



#### PURPOSE OF THE REPORT

GHD and Urbis has been engaged by The City of Wagga Wagga Council to undertake the landscape and engineering works for Stage 2 of the Riverside Master Plan.

This design report has been prepared in collaboration with Council to inform and document the working concept for Stage 2.

The urban place analysis contained in this report outlines the context of the master plan, which is informed by previous studies, site visits and consultation with Council throughout the master planning process. It identifies the consolidated opportunities and challenges for the site and provides directions for the Riverside Stage 2 design. The design response for Stage 2 is underpinned by clear design objectives, strategies and themes already in place from the previous studies to ensure alignment with the vision for Riverside and the needs of the community.

Following the site visit a sketch concept was provided to Council that illustrate the design strategies along with precedent examples of parks in the Wagga Wagga locality and in previous Urbis designs to inform Council of the direction moving forward

This feedback was consolidated into a preferred illustrative concept plan which forms the design response in the latter section this document, from which feedback from the community is sought. Following this feedback, detailed technical studies will be undertaken by GHD to support and refine the design documentation for the Riverside Stage 2.

PROJECT TEAM:

Urbis | Landscape Master Plan

GHD | Engineering

Cover Page: Rockhampton Riverside by Urbis

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### **PROJECT TIMELINE**

The following timeline outlines the workin-progress project dates and meetings for Stage 2 Riverside Master Plan undertaken so far



## 1.0 BACKGROUND REVIEW

### 1.1 RIVERSIDE MASTER PLAN 2010

#### FIVE OBJECTIVES AND STRATEGIES FOR THE BEND PRECINCT



#### 1: RIVERSIDE REGENERATION

#### KEY OBJECTIVES OF THE MASTER PLAN The

- Enhancing the city's open space, landscape and recreation values through re-connection with the river;
- Building a more sustainable future through recovering important natural city - river linkages and environmental values; and
- Enhancing cultural, academic, heritage and aesthetic engagement afforded by re-connection of the city with the river. The Strategic Master Plan translates the strategies and actions identified in the Strategic Framework.

#### The Bend

The city's space and place of celebration. Bringing back the activities to the bend and the beach. This will be a place for festivals and celebrations as well as recreation and living on the riverside. New services in purpose built facilities will support the jazz festival and other celebrations. An extension of the escarpment on the edge of the church hill will create a city plaza overlooking the river and beach.

#### Specific Activities Suggested:

- Remove Caravan Park
- Upgrade Wagga Beach
- Grassed terraces and event space
- Bike and boat hire



#### 2: LANDSCAPE MANAGEMENT ZONES

#### The Bend as Urban Park

High/moderate use and management

- Natural nodes –Wagga Beach, the Rocks
- City common /unstructured active recreation areas
- BBQ and picnic facilities
- Multi-purpose play
- Re-vegetation to river corridor
- Managed water feature
- Irrigated grass (recycled water)
- Music /band areas
- Grassed terraces for large community events
- Viewing areas
- Car and bus parking adjacent
- Limit cycle ways through this high activity area



#### 3: LAND USE OPPORTUNITIES

#### Main Strategies relevant to The Bend Precinct

- Deliver a parking strategy that minimises the intrusion of vehicles into inappropriate places while allowing access to the Riverside for those who need it that meets current and future demands.
- Create destinations for social and cultural activities
- Create opportunities for passive recreational activities
- Create opportunities for active recreational activities
- Create a place for visitors
- Create a place for events
- Encourage people to move around Riverside

#### **Key Actions**

- Relocate Caravan Park
- Upgrade Wagga Beach
- Grassed Terraces & event space
- Multimedia wall
- Bike and boat hire
- New playground





#### Main Strategies relevant to The Bend Precinct

- Create landmarks and iconic built forms to improve the legibility of Riverside
- Take advantage of underutilised space to increase activity and housing choice
- Utilise the levee to accommodate undercroft or subbasement car parking

#### **Key Actions**

- Build a 'landmark' hotel on the Wagga Beach car park
- Build on the Wagga Beach car park adjacent the existing levee
- Ensure that the development on the Wagga Beach car park interacts directly with the levee top and utilises the level difference to incorporate semi-basement car parking



#### **5: MOVEMENT AND ACCESS OPPORTUNITIES**

#### Main Strategies relevant to The Bend Precinct

- Improve links, access and permeability to the riverside from the city and other adjacent places
- Create well used routes and circuits

#### **Key Actions**

- Improve pedestrian connectivity across streets adjacent
- Introduce pedestrian access to the top of the levee in high visibility locations such as at the end of the streets which intersect with it.
- Open the levee bank at key points to give views of the river and / or access to the riverside
- Create flexible circuits of various lengths for walkers, cyclists and horse riders of all abilities that link attractions in the city and on the riverside
- Create new paths along the eastern side of the river that in conjunction with new and improved crossings will create loops of various lengths
- Enable continuous access along the levee for its entire length

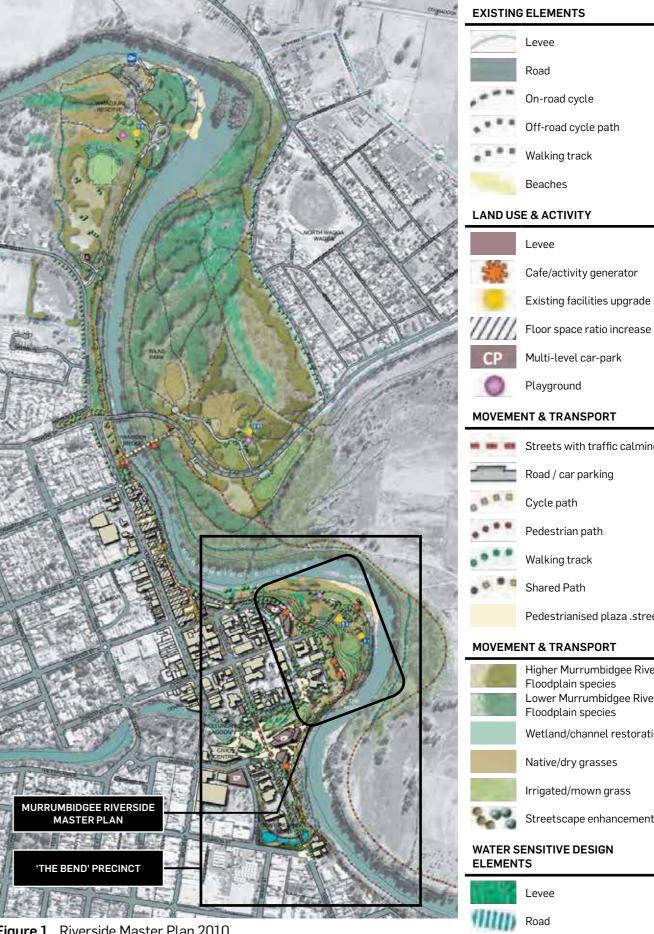


Figure 1 Riverside Master Plan 2010

(Source: Riverside Wagga Wagga Strategic Master Plan, May 2010)



On-road cycle

Off-road cycle path

Walking track

Beaches

#### **LAND USE & ACTIVITY**

Levee

Cafe/activity generator

#### **MOVEMENT & TRANSPORT**

Streets with traffic calming

Road / car parking Cycle path

Pedestrian path

Walking track

Pedestrianised plaza .street

#### **MOVEMENT & TRANSPORT**

Higher Murrumbidgee River Floodplain species Lower Murrumbidgee River

> Floodplain species Wetland/channel restoration

Native/dry grasses

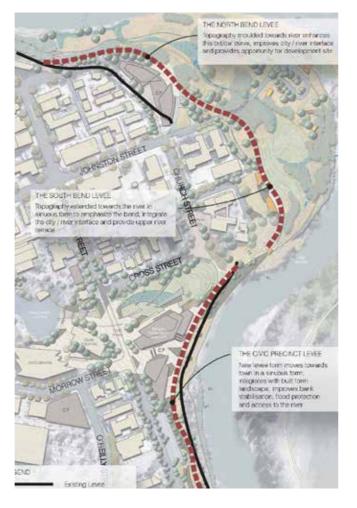
Irrigated/mown grass

Streetscape enhancement

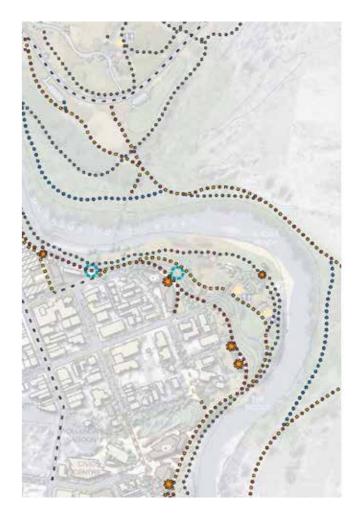
#### WATER SENSITIVE DESIGN

### **FOUR DESIGN THEMES**









#### **GREEN FINGERS**

Reinforce the riverside presence into the urban zones and compliment the environmental objectives

#### INTEGRATED LEVEE

Reshape the levee to visually blend it with the natural and built setting

#### **REINTERPRETING WATERWAYS**

Visually reinforce natural ecological patterns as part of the unique riverine setting

#### **PEARLS ON A STRING**

Enhance connectivity, diversity of uses and nodes to create a continuous network of places and spaces based on the Movement and Access Strategy and Land Use/Built Form Strategy

(Source: Riverside Wagga Wagga Strategic Master Plan, May 2010)

### THE BEND PRECINCT MASTER PLAN

## ROLES & FUNCTIONS OF THE BEND PRECINCT WITHIN RIVERSIDE WAGGA WAGGA

Then Bend Precinct comprise significant areas such as the Civic Precinct and Wagga Beach which is a key connection to the river from the city.

This precinct also includes the church precinct situated on a prominent granite knoll with the Murrumbidgee River 'bending' around it. The vertical spires of the tight cluster of churches in this area add character to the cityscape and is a visually important feature within Wagga Wagga.

The Civic Centre is located towards the southern end of the precinct and interfaces Wollundry Lagoon, Baylis Street and Fitzmaurice Street. A large car park dominates the visual setting east of the centre creating a separation from the riverscape.

In summary, the Bend Precinct:

- Is a significant interface between city-centre and the river
- Has historical significance such as Wagga Beach the Church Precinct
- Is a key focal point with access to river
- Includes great spaces and places such as the Church Precinct, the Civic Centre and Wollundry Lagoon.

OBJECTIVE	STRATEGY	D	DESIGN PRINCIPLES
IMPROVE THE IDENTITY AND ATTRACTIVENESS OF THE CITY CENTRE	Exploit vistas to key landmarks		Retain/ create open space corridors that allow significant vistas to be retained Improve and protect views of the churches on the peninsula
	Allow the Master Plan to integrate the various precincts into a cohesive urban fabric	•	Reinforce site specific attributes between precincts Link Church Precinct with the Civic Centre/ City Centre through open space and vistas
	Create Civic and Community Spaces	•	Introduce and formalise areas of assembly Introduce plaza type spaces
	Spatially and visually integrate the Wollundry Lagoon with the riverside	•	Introduce water elements (ephemeral or fixed) where possible; or as a minimum, planting to reflect riverine species to visually extend the lagoon towards the river
	De-emphasise local roads and streets and emphasise alternative models of transport such as walking	•	Reduce width of streets Introduce blisters at key locations Introduce raised thresholds in key areas
IMPROVE THE LEGIBILITY AND WAY FINDING WITHIN THE CITY CENTRE	Visually reinforce key streetscapes along desire lines	•	Introduce landscape and streetscape strategies and de-emphasise the vehicular environment
	Make Tarcutta Street appear as a destination at the interface with the Major Community Facility	•	Introduce a raised threshold of considerable length to create a pedestrian oriented space
IMPROVE RELATIONSHIP BETWEEN CITY AND RIVERSIDE	De-emphasise levee as a built barrier	•	Integrate levee with the built form to visually interrupt its continuity Meander the alignment of the levee to create a softer appearance
IMPROVE THE QUALITY OF THE MICRO- ENVIRONMENT WITHIN THE CITY CENTRE	Exploit the natural beauty of the site	•	Re-instate wetlands where appropriate Introduce WSUD measures that beautify streetscapes and improve legibility
	Reduce or slow down traffic along Tarcutta Street to improve noise ambiance	•	Introduce raised thresholds Reduce the apparent width of the street
	Reduce flooding risks	•	Identify opportunities that allow for potential future controlled flooding
IMPROVE THE QUALITY OF THE RIVER AND ITS SURROUNDING ENVIRONS TO ENCOURAGE FLORA AND FAUNA ETC.	Reduce steepness of batters to minimise erosion	•	Introduce retaining walls to reduce the height of fill Investigate moving levee to improve slopes, and introduce indigenous planting to river banks
	Introduce native species and eliminate exotics in a staged process	•	Reinforce indigenous plant species Remove unhealthy exotic trees; retain culturally significant
INTRODUCE SUSTAINABLE INITIATIVES	Promote a greener environment	•	Introduce development controls that include rooftop gardens and green roofs
	Reduce carbon footprints	•	Promote community and market gardens
	Promote pilot projects	•	Work with Charles Sturt University to determine appropriate research and education facilities for Riverside - in particular WSUD potential
	Introduce pedestrian oriented strategies		Create plaza type spaces with raised threshold
	Introduce WSUD		Streetscape enhancements to minimise stormwater run-off Convert piped drainage to above ground visible swales/ drainage where feasible to increase legibility of drainage systems

#### 'THE BEND' PRECINCT SUMMARY

#### **EXISTING CONDITIONS**

The master plan recognised an opportunity to spatially redefine the area between Wollundry Lagoon and the Riverside, as well as improving the key landforms feature - the "bend" of the river, i.e. in the area around the existing caravan park and the beach.

The links between the city and the river are poor mainly as a result of the levee, land uses and

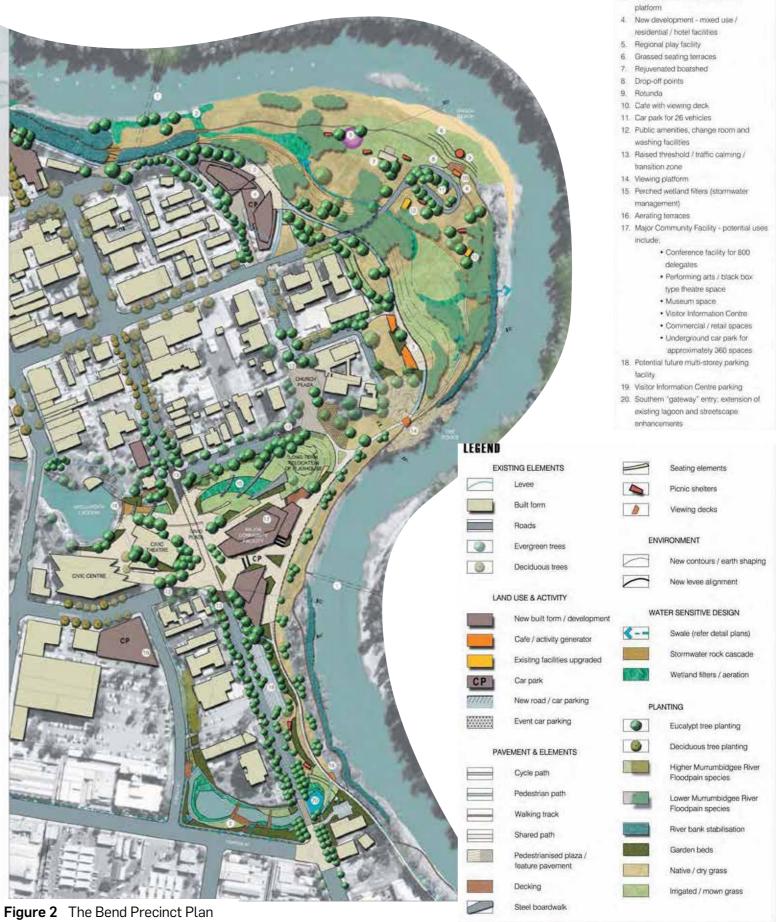
The visual and spatial analysis has been evaluated with a focus on the interrelationship between the Civic Centre, Wollundry Lagoon, the Church Precinct and the riverside.

#### **KEY OPPORTUNITIES**

- Create a 'Church Plaza' on Church Street
- Accentuate the hill as green spaced and limit vehicular traffic
- Large terraced grass space towards the river
- Mould topography to integrate the interface between the river and CBD
- Relocate the Playhouse theatre to open up key river interface -raise area to make the levee disappear
- Opportunity to create central focus of civic precinct and link to river

#### **CONSTRAINTS & CHALLENGES**

- Lack of vistas and view corridors towards key landmarks such as the church spires
- Lack of cohesive structure of built form to assist in orientation and city structure;
- Visual discontinuity between open spaces
- Lack of visual interaction between city centre and riverside. This is particularly exacerbated by the existing levee;
- Poor integration of the levee into the urban form and topography/landscape;
- Buildings and land uses block vistas and views such as caravan park Playhouse etc.;
- Disparate land uses discourage a legible structure and way finding; and
- Wide roads emphasise vehicular traffic and create the appearance of a harsh environment.



enhancement 3. Public plaza type space / viewing

(Source: Riverside Wagga Wagga Strategic Master Plan, May 2010)

### 1.2 MURRUMBIDGEE RIVERSIDE MASTER PLAN

The Murrumbidgee Riverside Master Plan was designed in 2012 by Somewhere Landscape Architects.

Construction of Stage 1 works began in 2014 and comprised of upgraded footpaths to improve connectivity over the site, a section of boardwalk, and additional BBQ areas.



### **REVIEW EXISTING CONCEPTS**

#### **STAGE 1 ELEMENTS**

#### LEGEND

1 Upgrade/ formalise existing car park 3 Re-vegetate area

Shared sealed path to encourage connectivity throughout the site

5 Existing building. Future use to be determined

7 Proposed drop-off zone

Youth area. Utilise the already flat and hard surface of the existing road by including facilities that explore the benefits of sports and socialising

9 Retain playground

Community cooking and seating areas. Contains 10 curved low rock wall with in built seats, shade structure and cooking facilities.

Existing toilets and canoe storage

12 Existing shed. Future use to be determined

Central cooking space which include BBQ, long 13 stainless steel benches for food preparation and some seating.

15 Existing Phragamites to be removed to keep site lines open

Boardwalk segments for pedestrian use only (Stage 2). Provide decomposed granite path in the interim

Open informal grass space

Existing steep slope reshaped and reformed to create seating space/ amphitheatre environment

26) The 'Rocks' area to include interpretive signage and informal seating Sculptural elements declare the presence of the

Re-vegetate stormwater outlets as rock cascades

Caravan park boundary

29 Natural playground

**BUILT ONGOING** NOT CONSTRUCTED 24 NOT CONSTRUCTED **ONGOING** COMPLETED Figure 4 Murrumbidgee Riverside Master Plan by Somewhere Landscape Architects -Stage 1

BUILT

**BUILT** 

**BUILT** 

#### **STAGE 2 ELEMENTS**

#### **LEGEND**

16

2	Site of Future Development
4	Shared sealed path to encourage connectivity throughout the site
5	Existing building. Future use to be determined
6	Future additional parking
10	Community cooking and seating areas. Contains curved low rock wall with in built seats, shade structure and cooking facilities.
14	Existing services
	Pop up shop precinct. Containers to be sited on existing powered caravan sites for access to pow

existing powered caravan sites for access to power and water. Containers to be located on a wide generous deck to provide access from both the river and the car park with views out across the site. Include shade and seating along deck to achieve a boardwalk feel to the site.

Existing amenities to be upgraded

Low rock wall with recycled granite blocks to gain access down to the river

Possible area for the new Wagga 'Whizz' water park.
Include sculptural elements that provide seasonal
water play possibilities

21 Preferred location for regional playground facility

Road reused as bicycle path

Area to be re-vegetated as parkland space that enhances the riparian setting and extends the habitat

enhances the riparian setting and extends the habita potential across the site

Open informal grass space

Sculptural elements declare the presence of the river

Re-vegetate stormwater outlets as rock cascades

(29) Caravan park boundary

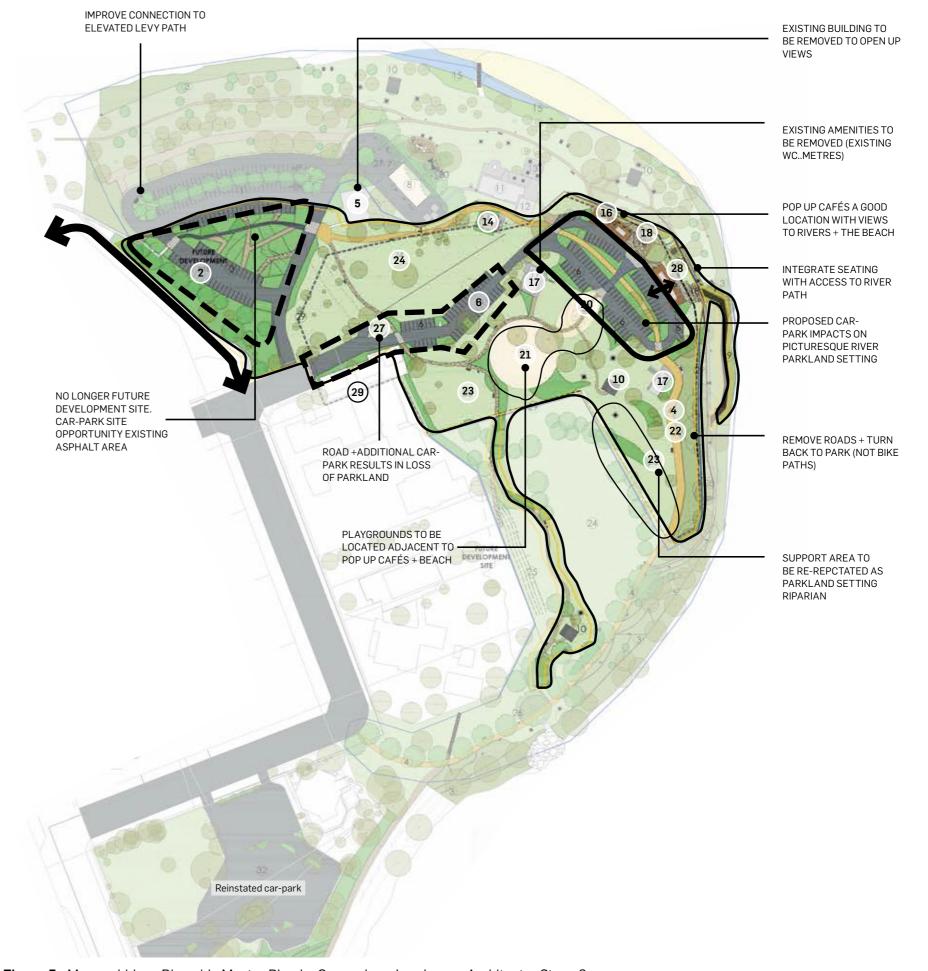


Figure 5 Murrumbidgee Riverside Master Plan by Somewhere Landscape Architects - Stage 2

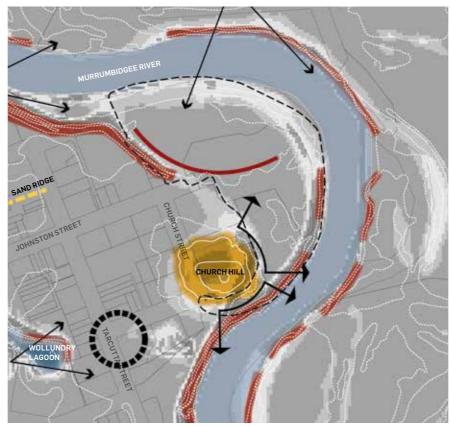
#### 1.3 **CONTEXTUAL SNAPSHOT**

#### 1.3.1 **URBAN CONTEXT ANALYSIS**

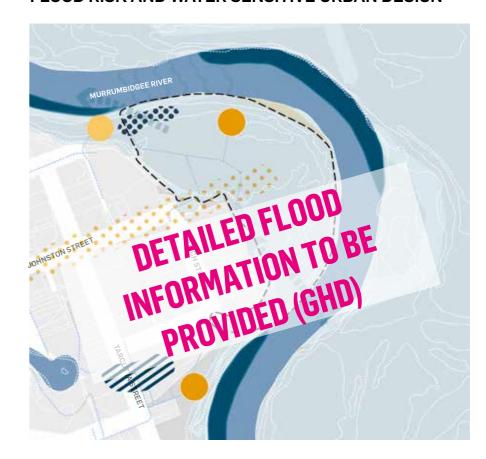
#### **EXISTING LAND ZONING**



#### **LANDFORMS & TOPOGRAPHY**



#### FLOOD RISK AND WATER SENSITIVE URBAN DESIGN



#### LEGEND

Riverside Landscape (Study Area) **B3** Commercial Core

R3 Medium Density Residential

**RE1** Public Recreation

**RU1** Primary Production

E2 Environmental Conservation

SP1 Special Activities

SP2 Infrastructure

#### LEGEND Riverside Landscape (Study Area) Significant views Panoramic views Opportunity to create a Entrance Space **Prominent Landforms** Primary Ridgeline **Enclosing Slopes/Spaces** Steep Banks Sunken Depression

#### LEGEND

Riverside Landscape (Study Area)

Stormwater cascade/ bank erosion

Existing stormwater pipes

Clean stormwater prior to release to river/lagoon



Evaluate opportunity for Infiltration



Opportunity for ephemeral wetland



Opportunities for streetscape WSUD initiatives: swales / biofilters

Overbank flood flows



Beach



Existing water systems

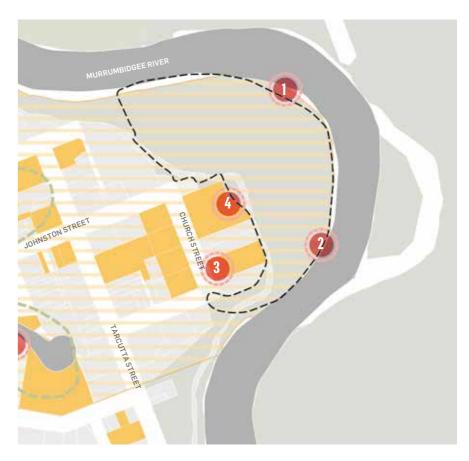
#### **BIODIVERSITY**



#### **BUSHFIRE PRONE LAND**



#### **CULTURAL & HERITAGE**



#### LEGEND



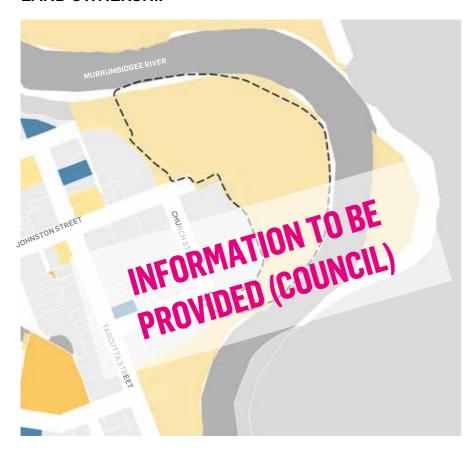
#### LEGEND

11	Riverside Landscape (Study Area)
	Existing Water System
	Existing Open Space
	Buffer
	High Risk Area

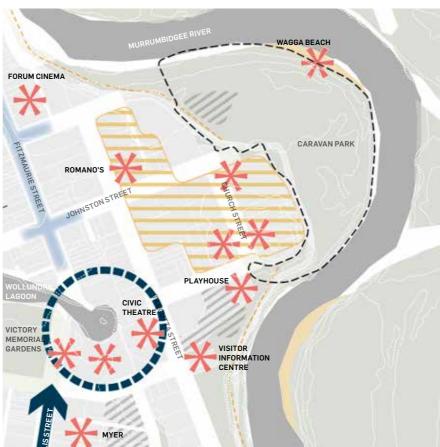
#### LEGEND

	Riverside Landscape (Study Area)	
1	Local Story Places: The Beach	
2	Local Story Places: The Rocks	
3	Local Story Places: Church Hill	
4	Local Story Places: Convent	

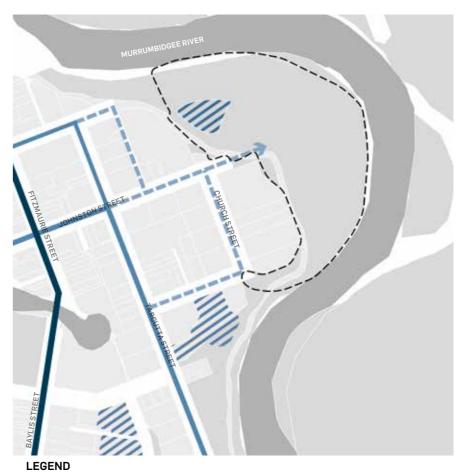
#### **LAND OWNERSHIP**



#### **ACTIVITY GENERATORS**



#### **VEHICULAR MOVEMENT AND PARKING**







#### LEGEND



Beach

Riverside Landscape (Study Area)



Roundabout



Main Retail & Commercial Street



Secondary Street Access



Existing Car Parking Areas



Existing Open Space



**Existing Water System** 

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#### 1.3.2 SITE VISIT & PHOTOGRAPHIC AUDIT

The following site and context photos were taken at the site visit held on 29th November 2018 which was attended by Council, GHD and Urbis.

It comprises internal site photos, context photos as well as observations of local park examples recommended by Council.









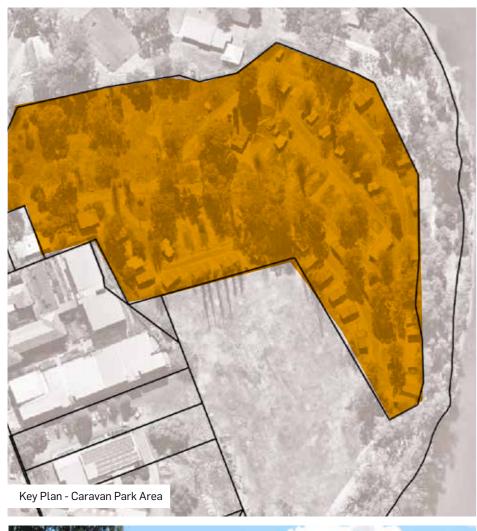
















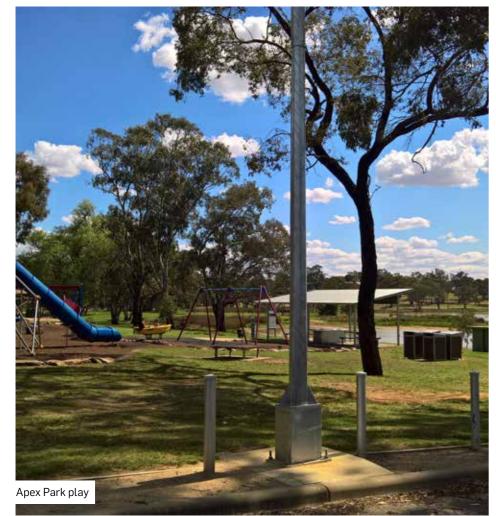








#### 1.3.3 LOCAL PARK PRECEDENTS





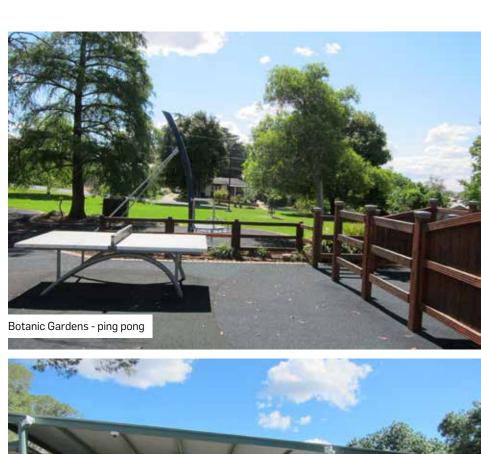






























#### RIVERSIDE - HISTORY





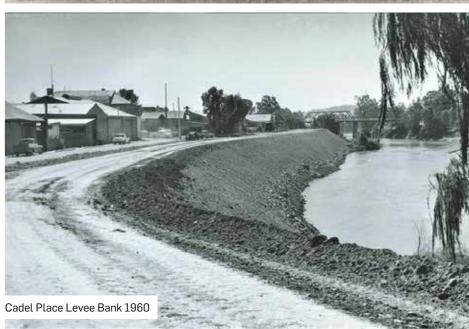




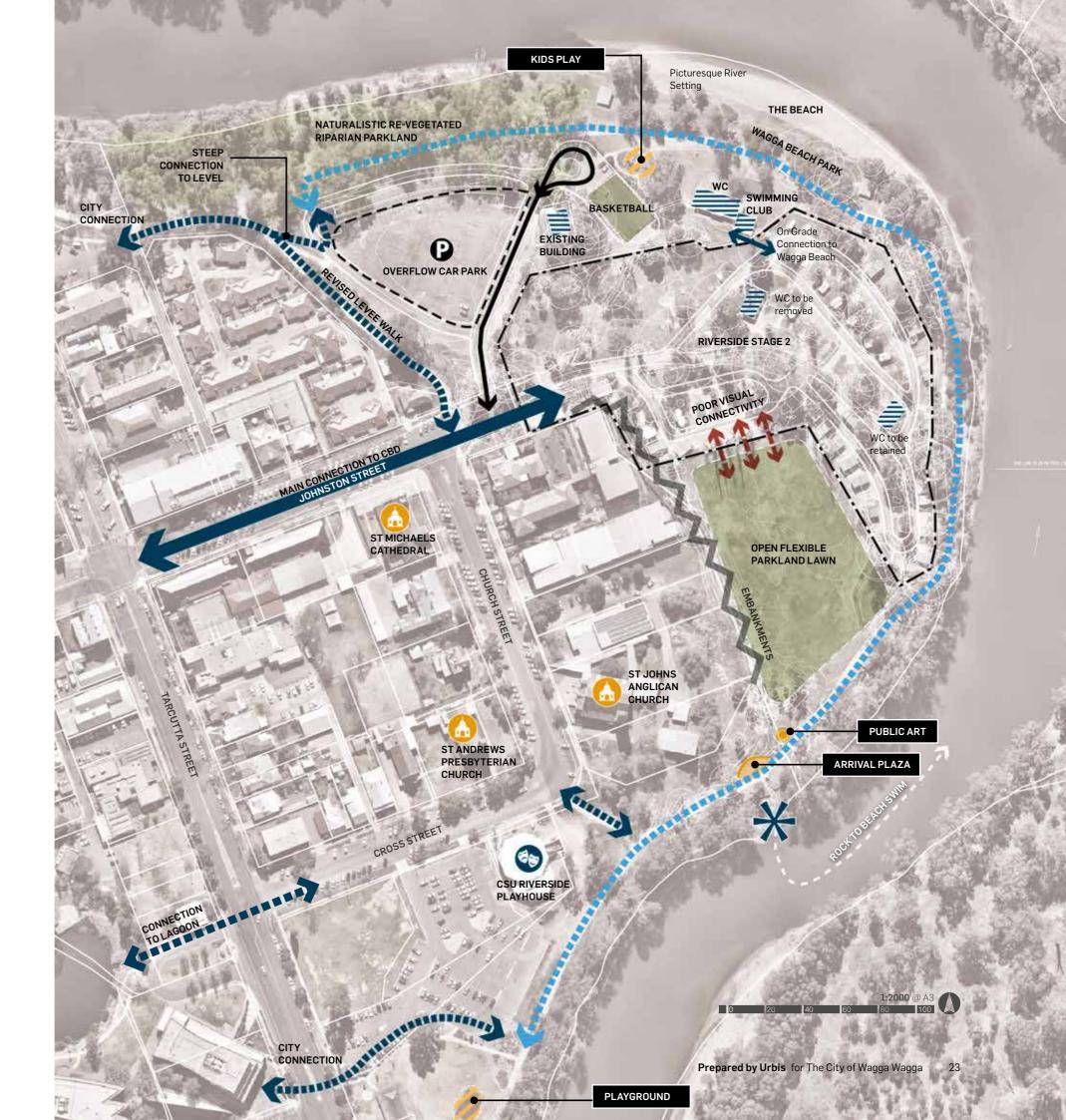








### 1.4 SITE ANALYSIS



## 2.0 DESIGN RESPONSE

### 2.1 RETURN BRIEF

An iconic recreation & cultural destination

Reinforce the relationship between the Murrumbidgee River & the City

Activate & Attract visitation

Event ready, base line infrastructure for events. Capacity for multi-use

Improve public realm & City liveability

#### 2.2 **PLACE MAKING ELEMENTS**



### 2.3 DESIGN STRATEGY



### CELEBRATE THE LOCAL HERITAGE



# RESPOND TO THE RIVERSIDE PARK AS A MAJOR CIVIC PLACE



#### PROVIDE OPPORTUNITY FOR A RANGE OF:

Cultural

Recreational

Social & leisure

Environmental events & activities to take place









### 2.4 DESIGN THEMES

GENERATE A MONUMENTAL SENSE OF 'PLACE'

CREATE A DESTINATION WHICH BEFITS THE ICONIC LOCATION & HISTORY WITH WAGGA WAGGA

BE OPTIMISTIC AND PLAYFUL WITH DISTINCT LANDSCAPE THEMES

FACILITATE OPPORTUNITIES FOR PASSIVE, ACTIVE, PROGRAMMED AND UN-PROGRAMMED ACTIVITIES

CONNECT THE PARK TO THE CITY AND BE ACCESSIBLE TO ALL.











### 2.5 SKETCH CONCEPT PLAN



# 2.6 ILLUSTRATIVE CONCEPT PLAN



# 2.7 ACCESS & CIRCULATION

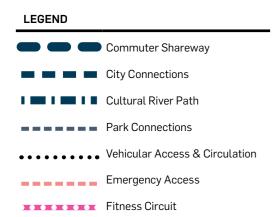
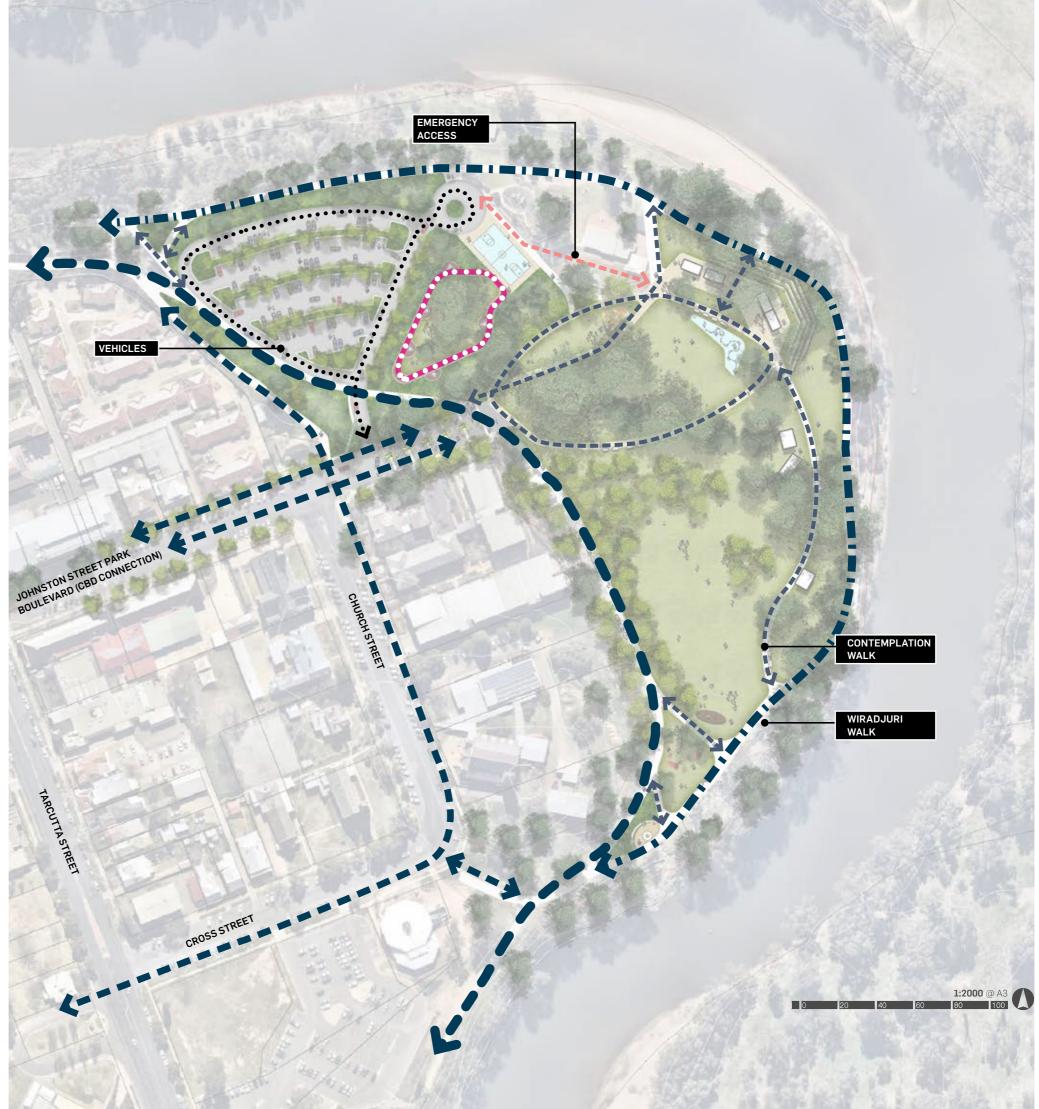


Figure 7 Access & Movement Principles



### 2.8 **DESTINATIONS**



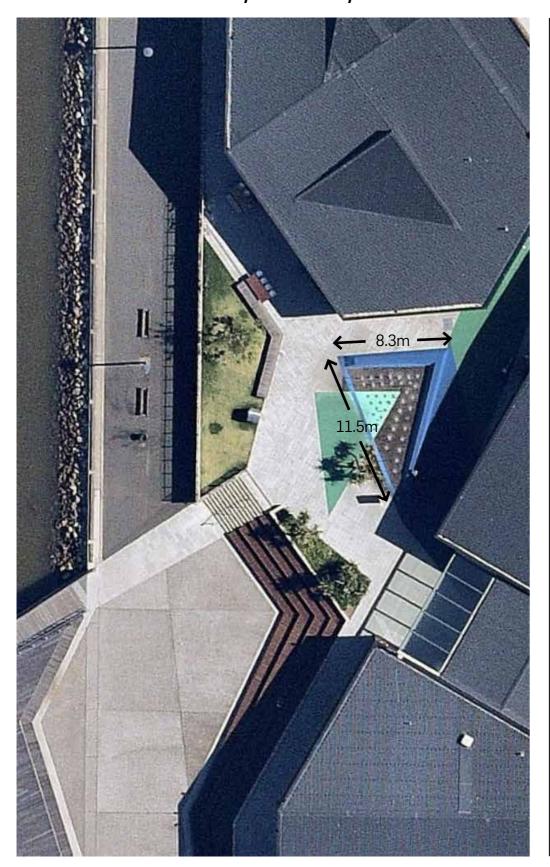
Figure 8 Destinations

### 2.9 PROGRAMS



Figure 9 Programs

# 2.10 PROJECT EXAMPLES RHODES COMMUNITY PRECINCT, RHODES, NSW



Interactive Water Play, activates Community Hub plaza on the edge of Homebush Bay. Combines public art overlay (softfall surface finish) with pop-up jets and mist.

**Design:** Urbis with Indigenous Artist Brook Andrews and Techno Water Designs **Cost:** \$500,000 (pop-up jet slash pad from \$250,000)



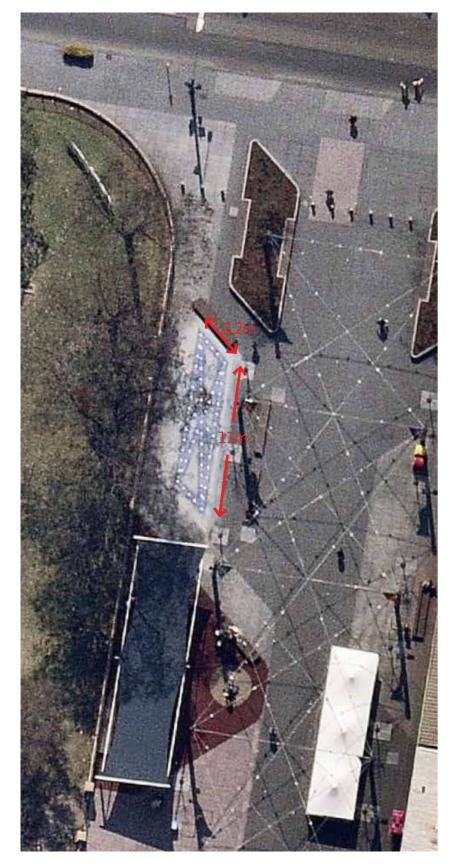


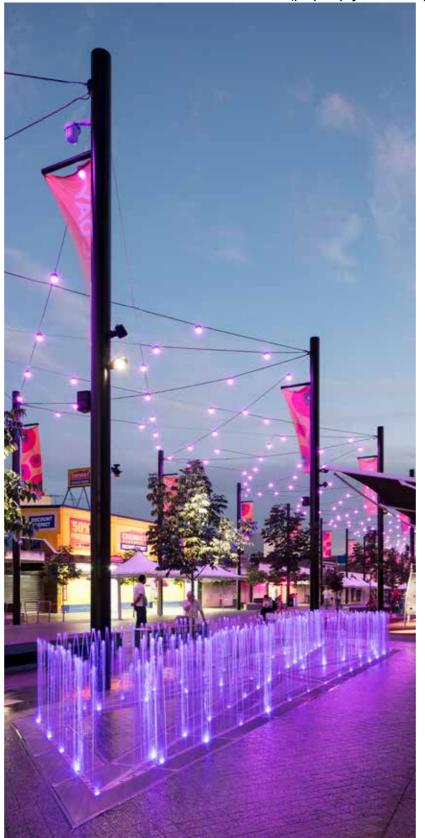
## Interactive Water Play, activates arrival plaza to the recently refurbished MACQUARIE Street Mall. Adjacent to play space including table tennis tables and chess tables.

### MACQUARIE STREET MALL, LIVERPOOL, NSW

**Design:** Urbis with Techno Water Designs

Cost: \$500,000 (pop-up jet slash pad from \$250,000)









### **BIGGE PARK, LIVERPOOL, NSW**

#### Proprietary Waterplay within the revitalised Bigge Park.

**Design:** Urbis with Parkequip

**Cost:** \$550,000







### Interactive Water Play and Waterfall. Central feature along the recently revitalised Rockhampton waterfront

Design: Urbis

Cost: \$1.1million pop-up jets \$100,000 for digital waterwall









#### Integrated water play superstructure and play elements

**Design:** Urbis with Play By Design

**Cost:** Play \$145,000, Water jets/mist not installed. Between \$150,000 (connected to mains water) to \$500,000 (for fully reticulated system).

# ONE THE WATERFRONT, WENTWORTH POINT, NSW







### 2.11 CAPACITY STUDY

#### SMALL EVENT GREEN: 997M<sup>2</sup>

EVENT EXAMPLE	SPACE	CAPACITY
Outdoor Cinema / Cultural Events	1 person/m²	997
Food & Wine Festival	2 people/m²	1,994
Concert / ANZAC day	2-3 people/m²	2,991
Outdoor Exercise / Picnic	1 person/2m²	498

#### CENTRAL LAWN: 4,640M<sup>2</sup>

EVENT EXAMPLE	SPACE	CAPACITY
Outdoor Cinema / Cultural Events	1 person/m²	4,640
Food & Wine Festival	2 people/m²	9,280
Concert / ANZAC day	2-3 people/m²	13,920
Outdoor Exercise / Picnic	1 person/2m²	2,320

#### XL EVENT: 5,850M<sup>2</sup>

EVENT EXAMPLE	SPACE	CAPACITY
Outdoor Cinema / Cultural Events	1 person/m²	5,850
Food & Wine Festival	2 people/m²	11,700
Concert / ANZAC day	2-3 people/m²	17,550
Outdoor Exercise / Picnic	1 person/2m²	2,925



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