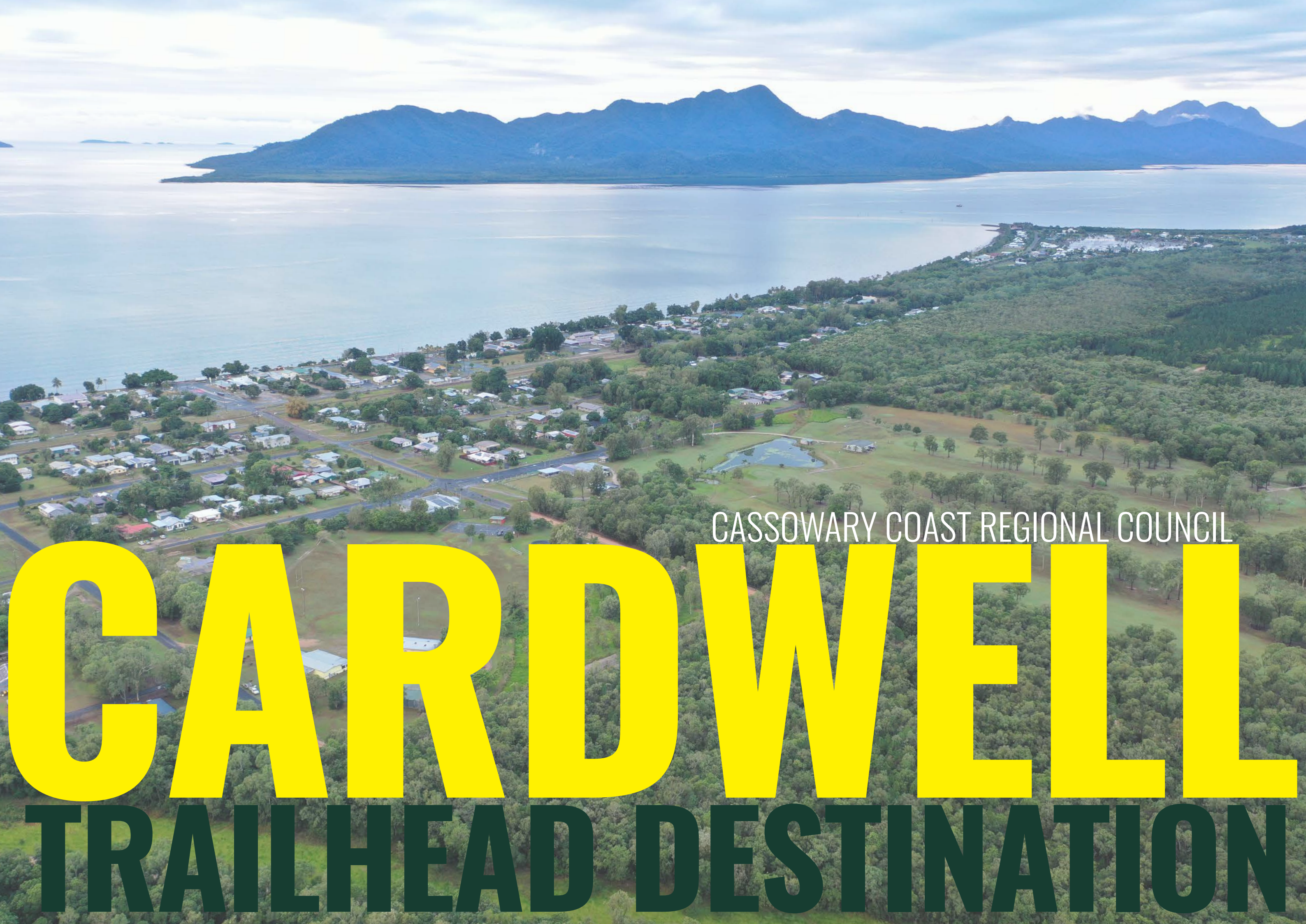




CASSOWARY COAST REGIONAL COUNCIL

CARDWELL

TRAILHEAD DESTINATION



CASSOWARY COAST REGIONAL COUNCIL

CARDWELL TRAILHEAD CONCEPT REPORT

Disclaimer:

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ACKNOWLEDGMENT OF TRADITIONAL OWNERS

World Trail respectfully acknowledges the Traditional Owners of the land this project is sited, the Girramay people and pays respect to their Elders past and present. We acknowledge and honour the unbroken spiritual, cultural and political connection they have maintained to this unique place for more than 2000 generations.

We accept the invitation in the Uluru Statement from the Heart and are committed to walking together to build a better future.

World Trail acknowledge that the Cardwell Tropical Mountain Bike Trails and this associated trailhead project sit in the foothills of Attie Creek and the 7 sisters (Elphinstone Range) in the lush, low-lying lands of the Girramay people and will commit to celebrating the wet tropics and continuous culture of the region through design.





CARDWELL TRAILHEAD

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INTRODUCTION



1

INTRODUCTION

PROJECT BACKGROUND

"Ride where our ancestors once walked, Girramay Country"

CARDWELL TROPICAL MOUNTAIN BIKE TRAILS PROJECT

The Cardwell Tropical Mountain Bike Trails Project includes the proposed development of a new 94km, 26 - trail mountain bike network in World Heritage Listed rainforest surrounding Cardwell, on the southern end of the Cassowary Coast. The Project is focused on establishing the region as a 'Ride Destination' and integrating and promoting the unique cultural heritage of the local Traditional Custodians, The Girramay People.

Central to any ride destination is the Trailhead - the following report explores some preliminary conceptual thinking and explains the potential of this space for both the local and visiting riding community, and the general public.

PROJECT OPPORTUNITIES

- World class network that offers a variety of styles and difficulties for all riders
- Meaningful involvement and recognition of the Girramay People
- Ride in, ride out trails, located within 500m of the town centre and foreshore
- Off-bike cultural experiences and natural attractions in proximity to the Trails and Cardwell
- Community-led project that has been recognised on the national scale





TRAILHEAD OPPORTUNITY

Located in the south-eastern corner of the park, the trailhead will serve as a key destination for both local and international mountain bikers—often providing their first physical impression of the Cardwell Trail network. It offers an opportunity to engage more deeply with the region’s distinctive landscape and rich cultural heritage. Nestled within an existing grove of paperbark trees, the project will:

- Orient and enhance the arrival experience into the trail network
- Provide essential rider services, including safety information and trail updates
- Activate the park through events, commercial activity, and a spacious, site-responsive community hub
- Celebrate nature and water play, local ecology and biodiversity, and connection to Girramay Country

The trailhead will energise both the park and the town, becoming a destination in its own right.

The trailhead design responds to the site’s natural character topography and overland flow trajectories, offering immersive experiences within the iconic Australian paperbark landscape. It includes opportunities for play, food and beverage offerings, cultural events, community gatherings, parking, and major events.

Importantly, the space will invite reflection on the enduring connection of the Girramay people to Country, honouring the ongoing cultural significance of this land.

Above all, it is a place for riders—a generous, welcoming space to prepare their bikes, plan their journey, and familiarise themselves with the trails ahead.



1 INTRODUCTION

SITE ANALYSIS

CARDWELL AS A DESTINATION

- 2hrs 15mins to Cairns
- 2hrs to Townsville

ANTICIPATED USER GROUPS

- Families and Cardwell community
- Local and interstate MTB riders
- Tourists
- Visitors stopping/passing through
- Event participants

ROCKINGHAM BAY

CARDWELL JETTY

FORESHORE

VICTORIA ST
BOWEN ST

CARDWELL PARK

TRAILHEAD

GIRRAMAY COUNTRY

ONE MILE CREEK

GIRRAMAY COUNTRY

TO TRAILS

THE SPA POOL





OVERLAND FLOW



SOFT PARK EDGES



PAPERBARK GROVE



PARK EXTENT



TRAILHEAD SITE + PUMPTRACK



1 INTRODUCTION

PROJECT OBJECTIVES

TRAILHEAD CONCEPT DESIGN

The Cardwell Mountain Bike Trailhead will be the foundational element of the wider trail network and represents a significant opportunity to shape the mountain biking experience, activate the public realm, and drive economic outcomes for the region. Located in a corner of the Cardwell Sports Ground on Brasenose Street, opposite Girramay land, the trailhead is strategically positioned within walking distance to the town centre and future trail access and is supported by existing recreational infrastructure such as the Cardwell Pump Track. This proximity enables a “ride in, ride out” model that seamlessly connects the trail network to accommodation, retail, and hospitality offerings in Cardwell.

From a landscape architectural perspective, the trailhead has been conceived as a multi-functional, community-anchored gateway that balances environmental, social and commercial outcomes. A key feature of the design is the integration of a newly designated area within the parkland known as ‘Paperbark Grove’ – a natural, shaded setting that will serve as the main staging area for the trailhead. Whilst respecting the environment, this space has been carefully selected to accommodate all essential rider services and functions, including amenities, bike infrastructure, way-finding, and gathering areas – delivering the core infrastructure required for a world-class trailhead experience. The broader site’s existing assets – such as community halls, amenities and open fields – will complement this space and allow for adaptive reuse and flexible event activation, creating a cohesive and dynamic precinct for both locals and visitors.

DESIGN INTENT AND KEY FUNCTIONS

The trailhead is designed to:

- Provide clear legibility and orientation, with integrated way-finding, trail maps and entry signage;
- Offer essential rider amenities, including toilets, showers, bike wash and maintenance areas, shaded seating and picnic zones;
- Serve as a flexible event hub, with capacity to host local and regional mountain biking events using the adjacent sports field;
- Embed cultural storytelling, with interpretive signage, storyboards and art installations developed in collaboration with the Girramay People;
- Integrate complementary commercial services, such as bike hire, food and beverage, and retail – contributing to a more complete and appealing visitor experience.
- Support existing park users, activities and community groups.



COMMERCIAL VIABILITY AND ECONOMIC ACTIVATION

The trailhead plays a pivotal role in realising the economic potential of the Cardwell Tropical Mountain Bike Trails. Its design directly supports revenue-generating activities through:

- Leasable retail and hospitality spaces designed to accommodate cafés, bike shops, art gallery/ display and sales and tour operators;
- Centralised services that support shuttle operations, providing access to higher elevation trail zones;
- Creating a physical hub for off-trail commercial partnerships, ensuring ease of access for leisure riders, families and day visitors;
- Enhancing the overall visitor length of stay and spend by concentrating activity, services and events in one well-designed location.

By consolidating user needs, social space and commercial activation into one cohesive site, the trailhead becomes more than a starting point — it becomes an iconic destination in its own right, supporting not only the recreational function of the Trails but also the broader visitor economy of Cardwell and the Wet Tropics of Far North Queensland.

DELIVERY AS A PRIORITY ASSET

Given its integral role in user experience, safety, operations, and economic sustainability, the trailhead has been identified as a standalone priority project. Delivering this component to a high standard – with durable, context-sensitive materials and a robust, user-focused design – is critical to the success of the overall trail network. A high-quality trailhead will:

- Support early activation and community engagement prior to trail construction;
- Signal investment and quality to future visitors and investors;
- Serve as a long-term asset for community events, tourism, and local pride.
- In summary, the Cardwell Trailhead provides a landscape-led opportunity to define the identity, function, and sustainability of the trail network. Its thoughtful design and strategic delivery will underpin the success of the entire project, ensuring it serves as a catalyst for recreation, culture, and economic development in the region.



1

INTRODUCTION

HEALTH AND WELLBEING OF COUNTRY

The values, rights and lore of Country should guide decision-making for the project.

We have drawn from the work undertaken to date by the project team, inputs from the Girringin Aboriginal Corporation, local and state government partners, and ongoing contributions from the Cardwell community. We hope this project will improve the health and wellbeing of Country. To ensure this, we propose working within the following five principles:

INDIGENOUS ECOSYSTEMS SUPPORT

Establish and better understand habitat and fauna specific to this part of Girramay Country through tree planting, ecologies and designing public open space that supports the coexistence of humans and non-humans.

CONNECTION TO WATER

Connect to the bay and foreshore and celebrate and respond to the movement of water across the site. Use design to respond to the inundations and occasional flooding likely in this area of the wet tropics. Provide educational, sensory and play opportunities through introduced water, attracting and connecting people to this place and providing physical and psychological respite from the heat.

CONNECTION TO COUNTRY AND CULTURE

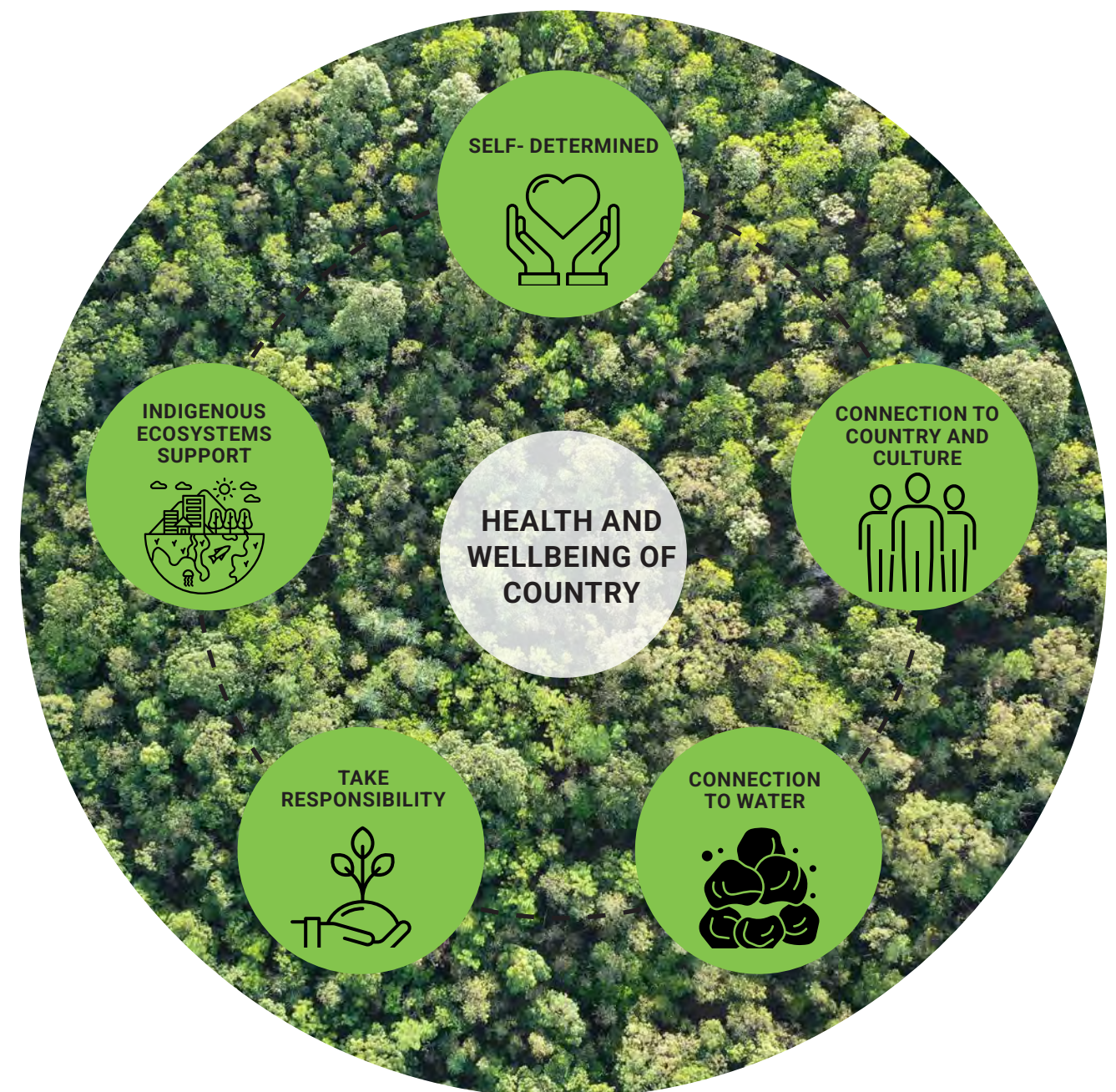
Integrate and reveal the markers, stories, truths and practices of Country through the design, interpretation planting and materials to strengthen connection to Girramay Country and culture and build appreciation for the landscape, Cardwell and the future bike trail network beyond.

SELF-DETERMINED

Ensure that the process of designing and delivering the project respects and is guided by Girramay cultural protocols, decision-making processes and opportunities for leadership and entrepreneurship.

TAKE RESPONSIBILITY

All involved in the delivery of this public space project must take responsibility to listen, to learn from the past, avoid harm, and design for the wellbeing of future generations—both human and non-human.



1

INTRODUCTION

PROTECTING PAPERBARKS

Central to the design of the Cardwell Trailhead is the protection and celebration of the iconic and culturally significant paperbark copse within the site.

The significance of Paperbarks in Queensland

Distinctively shaggy, paper-like bark of melaleucas, are prominent in the Wet Tropics. In summertime, the humid air fills with the burnt caramel perfume of the flowers of the weeping paperbark, *M. leucadendra*, and swamp tea-tree, *M. dealbata*.

Lorikeets descend on them in huge screeching flocks to feed on their rich nectar. So too do spectacled flying foxes; sometimes in such numbers that flights into and out of Cairns airport are delayed.

Working against the survival of broad-leaf tea-tree forests and, in fact, most large paperbark stands throughout Australia, is the preference of these trees for damp, swampy habitats.

On the settled land surrounding Cardwell, these low-lying, wet/dry, fringe habitats have traditionally been filled in, removed and 'reclaimed' for dryland uses like cattle and sugarcane farming. There are still signs everywhere in north-eastern Queensland of just how extensive the coverage here by melaleucas would have once been.

"Much of north Queensland's cane and cattle farms would have been covered by paperbarks...and you can still see the huge old trees, remnants of wider forests, across properties in the region." (Mark Parsons, QPWS conservation officer)

The Girramay people, part of the Rainforest Aboriginal Peoples of the Wet Tropics in Far North Queensland, have a deep and continuous connection to Country that includes cultural, ecological, and practical relationships with local species such as the paperbark tree (*Melaleuca spp.*).

Key Cultural Uses of the Melaleuca by Girramay and Other Rainforest Aboriginal Peoples include:

- **Shelter and bedding:** The bark of Melaleuca trees is layered and was traditionally peeled and used for temporary shelter, bedding, and even as blankets.
- **Cooking:** Paperbark was often used to wrap food for cooking in earth ovens (similar to hāngi).
- **Art and craft:** Soft layers of bark were used in traditional arts, and in more contemporary times, by Girramay artists such as those from Girringun Aboriginal Art Centre, in the creation of bark artworks and ceramics.
- **Waterproofing and insulation:** The bark's insulating properties were used in making water-resistant items.

Kup-murri - Underground Ovens

Melaleuca leaves are still widely used by the Girramay, in underground ovens known as Kup-murri. These begin as large holes dug in the ground and lined with rocks over which a fire is started.

Once the fire burns down, a layer of paperbark leaves are placed over the top. Meat and bush vegetables are added and then the whole thing is covered with more leaves and dirt and left to cook slowly for hours.

Water source and Torches

Girramay elder Claude Beeron, well known around the Cardwell area simply as 'Uncle Claude' and now aged in his 70s, says melaleuca trees were also a guaranteed source of water during the dry and on journeys. He points to the distended swellings that many smaller melaleucas appear to develop on their trunks.

"That's water storage and a lot of people drink it," he explains. *"It might be salty, but you can survive on it: if you happened to be walking for miles and miles and your neck was dry, you'd cut it with a stone axe and bleed it."* He also recalls that melaleuca bark was lit and used like a torch.

References :

<https://www.australiangeographic.com.au/science-environment/2016/11/marvelous-melaleucas/>
<https://www.murumittigar.com.au/>



CARDWELL TRAILHEAD DESIGN



2

TRAILHEAD DESIGN

CARDWELL TRAILHEAD OPPORTUNITIES

CARDWELL COMMUNITY
PARK + EVENT PRECINCT

TRAILHEAD SITE

GIRRAMAY LAND

OPPORTUNITY
Develop future eco and cultural
tourism facilities that complement the
MTB trails and connect to Country.
This may include :
• Cultural tours
• Educational resources and
• Art and cultural events
In the long-term, this facility may
include a cafe, restaurant, retail
shop, info desk/ booking desk or
accommodation etc.

TO TRAILS

2

TRAILHEAD DESIGN

CARDWELL COMMUNITY PARK PRECINCT

Created as a tool to guide Cassowary Coast Regional Council's decision making, World Trail have prepared a *Cardwell Community Park Concept Plan Report* to improve the overall benefits to both the Trail project and the public open space offering in Cardwell. The Trailhead is proposed for one corner of the park and will connect and respond to the broader objectives and aspirations to create a precinct, and a gateway to the Cassowary Coast. The following design themes and objectives will be central to the development of the Cardwell Community Park:

- **Presence and Identity**
- **Connectivity and Car-parking**
- **Safety and Inclusivity**
- **Durability and Maintenance**
- **Biodiversity and Cultural Significance**
- **Urban forest and Tree Canopy**

This design report is a separate document but designed to compliment the Trailhead Concept Report and guide any additional or future works.



2

TRAILHEAD DESIGN

BRASENOSE ST CONCEPT

A key strategic move for both the Trailhead and the strengthening of a Cardwell precinct is to better connect - physically, psychologically and spatially - the town and the park.

Through creating a 'gateway' or an avenue of iconic trees, we intend to highlight the trailhead as well as create visual connection between the park and the water.

This avenue of vibrant trees will strengthen wayfinding and street hierarchy within Cardwell. The seasonal colour and flowering will create an iconic 'event' to celebrate, encouraging storytelling and appreciation of this unique Australian tree species.

- Avenue of feature trees will act as a visual cue helping to orient visitors and create a strong sense of place.
- Provide a memorable threshold and arrival experience, symbolising the transition from town to trails.
- Reinforce the park as a civic landmark and focal point within the town.
- The seasonally flowering tree-lined street will create an 'event' and celebrate the history and significance of this species to the Girramay people
- Contribute to micro-climate improvement, habitat and encourage walking through increased shade
- Become part of the town's shared public memory and identity, making the journey to Cardwell and the future trail



2

TRAILHEAD DESIGN

TRAILHEAD DESIGN PRINCIPLES

- Create an iconic and memorable trailhead that informs and supports the riding community entering the future trail network.
- Enhance the destinal quality of the park and strengthen connections to the town, future trails, and the foreshore.
- Deliver infrastructure for events, and gatherings that welcome riders, visitors, and the local community throughout the year.
- Retain trees and design a lush, cool, tropical park that supports gathering, active recreation and nature play experiences.
- Respect and celebrate Girramay culture through the design process and in the final built outcome.
- Consider habitat, biodiversity, natural shade and maintenance requirements in species selections and water management.



2 TRAILHEAD DESIGN DESIGN APPROACH



PRIVILEGE LOCAL + SUSTAINABLE MATERIALS



CREATE OPPORTUNITIES FOR REST AND RELAXATION



FOSTER COMMUNITY PRIDE + GATHERING



DESIGN WITH THE EPHEMERAL / NATURE



SUPPORT RIDERS WITH CYCLING FACILITIES,
INFRASTRUCTURE + INFORMATION SIGNAGE



ENGAGE TEENS, YOUTH + TODDLERS IN
ACTIVE, SENSORY PLAY EXPERIENCES

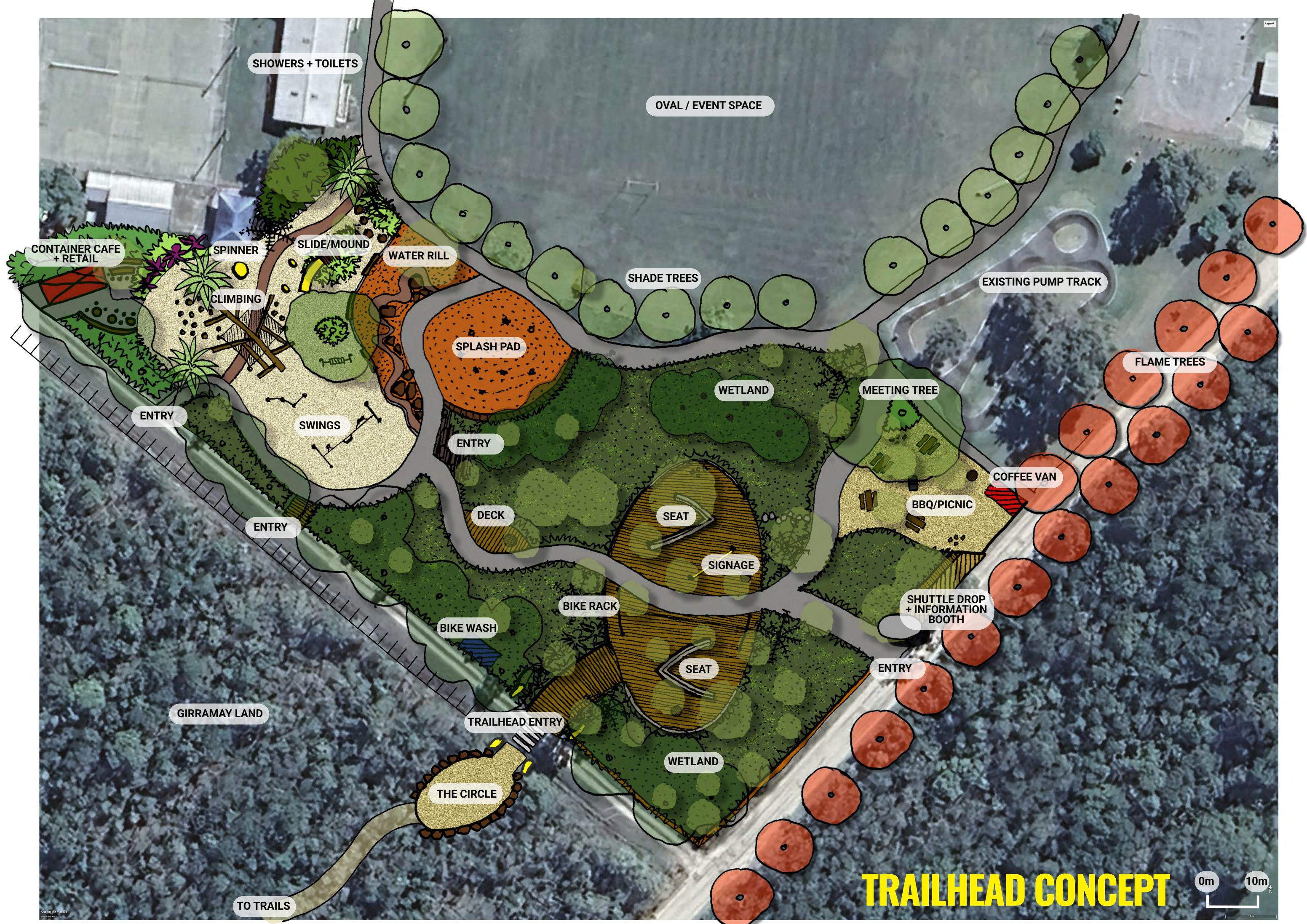


TREAD LIGHTLY ON COUNTRY AND CELEBRATE
CULTURAL UNDERSTANDING + PRACTICES



ACTIVATE PARK AND CREATE COMMERCIAL
OPPORTUNITIES + SCALABLE EVENTS





- REFURBISHED TOILETS + SHOWERS
- PAY TO USE LAUNDRY

- SPORTING OVAL
- MULTI PURPOSE EVENT SPACE
- 3-PHASE POWER
- VEHICLE ACCESS
- PERIMETER SHADE TREES

- CAFE / SHOP
- SEATING
- WATER TAP

- NATURE PLAY
- PLAY EQUIPMENT
- SAND PLAY

WATER-PLAY

PUMP TRACK

PAPERBARK GROVE

TRAILHEAD INFORMATION AND MAPS

- BBQ FACILITIES
- PICNIC TABLES
- COFFEE CART
- WATER TAP

- SHUTTLE DROP-OFF
- INFORMATION BOOTH
- TOUR BOOKINGS

GIRRAMAY LAND

GATEWAY

SLOW POINT GATHERING SPACE

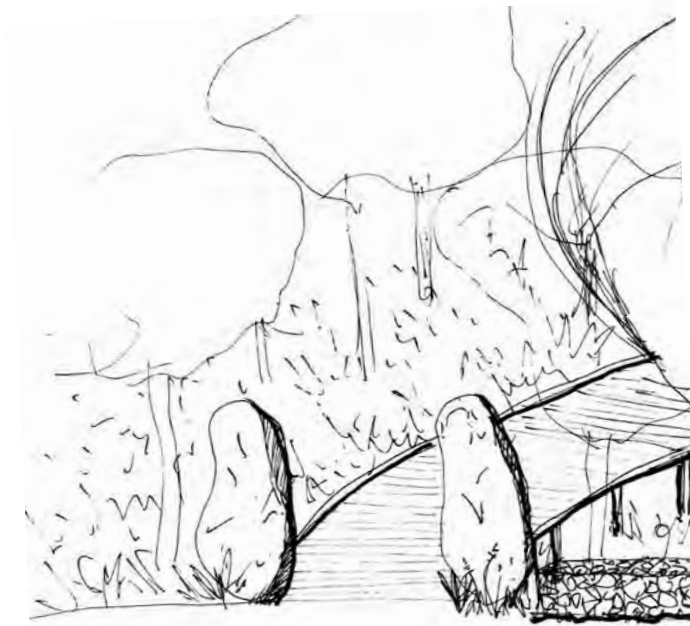
TO TRAILS

TRAILHEAD CONCEPT

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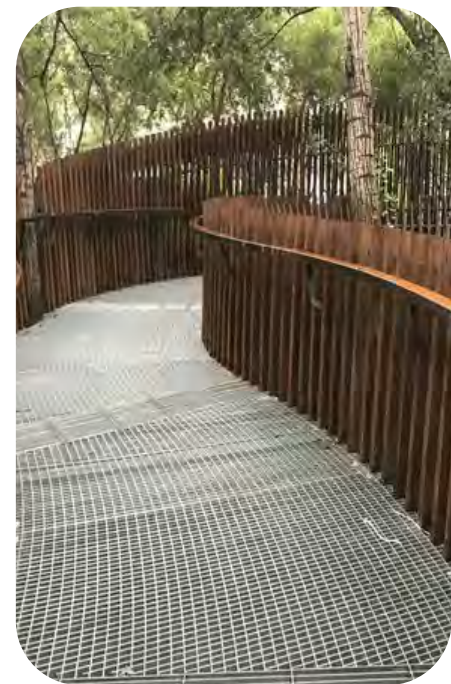
'PAPERBARK GROVE'





Designed to sit lightly within its natural setting, the main trailhead space will hover above the sunken paperbark grove and low lying wetland below. The oval shaped space will include easy to access bike racks, two entry/exit points, clear directional, cultural and interpretive signage, and comfortable social seating opportunities.

The filtered shade and grated decks will create an immersive atmosphere that connects visitors to the landscape, the weather and the seasons — a quiet pause before riders set off to explore the trails beyond.

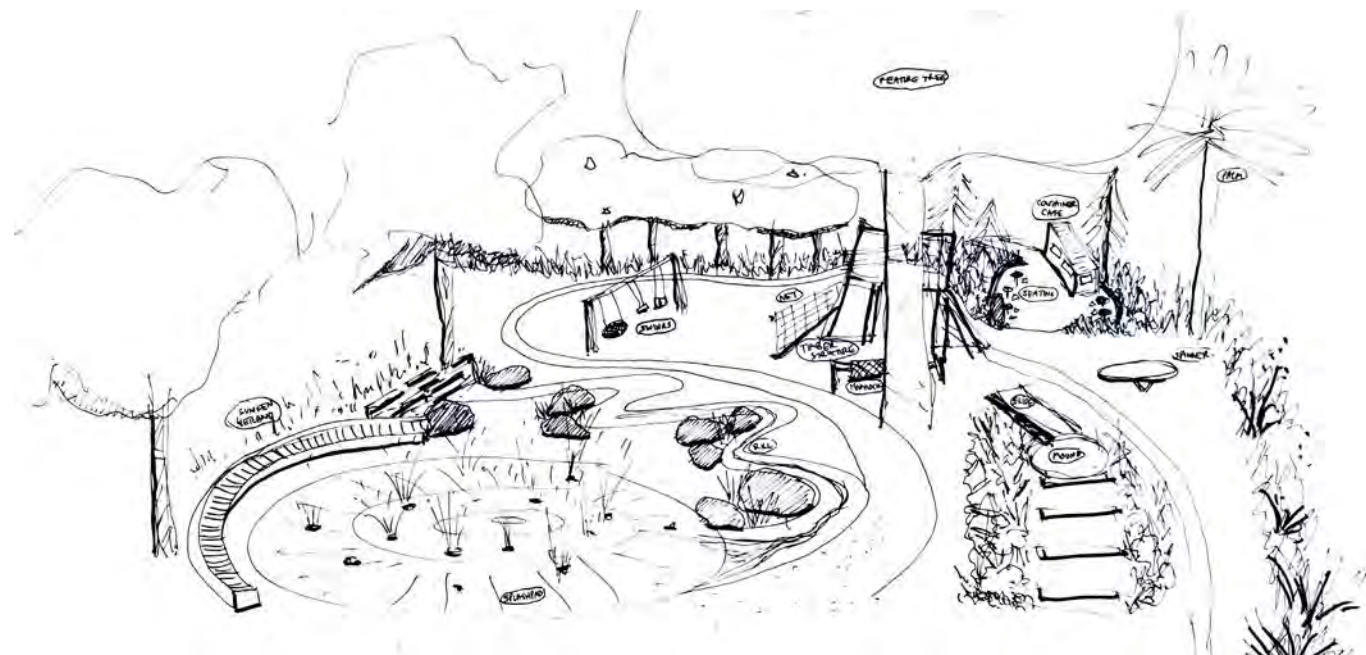


GIRRAMAY LAND



PLAY SPACE





Set within a backdrop of tropical planting and lush shade trees, an engaging, regionally scaled, nature play space invites children to explore, climb, and create through a variety of physical and sensory-rich experiences. Climbing structures, swings, and spinners will be nestled into soft sand, encouraging imaginative, loose-parts and active play in a safe, tactile environment.

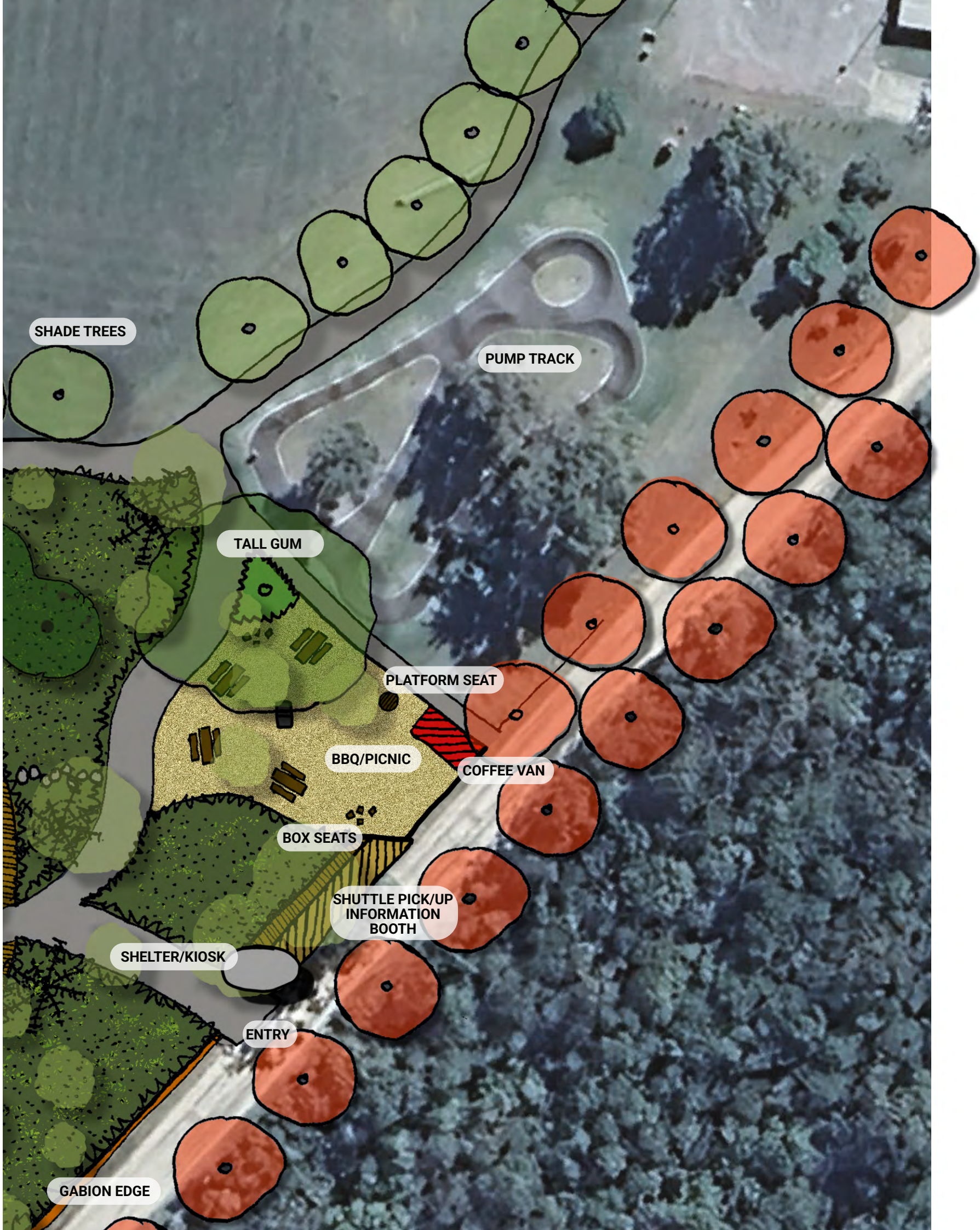
Water from a dynamic and cooling 'splash pad' or water play surface will flow gently down a meandering, boulder lined water rill that winds through the space and distinguishes the two play areas. There will be an opportunity to engage local artists to design or create paving patterns, that celebrate local culture and connection to Country.

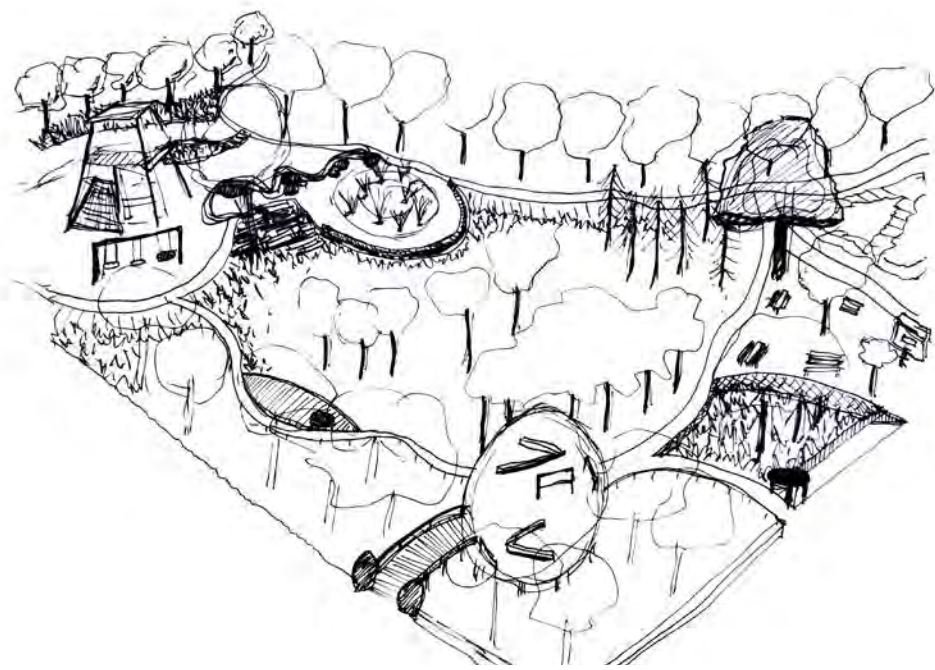
Intentionally positioned close to amenities and parking, there will be space for a cafe/retail/gallery offering that will further enhance and extend the experience for visitors, riders and families.

The combination of active, water, and sensory play will offer a memorable, inclusive, and culturally resonant experience for children, carers (and riders) of all ages and abilities encouraging them to cool off, socialise and enjoy.



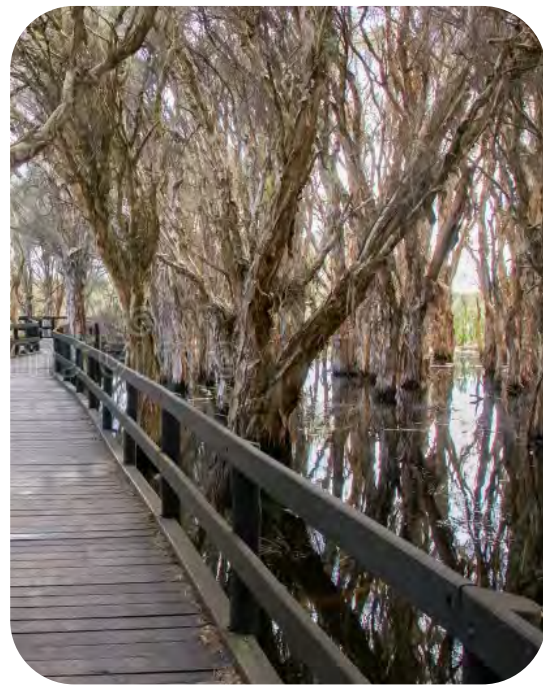
PICNIC SPACE





An open and welcoming gravel picnic space accessible from Brasenose St and adjacent to the dynamic pumptrack designed by World Trail, this simple space will create a vibrant hub that brings community groups together. Whether for a picnic, BBQ, birthday party, or larger school or social event, the space will accommodate multiple groups of different sizes. The concept suggests a range of seating types and styles, electric bbq facilities and a dedicated spot for a food-truck or coffee can to occupy on a regular or weekend basis.

At its heart, a large feature tree will offer shade and act as a natural meeting place. The picnic space is positioned in close proximity to the mountain bike shuttle drop-off and pick-up points, making it visible and easily accessible for riders of all ages as well as the wider community.



2

TRAILHEAD DESIGN

PRELIMINARY PLANTING LIST

PROPOSED SPECIES LIST *

TREES

Brachychiton acerifolius
Calophyllum inophyllum
Castanospermum australe
Buckinghamia celsissima
Cupaniopsis anacardioides
Waterhousea floribunda
Stenocarpus sinatus
Maniltoa grandiflora lenticellata
Elaeocarpus eumundi
Eucalyptus tereticornis

Melaleuca quinquenervia
Banksia Robur
Casuarina glauca
Casuarina cunninghamiana

Podocarpus elatus
Licuala ramsayi
Melicope elleryana

SHRUBS, FERNS AND GRASSES

Lomandra Hystrix
Dianella atraxis
Dianella caerulea
Liriope muscari
Crinum pedunculatum
Alpinia caerulea
Cyathea cooperi
Blechnum cartilagineum
Gahnia aspera

Illawarra flame tree
Wirri / Beauty Leaf Tree
Mirrayn / Black Bean
 Ivory Curl Tree
 Beach Tuckeroo
 Weeping lilly pilly
 Fire Wheel tree
 Silk Handkerchief Tree
 Eumundi Quandong
 River Blue gum

Broad-leaved paper bark
 Swamp Banksia
 Swamp oak
 River she oak

Plum pine
 Fan Palm
 Corkwood

Green Mat Rush
 Northern flax lily
 Blue flax lily
 Evergreen giant
 Crinum lily
 Native Ginger
 Australian tree fern
 Soft water fern
 Rough saw edge



* Collaboration and review with Giringun is recommended.



CONCEPT RENDERS



TRAILHEAD ENTRY





CARDWELL PLAYSPLACE



CARDWELL TRAILHEAD





CARDWELL TRAILHEAD

NEXT STEPS

- Seek endorsement of the Trailhead Concept and the Business Plan
- Secure funding for the Detailed Design Phase and Masterplan.
- Establish opportunities for Girramay/Girrigun involvement
- Finalise and embed the marketing and branding approach into the Trailhead



Once funding is secured then the detailed design and development of the Cardwell Trailhead project and broader Cardwell Park upgrades may commence. Next steps will involve commissioning a comprehensive feature survey, geotechnical and engineering assessments and additional inputs and consultation with Cassowary Coast Council and Girramay/Girrigun.



