CULTURAL TOURISM DEVELOPMENT CONCEPT PLAN

MUNDY CREEK REGENERATION PROJECT

2013-2014

Place Making as a Tool... "Involving the voluntary sector ensures that good park management centres on meeting community aspirations."

CABE 2005

This document was developed and produced by Bernadette Boscacci, with assistance from Denise Weightman and John Gunn, with input from and in consultation with the Mundy Creek Environmental Arts Collective and other stakeholders. It was made possible with the financial assistance of a RADF grant, auspicing assistance from Umbrella Studios Contemporary Arts, and the dedicated voluntary work of all those involved.

> Photographs: B.Boscacci, J.Gunn, D.Weightman, F.Sandilands. Townsville Queensland. 2013-2014



MUNDY CREEK NATUREWAY REGENERATION PROJECT









The Regional Arts Development Fund is a Queensland Government through Arts Queensland and Townsville City Council partnership to support local arts and culture.



Contents

Introduction 4

Cultural, Environmental and Recreational Values 10

Social Issues 18

Plantings 24

Pathways and Connectivity 26

Public Art / Infrastructure Design 30

Bibliography 67

Appendix 68

Introduction

The Mundy Creek Environmental Arts Collective is an evolving network of artists and environmental professionals. This collective grew out of the cultural arts programs and activities we have been conducting on site, at the Castle Hill PCYC and Garbutt State School since 2012, and the participant's commitment to contributing towards proactive community cultural and social development in the Townsville region.

This small group of Townsville locals has produced a series of designs for this concept plan to help create a renewed community park and hopefully extend the Mundy Creek Natureway to John Melton Black Drive and other connectivity sites i.e. Townsville Airport, Rowes Bay, Castle Hill, Kissing Point, to the bay, islands and other Learnscapes.

Plan components have been developed with participating youth, artists and other stakeholders over a period of 2 years using a community development framework.

Mundy Creek Arts Collective & Catchment Care Group had input and support from key partners including the Coastal Dry Tropics Landcare Inc., independent environmental, arts, design and industry professionals, local land owners, community members (adults and youth), Umbrella Contemporary Arts Studios and the Townsville City Council. It was partly funded by Arts Queensland's Regional Development Fund with the remainder being in-kind contributions.

We would like to acknowledge input provided by Bernadette Boscacci, Peter Buosi, Russell Butler, Shannon Chadwick, Christine Dalliston, Billy Doolan, Karen Doolan, Jonny Freeman, Andy Frost, John Gunn, Dylan Howells, Shane Keen, Jessie Su Oldfield, Fairlie Sandilands, Kim Sellars, Hans Sip, Tony Squires, David Stefanovic, Chad Stone, Leon Stubbs, Denise Weightman, Matt Whitton, Townsville City Council's Integrated Sustainability Services Department, local youth and landcare volunteers.



Site Map: Yellow Hatch is Townsville City Council reserves, Red Hatch is Unallocated State Land.



The **Objectives** for this plan were to:

• build upon the existing Environmental, Public Art / Infrastructure Design plan (see Concept plan_B.Boscacci 2011)

• develop a Cultural Tourism Plan for the Mundy Creek Natureway regeneration site, and encompassing areas of adjacent Airport and State land for community / industry feedback that can be used to gain sponsorship, funding or in-kind support to implement

• develop environmentally and culturally appropriate designs for a sculptural signage trail that extends from the Townsville Airport to the Natureway Regeneration site and into the adjacent parkland

• create landmarks to promote Townsville's significant urban wetlands by drawing upon local cultural and environmental themes and stories in the designs developed

• develop interpretive signage that can:

• complement The Mundy Creek Riparian and Fire Management Plan and its works: see attached (revised plan) - MundyCreekRipManPlan20130220.pdf

• be integrated with the Townsville City Council's Pathway Project, Stage 3 – Mundy Creek Pathway Project: <u>http://www.townsville.qld.gov.au/council/projects/Pages/</u><u>MundyCreekPathwayProject.aspx</u>

• linked to Coastal Dry Tropics Landcare Inc. website / database

• address "Areas for Improvement" and "Key Areas for Further Work" in Garbutt as identified in the Renewing Garbutt document 2001 (see next page)

Extract from the Executive Summary of 'Renewing Garbutt - People Partnerships and Planning. Summary and Review of the Garbutt Renewal Project 1993-2001.'

People, Partnerships & Planning

Areas for Improvement

While much has been achieved, some areas for improvement in future programs have been identified. These include:

- it is important to match planning processes and the provision of resources, thus avoiding long delays before funds become available
- if possible, funds should be provided for developmental programs, such as youth work and family support positions, over realistic periods and with opportunities being available for ongoing funding
- involvement of a range of state government departments is preferable at the commencement of any community renewal process so that the best possible planned responses to local needs may be developed
- the role of the public housing sector in meeting tenant needs and community expectations is not easily matched with the interests of the development industry thus creating difficulties in undertaking large scale joint ventures
- caution should be exercised with the development of medium density housing as an option as community feedback in Garbutt suggests that it may not be suitable for many groups and may meet resistance from the wider community

consider including additional Aboriginal and Torres Strait Islander staff in the Department of Housing, particularly for tenant liaison and consultation roles, where appropriate in future programs

the role and expectations of any community policing programs should be carefully negotiated at the beginning of future renewal projects.

Key Areas for Further Work in Garbutt

Key areas for further work in Garbutt include:

- completion of projects such as the planned Garbutt festival and entry statement signs which are to celebrate the strengths and identity of the Garbutt community and the achievements of the renewal process
- completion of outstanding studies funded under the Community Renewal Program and other programs, such as the Garbutt airport access and land use study and the Townsville West sport and recreation study
- securing resources and carrying out the proposed study to develop longer term strategies to improve drainage within Garbutt
- further improvements to the seniors units within the public housing sector in Garbutt

 ongoing maintenance of properties and physical infrastructure, including public housing, roads, parks and playgrounds, street trees and public art

- supporting and sustaining established community services and organisations, such as the Garbutt State School, Garbutt Neighbourhood House and Garbutt – West End Police Beat, and ensuring local coordination between services
- use of the proposed names from well-known Aboriginal and Torres Strait Islander families in the naming of new streets in Garbutt
- arranging for a plaque to be included in Garbutt Park to describe the meaning of the sculptures

- arranging for a plaque to be included in Garbutt Park to describe the meaning of the sculptures
- completion of long term projects, for example, the Mundy Creek Natureway
- consider the provision of further footpaths and bikeways in Garbutt
- securing of funds for high priority programs, especially youth development (including a position to work with Aboriginal and Torres Strait Islander young people)
- raising of concerns about the loss of services such as banking services and public telephones with the relevant authorities
- continuing work towards improving key services such as the public transport service.

While many projects identified through the Garbutt Renewal Project and funded under the Community Renewal Program are now being completed, work to bring about improvements in the quality of life for and with Garbutt's residents is an ongoing process.

Other Links

The recreational and cultural tenets and designs in this plan link with past, current and future projects, including:

- Harold Philipps ParkMagpies Football Club
- Castle Hill PCYC
- the Deadly Dukes Program
- Lions Football Club

• Renewing Garbutt- People, Partnerships & Planning, Community Renewal Project (1993 - 2001), Townsville City Council *(see opposite page for an extract from the Executive Summary of this document)*

• the recently completed Kissing Point / Garrabarra / Jezzine Barracks redevelopment,

- Soroptimist Park, Rowes Bay
- Palm Island Artists' and Community Employment initiatives
- Townsville Airport Terminal Cultural Rejuvenation Project
- Townsville Enterprise's Cultural Tourism plans.

We also have plans to continue to work with Deadly Dukes, Lions Footy Club, Neato and Ellis Developments to undertake inclusion activities (especially with local youth) in the areas of recreation, land rehabilitation and community harmony building. An application for funding is currently (August / September 2014) being developed by the Mundy Creek Arts Collective, Fairlie Sandilands and Matt Whitton for a film / community engagement / harmony project.

Cultural, Environmental and Recreational Values

The Mundy Creek Natureway site

The site was once a part of the Townsville Town Common (gazetted 1869) and is now a remnant natural area interfacing with 'suburbia'. While the creek line and surrounds have been significantly altered since the 1950s the site maintains environmental values that add to the cultural, environmental and recreational values of the Townsville Town Common Conservation Park which itself still contains significant wetlands, woodlands and coastal vine thicket habitats.

The Mundy Creek site is adjacent to a diverse native grassland which is locally significant due its scarcity in the built environment and the Townsville region i.e. relatively intact with few exotic species. The Mundy Creek catchment, while relatively small in area, provides habitat for many native species including bird roosts, nesting trees, lies, bowers and waterholes.

The site also has:

- expansive views to the surrounding ranges. These ranges are significant to the Wulgurukaba people because of their representation of a major creation story for the area i.e. terrestrial evidence of the ancestral Carpet Python;
- a series of well-defined pathways (pathways of preference) that are historical walking paths, pedestrian and cyclist shortcuts;
- multiple connectivity and recreational uses. It is regularly used by community members for the purposes of walking and dog walking, jogging, playing of ball sports, riding bikes, scooters and skate boards, using remote control toys and (illegal) trail bike riding;



- both recent and well established plantings;
- a permanent spring fed water source;
- issues associated with invasive exotic/weed species.

Mundy Creek Catchment Care

Mundy Creek Catchment Care as part of the Mundy Creek Project (since 2011) have coordinated and facilitated:

• The development and implementation of a regeneration and maintenance plan for the creek / natureway aspects of the site (Mundy Creek Catchment and Riparian Management Strategy) incorporating a fire management plan for the adjacent native grassland (see Bibliography)

• Monthly landcare afternoons since January 2012 (1st Saturday of the month starting at 4pm or 5pm (depending on the temperature) til sundown);

• Irregular habitat management days with local landcare groups and community volunteers. Activities include weeding along the management lines, slashing and spraying of exotic grasses and weeds, rubbish collection and clean up along the creek after high tides and storm / rain events and general preparations for fire management activities;

• Spontaneous weeding and rubbish collection by Mundy Creek Catchment Care members especially along the creek line between Lockheed Street and the footbridge and around the revegetation site (planted April 2012);

• Healthy working partnerships with CDTLI (Coastal Dry Tropics Landcare) and CVA



(Conservation Volunteers Australia), TCC ISS Department (Greening and Waterways team), Department of Communities (Juvenile Justice), NEATO (Job agency), the Townsville Airport, Garbutt State School, the Magpies and Lions Football Clubs, Earth Environmental, Mundy Creek Arts Collective and members of the community (of all ages and cultures);

• Preparation of numerous funding applications to assist us with our work on site: including Strengthening Communities Grants; Caring for our Country, Coastal Habitats and Small Environmental Grant rounds;

• Negotiation and collaboration with a land developer to improve the potential community and environmental outcomes associated with a proposed development on the eastern side of the creek.

Planned Land Management Activities

We provided a letter of support to Neato Employment Services for their bid to secure a Green Army team with suggested works to be undertaken at the Mundy Creek site. Unfortunately their application was unsuccessful. We will continue to work in partnership with NEATO and other organisations to undertake weeding and maintenance activities on the site and particularly on the riparian revegetation area on the west bank of the creek and on the adjacent native grasslands.

As part of the ongoing management of the native grasslannds, investigations are underway into the tenure of the block and its intended use. If possible, we would like to enter into an agreement with the landowner to manage the grassland in perpetuity for the community. Issues still to be addressed include: illegal dumping and unauthorised access for nefarious purposes along with the ongoing need for weed and fire management.

Fire management

We are undertaking ongoing fire management activities in conjunction with Townsville City Council. Fire management for property protection and habitat management of the Mundy

Creek catchment native grasslands involves an integrated hazard reduction and ecological burn/s approach including:

- Maintaining a hazard free buffer to neighbouring residences;
- Installation of management lines;
- Removal of Guinea Grass, Para Grass and other high fuel load, invasive, exotic species;
- Native habitat 'farming' including seasonal seed harvesting (prior to burning);
- Understanding of system ecological processes through traditional ecological knowledge and science;
- Community capacity building through involvement in monitoring activities.

Post burn monitoring, evaluation and reporting will help build a body of knowledge to inform future controlled burning.



Proposed Residential Development

On the 23rd June 2014 notification of a development application was advertised for a proposed housing development on site adjacent to the creek and park (see Figure1). Applications for comment have been invited with the closing date for submissions being 6 August 2014) (see http://www.townsville.qld.gov.au/resident/planning/online/pages/

Earth Environmental is working with the developer and Mundy Creek Catchment Care to negotiate the most beneficial environmental, cultural and social outcomes possible for the community and the Mundy Creek catchment.

According to the plan of development, the zoning of the block will be changed from Green Zone to Medium Density Housing zoning, and the majority of the existing woodland trees on the development site will be removed to make way for houses and roads. We are negotiating with Council and the developer to retain some of the old growth trees on the block, for habitat and shade. We propose that any trees that are felled, be given to the Mundy Creek Project for use in creating park furniture and other useful community, cultural and recreational structures.

Note: Earth Environmental has been engaged by the developer to achieve environmental outcomes to enhance the development and reduce the impacts of 'traditional' engineered drainage concepts.



Development application notice

"The development proposal is well on its way and is 'supported' by Townsville City Council's intent for infill development prior to expansion of the urban footprint. The condition of the site and the environmental values of the block are unlikely to be high enough to seriously challenge the trajectory of the development.

Based on that assumption I am working with the developer to obtain the best environmental outcomes for the catchment within the TCC process designed to improve flood mitigation in the Mundy Creek catchment. This involves widening the creek/ drain (depending on the perspective of the viewer) and increasing the fish habitat area upstream of John Melton Black Drive."

Extracted from an email from John Gunn (Earth Environmental), June 2014 (earth@mackay.net.au).

Greater Town Common

Through the Creek to Coral Caring for our Country project "Increasing community engagement in Townsville coastal catchments for biodiversity" the Mundy Creek project is now linked to Integrated Sustainability Services' (Townsville City Council) Greater Townsville Town Common initiative and was included in 2013 funding proposals for the Biodiversity Fund Round 2 and Caring for our Country (2nd iteration - 2013-2018), to progress Townsville Urban Biodiversity Connections: Commons, Waterways and Coastalscapes. Unfortunately the applications were unsuccessful.

Social Issues

"... in run-down environments 'the sense of powerlessness, vulnerability and impotence begins to shape self-identity." 2005 CABE

Vandalism & Pollution

Vandalism and pollution occur on a daily basis. It is best described as:

1. Environmental and infrastructural vandalism caused by individuals and small groups on trail / motor bikes and in vehicles, passers-by and youth who frequent the park: witnessed accounts include destruction of public murals, grassed areas, plantings, signage, arson and the driving of vehicles over park infrastructure (BMX track, skatepark, the footbridge and park pathways). When is it alright to drive in parks except for maintenance and management?

2. Illegal dumping and littering. This occurs particularly on the far side of the grasslands, where dumpers can access the dirt track around the grassland from John Melton Black Drive and Peel Street, Garbutt.

3. Noise pollution caused by motorbikes using the park, grassland and pathways as racing tracks / places to do 'burn outs'.

Vandals are causing distress for locals and putting other users, including children, at risk.

Despite the fact that residents continually call upon the police to intervene, very little change has been made. The police have told us that they can't enforce trespass or no motor bike riding laws there because the Council do not have signage in place to say it is not allowed. We have been petitioning Council to install such signage and bollards to prevent people



driving into the park for some time now. Some bollards have now been installed to prevent people driving onto the football fields (Council asset) however public vehicles are still sighted regularly in the park. There are two problems here: 1. an extra bollard is required on the creek side, as vehicles have been seen driving around the barrier at this point; and 2. Operation of the gates is in question, as it has been observed that gates are sometimes left open after hours and on weekends.

"Investing in park staff, in good design, and in the ongoing maintenance of spaces is vital if parks are to be the much-valued community assets." Dickon Robinson CBE, Chairman, CABE Space 2005

Some vandalism is carried out by kids / youth who frequent the park, and usually takes the form of fires lit around plantings or on the grasslands, damaging of trees, fences, lighting and signage. Apart from lighting fires for 'fun', in most cases, the objects of the vandals' focus are already degraded / neglected or defective.

"Poor standards of maintenance are highly visible to the public and communicate a lack of care, authority and ultimately respect. Whether or not anti-social behaviour is actually witnessed in these spaces, the sense of its presence exerts such a negative effect on public perception that it must be taken seriously." (CABE 2005)

Community Ownership

It is necessary to engage the community in the redesigning and implementation of the project if we are to address vandalism, site misuse and weed infestation issues, and improve the condition of the site for all to enjoy. Associated social issues that need to be addressed in some way, to develop the capacity to establish and manage the park and the open spaces around PCYC and the Mundy Creek Natureway. We are aware of the need to support all community efforts and to work collaboratively to help dissolve these issues. This requires not only a longer term outlook but also a commitment from all sides. We're interested in working collaboratively with other stakeholders and community to find practical and inclusive solutions wherever possible. We want to try and instil the kids with a feeling of acceptance and belonging in the public realm thereby having a stake in maintaining that particular part of their life experience regardless of their home and school circumstances.

The reality is that anything that is done in the park must include the community for it to be effective. If planning and works are done collectively and cooperatively then chances are it will be cared about and cared for. This is the basis of the Mundy Ceek Regeneration Project.

Some of the issues that have become apparent through the development of the project and other general observations of living and working in the area include:

- The park and its end-users have been generally overlooked and the public space is neglected
- The general attitude about the management of the site is antiquated, limited and unimaginative. That the local kids 'will just wreck it anyway', so there's no point investing in fixing / upgrading or maintaining the space and its assets. This is an outdated and ineffective excuse that perpetuates the problems we have here in the community, as well as serves to block any positive action that locals are making to improve the social and cultural issues that are historically present in Garbutt and Townsville, in general.

• Conflict (racial and cultural): This is something that we, as a group / community, will be able to deal with effectively, if we have the support of the local PCYC, The Townsville City Council, Multicultural Support Groups and other stakeholders (including other community members). There is a need to coordinate and run ongoing / seasonal

activities that will contribute to and demonstrate community harmony and positive cultural exchange opportunities. We have lodged various applications to support these activities over the past year but unfortuneately have not been successful. Preventative measures are required, such as:

• High visibility deployment of Police/Community Safety Patrol Officers.

• Regeneration of the Skatepark and BMX tracks and Park, including improved lighting and the siting of a deployable CCTV camera, in order to reduce crime and anti-social behaviour. An alcohol strategy to address alcohol misuse (link with the Community Health & Care organisations in the area).

Recommendations / Future activity:

- Intergenerational / Cultural / Environmental Walking Tours from the Townsville Airport to Mundy Creek; across the grasslands, from Mundy Creek to Rowes Bay and Kissing Point; From Mundy Creek to Castle Hill - lead by Russell Butler
- Approach Townsville Lions Club to assist in funding the safetly and infrastructure improvement in Harold Philips Park, as well as the Council.
- Develop a Junior Rangers Program for the site, in conjunction with PCYC, local Indigenous elders and supportive land management groups e.g. CDTLI, CVA, and NQ Dry Tropics.

• PCYC and Townsville City Council's Youth, Community Services and ISS Departments work together with the Mundy Creek Project to engage local children, youth and adults in sporting/ fitness, socail / recreational, and environmental education activities on site; run scooter competitions with prizes i.e. gym membership; In particular the children and youth who are not currently accessing the services provided by the PCYC.

• Harold Phillips Park be renamed or co-named, with an Indigenous name, to be decided upon by Traditional Owners and local Indigenous elders.

- Development of a feature film, developed and filmed with the local youth.
- Film screening / Community BBQ and dance event at the PCYC to launch the next stage of activities on site. Scheduled for Christmas School Holidays

• Conduct Community Participation activities with the Deadly Dukes, including rubbish collection / environmental and cultural awareness walks; stencilling over abusive graffiti on the skatepark using Mundy Creek Arts project gear.



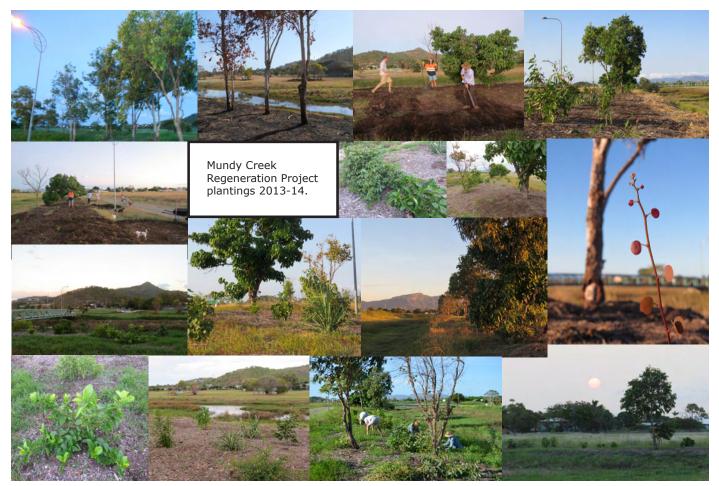
Plantings

As per document *Mundy Creek Natureways Revegetation- Eastern Bank/Parkland Shade Tree Planting and Rejuvenation Planting. (see Appendix)*

Project Title: Community Greening for Mundy Creek (Harold Phillips Park) - Garbutt

Project Manager: John Gunn (Earth Environmental), Sri Suryati-Schnatz

Location: Parkland Area – (Eastern bank of Mundy Creek at Harold Phillips Park)



Pathways and Connectivity

The park and pathways use has significantly increased over the past 3 years, and the existing pathways need repair and reinvention. Connectivity is impacted by the lack of infrastructure and degradation of existing pathways.

Pathways:

- provide connections between people and place, landscape spaces, natural and built environments,
- may be built upon formal and informal paths
- are historical and contemporary walking tracks
- sometimes follow pathways of preference and the flow of the land.



Sealing Pathways of Preference

Key pathways of preference have been identified and need to be formally established and / or sealed. Newly formed and sealed paths will facilitate better access for pedestrians and bike / scooter riders including during the wet season when there is a lot of water ponding in the area.

We propose that Townsville City Council:

- install new decomposed granite paths along the water's edge on the Eastern bank in the parkland
- replace decomposed granite path between bridge and skatepark with bitumen or concrete, so that kids on bikes and scooters can ride seemlessly along it

• Build a new path (boardwalk) along the Eastern bank of the creek, that connects the existing bitumen path (beside the BMX track) to John Melton Black Drive. As per the Mundy Creek Pathway Project plan - see Map: TCC pathway D46211_1997.



Left: Track (fire break) that runs across the centre of the grasslands; Russell Butler indicating the last existing natural corridor between the Town Common, Garbutt Grasslands and Castle Hill. View from Mundy Creek East bank.

Pathways Project Stage 3

On the Eastern bank of the creek, at Harold Phillips Park, the existing pathway:

1. diverges and continues to meet the skate park (using bitumen or concrete)

2. veers across the park to the right to lead out along the gravel road / track at the rear of the PCYC i.e. formalise this pathway of preference using compacted decomposed granite

3. branches into a new path, made of compacted decomposed granite, that follows the creek bank to cuts left and curves around between the plantings. Decomposed granite will allow for paving or concreting at a later date.

4. connects to a new boardwalk track built as per proposed 'Mundy Creek pathway Stage 3'.



Solution End of existing bitumen pathway / beginning of new boardwalk

End of new pathway / boardwalk at John Melton Black Drive

This new pathway will replace the existing pathway of preference (traditional walking track) on the Western bank. If proposed developments go ahead, the existing path will be removed with the widening of the creek.

				0 20 40 40 80 100 Mart	-	ASSOCIATED DRAWINGS		TOWNSVILLE CITY COUNCIL			RBUTT T	O ROWES	BAY
			Sciet	ale 12550 0 20 40 60 80 100 Met Al sure				APPROVED	DES.	and the second second	WALKI	NG TRACK	<
					111100	LEVEL DATUM CA	D INDEX NO.	No. Contraction	DRN. T.T.K.				
	the second s				torrance.		\$17	DIRECTOR-ENGINEERING SERVICES	\$0.				SHEET 1 DF
					CITY	N.Q.E.B. A.T.C. D.	O. FILE NO.		ENG.	DATE N	FILM SCALE		
ZONE PER.	REVISIONS BY LKD. DATE							MANAGER-PLANNING & INVESTIGATIONS	CD.	9/2/92	6.5 show	462	11
1 1	2 3	A	5	6	7		1000	9		1	15		12

Public Art / Infrastructure Design

The concept plan artists' brief was to develop designs that were culturally and practically appropriate, site specific and addressed issues that were raised during consultations. The artists were asked to also consider the surrounding environmental values, notions of connectivity, contemplation, safety and community cohesion.

The designs:

- are end-user driven;
- will provide practical function in the space;
- incorporate contemporary Indigenous and multi-cultural imagery, and / or social and environmental themes;
- have refined aesthetic qualities that enhance the space;

• will be vandal-proof: *Public art components need to be integrated into the infrastructure with any removable details installed out of view and reach; Use highly durable materials for repair and newly installed infrastructure e.g. steel, earth and concrete; install bollards at the beginning and ends of paths to deter motorbike and vehicle use along pedestrian paths*

• convey culturally and environmentally appropriate and site specific information.

• relate / respond to other local public art and environmental spaces e.g. The Strand, the Kissing Point / Garabarra / Jezzine Barracks development, Rowes Bay / Soroptimist Park

• demonstrate thematic continuation across the area

• reiterate that the act of connecting these spaces (through paths and culturally symbolic themes) will assist in raising community awareness of the traditional pathways, and the historic connections of the areas that lay (past and present) along these paths.

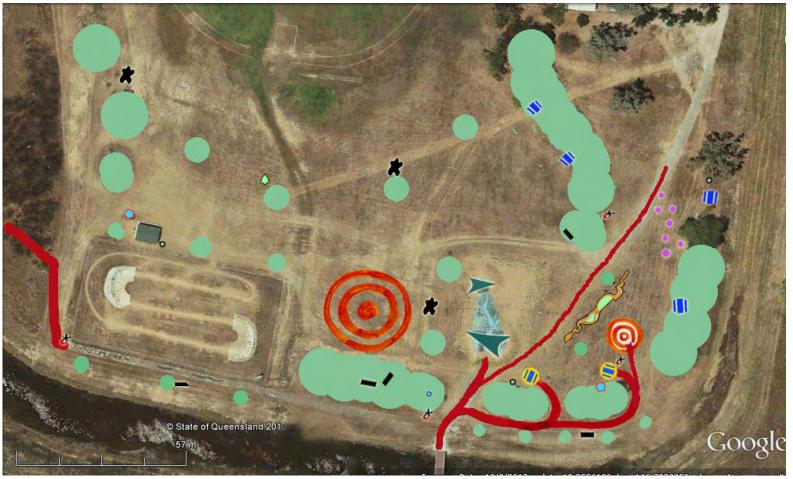
The proposed design components include:

- Landscaping and native species plantings (in Harold Phillips Park and along the natureway on the West bank)
- Park infrastructure:
- Shade shelter over the skate park
- Seating & picnic tables
- Site specific sculptures and landscaping
- Lighting
- Interpretive signage for cultural works and plantings
- Murals on the BMX track and skatepark

• New pathway development: compacted decomposed granite and concrete paths in the park; new path on the PCYC side of the bridge, between the creek and existing plantings as per Map TCC pathway D46211_1997.

- Cultural Tourism Sculptural signage John Melton Black Drive
- Townsville Airport Cultural rejuvenation works:
 - * printed banners for inside the terminal

* public art /sculpture



Key:









Hand seating - sculpture



Pathways



Serpent seat - sculpture

Signage, Bollards, Bins and Lighting

The existing signage along the natureway and in the park is badly damaged and in most cases completely nonexistent. Recently one of the larger Council signs was ripped from it's footings and thrown in the creek, the uprights have now been burnt by fire. Perspex signage installed in 1998 was vandalised not long after installation (the steel framework still stands).

There are issues with illegal trail and motor bike riding along the pathways, around the grasslands and across the park and it's infrastructure. There is no signage to suggest that this behaviour is not acceptable. There has been a marked increase in pedestrian, bicycle and dogwalking traffic over the past 5 years, so it is clear that new and appropriate signage is required. There is also a need to address the unauthorised access which leads to illegal dumping on the grasslands.

We propose new signage, pathway definition, bollarding of areas and inmproved lighting on site in order to:

- reduce vandalism and pollution
- improve Public Safety
- Set boundaries & define spaces
- encourage proactive Social responsibility and promote community cohesiveness
- improve and develop cultural and environmental knowledge and awareness









We propose the use of steel, stencil-cut interpretive signage because this enables graphics and text to be incorporated in a format that:

- provides maximum durability
- is vandal and weather proof (cyclones, fire, high winds)
- complies with Australian Safety Standards.
- allows graphics and text to be incorporated in a format that provides maximum durability.

<u>Specific Community requests for Council to address:</u> Install:

• No Motorcycles / wheeled vehicles (unless authorised) signage in the Park, along the pathways of the Natureway and around the grasslands

• Locked Council gates and bollards at 3 points on the western side of the grasslands (all major entry points) i.e. John Melton Black Drive (in 2 places) and at the end of Peel Street, Garbutt

- Bollards to prevent cars / motorbikes at either end of the Natureway paths
- Signage re. Illegal dumping on the grassland.
- Formalise walking / bike / fire break tracks around the grasslands.
- Lions Football Club would like the Sports Oval and spectator areas of Harold Phillips Park to be an onleash area, and request signage to reflect this.
- Angle parking bays / markings at the corner of Hugh Street and Lower William Street, to accommodate visiting walkers to the site.
- Removal of old cricket nets
- Removal of old table near the bowerbird's bower, behind the PCYC.

Proposed Signage:

1. The beginning of the Natureway at the end of Lockheed Street - this could be a sign about Mundy Creek Natureway and the Community Regeneration Project.

2. Botanical and Cultural plaques positioned amongst select plantings on the Natureway and in the Park. These will also have a weblink and a QR reader symbol that will link to Coastal Dry Tropics Landcare Inc.'s webpage. Layers of information about the featured plants, and their cultural / ecological values will be featured on this platform.

3. Small Cultural Heritage interpretive signs in the park about the public art works and the stories they contain - these can also be linked to the TCC website.

4. Repair and update of Council signs: a) Harold Phillips Park Sign; b) Installation of a new sticker on existing Mundy Creek park signage (features information about Mundy Creek & is situated adjacent to the Bridge); c) etched directional signage in existing concrete slab on the Park side of the bridge; d) BMX track and Skatepark sign (combine these into 1, to make a doubled sided sign).

- 5. Interpretive signage / plaques for the Public Art works / designs on site.
- 6. Interpretive signage at the eastern end of the new path, on John Melton Black Drive.
- 7. Interpretive signage / sculpture on John Melton Black Drive: Grassland markers x 2.

8. Interpretive signage / sculpture on John Melton Black Drive: x2 Brolga Sentinels, one on either side of the road.





Above right: Designs by Karen Doolan, for the Mundy Creek Regeneration Project; Above left: Steel signage, footpath and botanical plaque design examples (various internet sources); Local Public Art works, designs by Marion Gaemers, Denise Weightman & Bernadette Boscacci.





Interpretive Signage:

Designs aim to:

- illustrate flora and fauna species that inhabit the local environment
- draw attention to the natural and cultural values of the area
- indicate significant places in the landscape along John Melton Black Drive - the main road to and from the Airport
- mark / formalise the entrance points of the Mundy Creek Pathway and Natureway
- Educate and inform the public and visitors to the area

Botanical signage for plantings:

This signage needs to be developed with local community and Council, and include locally designed imagery and be linked to the website through QR technology.



It is envisioned that all the stories, documentation from the various aspects of the project, and data (from environmental monitoring including sound and image sampling over time), could feed into this database (that CDTLI will host). The idea being that we could have different sets of information for the same numbers. e.g. something that talked about the botany and / or the significance for birds and animals, and / or their Aboriginal / Cultural use etc. The initial idea was that we could have PDFs on the CDTLI website.

Mundy Creek Catchment Care could work with local youth to paint signage for the Natureway Project.

Directional signage:

Concept: A pathway work that provides directional information to the pedestrian. Including compass directions and prominant landmarks or places that are culturally and locally relevant.

Site: in the cement landing / bridge footings on the Park side.

Description: The work could be sandblasted / etched into the cement (and painted) or made of steel and inset into the cement. It would most likely look like a starbust with text. Suggested Place names: Rowes Bay, Cutheringa (Castle Hill), Ross River, Garbutt IGA, Mount Stuart, Mount Elliott, Yunbenun (Magnetic Island), Palm Island, Many Peaks Range, Ingham, Kakadu, Somalia, Charters Towers, Bamaga, Alice Springs, China, Italy, New York etc.

Airport Road Sculptures / Interpretive Signage

<u>Description</u>: A series of sculptural (interpretive) signage placed at strategic points along John Melton Black Drive.

Design of the bird forms is based on Billy Doolan paintings about the brolga that live on the Common and frequent the Greater Town Common area.

Description: Two birds, a pair of brolga.

- 3D forms large stylized steel bird figures constructed of mild steel - galvanised and powder coated with concrete footings
- One on either side of John Melton Black Drive, installed near to the curve of the road where Mundy Creek runs along the Airport perimeter, and intersects with the Greater Town Common wetlands and Garbutt Grasslands.
- Bird 1 standing / looking upwards and back towards the the Town Common / Palm Island.
- Bird 2 stooping to feed with Bulkuru Sedge (water chestnut) at it's feet



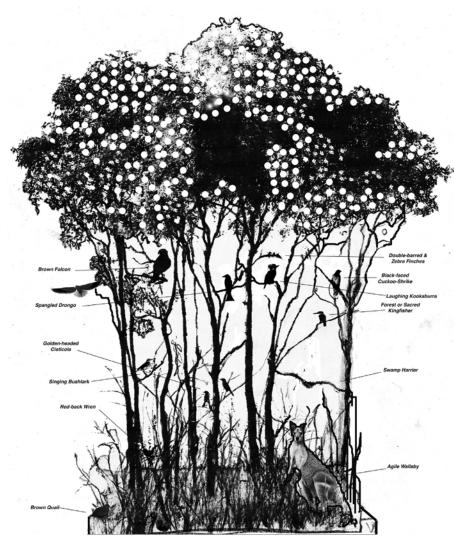
• Fabricated in a similar style to the steel works at Kissing Point / Garabarra by Doolan and Amanda Feher

• Skeletal-style framework for strength of structure and to better illustrate Doolan's designs / linework, especially on the wings (see images at right / below)

• The works will be designed to be weather and vandal proof - allow wind to pass through and the surrounding landscape to be viewed through them and durable materials

• Dimensions: 5-7m high

• Strong uplighting at the base of each bird, with light / movement sensors



Grassland signage:

Illustrating fauna and flora (especially the diverse birdlife) that inhabit the grasslands. Etched steel, galvanised and powdercoated. Perforated tree canopy, reobar welded (at rear) in tree uprights for maximum strength. Concrete footings with interpretive key at the base of the work, featuring silhouette forms, common, cultural and scientific names of the included species.

Dimensions: circa 3.5m (h) x 2.2m (w) x .7m (d)



An alternative / additional design is the Anthill concept at right. Footings for both would be set in a slight arc, to ensure maximum strength of form.

Pathway entrance signage:

Illustrating flora and fauna that inhabit, and are sustained by the creek.

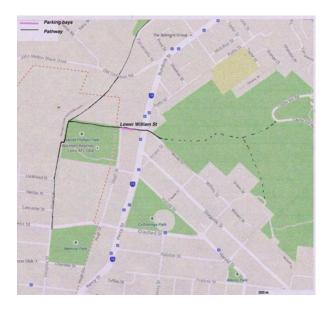
Designs by Bernadette Boscacci in consultation with Russell Butler, Peter Buosi and Denise Weightman mangrove shaped 150cm circa interpretive signage profile / side view aerial view with creek species featured quail in flight flushed from the Speargrass -Heteropogon contortus fire love grasses -Eragrostis sp. plantings burnt, striped grass stalks Carpark some form of bollarding ecessarv here concrete footings

3m

brown quail and eggs

In addition to the previous paths, we propose that Townsville City Council create a new walking track to formally link the Natureway to existing Castle Hill's walking tracks. The new track could branch towards Castle Hill at the end of the bitumen pathway (at the Harold Phillips Park end of Stage 3 of the Pathway), and lead along the side of the Football Oval, up Lower William Street, across Percy Street to William Street and up Castle Hill from there. This new track could link to the Ironbark Track in West End, or up to the Castle Hill Road above Belgian Gardens.

This proposed path / track would create a round loop walk from Rowes Bay to Mundy Creek, to Castle Hill, to Queens Gardens, the Strand, Jezzine Headland and back to Rowes Bay.



Also, a suggestion has been put forward for a Dog Walk (off leash) Area. This is proposed as a caged area for dog exercise and socialising. Potential sites are: beside the Castle Hill PCYC, on Hugh Street, in the existing informal car park in front of the PCYC; or, at the top of the drain between the PCYC carpark and the houses on Hugh Street; or, on the Hugh Street end of Cutheringa Park (near to the traffic lights).

Left: Proposed new pathway and parking bays for a track formally connecting Mundy Creek Natureway to Castle Hill.

Rubbish Bins

Littering is a big issue in the area. There are no rubbish bins in the park or along the walkway. This does not help the regeneration work that is happening on site. We want to include a series of rubbish bins that depict local flora and fauna, so as to remind people that they are not the only ones affected by littering in the area.

Description:

- A set of recycling waste bins are needed for the park and can be positioned near to the Skatepark.
- Smaller refuse bins (x3) are also required across the site.
- Bins will:

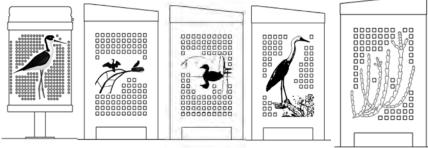
 \ast be made of powdercoated steel (outer structure) with galvanised steel inner sleeves

* feature laser cut (stencil) designs on the sides

 st require fixed covers to prevent refuse blowing away and lessen access to the bins for fire proofing

and to prevent animal / bird raiding.

* need to be maintained by Townsville City Council Parks and Infrastructure Department.





Lighting

Lighting in the park is non existent. Poor lighting restricts community member's safe access through the area after dark, and permits people who engage in vandalism, alcohol misuse and other anti-social behaviour. Safety in the park at night is a key issue.

Lighted bollards at key points along the park pathway, and adjacent to park shelters. These can be installed to provide light along the Park pathways at night. Design features include: solar power; daylight sensors; industrial strength vandalproof designs (such as image examples at right).

1. **7 Sisters / The Pleiades Light Cluster** - Park Entrance sculptural lighting

Description:

- A series of interconnecting galvanised steel light poles of various heights
- Positioned near to the new bollards and Harold Phillips Park gate (which is a notoriously dark spot in the park)
- Solar powered, LED (blue or ultraviolet white) lights at centre of each starburst. Movement sensors at outer footing points. This will create more of an ambient light that will subletly illuminate the area and not cause problems for local wildlife, and be energy efficient.
- Concrete footings x 7 for light poles. Plus, x 2 concrete pedestals smaller than



footings to hold small brass plaques with information and diagrams about the Constellation and local creation story about it. These 2 footings represent the 2 stars

<u>Dimensions:</u> Approx 3 m x 1.5 x 2m (ground area); up to 4.5m height.

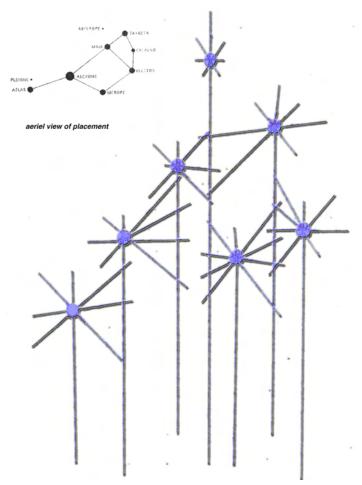
Optional positions:

• in a more central space along the same path, between the skatepark and the park gates



• where the cricket nets are now (if they are moved, as has been suggested).

The Pleiades (M45) is an open star cluster of seven stars located northeast of the Orion's Constellation. It is culturally significant across many cultures, and locally it features in Indigenous Creation stories, the stars representing 7 sisters.



Water Taps and Drinking Fountains

Community requests:

Water tap installed near to the skatepark

According to Council: "Water line to feed the tap is app 2m PCYC side of the green bollards around the BMX track. But again we did have one there and were not able to keep it in place due the vandalism. It'll cost approximately \$400 to install a tap." (percomm. Ken Armitage - 6 March 2012)

- Council tap fitting installed amongst the plantings between the skatepark and the footbridge.
- Replace / upgrade existing water fountain with a new model that incorporates a drinking fountain / tap and dog drinking trav

Seating & picnic tables

The existing picnic table in the park is decrepid and unuseable (pictured right). A series of sculptural and practical seats designs have been developed by the participating artists. It's envisioned that these be installed in the park, positioned under existing plantings, along the natureway and in open park areas that afford good views to the football field and / or the creek.

The following design concepts reflect the local natural and cultural values of the park and it's inhabitants.





'Friend picnic table' -

Description:

• Made from concrete (and / or timber seating), with sand blasted / carved designs into the surface of the table and seats - similar to the picnic tables at Kissing Point Parklands This table will be large in size (so as to accommodate a group) and will be positioned under one of the large melaleucas in the park which, in Indigenous Cultural Heritage, are known as 'Friend' because they provide shelter, security and shade from the elements.

Midja Picnic shelters with picnic table and seating

- Designs by Chad Stone.

Description:

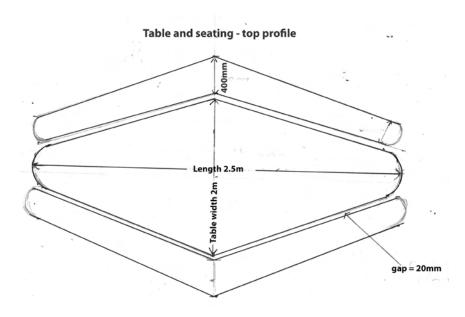
- 2x shelters in the park, close to the skatepark and the ground maze
- Shelter form based on traditional Indigenous wet season shelters
- Picnic table and seat concept based on shield and boomerang designs
- Materials: wood, steel, corrugated aluminium, concrete footings



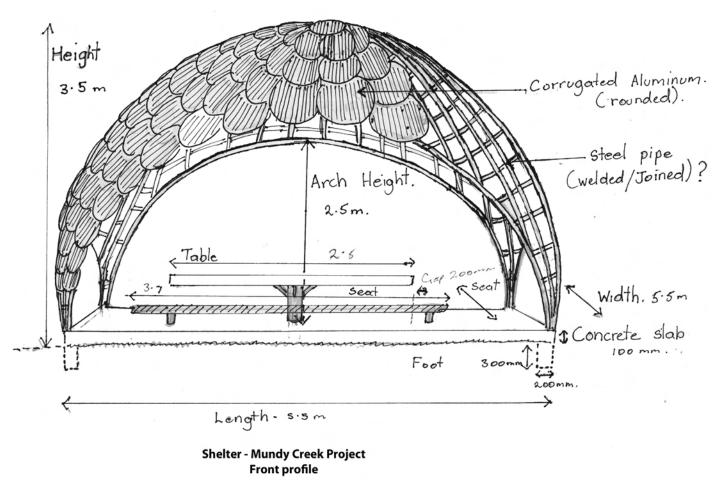


These shelters will:

- provide shelter from the sun (even when it is at a low axis) and the seasonal rains.
- be able to used as meeting places
- have a drinking tap and rubbish bin adjacent
- could also include a barbeque positioned between them, so that families and groups can use the park for food centred gatherings.







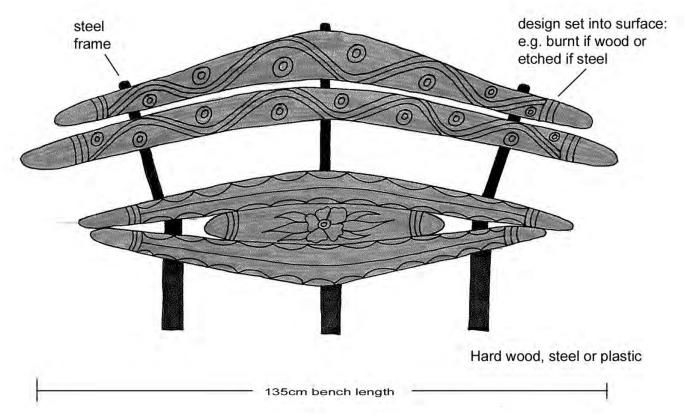
Hand Seats - designs by Tony Squires

These seats could be positioned near to plantings adjacent to the Football Oval.

Stocky Hand 3 person seat Delicate Hand Hand Seats Separate Fingers 2 person Seat Separate Finaers 2000 1600m 1000mm 1800mm 1200 mm 2000 mm Idealised Hand External field seating 2 person Seat Jained fingers Steel-Framed, rendered concrete Oxide-Finished; Red, Black, Yellow, White Fine sand textured top coat 2000 mm Circa 1-2 WooMetres of Concrete each; 3000 kg No footmas required 1500 mm 2000m

Boomerang and Shield Park seat - Design by Karen Doolan

These seats could be placed amongst established plantings in the park or on the Natureway.



Gabul bench - Design by Denise Weightman

Description:

- A bench seat in the shape of the creation serpent Gabul (Carpet Python) with the curves of the serpent body creating the seating alcoves.
- One alcove faces the skatepark and the other faces the creek, giving the bench a double viewpoint.
- Constructed of ferro concrete over a steel armature
- Carved with cultural heritage & natural designs from the area
- Coloured with powder pigments
- Dimensions: Approx. 9000 mm long x 1300 mm high x 1500mm width
- Each bench alcove / seat: 1500mm long $\, x$ 2 positioned centrally. 550 mm seat depth
- Designs inspired by: Gaudi sculptural seats; serpentine forms from nature reflecting the mountain ranges Gabul Creation Story that surround the area; lover's seats traditional colonial style furniture designs.







Original concept drawing (left), marquette (below) and artist's impression - in situ (above). Nb. proposed plantings near to the head and tail of the serpent seat will provide shading in the morning and afternooons



Skatepark Shelter - Shade shelter arcs

Description:

- steel framework with steel slats
- Style of structure influenced by the Strand jetty shade structures
- Concept design by David Stefanovic / Architects North through consultation with local youth / skate park users; Positioning: one arc shad structure over the two jumps of the skatepark





Erosion control:

- Skatepark edges, around the jumps, are badly eroded and requires reprofiling.
- This erosion is a recurring issue, so we propose that the jump embankments be surfaced with playground rubber to protect from erosion and provide an additional safety factor for the users.

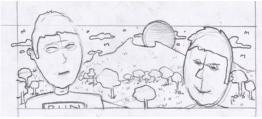
Murals - Design by Shane Keen & the Collective with participating youth.

<u>Description</u>: A legal graffiti activity - painted onto the BMX track berms (new mural) & on the skatepark (refreshing last yer's mural, to cover damage done to the paintwork from vehicles and poorly executed graffiti). This project could take place over the school holidays. Funding for materials and fees for facilitators are required.

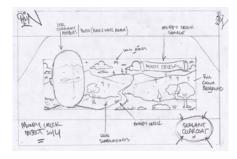
Themes: Community harmony, Mundy Creek - many cultures, many creatures, local stories, local heroes.. Say no to Bullying!

Supplies needed:

- 10L Exterior white acrylic paint
- 4 rollers
- 1 pack (x6) roller covers
- 5 boxes of Ironlack (aerosol enamel paints)



Process: Mark out image areas; undercoat; spray full colour background relating to the surrounding landscape; render black and white portraits, based on some of the local kids involved in the project, and illustrating the cultural diversity in our community.



We have facilitators and a budget ready for this activity.





Public Art Works

Land Art & Sculpture

Our studies (over a six year period) of the lay of the land and the way in which water inundates and lies in the parkland we have developed a series of freestanding sculptural and earth artworks that honour our mix of cultures and the local wildlife that inhabits the space.

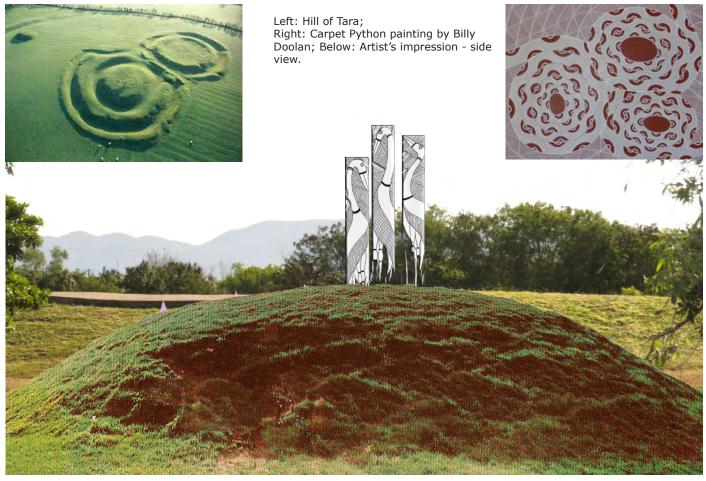
These works will:

- improve the aesthetic and dynamism of the space
- convey environmental, cultural and social messages
- create land marks that can be enjoyed by users and not interfere with the natural processes and wildlife users of the park

Hill of Mundy (Sleeping python) with brolga family - Design by Bernadette Boscacci, Karen Doolan & the Collective.

Description:

- Earth mounds situated between the skatepark and the BMX track
- Features a central mound with two mounded concentric rings surrounding the central form with native grass and samphire plantings
- The central mound features a series of vertical panels (3 brolgas) made from powdercoated or stainless steel mounted into concrete footings, with uplighting set into the base
- The work will provide an elevated vantage point in the park for playing / sitting



on, and for viewing the surrounding environment including the ranges - the local Creation Story.

Designs inspired by:

- Resident and visiting brolga families to the site;
- The Hill of Tara (in Ireland) and `
- Gabul' Carpet Python paintings by Billy Doolan; <u>Dimensions:</u> circa 25 m square.

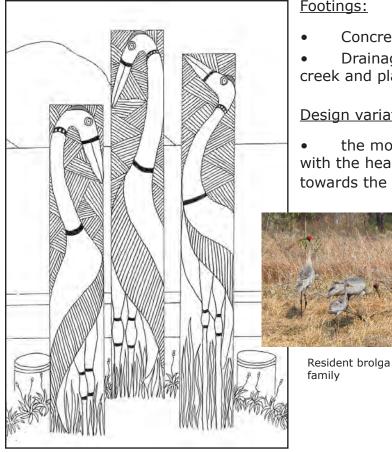
Materials:

• laser cut steel - galvanised mild steel, powdercoated colour or stainless, concrete and steel footings; LED lighting

Right: Site inundated with water during Cyclone Ita 2014; Below: proposed site images in the Dry Season.







Footings:

- Concrete with 12mm steel brackets
- Drainage will need to be funnelled towards the creek and plantings

Design variation:

the mounds could be shaped like a coiled snake, with the head at the centre and the tail tapering out towards the football field (sketch below).



Brolga family - Design by Karen Doolan 2012

Spiral Journey Pathway / Meeting place

Based on original ground labyrinth concepts by Tony Squires (see Concept Plan 2011), developed by Denise Weightman & Chad Stone (2013-14).

<u>Description</u>: An Environmental sculpture featuring a spiral pathway, plantings, etched rocks and pavers, and a central sitting place.

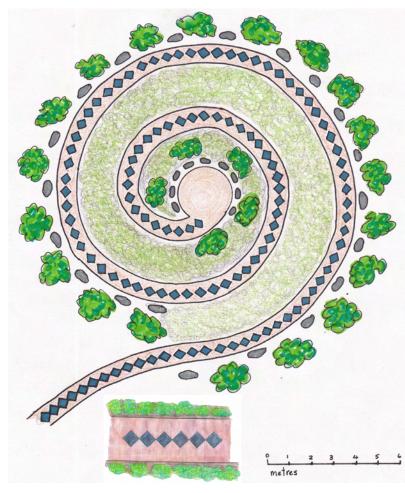
<u>Elements</u>: Spiral Design – suggestive of Gabul – Serpent Dreaming – a symbol found in all Indigenous Cultures across the world. A metaphor for life's journey and the path to the centre of self knowledge and unity with the divine.

Materials / construction:

• Path constructed of red decomposed granite with a central paving design - 130 pavers approx. 40 cm square. Central circle (sitting place) made of compacted earth, chosen for it's coolness qualities and also to allow for tree roots to infiltrate the space with out causing damage to pavers / concrete.

• Diamond pavers – suggestive of the scales of a diamond python, linking again to the Creation stories for the North Queensland area. These will be etched with animal tracks on every 3rd paver. The tracks will represent species from the modern era to the prehistoric (journey through time).

• Granite Rocks – x20 flat-faced rocks positioned around the outside path will be etched with rock art style (simplified line) drawings of native fauna from the modern day to the prehistoric period's mega fauna. This is to represent the idea that the Indigenous peoples of this continent walked the earth with these creatures, throughout the ages. The rocks will also act as natural bollards to discourage wheeled traffic



through the garden and across the paths.

• Granite rocks – x9 flat topped rocks positioned around the inner circle, to act as seating. There will be 9 stones to represent the 9 main Clan groups of the North Queensland area: from the north - Tully to the south - Bowen, east to Palm Island and west to Charters Towers. The Gabul Creation story tells of the gathering of the Clans to fight the giant serpent.

• These rocks will have the Clan group name etched into the top surface: Wulgurukaba, Bindal, Ngawagi, Warrigamay, Girrimay, Birrigubba, Jirrbal, Manbarra, Gugu Badhun.

• Dimensions: 16-18 metre diameter; Central Circle, approx 2 m diameter; Path width, approx. 1.2m diameter; Garden bed width, approx 1.6m.

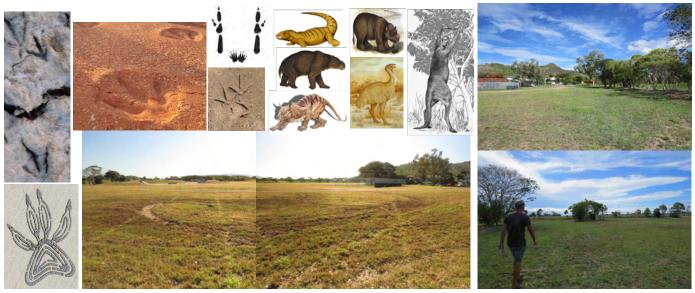
• Plantings: Small native shrubs, trees and plants e.g. Grevillea, Melaleuca viridiflora, Lomandra, Dianella.

• Animal tracks and body paintings:

for etching (sand or water blasting) onto rocks and pavers

• Featured Modern animals: Goanna, Wallaby, Dingo, Brolga, Possum, Crocodile, Barramundi, Crab, Whale, Curlew. Featured Prehistoric: Megafauna: Giant Emu -Genyornis newtoni; Sthenurus, Giant browsing kangaroo; Marsupial Lion - Thylacoleo carnifex; Diprotodon optatum; Giant marsupial Zygomaturus trilobus; giant goanna -Megalania prisca.

Below images: Brolga tracks from Mundy Creek; Wallaby tracks; Megafauna tracks (Broome / H.Ellery pic); Megafauna images from various sources; proposed site views; sandblasted concrete - dingo track design (Karen Doolan / Jezzine Project).



Other Community Suggestions / Recommendations:

- It is necessary to engage the community in the redesigning and implementation of the project if we are to address vandalism, site misuse and weed infestation issues, and improve the condition of the site for all to enjoy.
- We plan to oganise walking tours in the area, lead by Russell Butler and other Catchment Care Group members. These could occur on a quarterly basis, possibly on the same day as the Community Landcare days.
- We aim to approach Townsville Lions Club, as well as the Council, to assist in funding the safety and infrastructure improvement in Harold Phillips Park.
- There is interest amongst the children in the area for a Junior Rangers Program to be developed for the site, in conjunction with PCYC, TCC, local Indigenous elders and Mundy Creek Catchment Care Group.
- If and when the Ellis development takes place on the adjacent block of land on Hugh Street, we are aware that some of the trees will be removed, in particular - Melaleuca dealbata and Corymbia tesselaris. We oppose the removal of all the old growth trees, and propose that any other felled timber be donated to the project to

use in the making of park seating and picnic tables. Local carver / boatbuilder, Andy Frost, is interested in being employed to undertake the crafting of these pieces, and share his skills with interested community members in the process. We'd need to hire a portable mill / timber miller to process the logs and then find an appropriate storage on site for the timber until they are ready for construction / carving. One possible storage area is situated in the old playgroup yard at the back of the PCYC.





Bibliography

Earth Environmental December 2013, Mundy Creek Catchment and Riparian Management Strategy

Community and Cultural Services Consultancy Unit, Townsville City Council 2001, Renewing Garbutt, People, Partnerships & Planning 2001

Enviromental Management Services, Townsville City Council 2003, SOE State of the Environment.

References:

CABE 2005, www.cabe.org.uk/files/decent-parks-decent-behaviour.pdf

http://www.popcenter.org/Responses/urban_parks/print/

http://webarchive.nationalarchives.gov.uk/20110118095356/

http://www.popcenter.org/Responses/urban_parks/print/

http://australianmuseum.net.au / http://donsmapscom/megafaunakill.html)

Triggs, Barbara, Tracks, Scats and other Traces, A Field Guide to Australian Mammals, Oxford 2004

Appendix

Mundy Creek Natureways Revegetation- Eastern Bank/Parkland Shade Tree Planting and Rejuvenation Planting - DRAFT PROJECT BRIEF

DESCRIPTION OF PROJECT

Project Title: Community Greening for Mundy Creek (Harold Phillips Park) - Garbutt

Project Manager: John Gunn (Earth Environmental), Sri Suryati-Schnatz.

Location: Parkland Area – (Eastern bank of Mundy Creek at Harold Phillips Park)

Objectives:

- 1. Improve amenity to the area.
- 2. Introduce further native species to the area.

3. Provide an opportunity for community involvement in the management of public open spaces.

- 4. Creation of natural shades around the sporting facilities
- 5. Provide shade cover to reduce weeds and improve water quality
- 6. Involvement of local indigenous groups in creation of Bush Tucker plants trail/revegetation

Partners:

• Mundy Creek Natureways Renegeration Project Group / Community Consultants Russell Butler, Peter Buosi & Benadette Boscacci

- Coastal Dry Tropics Landcare Inc (CDTLI)
- Local residents
- Local Indigenous groups

Date for activity: April, May, June 2013

Note:

This planting plan should be read in conjunction with the following documents:

Draft Mundy Creek West Bank Revegetation prepared by John Gunn (Earth Environmental)

Draft Mundy Creek Riparian Management Strategy prepared by John Gunn (Earth Environmental)

SITE DETAILS

This section of Mundy Creek behind the Castle Hill PYCY/Harold Phillips Park is managed both as parkland and sporting ground with the adjacent modified Mundy Creek managed primarily as a drain and a natural area. This area is used frequently by local residents to access Rowes Bay from Garbutt. The BMX Track, the skate parks and parkland area are also well utilised by local youth, residents and groups. There have been some incidences of vandalism reported in this area in the past.

Currently there are not much shade trees close to the sporting facilities to provide shade to the users of the park. The parkland area is maintained by Council's Construction and Maintenance with regular moving. The proposed planting aims to create shade within the parkland areas and also rejuvenate the existing revegetation beds to increase the natural values of the site.

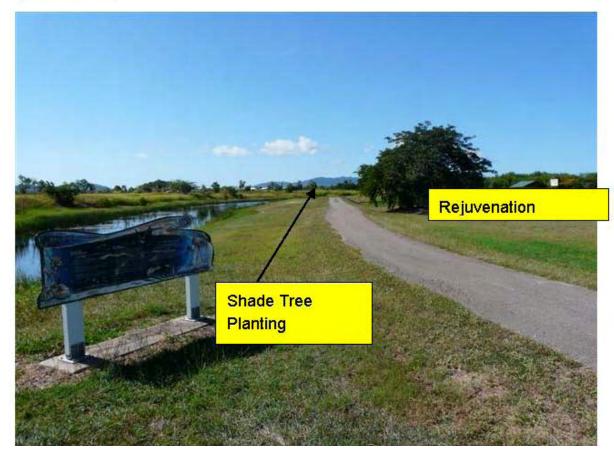
The planting will consist of a mixture of native plant species: large and medium native trees to provide shade, small trees and shrubs as well as grasses and groundcovers to reduce weed growth and rejuvenate the existing revegetation beds.

The planting will be beneficial in increasing plant diversity and animal habitat, while not impairing drain function or maintenance. This is a great opportunity for community involvement in improving a park that many of the residents use.





SITE IMAGES





PROPOSED MANAGEMENT

Site Preparation

- Greeening and Waterway Team (GAWT-ISS-TCC) will provide support with site preparation including:
 - Spray herbicide on areas to be planted.
 - Whipper snipping areas to be planted
 - Marking of planting holes
 - Digging of planting holes and place safety tape around prepared holes.
- The Mundy Creek Natureway Regeneration Group and Coastal Dry Tropics Landcare (CDTLI) will provide:
 - Site preparation assistance

Planting

- Use of Terecottem essential to help the plants retain water and reduce the frequency of watering
- Soil may need to be treated to increase plants survival (e.g. gypsum, compost, etc..)
- Plants are to be blanket mulched to a 10cm thick
- Shade trees/individual plant to be staked and marked

Maintenance

- The Mundy Creek Natureway Regeneration Group (lead by Bernadette Boscacci) will provide regular general maintenance, monitoring and act as custodian of the plantings
- The Coastal Dry Tropics Landcare Group (CDTLI) will be conducting a regular working bees on the site including weed control, watering and general site maintenance including replacement of loss seedlings
- The Greening and Waterways Team (GAWT-ISS-TCC) will provide the following in-kind supports:
 - Weed control every 4 months.
 - Remulch if necessary after first 12 months have lapsed
 - Removal of weeds cleared by community groups and disposal
- Existing maintenance of the drain, parkland and the mowing of areas will continue to be completed by relevant departments (Construction and Maintenance –TCC).

Irrigation

- A temporary irrigation to be installed on the parkland area (TBC). Arrangement for access to water point to be discussed with Maintenance (Parks) Department
- Plants to be watered at time of planting.
- Regular watering 1 x weekly in first 6 month or until the next wet season; as necessary after the first 12 months have lapsed/after the wet season(unless a temporary irrigation can be arranged prior to the planting). The watering needs will be assessed at the end of wet season to determine if further water is still required.

Evaluation

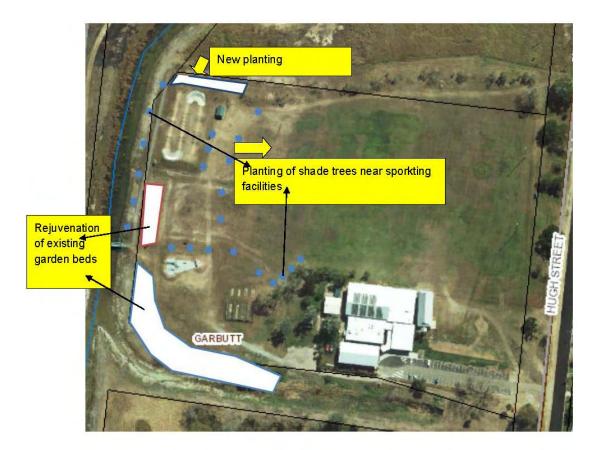
- A photo monitoring point should be established and photographs to be taken twice yearly.
- Site assessment to assess the survival rate of seedlings, replacement plantings, degree of self-regeneration and weed management.





Species List

Scientific Name	Common Name	
Shade tree		
Nauclea orientalis	Leichhardt Tree	Tree
Sterculia quadrifida	Peanut Tree	Tree
Melaleuca viminalis	Weeping Bottle Brush	tree
Cupaniopsis anacardioides	Beach Tuckeroo	tree
Timonius timon	Tim Tim	Tree
Mimusop elengi	Red Condoo	Tree
Milletia pinnata	Pongamia	tree
Revegetation/rejuvenation		
Aidia racemosa	Archer Cherry	Shrub/tree
Alphitonia excelsa	Soap Bush/Red Ash	tree
Casuarina cunninghamiana	River Oak	tree
Cupaniopsis anacardioides	Beach Tuckeroo	tree
Ficus opposita	Sand Paper Fig	tree
Macaranga tanarius	Heart Leaf	tree
Melaleuca viminalis	Weeping Bottle Brush	tree
Nauclea orientalis	Leichhardt Tree	Tree
Pandanus Whitei	Pandanus	tree
Planchonia careya	Cocky Apple	Tree
Sterculia quadrifida	Peanut Tree	Tree
Timonius timon	Tim Tim	Tree
Bursaria tenuifolia	Sweet Bursaria	Shrub/tree
Morinda citrifolia	Stinking Cheese Fruit Tree shrub	
Lomandra longifolia	Spiny Headed Mat Rush	Ground covers



Proposed layout of planting within parkland area (including shade trees and rejuvenation of existing planting beds)

