFINEMENTS TO THE ‘BALLINA LANDSCAPE ENTRY TREATMENT MASTER PLAN’ (BLETMP 2013)

RIVER STREET SECTION BETWEEN TEVEN ROAD AND KERR STREET

Prepared for Ballina Shire Council by Planit Consulting

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B	Draft Refined Master Plan for review	16/12/20	MP/AB	BG/MP
C	Refined Master Plan	10/02/21	RS/AB/MD	BG/RS
D	Final Refined Master Plan	01/03/2021	RS/MD	BG/RS

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## 1.0 PROJECT OVERVIEW

*Over 26,000 vehicles per day entered through the Western entry to Ballina along River Street in 2019.*

The focus of this project is to improve the aesthetics and landscape amenity of River Street, one of the main streets in Ballina.

Currently River Street and its strip development comprises of hardscape differing treatments, inconsistent softscape, service infrastructure and signage that create a poor entry character into town.

Through the development of a consistent streetscape enhancement to River Street, a sense of arrival and the establishment of a strong visual identity is sought to be addressed.

It is predicted that in 2036 there will be annual traffic flows of 29,500 vehicles per day into the west Ballina entry along River Street, further hardening this significant entry road. As a result, the required River Street lane duplication will increase the need for a landscape treatment that creates an interesting and aesthetically pleasing sense of arrival. This work will build upon the works already completed at the eastern end of River Street.

### REFINING THE MASTER PLAN

Ballina Shire Council adopted in 2013 the Ballina Landscape Entry Treatment Master Plan (BLETMP) by King + Campbell. The endorsed document does not allow for the River Street Lane Duplication (RSLD) project by AT&L, proposed for construction in early 2021.

The BLETMP covers both the northern Tamarind Drive through Kerr Street and the southern River Street entry. The refined Landscape Master Plan covers approximately 3.6km of River Street into Ballina and prioritises the RSLD works, known as Stage 2 (approx. 1km).

Planit Consulting have reviewed and critically analysed the above works and will comply with the overarching design principles set out in the BLETMP, and align the Master plan Refinement with the RSLD.

There are many influences in the delivery of the new River Street streetscape including but not limited to the Burns Point Ferry Road development, the new works completed at the eastern end of River Street, BSC road reserves, the adjoining future development sites, and the Fishery Creek Bridge Duplication including the adopted Marina Master Plan.

Additionally the following guidelines have been review for their relevance: A Guide to Road Design Part4A, Part 4B, Part 6, Part 6B (Austroads), NSW RMS Landscape Design Guideline 2019, Landscape design guideline 2019, BSC Road Safety Strategy and the SEPP (Coastal Management) 2018.

The refined Master Plan will maintain a cohesive design approach to the existing works while increasing the interest through a 'gateway' into Ballina.

### DESIGN PRINCIPLES

The design principles are consistence with the (BLETMP 2013) as follows:

1. Design with a suitable scale and a hierarchy of elements;
2. Use consistency and repetitive rhythm to establish a strong visual identity;
3. Ballina specific response: landscape treatments to have local identity;
4. Locally sourced materials and work: keeping it within the community to encourage a sense of stewardship.

### DESIGN CONCEPTS

The design concepts illustrated in this document were developed out of the guiding principles above:

- Entry statement to evoke the Ballina character through an instilled identity considering both Aboriginal and European history. They should tell a story both individually and as a suite throughout the River Street streetscape.
- Plant selection and locations will allow for compliance of sight-lines and road offsets.
- Use of native vegetation that provides good shade, habitat and add to the Ballina streetscape character. The vegetation selection will be diverse yet constrained to maintain a level of continuity and formality in line with the surrounding Ballina character zones.
- Retain existing mature trees when adequate to the intended function and character.
- Where space and infrastructure permits large shade trees are proposed and smaller trees are proposed under power lines.
- Vegetation to frame views and business frontages.
- Central road island to be planted with medium size trees for shade and visual amenity.
- Street enhancement to integrate development framing entrances and fencing screening, and to provide rest and meeting nodes for pedestrians.



1.1 CONCEPTUAL THEMES

This project will enhance the visual identity of Ballina through creating a sense of arrival on River Street with engaging pocket parks, distinct green infrastructure and ground plane treatments to denote crossings at strategic locations.

The River Street landscape treatment will vary to suit appropriate surrounding conditions to ensure site specific identity and character that enhances the Ballina environment. These treatments include:

**RIPARIAN ZONES ADJACENT CREEKS AND RIVERS:** will be treated with local riparian vegetation species suitable to also provide shade, visual amenity and appropriate form and texture to suit the street character. The areas will be planted to enhance views and local flora and fauna habitats.

**URBAN ZONES ADJACENT RESIDENTIAL AND COMMERCIAL:** will be treated with a more formal character of native vegetation. A rhythm of trees in garden beds of consistent plant species will be applied where possible. The central median will have the existing vegetation partially removed due to maintenance, physical and visual obstruction. Feature species and mature trees will be retained (e.g., pony tail palms) and incorporated in a planting pattern. Existing species will be replaced by suitable species.

**PLANTING PRINCIPLES:** Proposed trees will be single trunk with clear sight-lines. They will be offset from parking, driveways and intersections in compliance with relevant guidelines. Street trees will be appropriate for the constrained space provided and root barriers will be installed as recommended on a case by case basis. Groundcovers will be low to masks oncoming headlights and maintain safe sight-lines, with a maximum mature height of 600mm. They will also be planted to ensure the required 500mm offset from carriageways at maturity.

EXTENT OF WORKS:



ZONE CHARACTER	riparian character		urban character		riparian to the north & adjoining		urban /beach character
	maintain views & enhance habitats		structured, tidy and strong rhythm		urban	the bridge	
SEPP (Coastal Management) 2018 applies to most of the study area	Streetscape adjacent and near creeks to have vegetation species that evoke a connection to the water bodies and in line with the upper creek bank species listed in the Emigrant Creek Riverbank Stabilisation & Rehabilitation PoM (2019).		Streetscape in a more urban environment will have clean, tidy formed trees for low maintenance. Maximise groundcover usage to reduce mowing and minimise heat island effect; species selected must have a mature height of less than 600mm.		East of Barlows Road to have riparian treatment on the northern side and surrounding the bridge. Maintain water views and screen/soften structures where possible.		Urban treatment transitioning into urban/beach character and linking to the River Street East landscape recently completed works. Use of palms to link directly to the Ballina Island character.



## 2.0 Master Plan Areas

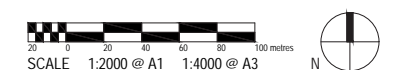


- 1. GATEWAY ENTRANCE**  
Create a strong entry gateway with large evergreen street trees. Opportunity to use a tall tree to maintain creek views and create a vertical gateway into Ballina. Maintain a minimum of 2.0 m trunk clearance on establishment.

- 2. ROAD RESERVE**  
The BLETMP proposed the priority sculpture location in the roundabout island. The additional road reserve space at this location allows for an integrated landscape solution to accommodate the entry statement.  
An engaging public space and potentially an additional bus stop in this location would be supported by local growth.

- 3. PEDESTRIAN CROSSING**  
Providing informal pedestrian crossings (by civil) will allow people to easily move around the retail anchors such as Bunnings, Autobarn, Choice The Discount Store, Spur supermarket and Brads Butchery. Opportunity to emphasize the crossings for interest and to increase passive awareness.

- 4. TRAFFIC**  
Possible future speed limit change (not part of the current scope of works and an opportunity for further investigation). Landscape treatments can create the perception of a low-speed environment to improve pedestrian safety and enhance the streetscape through a visual connection to the local environment.





The BLETMP nominated the roundabout island at Burns Point Ferry Road and the northern side of River Street as potential locations for a prominent "Welcome to Ballina" sculpture and entry statement. The roundabout has a considerable vehicle and pedestrian movement therefore distracting features should be avoided. Additionally, the existing center point light pole is to be retained.

The road reserve on the corner of River Street and Burns Point Ferry Road (southern side) provides a good alternative for the entry statement and the perfect setting for a permanent sculpture or a themed temporary placemaking/community initiative. A more formal and consistent roundabout landscape treatment and the use of landmark trees will provide a legible and strong gateway.



The Big Prawn located in this entry point of River Street is already a significant iconic attraction and a landmark that will always dominate the streetscape.

The River Street and Burns Point Ferry road reserve (pocket park) provides a stronger visual connection to the traffic entering Ballina via River Street. Therefore a more subtle temporary/permanent artwork installation in this location is recommended.

An integrated park with interactive, educational and playful themed sculptures (traditional fishing crafts, trawlers, boats, canoes integrated in the grass) that can support the growing neighborhood.

The BLEPMP proposed, in bitumen, tree garden beds of 3.5m x 6m on the southern side under power lines and tree garden beds of 3.5m x 8m on the northern side.

The new proposal provides trees in 1.4m x 6.7m garden beds for both sides of River Street (as per civil engineering plans).

A medium sized *Melaleuca quinquenervia* is proposed in the garden beds to match the existing character of the eastern River Street. Some existing trees are proposed to be removed due the road widening works.



The existing footpath alignments will be used where possible to minimise construction costs. New 2.0m and 2.5m wide footpaths (where space permits) to marry into the existing footpaths.

Plain concrete will be used for the new footpaths and a permeable paver to specific paved areas between garden beds. A simple paving band may be used at seating locations to denote the spaces. This paving will match the existing concrete pavers in the Ballina CBD.

The BLEPMP proposed deciduous trees. However, to reduce the potential impact on the waterways health (organic material build-up in drains and increased nutrient loading ending up in the river) evergreen trees were recommended. These trees will create a year round beautification with lower maintenance costs.

On the southern side of River Street the street trees will be consistent with the riparian character. A large fig in the open reserve park will establish a link to the creek and significant shade for the seating, meeting and rest area.

*Arcauria cunninghamii* street trees will provide a vertical gateway to the Ballina township adjacent Emigrant Creek.



Existing vegetation that is established, performing well and is appropriate for the location will be retained and protected to provide a more instant canopy and amenity. Complementary infill planting will enhance and embellish these landscapes.

In this location significant weed seed banks were identified in the roundabouts and medians. Therefore, the new proposal recommends that they be cleared and grubbed treated with pre-emergent herbicide before the new top soil mulch and planting is carried out. The lomandras are proposed to be removed and replaced by groundcover species.

A, B and C reference the location on the previous page.

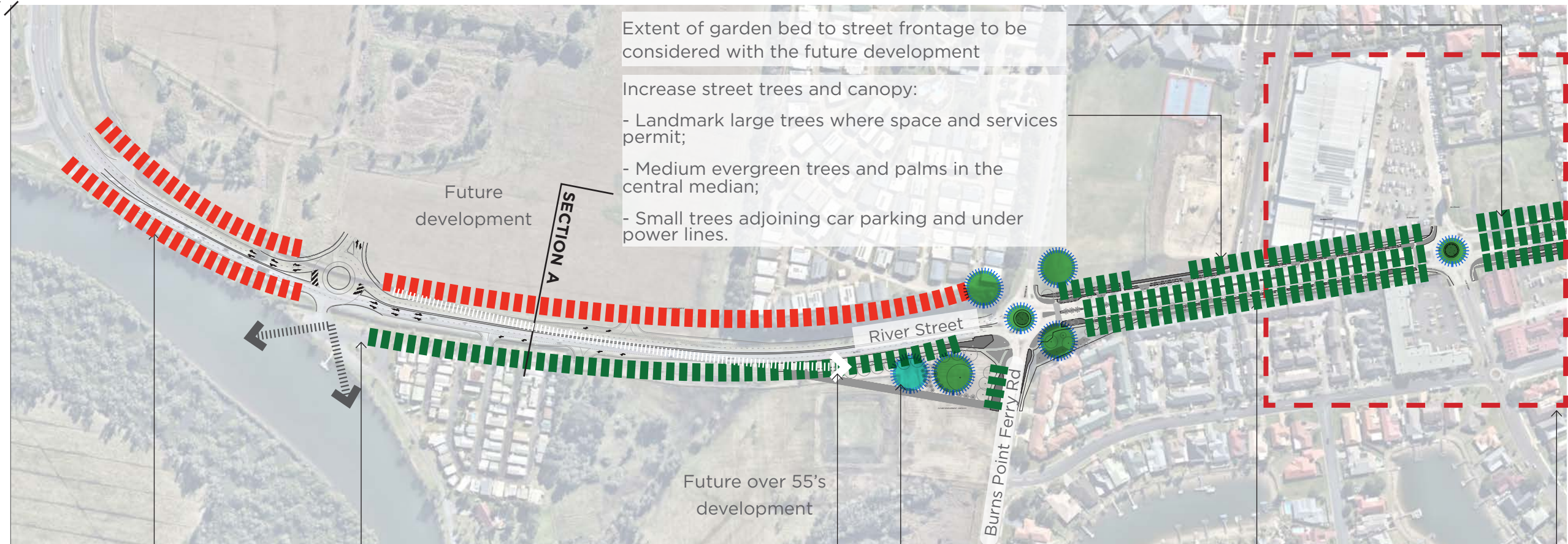


## DESIGN INTENT

Median and verge is to be kept clear of in-frangible vegetation, have clear sight lines for traffic and pedestrians. Where possible (space and budget permit) provide adequate area of buffer planting that separate the road from the pathways, which increases the feeling of comfort and safety for the user.



LOCATION PLAN



- ||||| LARGE TREES  
HOOP PINE
- ||||| SMALL/MEDIUM  
TREES



LANDMARK/ENTRY  
STATEMENT TREES

### GATEWAY ENTRANCE TREES

A tree lined entry road with large trees in verge. The *Araucaria cunninghamii* (hoop pine) is the specie proposed to the northern and southern side of River Street. The hoop pine can create a feature vertical gateway with significant connection to the creek and is included on the recommended use list.

On the southern side, consider a break to maintain the views through tree plantings to the Emigrant Creek.

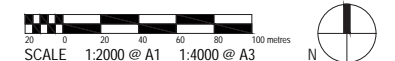
### ENTRY STATEMENT

The pocket park (road reserve) is the perfect setting for an interactive installation/entry statement themed to traditional fishing (refer page 20) and linked to the river and Ballina character. A placemaking/community initiative is recommended for the temporary or permanent statement installations. Additionally a single mature fig (landmark) proposed as an entry statement.

The park provides an engaging entry statement that doesn't detract from the iconic Big Prawn. This park will also support local growth therefore a bus stop at this location is recommended. Further investigations required.

### RETAIL ANCHOR ENHANCEMENT

The informal pedestrian crossing and controlled speed limit will increase pedestrian movement and make the retail area more vibrant and pedestrian friendly. A stamped pattern on the road recommended at the pedestrian crossing to passively slow traffic, creating a safer environment and a consistent identity. Potential to include traffic lights in the future.





INDICATIVE SECTION A

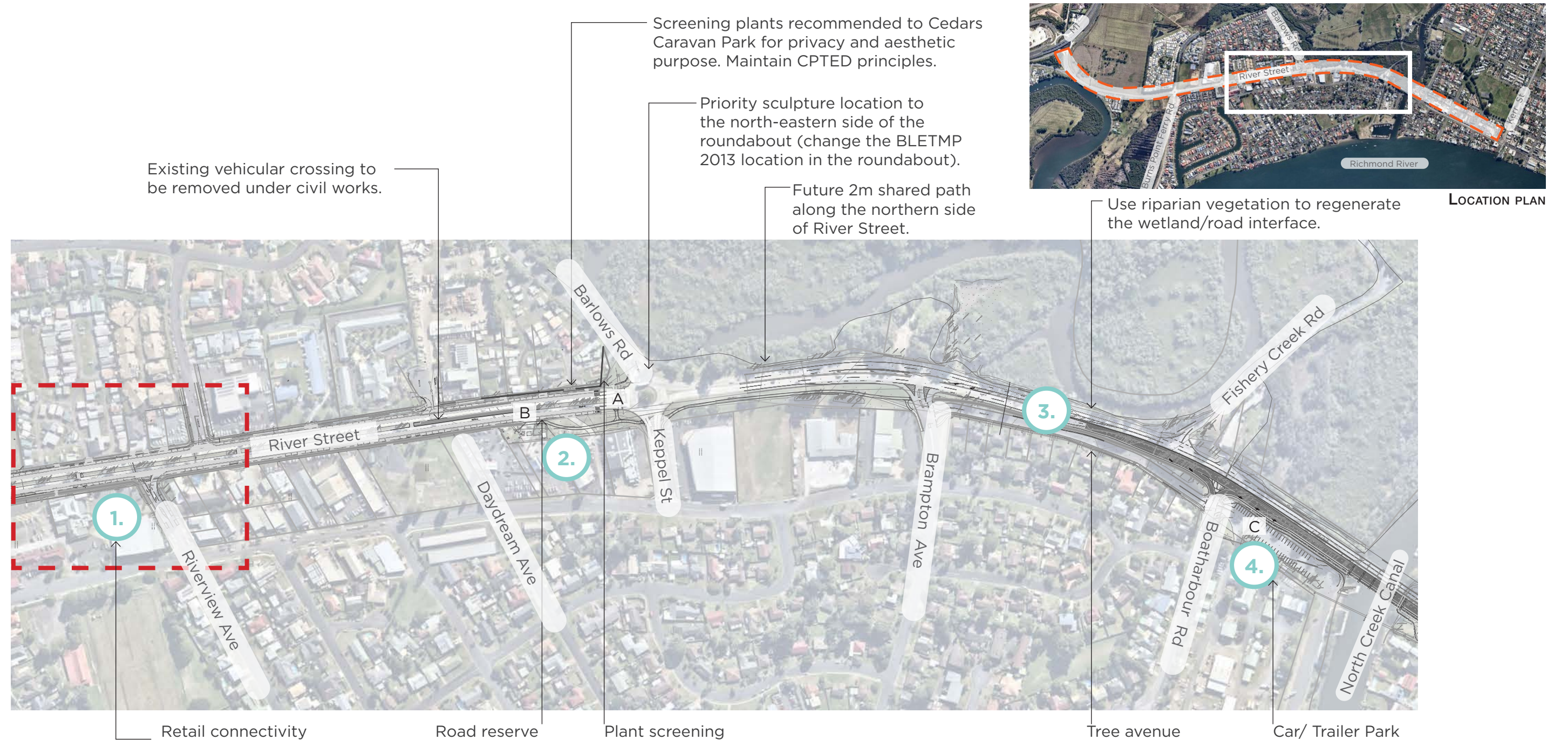
VERGE/LANDSCAPE PROPOSED OPEN SWALE DRAIN	EAST BOUND CARRIAGEWAY AND SHOULDER	MEDIAN	WEST BOUND CARRIAGEWAY AND SHOULDER	VERGE/LANDSCAPE EXISTING FOOTPATH
<p>Regrade lawn swale area (civil works) for easy mowing. Collaborate with civil to ensure existing roadside swale can be realigned to allow for better tree conditions.</p> <p><i>Araucaria cunninghamii</i> will provide a significant vertical gateway statement and will pay homage to the upper creek riparian zone.</p>	<p>Two East bound traffic lanes with a shoulder as per civil engineering.</p>	<p>Two West bound traffic lanes with one West shoulder turning lane as per civil engineering.</p> <p>Low groundcover planting only to the central median at this location due to narrow width.</p> <p>Where the central median Internal garden space width is less than 2.5m and greater than 1.2m, the species will have a maximum mature height of 0.6m to allow sight-lines near intersections and crossings.</p> <p>Ensure mature planting is 0.5m clear of the carriageway.</p>	<p>Turf to verge with proposed small/medium street tree to provide vegetation buffer to existing footpath.</p>	



Refer to civil engineers drawing package for road details.

SCALE 1:50 @ A1 1:100 @ A3





1.

### RETAIL CONNECTIVITY

Opportunity to make a more active retail strip by providing safe pedestrian crossing. Include access to potable water and temporary respite areas.

Dan Murphy's, BP, Ballina Smash repairs and Northern Rivers Seafood located in the retail strip.

2.

### ROAD RESERVE

The frontage of Fishermen's Co-op, Mays Motors and Quayside Hyundai is currently underutilised for the public and therefore is used for car sales parking.

Opportunity to improve the functionality and appearance of the intersection, as well as traffic and pedestrian safety. Provide landscape and functional amenity to support businesses.

Increase canopy while maintaining access and visibility to businesses relevant signage.

3.

### TREE AVENUE

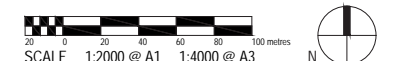
Riparian species along northern edge from the road to the adjoining wetland area. Enhance the natural edge with a regeneration approach, and collaborate with engineers to establish the best solution to maintain and enhance CBD views from the bridge.

Provide small trees and a regeneration approach to verge. This will improve the experience and create a sense of safety (barrier) for pedestrians on the new Johnson Drive share-path.

4.

### CAR/ TRAILER PARK

Provide space for car and trailer park with low planting and large shade trees. Increase tree canopy and shade by using three parking bays for tree planting/blisters. Consider the adopted Ballina Marina Master Plan and Crown Land.

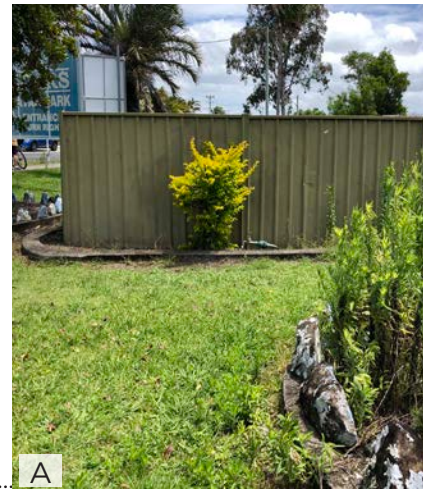




BLETMP nominated the roundabout at Barlows Road on River Street as a priority sculpture and entry statement location.

The sculpture/entry statement at Burns Point Ferry Road (plan 1) and the Big Prawn are sufficient streetscape landmarks therefore, an additional sculpture at this point along the road is not recommended (over embellishment and lost in the entry point significance).

Improving the amenity, functionality and appearance of this intersection as well as traffic and pedestrian safety is the key outcome.



The existing caravan park will benefit from a nicely landscaped screening and, which will also create an aesthetically pleasing character for the Barlows Road intersection. Recommended landscape to be a naturalised buffer of riparian species, to transition into the wetland character on the opposite side of the road.

The Road reserve provides a short term respite area for pedestrians.

Existing dense landscape within the central median of River Street will be partially removed to open up sight-lines and improve pedestrian and traffic safety, and reduce maintenance hazards. Retain existing Pony Tail Palms and create pattern/clusters with the Cabbage Palms.

Low maintenance single trunk trees such as *Tristaniopsis laurina* (Water Gum) will be planted to median with *Livistona australis* (Cabbage-tree Palms) proposed at crossings to denote the openings/change of conditions.



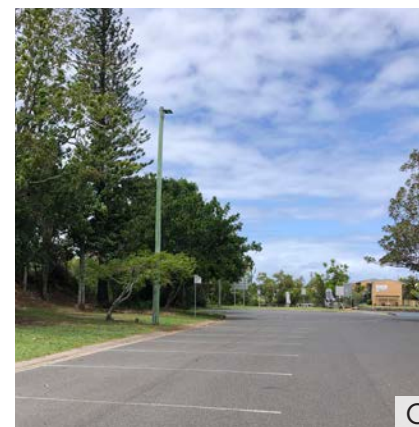
An additional 2.5m footpath in plain concrete traverses the road reserve at the Keppel Street intersection. New medium size street trees (landmark) and shaded seating/meeting nodes will enhance the pedestrian experience.

Roundabout to stand along with a consistent design and island character planting: cluster of Cabbage-tree Palms.

Existing light pole to be retained in the roundabout.

The existing vegetation will be removed to open up sight-lines and the Golden cane palms replaced with *Livistona australis* (Cabbage-tree Palms) to match the previous two roundabouts with a consistent character.

Golden Canes are a multi-trunked specie making it inappropriate for street areas that require open sight-lines.



Retain existing established vegetation that is performing well as it will provide a more instant appeal and canopy cover. Complementary infill planting of coastal character will enhance the streetscape and create further privacy from the road duplication over the bridge. Trailer parking and shade pods within the car park implemented where possible, in coordination with the Marina development. Consider Crown Land compliance and the SEPP (Coastal Management).

Letters reference the location on the previous page.



## Refinements to the 'Ballina Landscape Entry Treatment Master Plan' - River Street

Safety recommendations: low planting to ensure CPTED principles and street trees to provide the required 5.2m under canopy height for sight-lines and access for heavy vehicles. Planting to allow visibility at all pedestrian crossings and intersections. Groundcovers will mask oncoming headlights although ensuring safe sight-lines (maximum mature height 600mm or 400mm within 10 m of a pedestrian crossing).

Removal of existing central median planting due to its over grown character and ongoing maintenance. New single trunk trees (section notes) and groundcovers ensuring CPTED compliance. Providing informal pedestrian crossing and activation by landscaping and adding identifiable ground plane patterns: sandblasting in concrete and stenciling over road bitumen.

Providing low plant screening to the Cedars Caravan Park for privacy/buffer. Planting to comply with CPTED principles and provide a natural riparian character on Barlows Rd (transition into the wetland).

Future shared pathway

Riparian native trees and under-story to infill along future 2.5m shared path. Planting to occur where possible and avoiding power lines and sign obstruction.

Retention of existing mature trees and native vegetation in verge (except due to civil works).



LOCATION PLAN



||||| LARGE TREES

||||| SMALL/MEDIUM TREES

● LANDMARK/ENTRY STATEMENT TREE

### ROAD RESERVES

The Northern side of River Street provides a logical setting for landscape embellishment (style and character to be consistent with the riparian zone opposite on Barlows Road) to create a naturalistic screening appearance to soften the Cedar Caravan Park interface.

Pedestrian links to the southern side where an attractive garden space for the public with seating and shade will enhance the adjoining commercial interface and support businesses; making a nice short term respite zone for pedestrians.

Create a subtle visual interest at the crossing (road stencil overlay) to improve passive safety awareness through engaging visual cues.

### VERGE GARDENS

Create garden node with seating and shade for short respite and meeting.

This larger road reserve adjoins new businesses and is a suitable location for enhancing the pedestrian experience and supporting businesses.

### TREE AVENUE

Creating a tree avenue for pedestrians. Include medium native trees for shade amenities and allow visual passive surveillance.

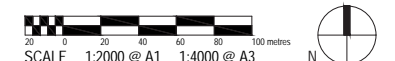
Retain existing mature trees in the medium verge between Johnson and River Street.

### CAR/ TRAILER PARK

Provide car and trailer parking with tree shade and infill planting at edge (screening to retaining wall). Trees to be planted within car parking area in blisters and garden beds.

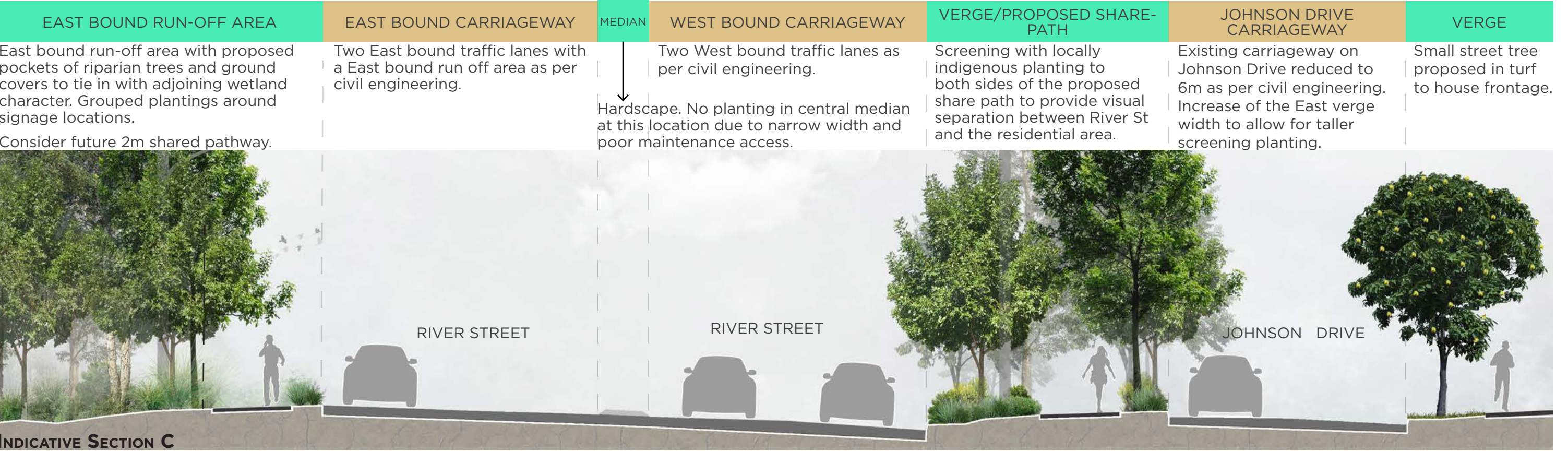
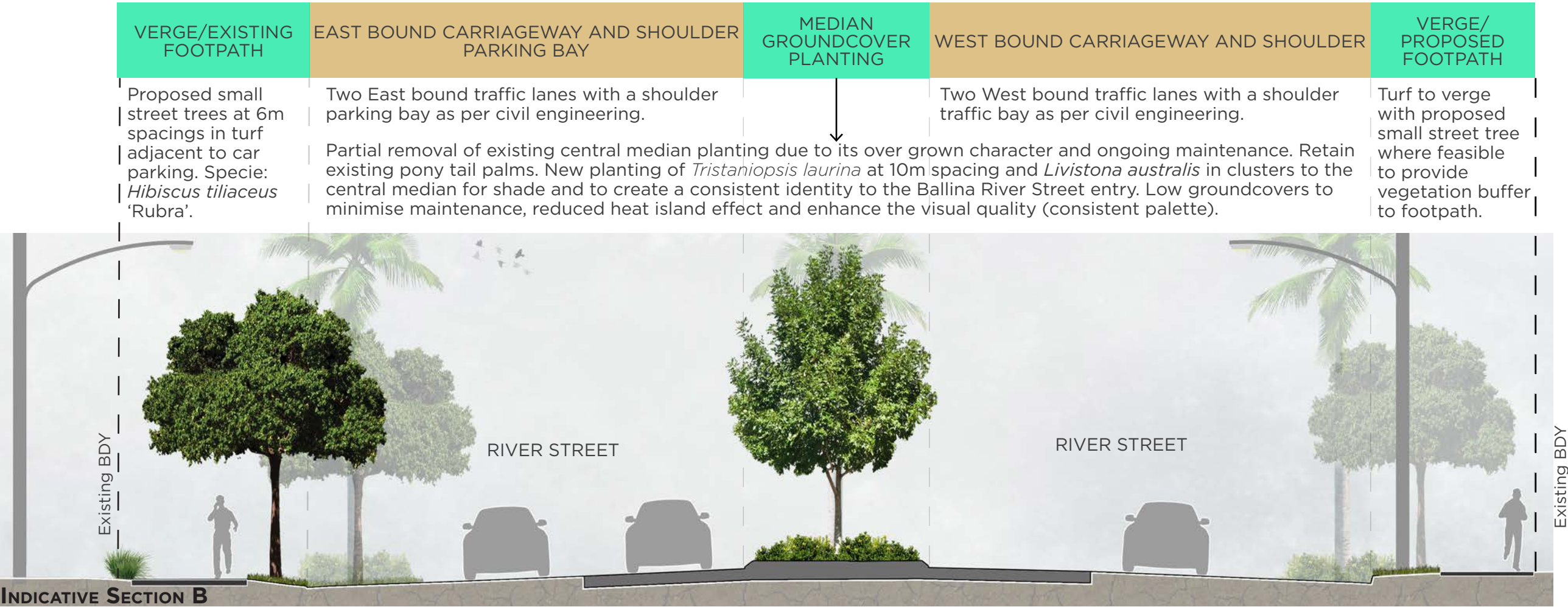
Reinforce Ballina's island concept by accentuating visual connections to the creek, natural wetland, CBD and the bridge.

Consider Crown Land, ongoing maintenance, engineering requirements and the SEPP Coastal Management. Develop proposal in collaboration.





0.5 1 1.5 2 2.5 metres  
SCALE 1:50 @ A1 1:100 @ A3





Existing slip road to be closed. Opportunity to enhance planting along new lane duplication.

New planted blister in road to be removed due to bridge widening works. Retain if possible subject to further investigations.



LOCATION PLAN



Retain new trees on edge of road in planted garden blisters.

Potential to plant/screen bridge embankment cutting. Frame creek and edge views to accentuate the concept of Ballina as an island.

Further investigations required during detailed design of the new signals (by others) regarding the retention of existing new street trees.

Potential signage / sculpture location (proposed in the BLETMP): Opportunity for partial road closure (and reduced parking) to accommodate pedestrian zone/plaza and sculpture to be developed as an engaging and educational plaza identifiable as a Ballina town precinct.

### 1. POTENTIAL TOURIST DISTRICT

Increase pedestrian amenity to cater six motels (Almare Tourist, The Cubana, Coast Inn, Comfort Inn All Seasons, Hi-Craft and River Street Motel) on River street will enhance the area. Having Riverview Park in the area will provide relaxation spot/ view point to beautiful Richmond River.

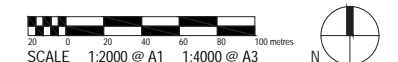
### 2. POTENTIAL SIGNAGE/ GROUND ART

There are signage issues in most areas that if addressed could improve the visitor experience and create vibrant spaces.

A low key water inspired sculpture could add value to the new residential/ commercial development and the local area. Retain and utilize water views.

### 3. TREES ON EDGE OF ROAD

BLETMP noted large trees to be planted on both side of road to provide shade and create an avenue. Due to existing overhead power lines, hardscape constraints, underground services and property entry points there is little opportunity to add large street trees; Where possible add small non invasive trees to green the streets.





The BLETMP shows no treatment for the surrounding bridge areas as there was no plan at that time for duplicating the bridge lanes.

To accommodate the duplication works there is now opportunity to use large native trees to frame views to the creek and enhance the southern side of the bridge with screening shrubs to adjoining properties and line the pedestrian footpath with Melaleucas, Casuarina and Araucarias.



Existing vegetation that is established and is performing well will be maintained where possible to help provide a more instant canopy and appeal.

Complementary infill planting with coastal wetland species will enhance the landscape, increase habitat and emphasize the coastal character.

Screening planting of Syzygium species with native coastal and riparian species will be used to the base of the retaining wall to soften the vertical scale and help screen the bridge structure.

This greenscape also creates a more pedestrian friendly environment.



The new bridge alignment includes a new footpath. Planting will be used to soften the hardscape interface with low upright strappy Lomandra (if space permits) to provide a visual barrier for pedestrians.

The use of layering up shrubs, feature plants and groundcovers can provide screening and enhance the hardscape street works. Making a more enjoyable experience for both vehicle and pedestrian.

The bridge duplication work includes the closure of the Norlyn Avenue access road from River Street.

This provides further opportunity to add screening planting to the residential and commercial property frontages. The species and extent of planting will be determined by existing overhead power lines and underground service infrastructure.

Screen planting to boundary line to be negotiated with landowners to avoid the 2.5m maintenance offset.



Further investigation into the feasibility of a feature (plaza) space at the southern end of Kerr Street recommended.

If feasible, the design can incorporate a themed and engaging pattern into the ground plane (water inspired) and engaging a local artist to design the public/pavement artwork is recommended.

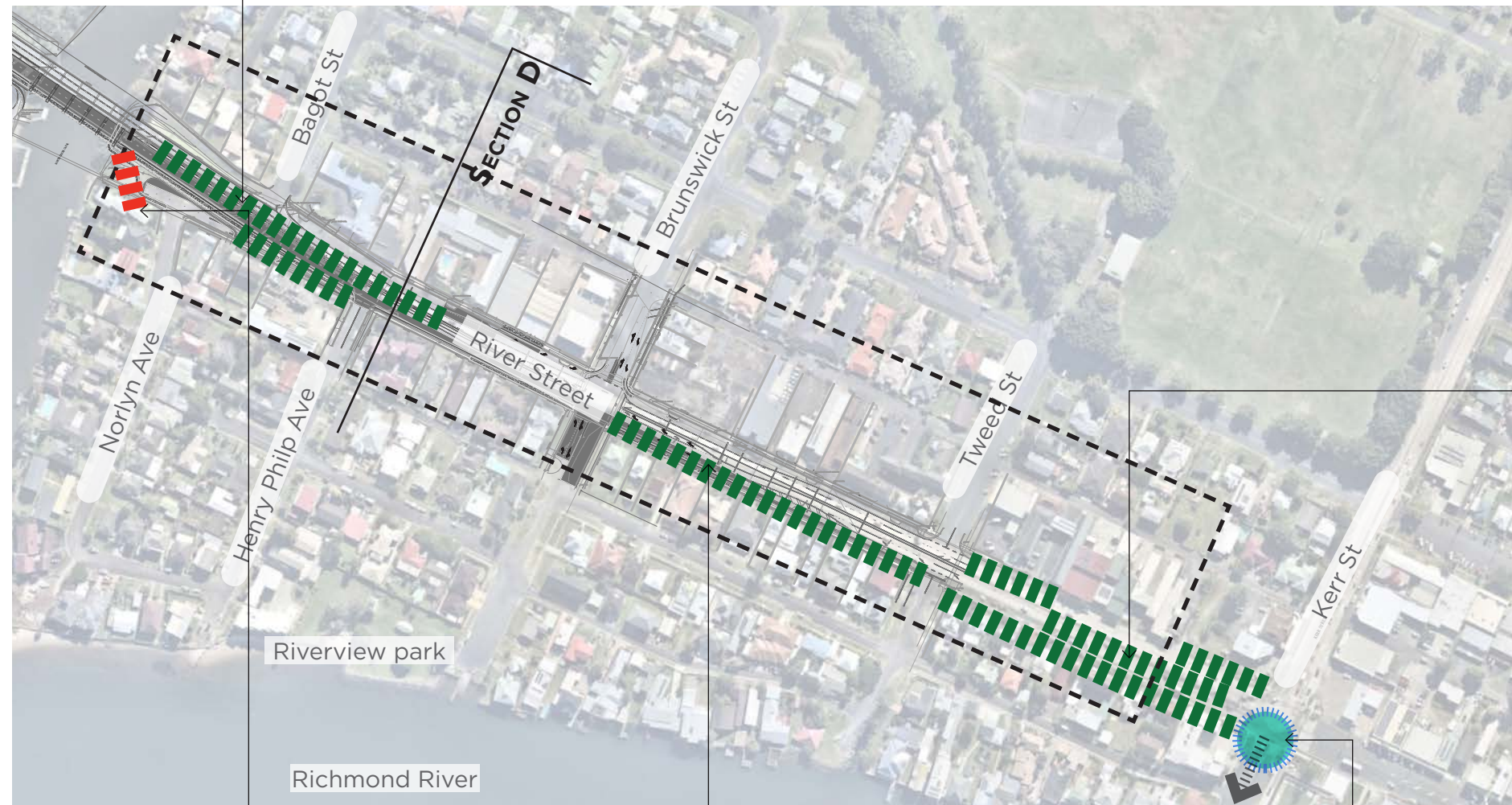
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Potential for trees to central median: Cabbage-tree Palms in linear clusters to maintain consistent identity.

Low groundcovers will add aesthetic value and cooling to the new bridge precinct.



Potential for trees to central median: Planting of *Tristaniopsis laurina* at 10m spacing and *Livistona australis* in clusters to the central median for shade and to create a consistent identity to the Ballina River Street entry.

### TREE SCREENING

Use large trees to frame views to the water, strengthening the riparian character and screening the bridge/traffic.

Further screening with native shrubs to soften the embankment cutting of the new bridge, as well as adjoining property fence lines.

### TOURIST DISTRICT

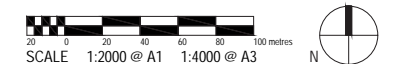
Increase pedestrian amenity to support the growing tourism along River Street. Riverview Park provides a destination for relaxation and passive recreation with views to beautiful Richmond River. Enhance pedestrian connections to the river frontage by greening the streetscape where possible. Plant gardens instead of lawn and maintain pedestrian access via permeable paving.

### SCULPTURE LOCATION

Investigations recommended into the feasibility of a partial road closure (and perhaps reduced parking) to accommodate pedestrian zone/plaza and sculpture. This site would not be a full scale sculpture in competition with the prawn or the pocket park

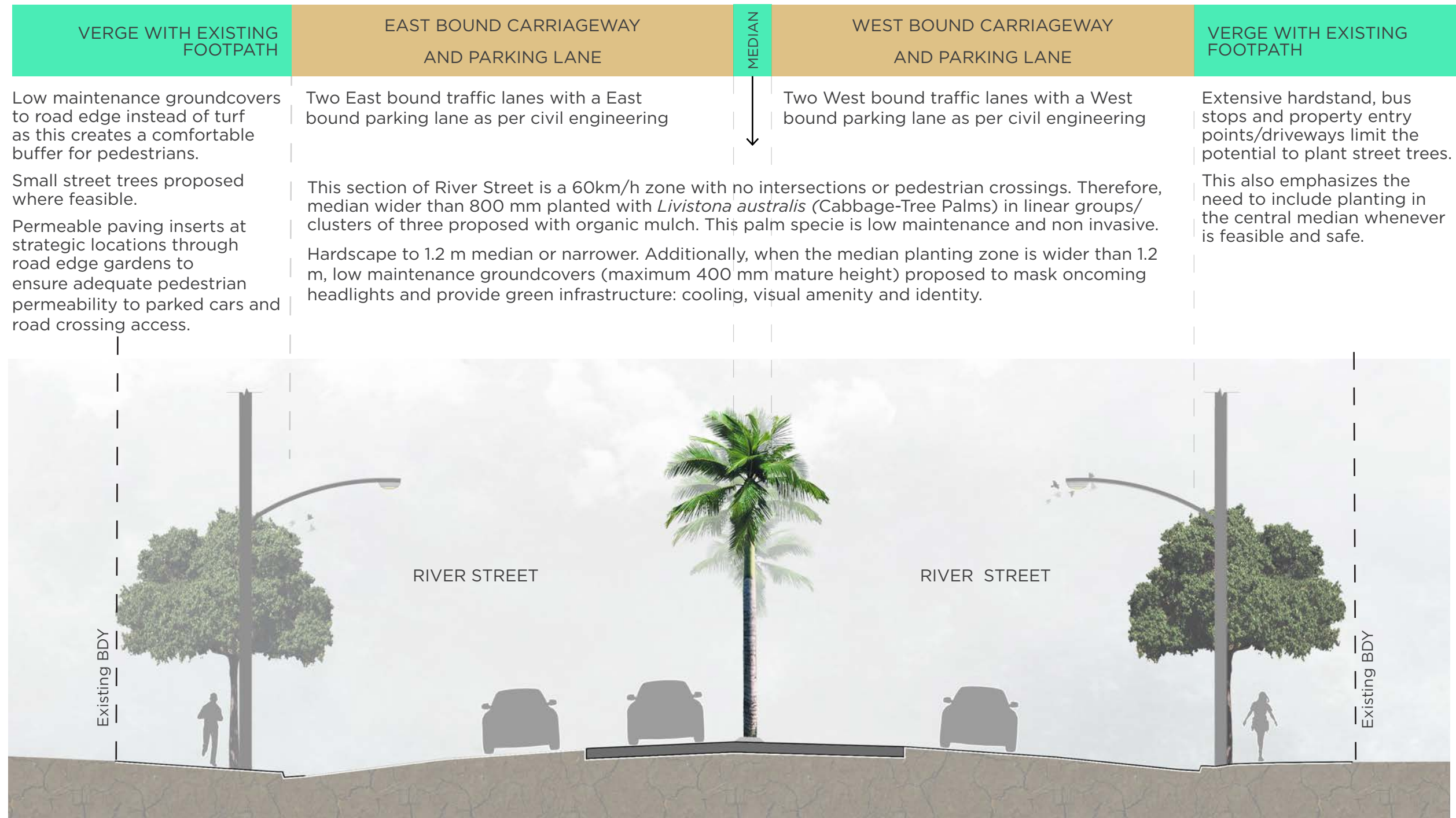
Recommended urban water based engaging feature that links to the River and the Island character of Ballina. This public open space would be supported by the increased mix-use development.

Emphasize water views at the end of the street.





# INDICATIVE SECTION D



SCALE 1:50 @ A1 1:100 @ A3

3.0 DETAILED LOCATIONS - RIVER STREET CONCEPTS



ROUNDABOUTS TREATMENT x 3

LOCATION PLAN - DETAILED AREAS



### 3 EXISTING ROUNDABOUTS

The three roundabouts between Burns Point Ferry Road and Barlows Road have existing lighting (one central light pole) to be retained. All three have existing vegetation (lomandras, palms, etc) that was assessed during site analysis.

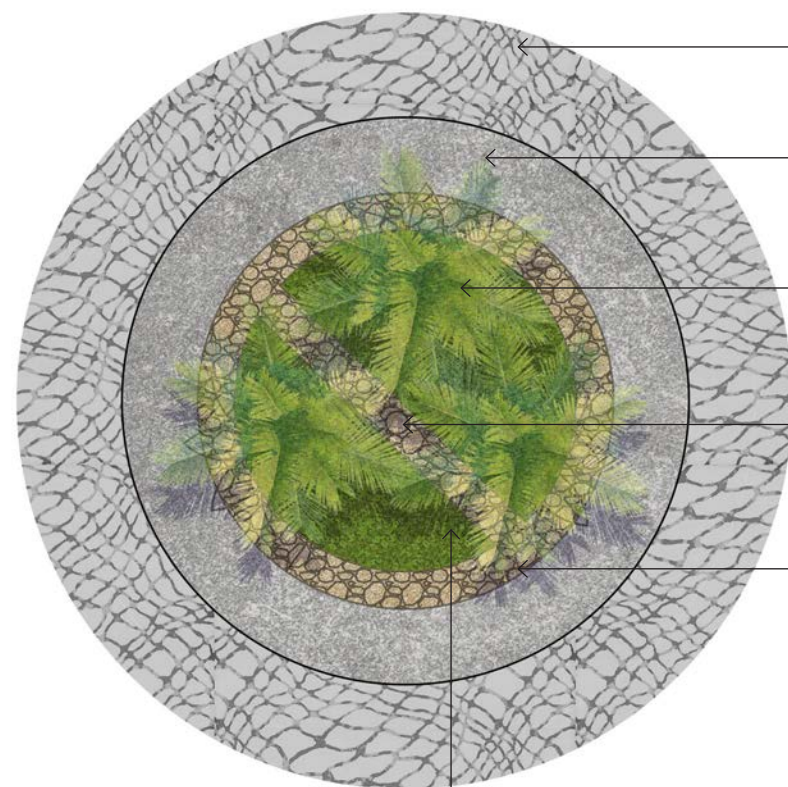
The design intent is to work with the existing infrastructure and enhance the landscape without inhibiting sight-lines to ensure safe environment for pedestrians and vehicles.

A visually appealing streetscape encourages slower driving, with clues and landmarks supporting driver awareness and pedestrian friendly environments.

Opportunity for a low-speed and pedestrian friendly placemaking initiative:

Use of a stamped pattern on the road is recommended in a phased approach (subject to budget availability).

Nautical, traditional fishing or fishnet theme. Community engagement



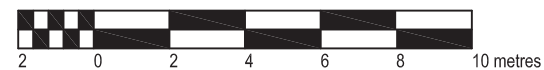
Existing concrete to be retained and coloured (to match CBD)

Landmark: 3 x Cabbage-Tree Palms strategically located

Retain existing light pole and create a 1m maintenance access pebble strip

Allow for a 3m strip from face of kerb to planting edge: proposed pebble and existing concrete edge should total the 3m width.

Infill planting: groundcovers (400mm maximum mature height)



SCALE 1:200 @ A1 1:400 @ A3

#### ROUNABOUT PLAN



Remove existing vegetation and mulch prior to the landscape works, considering significant weed seed banks were identified on site visit by BSC maintenance staff.

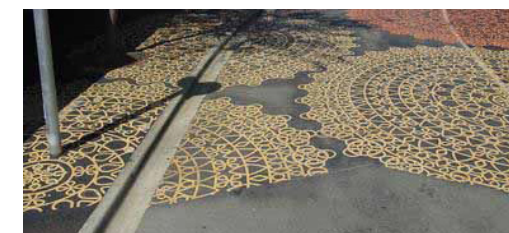
Infill groundcover planting and new trees will enhance and embellish the roundabout. Three Cabbage-tree Palms proposed in each roundabout for their coastal appeal and low maintenance value. They are single trunk species that provide safe sight-lines.



Pebble strips around the garden beds and dissecting the roundabout used to extend the buffer zone, as a maintenance access and improve aesthetics.



Existing roundabout perimeter concrete to be retained and painted to match the sandy colour of Fawcett Street roundabouts.



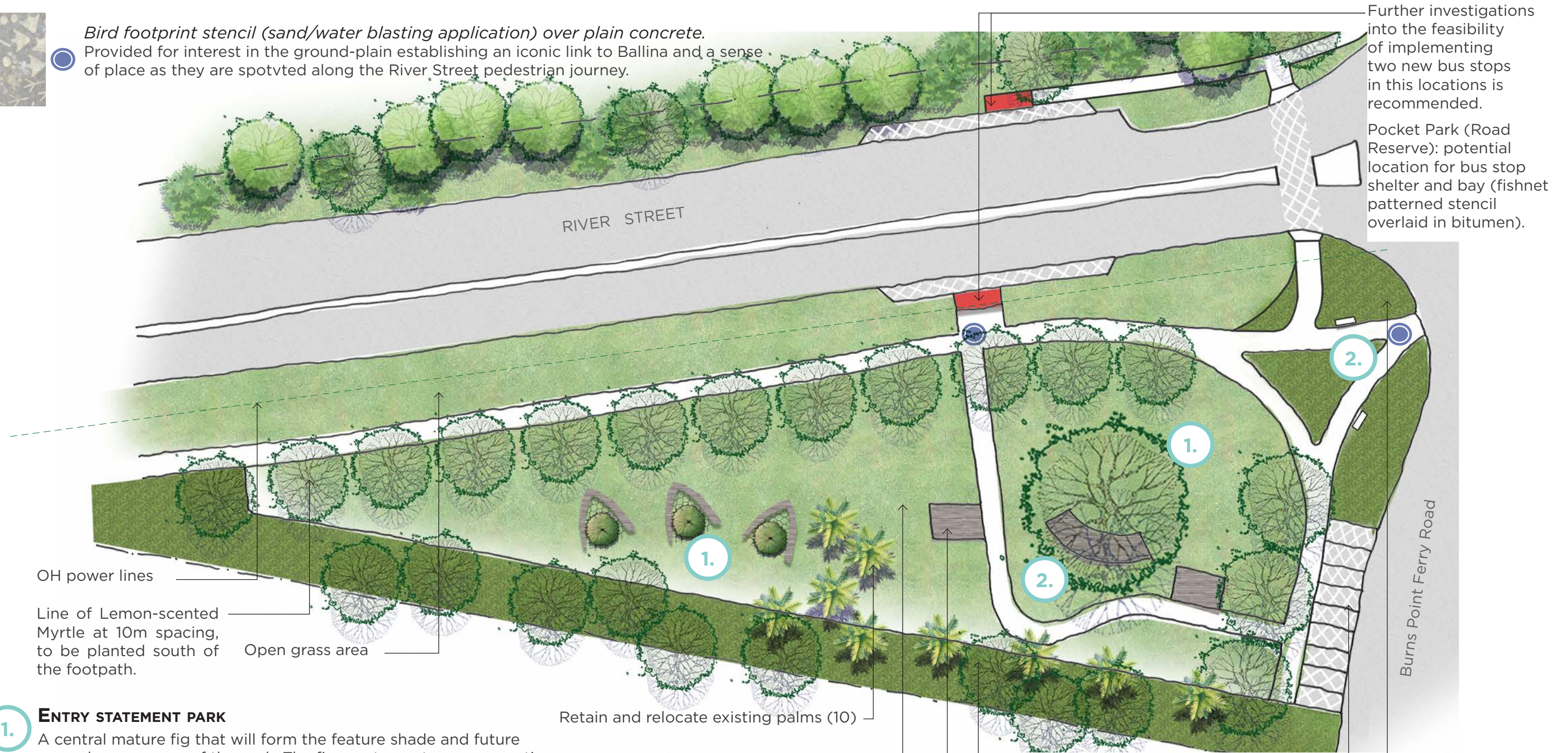
Opportunity for art and community engagement: pedestrian friendly roundabout subject to BSC approval and DDA compliance.





*Bird footprint stencil (sand/water blasting application) over plain concrete.*

Provided for interest in the ground-plane establishing an iconic link to Ballina and a sense of place as they are spotted along the River Street pedestrian journey.



Further investigations into the feasibility of implementing two new bus stops in this locations is recommended.

Pocket Park (Road Reserve): potential location for bus stop shelter and bay (fishnet patterned stencil overlaid in bitumen).

OH power lines

Line of Lemon-scented Myrtle at 10m spacing, to be planted south of the footpath.

Open grass area

Retain and relocate existing palms (10)

Open grass area

Future picnic shelters

Screen planting to the edge of the road reserve to be further detailed.

Offset from property boundaries to be 2.5 m for shrubs/groundcovers and 5.0 m for tree planting. New planting with Casuarinas, Tuckeroo, Lillypilis and relocated palms. Developers of the adjoining property to be informed via approval process that scree vegetation should be protected from damage during their operational works.

Carparking to have a fishing net patterned stencil overlaid in bitumen.

This works are not included in the RSLD stage 1 and should be implemented in a phased approach (budget)

Low planting to maintain sight-lines to entry statement to be installed (maximum mature height 600 mm)

1.

### ENTRY STATEMENT PARK

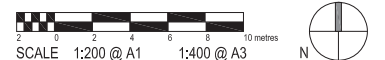
A central mature fig that will form the feature shade and future mound appearance of the park. The fig creates a strong connection to the creek and will transform the space over time.

Welcome to Ballina entry statement/sculpture: playful, engaging and themed temporary and/or permanent art installations. Recommended engagement with local artists and community to develop concept and program (example showed: canoes/boats with turf, nets and trees/sails as part of a temporary traditional fishing interpretation).

2.

### PARK SEATING

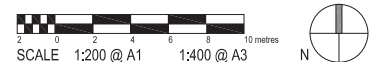
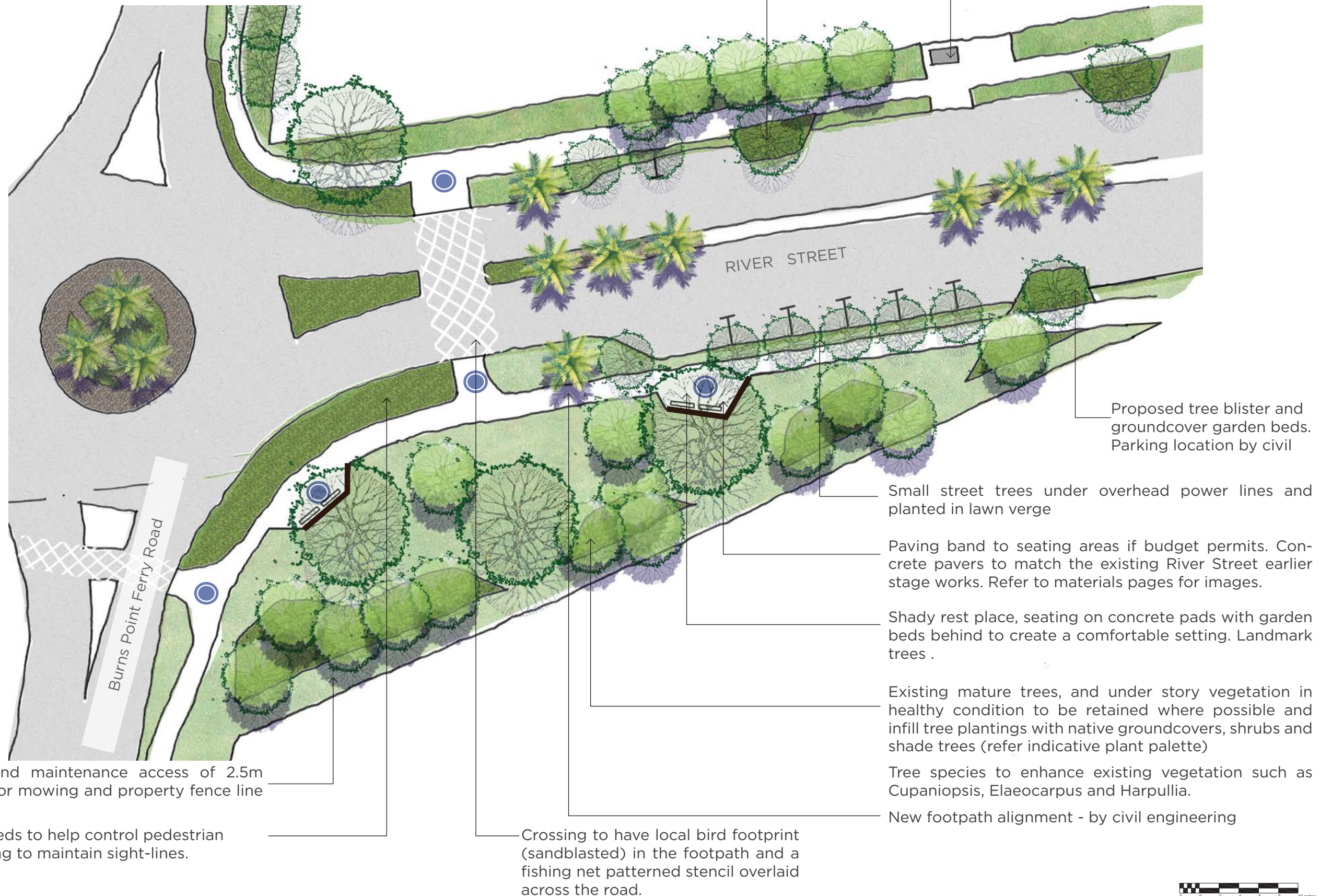
Shady rest place with large fig tree to the middle, park benches and picnic tables/benches.



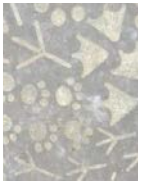




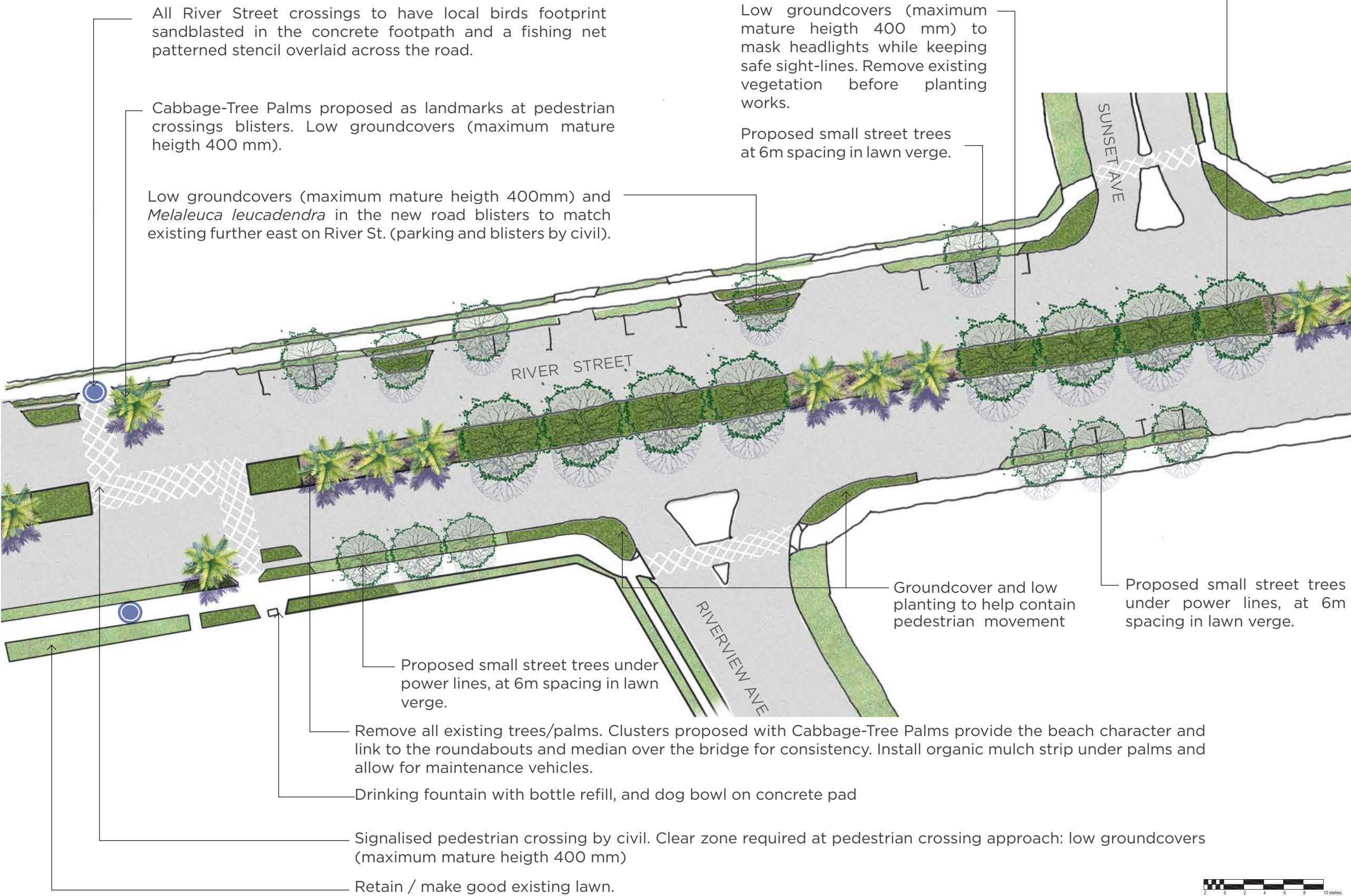
● Bird footprint stencil (sand/water blasting application) over plain concrete.







● Bird footprint stencil (sand/water blasting application) over plain concrete.







1. Bird footprint stencil (sand/water blasting application) over plain concrete. Creates a connection between the proposed landscape and its surrounds, providing a local identity to the newly designed space.

1. **CEDAR PROPERTY BOUNDARY**  
The Cedar Caravan Park are liaising with Ballina Shire Council to realign their property boundary. This will enable the road reserve frontage to River Street to be planted with a seating area (pocket park).

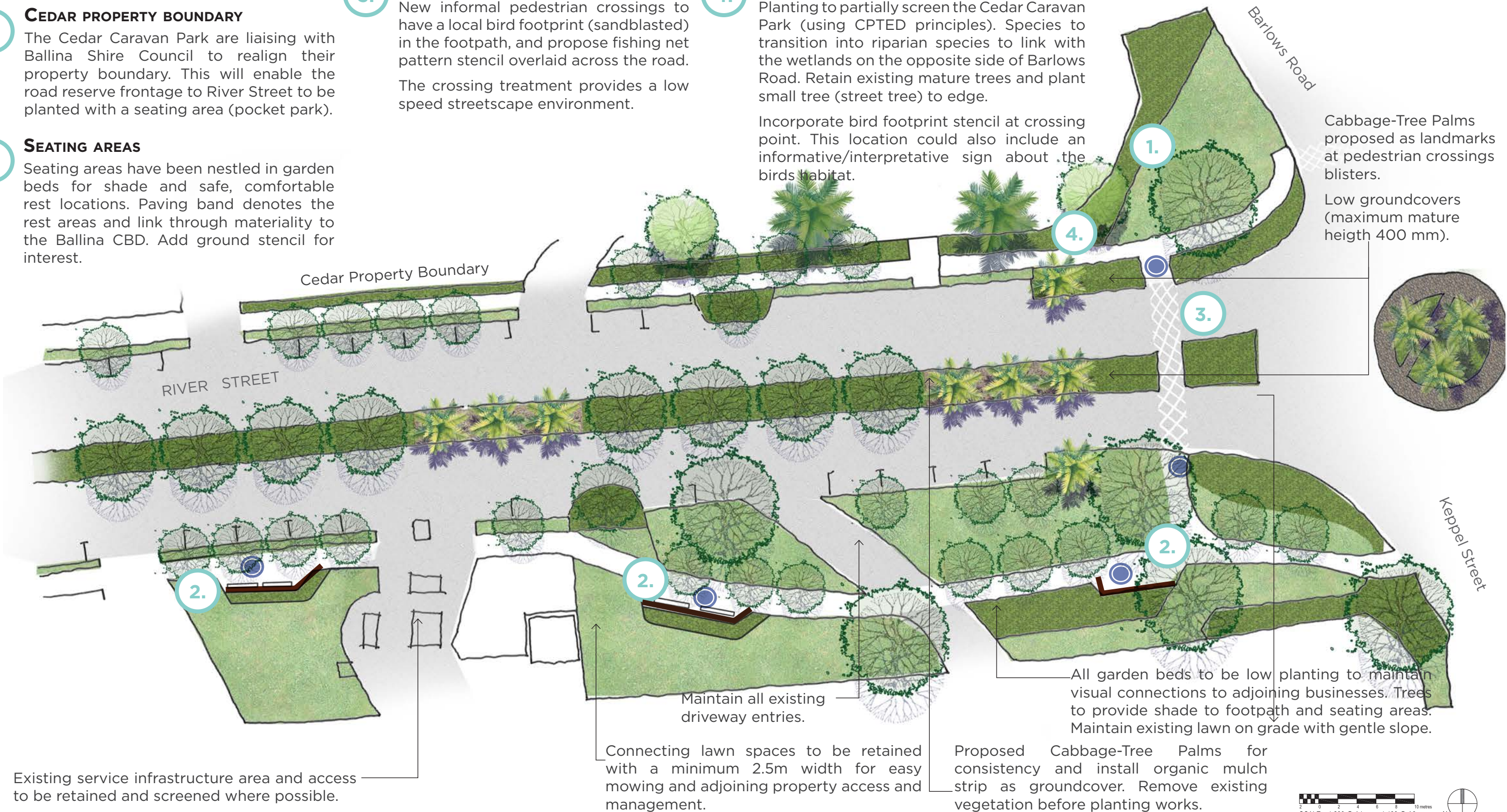
2. **SEATING AREAS**  
Seating areas have been nestled in garden beds for shade and safe, comfortable rest locations. Paving band denotes the rest areas and link through materiality to the Ballina CBD. Add ground stencil for interest.

3. **CROSSING TREATMENT**  
New informal pedestrian crossings to have a local bird footprint (sandblasted) in the footpath, and propose fishing net pattern stencil overlaid across the road. The crossing treatment provides a low speed streetscape environment.

4. **CORNER PLANTING**  
Planting to partially screen the Cedar Caravan Park (using CPTED principles). Species to transition into riparian species to link with the wetlands on the opposite side of Barlows Road. Retain existing mature trees and plant small tree (street tree) to edge.  
Incorporate bird footprint stencil at crossing point. This location could also include an informative/interpretative sign about the birds habitat.

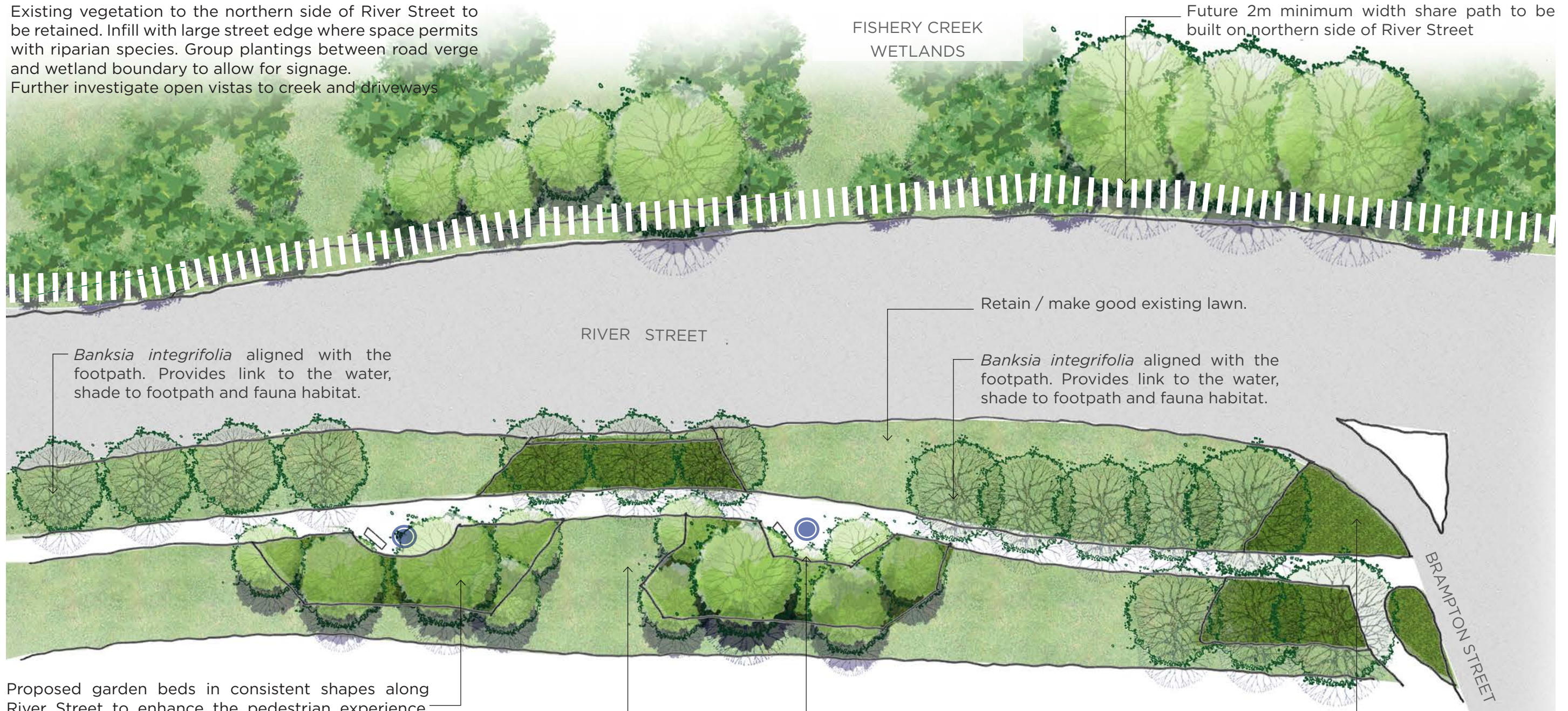
Cabbage-Tree Palms proposed as landmarks at pedestrian crossings blisters.

Low groundcovers (maximum mature height 400 mm).





Existing vegetation to the northern side of River Street to be retained. Infill with large street edge where space permits with riparian species. Group plantings between road verge and wetland boundary to allow for signage.  
Further investigate open vistas to creek and driveways



Proposed garden beds in consistent shapes along River Street to enhance the pedestrian experience, screen and provide shade to the footpath. Existing vegetation that is established and performing well will be retained to help provide a more instant canopy and appeal. Complementary infill planting will enhance and embellish the existing vegetation such as *Banksia integrifolia* and *Livistona australis*.

Retain / make good existing lawn.

*Banksia integrifolia* aligned with the footpath. Provides link to the water, shade to footpath and fauna habitat.

Small respite locations to support local businesses. Seating on concrete pads with Ballina (local bird) stenciled into the concrete for interest. Concrete pavers to match the existing River Street town precinct from earlier staged works.

Refer to materials pages for images.

Open lawn areas connect businesses to the streetscape and footpath. Maintenance access of 2.5m minimum lawn buffer for mowing and property fence line access.

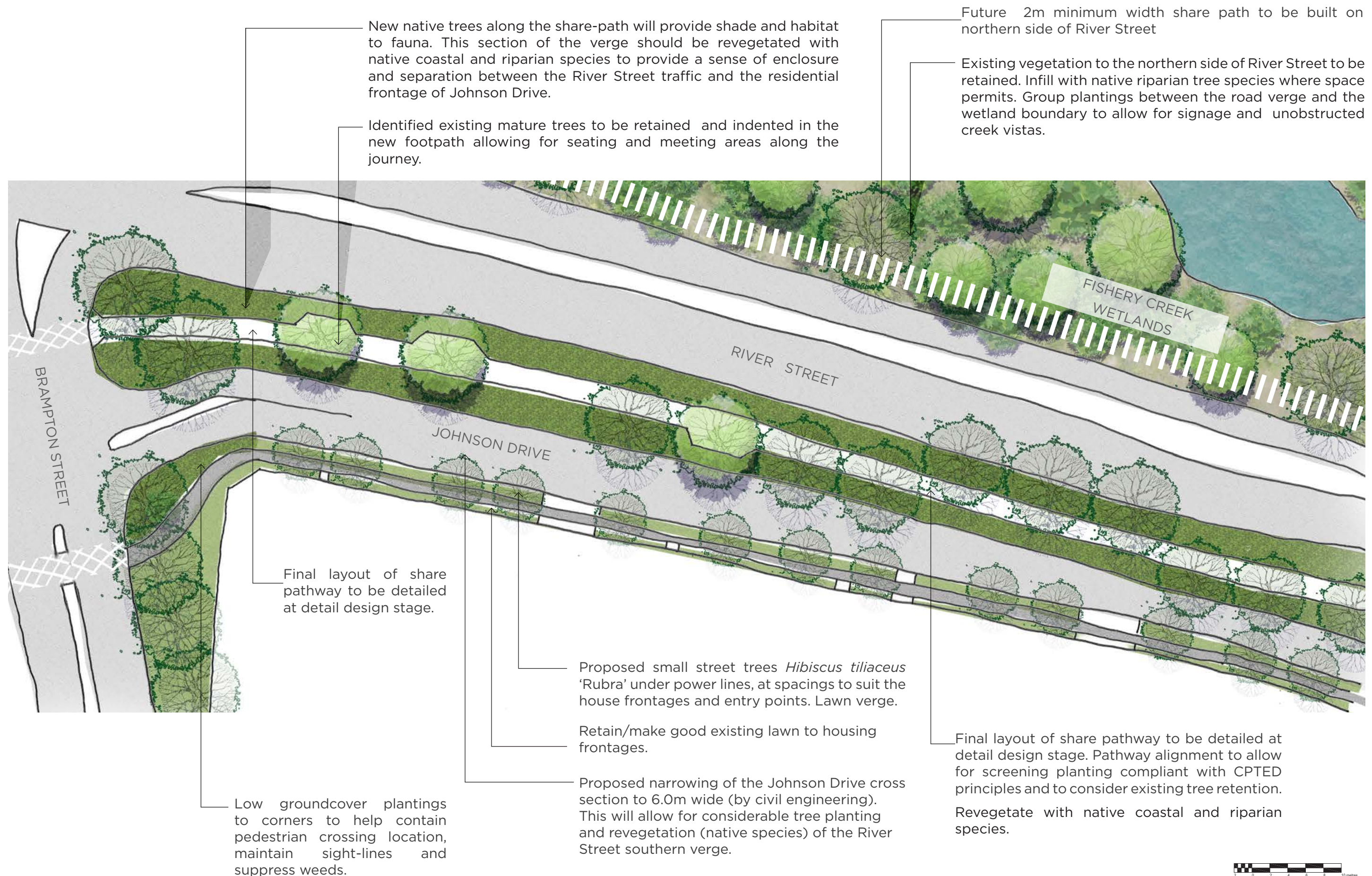
Low groundcover plantings to help contain pedestrian crossing location and maintain sight-lines. Proposed *Harpullia pendula* in corner garden beds. These trees can provide a high canopy to allow sight-lines.



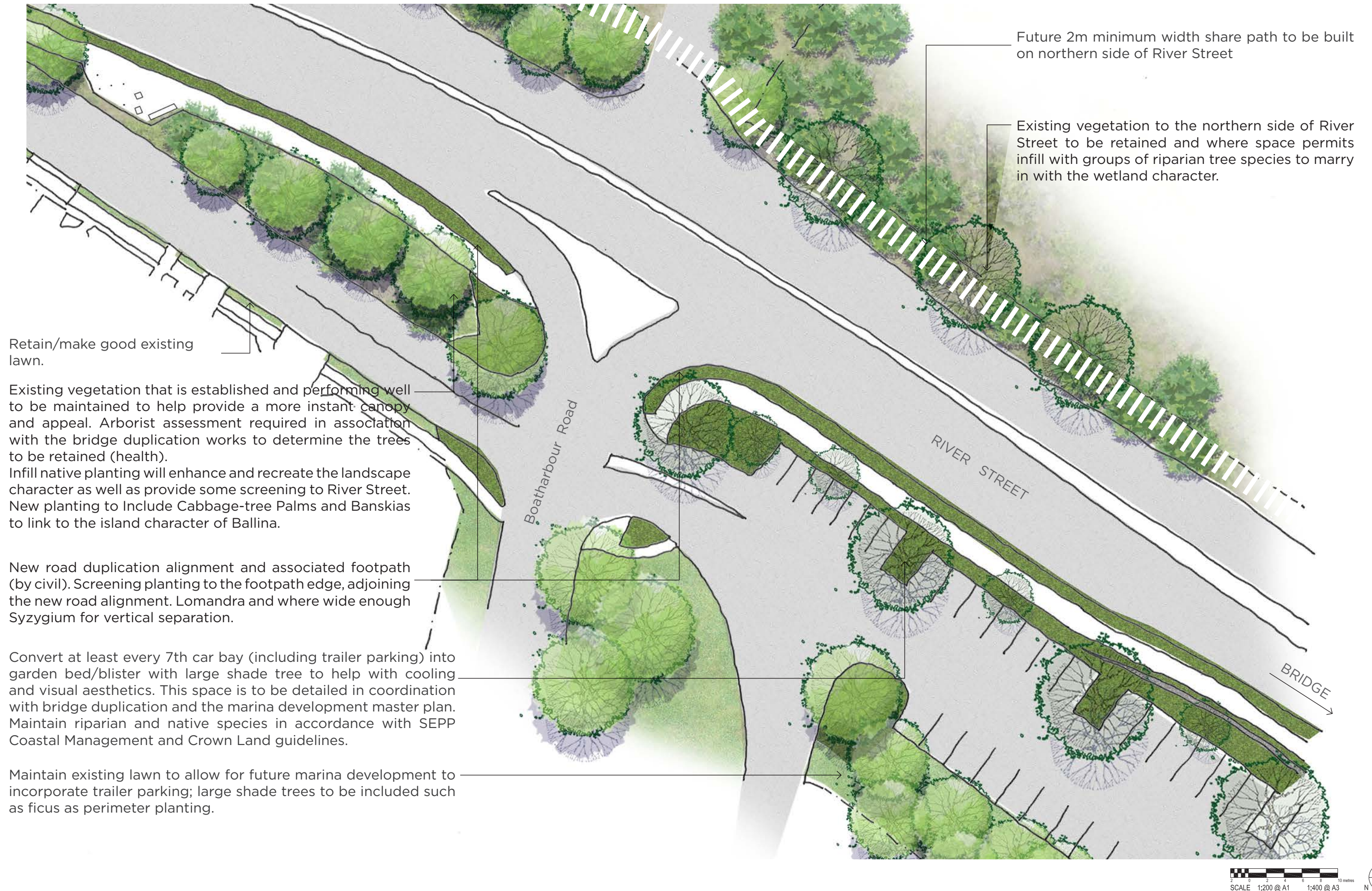
● Bird stencil (sand / water blasting application) over plain concrete.



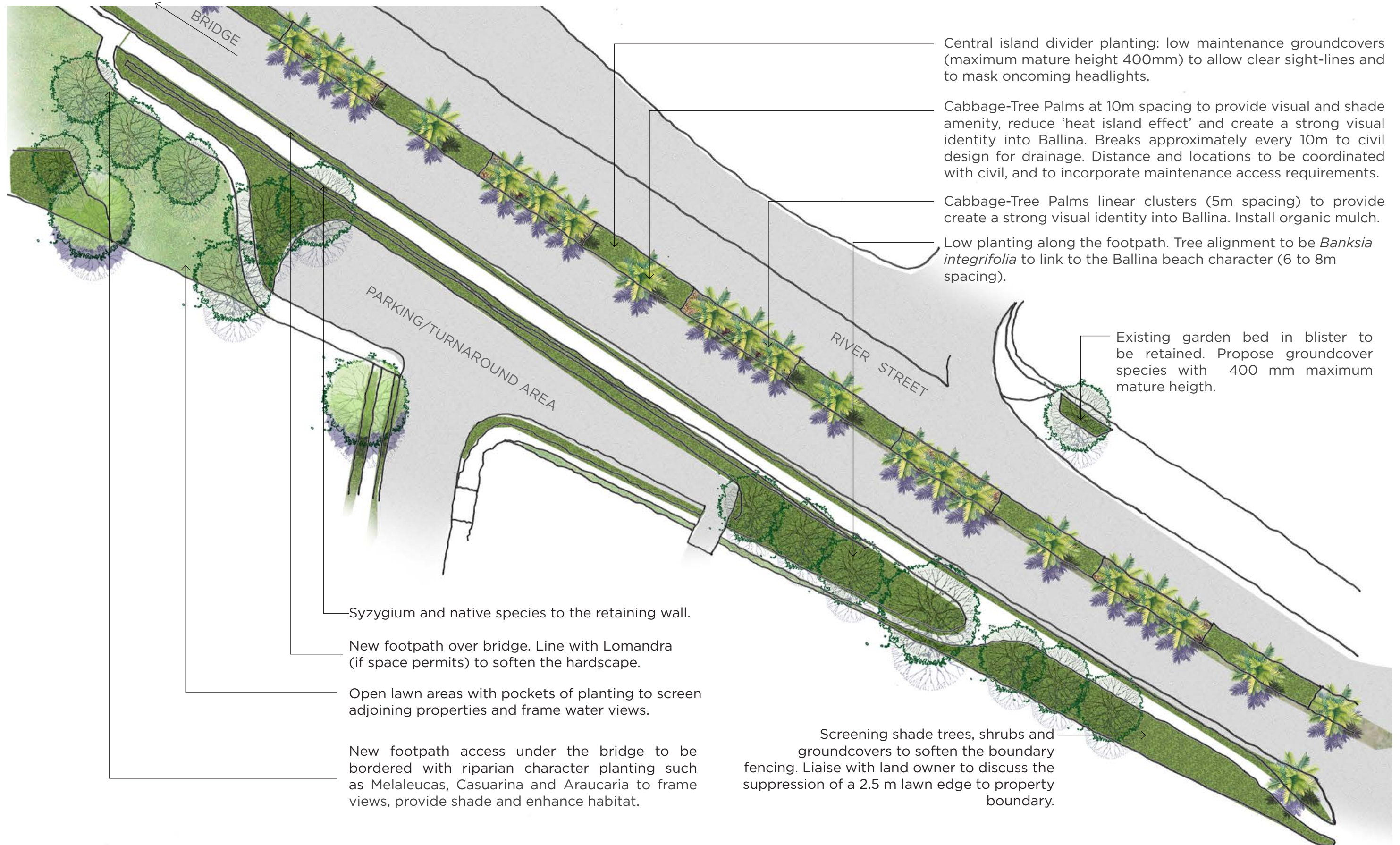










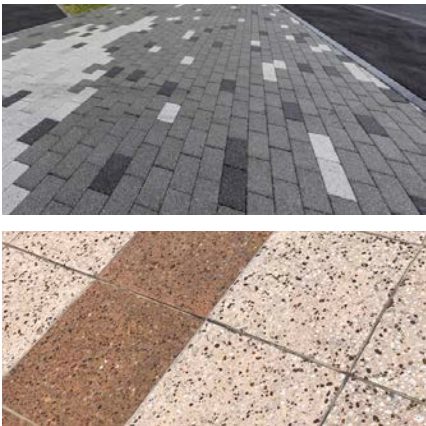




4.0 MATERIALS

Permeable paving (hydropave) for access through garden areas.

Plain concrete to be used for new footpaths and seating areas with feature paving bands that connect to the towns materials palette on River Street new landscaped areas. Exposed aggregate concrete pavers to match existing to be and to be used as borders and feature banding in strategic places. Refer to plans for locations.



Large bush rock to feature in strategic landscape areas to marry in with the local Ballina streetscape character.

Natural riverstone pebbles to landscape areas. Minimum 50mm to 75mm approx sizing to withstand weather elements and maintenance.

Seating to be consistent with the existing Ballina Shire Council streetscape furniture by Town and Park Furniture.



Bollards where required to be consistent with the existing Ballina Shire Council streetscape furniture.

Landmark 'Cascade' Drinking Fountain with dog bowl to be connected to town water supply. Colour: powder coated to match bollard colour (White).

Sculpture and entry statement: recommend engaging local artists (and local suppliers) to provide interactive installations to be installed temporarily or permanently in the pocket park. A concept brief to be developed by BSC based on the town's history and relation to river and waterways: fishnets, canoes, boats, trawlers, fishing crafts that could tie with the big prawn. Indicative example images only.



Bins to be consistent with the existing Ballina Shire Council streetscape bin enclosures.

The selection criteria for the River Street landscape materials include a robust low maintenance quality that will marry in with the local Ballina streetscape character.

CHARACTER IMAGES - material connections to the existing River Street precinct



## DESIGN SOLUTIONS

Key nodes along River Street have been identified for special treatments. These include cost effective solutions that are able to be developed over time to create experiences and link with the existing Ballina town character. Feature pavements, sculptures, artwork, bespoke street furniture and planting were considered.

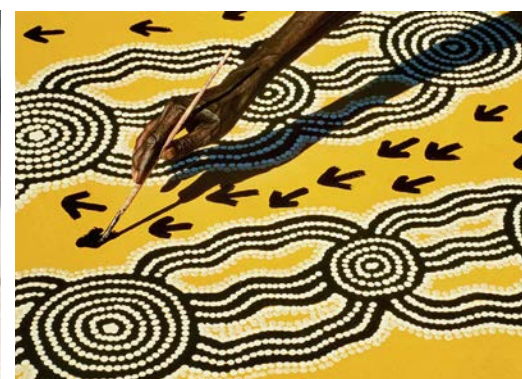
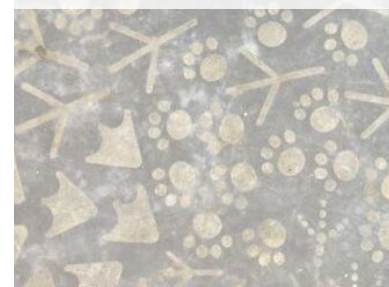


Drift net pattern over pedestrian crossing points



Green and blue for visual links to the water and vegetation

Bird and ocean fauna footprint in concrete



### FEATURE GROUND TREATMENTS

Bespoke treatments will be utilised in the high traffic precinct areas and pedestrian crossings, including natural materials (riverbed stones and bush rock) or hardscape solutions that reinforce Ballina's existing character.

Stenciled concrete (sand/water blasting application) along the River Street pedestrian pathways (i.e. paw prints and aboriginal design on concrete seating). This stenciling installation would create a connection between the proposed landscape and its surrounds, providing a local identity to the newly designed space which could also have a passive educational value for the community.

Simple stencils can be applied to bitumen surfaces to enhance awareness and increase safety around pedestrian road crossings. This can provide pops of colour, layers and telling story patterns that aid way-finding and characterise part of Ballina's history by the water.

Additionally there is an opportunity for local artists to showcase their work on a large scale in strategic locations. This could be incorporated with the sculpture/entry statement works and can create changing experiences within a consistent character



5.0 PLANTING PALETTE

This planting palette serves as a guide to the types of plants utilised across the Master plan site. Further development of character will be developed during detail design documentation. The existing works along River Street that have been completed, their success and shortfalls, have also helped inform this list.

TREES

A native mix of tree species have been selected to provide a striking visual connection between the area’s character and its natural surrounds. These trees will provide both shade and colour along the Ballina entry road of River Street and will become significant identifiers.



**Livistona australis**  
*Cabbage Tree Palm*



**Ficus obliqua**  
*Small-leaved Fig*



**Araucaria cunninghamii**  
*Hoop Pine*



**Casuarina glauca**  
*Swamp She-oak*



**Backhousia citriodora**  
*Lemon-scented Myrtle*



**Melaleuca leucadendra**  
*Weeping Paperbark*



**Melaleuca quinquenervia**  
*Broad-leaved paperbark*



**Tristaniopsis laurina**  
*Water gum*



**Cupaniopsis anacardioides**  
*Tuckeroo*



**Harpullia pendula**  
*Tulipwood*



**Elaeocarpus eumundi**  
*Eumundii Ash*



**Banksia integrifolia**  
*Coast Banksia*



**Callistemon salignus**  
*White Bottlebrush*



**Hibiscus tiliaceus 'Rubra'**  
*Bronze Cotton Wood*  
Not to be used as street tree



## SHRUBS



**Syzygium Australe 'Resilience'**  
*Lilly Pilly*



**Syzygium luehmannii 'Tiny Trev'**  
*Tiny Trev*



**Pittosporum tobira wheeler dwarf**  
*Wheeler dwarf*



**Banksia spinulosa**  
*Hairpin Banksia*



**Melaleuca thymifolia**  
*Thyme honey-Myrtle*



**Westringia fruticosa 'Naringa'**  
*Native Rosemary*

## GROUNDCOVERS



**Carpobrotus glaucescens**  
*Pig Face*



**Acacia howitii dwarf**  
*Sticky Wattle dwarf*



**Trachelospermum jasminoides**  
*Star Jasmine*



**Myoporum ellipticum**  
*Creeping Boobialla*



**Lomandra glauca Blue Ridge**  
*Lomandra Blue Ridge*



**Lomandra longifolia Breeze**  
*Dwarf Mat Rush*

