## PLANNING CONTEXT

### Hassell

#### **STATE PLANNING STRATEGY**

The State Planning Strategy is the lead strategic planning document within Government. It highlights principles, strategic goals and strategic directions that are important to the landuse planning and development of Western Australia.

Six principles underpin the plan: Community: enable diverse, affordable, accessible and safe communities

**Economy:** facilitate trade, investment, innovation, employment and community betterment

**Environment: conserve the** State's natural assets through sustainable development

Infrastructure: ensure infrastructure supports development

Regional development: build the

competitive and collaborative advantages of the regions Governance: build community confidence in development processes and practices

**Key implications for Kununurra:** Kununurra identified as a regional centre within the 'northern sector', comprising the Kimberley and Pilbara

Agriculture and resource projects will continue to drive growth across the region

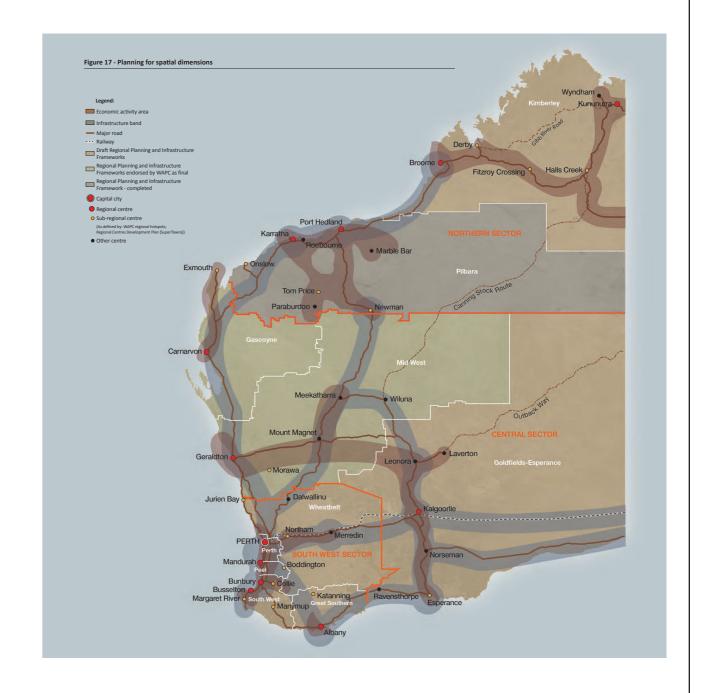
The Kimberley's unique natural environment is a driver for tourism

Securing, attracting and retaining people and businesses is a key challenge - town settings as liveable and attractive places is therefore important The Ord-East Kimberley

expansion project will support

Kununurra in being a vibrant, major regional centre

**Embracing and celebrating** Aboriginal culture and the positive aspects of Kimberley-life help to inform Kununurra's sense of place



#### KIMBERLEY REGIONAL PLANNING AND INFRASTRUCTURE FRAMEWORK

The Kimberley Regional Planning | tourism projects and Infrastructure Framework (2015) has been prepared to identify regional infrastructure projects for a stronger, more robust economy and community betterment. The Framework identifies a range of strategic initiatives to help achieve comprehensive regional planning whilst having due regard to the region's natural environment, history and culture.

**Key implications for Kununurra:** Kununurra recognised as a regional centre

The Ord Irrigation Scheme, including its expansion, will continue to drive growth for the **East Kimberley region** 

Kununurra will continue to function as a service centre for existing and future resource and **High construction costs** relative to house prices have implications for attracting and

retaining permanent resident

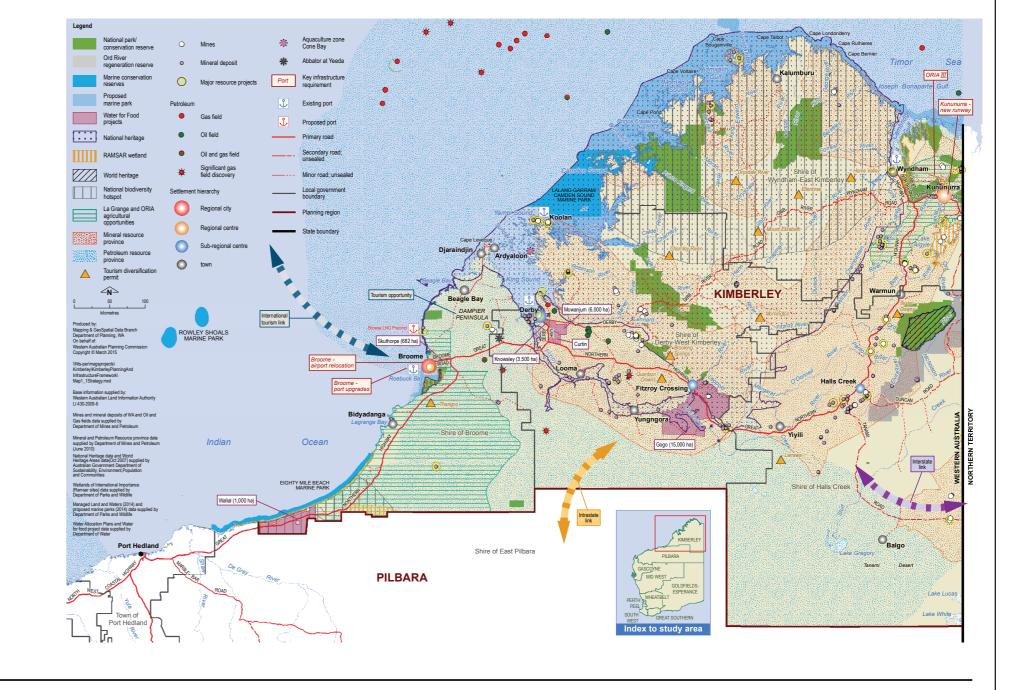
populations Climate change impacts, including threats from cyclones and bushfires, need to be taken into account with regard to spatial town design

Managing the regional road network is critical to cater for travel demand across local and regional traffic

Wet season conditions limit the

window of opportunity for civil works to be undertaken to the months of the dry season only Relocation of the town's bore fields, which are situated on the Lake Kununurra foreshore, has been proposed as an option to facilitate the growth of

Kununurra as a regional centre. However, the current bore field is a secure and safe water supply for Kununurra.



#### SHIRE OF WYNDHAM EAST KIMBERLEY LOCAL PLANNING STRATEGY

The local planning strategy, prepared in 2025, provides strategic direction and key actions for land use planning in the Shire for ten to fifteen years.

With a vision of 'connecting our cultures, striving for prosperity, celebrating the spirit of Country and community', the local planning strategy supports the Shire's strategic community plan priorities:

- Safe communities
- Healthy communities
- Access to housing
- · Access to employment
- Accessible place Connecting to the world

Conserving Country

**Key implications for Kununurra:** 

• Identifies the short term need to improve accessibility to Lake Kununurra, with

opportunities for new housing, accommodation, activation and tourism.

- Identifies the short term need to prepare a precinct structure plan for the Kununurra town centre, focused on improving place quality, built form and land use.
- Acknowledges the need for increased housing within Kununurra's town centre, improved public realm, prioritising community safety and reducing land use conflicts between commercial and tourism uses and legacy light industrial activity.
- Recognises the need to consolidate commercial activity within the Kununurra town centre.
- Recognises the need for enhanced tourism development within the Shire

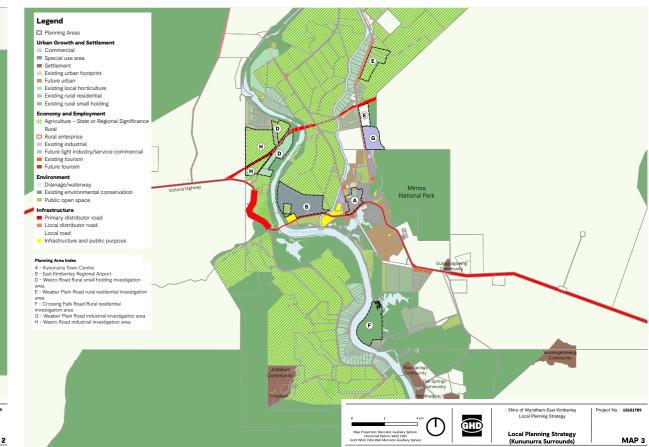
more broadly, and particular to any town centre commercial

Recognises a lack of high quality local infrastructure within Kununurra, such as pedestrian and cycling paths.

zone.

 The plan to the right shows the local planning strategy map for Kununurra, with the town centre area containing a mix of commercial, tourism and other zones associated with the urban footprint of the town. Foreshore areas are intended for environmental conservation or public open space.





#### SHIRE OF WYNDHAM EAST KIMBERLEY LOCAL PLANNING SCHEME

Local Planning Scheme No. 9 (LPS9) gazetted in February 2019 and is the primary document for controlling land use and development within the Shire.

#### **Relevant zones:**

- Commercial: extensive areas of the town centre along **Coolibah Drive, Konkerberry Drive, River Fig Avenue and** Messmate Way. A number of sites zoned commercial are used for residential purposes via historic use, approvals or via the additional uses mechanism
- Tourism zone to Bandicoot
- **Drive and Victoria Highway**  Mixed use: extensive areas of the town centre including along River Gum Avenue, **Bloodwood Drive, Mango**

- **Street and Konkerberry Drive**  Service Commercial: along Ivanhoe Road and Poinciana
- Coolibah Drive, Ivanhoe Road and Messmate Way reserved as Local Distributor Road

Street

- Victoria Highway reserved as a **Primary Distributor Road** Public Purposes - Medical
- and surrounding land Public open space reserve to playing fields and the

reserve for Kununurra Hospital

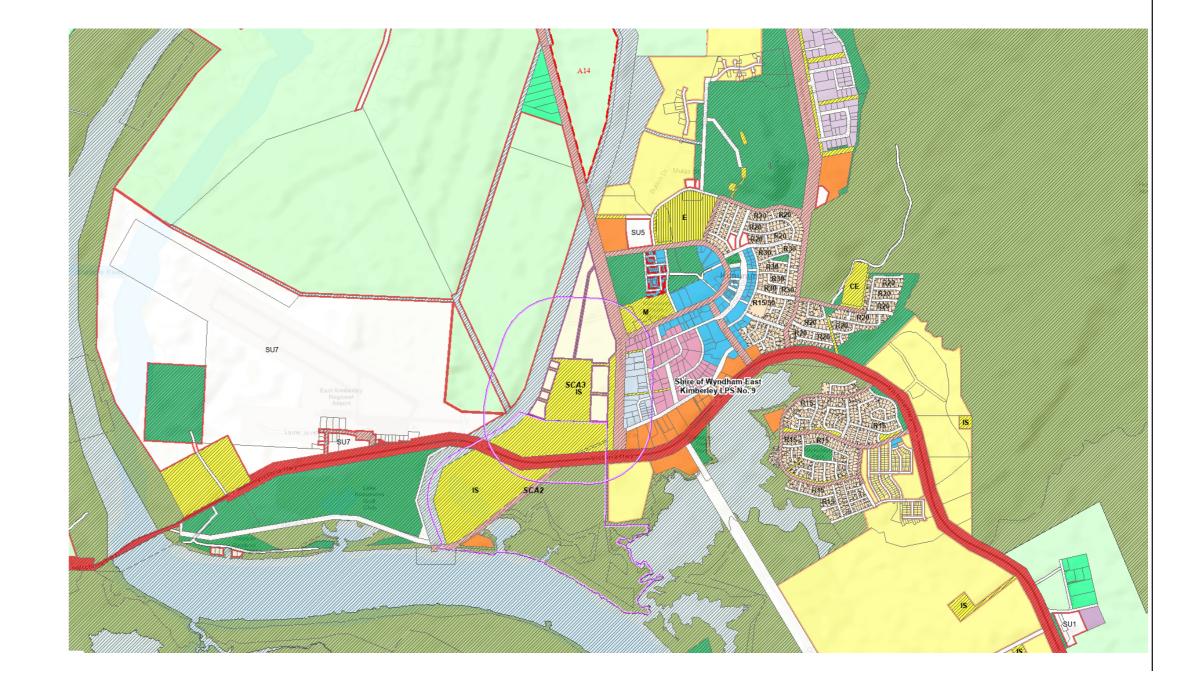
- Agricultural Society, as well as to the Lake Kununurra Golf Club Foreshore areas of Lake
- Kununurra reserved for **Environmental Conservation**

**Key implications for Kununurra:** Land use zones and reserves

determine permissible land

#### uses

- Defines the principal areas of town centre activity, with residential neighbourhoods surrounding at varying densities
- Protects the foreshore of Lake **Kununurra for conservation** and public use
- Parts of the town centre, principally the service commercial and mixed use zones along Ivanhoe Road, are subject to a buffer area around the waste water treatment plant.



## DEMOGRAPHICS + ECONOMIC APPRAISAL

### Hassell

An analysis of Kununurra's strategic documentation and current socio-economic profile has been used to identify a preferred future state for Kununurra, associated goals, and benchmarks for different points in time. Potential projects in benchmark areas have been identified that may enable Kununurra to realise those objectives. These are projects that will help to transition Kununurra from its current state to its defined aspirational state.

#### **Strategic Context**

Local, State, and Federal strategic documents and other contextual documentation have been reviewed to identify overarching objectives for Kununurra and to understand pertinent socioeconomic factors that would influence future development.

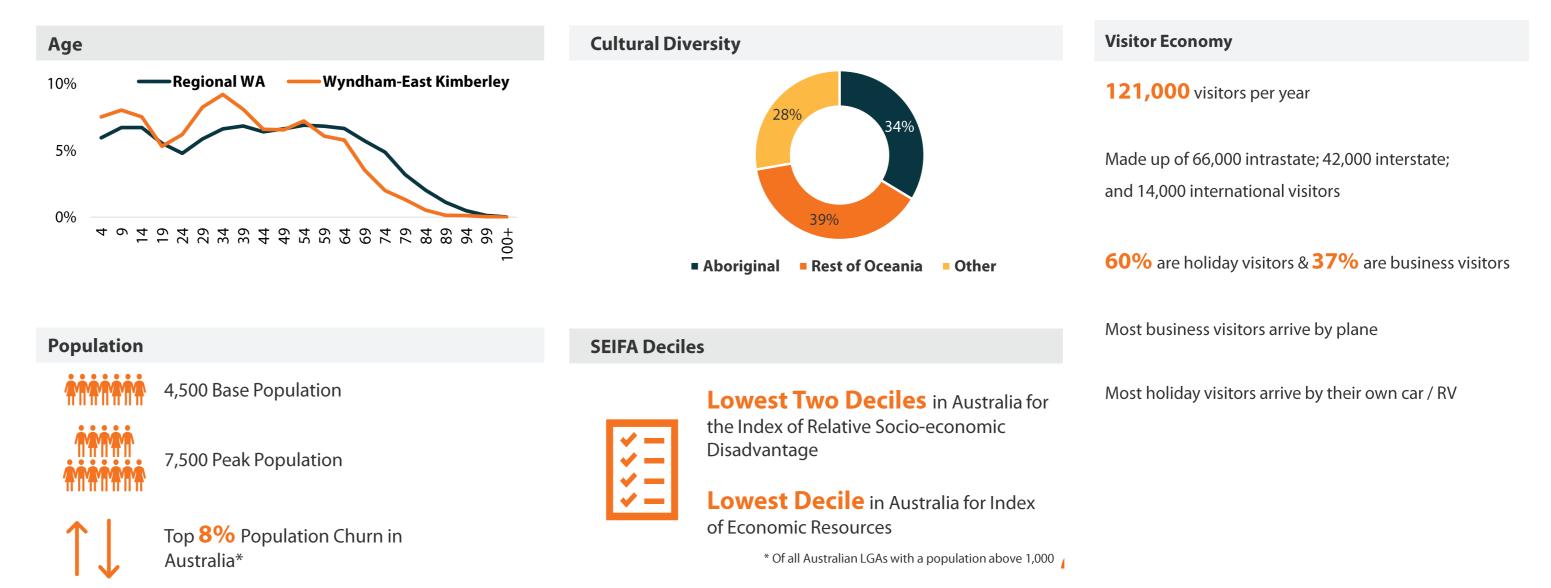
Some common themes for Kununurra's objectives include:
 Better access to Kununurra (flying and driving)

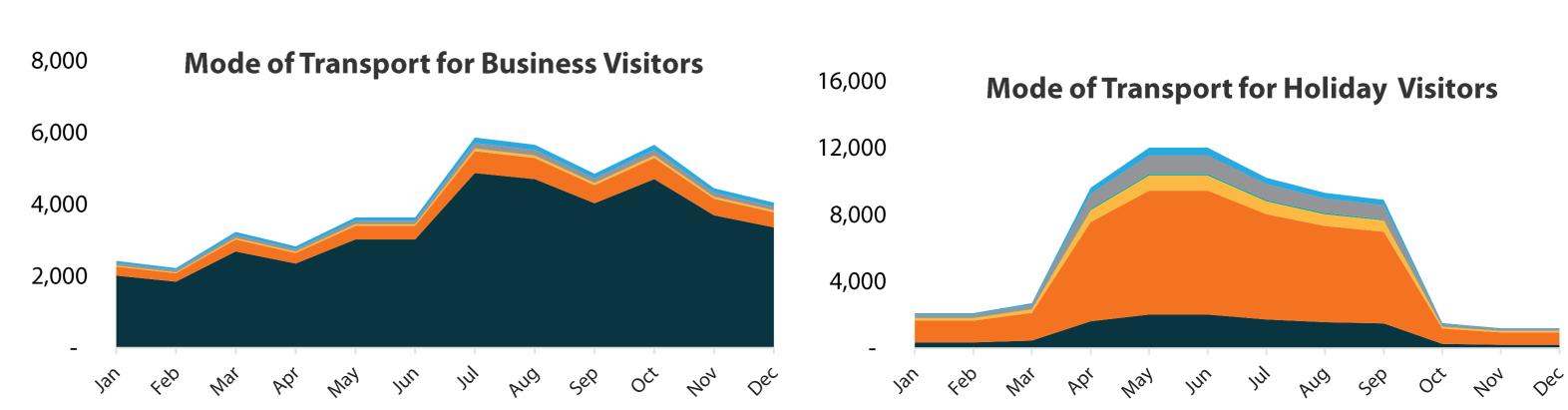
- better docess to remaind the first and driv
- Increased supply of critical infrastructure
- Improved short-stay accommodation availability
- Improved housing affordability
- Improved skilled local workforce
- Having a safe, attractive town centre with amenities
- Increased supply of available land for development
- Improved cost of living
- Better population attraction and retention
- Greater economic diversity
- Increased capacity for quality tourism offerings

Three local government areas, Katherine (short term), Broome (medium term) and Alice Springs (long term), were selected to identify both realistic and aspirational targets for Kununurra.

#### **Critical Success Factors**

Targeted stakeholder interviews and a literature review identified three critical success factors in delivering projects which were high prices, having a transient population, and low housing availability. Addressing these challenges would better enable Kununurra to reach its aspirations.





■ Plane ■ Own Car / Caravan / RV ■ Rented Car / Caravan / RV ■ Ship ■ Tour ■ Other

#### **KUNUNURRA'S DEFINED OBJECTIVES**

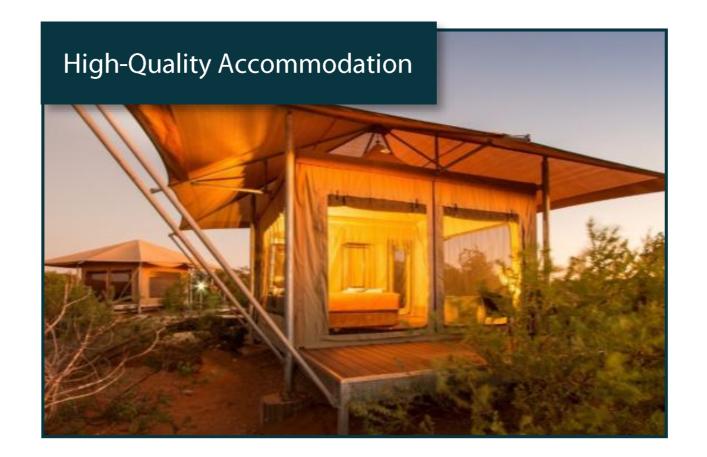






#### **IDENTIFIED PROJECTS**





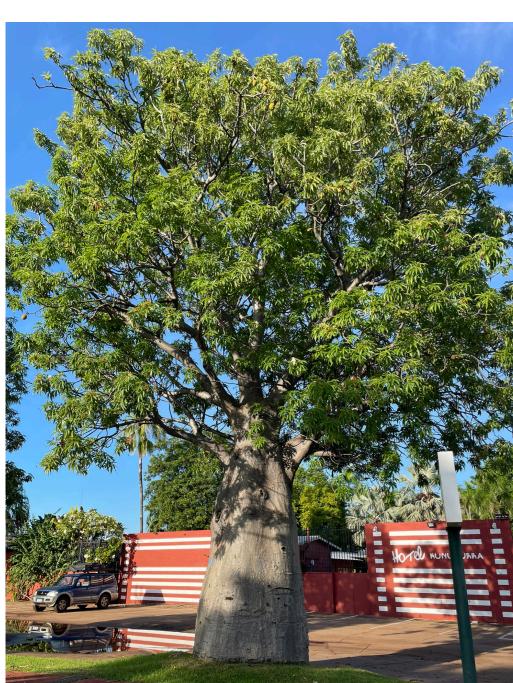






# TOWN CENTRE LANDSCAPE

- Kununurra town centre is blessed to reside within Miriwoong country. The town feels close to country, especially when views are gained to Kelly's Knob and Mount Cyril. The town feels like a stones throw from the Mirima National Park and the Lily Lagoon foreshore but walkability is difficult due to the climate and streetscape quality.
- Perhaps the most impressive landscape component of the town centre is the unique and mature tree stock. The Boabs and other large species create an impressive landscape experience, in particular where the trees have been allowed to thrive at White Gum Park, the Country Club, Coolibah Drive and Messmate Way.
- Trees are though lacking along some of the important streets, in particular Konkerberry Drive. The development of the town has constrained successful tree establishment. The Town Centre Revitalisation Strategy will address this shortfall and seek to significantly increase tree canopy coverage.
- White Gum Park is an important community space, dominated by impressive tree cover, large lawn and skate-park. It feels like the northern book-end to the town centre but would benefit from a much more activated southern edge condition and improved passive surveillance.
- The Messmate Way green link and spaces along Coolibah Drive have much potential to enhance the town centre experience, encouraging activation and active movement amongst landscape.
- The quality of the public realm could be improved in the town centre. Paving, street furniture, lighting and public art, as well as the provision of spaces for younger people, could all be lifted
- Parking dominates the landscape, breaking up walkways and fracturing the connections through the town centre.
- The town centre would significantly benefit from more trees, activated frontages, more continuous built form, a range of urban landscape experiences and a stronger feeling of cohesiveness.
- A Shire owned open space on the north side of Konkerberry
  Drive between Kimberley Fine Diamonds and Aboriginal Art
  Australia has great potential to be re-imagined as a town
  square. Its size and location, with built form edges, means it
  has the bones to be an exciting place for the community to
  come together.
- Papuana Street has a well established landscape quality which feels part of its context.
- The Courthouse has adopted a considered landscape design and architectural treatment which also speaks to Kununurra's sense of place. Inspiration can be taken from this project, as well as the broader country context.
- The Messmate Way green link is an important landscape connection to the foreshore. There are blocked views to the water which should look to be opened up.
- The junction of Messmate Way and Victoria Highway would benefit from a significant gateway statement and be complemented by improved walkways and safer pedestrian crossing of the roads.







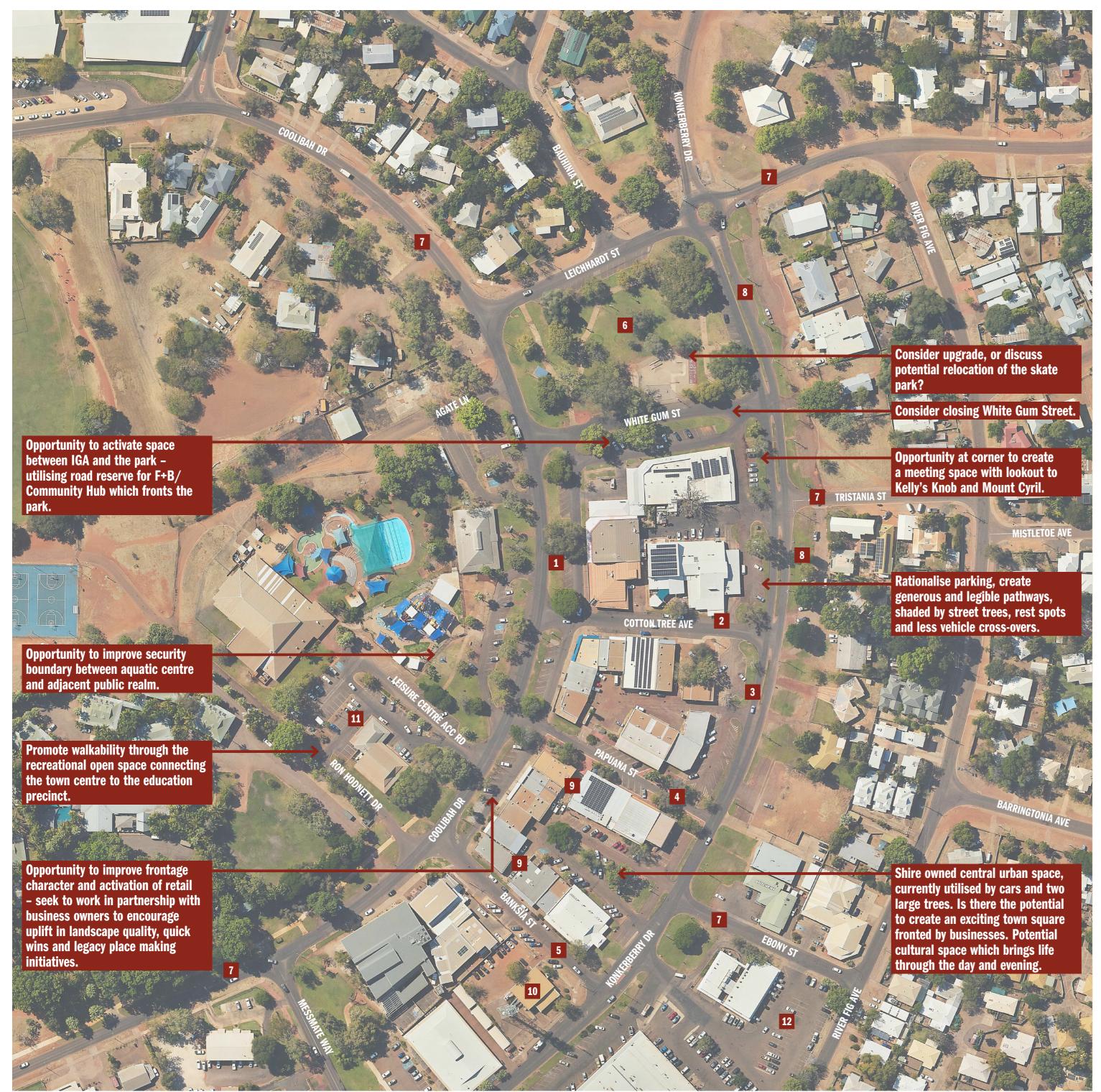






# TOWN CENTRE PLACE ANALYSIS - NORTH

### Hassell



#### 1 Coolibah Drive

Improve walkability, explore idea of a shared road surface, people centric/slow movement environment, create enticing community spaces amongst the open spaces, formalise market event space, rationalise parking provision, promote walkability across the road connecting Konkerberry to the community facilities, new lighting, underground power, street furniture, cultural design/trail opportunities.

#### **2** Cotton Tree Avenue requires improvement

Enhance walkability, new lighting, rationalise parking, street trees, underground power, potential shared surface + one-direction.

#### **3** Konkerberry Drive requires improvement

Enhance walkability, median, new lighting, rationalise parking, street trees, underground power, street furniture, cultural design/trail opportunities.

#### 4 Papuana Street

Build upon existing, lush and attractive landscape character, ensure sightlines are lighting enhanced.

#### **Banksia Street requires improvement**

Enhance walkability, new lighting, rationalise parking, street trees, underground power, potential shared surface + one-direction.

#### 6 White Gum Park

Consider improving amenities, cultural recognition, planting, lighting.

#### Connecting streets have poor walkability

Explore new pedestrian paths, trees, lighting improvements.

#### 8 Road reserve

Informal space could be better defined for pedestrians and vehicle parking, enhanced with trees.

#### Existing laneways

Explore opportunity to open up, activate and enhance the links through light and art.

#### 10 Telstra lot

This land use is not appropriate for a town centre. Progress discussions on the removal of the infrastructure, releasing land for appropriate town centre development opportunities.

#### 11 Post Office and parking

12 Car parking

















# TOWN CENTRE PLACE ANALYSIS - SOUTH

### Hassell



#### Messmate Way

Generous landscape connection amongst shade trees. Real opportunity to further enhance a Kununurra landscape experience, connecting the town to the foreshore. Can the character of the space be re-imagined bringing a stronger sense of country to the town. Cultural Trail with art and rest spots?

#### 2 River Fig Avenue

Performing back of house access to the retail. Potential to improve walkability, street trees and potentially define dedicated location for seasonal recreational vehicles (RVs).

#### **3** Konkerberry Drive requires improvement

Enhance walkability, median, new lighting, rationalise parking, street trees, underground power, street furniture, cultural design/trail opportunities.

#### Victoria Highway

Main Roads WA planning upgrade, important pedestrian crossing is made much safer.

#### **5** Foreshore pathway

Connecting to Welcome to WA potential development site.

#### **6** Lily Lagoon pedestrian pathway

Connecting to Celebrity Tree Park – opportunity to significantly improve the walking experience.

#### **Expansive Coles car park area**

Potential development site.

- Connecting streets have poor walkability Explore new pedestrian paths, trees, lighting improvements.
- **9** Loading and staff parking area
- 10 Single storey of shops with angled parking
- Coles supermarket, with perimeter shops and pharmacy Entry from car parks to NW and NE.
- 12 Open gravel, informal parking area by the Kununurra Hotel
  Important land-use site in the town centre. Currently used by locals and seasonal RVs.
- 13 Kununurra Hotel

 $Important\ and\ popular\ community\ and\ visitor\ asset.$ 

- **Department of Transport administration**
- 15 Hotel accommodation blocks

#### 16 Messmate Way streetscape

Opportunity to improve character and experience, street trees, underground power, enhanced median, multi-functional light poles, safer pedestrian cross-overs.

#### Pedestrian path stops This path could continue

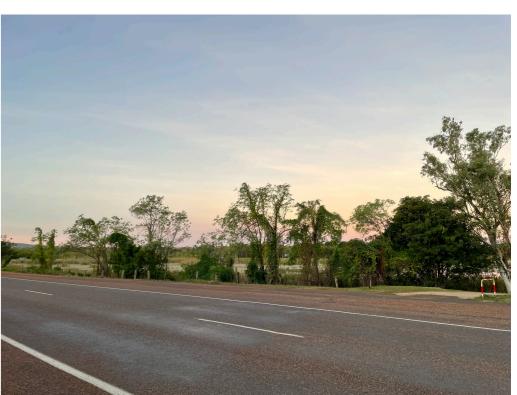
This path could continue along the landscape strip connecting the tourist accommodation to the town centre.

- **18** Connection to Country Club and Picture Gardens
- 19 Kununurra Town Caravan Park
- 20 Ord River Roadhouse / Caltex
- **EV Charging Station**

















# TOWN CENTRE LAND USE

- The town centre has a mix of land uses in a moderately small area. Retail outlets form the core land use in the heart of the town, anchored by the Coles complex. Other speciality retail, cafes, galleries and community uses are found on Konkerberry Drive and the streets connecting to Coolibah Drive.
- There is a strong community focus to land use within the recreational precinct, which is complemented by the Visitor Centre and Post Office.
- Messmate Way has a mix of uses, including retail, administration, accommodation, the Ord River Roadhouse, with the main focus being the Kununurra Hotel.
- The Town Centre Revitalisation Strategy will consider the long term long uses and propose consolidation and changes to the benefit of creating a more vibrant town centre.
- The Telstra site should look to be moved.
- It is important that the highly activated supermarket remains in the centre, as it forms such an important focus for the community and anchor for other retail and F+B outlets.











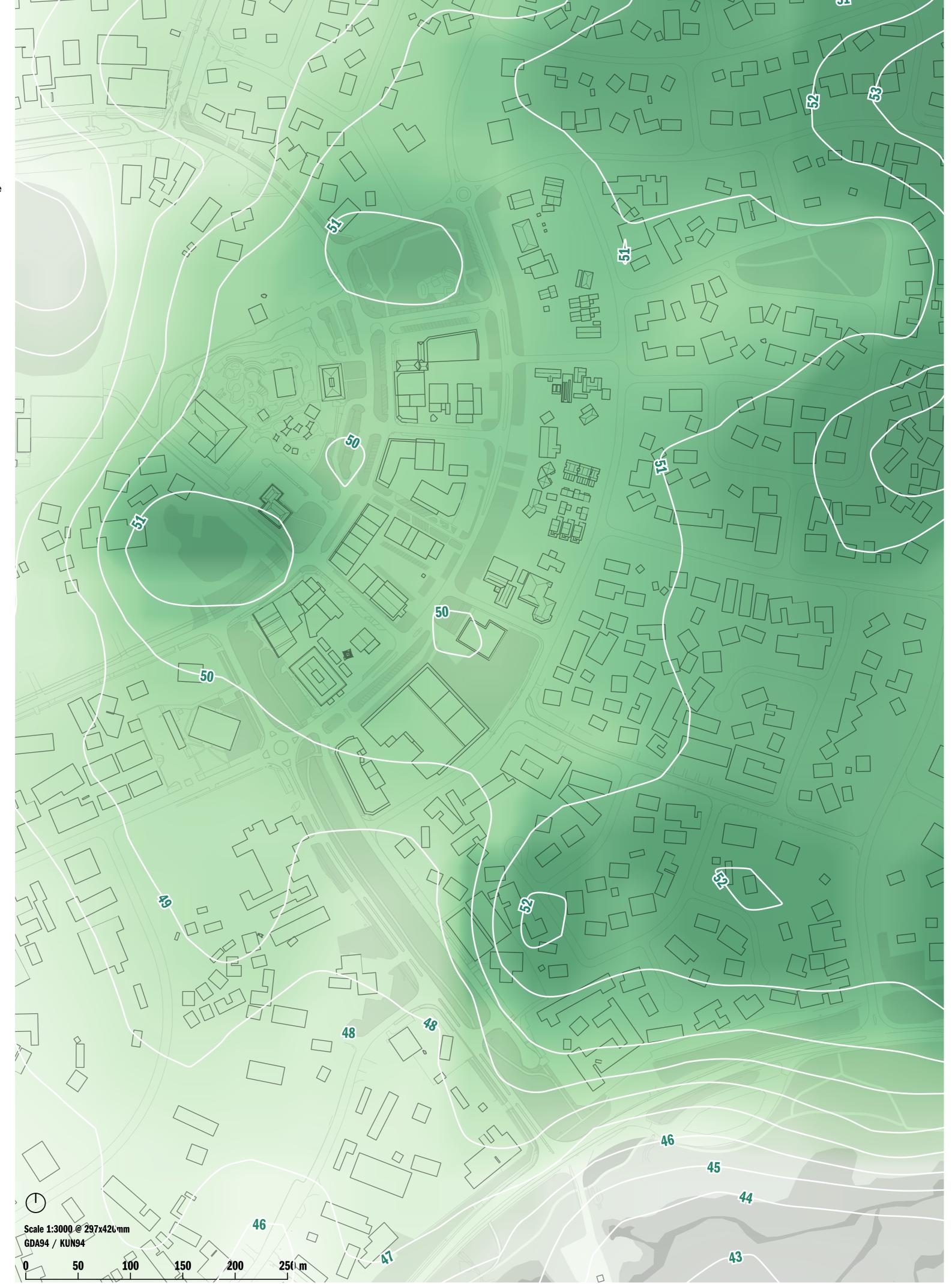






# TOWN CENTRE TOPOGRAPHY

- Kununurra town centre does not experience too much fluctuation in levels and is fairly flat as an experience to walk around.
- From the Victoria Highway junction with Messmate Way to White Gum Park there is only a variation in level by 4 metres. This fall in level towards the foreshore largely occurs to the southern end of Messmate Way.
- A 'flat' town centre is positive from achieving equitable access and encouraging walkability. It can though pose challenges in the design of effective storm water systems.
- Messmate Way has a dip along its length of lawn. This is associated with its function as a key drainage element. A reimagined Messmate Way green space will need to acknowledge storm water management requirements.





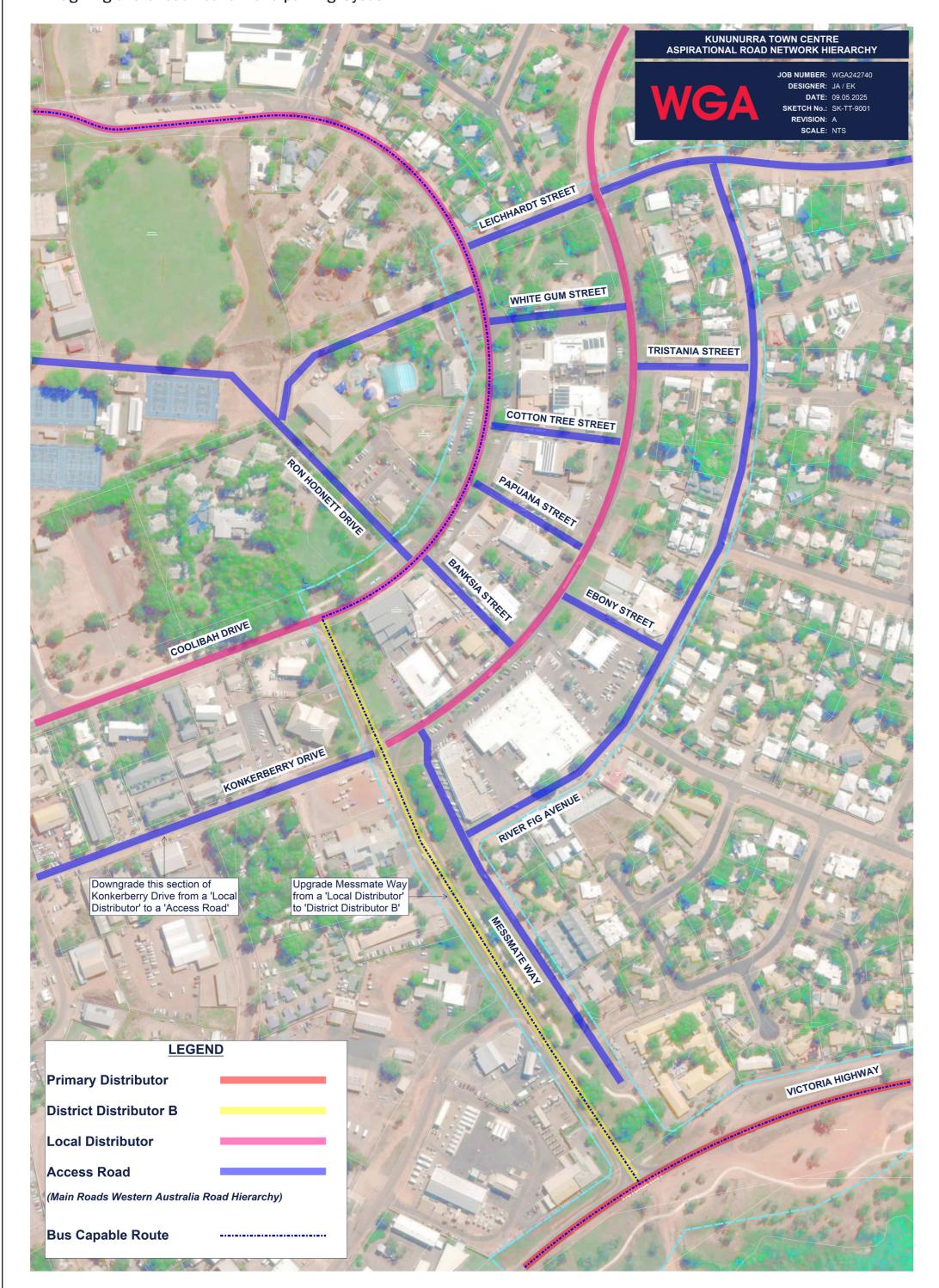






# TOWN CENTRE MOVEMENT

- Kununurra town centre is well served by an established road network. Over time the centre has become somewhat dominated by the provision of car parking bays. A key aspect of the Town Centre Revitalisation Strategy is to appraise the balance of space provided for people versus the vehicle.
- We have looked at the existing road network. There may be opportunities to refine streetscapes to formalise pedestrian sidewalks, include parallel parking, plant trees and in some instances close a road, make one-way or even create new roads.
- The refinement of the parking is a major component of this project. Re-positioning and consideration of defined parking areas for every day use, DDA/servicing and for seasonal RV's is important to consider while maintaining walkable access to shops and services.
- The analysis and ideas shown on this sheet represent a starting point for a discussion with the community. From Survey 1 we have heard that the town centre should be more walkable, safer and welcoming with an infusion of landscaping and spaces for people to come together. It should also look to promote active movement, encouraging safer cycling. This will mean a reimagining of the road network and parking layout.

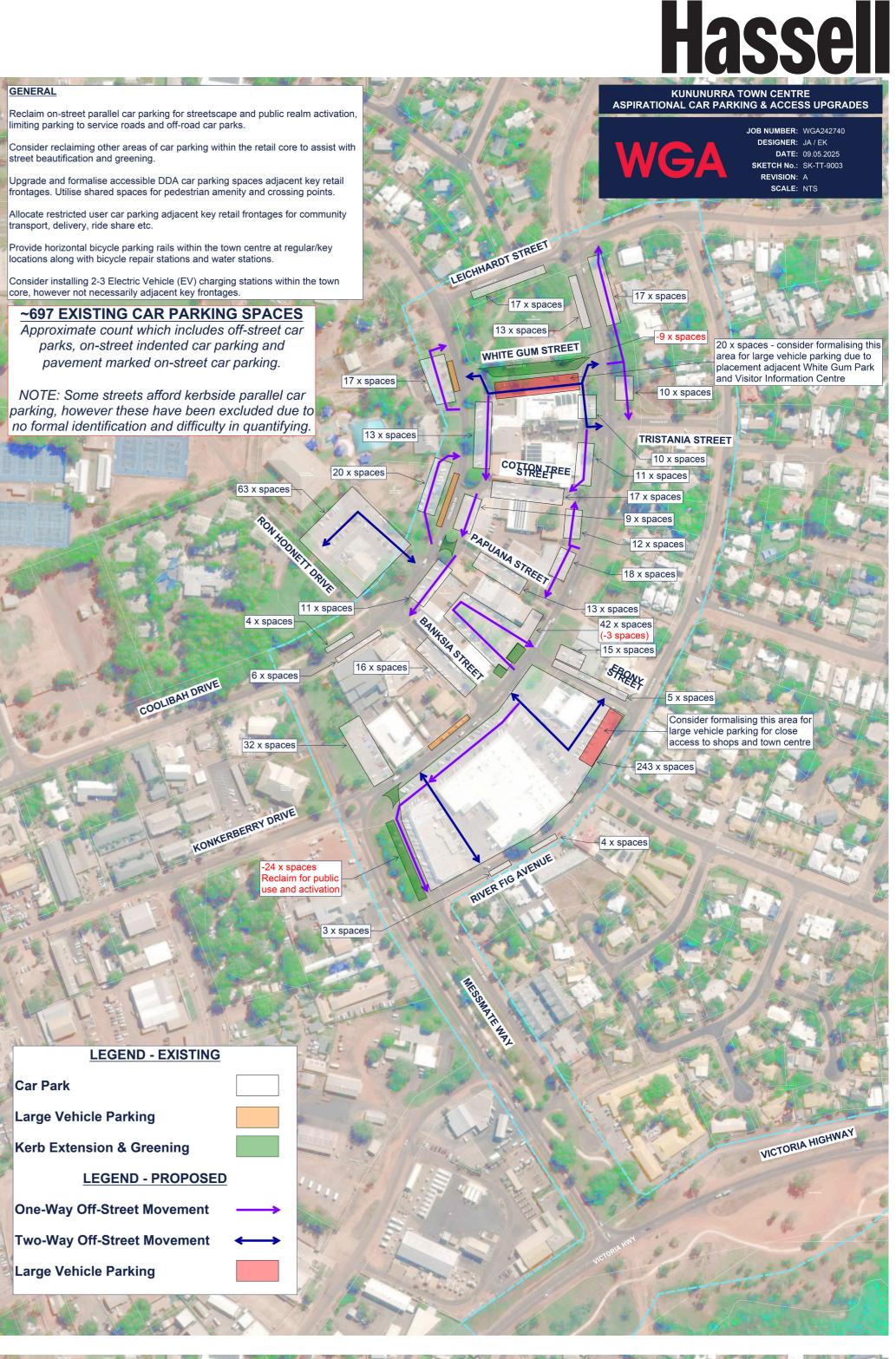


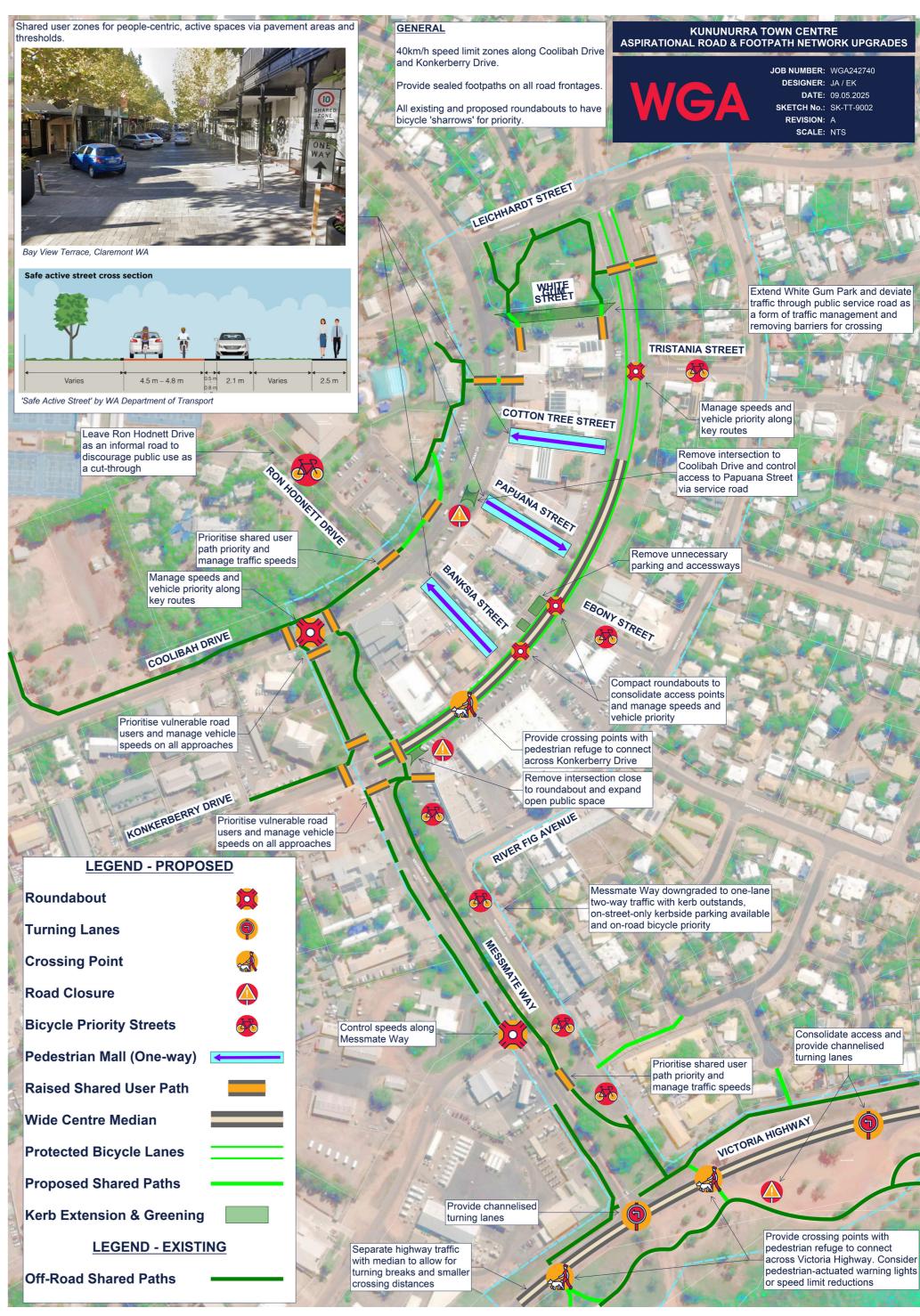






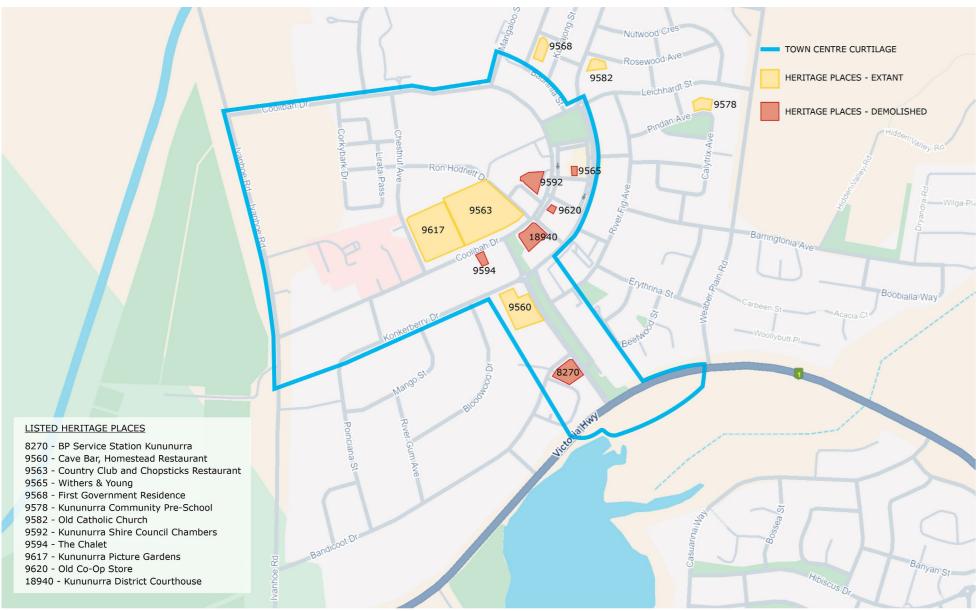






## TOWN CENTRE HERITAGE REVIEW

#### **LOCAL HERITAGE LISTINGS**



Map of Kununurra showing the Town Centre masterplanning area and heritage listings. Griffiths Architects, Google Earth base image

#### The following places are listed on the Shire of Wyndham East Kimberley Local Heritage Survey.

- The Cave Bar (9560) (Zebra Rock Bar, The Homestead Bar)
- Country Club Hotel & Chopsticks Restaurant (9563)



Interior view of the Cave Bar. LGHI 2007.

Interior view of the Cave Bar. LGHI 2007.



View of the Country Club Hotel. LGHI 2007.



View of the Country Club Hotel entrance. LHS2023.



Hassell

View of the Country Club Hotel. LGHI 2007.



View of the Country Club Hotel in background. LHS 2023.

#### PLACES DIRECTLY ADJACENT TO THE TOWN CENTRE MASTERPLAN AREA

- Kununurra Picture Gardens
- First Government Residences (9568)
- Kununurra Community Pre-School
- Old Catholic Church (9582)

#### SITES OF ABORIGINAL CULTURAL SIGNIFICANCE

A search of the Aboriginal **Cultural Heritage Register** accessed via the Aboriginal **Cultural Heritage Inquiry System** (ACHIS) identified 12 Aboriginal Sites within zones for master planning development of the **Kununurra Town Centre and Lake Kununurra Foreshore Precincts** 1-5.

It should be noted that the ACHIS register does not represent a comprehensive list of all Aboriginal heritage places in a specified area as it only lists those places which have been reported to the DPLH.

ID	Place Name	Site Type	Status	Location	File Restricted?
12982	Mirima- Dumun.Gum	Creation / Dreaming Narrative; Painting	Registered	Town Centre northern area of Precinct 4	Yes
12999	Duguwiyang	Ritual / Ceremonial; Creation / Dreaming Narrative	Registered	Northeastern section of the Town Centre	Yes
14897	Lily Creek 8.	Artefacts / Scatter; Camp; Engraving; Grinding areas / Grooves; Painting	Registered	Eastern end of Town Centre and northern area of Precinct 4	Yes
15153	Gunanurreng - Ord River	Burial; Artefacts / Scatter; Ritual / Ceremonial; Creation / Dreaming Narrative; Engraving; Grinding areas / Grooves; Modified Tree; Ochre; Painting; Quarry	Registered	Covers areas of Precinct 1-5 and southern portion of Town Centre	Yes

- The overarching values of significance for the locally listed places are social and historical significance. These are intangible values that derive from the places continuing or past uses and their history in terms of the development of the town and how they were considered social hubs.
- What is important when considering changes to the town centre masterplanning zone is that these areas continue to be social gathering spaces that give back to the
- Based on the statement of significances provided remaining physical and aesthetic fabric and attributes of places have a lower

significance than the social

and historical significance.

community.

- The mapping and place types provided by the ACHIS is very generally generalised and given the broader area of the individual listings all site type might not be relevant to the town Centre masterplanning
- Discussion with local

**Aboriginal Elders should** be held to identify areas within the Town Centre area that represent the best opportunities to celebrate and educate the public on the significant Aboriginal cultural values of the place.

## ENVIRONMENT REVIEW

To evaluate potential environmental impacts associated with the Town Centre Master Plan a Preliminary Environmental Assessment has been undertaken.

A desktop analysis of key environmental aspects and risks, and includes recommendations regarding applicable environmental approvals, including those required under the Environmental Protection Act 1986 (EP Act; WA) and the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) administered by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW).

#### **EVALUATION OF POTENTIAL ENVIRONMENTAL IMPACTS**

- Acid Sulfate Soils Town Centre was reviewed using the SLIP platform, which confirmed that the development footprint does not fall within an area of identified ASS risk.
- Air Quality Not likely to be significant.
- Biodiversity (flora & fauna) - Assessed against IBRA bioregional and Beard vegetation association mapping however, due to the highly disturbed nature of the town site, no vegetation mapping has been assigned to the area. Threatened **Ecological Communities**  none. Native Vegetation Clearing Permit (NVCP) likely not required. It is therefore recommended that targeted ecological surveys are undertaken to confirm the presence or absence of listed or significant species/suitable
- Contamination DWER's contaminated sites database indicated that two contaminated sites are located within the town centre development footprint (Site ID 76416, and Site ID 71269).

habitat.

 Declared plants (weeds) – The area is susceptible to declared pests, Neem (Azadirachta indica) and Caltrop (Tribulus terrestris). It is recommended that targeted weed surveys be undertaken prior to

- construction to confirm the presence of weeds within and adjacent to the development footprint. Typha domingensis (cumbungi), a native species that can behave invasively under certain conditions, is also likely to be present. It is often subject to control measures around waterways and infrastructure, and clearing may require a NVCP if not exempt under the EP Act.
- Phytophthora dieback no current evidence suggesting that Phytophthora dieback is a significant concern in the Kimberley region.
- Dust industry standard dust suppression measures, such as the use of water carts during construction, will be sufficient to manage this risk. These measures should be detailed in the project CEMP.
- Hazardous substances industry standard hazardous substances management practices must be implemented to prevent contamination of soil, surface water, or groundwater, including the secure storage of fuels and chemicals, use of spill kits, routine inspections of storage and handling areas, and appropriate staff training in spill response and environmental awareness. These practices should be

detailed in the project CEMP.

Noise and vibration -

- industry standard noise and vibration controls should be implemented. Protected areas - The following
- in close proximity to the development footprint (Mirima National Park, Kununurra Arboretum (nature reserve), Darram Conservation Park). It is recommended that early consultation be undertaken with the DBCA to assess any potential indirect impacts, such as from water runoff, noise, or lighting.
- Visual amenity -Recommended mitigation actions include: Designing landscaping elements to complement the surrounding environment, integrating native plants to maintain local character, ensuring new built structures are low-profile and utilise materials that blend with the natural landscape, incorporating pedestrian and cyclist-friendly pathways with street furniture to promote engagement without dominating the visual field, careful placement of public art to enhance the town's cultural identity while avoiding
- Waste all waste generated during construction must be

manner.

visual clutter, and managing

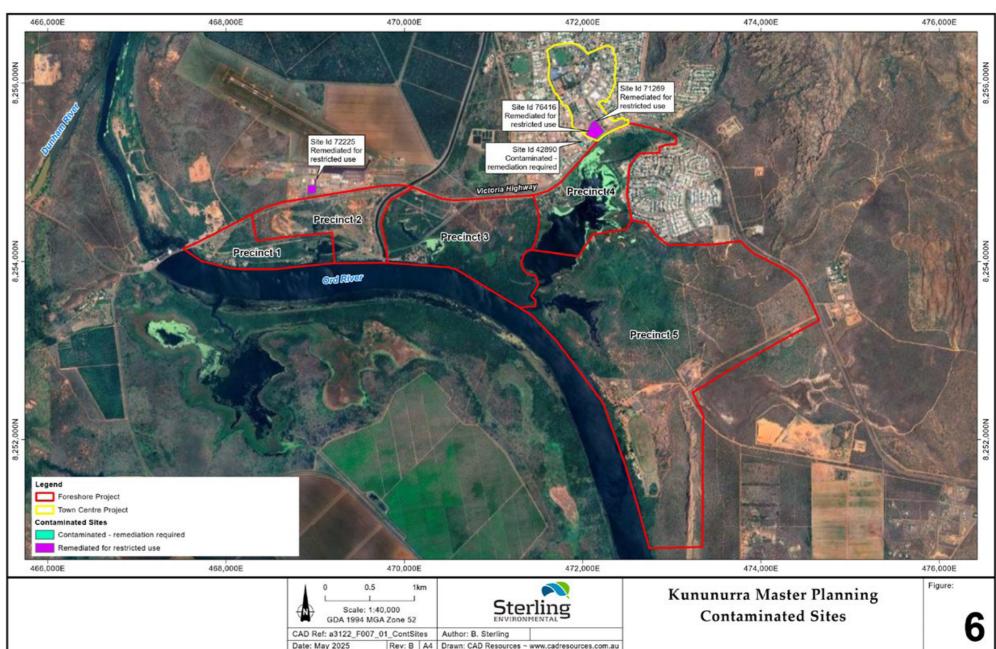
limit visual disruption while

maintaining work sites in a

generally tidy and organised

construction activities to

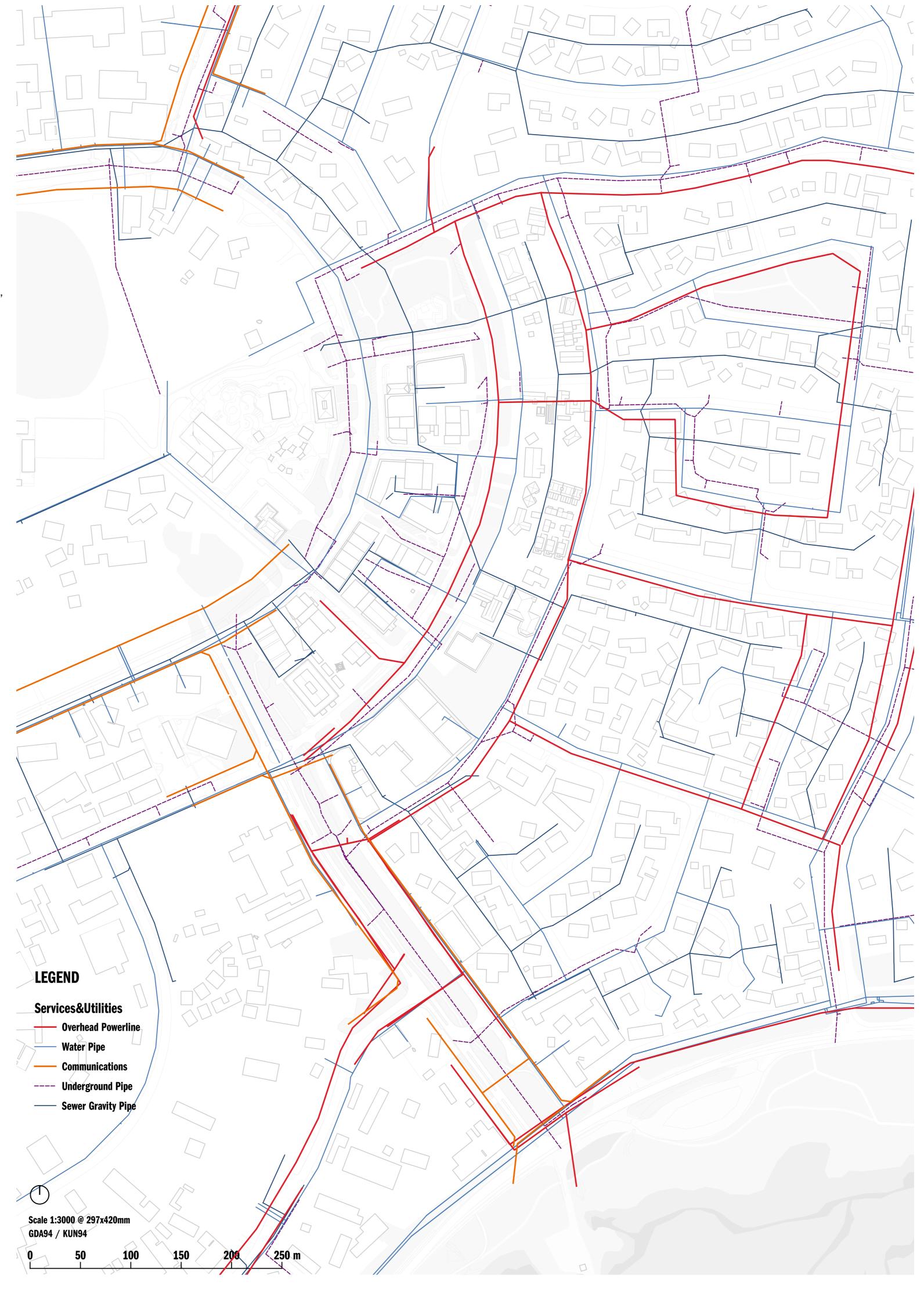
- appropriately managed in accordance with the Waste **Avoidance and Resource** Recovery Act 2007, EP Act, and local Shire requirements
- Water (surface water and groundwater) - Integrate Water Sensitive Urban Design (WSUD) principles, where practicable, to enhance water efficiency, improve stormwater quality, and protect the ecological health of nearby water bodies such as Lake Kununurra.
- Wetlands Two wetlands of international significance located downstream of the town centre development footprint, (The Lakes Argyle and Kununurra Ramsar site, and The Ord River Floodplain Ramsar site). Recommended that a pre-referral meeting be held with the DCCEEW to discuss the proposal and confirm whether a referral is warranted.
- When the revitalisation strategy is more clearly known, the Sterling Preliminary **Environmental Assessment** report recommends early discussions with relevant statutory environmental bodies (EPA, DWER, DBCA) to ensure compliance to guidelines. Refer to Sterling report for additional detail.



Contaminated Sites, Sterling

# TOWN CENTRE UTILITIES AND SERVICES

- A revitalised town centre should take into account the existing utilities and civil infrastructure. Re-shaping streets, creating new public open spaces and defining sites for re-development needs to consider the provision of power, lighting, storm water management, sewer and comms.
- This project will require some infrastructure to be modified.
- The overhead power lines are a constraint in the town and should be investigated to be under-grounded. There are overhead lines throughout the core town centre area.
- Re-shaped streets in the centre will see upgrades and modifications to the storm water system and there may be opportunities to integrate water sensitive urban design techniques (rain gardens, bio-swales).
- The Telstra site is a significant constraint in the centre. There should be a strategy for its re-location.
- Lighting is a critical component of this project. Creating a safer, more welcoming town centre will require a new lighting layout. This should adopt best practice sustainability principles, enhance townscape character, encouraging positive activation.
- The town centre should think about the provision of power in key locations so community activations can be successfully managed.











## FORESHORE ENVIRONMENTAL BASELINE REVIEW

The Shire of Wyndham East Kimberley is undertaking a masterplanning initiative for the development of the Lake Kununurra foreshore and Kununurra town centre. The Lake Kununurra Foreshore **Masterplan and Development** Strategy (the Masterplan) looks to revitalise precincts along the lake edge whilst enhancing local environments, culture, and

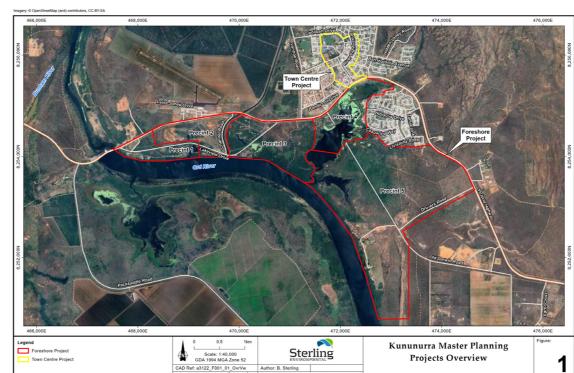
community.

To evaluate potential environmental impacts associated with the masterplan's proposed developments, a **Preliminary Environmental** Assessment was undertaken. The assessment consisted of a desktop analysis of key environmental aspects and risks, and includes recommendations regarding applicable environmental approvals,

including those required under the Environmental Protection Act 1986 (EP Act) and the **Environment Protection and Biodiversity Conservation Act** 1999 (EPBC Act) administered by the Commonwealth **Department of Climate Change,** Energy, the Environment and Water (DCCEEW).

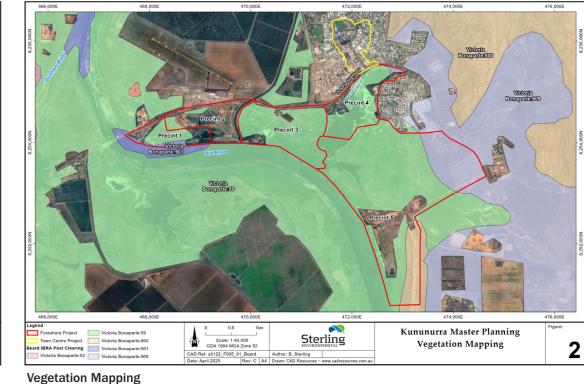
Summary of Key Potential Environmental Impacts  Element Potent Impact					
Biodiversity (flora & fauna)	A desktop assessment of available databases for threatened and priority flora and vegetation communities within the development footprint identified the potential				
	presence of two Priority Flora species within the development footprint, and that the majority of the development footprint is overlapping with a Threatened Ecological Community (TEC).				
	A Protected Matters Search for Matters of National Environmental Significance listed under the EPBC Act identified that 21 threatened species, 17 migratory species, and 3 marine species may occur in and around the foreshore development footprint.				
Declared	A search of online databases and government resources confirmed the potential				
plants (weeds)	presence of several Weeds of National Significance (WoNS) including salvinia (Salvinia molesta), lantana (Lantana camara), gamba grass (Andropogon gayanus), and opuntioid cacti (Opuntia spp.).				
	In addition to the identified WoNS, several declared plant species under the Biosecurity and Agriculture Management Act 2007 may also be present within the development footprint, including neem (Azadirachta indica), and caltrop (Tribulus terrestris).				
	Both of these species are declared pests in the Kimberley region, typically classified as Category C3 species requiring measures to prevent its spread.				
Protected	A search of conservation and protected areas identified the Mirima National Park,				
areas	Kununurra Arboretum (nature reserve), and Darram Conservation Park in close proximity to the development footprint.				
Visual amenity	A desktop review of the visual amenity within the Lake Kununurra foreshore area was conducted. Potential visual impacts may include introduction of built structures such as				
	boardwalks, jetties, and signage, temporary disturbance from construction activities, such as equipment and site clearing, and modifications to key views or sightlines from public spaces.				
Water (surface	Given the nature and scale of the proposed foreshore redevelopment, impacts to surface				
water and	water and groundwater flow or quality are expected to be minimal. However, due to the				
groundwater)	site's proximity to the Ramsar-listed wetlands and the Kununurra Water Reserve, which is				
	a designated drinking water source protection area, it is critical to ensure that the project design and activities do not impact water quality or availability.				
Wetlands	The Protected Matters Search identified two wetlands of international significance, the				
	Lakes Argyle and Kununurra Ramsar site, and the Ord River Floodplain Ramsar site				
	within and downstream of the foreshore development footprint.				
	As the Lakes Argyle and Kununurra Ramsar site overlaps the development area, there is				
	potential for direct impacts to occur. Given the Ramsar status of the wetland, even minor disturbance could be considered significant under the EPBC Act.				

Element	Recommended Action				
Biodiversity	Given the presence of a TEC within the development footprint, the potential occurrence of				
(flora & fauna)	Priority Flora species it is recommended that targeted ecological surveys be undertaken				
(nora & rauna)					
	to confirm the presence, extent and condition of the TEC, the presence of threatened and				
	priority flora species, and the presence of suitable habitat for listed fauna species.				
	It is further recommended that a pre-referral meeting be held with the DCCEEW to				
	confirm whether referral under the EPBC Act is warranted, particularly in relation to				
	potential direct and indirect impacts to listed species.				
	Should clearing of native vegetation be required and formal EP Act Part IV assessment				
	not be triggered, it is recommended that a Native Vegetation Clearing Permit under Part V				
	of the EP Act be obtained.				
Declared	Given the potential presence of WoNS and declared pests it is recommended that				
plants (weeds)	targeted weed surveys be undertaken prior to construction to confirm the presence of				
	weed species within and adjacent to the development footprint.				
Protected	Given the proximity of the National Park, Nature Reserve, and Conservation Park to				
areas	the development footprint, it is recommended that consultation be undertaken with				
	the DBCA to assess potential impacts and to ensure that any relevant management				
	measures are identified and incorporated into the project.				
Visual amenity	Given the potential for visual amenity impacts, the following mitigation actions are				
	recommended: Designing structures to blend with the natural landscape using locally				
	appropriate materials and colours, retaining key view corridors, especially from public				
	access points like parks and lookouts, integrating landscaping to soften built elements				
	and reduce visual intrusion, minimising night-time light spill with low-lumen, directional				
	lighting, and managing construction activities to reduce visual disruption, with general				
14/	tidiness maintained throughout.				
Water (surface	Incorporate Water Sensitive Urban Design principles, into project design where				
water and	practicable. Given the site's proximity to two Ramsar-listed wetlands and the Kununurra				
groundwater)	Water Reserve it is recommended that best practice management measures are				
	adopted, such as regular monitoring of water quality, implementation of sediment control				
	measures, and minimising land disturbance.				
	If groundwater abstraction is required to support construction or landscaping, a 5C				
	licence under the Rights in Water and Irrigation Act 1914 (RIWI ACT) should be obtained				
	from the Department of Water and Environmental Regulation (DWER).				
Wetlands	Given the site's proximity to two Ramsar-listed wetlands (the Lakes Argyle and Kununurra				
	Ramsar site, and the Ord River Floodplain Ramsar site), it is recommended that a pre-				
	referral meeting be held with the DCCEEW to discuss the proposal and confirm whether				
	an EPBC Act referral is required.				
	In addition, a Bed and Banks Permit under the RIWI Act should be obtained from DWER				
	for any works that involve disturbance to the bed or banks of Lake Kununurra (such as				
	the construction of boat ramps or boardwalks).				
Construction	It is recommended that a Construction Environmental Management Plan be developed				
environmental	to describe mandatory management measures that must be implemented during				
management	construction to manage environmental matters including weeds, dust, noise and				
	vibration, Acid Sulfate Soils investigation and management, and waste and hazardous				
	substances management.				

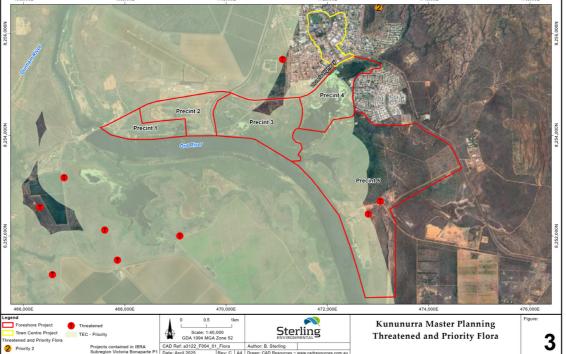


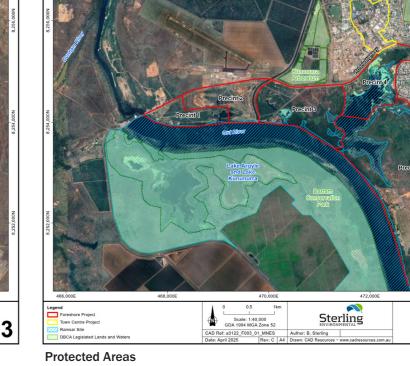
**Projects Overview** 

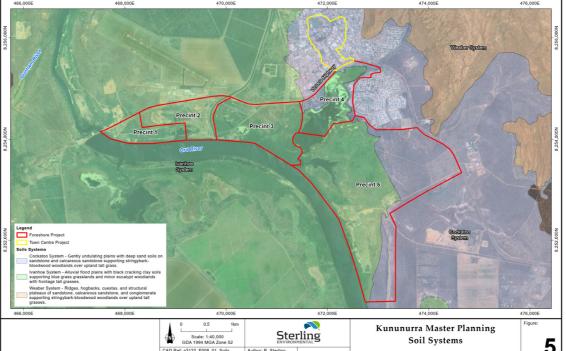
**Threatened and Priority Flora** 

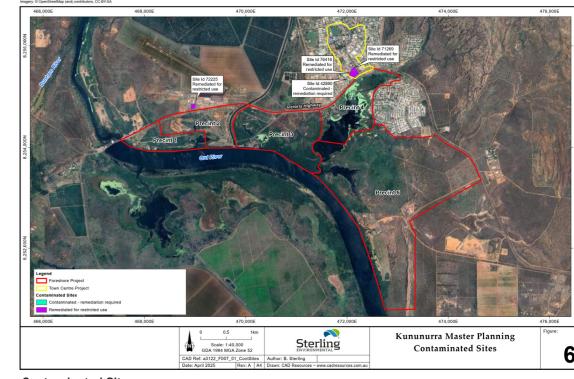


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**Contaminated Sites** 

#### **FAUNA**

Soil Systems

The Foreshore provides suitable habitat for the following fauna species of conservation significance:







Protected Areas

Calidris ferruginea (Curlew Sandpiper)

Crocodylus johnstoni Erythrura gouldiae (Australian Freshwater Crocodile) (Gouldian Finch)

Hydromys chrysogaster (Water-rat)

**Ixobrychus dubius** (Australian Little Bittern)

#### **EXISTING CONTEXT**



#### **CUMBUNGI**

Cumbungi' is native to the Ord River. The damming of the Ord River has provided optimum conditions for the rapid colonisation of Lake Kununurra and the Lily Creek Lagoon.

It forms a dense monoculture, with subsequent impacts to habitat heterogeneity and the elimination of other flora species, a reduction in the holding capacity of dams and waterways, adverse impacts to waterway access and a restriction to almost total blockage of water flow in rivers, creeks and irrigation and drainage channels.

The dense stands created by Cumbungi comprises a fire hazard, with a number of unplanned fires occurring around Lake Kununurra and the Lily Creek Lagoon over the years, with these fires potentially resulting in detrimental impacts to riparian vegetation communities.

Clearing permits have been previously granted to remove significant areas of Cumbungi via mechanical and chemical means. Clearing enhances water flow through the waterbodies, provides more access for boats and people and improves aesthetics for visitors.

## FORESHORE HERITAGE REVIEW

The team has undertaken a preliminary review of the places of cultural significance within the zones for master planning development of the Lake **Kununurra Foreshore. The study** is a desktop audit of available documents on the heritage places and values within the master planning areas. The intended outcome is to ascertain what buildings, structures, landscape elements, or activities are significant within the

preparation of the masterplans.

#### **Information researched from:**

- Shire of Wyndham East **Kimberley Local Government** Heritage Inventory prepared by SMEC, August 2007.
- Shire of Wyndham East Kimberley Local Heritage Survey 2023. (Appendix 2) Shire of Wyndham East
- Kimberley Local Planning Scheme No.9, 19 February 2019, Updated 06 May 2022.

 Shire of Wyndham East **Kimberley DRAFT Local** Planning Policy 16 - Heritage

Kununurra is located in the far north of Western Australia at the eastern extremity of the Kimberley 45km from the borde with the northern territory. It is located on the traditional lands of the Miriwoong, which straddles the border with the Northern Territory and stretches over 10,000 square kilometres from Ord River Valley to the

south, Carlton Hill Station to the north and Wuggubun to the east. The town was established in 1961 as a service centre for the Ord River Irrigation Scheme and is situated among the scenic hills and ranges of the far northeast Kimberley region, having an abundance of fresh water, conserved by the Ord River Diversion Dam and the main Ord River Dam.

## Hassell



Aerial of Kununurra showing the masterplanning areas and heritage listings in white. Griffiths Architects, Landgate base aerial image.

#### **STATE HERITAGE LISTINGS**

Main Pump Station, Kununurra **(1963) Place Number 9589** 

masterplan areas to inform the

**Listed on the Western Australia State Register of Heritage Places** 

#### **Statement of Significance**

Main Pump Station, Kununurra, a steel framed iron clad shed housing three pumps on a concrete substructure and located in Lake Kununurra adjacent to the north bank, has cultural heritage significance for the following reasons,

 The Ord River Irrigation Scheme, of which Main Pump

Station, Kununurra was an integral part, was a bold venture to develop and settle the North West of the State in the post-World War II era, and accompanied a period of great expansion in Western Australia's resource and

 The establishment of the town of Kununurra and surrounding area was reliant on the Ord River Irrigation Scheme. The decision to encourage settlement in this area arose partly in response to the 'populate or perish' philosophy

agricultural sectors.

- of the time,
- The place is the largest capacity pumping station in the State and a good, intact example of its type. Its form and proportions demonstrate the aesthetic values of utilitarian service structures associated with Government utilities,
- The place was considered a difficult engineering project for the time, requiring innovative design solutions,
- The place is a landmark on Lake Kununurra and, together with Lake Kununurra and the
- M1 Channel, forms a cultural environment which contributes to a sense of place for the local and wider community,
- Funding for the Ord River Irrigation Scheme, of which Main Pump Station, Kununurra was an integral part, was a controversial political issue throughout the time of its implementation, at a Federal and state level.



Main Pump Station, Kununurra. LGHI 2007

Main Pump Station, Kununurra



**LOCAL HERITAGE LISTINGS** 

#### **Swimming Beach and Tree** (9593)

Listed on the Shire of Wyndham **East Kimberley Local Heritage** Survey.

- The well-known Swimming Beach is located on the north bank of the Ord River. An old, long dead Eucalyptus tree is located about 25 metres from the shore. A parking area, barbecue and toilet facilities have been provided and are maintained by the Shire. A boat ramp is adjacent to the Swimming Beach.
- The location was established as a swimming area in 1964. In earlier years, a swimming area was established on the opposite side of the river but

it became too congested and busy so a group of people graduated to what became known as the Swimming Beach. There was an attempt to remove the dead tree at one stage but without success. The tree has become a focal point of the swimming area. People climb the tree and swing from a rope attached to one of its branches and 'bomb' into the water. Naturally the tree has deteriorated and rotted over time.

#### **Statement of Significance**

 The Swimming Beach has Social significance: it has been valued by the community as a recreational area and

social gathering point since the early days of Kununurra

#### **Kimberleyland Caravan Park** (9575)

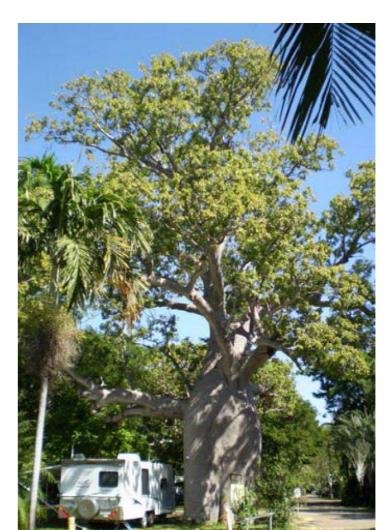
Listed on the Shire of Wyndham East Kimberley Local Heritage

 The Kimberleyland Boab Tree is situated inside the grounds of Kimberleyland Caravan Park on the Victoria Highway on the outskirts of Kununurra. The Caravan Park is adjacent to the old Wyndham Darwin Road and is two to three kilometres from Kimberley Durack's original farm on the Ord River. The Boab Tree is a fine example of an old boab

 Owing to its size and location it was a recognised camping site for many drovers, including the Durack family who used the location when they travelled between their **Argyle Downs Station and** Wyndham.

#### **Statement of Significance**

 The Boab Tree has Historic Significance as it was a recognised campsite for many drovers, including the Durack family who used the location when they travelled between their Argyle Downs Station and Wyndham.



Dead Tree, Kununurra.



Dead Tree, Kununurra

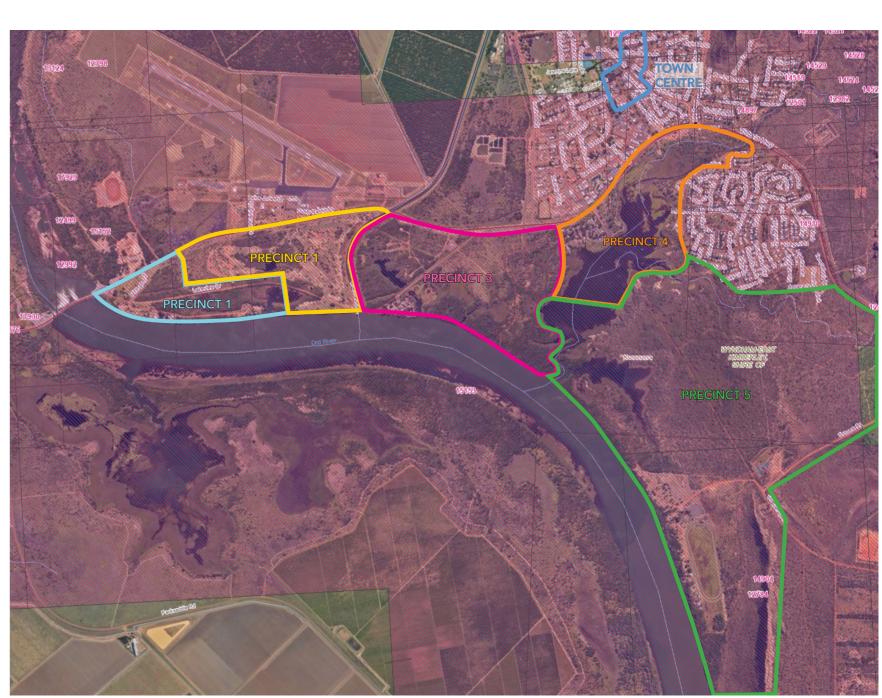
#### PLACES DIRECTLY ADJACENT TO THE FORESHORE MASTERPLAN AREA

- Ord River Diversion Dam (9585)
- Ord Irrigation Project Commemoration Plaque (9562)
- Guerinoni Crushing Plant (9564)

#### SITES OF ABORIGINAL CULTURAL SIGNIFICANCE

A search of the Aboriginal **Cultural Heritage Register** accessed via the Aboriginal **Cultural Heritage Inquiry System** (ACHIS) identified 12 Aboriginal Sites within zones for master planning development of the **Kununurra Town Centre and Lake Kununurra Foreshore** Precincts 1-5. It should be noted that the ACHIS register does not represent a comprehensive list of all Aboriginal heritage places in a specified area as it only lists those places which have been reported to the DPLH.

ID	Place Name	Site Type	Status	Location	File Restricted?
12784	Didthabalang	Artefacts / Scatter; Camp; Ritual / Ceremonial; Creation / Dreaming Narrative; Hunting Place; Painting	Registered	Southern end of Precinct 5	Yes
12982	Mirima-Dumun. Gum	Creation / Dreaming Narrative; Painting	Registered	Town Centre northern area of Precinct 4	Yes
12992	Darram	Ritual / Ceremonial; Creation / Dreaming Narrative	Registered	Covers areas withing precinct 1	Yes
14519	Lily Creek 4/ Hidden Valley.	Sub surface cultural material; Engraving; Grinding areas / Grooves; Other; Painting	Registered	Northern area of Precinct 4	Yes
14524	Lily Creek 12	Engraving; Other; Painting	Registered	Small section within northeastern area of Precinct 4	Yes
14526	Mirrima	Creation / Dreaming Narrative; Other	Registered	Adjacent northeastern boundary of Precinct 4	Yes
14529	Lily Creek 14	Other; Painting	Registered	Small section within northern area of Precinct 4	Yes
14897	Lily Creek 8.	Artefacts / Scatter; Camp; Engraving; Grinding areas / Grooves; Painting	Registered	Eastern end of Town Centre and northern area of Precinct 4	Yes
14904	Carlton Ridge East	Sub surface cultural material; Engraving; Painting	Registered	Southern end of Precinct 5	Yes
14910	Lily Creek 23.	Sub surface cultural material; Artefacts / Scatter; Engraving; Painting	Registered	Northern area of Precinct 5 and northeast area of Precinct 4	Yes
15152	Nganjuwarrm - Dunham River	Artefacts / Scatter; Ritual / Ceremonial; Creation / Dreaming Narrative; Engraving; Modified Tree; Ochre; Painting; Quarry; Repository / Storage Place	Registered	Covers areas of Precinct 1 and 2.	Yes
15153	Gunanurreng – Ord River	Burial; Artefacts / Scatter; Ritual / Ceremonial; Creation / Dreaming Narrative; Engraving; Grinding areas / Grooves; Modified Tree; Ochre; Painting; Quarry	Registered	Covers areas of Precinct 1-5 and southern portion of Town Centre	Yes



Kununurra masterplanning zones overlayed on the Aboriginal Cultural Heritage site map.