



# WAAAF Creek Walk – a project of the Rotary Club of Tocumwal Concept Plan Report- Rev A

August 2019

Berrigan Shire Council, Tocumwal Rotary and Tocumwal Farmers Market  
&  
Liesl Malan Landscape Architects

LM·LA



# Acknowledgements

## Acknowledgement of Country

We acknowledge the Elders past, present and future and the Traditional Peoples whose lands includes Tocumwal.

## Acknowledgements

### Berrigan Shire Council

- Matt Hansen - Director Corporate Services BSC
- Jo Ruffin - Strategic and Social Planning Coordinator BSC

### Tocumwal Rotary Club

- Kerry Davies
- Anne Pyle,
- Sally Ivonne
- Bob Adam,

### Tocumwal Farmers Market

- Representatives from the Tocumwal Regional Farmers Market

## The Project Team

Liesl Malan Landscape Architects were the lead consultants for this project.

Team members:

- Liesl Malan - Registered Landscape Architect
- Claire Reynolds - Registered Landscape Architect
- Georgia Carroll - Graduate Landscape Architect
- Deepthi Kurian - Graduate Landscape Architect

### *Disclaimer*

### Glossary

BSC - Berrigan Shire Council  
TRC - Tocumwal Rotary Club  
TFM - Tocumwal Farmers Market  
LMLA - Liesl Malan Landscape Architects

### Note

Outlined text provides hyperlinks to further information. Please use the PDF version to access these links.



Contents

Acknowledgements ..... 2

Contents ..... 3

Executive Summary..... 4

Project Background ..... 5

Project Process and Community Input ..... 6

**Analysis and Risk Assessment..... 7**

Site Analysis & Investigation..... 8

    Issues & Opportunities Plan ..... 8

    Photo Study ..... 9

Risk Assessment ..... 10

Bridge Assessment..... 11

**Masterplan and Staging..... 12**

Overall Concept Plan ..... 13

Staging Plan..... 14

Individual Stages ..... 15

Estimate of Project Costs..... 16

**Detailed Plans ..... 18**

WAAAF Creek Trailhead..... 19

Dog Park and Bessie’s Bridge ..... 20

Cobram Street New Bridge ..... 21

Kelly Street Crossing..... 22

Robert’s Bridge..... 23

Boardwalk Bridge & Golf Course..... 24

**Addressing Risk as a Priority ..... 25**

Tree Management ..... 26

Materials & Surfaces ..... 27

Furniture ..... 28

Bridge Crossings ..... 29

Bridge Concept..... 30

**Wayfinding and Interpretation ..... 32**

WAAAF Creek Walk Branding ..... 34

Wayfinding Concept..... 35

Interpretive Signage Concept..... 36

WAAAF Story..... 37

**Weed Control and Revegetation ..... 39**

Bank shaping ..... 41

Revegetation Species ..... 42

**Future Works..... 43**

Future Works ..... 44

Appendix..... 45

    Site Photos..... 46

    On-site workshop ..... 47

    Opinion of Probable Cost ..... 50

    Interpretive Research..... 55



Two WAAAF flight mechanics checking aircraft engine components at RAAF Station Tocumwal, 1944. C291700 - Australian War Memorial



# Executive Summary

A path to link Tocumwal's visitor accommodation with Golf Course and Splash Park



WAAAF Recruitment Poster

This project is a collaborative initiative between Berrigan Shire Council, Tocumwal Rotary and the Tocumwal Farmers Market. It has been undertaken to further improve Tocumwal for the community. It supports the works being undertaken at the Foreshore by improving connections and access.

## Improved connections for Tocumwal

Tocumwal has been identified by Berrigan Shire Council as a key visitor destination and a growing township within the LGA. This project is an upgrade to an existing trail to improve pedestrian and cyclist access for locals and visitors. The overall concept plan connects Tocumwal via a continuous shared path to the Town Walk, Bird Walk, Riverside Walk (proposed), Levee Walk (proposed). This path network will link the town centre, foreshore, splash park, Town Beach, Tocumwal Golf Course (future museum), Tocumwal PS, Sacred Heart School, Preschool, Kelly St Reserve (off the leash dog park) and 5 hotels/motels. It will improve the livability of Tocumwal at the town scale.

## A staged approach

The plan has been staged to prioritise addressing safety concerns first. Other works have been developed as small projects, able to be undertaken independently of each other. Staging and project division ensures that the works are of a manageable scale.

## Tocumwal History Showcased

Tocumwal's history during WWII is an asset for the town to build on. Not only was it home to the largest Aerodrome in the southern hemisphere, it was also the largest encampment of the Women's Australian Air Force Auxiliary Force (WAAAF). This project continues the preservation of the route the WAAAF used to access the town centre. The plan includes interpretation opportunities and feature elements to tell stories of the Tocumwal Airbase WAAAF. The role of the WAAAF in WWII and the role of women in Australian society will provide context and meaning to the story. This is an opportunity to pass on important Australian heritage to the next generation.

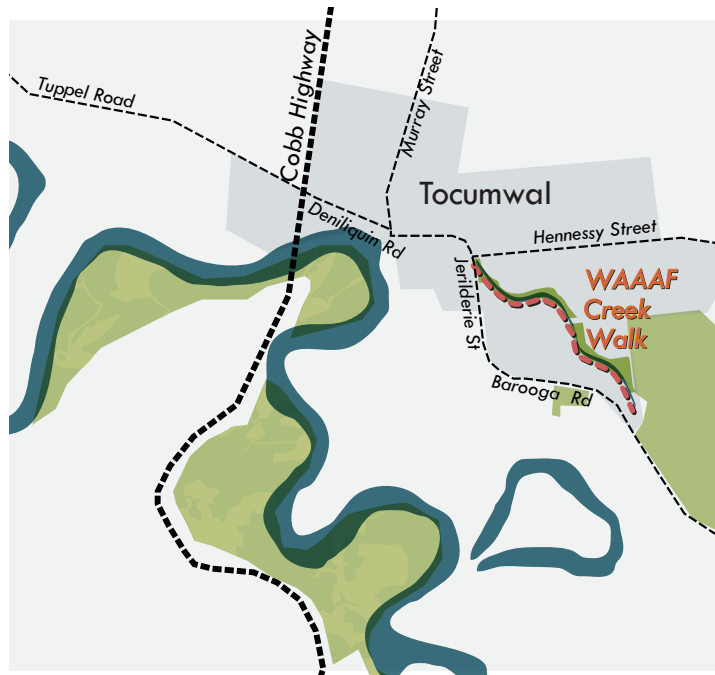
## Habitat and environmental improvements

The plans propose a staged revegetation program coupled with weed management and tree management to revitalise the creek environment. The proposal is designed to improve the ongoing maintenance issues within the creek environment, in the long term.



# Project Background

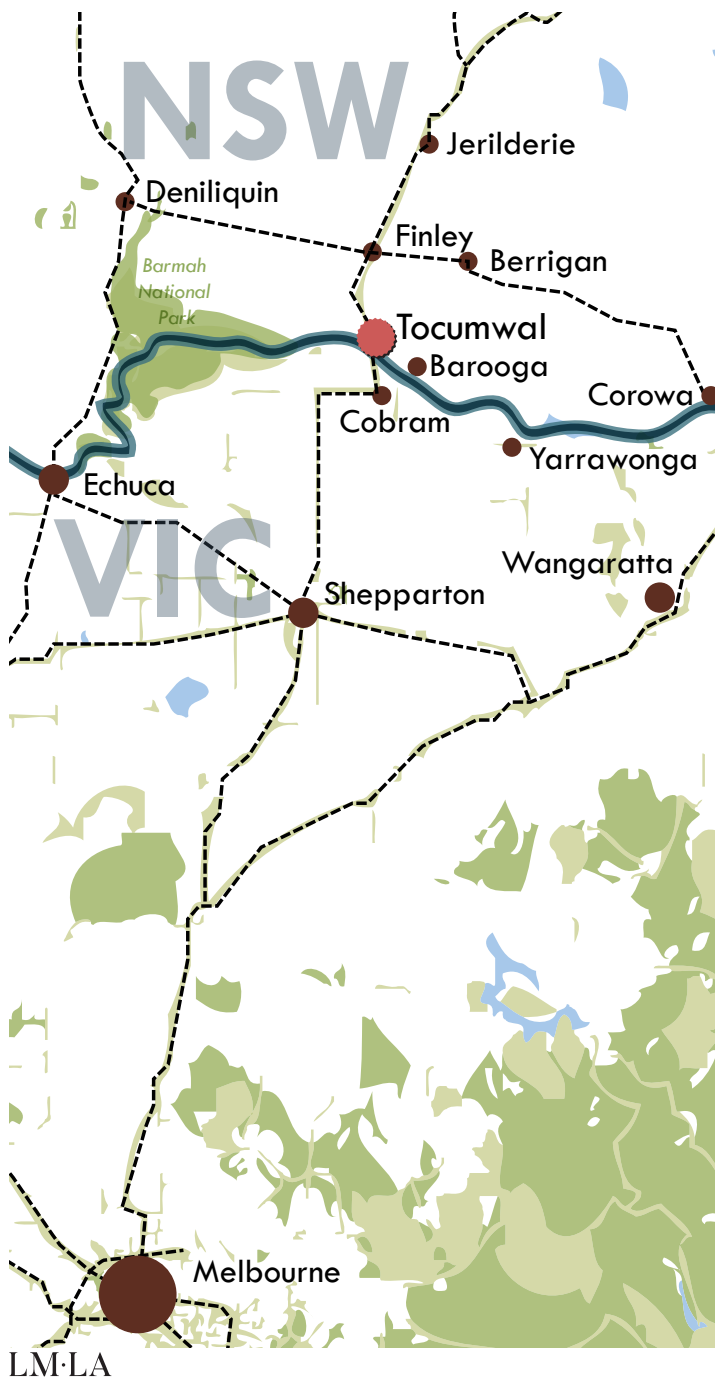
## Introduction & Context



### What triggered this Concept Plan?

Tocumwal Rotary (Rotary), Berrigan Shire Council (BSC) and the Tocumwal Farmers Market commissioned the WAAAF Creek Walk Concept Plan.

The trail has been maintained by Rotary for the last 20 years. Maintenance of the site has been getting more difficult as Rotary members are getting older. There is concern that the creek is becoming unsightly (weeds). The community want to tell the WAAAF story and frame it for a contemporary audience.



### Purpose of Concept Plan

- Review the existing trail and upgrade to improve access and, where appropriate, meet DDA requirements. The path may not necessarily provide full DDA access to all areas and signage and interpretation may need to be considered to offer those with mobility challenges alternative ways to enjoy the WAAAF Walk experience
- Provide a path along the southern side of the Creek only
- Consider safety aspects for golf buggy and mobility scooter users and options to restrict vehicle access to the Walk (other than maintenance vehicles)
- Strengthen and improve connections to the northern side of creek and connect to existing road and pedestrian network where possible
- Incorporate opportunities to connect the WAAAF Walk to the Murray River (near existing water treatment plant)
- Incorporate opportunities to connect the WAAAF Walk to the Tocumwal CBD and the Foreshore
- Develop a Concept Plan which provides a conceptual overview of the WAAAF Creek Trail with more detailed plans (zoom-ins) required for key areas and creek crossings

### Previous Reports, Plans and Strategies

- Tocumwal Pedestrian Access And Mobility Plan - Des Gunn Landscape Design/ Berrigan Shire Council - Adopted 16th July, 2014
- Tocumwal Town Concept Plan 2015 - LMLA
- Tocumwal Foreshore Masterplan 2016 - LMLA
- Berrigan Shire 2027 - Our Community Strategic Plan
- BSC Tourism Strategy - 2014-2018 - Berrigan Shire Council
- BSC Active Ageing And Disability Inclusion Plan - Disability Inclusion Action Plan -2017 – 2021

### How to use this report

The Report has been divided into a series of individual projects. This Report has been written based on the current priorities. Delivering the Plan will require flexibility in priorities to be responsive to funding/resourcing opportunities. Each project section in the Report can be separated. The sections can be used to;

- form the basis of a brief
- support funding applications
- facilitate discussions with relevant authorities
- coordinate projects internally
- support press releases
- engage and empower community members to contribute to achieving the overall vision for The WAAAF Creek Trail

### WAAAF History at the creek & Tocumwal

This creek-side trail linked the Tocumwal town centre with the largest airforce establishment in Australia. At its peak, 4,581 RAAF servicemen and 422 WAAAF service-women served on the base.

The WAAAF's were essential to the running of Tocumwal Aerodrome. They were involved in signals communications, flying administration, aircraft, engine, instruments and parachute maintenance, transport, stores and offices as well as more traditional roles in the mess hall, laundries and offices.

They are proud of their service. The WAAAF were needed by the Air Force and they fulfilled their roles with flair and competence. They were considered to make a double contribution to the war effort, as their work released many men for active duty. It should be noted that the WAAAF were, however, paid 2/3rd (or less) the equivalent ranked pay of a service-man.

Tocumwal Aerodrome was a culture shock after their sheltered family lives. Conditions were communal and spartan with 28 women to a cottage. Learning trades and working alongside men, were new challenges. Male/female ratio was ten to one. They worked 6.5 days a week and had a full social life. They made time to make curtains and flower beds for their huts. Dances, engagements and weddings brightened the hard times. They recall the time with happiness.

“it was a terrible time, it was a horrific time, but you wouldn't have missed it for anything because it gave us a different outlook on life, it made us more understanding of a lot of things and it made brothers and sisters of a lot of people who would never have known each other otherwise.”

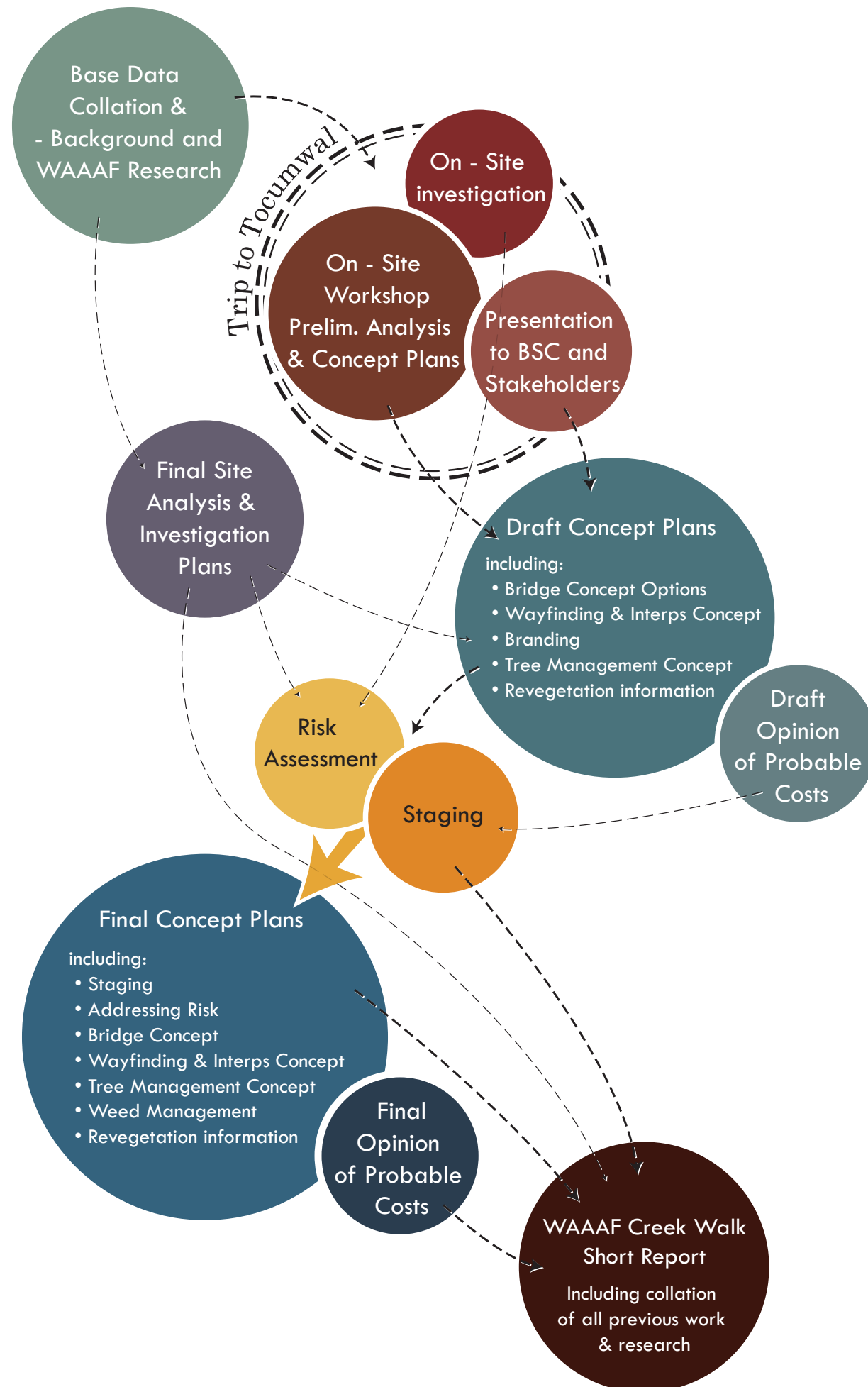
Judy Stone, WAAAF

Joanna Penglase and David Horner, When the War Came to Australia, Allen and Unwin, Sydney, 1992 pages 49 - 50, 245



# Project Process and Community Input

A community driven project



The following design process was undertaken:

## On site investigation, workshop & presentation

- LMLA walked the creek with BSC and Rotary members to discuss site opportunities and constraints. Links to town were investigated and confirmed on foot
- Hand drawn analysis & concept plans were developed on location to confirm the outcomes of the site visit
- A workshop meeting with BSC and Stakeholders was held to discuss the plans and findings
- The plans were shared with other interested community members for their feedback



## Draft Concept Plans

- A concept plan with integrated path system to connect to Tocumwal's existing path network was developed
- Zoom-in plans covered the whole trail
- Wayfinding and interpretation elements were developed
- Tree management and revegetation information was developed
- A Draft OPC was created to liaise with BSC
- Rotary discussed the plans and voted to adopt all elements with minor tweaks
- BSC presented the plans to the Councillors who asked that the plans address risk issues first, reduce the scale of the plan & its aspirations and identify staging for projects



## Final Concept Plans

- The feedback directed changes to the plans, concepts and OPC
- A risk management analysis was undertaken with BSC input
- Staging was developed in collaboration with BSC and Rotary
- Wayfinding, interpretation and revegetation concepts were further developed
- The Report was finalised



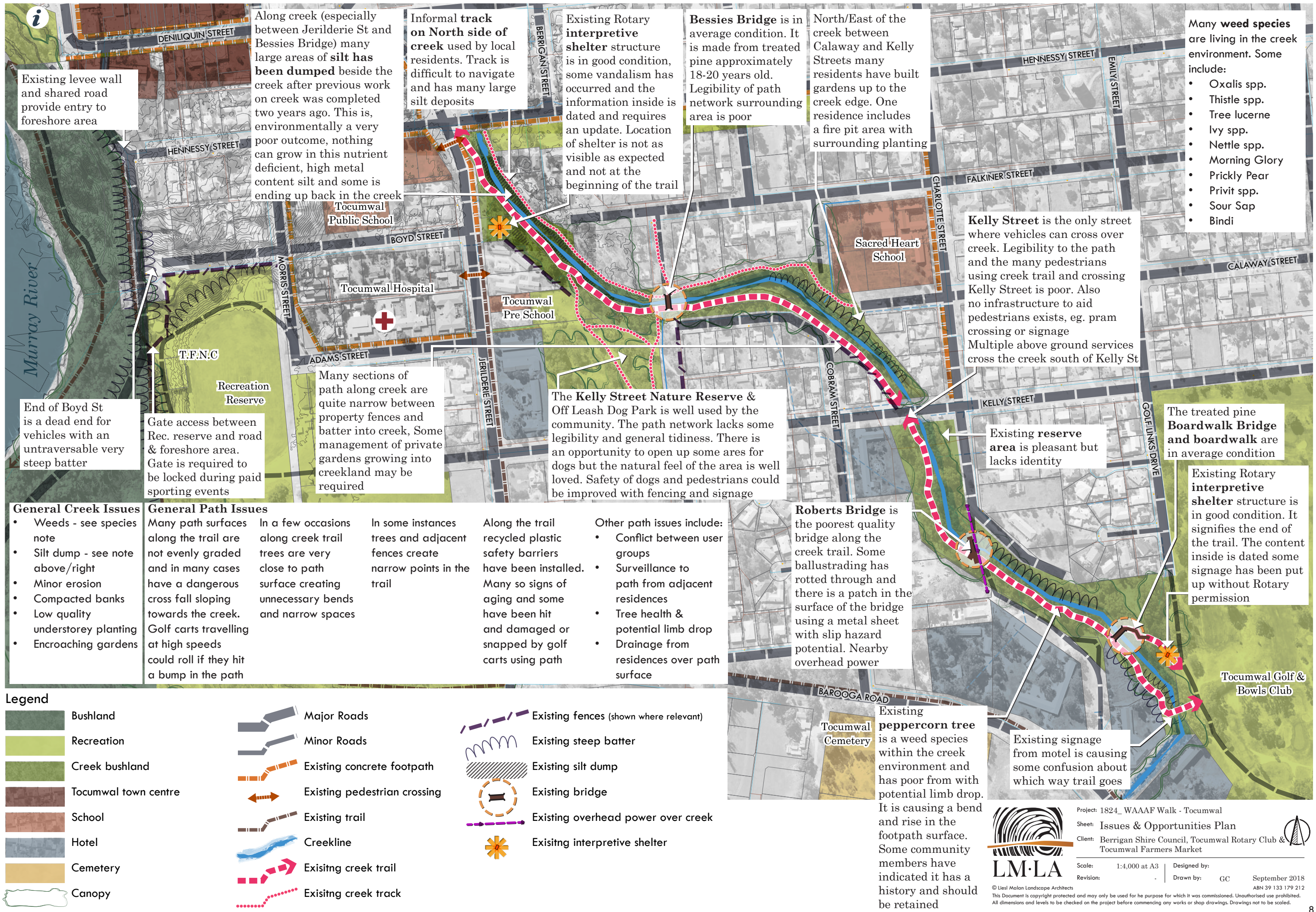


WAAAF's picnic by the Murray River - Tocumwal Historic Aerodrome Museum

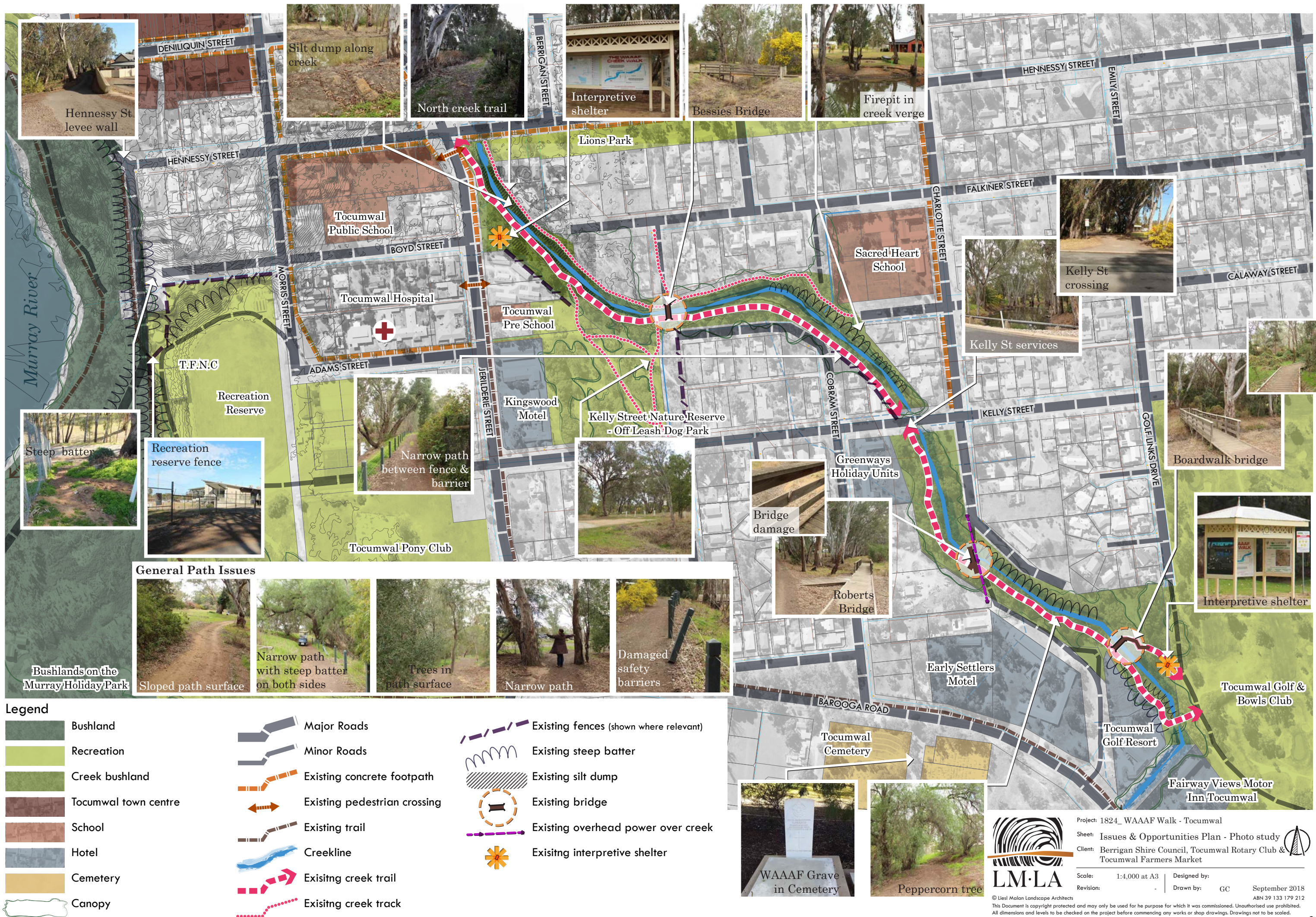
## Analysis and Risk Assessment












Legend

- |  |                      |  |                              |  |  |
|--|----------------------|--|------------------------------|--|--|
|  | Bushland             |  | Major Roads                  |  | Existing fences (shown where relevant) |
|  | Recreation           |  | Minor Roads                  |  | Existing steep batter                  |
|  | Creek bushland       |  | Existing concrete footpath   |  | Existing silt dump                     |
|  | Tocumwal town centre |  | Existing pedestrian crossing |  | Existing bridge                        |
|  | School               |  | Existing trail               |  | Existing overhead power over creek     |
|  | Hotel                |  | Creekline                    |  | Existing interpretive shelter          |
|  | Cemetery             |  | Existing creek trail         |  |  |
|  | Canopy               |  | Existing creek track         |  |  |



Project: 1824\_ WAAAF Walk - Tocumwal  
Sheet: Issues & Opportunities Plan - Photo study  
Client: Berrigan Shire Council, Tocumwal Rotary Club & Tocumwal Farmers Market

Scale: 1:4,000 at A3  
Revision: -

Designed by:  
Drawn by: GC

September 2018  
ABN 39 133 179 212

© Liesl Malan Landscape Architects  
This Document is copyright protected and may only be used for the purpose for which it was commissioned. Unauthorised use prohibited.  
All dimensions and levels to be checked on the project before commencing any works or shop drawings. Drawings not to be scaled.



Risk Assessment

Prioritising safety

Risk focused approach

BSC requested that the works prioritise risk issues. LMLA has undertaken a risk assessment in collaboration with Michelle Koopman Enterprise Risk Manager BSC. Definitions of risk type, consequence, likelihood and risk level are all based on the Risk Management Policy & Framework 2017.

Staging

The level of risk and the type have been used to determine which works should be prioritised into Stage 1. Some works are more cost-effective if undertaken with other works e.g. the path resurfacing and grading of the track. These works have therefore been grouped in the same stage.

Refer Berrigan Shire Council Policy 17  
Risk Management Policy & Framework  
Version 04  
March 2017

Hazard	Risk	Risk Type	Consequence (1 - 5)	Likelihood (A - E)	Risk Level	Recommendations	Stage	\$
At the Kelly Street road crossing vehicles have low awareness of pedestrians & cyclists using Creek Walk	Vehicle could hit pedestrian crossing street	Public Liability	5	C	High	Install signage to indicate to vehicles pedestrian crossing	Stage 1	\$
Golf carts travelling along Creek Walk at high speeds under hazardous circumstances	Pedestrian or cyclist could get hit by or hurt while trying to avoid golf cart	Public Liability	4	C	High	Restrict access to Creek Walk for Golf Carts	Stage 1	\$\$
Trees with dieback	Limb drop onto pedestrian or cyclist could cause injury	Public Liability	3	B	High	Arborist assessment of trees along creek walk and subsequent management	Stage 1	\$\$
Ageing bridge infrastructure	Damage or collapse could occur during use and cause injury	Public Liability	3	D	Medium	Replace bridges using robust and long lasting materials	Stage 1	\$\$\$
Kelly Street road crossing no pram crossings	Difficult to traverse kerb could cause accident between Creek Walk user eg. Mobility scooter and vehicle	Public Liability	3	D	Medium	Install pram crossings in kerb to allow access for all abilities crossing	Stage 1	\$
Damaged safety barriers	Pedestrian could fall through gap and down slope or fall onto sharp damaged bollard fencing	Public Liability	3	C	High	fix existing damaged elements. Consider replacement of recycled plastic bollard with more robust product	Stage 1	\$\$
Slope on path	Slip risk for pedestrians, roll potential for golf carts	Public Liability	2 / 3	B / C	Medium/ High	Implement coir logs & gabion baskets in path design to regrade path surface (undertake at same time as addressing uneven path surface)	Stage 1	\$\$
Uneven path surface, can be wet and muddy, some areas of silt dump from creek clearing works	Slip and fall risks for pedestrians	Public Liability	2	D	Low	Re-surface path with smooth gravel finish (undertake at same time as addressing slope on path)	Stage 1	\$\$
Dogs from Kelly Street Nature Reserve off-leash dog park	Dogs run out in front of cars from park, may cause vehicles to swerve and have a traffic accident	Public Liability	3	B	High	Install fence along front of reserve	Stage 1	\$
Track North of creek has silt dumps creating uneven ground	Trip and fall risks for pedestrians	Public Liability	2	B	Medium	Remove silt and provide even ground along informal track	Future	\$
Ageing and damaged furniture	Injury risk if person sits on unstable, deteriorating furniture	Public Liability	2	C	Medium	Replace furniture along Creek Walk	Public Open Space	\$\$
No lighting along Creek Walk	Injury or incident occurs along Creek Walk during evening	Public Liability	2	C	Medium	Discourage evening use. Monitor and consider using solar lighting if required	Future	
Creek Walk legibility	Visitors get confused or lost due to inconsistent name of walk, insufficient detail regarding walk and poor signage and information available along the walk	Community & Government reputation	1	D	Low	Establish walk identity and name and install wayfinding signage along walk.	Interps & Wayfinding	\$\$
High quantity of weeds within creek environment	Spread of weeds through creek reducing quality of environment downstream	Environment	3	C	High	Extensive removal of weeds and undertake revegetation of creek	Weeds & reveg.	\$\$\$\$



Bessies Bridge



Replaced timber

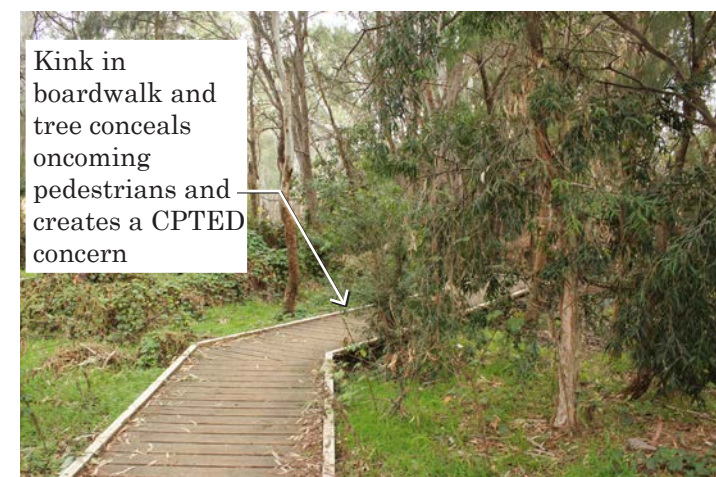
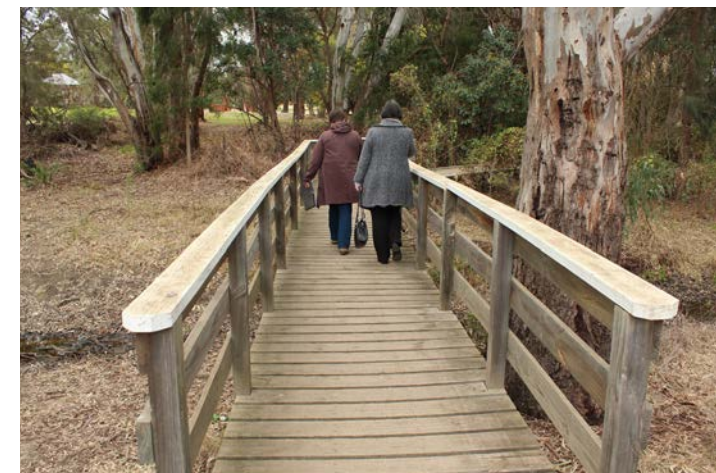
Robert's Bridge

End of bridges  
steps down to  
path surfaceSteel panel on bridge  
surface possibly  
to patch hole or  
damage. Steel is a  
slip hazard

Signs of timber decay

Timber  
balustrading  
splitting at  
weak part of  
treated pine

Boardwalk Bridge

Kink in  
boardwalk and  
tree conceals  
oncoming  
pedestrians and  
creates a CPTED  
concern

# Bridge Assessment

## Existing bridge quality

### General bridge quality statement

LMLA has undertaken a visual assessment of the bridge conditions. The following notes summarise their general condition:

- The bridges and boardwalk are around 18 years old
- They provide valuable pedestrian and cyclist connections
- There are no large vehicle control measures to prevent the use of the bridges. The golf carts using the trail have the potential to use these crossings. The bridges were built as pedestrian/cyclist bridges only
- At times the bridge doesn't finish flush with the path creating access issues for people with mobility challenges
- Part of the boardwalk is overgrown with vegetation creating areas that don't achieve Crime Prevention Through Environmental Guidelines best practice outcomes. There have been complaints about public urination in this area
- The bridges are made with a treated pine structure and decking boards. The type of treated pine is unknown
- There are signs that significant repairs to structural elements and the decking have been required recently

### Treated pine has a limited lifespan

The expected lifespan of treated pine varies depending on type/ class and size of timber, as well as the site conditions. Serviceable lifespan expected for treated pine in these conditions is generally considered to be up to 20 years.



## Masterplan and Staging

Image from State Library Victoria





**Tocumwal Golf & Bowls Club**

Refer LP07

© Liesl Malan Landscape Architects  
This Document is copyright protected and may only be used for the purpose for which it was commissioned. Unauthorised use prohibited.  
All dimensions and levels to be checked on the project before commencing any works or shop drawings. Drawings not to be scaled.



# Staging Plan






Sub title

## Staging Rationale






















The following approach to staging was identified:

- Prioritise projects in the Creek Walk environs based on addressing safety concerns (Stage 1)
- Break up the overall project into achievable small projects that will be able to apply for funding grants or be championed by the community
- Refer to the Risk Assessment section of this report for more information

## Staging

-  Stage 1 – Path Works and Safety Priority
-  Public Open Space Stages
-  Wayfinding & Interpretation Stage
-  Weed Control & Reveg. Stage
-  Works outside of Project Scope

### Legend

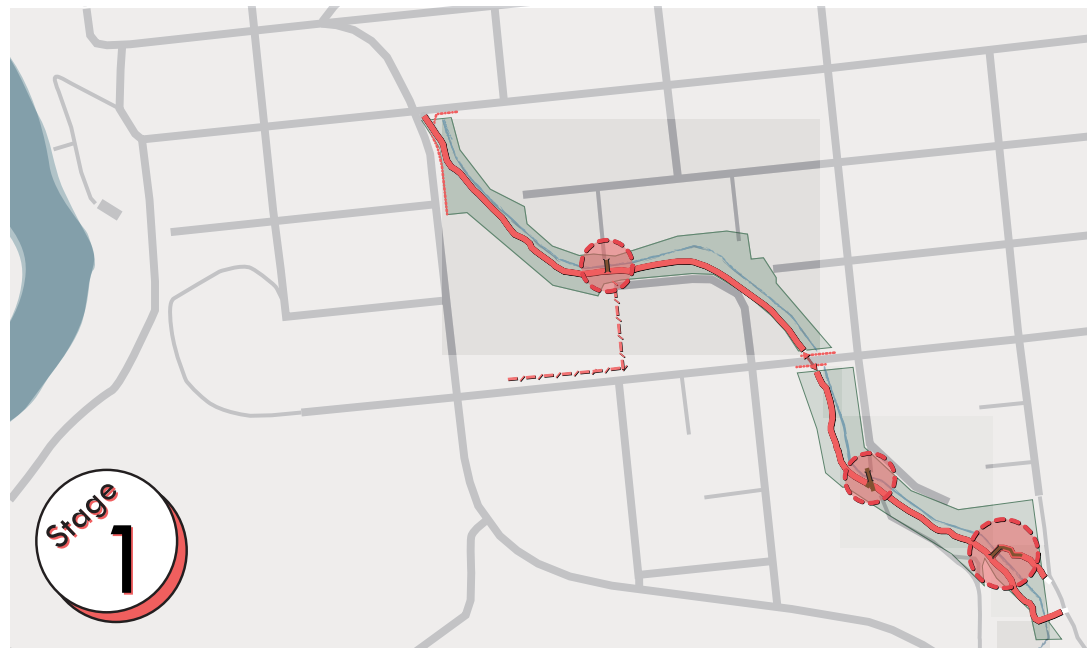
- |  |  |
|--|--|
|  Proposed upgrade to existing trail           |  Proposed revegetation to creek                         |
|  Proposed upgrade to Kelly Street Crossing    |  Proposed screening revegetation                        |
|  Proposed upgraded bridge                     |  Proposed future concrete footpath                      |
|  Proposed fence                               |  Existing track requires silt removal                   |
|  Proposed post & rail fence                   |  Improved pedestrian connection                         |
|  Public open space areas                      |  Proposed future pedestrian crossing - truck route road |
|  Proposed seating/picnic area                 |  Proposed future ramp connection                        |
|  Proposed upgrade to existing path            |  Possible future new bridge                             |
|  Proposed concrete footpath in creek trail    |  |
|  Existing interpretive shelter to be retained |  |
|  Proposed wayfinding map                      |  |
|  Proposed wayfinding bollard                  |  |
|  Proposed interpretive sign                   |  |



# Individual Stages

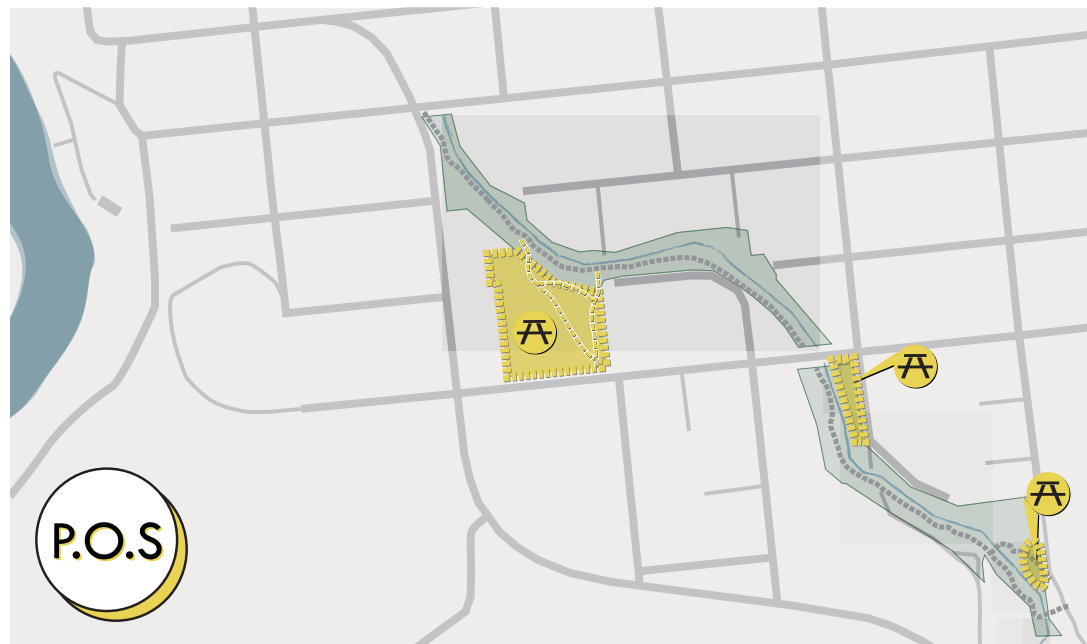
## Stage Order

1. Stage 1 should be completed first.
2. All other works can be undertaken independently of each other as funding opportunities arise. The works have been broken up to suit community organisations / members leading the works



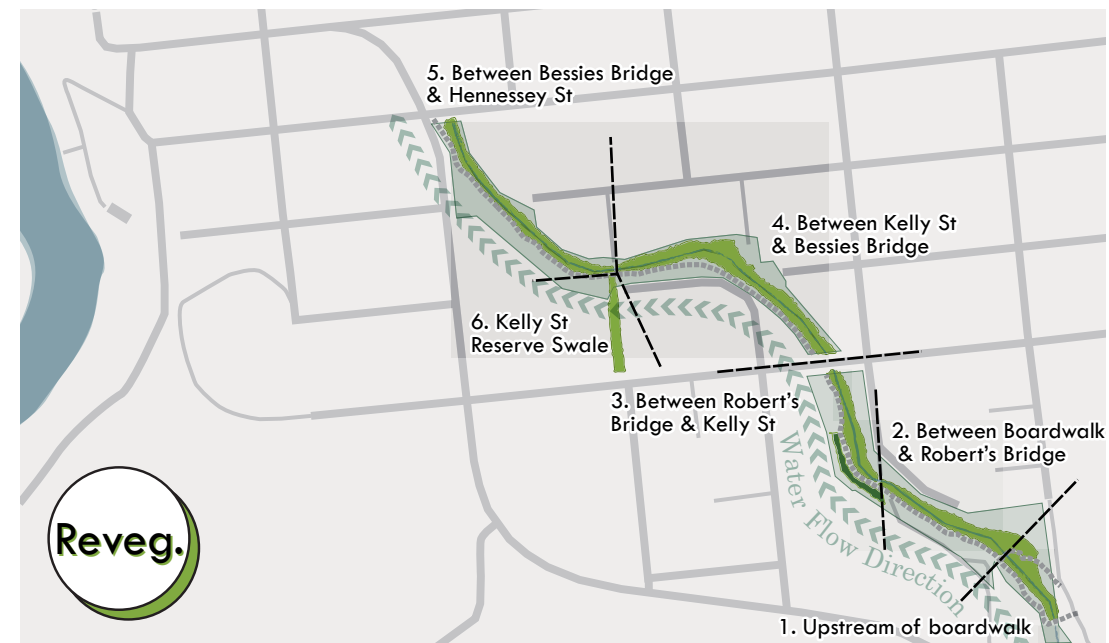
## Stage 1 – Path Works and Safety Priority

- Path upgrades (surface and grading)
- Tree assessment and associated works
- Bridge upgrades
- Fencing and golf cart access control points
- Fencing at Kelly Street Reserve
- Kelly Street Crossing



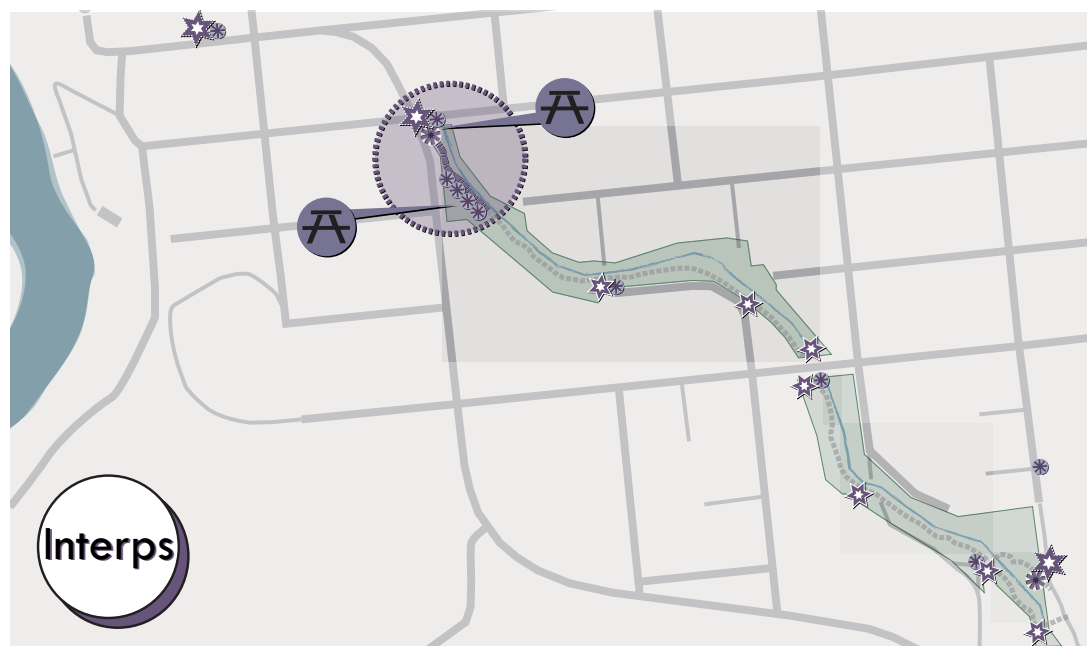
## Public Open Space Stages

- Kelly Street Nature Reserve - path upgrade, understorey clearing and furniture
- Charlotte Street / Kelly Street Picnic area
- Golf Club end of trail furniture



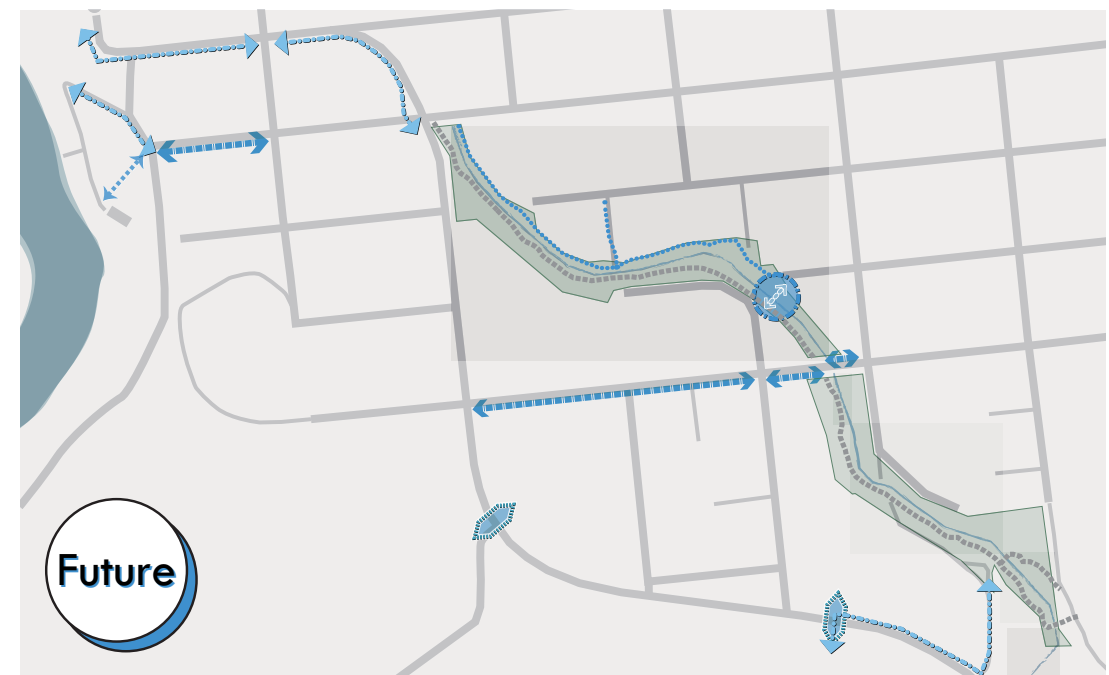
## Weed Control & Revegetation Stage

- Clearing creek of invasive weed species beginning upstream to minimise weed spread
- Revegetation of creek in small sections beginning upstream



## Wayfinding & Interpretation Stage

- Trailhead (including parking, picnic space etc)
- Relocation and refurbishment of existing shelters
- Interpretation signage
- Wayfinding signage



## Works outside of Project Scope

- Track on north side silt removal
- Kelly St footpath
- Hennessey St footpath and ramp to river
- Crossings (signage only) over Barooga Road near the cemetery and bushlands
- Lighting along Creek Walk
- Future possible bridge at Cobram / Sacred Heart School



# Estimate of Project Costs

Carefully planned and costed

	Item	Sub total	Contingency at 25%	Sub total inc contingency	GST 10%	Total
<b>Stage 1 – Path Works and Safety Priority</b>		<b>\$443,325.00</b>	<b>\$110,831.25</b>	<b>\$554,156.25</b>	<b>\$55,415.63</b>	<b>\$609,571.88</b>
	Preliminaries and earthworks	\$23,000.00	\$5,750.00	\$28,750.00	\$2,875.00	\$31,625
	Grading and retaining walls and associated path	\$56,350.00	\$14,087.50	\$70,437.50	\$7,043.75	\$77,481.25
	Paths (not associated with grading works)	\$91,425.00	\$22,856.25	\$114,281.25	\$11,428.13	\$125,709.38
	Kelly Street crossing - pram crossings & signage	\$1,500.00	\$375.00	\$1,875.00	\$187.50	\$2,062.50
	Kelly Street Nature Reserve fencing	\$37,600.00	\$9,400.00	\$47,000.00	\$4,700.00	\$51,700.00
	Access Control post & rail fencing and bollards	\$82,450.00	\$20,612.50	\$103,062.50	\$10,306.25	\$113,368.75
	Bridge and boardwalk upgrades	\$151,000.00	\$37,750.00	\$188,750.00	\$18,875.00	\$207,625.00
<b>Public Open Space Stages</b>		<b>\$54,137.00</b>	<b>\$13,534.25</b>	<b>\$67,671.25</b>	<b>\$6,767.13</b>	<b>\$74,438.38</b>
	Kelly Street Nature Reserve	\$37,327.00	\$9,331.75	\$46,658.75	\$4,665.88	\$51,324.63
	Kelly Street / Charlotte Street Picnic area	\$8,405.00	\$2,101.25	\$10,506.25	\$1,050.63	\$11,556.88
	Golf Course Picnic area	\$8,405.00	\$2,101.25	\$10,506.25	\$1,050.63	\$11,556.88
<b>Wayfinding &amp; Interpretation Stage</b>		<b>\$190,760.00</b>	<b>\$47,690.00</b>	<b>\$238,450.00</b>	<b>\$10,395.00</b>	<b>\$114,345.00</b>
	Trailhead including preliminaries, concrete footpath, shelter relocation & refurbishment and car park	\$107,600.00	\$26,900.00	\$134,500.00	\$13,450.00	\$147,950.00
	Wayfinding & Interpretive signage (including shelter display) - research, curation, copy writing, graphic design, form design & detailing, fabrication and installation	\$74,000.00	\$18,500.00	\$92,500.00	\$9,250.00	\$101,750.00
	Furniture	\$9,160.00	\$2,290.00	\$11,450.00	\$1,145.00	\$12,595.00

Note:

- Whilst every effort has been taken to ensure accuracy Liesl Malan Landscape Architects cannot accept liability arising from the use thereof.
- This OPC includes construction costs only, it does not include consultancy fees associated with additional design for revised scope, documentation and project management. This OPC is based on a Concept Plan only and is subject to variation during documentation
- All rates are to be confirmed by Berrigan Shire Council.



Estimate of Project Costs

Carefully planned and costed

	Item	Sub total	Contingency at 25%	Sub total inc contingency	GST 10%	Total
	Weed Control & Reveg. Stage	\$293,635.00	\$73,408.75	\$367,043.75	\$36,704.38	\$403,748.13
	Design and documentation of revegetation works	\$15,000.00	\$3,750.00	\$18,750.00	\$1,875.00	\$20,625.00
	Revegetation. Stage 1. Upstream of boardwalk	\$30,385.00	\$7,596.25	\$37,981.25	\$3,798.13	\$41,779.38
	Revegetation Stage 2. Between Boardwalk & Robert’s Bridge	\$49,900.00	\$12,475.00	\$62,375.00	\$6,237.50	\$68,612.50
	Revegetation Stage 3. Between Robert’s Bridge & Kelly St	\$35,320.00	\$8,830.00	\$44,150.00	\$4,415.00	\$48,565.00
	Revegetation Stage 4. Between Kelly St & Bessies Bridge	\$79,000.00	\$19,750.00	\$98,750.00	\$9,875.00	\$108,625.00
	Revegetation Stage 5. Between Bessies Bridge & Hennessey St	\$44,770.00	\$11,192.50	\$55,962.50	\$5,596.25	\$61,558.75
	Revegetation. Stage 6. Kelly St Reserve Swale	\$27,520.00	\$6,880.00	\$34,400.00	\$3,440.00	\$37,840.00
	Revegetation screening shrub species	\$11,740.00	\$2,935.00	\$14,675.00	\$1,467.50	\$16,142.50
	Project total (excluding works outside of project scope)	\$443,325.00	\$110,831.25	\$554,156.25	\$55,415.63	\$609,571.88
	Works outside of Project Scope	\$294,700.00	\$73,675.00	\$368,375.00	\$36,837.50	\$405,212.50
	Removal of all silt dumps from north side of creek bank	BSC - ongoing maintenance budget				
	Concrete footpaths on naturestrips - Hennessy Street	\$48,000.00	\$12,000.00	\$60,000.00	\$6,000.00	\$66,000.00
	Concrete footpaths on naturestrips - Kelly Street	\$149,700.00	\$37,425.00	\$187,125.00	\$18,712.50	\$205,837.50
	Earthern Ramp in Foreshore	\$30,000.00	\$7,500.00	\$37,500.00	\$3,750.00	\$41,250.00
	Pedestrian crossing x 2 ( signage only) over Barooga Road	\$1,000.00	\$250.00	\$1,250.00	\$125.00	\$1,375.00
	Lighting along Creek Walk at trail head area	\$30,000.00	\$7,500.00	\$37,500.00	\$3,750.00	\$41,250.00
	Possible bridge at Cobram/ Sacred Heart School	\$36,000.00	\$9,000.00	\$45,000.00	\$4,500.00	\$49,500.00

- Note:
- Whilst every effort has been taken to ensure accuracy Liesl Malan Landscape Architects cannot accept liability arising from the use thereof.
  - This OPC includes construction costs only, it does not include consultancy fees associated with additional design for revised scope, documentation and project management. This OPC is based on a Concept Plan only and is subject to variation during documentation
  - All rates are to be confirmed by Berrigan Shire Council



## Detailed Plans

WAAAF members performing maintenance on RAAF aeroplane, 1943 - Australian War Memorial





# WAAAF Creek Trailhead

## Access and Linkages

- Start of trail
- Links to Tocomwal PS, town centre, foreshore and Bird Walk
- A section of concrete path has been included to ensure access for all abilities at the interpretation
- Golf carts to be restricted from accessing this section of the trail

## Interpretation and Wayfinding

The main display of interpretation with all abilities access

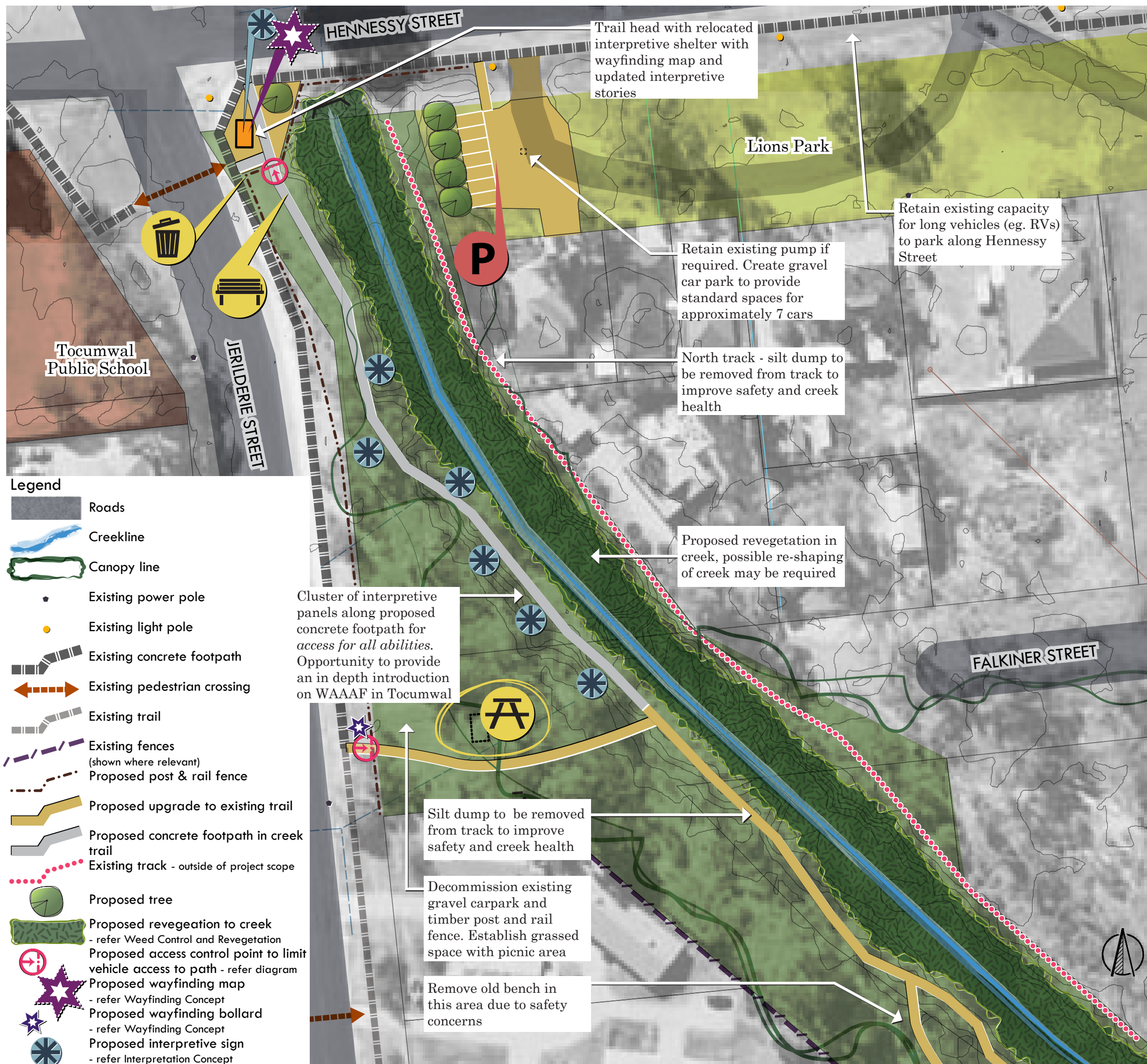
- Relocate existing shelter and include wayfinding map and honour role of WAAAF who served at Tocomwal Airbase
- Stories to be covered: the largest encampment of WAAAF, life on base, life in town, work of WAAAF (general and at Tocomwal), contrast to pre and post-war role of Women in Australia
- Refer to interpretation section of report for more detail

## Uses and Activities

- Trailhead provides outdoor WAAAF museum
- The picnic area offers a passive outdoor recreation space tailored to the needs of families, grey nomads, visitors and the local community
- The shared path is part of an extensive network along the entire town and provides a range of outdoor recreation opportunities

## Revegetation and Maintenance

- Creek to be planted with indigenous riparian species as part of the staged weed management and revegetation works
- Plantings to address erosion issues near the Hennessey Street culvert
- This section of the creek will be the most visited and should be prioritised for weed control
- Due to the high number of visitors, this area should be prioritised for tree assessment and management



Sheet: **LP02\_ Jerilderie Street Concept Plan**

Scale: 1:750 at A3

Drawn: GC October 2018



## Dog Park and Bessie's Bridge

### Access and Linkages

- Upgrade to existing bridge. This Bridge provides a link to the dog walking park for residents on the north side of Tocumwal
- New fence along Kelly street and residential boundary to contain off leash dogs
- Kelly Street Nature Reserve path upgrades to gravel surface paths as shown on the plan
- Golf carts to be restricted from accessing this section of the trail

### Interpretation and Wayfinding

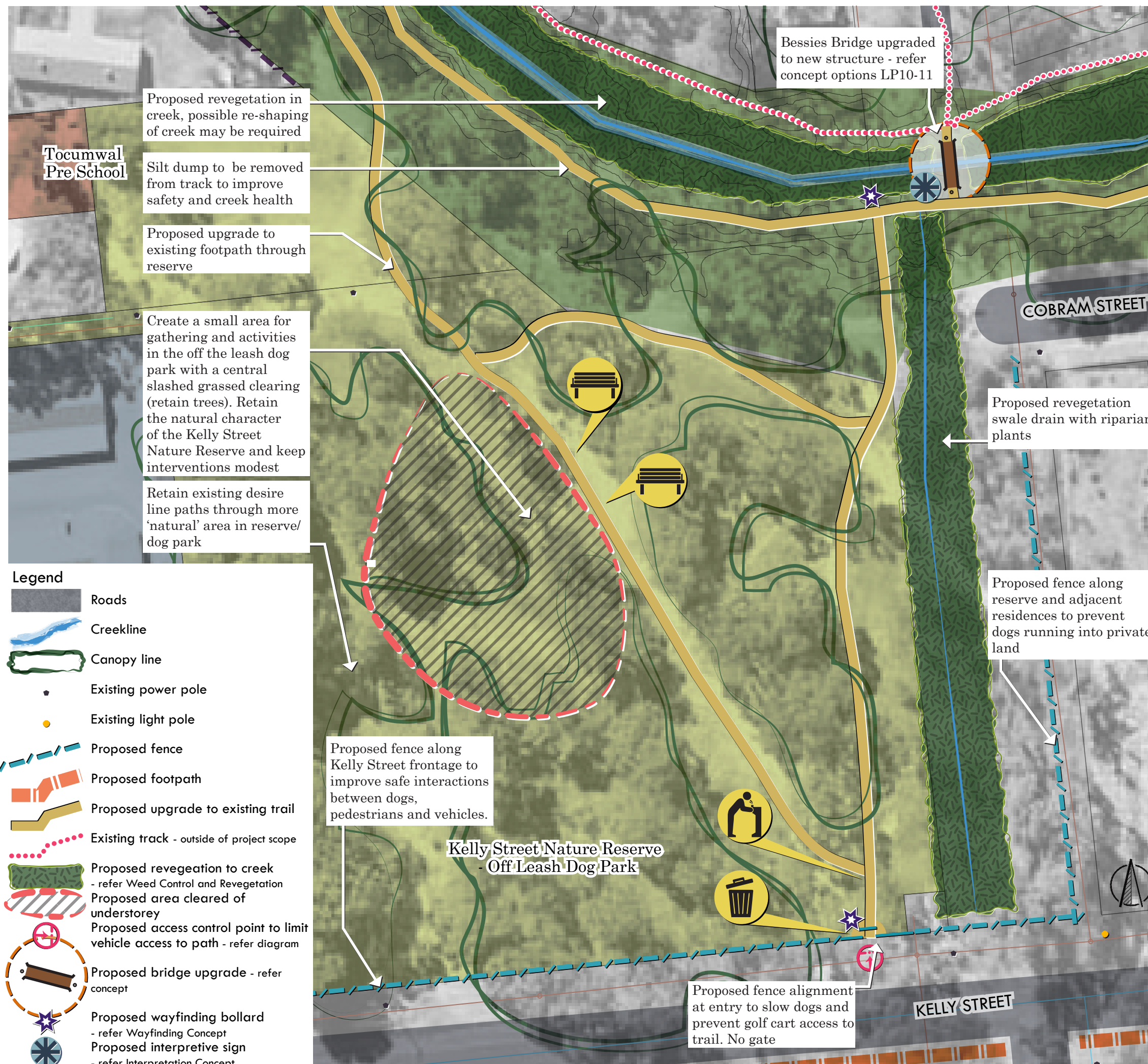
- Wayfinding bollards to note trail
- Interpretation opportunity could be included near the bridge with easy access from Cobram Street for people with limited mobility

### Uses and Activities

- Support dog walkers and path users with bin and drinking fountain
- Gathering space with seats to provide a central area for dog walkers to socialise with their pets
- The shared path is part of a large network along the entire town and provides a range of outdoor recreation opportunities

### Revegetation and Maintenance

- Trees adjacent to the new bridge are to be assessed. The assessment should consider the impact of the proposed works on tree health. Some tree removal may be required to protect assets and limit risk to human lives
- Creek to be planted with indigenous riparian species as part of the staged weed management and revegetation works
- Any work within Kelly Street Nature Reserve will need to be discussed with Local Land Services (LLS) (authority over site)
- This area is to be included in the tree management plan. LLS may want to have input into the Tree management in Kelly Street Nature Reserve
- Revegetate Kelly Street Nature Reserve swale drain with riparian species
- Minor clearing of understorey plants (subject to the approval of authority) to create a gathering space

Sheet: **LP03\_Nature Reserve Concept Plan**

Scale: 1:750 at A3

Drawn: GC October 2018



# Cobram Street New Bridge

## Access and Linkages

- Golf carts to be restricted from accessing this section of the trail
- Possible future pedestrian bridge over the creek could provide a direct link to Sacred Heart School for students and staff south of the creek

## Interpretation and Wayfinding

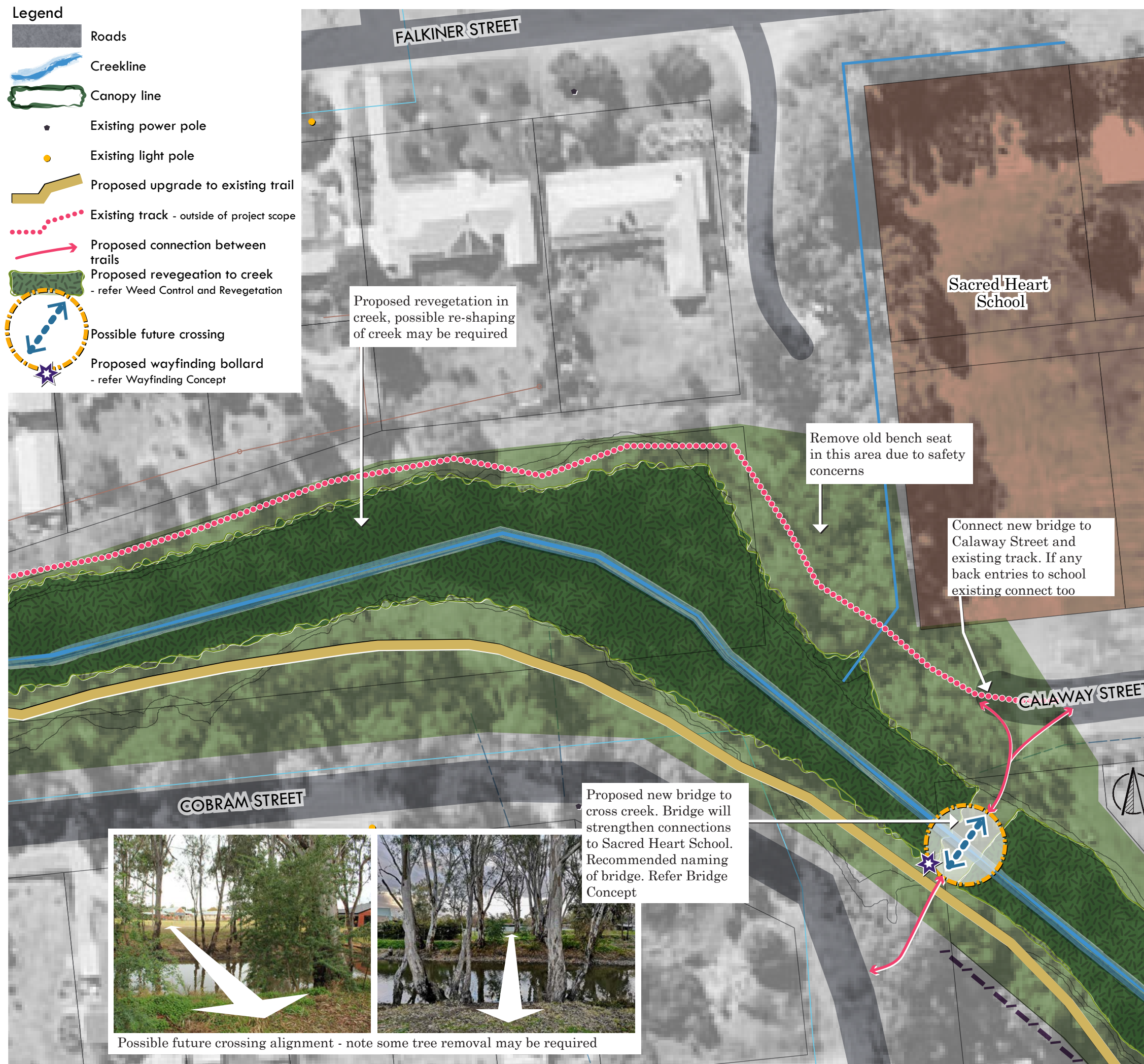
- Wayfinding bollards to note trail
- Possible future pedestrian bridge to be named after a Tocumwal WAAAF

## Uses and Activities

- The shared path is part of a large network along the entire town and provides a range of outdoor recreation opportunities

## Revegetation and Maintenance

- Trees adjacent to the new bridge should be assessed. The assessment should consider the impact of the proposed works on tree health. Some tree removal may be required to protect assets and limit risk to human lives
- Creek to be planted with indigenous riparian species as part of the staged weed management and revegetation works
- This area is to be included in the tree management plan

Sheet: **LP04\_Cobram Street Concept Plan**

Scale: 1:750 at A3

Drawn: GC October 2018



## Kelly Street Crossing

### Access and Linkages

- Upgrade to crossing to include pram crossing in kerbs and signage to note pedestrians cross at this location
- Golf carts to be restricted from accessing this section of the trail

### Interpretation and Wayfinding

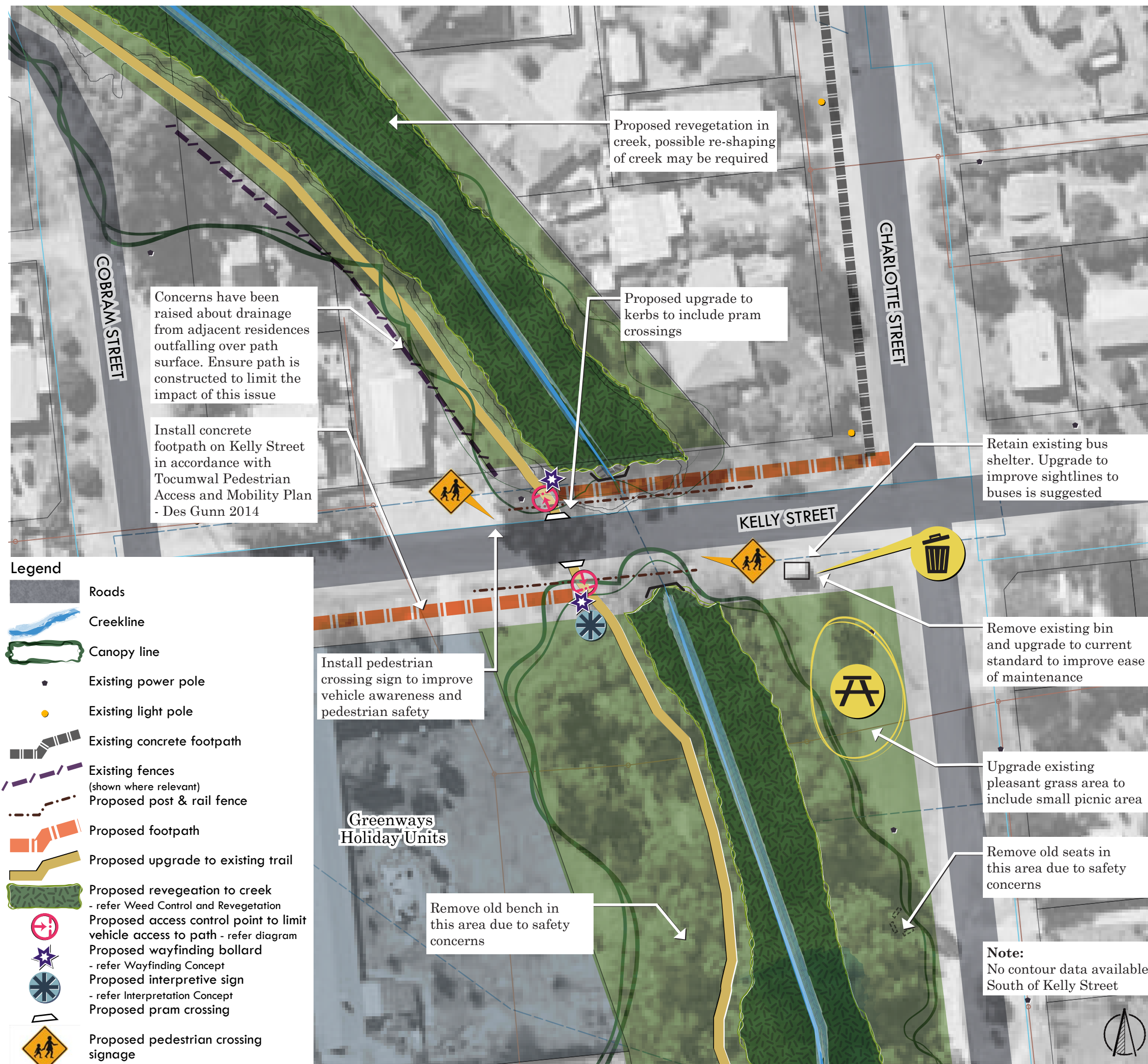
- Wayfinding bollards to note trail
- Interpretation opportunity could be included near the Kelly street intersection with easy access from Kelly Street for people with limited mobility

### Uses and Activities

- The shared path is part of a large network along the entire town and provides a range of outdoor recreation opportunities

### Revegetation and Maintenance

- This area is to be included in the tree management plan
- Creek to be planted with indigenous riparian species as part of the staged weed management and revegetation works
- Note ducks live in this area, and the local community loves them. Duck health and possible impact on plantings will need to be considered during works



Sheet: **LP05\_Kelly Street Concept Plan**

Scale: 1:750 at A3

Drawn: GC October 2018



## Robert's Bridge

### Access and Linkages

- Upgrade to existing bridge
- Golf carts to be restricted from accessing the section of the trail north of Robert's Bridge.
- Access for golf carts from motels retained south of Robert's Bridge
- Regrade path to address steep cross fall and improve accessibility

### Interpretation and Wayfinding

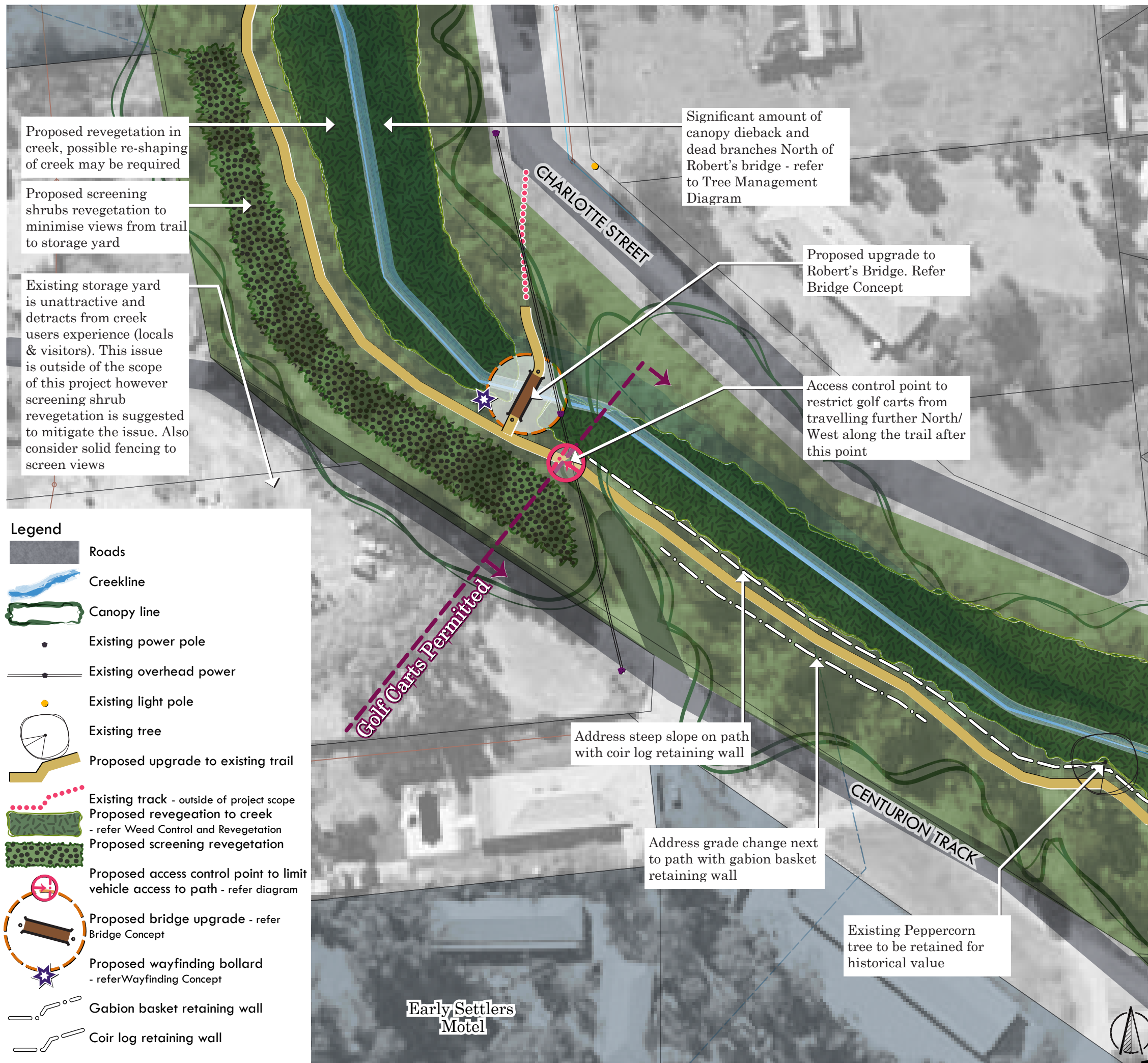
- Wayfinding bollards to note trail

### Uses and activities

- The shared path is part of a large network along the entire town and provides a range of outdoor recreation opportunities

### Revegetation and Maintenance

- Trees adjacent to the new bridge are to be assessed. The assessment should consider the impact of the proposed works on tree health. Some tree removal may be required to protect assets and limit risk to human lives
- This area is to be included in the tree management plan
- Creek to be planted with indigenous riparian species as part of the staged weed management and revegetation works
- Small retaining walls may be required to address the grade changes
- Note ducks live in this area, and the local community loves them. Duck health and possible impact on plantings will need to be considered during works



Sheet: **LP06\_Robert's Bridge Concept Plan**

Scale: 1:750 at A3

Drawn: GC October 2018



# Boardwalk Bridge & Golf Course

## Access and Linkages

- Upgrade to existing bridge and boardwalk
- Golf carts to be restricted from accessing this bridge and boardwalk but access from the motels and hotels to be retained and promoted

## Interpretation and Wayfinding

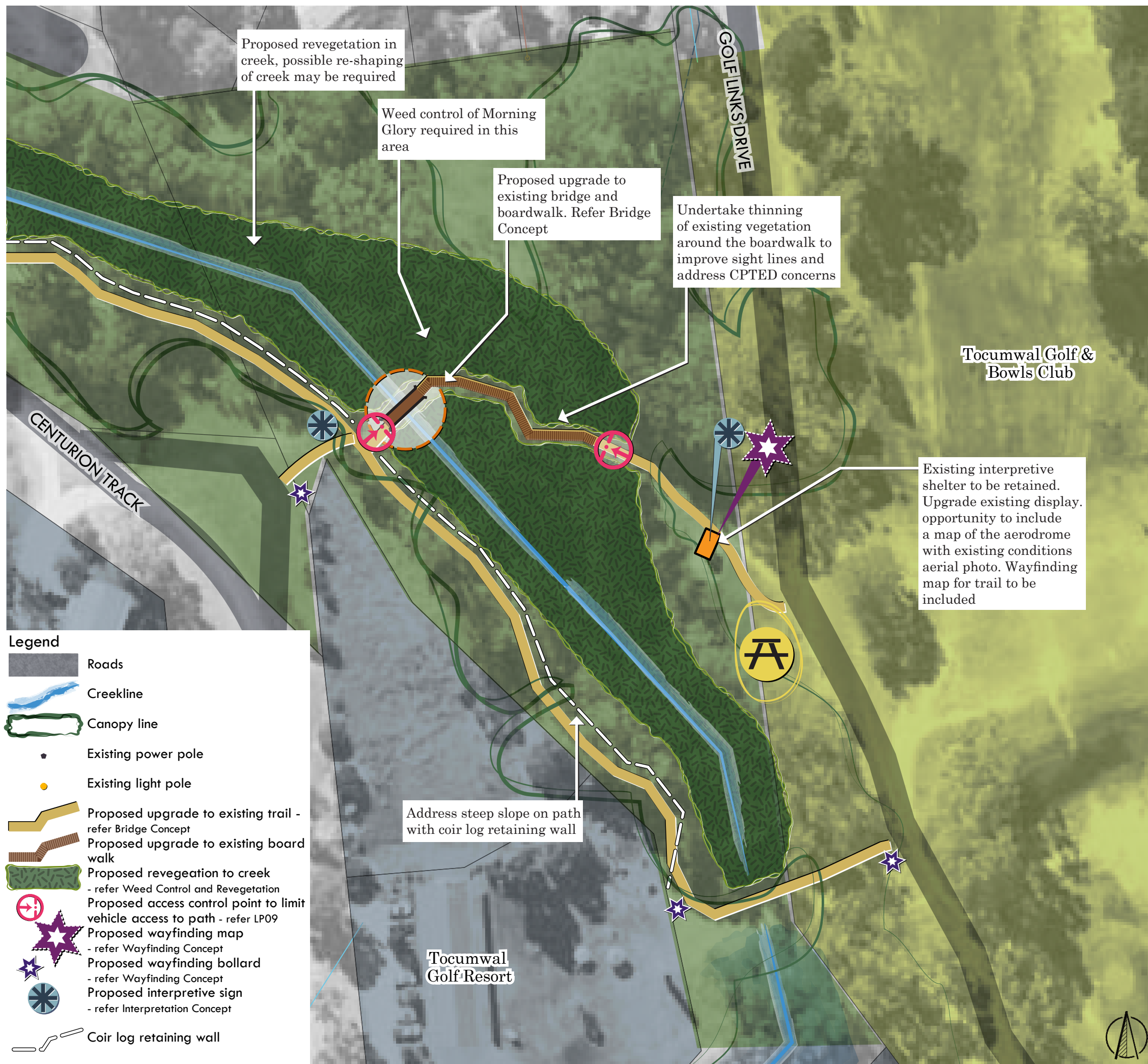
- Interpretation opportunity could be included near the bridge with easy access from Centurion Track for people with limited mobility
- Retain and refurbish existing shelter
- Include map overlaying old Tocomwal Airbase over existing conditions, links to the possible future museum, wayfinding for the WAAAF Creek Trail
- Wayfinding bollards to note trail

## Uses and Activities

- The shared path is part of a large network along the entire town and provides a range of outdoor recreation opportunities
- Golf cart access permitted for access to the Golf Club

## Revegetation and Maintenance

- Weed control including morning glory (extensive around boardwalk)
- This is the upstream section of the creek and should be prioritised for weed control and revegetation to limit the spread of weed species
- Trees adjacent to the new bridge and boardwalk are to be assessed. The assessment should consider the impact of the proposed works on tree health. Some tree removal may be required to protect assets and limit risk to human lives
- This area is to be included in the tree management plan
- Creek to be planted with indigenous riparian species as part of the staged weed management and revegetation works
- Small retaining walls may be required to address the grade changes
- Note ducks live in this area, and the local community loves them. Duck health and possible impact on plantings will need to be considered during works



Sheet: **LP07\_Boardwalk Concept Plan**

Scale: 1:750 at A3

Drawn: GC October 2018



## Addressing Risk as a Priority

Tocumwal WAAAF - Mary Halliday Good conduct certificate - image C Schomberg\_Facebook post





# Tree Management

Shady and safe

Stage  
1

## Healthy trees and a safe trail

The creek tree canopy is almost 100% eucalyptus. They make a significant and positive contribution to the creek aesthetically and environmentally. The community highly values trees.



Some areas of trees show signs of stress (die back and dead branches in canopy). It is normal for these trees to drop branches during times of stress such as drought or flood. This is a significant risk to public safety which will need to be mitigated. Broad-scale removal of trees will not be acceptable to community organisations or generally to Tocumwal Residents.

The Tocumwal Rotary Club are very concerned about tree removal and have asked to be informed if and why a tree requires removal.

## Recommendations:

- Ensure seats, picnic tables, interpretive signage or other elements that encourage people to linger are not installed under the tree canopy
- Commission a qualified arborist to create a tree management plan for the trail to promote tree health and a health bushland experience for users
- Prioritise management of trees with limbs overhanging paths, picnic and seating areas



Sheet: **Tree Management Diagram**

Scale: N/A

Drawn: DK October 2018

Existing large trees are important aesthetically, provide a strong 'sense of place' & has excellent habitat value. There are no known negative impact on services or assets. Retention of trees with pruning, ongoing assessment & management is recommended rather than broad scale removal

Many trees have dead branches or poor branch attachment. Removal of these branches above paths or seats is strongly recommended

Drop Zone  
above path

Fenceline

Private  
Residence

Any path upgrades/grading changes may have a negative impact on tree health. Path materials & retaining walls are to consider tree health

Creek



# Materials & Surfaces

Maintained within available resources



## Existing grade and surface of path

There are areas of path with significant cross fall near the golf course end of the trail. This is a hazard for golf carts and don't provide *all abilities access*. The path surface is a well worn gravel or earth. The surface promotes a bushland feeling, however, would be difficult to use after rain. The width varies and at times it is not wide enough for golf carts and pedestrians.

## Recommendations:

### Addressing grade changes

Level changes can be addressed using a combination of coir logs and gabion baskets. These methods have been suggested because they are

- cost effective
- don't require footings which may impact on tree health

### Path surface and width

The path surface will need to be replaced in areas where the crossfall is addressed. A compacted gravel path is recommended to ensure that the path provides adequate slip resistance in all weather conditions.

At the trailhead it has been identified that elderly visitors may have mobility challenges. A concrete path has been recommended to ensure all abilities access is provided.

A standard 2.5m wide path is recommended. this should be implemented where space allows (note no survey was available at the time of the report).



## Golf cart access issues

The path is not suited to golf cart use for the following reasons:

- The path not wide enough to share with pedestrians. Other facilities, regulatory signage and laws are not able to be enforced (speed limits etc)
- The carts are fast moving vehicles in a pedestrian environment
- There is damage to fencing (see below) which is likely to be caused by carts
- The bridges are accessible to some golf carts but are not designed to take the weight
- The community are concerned that cart drivers have consumed alcohol at the club and are a hazard to path users



## Existing safety fencing

As a result of a previous risk assessment a safety barrier was installed to prevent falls into the creek. Sections of the fence have been hit by vehicles snapping the recycled plastic posts at ground level. Some wires have snapped and are a hazard to path users

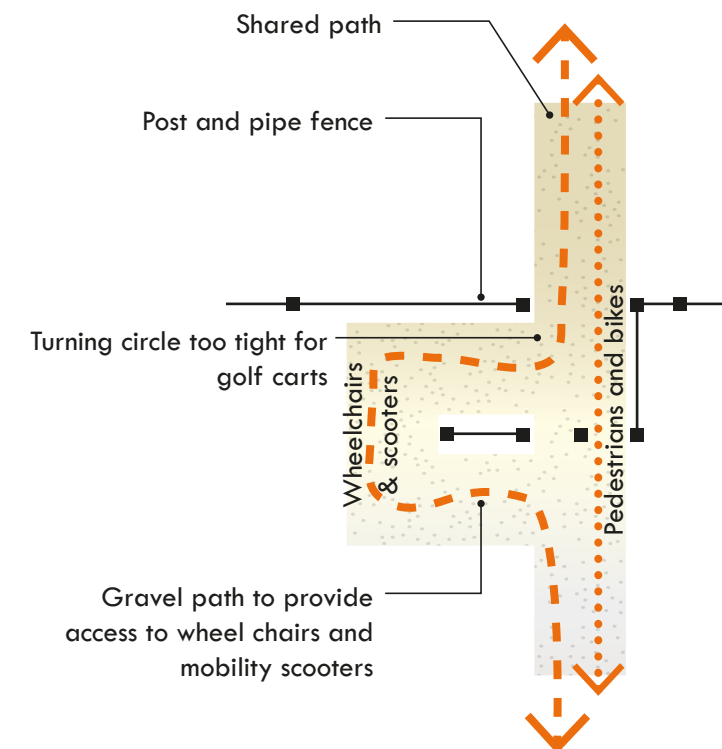
## Recommendation

The safety fence should either be repaired or replaced with stronger materials eg steel posts / a bollard and pipe fence / a bollard and chain fence.

## Recommendations:

Golf carts be restricted as shown on the plans

- fencing
- access control (points see diagram below)
- regulatory signage



## Access Control Point diagram - Golf cart access restriction fencing

## Controlling access

To address issues relating to golf carts the plans identify access control measures. They have been planned to restrict golf carts (large turning circle but not mobility scooters or wheel chairs (small turning circles)

**Note:** Golf cart access is permitted south of the boardwalk bridge, on the south side of the creek to allow access to the course from rear of nearby motels. Refer Overall Plan



Coir log retaining wall



Gabion basket retaining wall



Gravel Path Surface



Concrete Surface



Timber bollard  
Finish  
Hard wood



Bollard and pipe  
fence with timber  
bollard  
Finish  
Hard wood  
Galv pipe

## Proposed Materials Palette

We have selected materials that will suit the natural environment of the trail setting.

## Surface Materials

The surfaces materials have been chosen in collaboration with Berrigan Shire Council to provide long lasting, easy to maintain finishes.



## Existing furniture

There is a range of existing park furniture. All is past its serviceable lifespan. They do not provide *access for all abilities*. Most seats shows signs of rot and may collapse under an adults weight.

There are memorial plaques on some of the park benches to WAAAF and local community members.



### Drinking fountain

Supplier:

Landmark

Unit:

Drinking Fountain

KF502 with Side Tap &

Dog Bowl

Finish:

Powder Coat Black



### Park bench

Supplier:

Landmark

Unit:

San Marco Bench K052

Finish:

Cast aluminium

Hard wood timber



### Park seat (with arms)

Supplier:

Landmark

Unit:

San Marco Seat KA002

Finish

Cast aluminium

Hard wood timber



### Picnic table

Supplier:

Landmark

Unit:

San Remo K060

Finish:

Cast aluminium

Hard wood timber



### Bin surround

Supplier:

Landmark

Unit:

Daintree Bin Surround  
(240lt) K076

Finish:

Hardwood timber

Woodland grey

Powdercoat

# Furniture

Easy to maintain and accessible



## Proposed Furniture Palette

We have selected materials that will suit the natural environment of the trail setting.

### Furniture

The furniture have been chosen in collaboration with Berrigan Shire Council to provide long lasting easy to maintain public facilities. The furniture has been sourced with the following considerations:

- ease of maintenance and replacement
- ensure high-quality products that are built to withstand vandalism, local climate conditions

The furniture finishes have been chosen to limit ongoing maintenance and consider the ease of replacement.

### Recommendations:

- Ensure seats, picnic tables, interpretive signage or other elements that encourage people to linger are not installed under the tree canopy
- Install new furniture
- Retain and install existing plaques on new furniture



# Bridge Crossings

Safe and long lasting

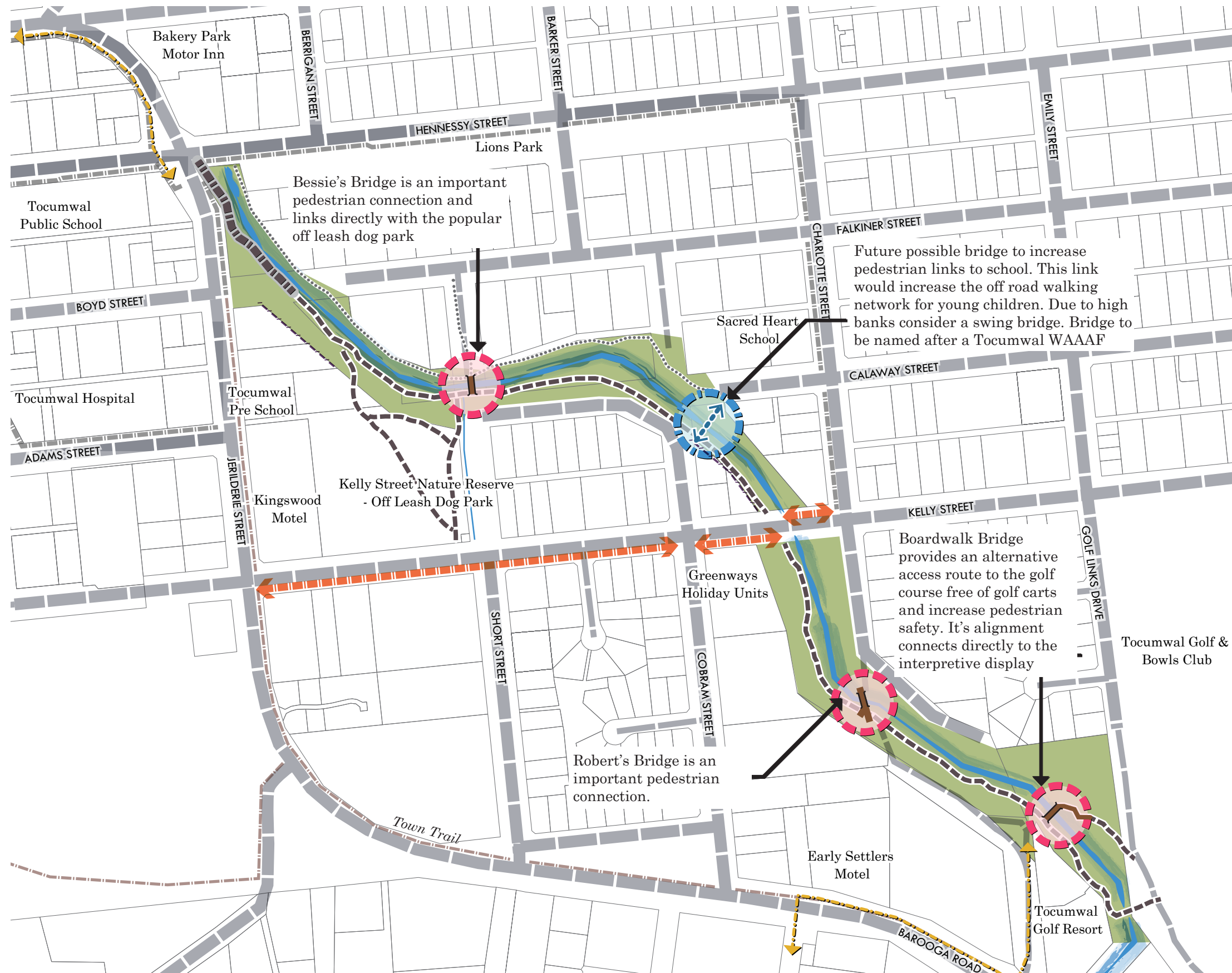
Stage  
**1**

The existing bridges are well used and provide meaningful pedestrian links. The infrastructure is ageing beyond its serviceable lifespan.

The community has identified a location for a possible future bridge. The purpose is to increase walking and cycling access to Sacred Heart School, and as part of the broader shared path network.

## Recommendations:

- Replace bridges in the near future to avoid increased maintenance costs and risk issues
- New bridges should be made of materials with long lifespans in these conditions (refer to bridge concept)
- The possible future bridge should be considered when designing the replacement bridges to ensure that they work as a suite. Refer to the 'Future Work' section of this report for more information



### Legend

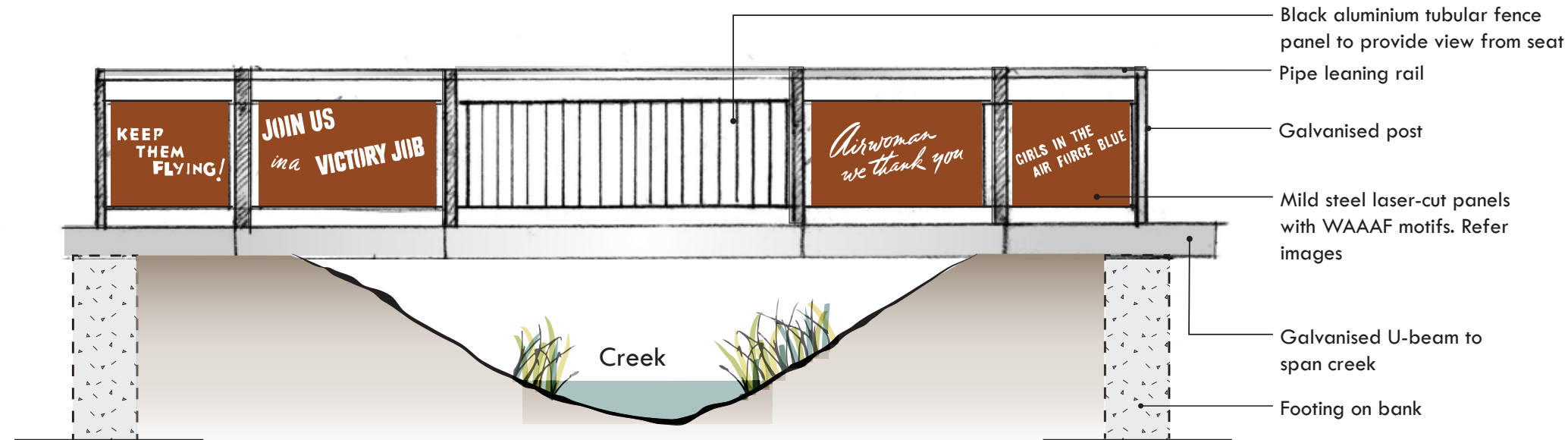
- Roads
- Creekline
- Proposed footpath
- Possible future crossing
- Proposed upgraded bridge - Refer LP011 & 12 for concept
- Proposed improved pedestrian connection
- Proposed upgrade to existing trail - refer LP09
- Proposed concrete footpath in creek trail - refer LP09



# Bridge Concept

Safe and long lasting

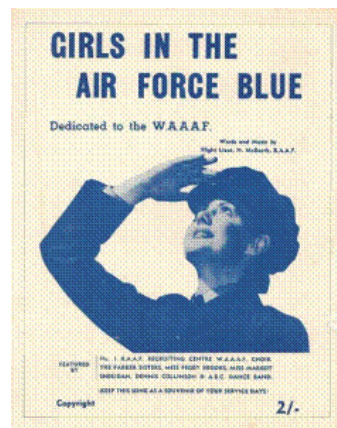
Stage  
**1**



Elevation  
Scale 1:50

## Design and Construct Brief

- A simple steel sub structure to span the creek, ensuring that water flow is not impeded
- Able to be fabricated off site and installed with a crane truck
- feature panels provide visual interest and capture part of the WAAAF story with slogans used to recruit women during WWII. (Refer to the interpretation section of this report for more information)
- Viewlines down the creek corridor have been maintained with a central panel of tubular fencing

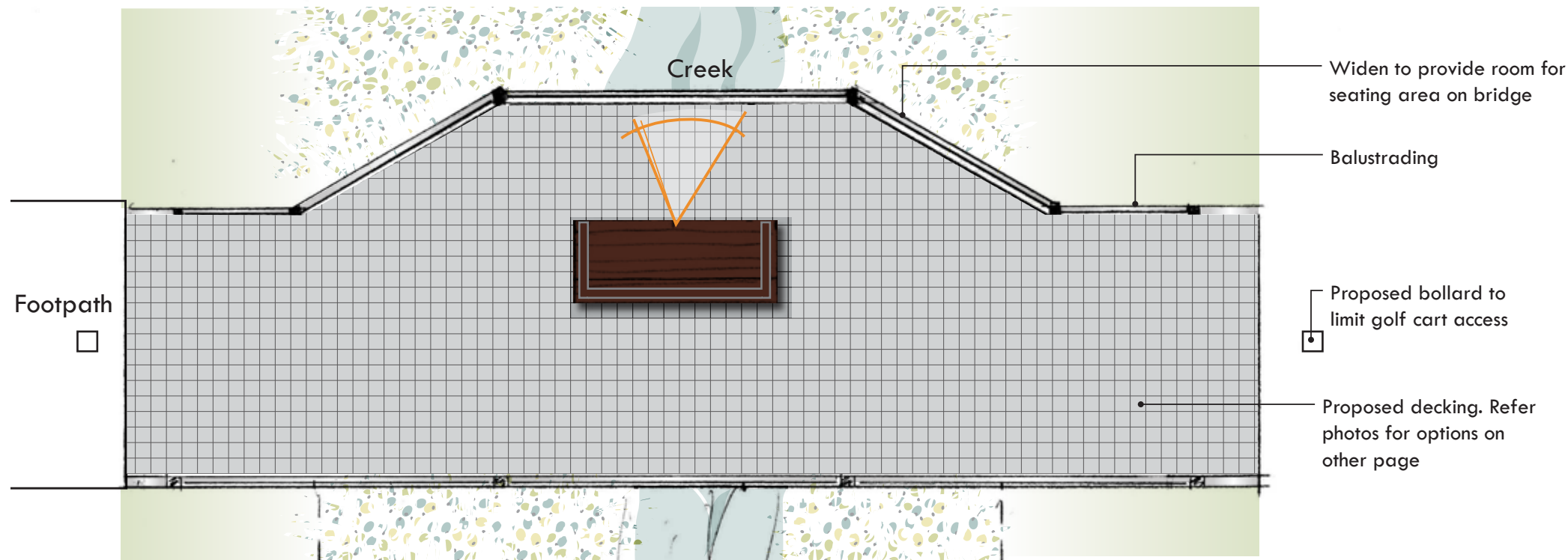




# Bridge Concept

Safe and long lasting

Stage  
**1**



Plan - Option with bench  
Scale 1:50

## Bridge plan options

- 2 plan options have been developed (with and without seat area)
- ensure golf carts can not access the bridge

## Materials

- All materials shall have good longevity in these site conditions
- Deck materials have been chosen to be low slip & fire resistant.
- All materials are able to be pressure washed after flood event

## Next steps

- Bridges are to be designed including structural computations and shop drawings
- Panels will require laser cut patterns to be developed. Ensure the writing reflects the typography of the era and is free of snags, and sharp points that may be a hazard. While the bridge is not a playground it is recommended, that finger entrapment be considered.



Plan - Option without bench  
Scale 1:100



Replas -Enduroplank



Replas -Enduromesh



Expanded mesh



Mild steel



Laser cut mild steel



Galvanised post SHS

Note materials have been chosen for longevity in these site conditions. Deck materials have been chosen to be low slip & fire resistant. All materials are able to be pressure washed after flood event



## Wayfinding and Interpretation

W.A.A.A.F girls outside their sleeping quarters at Willaston - State Library of South Australia





# Wayfinding and Interpretation

Telling the WAAAF story



## Interpretation

Interpretation provides a window into the history. It is essential that the stories told are of the place and can not be told anywhere else.

Stories that are of this place:

- encourage people to travel to Tocomwal to engage with a story that can't be heard/seen/read anywhere else
- enrich people's insight into the cultural history of Tocomwal
- ensure real and authentic stories

The way that the stories are written should put the 'You' into the story:

- providing insight into what it would be like for 'you' to be 'them'
- provoke an emotional response in the reader/viewer

Keep the story clear by:

- curating the story into understandable themes (Thematic Interpretation)
- using the themes as a vehicle to communicate how the facts impacted on the lives of people

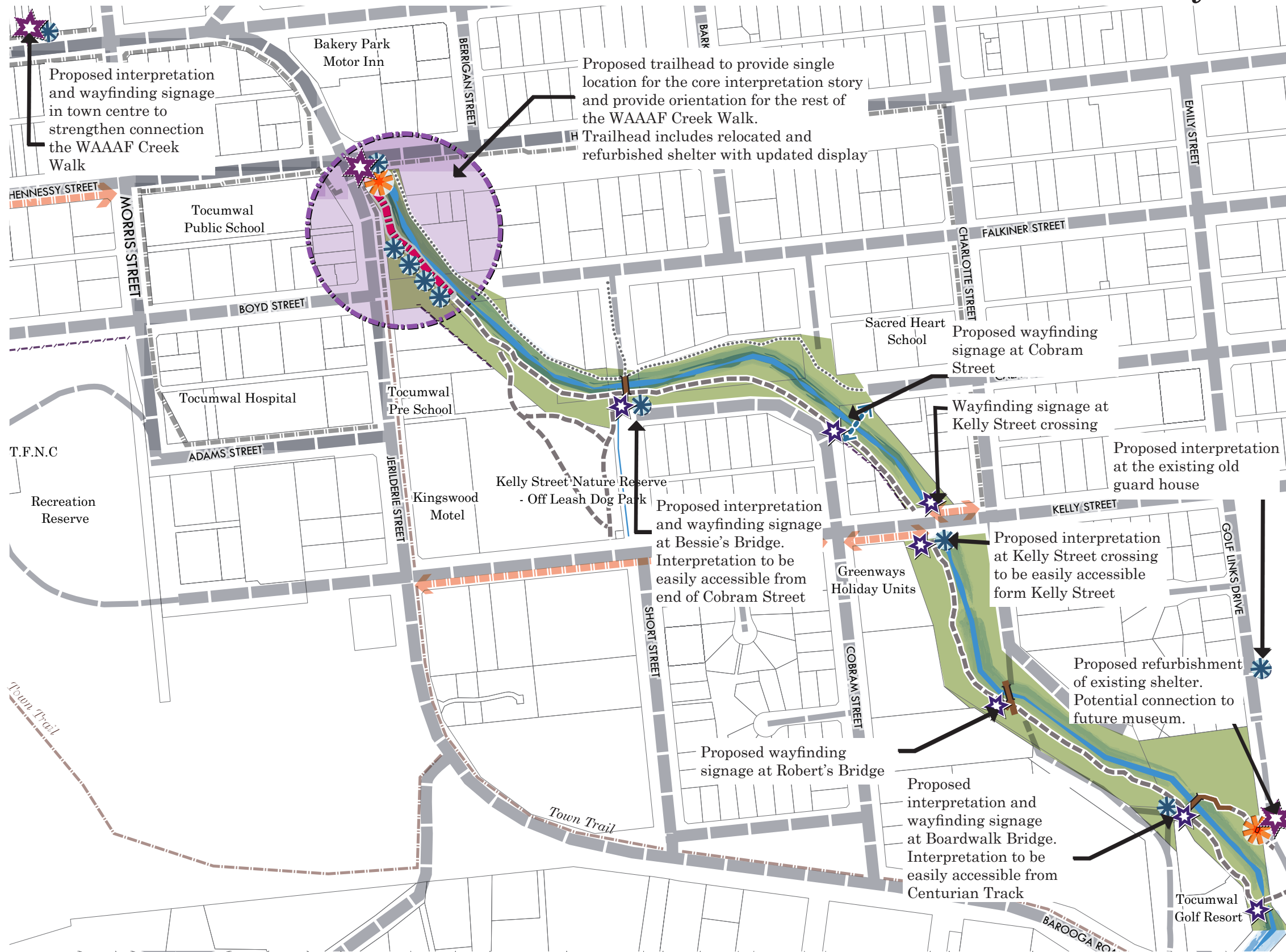
Location of the signs has been considered to

- create a whole town experience that connects to future possible historical centre, the bird walk, foreshore, the town entry and railway station
- signs are in locations that are close to the road for easy access (maintenance and people with mobility challenges)

## Wayfinding

A key principle of good wayfinding reassures visitors they are on the trail and are not lost

- The plan locates signage at points of decision or legibility issues
- different scales of sign have been shown based on site needs



### Legend

- Roads
- Creekline
- Proposed footpath
- Proposed upgraded bridge - Refer LP011 & 12 for concept
- Possible future crossing
- Proposed upgrade to existing trail - refer LP09

- Proposed concrete footpath in creek trail
- Proposed wayfinding map - refer concept
- Proposed wayfinding bollard - refer concept

- Proposed upgrade to interpretive shelter
- Proposed interpretive sign - refer concept



# WAAAF Creek Walk Branding

## Clear legibility and branding



### Wayfinding and trail legibility

A key principle of good wayfinding is creating a singular identity for the overall experience of the trail. This helps to reassure visitors they are on the trail and are not lost.

The trail along the creek has a confusing image which can be demonstrated by the number of different names the trail is known as.

#### Existing Names for trail:

WAAAF Walk  
WAAAF Creek Walk  
WAAAF Creek Memorial Walk  
WAAAF Memorial Walk  
Creek Trail  
Centurion Track  
Creek Walk  
Creek Walk Reserve  
Rotary Creek Walk

### Existing Signage



BSC Signage



Wayfinding bollards



Rotary Signage

### Existing Landscape Colour Palette



### WAAAF Recruitment Posters



A project colour palette has been developed. The colours have been chosen from the sites existing colours and WAAAF recruitment posters from WWII.

Use the colour palette to:

- develop a clear brand for the trail
- improve trail legibility with a defined look
- create a cohesive look for the interpretive and wayfinding signage

There has been some work towards wayfinding along the creek, including maps in the shelters and some bollards. These elements are looking tired and dated. The WAAAF Creek Walk would benefit from an image update, including branding, wayfinding and interpretation.

### Recommendations:

- The Track is to be branded: WAAAF Creek Walk – a project of the Rotary Club of Tocumwal
- Develop a logo/ brand/look for the trail based on the colour palette developed for this project
- Ensure all maps (physical and digital) are branded and named correctly
- Use a simple materials palette and a strong individual colour palette for elements of signage to unify the trail (interpretative and wayfinding)

### Project Colour Palette

Highlight colours



Core colours



Secondary colours - provide contrast and tone as required





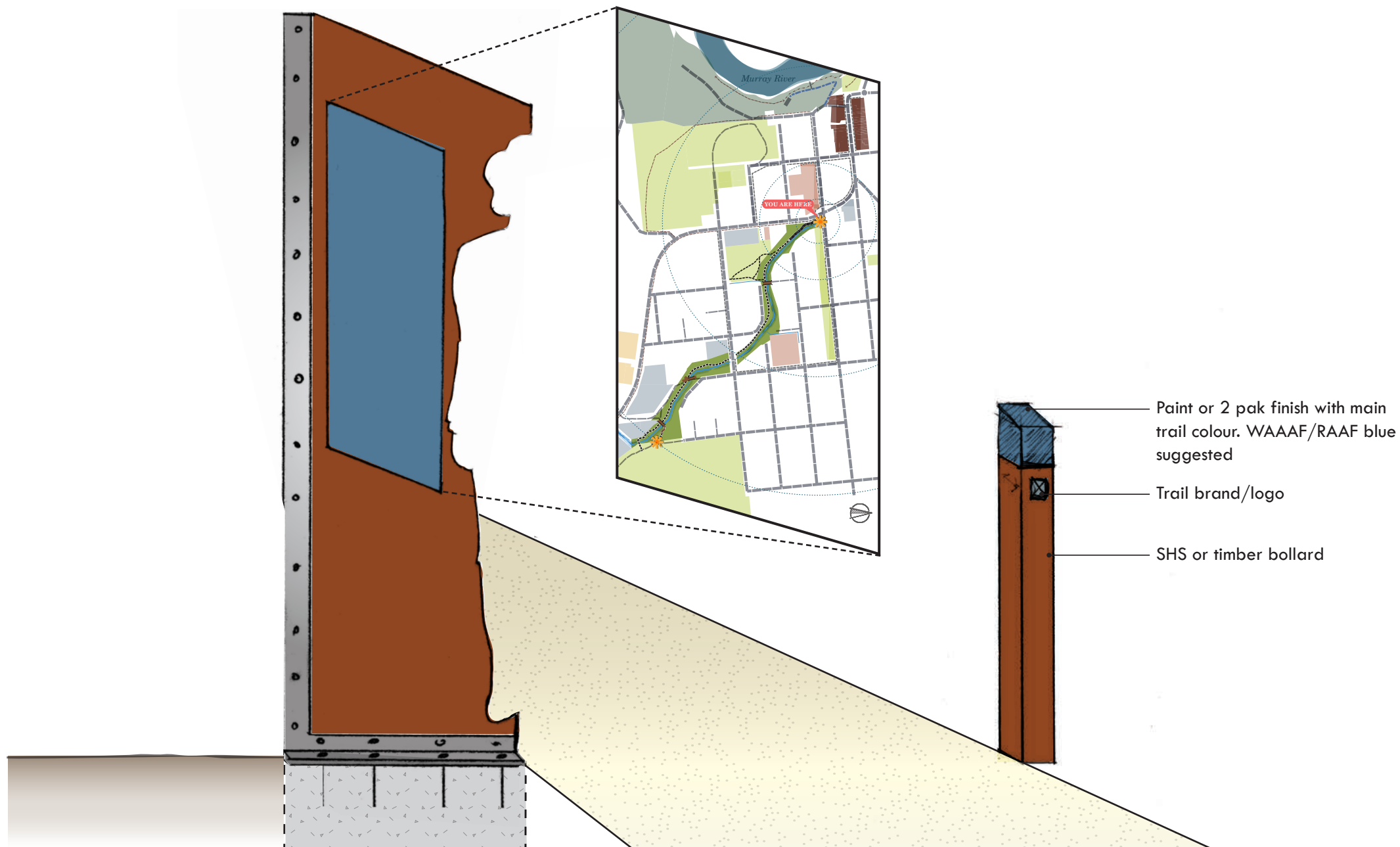
# Wayfinding Concept

Clear & easy walking for locals and visitors



## Wayfinding Recommendations

- Integrate wayfinding into interpretation and existing shelters
- Map should be clear and easily to read
- The design should be contemporary and meet the needs of people with accessibility and intellectual challenges
- Content of the map should include connections from splash park to the golf club at a minimum
- Consider extending map to the historic railway station area to provide interpretation trail, or the whole town to provide town wide wayfinding



Interpretive Sign & Wayfinding Bollard

## Precedents

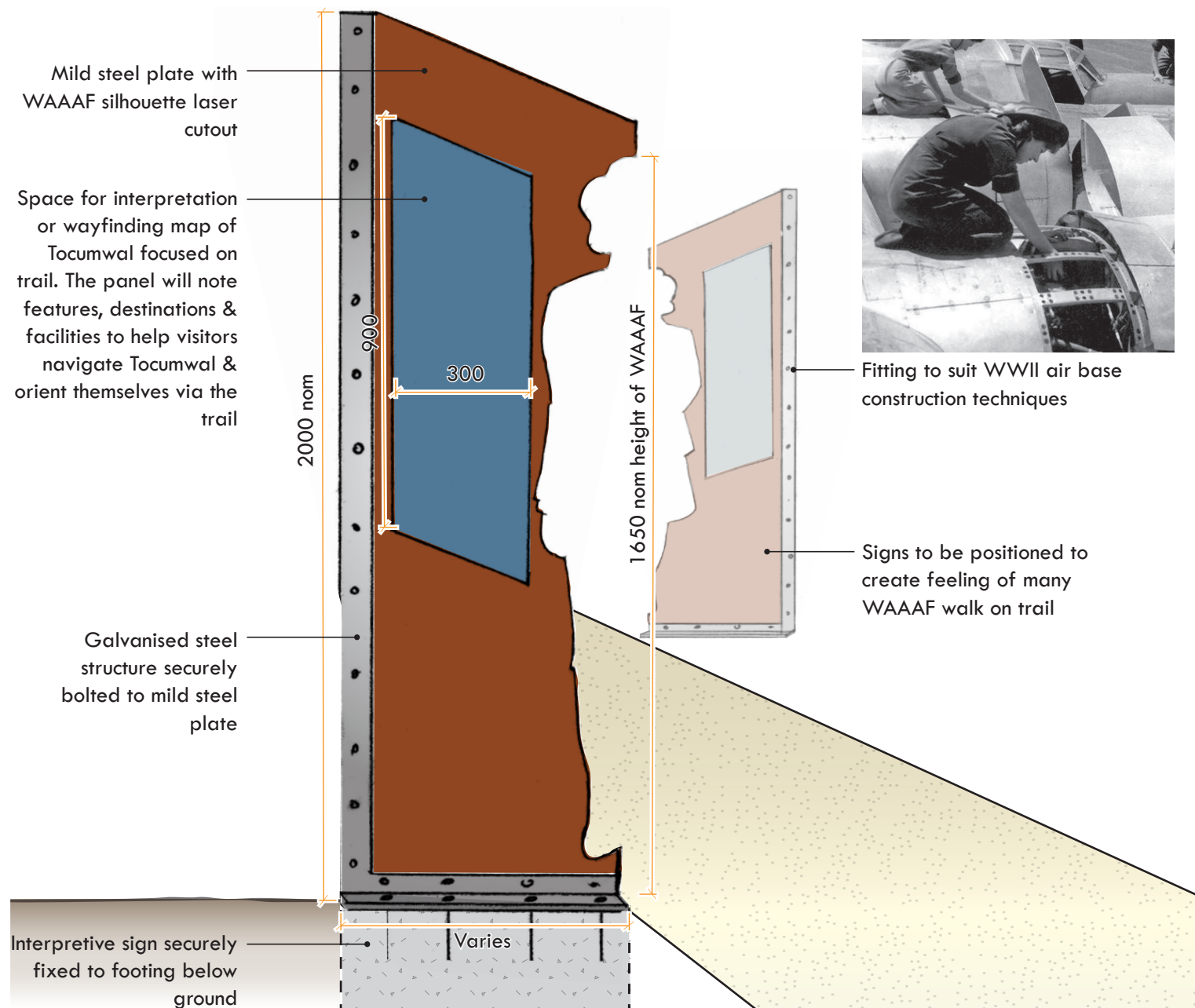


Wayfinding map



Wayfinding bollard





## Interpretive Signage Form

## Precedents



Etched stainless steel



Audio Installations



Vinyl print



# Interpretive Signage Concept

Walk with the WAAAF



A concept for the interpretation signage form and content has been developed during this project. It has been developed in collaboration with BSC and community members. Please refer to all interpretation pages for complete concept.

The sign form concept is developed to celebrate the women who 'walked' the creek. The form of a woman in military dress, work overalls and evening wear dresses reflect the life on the base in Tocumwal.

## Interpretation Recommendations

- engage a professional to develop the interpretation content and form
- the following pages identify a guide for best practice in NSW interpretation and should be used as a brief to develop the interpretation
- consider opportunities to include audio / QR codes or similar to provide alternative interpretation opportunities and provide improve accessibility to the interpretation content for people with reading challenges

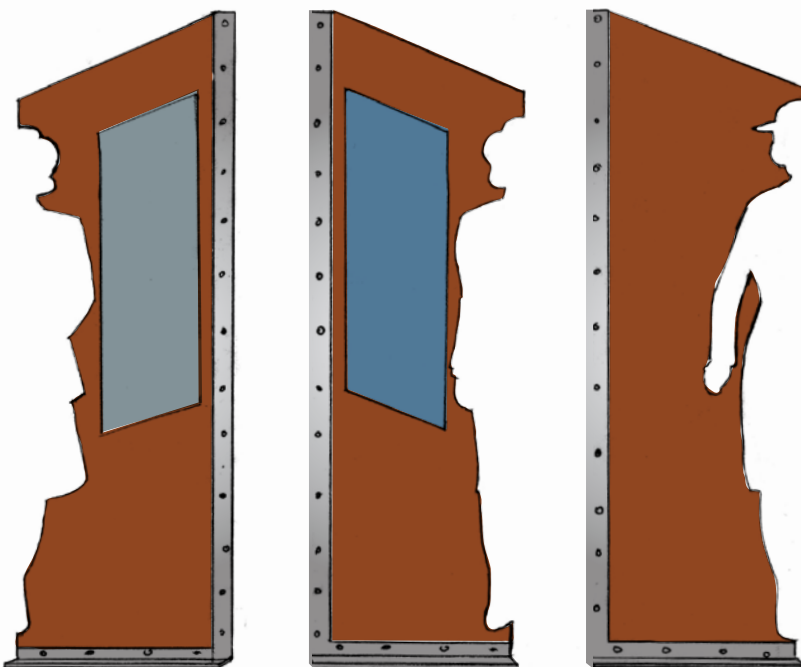
## Artwork as interpretation

Interpretation doesn't just mean signage. There is the opportunity to develop the interpretation concept as creative and innovate artwork(s). The art should provide a diverse range of experiences, be accessible to different cultures and languages, as well as promoting discourse around the WAAAF story.

The artwork themes should build on the work in this section of the report. There will still be the need for additional research to strengthen the artwork's narrative. The artwork will need to consider the content of the interpretation guidelines and reapply these to the development of the artwork. This research and background content should be made available to visitors.

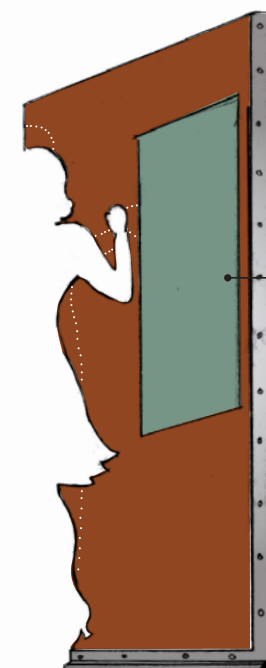
The form of the artwork should not be restricted to sculpture. Sound, light, and digital mediums should also be considered.

## Interpretive Sign



Interpretive &amp; Wayfinding Design Options

LM·LA



Wayfinding on one side & Interpretation about WAAAF, air base & in town activities

Suggested form for sign at the War Memorial Hall in town centre

Sheet: **Interpretive Sign Concept**

Scale: N/A

Drawn: DK October 2018



# WAAAF Story

## Applying Best Practice In Heritage Interpretation



The NSW Office of Environment and Heritage has published a Interpreting Heritage Places and Items Guidelines, It was endorsed by the Heritage Council of NSW in 2005. The following section responds to the outline for best practice contained in the guideline.

### People And Culture

#### **Respect for the special connections between people and items**

This site is a break away of the Murray River. Rivers and creeks are a significant landscape for the traditional owners. At the time of writing this report traditional ownership of the area was under discussion. It is recommended that once this is more clearly resolved consider including interpretation that incorporates Aboriginal people's culture and heritage.

It is recommended that the interpretation be reviewed by a committee of people directly connected to the stories being told. The Tocumwal Aerodrome had the largest encampment of WAAAF. Surviving WAAAF will be in their mid 90's. Consideration should be given to ensure methods meet their needs, are respectful, provide a welcoming and inclusive process.

Bob Brown has collected Aerodrome History. While WAAAF history is not the focus of his research, his knowledge of the Aerodrome would make a highly valuable contribution to the interpretation.

There are some community members alive who remember the aerodrome and WAAAF. Their inclusion on the Review Committee would strengthen the stories connections to local history.

### Significance

#### **Understand the story & convey its significance**

The WAAAF Creek Walk allows the story of women's wartime lives to be told in the place that it happened. The story of WAAAF is complex. there are layers of media and recruitment propaganda, a post war narrative and significant cultural changes which will need to be addressed in the story to accurately capture the significance of the WAAAF wartime efforts.

### Records And Research

#### **Good research is at the heart of effective interpretation**

Both historical writing and reputable newspapers of the time have formed the basis of the information included in the interpretive concept. Refer to the Appendix for details of records and research that were used to develop the story.

Facts will need to be cross-checked to ensure that they match local knowledge and experiences of people directly related to the stories.

### Audience

#### **Explore, respect and respond to the identified audience**

General Audience :

The site is used by locals and visitors who are accessing the site for recreation. The future heritage displays attract many people interested in the WWII history of the region and the proposed signs are likely to attract their attention. The interpretation should be written to appeal to a modern audience, with an accessible style of writing using plain English - suitable for all ages with an education level from Year 9 upwards.

Specialist Audience:

There is also a niche market audience based on specialist interest in the changing Women's Role in Australian society and the role of Women in War. Key facts and figures should be specifically incorporated to these audiences.

### Themes

#### **Make reasoned choices about themes, ideas and stories**

Previous work completed on the Town Entry signs included a brief strategy for interpretation across the town. The rationale was create an interpretive trail, and stories were to be told (wherever possible) in the area where they happened. The WAAAF Creek Walk was identified at town scale as a good location to tell the Tocumwal WAAAF story.

Based on the general audience profile the importance of communicating the human connection to the trail and the lives of the WAAAF is a key priority.

The specific audience interested in women's role in Australian Society and in war will appreciate the details such as:

- Daily life
- Opportunities specific to war time
- Motivations and process to join WAAAF
- Pre and post war life as a contrast to daily life on the base
- WAAAF and RAAF similarities, discrepancies and interactions
- Facts and figures that support the descriptions of the above themes

### Engaging The Audience

#### **Stimulate thought and dialogue, provoke response and enhance understanding**

It is recommended that the following method be used:

The Thematic Interpretation<sup>1</sup> method enhanced with hooks, headlines and putting 'you' into the history. Consider which tense should be used and how to make the interpretation engaging and memorable.

### Context

#### **Research and understand the physical, historical, spiritual and contemporary context of the story and related stories; and respect local amenity and culture**

In accordance with Thematic Interpretation principles, the chosen themes should relate specifically to the place/site of the interpretation and the significance of these events. This links directly to the site design which draws on historical context - both human and environmental.

The concept of the interpretation elements has been designed to enhance the story. They have been located to be easy accessible to both maintenance vehicles and people with mobility challenges. The form design supports current local culture as well as the character and authenticity of the beautiful natural environment. The interpretation will add another dimension to elements people see every day.

### Sustaining Significance

#### **Develop interpretation that strengthens and sustains the significance of the item, its character and authenticity**

The siting of the interpretation elements and the media used enriches and add layers of significance. The entire site plan supports a sustainable use of the site. The interpretation further enhances this and has been located at sites which encourage the viewer to interact appropriately with the sensitive creek environment.

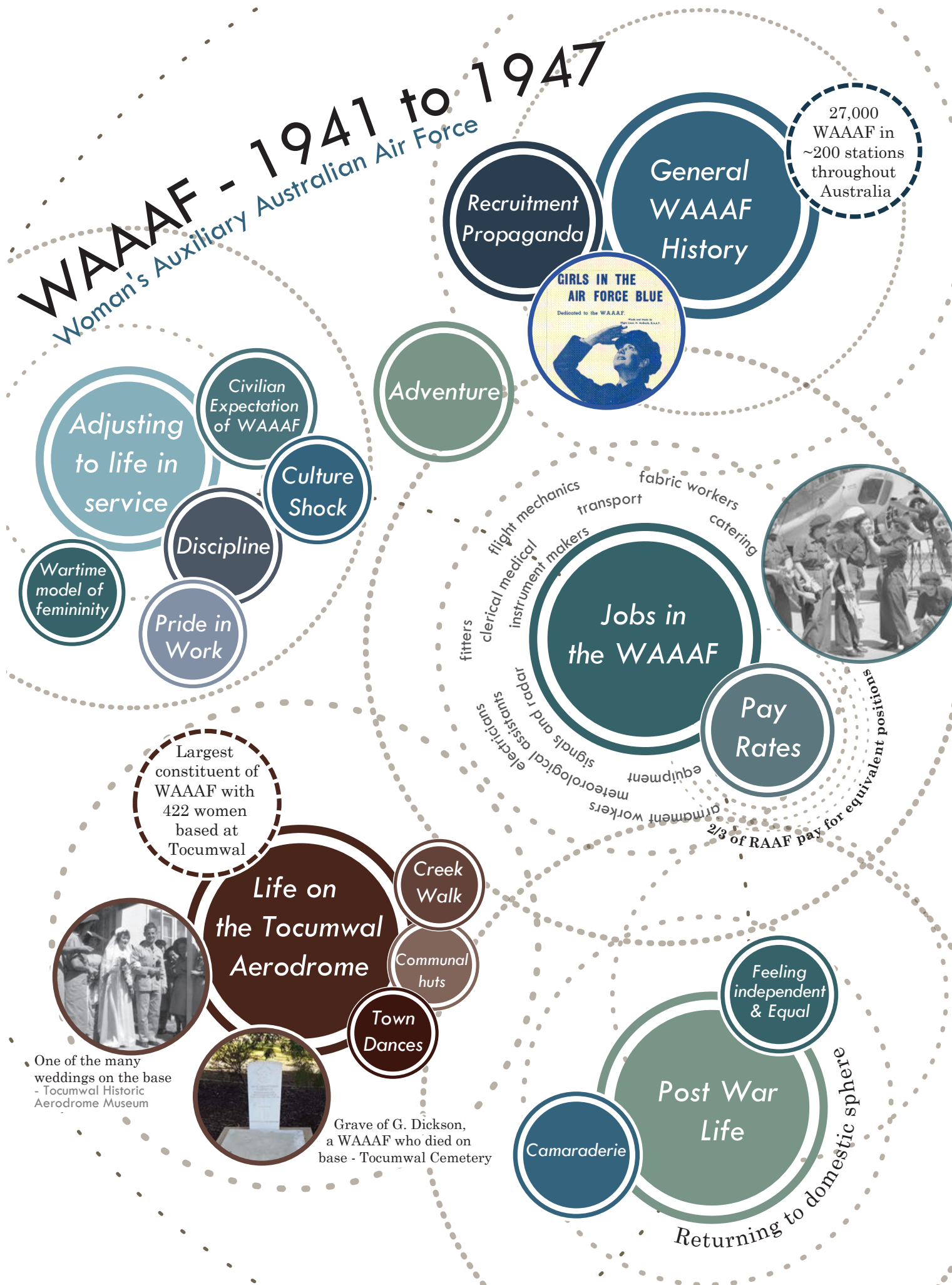
<sup>1</sup> [https://en.wikipedia.org/wiki/Thematic\\_interpretation](https://en.wikipedia.org/wiki/Thematic_interpretation)



# WAAAF Story

Applying Best Practice In Heritage Interpretation

Interps



## Conservation Planning

**Integrate interpretation in conservation planning, and in all subsequent stages of a conservation project**

This site does not currently have a Conservation Management Plan. Neither the Walk or the Aerodrome are listed under the NSW Heritage Act State Heritage Inventory. It is suggested that the LGA consider reviewing WWII heritage within the Shire for inclusion.

## Maintenance, Evaluation And Review

**Include interpretation in the ongoing management of an item; provide for regular maintenance, evaluation and review**

All interpretation is to be designed with careful consideration of

- available maintenance resources, skills and budgets
- method of fabrication and installation including design for distance from major centres, local skills and resources that ensure high quality outcomes

Ongoing maintenance of the signs is to include:

- checking for vandalism, damage from storm/flood events, ageing of any components
- undertaking maintenance of the signs to keep the signs clear, safe and accessible
- commissioning fabrication of replacement parts to refurbish the sign

Periodic assessment of the interpretation will be needed. Reviews will incorporate:

- visitor and peer group feedback, or any new research or understandings
- presentation of all elements
- appropriate timing for more information and acknowledgement of the Traditional Owners of the site
- Future reviews will consider and update the wording of the copy, facts included and method of interpretation, as required.

## Skills & Knowledge

Interpretation is to be written and developed by a professional with a specialisation in interpretation projects.

Ensure that the copy writing uses modern techniques of hooks/angles to communicate the significance of particular events, facilitate emotional engagement and highlight human connection. The work should engage with contemporary audiences.

Fabrication and graphic design skills will be required to enhance elements of the story in an iterative and integrated process.

## Collaboration

It is recommended that the interpretation copy text, where possible, be co-authored with the review committee and members of the local community.



## Weed Control and Revegetation

Image from Tocumwal Historic Aerodrome Museum





# Weed control and revegetation

improving maintenance in the long term

Reveg.



## Existing conditions

The creek is both a drain and a old break away from the Murray River. The water flows on to join the Tuppall Creek. There is significant indigenous tree canopy, however the lower storey and riparian areas have low quality vegetation. Many weed species are living in the creek environment. Some include:

- Oxalis spp.
- Thistle spp.
- Tree lucerne
- Ivy spp.
- Nettle spp.
- Morning Glory
- Prickly Pear
- Privet spp.
- Bindi

There are some trees which are environmental weeds, however they are of significance to the local community (Peppercorns and White Cedars) and should only be removed with community consultation.

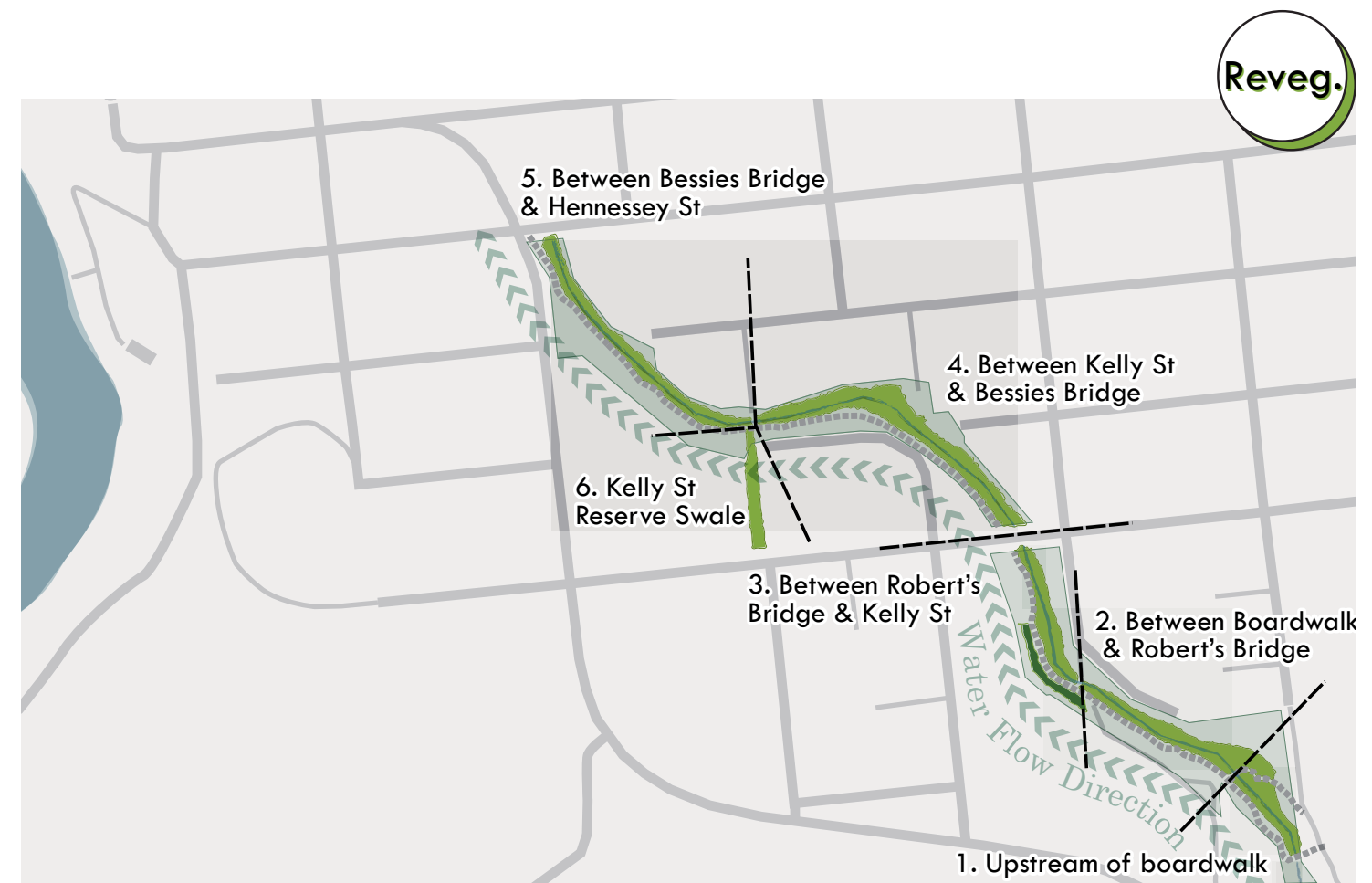
Weed infestation is a current issue for the management of the WAAAF Creek Walk. There has been significant community effort, time and resources invested in removing weeds (chemical and mechanical methods). These efforts have ensured that the creek is not completely overrun and their efforts should be acknowledged as an important contribution. The community members involved, however, have identified that they can not sustain this level of effort in the long term.

## Revegetation to address weeds

Successful revegetation will limit the opportunities for weeds. Some weed control will still be required, however it should be significantly less than the current requirements.

Due to the scale of the project the revegetation project has been divided into reaches. Works are to be undertaken in order of upstream to downstream.

Some bank works may be required to improve habitat and bank erosion issues. Refer to bank shaping diagrams for more information.



## Revegetation stages

- Plan works 12 months in advance
- Pre order plants to allow for planting of the right species at the optimum time of year
- Plan and undertake weed control with careful consideration, ensuring minimal risk of residual effects and pollution damage
- Pre revegetation weed control including pre cultivation and post cultivation methods. Ensure all chemicals are used as directed and consider weather events to limit impact on non weed species and fauna
- Bank shaping and cultivation of site to be planted
- Planting when soil is moist but not saturated. Planting methods should consider protection from fauna (water birds etc)
- Monitor plants and weeds - manage as required to ensure plants are not out competed in the first 2 years
- Additional weed management may be required such as weed mat or mulch

## Recommendations

- Short term - continue general control weeds for the entire reach of the creek to stop creek from becoming over run
- Engage a professional to develop a detailed revegetation plan that includes targeted weed control methods, bank work improvements, planting methods, species list appropriate for different site conditions, planting modules and staging. Soil tests may be required to ensure the best conditions for the plants
- Seek partners to help fund and implement the revegetation works
- Opportunities to involve the community in the works should be considered



# Bank shaping

improving micro climates and habitat values



## Recommendations

- Bank works be considered in the planning of revegetation works by a professional
- Bank works are to be sensitive to existing trees and avoid negative impact on tree health



## Existing conditions

The creek has been de silted in the recent past. The form of the creek is often trapezoidal.

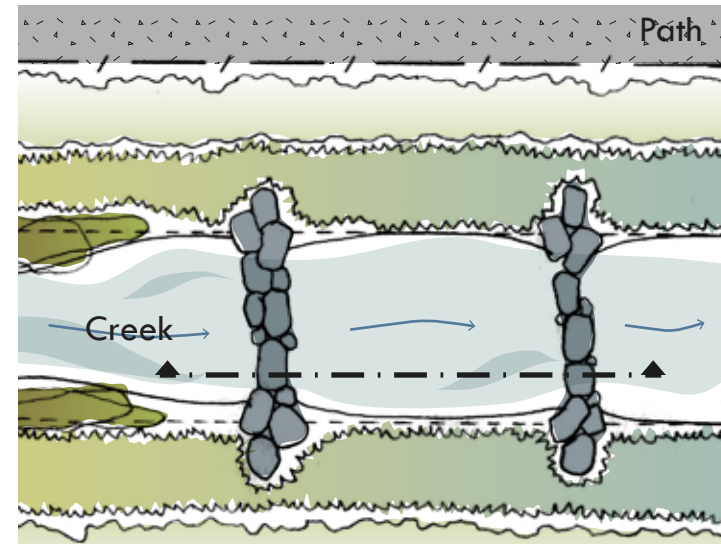
Areas of existing trees on banks limit possible bank works. There are some areas of stagnate water.

## Bank work benefits

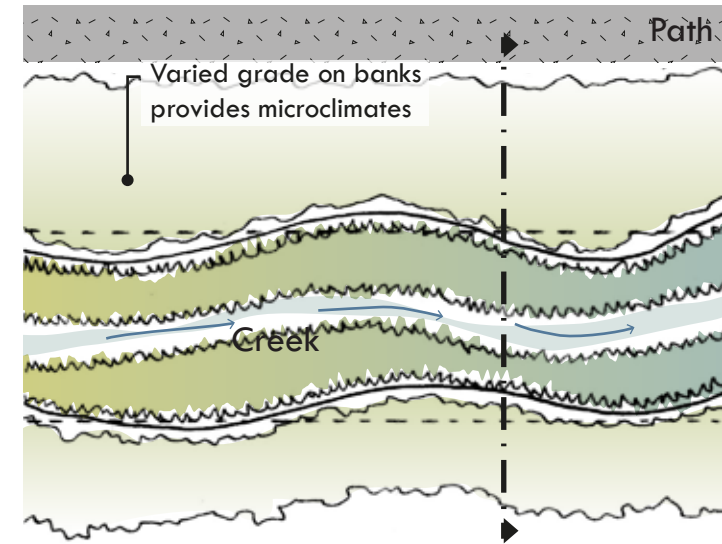
Trapezoidal creek forms are used to move water quickly away. Water sheets down banks, often not providing benefits to plants or allowing the plants to provide water cleaning functions.

Changing the bank form to slow water during low flow events has the potential to improve:

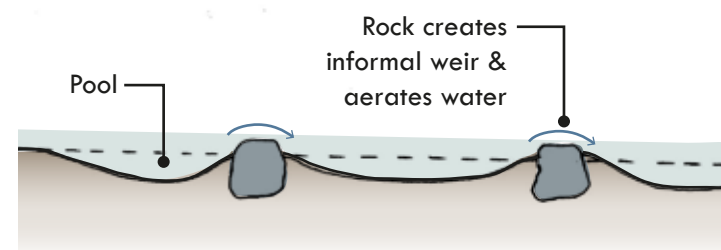
- revegetation plant success rate
- habitat diversity
- micro climates for plant species
- allow plants to function as WSUD elements



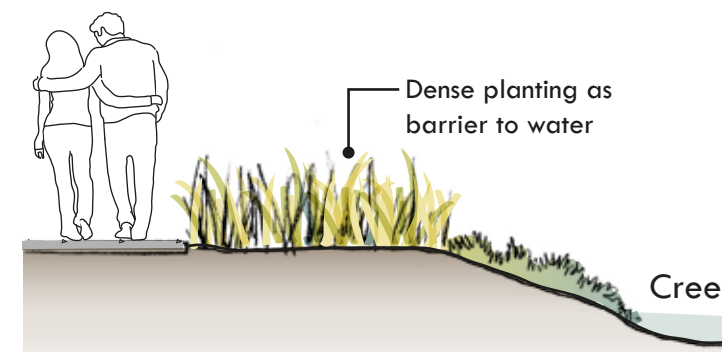
Riffle - Plan



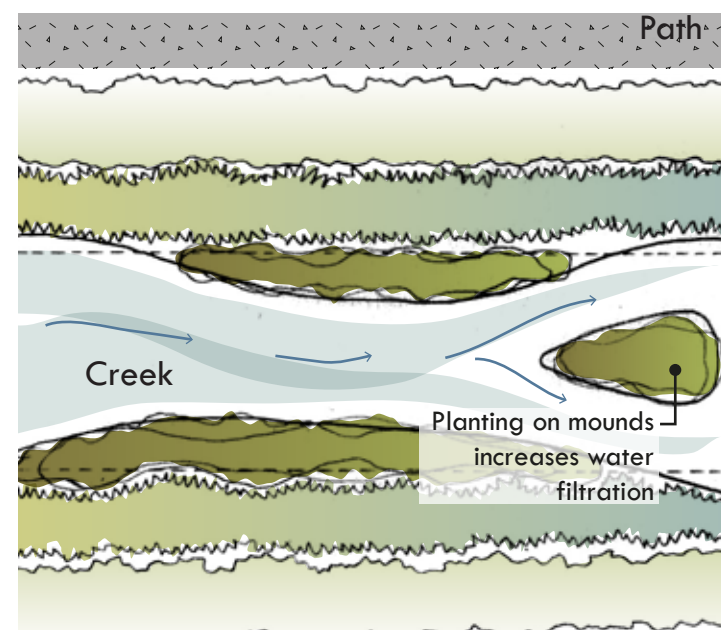
Bank scolloping - Plan



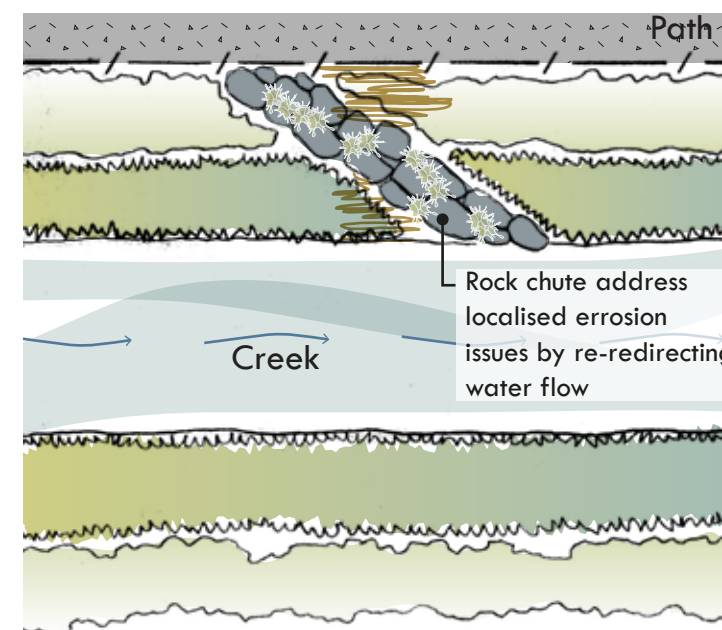
Riffle - Section



Bank scolloping - Section



Instream meander - Plan



Erosion control swale - Plan

## Legend

- Upper bank vegetation
- Lower bank vegetation
- In-stream riparian vegetation
- Erosion scour
- Rocks & sedge planting



# Revegetation Species

Healthy environment and habitat



## Ecological Vegetation Classes

The mapped information is from DELWP Victorian State Government. Due to the close proximity and similar environment to the project site to the following species lists can be used to form the basis of a revegetation list. Commercial availability should be researched and the list refined to suit site conditions.

## Recommendations

- Develop a planting list for the different conditions of the creek (plants to be commercially available and suited to revegetation projects)
- Revegetation to focus on the riparian planting of the creek. Terrestrial works should be considered, however are not a prioritised outcome of these works

### EVC 814: Riverine Swamp Forest

Open eucalypt forest to 25 m tall with understorey dominated by obligate wetland species (or opportunistic annuals during sustained dry periods) and can range from closed sedgeland or herbland to grassy-herbaceous or extremely sparse and with cover primarily leaf-litter, black water or exposed alluvium. Occupies low-lying areas subject to reasonably regular flooding, typically flood-prone lower river terraces and low-lying areas adjacent to floodways through or within riverine forest.

LF Code	Species typical of at least part of EVC range	Common Name
LH	Wahlenbergia fluminalis	River Bluebell
LH	Senecio quadridentatus	Cotton Fireweed
MH	Alternanthera denticulata s.l.	Lesser Joyweed
MH	Ranunculus inundatus	River Buttercup
MH	Ranunculus pumilio var.pumilio	Fan-leaf Buttercup
MH	Centipeda cunninghamii	Common Sneezeweed
LNG	Phragmites australis	Common Reed
MTG	Lachnagrostis filiformis	Common Blown Grass
MNG	Eleocharis acuta	Common Spike-sedge
MNG	Cynodon dactylon var.pulchellus	Native Couch

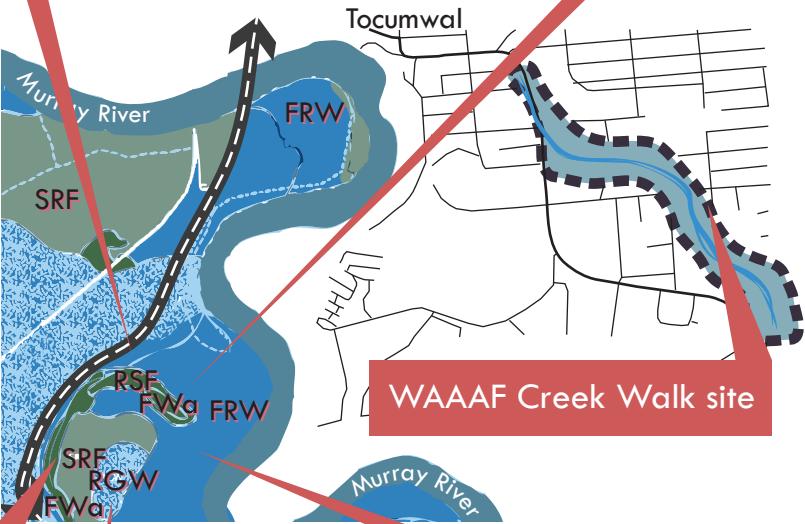
### EVC 816: Sedgy Riverine Forest

Eucalypt forest to 25 m tall with understorey dominated by larger sedges. Understorey composition indicative of at least occasional shallow flooding and a tolerance of gaps between floods of several years. Typically on heavy soils which can become wet in winter. Sedgy Riverine Forest has some floristic affinities to Red Gum Swamp. It is considered to occupy areas infrequently flooded and in which flood duration may be short, for example, higher ground surrounding the box ridges or occurring along the river levee in a position remote from the channels from which the forest first floods. These areas are therefore the last to flood and the first from which floods quickly recede. Soils are typically heavy clays. The major understorey species Carex tereticaulis is intolerant of total immersion (at least in turbid water).

LF Code	Species typical of at least part of EVC range	Common Name
MS	Exocarpos strictus	Pale-fruit Ballart
LH	Wahlenbergia fluminalis	River Bluebell
LH	Senecio quadridentatus	Cotton Fireweed
LH	Brachyscome basaltica var. gracilis	Woodland Swamp-daisy
MH	Marsilea drummondii	Common Nardoo
SH	Lobelia concolor	Poison Pratia
SH	Chamaesyce drummondii	Flat Spurge
LTG	Carex tereticaulis	Rush Sedge
MTG	Setaria jubiflora	Warrego Summer-grass
MTG	Lachnagrostis filiformis	Common Blown Grass
MNG	Eleocharis acuta	Common Spike-sedge
MNG	Eleocharis pusilla	Small Spike-sedge

### EVC benchmarks map

Information from Nature Kit Victorian State Government



### EVC 809: Floodplain Grassy Wetland

Wetland dominated by floating aquatic grasses (which persist to some extent as turf during drier periods), occurring in the most flood-prone riverine areas. Typically treeless, but sometimes with thickets of saplings or scattered more mature specimens of Eucalyptus camaldulensis. Occupies temporary shallow lakes in the most flood-prone riverine areas, also occurs as a narrow intermediate band around some floodway ponds.

LF Code	Species typical of at least part of EVC range	Common Name
MH	Myriophyllum crispatum	Upright Milfoil
MH	Ludwigia peploides ssp. montevidensis	Clove-strip
MH	Nymphoides crenata	Wavy Marshwort
MH	Centipeda cunninghamii	Common Sneezeweed
SH	Azolla filiculoides	Pacific Azolla
SH	Persicaria prostrata	Creeping Knotweed
LTG	Juncus ingens	Giant Rush
MTG	Lachnagrostis filiformis	Common Blown Grass
MTG	Sporobolus mitchellii	Brown-back Wallaby-grass
MNG	Pseudoraphis spinescens	Spiny Mud-grass
MNG	Amphibromus fluitans	River Swamp Wallaby-grass
MNG	Eleocharis acuta	Common Spike-sedge
MNG	Cynodon dactylon var.pulchellus	Native Couch

### EVC 56: Floodplain Riparian Woodland

An open eucalypt woodland or open forest to 20 m tall over a medium to tall shrub layer with a ground layer consisting of amphibious and aquatic herbs and sedges. Occurs along the banks and floodplains of the larger meandering rivers and major creeks, often in conjunction with one or more floodplain wetland communities. Elevation and rainfall are relatively low and soils are fertile alluviums subject to periodic flooding and inundation.

LF Code	Species typical of at least part of EVC range	Common Name
T	Acacia dealbata	Silver Wattle
MS	Hymenanthera dentata s.l.	Tree Violet
MH	Sida corrugata	Variable Sida
MH	Oxalis perennans	Grassland Wood-sorrel
MH	Persicaria decipiens	Slender Knotweed
SH	Chamaesyce drummondii	Flat Spurge
SH	Azolla filiculoides	Pacific Azolla
LTG	Carex appressa	Tall Sedge
LNG	Phragmites australis	Common Reed
LNG	Eleocharis sphacelata	Tall Spike-sedge
MTG	Poa labillardierei	Common Tussock-grass
MTG	Chloris truncata	Windmill Grass
MTG	Themeda triandra	Kangaroo Grass
MTG	Aristida behriana	Brush Wire-grass
MNG	Pseudoraphis spinescens	Spiny Mud-grass
MNG	Eleocharis acuta	Common Spike-sedge

### EVC 295: Riverine Grassy Woodland

Occurs on the floodplain of major rivers, in a slightly elevated position where floods are rare, on deposited silts and sands, forming fertile alluvial soils. River Red Gum woodland to 20 m tall with a groundlayer dominated by graminoids and sometimes lightly shrubby or with chenopod shrubs.

LF Code	Species typical of at least part of EVC range	Common Name
SS	Sclerolaena muricata var. villosa	Grey Roly-poly
SS	Enchylaena tomentosa var. tomentosa	Ruby Saltbush
SS	Maireana decalvans	Black Cotton-bush
SS	Chenopodium curvispicatum	Cottony Saltbush
LH	Wahlenbergia fuminalis	River Bluebell
LH	Rumex brownii	Slender Dock
LH	Senecio quadridentatus	Cotton Fireweed
MH	Einadia nutans ssp.nutans	Nodding Saltbush
MH	Atriplex semibaccata	Berry Saltbush
MH	Atriplex eardleyae	Small Saltbush
MH	Sida corrugata	Variable Sida
MTG	Austrodanthonia setacea	Bristly Wallaby-grass
MTG	Austrostipa scabra	Rough Spear-grass
MTG	Carex inversa	Knob Sedge
MTG	Juncus subsecundus	Finger Rush







## Future Works

WAAAF's on board the wings of a Wirraway - Tocumwal Historic Aerodrome Museum





# Future Works

Outside of project scope

## Value of town wide connections

The WAAAF Creek Walk has the potential to improve broader links across the Tocumwal Town Center. The additional path connections outside of the WAAAF Creek Walk connect to:

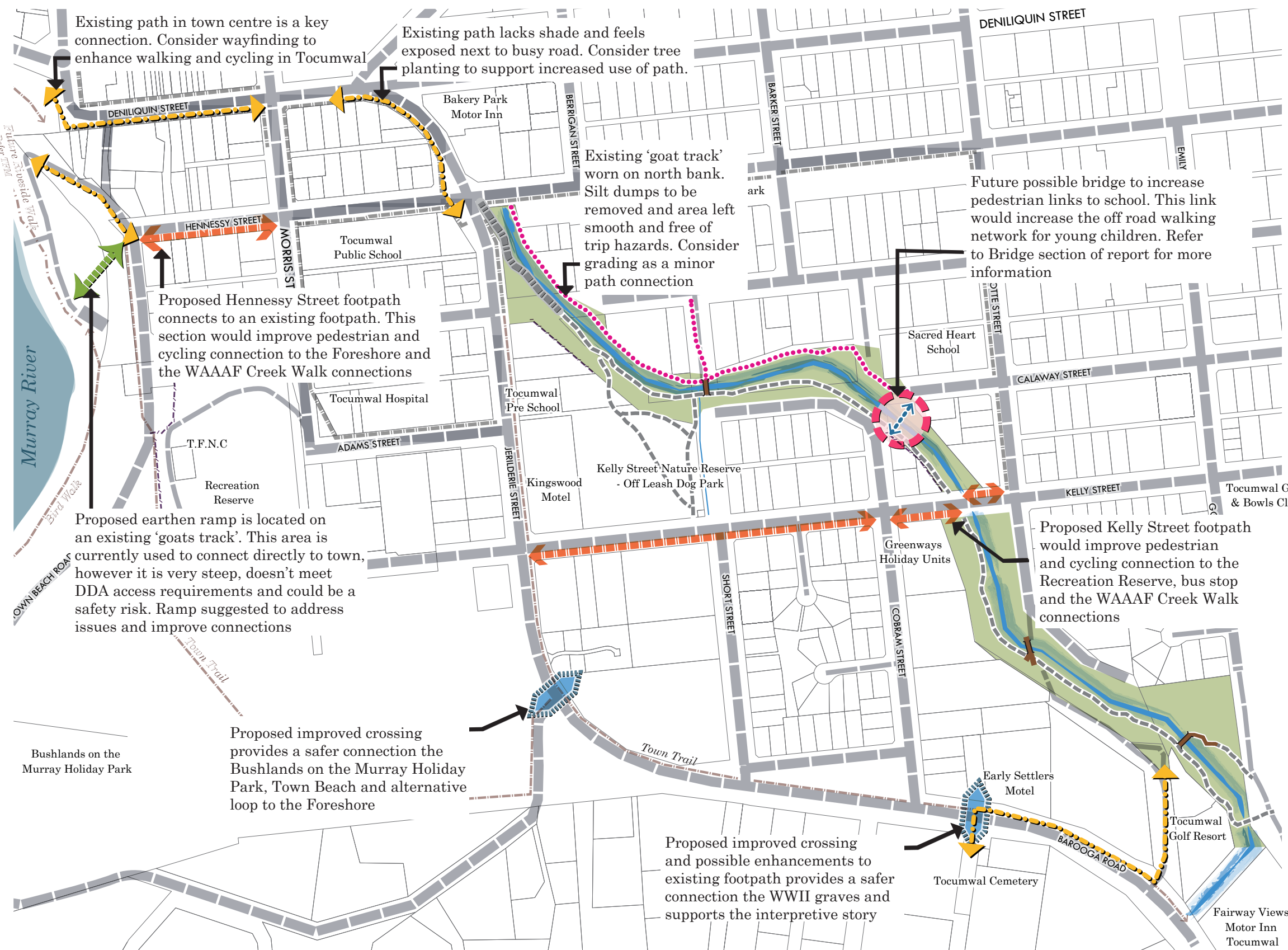
- Town Walk,
- Bird Walk,
- Riverside Walk (proposed),
- Levee Walk (proposed)

The path network, as a whole, will;

- provide an improved off-road path network linking to two schools and a pre-school that would be suitable for children and teens
- link visitors staying in the 5 hotels/motels along the creek to the Tocumwal Foreshore, splash park and Town commercial centre. This will enhance Tocumwal as a family holiday destination
- enhance the livability of Tocumwal on a town scale for residents with improved active recreation and lifestyle

## Recommendations

- Fund and construct the foot paths on Hennessy Street and Kelly Street
- Fund and install pedestrian crossing signage on Barooga Road
- Install a pedestrian bridge connection near Sacred Heart School to match other bridges along the trail (Refer to the 'Bridge' section of this report for more information)
- Consider ways to strengthen existing connections such as shade tree planting, surface improvements, wayfinding signage, etc



### Legend

- |           |   |  |                                  |
|-----------|---|--|----------------------------------|
| Roads     | Proposed upgrade to existing Creek Walk   | Existing track requires silt removal                   | Proposed future footpath upgrade |
| Creekline | Proposed concrete footpath in creek trail | Proposed future improved pedestrian connection         | Possible future crossing         |
|           |   | Proposed future pedestrian crossing - truck route road | Proposed future ramp connection  |



# Appendix

Site Photos. .... 44

On-site workshop ..... 45

Opinion of Probable Cost ..... 48

Interpretive Research..... 49

Women’s Weekly - 24/03/1945 ..... 50

VIC. 1943-02-11. Women's Auxiliary Australian Air Force (WAAAF) Service Policewomen and Royal Australian Air Force (RAAF) Service Policeman Being Inspected by the Provost Marshal of the Royal Australian Air Force (RAAF). - Australian War Memorial





Site Photos

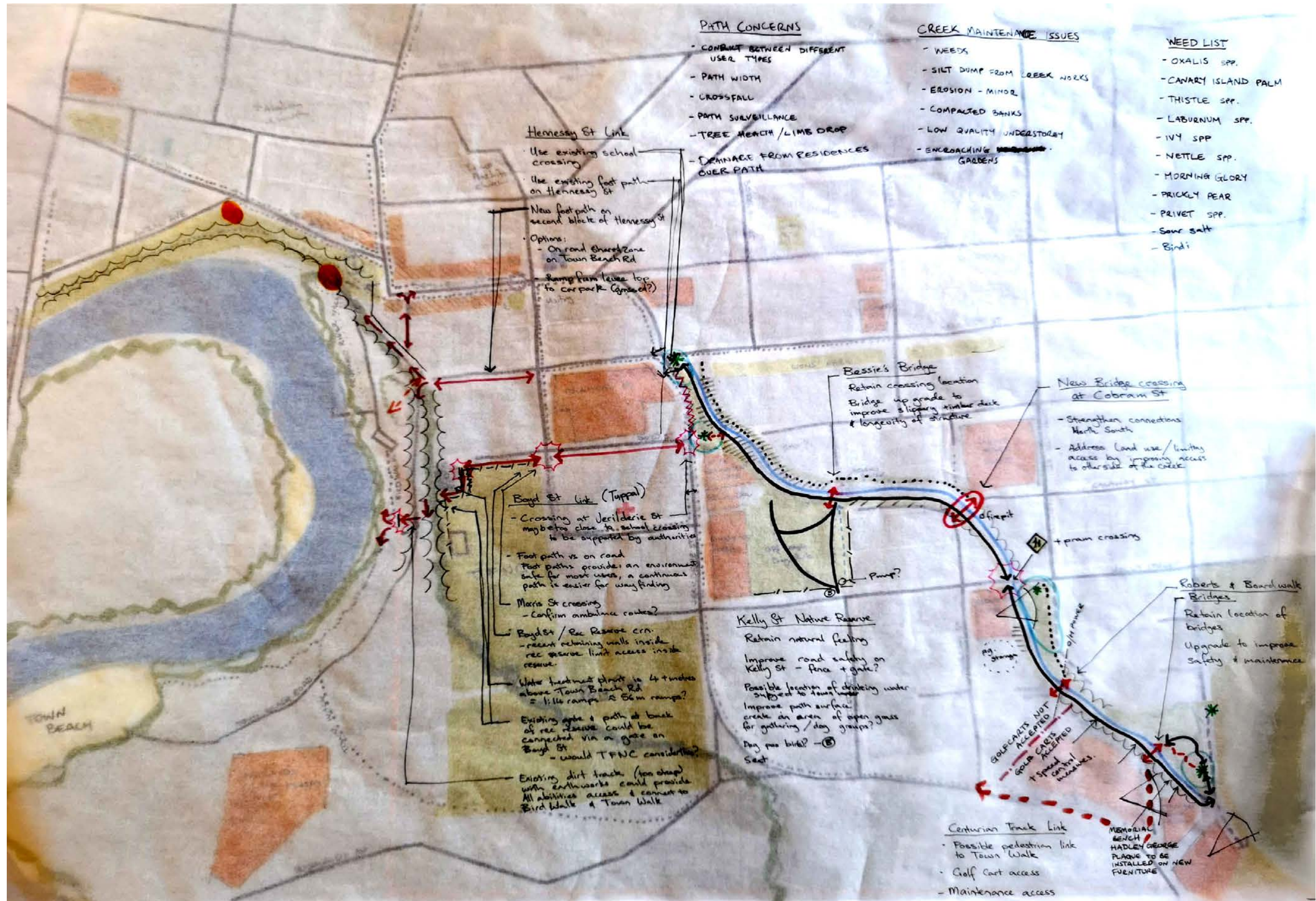
14/08/2018





## On-site workshop

Analysis &amp; concept options sketch plan - 14/08/2018



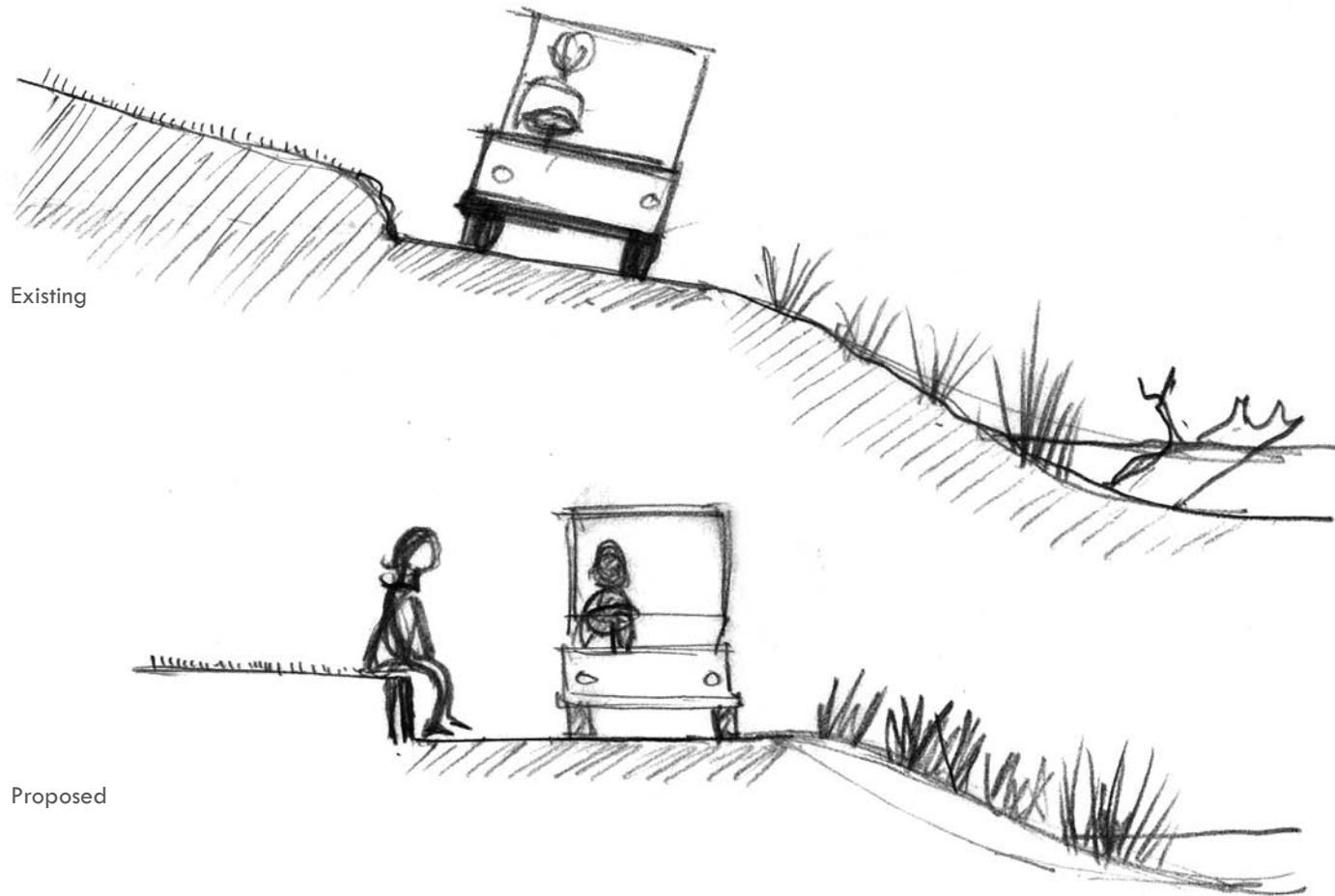




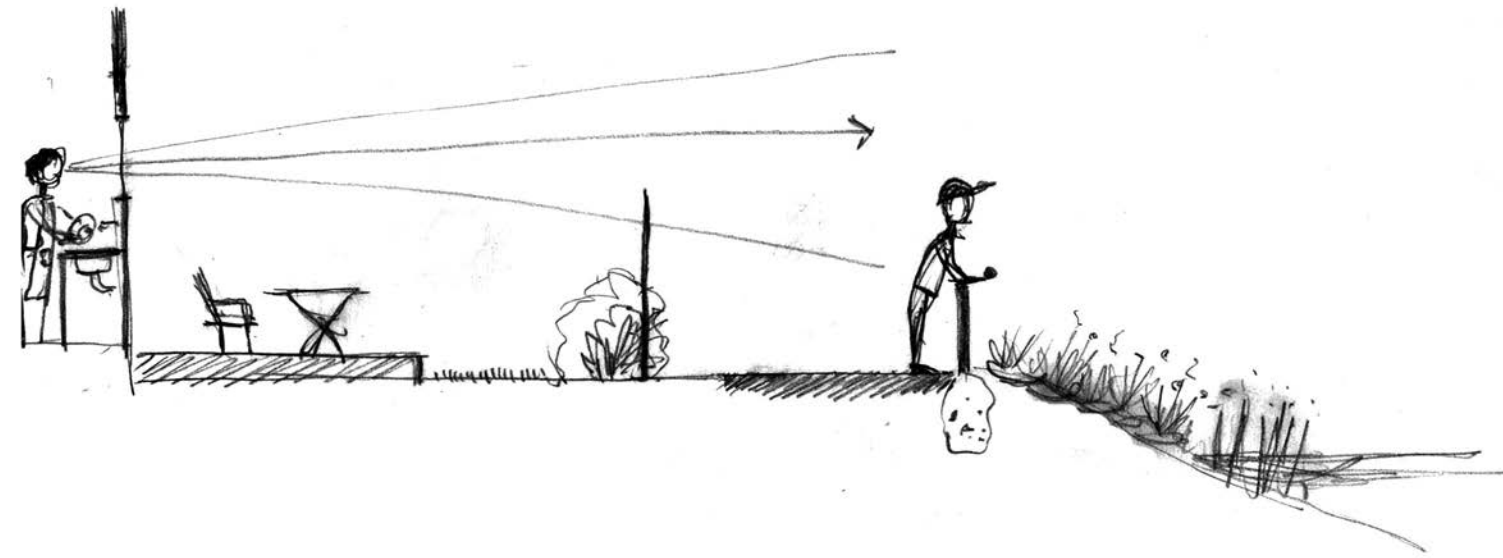


## On-site workshop cont.

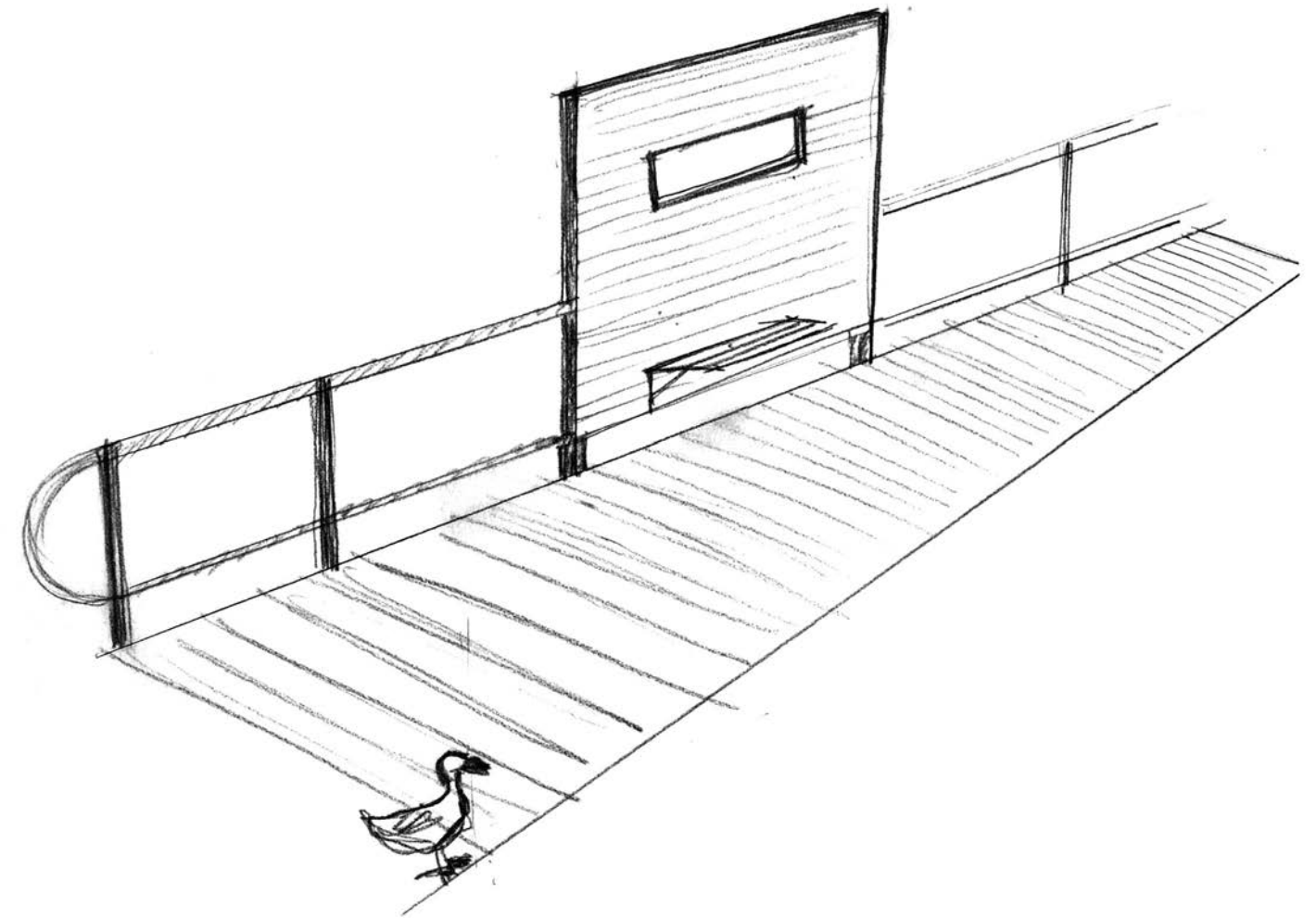
### Path and bridge opportunities sketches



Path surface & grading sketch



Passive surveillance from adjacent residences sketch



Bridge with bird hide concept sketch



Opinion of Probable Cost

WAAAF Creek Walk									
Berrigan Shire Council, Tocumwal Rotary and Tocumwal Farmers Market									
Opinion of Probable Cost - Draft Concept ONLY									
Schedule 1									
Date : 16.10.2018									
Liesl Malan Landscape Architects, PO Box 78 Harcourt, VIC 3453									
Description of works									
Stage 1 - Path Works and Safety Priority		\$	443,325.00						
Public Open Space Stages		\$	54,137.00						
Wayfinding & Interpretation Stage		\$	190,760.00						
Weed Control & Revegetation Stage		\$	293,635.00						
Total		\$	443,325.00						
Contingency at 25%			\$110,831.25						
Total including contingency			\$554,156.25						
Subtotal			\$554,156.25						
GST			\$55,415.63						
Total amount (including contingency and GST)			\$609,571.88						
• Whilst every effort has been taken to ensure accuracy Liesl Malan Landscape Architects cannot accept liability arising from the use thereof.									
• This OPC includes construction costs only, it does not include consultancy fees associated with additional design for revised scope, documentation and project management.									
• This OPC is based on a Draft Concept Plan only and is subject to variation during documentation									
• All rates are to be confirmed by Berrigan Shire Council.									

Stage 1 - Path Works and Sefety Priority							
Berrigan Shire Council, Tocumwal Rotary and Tocumwal Farmers Market							
Schedule 3							
• Whilst every effort has been taken to ensure accuracy Liesl Malan Landscape Architects cannot accept liability arising from the use thereof.							
• This OPC includes construction costs only, it does not include consultancy fees associated with additional design for revised scope, documentation and project management.							
• This OPC is based on a Draft Concept Plan only and is subject to variation during documentation							
• All rates are to be confirmed by Berrigan Shire Council.							
Date : 16.10.2018							
Liesl Malan Landscape Architects, PO Box 78 Harcourt, VIC 3453							
<a href="mailto:lm@lmia.com.au">lm@lmia.com.au</a>							
No.	Item	Unit	Quantity	Unit cost	Approximate total cost (excluding GST)	Subtotal	Comments
Preliminaries and earthworks						\$ 23,000.00	
1	Preliminaries - setout, site preparation, Public Liability Insurance, Safe Work Methods, Site Management Plan, Traffic Management, Dial Before You Dig and OH&S	item	1	\$ 8,000.00	\$ 8,000.00		Allowance only - TBC subject staging
2	Removal of all silt dumps from creek banks. Use best practice to dispose of silt in environmental friendly method.	item	1	BSC - ongoing maintenance budget			
3	Creek path area - Earthworks and site preparation, grading & site set-out, ensuring all areas are free draining, stock pile top soil, undertake weed control (not including revegetation areas)	item	1	\$ 15,000.00	\$ 15,000.00		Allowance only - TBC
Paths and fencing						\$ 269,325.00	
4	Supply and installation of coir log retaining structure	lm	310	\$ 70.00	\$ 21,700.00		
5	Supply and installation of gabion basket retaining structure	lm	64	\$ 300.00	\$ 19,200.00		
6	Upgrade existing gravel shared path at 2.5m wide in conjunction with retaining structure	m <sup>2</sup>	515	\$ 30.00	\$ 15,450.00		
7	Upgrade gravel shared path at 2.5m wide. Includes supply and installation	m <sup>2</sup>	3048	\$ 30.00	\$ 91,425.00		



Opinion of Probable Cost

7	Supply and install pram crossing in Kelly Street (include minor demolition of existing kerb)	item	2	\$ 500.00	\$ 1,000.00	Assumes works by BSC and can be undertaken in conjunction with other kerb works. Confirm staging with Michelle Keenan
8	Supply and install pedestrian crossing signage in Kelly Street	item	2	\$ 250.00	\$ 500.00	
8	Supply and install Kelly St Reserve frontage fencing	lm	170	\$ 150.00	\$ 25,500.00	
9	Supply and install Kelly St Reserve and residential lot fencing	lm	110	\$ 110.00	\$ 12,100.00	BSC and resident input required Allowance only - TBC
10	Supply and install post and rail fencing	lm	317	\$ 250.00	\$ 79,250.00	
11	Supply and install removable bollards	item	16	\$ 200.00	\$ 3,200.00	
Bridge crossing and boardwalk				\$ 151,000.00		
12	Soil test to inform structural engineers computations (approximately 7 test sites)	item	1	\$ 1,000.00	\$ 1,000.00	
13	Structural engineering of bridge and boardwalk	item	1	\$ 5,000.00	\$ 5,000.00	Allowance only - TBC
14	Supply and delivery of bridge crossing (approximately 10 lm)	item	3	\$ 25,000.00	\$ 75,000.00	Allowance only. Subject to further research and design development
15	Supply and delivery of boardwalk (approximately 52 lm)	item	1	\$ 25,000.00	\$ 25,000.00	Allowance only. Subject to further research and design development
16	Installation of bridge crossings including footings. Ensure site is left neat and tidy.	item	3	\$ 5,000.00	\$ 15,000.00	Allowance only. Subject to further research and design development
17	Installation of boardwalk including footings. Ensure site is left neat and tidy.	item	1	\$ 10,000.00	\$ 10,000.00	Allowance only. Subject to further research and design development
18	Crane truck to assist with bridges and boardwalk installation	item	1	\$ 20,000.00	\$ 20,000.00	Allowance only.
				Subtotal (ex. GST) \$ 443,325.00		

Public Open Space Stages							
Berrigan Shire Council, Tocumwal Rotary and Tocumwal Farmers Market							
Schedule 3							
<ul style="list-style-type: none"><li>Whilst every effort has been taken to ensure accuracy Liesl Malan Landscape Architects cannot accept liability arising from the use thereof.</li></ul>							
<ul style="list-style-type: none"><li>This OPC includes construction costs only, it does not include consultancy fees associated with additional design for revised scope, documentation and project management.</li></ul>							
<ul style="list-style-type: none"><li>This OPC is based on a Draft Concept Plan only and is subject to variation during documentation</li></ul>							
<ul style="list-style-type: none"><li>All rates are to be confirmed by Berrigan Shire Council.</li></ul>							
Date : 16.10.2018							
Liesl Malan Landscape Architects, PO Box 78 Harcourt, VIC 3453							
<a href="mailto:lm@lmla.com.au">lm@lmla.com.au</a>							
No.	Item	Unit	Quantity	Unit cost	Approximate total cost (excluding GST)	Subtotal	Comments
Preliminaries and earthworks							
1	Preliminaries - setout, site preparation, Public Liability Insurance, Safe Work Methods, Site Management Plan, Traffic Management, Dial Before You Dig and OH&S	item	N/A will vary depending on approach to works				Allowance only - TBC subject staging
Kelly Street Nature Reserve						\$ 37,327.00	
2	Kelly Street Nature Reserve path upgrade	item	443	\$ 30.00	\$ 13,290.00		Assumes works by BSC and can be undertaken in conjunction with other kerb
3	Minor clearing and establishment of slashed grass area in Kelly Street Nature	m <sup>2</sup>	2388	\$ 4.00	\$ 9,552.00		
4	Supply and install Roadside Litter & Recycling Receptacle (metal front/rear and timber sides) with insert Trail name	item	4	\$ 1,645.00	\$ 6,580.00		
5	Supply and install park	item	2	\$ 1,200.00	\$ 2,400.00		
6	Drinking fountain with dog bowl and side tap	item	1	\$ 2,505.00	\$ 2,505.00		
	Water connection to drinking fountain	item	1	\$ 3,000.00	\$ 3,000.00		
Kelly Street / Charlotte Street Picnic area						\$ 8,405.00	
7	Supply and install Roadside Litter & Recycling Receptacle (metal front/rear and timber sides) with insert Trail name	item	1	\$ 1,645.00	\$ 1,645.00		
8	Supply and install picnic tables and seats with provision for wheelchairs	item	2	\$ 3,380.00	\$ 6,760.00		
Golf Course Picnic area						\$ 8,405.00	
9	Supply and install Roadside Litter & Recycling Receptacle (metal front/rear and timber sides) with insert Trail name	item	1	\$ 1,645.00	\$ 1,645.00		
10	Supply and install picnic tables and seats with provision for wheelchairs	item	2	\$ 3,380.00	\$ 6,760.00		
				Subtotal (ex. GST)		\$ 54,137.00	



Opinion of Probable Cost

Wayfinding & Interpretation Stage							
Berrigan Shire Council, Tocumwal Rotary and Tocumwal Farmers Market							
Schedule 3							
<div><div>• Whilst every effort has been taken to ensure accuracy Liesl Malan Landscape Architects cannot accept liability arising from the use thereof.</div><div>• This OPC includes construction costs only, it does not include consultancy fees associated with additional design for revised scope, documentation and project management.</div><div>• This OPC is based on a Draft Concept Plan only and is subject to variation during documentation</div><div>• All rates are to be confirmed by Berrigan Shire Council.</div></div>							
Date : 16.10.2018							
Liesl Malan Landscape Architects, PO Box 78 Harcourt, VIC 3453							
<a href="mailto:lm@lmla.com.au">lm@lmla.com.au</a>							
No.	Item	Unit	Quantity	Unit cost	Approximate total cost (excluding GST)	Subtotal	Comments
Preliminaries and earthworks						\$ 4,000.00	
1	Preliminaries - setout, site preparation, Public Liability Insurance, Safe Work Methods, Site Management Plan, Traffic Management, Dial Before You Dig and OH&S	item	1	\$ 4,000.00	\$ 4,000.00		Allowance only - TBC subject staging
Trailhead						\$ 103,600.00	
2	Supply and install carpark gravel area	item	1	\$ 50,000.00	\$ 50,000.00		BSC input required Allowance only - TBC
3	Supply and install concrete shared path at 2.5m wide	m	405	\$ 120.00	\$ 48,600.00		
4	Relocation of existing shelter including new footings	item	1	\$ 1,000.00	\$ 1,000.00		
5	Crane truck to assist with relocation of shelter	item	1	\$ 2,000.00	\$ 2,000.00		Allowance only.
6	Refurbishment of existing shelters including repainting and cleaning	item	2	\$ 1,000.00	\$ 2,000.00		
Interpretation						\$ 74,000.00	
7	Interpretive signage - research, curation, copy writing, graphic design and signage form design and detailing	item	8	\$ 3,000.00	\$ 24,000.00		Assumes limited research required
8	Interpretive elements including signage - fabrication & installation	item	8	\$ 3,000.00	\$ 24,000.00		
9	Wayfinding signage - graphic design and signage form design and detailing	item	1	\$ 2,000.00	\$ 2,000.00		Assumes limited research required
10	Wayfinding signage - fabrication & installation	item	2	\$ 1,000.00	\$ 2,000.00		
11	Supply and install wayfinding bollard	item	10	\$ 200.00	\$ 2,000.00		
12	Shelter 1 Update existing shelter display including fabrication supply and installation (approximately 7 new panels + 1 wayfinding sign as itemised above)	item	1	\$ 10,000.00	\$ 10,000.00		

13	Shelter 2 update existing shelter display (approximately 7 new panels + 1 wayfinding sign as itemised above)	item	1	\$ 10,000.00	\$ 10,000.00		
Furniture					\$ 9,160.00		
14	Supply and install picnic tables and seats with provision for wheelchairs	item	2	\$ 3,380.00	\$ 6,760.00		
15	Supply and install park benches	item	2	\$ 1,200.00	\$ 2,400.00		
	bin		1				
					Subtotal (ex. GST)	\$ 190,760.00	



Opinion of Probable Cost

Weed Control & Revegetation Stage								
Berrigan Shire Council, Tocomwal Rotary and Tocomwal Farmers Market								
Schedule 3								
• Whilst every effort has been taken to ensure accuracy Liesl Malan Landscape Architects cannot accept liability arising from the use thereof.								
• This OPC includes construction costs only, it does not include consultancy fees associated with additional design for revised scope, documentation and project								
• This OPC is based on a Draft Concept Plan only and is subject to variation during documentation								
• All rates are to be confirmed by Berrigan Shire Council.								
Date : 16.10.2018								
Liesl Malan Landscape Architects, PO Box 78 Harcourt, VIC 3453								
<a href="mailto:lm@lmla.com.au">lm@lmla.com.au</a>								
No.	Item	Unit	Quantity	Plant size	Unit cost	Approximate total cost (excluding GST)	Subtotal	Comments
Design and documentation of revegetati							\$ 15,000.00	
1	Professional design and documentation of creek rehabilitation works including species selection, bank works as appropriate, planting plans, scheldules, modules and details, opinion of probable costs including staging, weed and pest control recommendatiosn.	item	1	n/a	\$ 15,000.00	\$ 15,000.00		Allowance only -
2	Survey of creek to support planting plan and bank works	item	1	n/a	To be undertaken by BSC internally			
Revegetation							\$ 278,635.00	
3	1. Upstream of boardwalk Preliminaries - setout, site preparation, and bank works, weed control Public Liability Insurance, Safe Work Methods, Site Management Plan, Traffic Management, Dial Before You Dig and OH&S	item	1	n/a	\$ 4,000.00	\$ 4,000.00		Allowance only - TBC subject staging
4	1. Upstream of boardwalk Revegetation of the creek banks with riparian species. Assumes 6 hiko stock per m2	m <sup>2</sup>	1759	Hiko	\$ 15.00	\$ 26,385.00		Area to be revegetated in Creek is an estimate only due to no site survey to confirm location of top and toe of bank
5	2. Between Boardwalk & Robert's Bridge Preliminaries - setout, site preparation, and bank works, weed control, Public Liability Insurance, Safe Work Methods, Site Management Plan, Traffic Management, Dial Before You Dig and OH&S	item	1	n/a	\$ 4,000.00	\$ 4,000.00		Allowance only - TBC subject staging
6	2. Between Boardwalk & Robert's Bridge Revegetation of the creek banks with riparian species. Assumes 6 hiko stock per m2	m <sup>2</sup>	3060	Hiko	\$ 15.00	\$ 45,900.00		

7	3. Between Robert's Bridge & Kelly St Preliminaries - setout, site preparation, and bank works, weed control, Public Liability Insurance, Safe Work Methods, Site Management Plan, Traffic Management, Dial Before You Dig and OH&S	item	1	n/a	\$ 4,000.00	\$ 4,000.00		Allowance only - TBC subject staging
8	3. Between Robert's Bridge & Kelly St Revegetation of the creek banks with riparian species. Assumes 6 hiko stock per m2	m <sup>2</sup>	2088	Hiko	\$ 15.00	\$ 31,320.00		
9	4. Between Kelly St & Bessies Bridge Preliminaries - setout, site preparation, and bank works, weed control, Public Liability Insurance, Safe Work Methods, Site Management Plan, Traffic Management, Dial Before You Dig and OH&S	item	1	n/a	\$ 4,000.00	\$ 4,000.00		Allowance only - TBC subject staging
10	4. Between Kelly St & Bessies Bridge Revegetation of the creek banks with riparian species. Assumes 6 hiko stock per m2	m <sup>2</sup>	5000	Hiko	\$ 15.00	\$ 75,000.00		
11	5. Between Bessies Bridge & Hennessey St Preliminaries - setout, site preparation, and bank works, weed control, Public Liability Insurance, Safe Work Methods, Site Management Plan, Traffic Management, Dial Before You Dig and OH&S	item	1	n/a	\$ 4,000.00	\$ 4,000.00		Allowance only - TBC subject staging
12	5. Between Bessies Bridge & Hennessey St Revegetation of the creek banks with riparian species. Assumes 6 hiko stock per m2	m <sup>2</sup>	2718	Hiko	\$ 15.00	\$ 40,770.00		
13	6. Kelly St Reserve Swale Preliminaries - setout, site preparation, and bank works, weed control, Public Liability Insurance, Safe Work Methods, Site Management Plan, Traffic Management, Dial Before You Dig and OH&S	item	1	n/a	\$ 1,000.00	\$ 1,000.00		Allowance only - TBC subject staging
14	6. Kelly St Reserve Swale Revegetation of the swale with riparian species. Assumes 6 hiko stock per m2	m <sup>2</sup>	1768	Hiko	\$ 15.00	\$ 26,520.00		
15	Revegetation with shrub species screening. Assumes 4 hiko stock per m2	m <sup>2</sup>	1174	Hiko	\$ 10.00	\$ 11,740.00		
16	Weed control - manual removal of weed shrubs	item	1	ongoing maintenance budget				
17	Weed control using chemical methods (ensure best practice in creek environment)	item	1	ongoing maintenance budget				
					Subtotal (ex. GST)		\$ 293,635.00	



10	Installation of bridge crossings including footings. Ensure site is left neat and tidy.	item	1	\$ 5,000.00	\$ 5,000.00		
11	Crane truck to assist with bridges and boardwalk installation	item	1	\$ 5,000.00	\$ 5,000.00		
					<b>Subtotal (ex. GST)</b>	\$ 294,700.00	



## Interpretive Research

### The WAAAF Tocumwal

#### Tocumwal Historic Aerodrome Museum

<http://www.tham.org.au/>

### The Royal Australian Air Force

Women's Auxiliary Australian Air Force (WAAAF) and Women's Royal Australian Air Force (WRAAF)

#### Australian War Memorial

<https://www.awm.gov.au/learn/understanding-military-structure/raaf/waaaf>

### Women's Auxiliary Australian Air Force (WAAAF) (1941 - 1947)

<http://www.womenaustralia.info/biogs/AWE0400b.htm>

### Australians at War Film Archive

#### Lois Dalziel

<http://australiansatwarfilmarchive.unsw.edu.au/archive/2095-lois-dalziel>

### Women the victims of war, WAAAF veteran says

<https://www.canberratimes.com.au/national/act/women-the-victims-of-war-waaaf-veteran-says-20160421-gobjad.html>

### Women's Auxiliary Australian Air Force (WAAAF)

in Australia During WW2

<https://www.ozatwar.com/waaaf/waaaf.htm>

### WAAAF - an Aussie wartime success story

<http://www.defence.gov.au/news/raafnews/editions/4404/story10.htm>

### One WAAAF remembers

#### Judy Stone, WAAAF

(Joanna Penglase and David Horner, When the War Came to Australia, Allen and Unwin, Sydney, 1992 pages 49 - 50, 245)

### Investigating the reality

#### what women did and were paid

<http://main.anzacday.org.au/overview-of-activity>

### Meander along the WWII Women's Auxillary Australian Air Force Memorial Creek Walk.

<http://www.toconthemurray.com.au/Products/19/70/WAAAF-Creek-Walk.html>

### Women's Auxiliary Australian Air Force Memorial Creek Walk

<http://www.aussietowns.com.au/town/tocumwal-nsw>

### Geocache Description

#### WAAAF Creek Walk #3

[https://www.geocaching.com/geocache/GC2W319\\_waaaf-creek-walk-3?guid=14cf647e-f5d4-4cb9-9867-8f50b8c78971](https://www.geocaching.com/geocache/GC2W319_waaaf-creek-walk-3?guid=14cf647e-f5d4-4cb9-9867-8f50b8c78971)

### Woman Answered the Call During the War

<https://anzacportal.dva.gov.au/history/special-features/veterans-stories/australians-war-stories/women-answered-call-during-war>

### Trove WAAAF Articles

<https://trove.nla.gov.au/>

<https://trove.nla.gov.au/newspaper/page/626974#>

<https://trove.nla.gov.au/newspaper/article/12149549?searchTerm=WAAAF%20Tocumwal%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20&searchLimits=#>

<https://trove.nla.gov.au/newspaper/article/156630049?searchTerm=WAAAF%20Tocumwal%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20&searchLimits=#>

<https://trove.nla.gov.au/newspaper/article/111889945?searchTerm=WAAAF%20Tocumwal%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20&searchLimits=#>

<https://trove.nla.gov.au/newspaper/rendition/nla.news-page4727522.pdf>

### Other Links

[http://www.australiansatwar.gov.au/stories/stories\\_ID=17\\_war=W2.html](http://www.australiansatwar.gov.au/stories/stories_ID=17_war=W2.html)

<http://www.australia.gov.au/about-australia/australian-story/aviatrices>

<http://murrayriver.com.au/tocumwal/tocumwal-history/>

### Images

VIC0376

Australian War Memorial

<https://www.awm.gov.au/collection/C291696>

Tocumwal, NSW. C. 1944. Two WAAAF armourers working on a gun turret of a Consolidated B-24 Liberator bomber aircraft at No. 7 Operational Training Unit, RAAF Station Tocumwal.

Copyright expired

VIC0380

Australian War Memorial

<https://www.awm.gov.au/collection/C291700?image=1>

Tocumwal, NSW. C. 1944. Two WAAAF armourers working on a gun turret of a Consolidated B-24 Liberator bomber aircraft at No. 7 Operational Training Unit, RAAF Station Tocumwal.

Copyright expired

VIC0377

Australian War Memorial

<https://www.awm.gov.au/collection/C291697?image=1>

Tocumwal, NSW. C. 1944. A WAAAF airframe fitter at work on an aircraft at No. 7 Aircraft Depot, RAAF Station Tocumwal.

### THAM Images

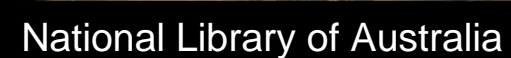
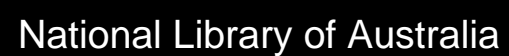
WAAAF's on board the wings of a Wirraway

WAAAF's picnic by the Murray River

One of the many weddings on the base

<http://www.tham.org.au/>







# THE W.A.A.F. IS NOW FOUR YEARS OLD . . .

**B**IRTHDAY greetings to the W.A.A.F., which is now four years old! Its total strength is approximately 18,500, of whom the largest group—4000—are doing various forms of signals and communication work. Next to them in numbers are cooks and mess stewaresses—3000—while 1500 work on aircraft in both technical and unskilled jobs. These photographs were taken on a tour of R.A.A.F. stations by a staff photographer of The Australian Women's Weekly.



**AT A NORTHERN BASE,** Waaafs travel to work by trailer bus from their camp a few miles out.



**FABRIC WORKERS** ACWs Carol Horman, Jean Hewens, and Peg Miller doing repairs on a Catalina flying-boat.



**ACW JUDY LINDEMAN,** transport driver, from Merriwa, N.S.W., tows a Catalina up from the slipway at a flying-boat maintenance depot in the Far North.



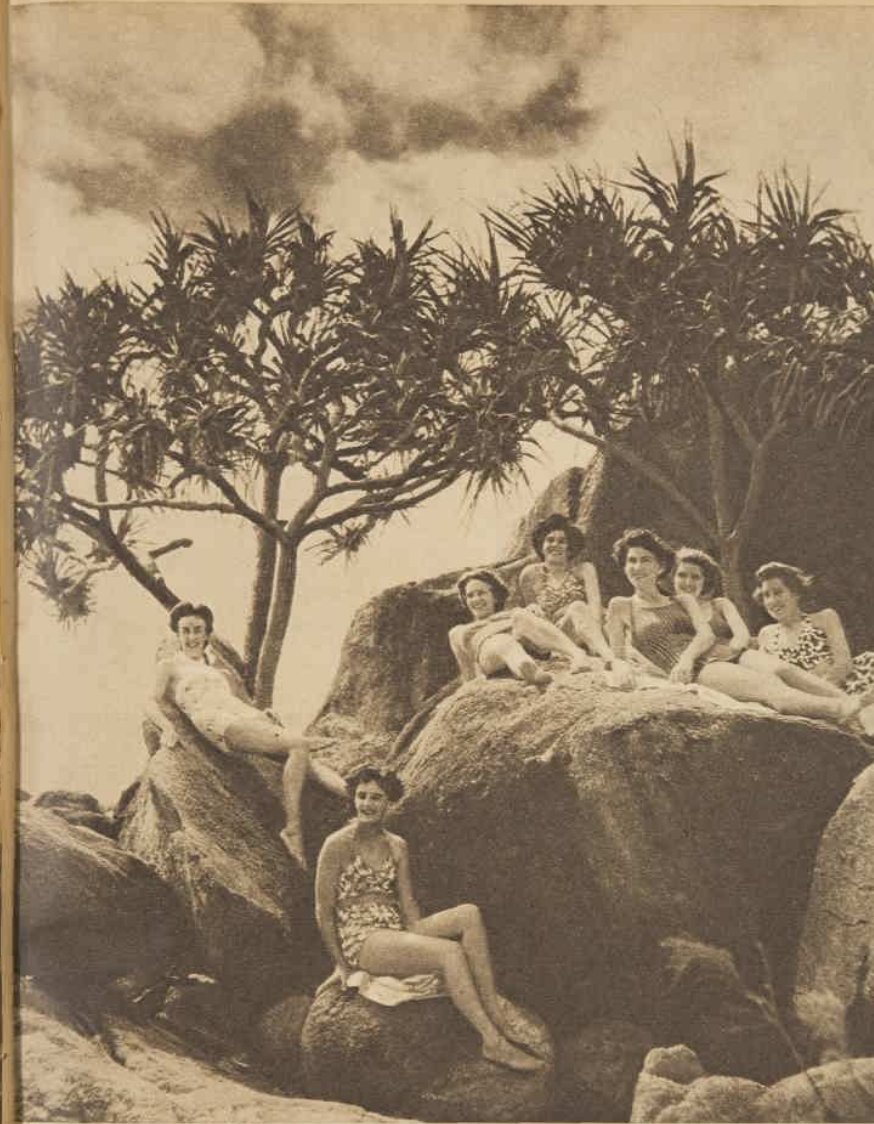
**TELEGRAPHIST** ACW Mollie Winter had two sisters, two brothers, in Services. One brother was killed.



**CORPORAL NAN DOYLE,** wireless-telegraphist, sets out for night shift, taking rations for supper.



**AIRCRAFTWOMEN** and aircraftmen at work on a Mark 8 Spitfire at a training unit.



**SHIFT WORKERS** of the W.A.A.F. sunbathing on the rocks by a beach near their Far North station.



**BUCKET PARADE** at Tocumwal, N.S.W. Waaafs have to cart water they need to wash down floors in their huts.



**STAGGER BOARD** records flying hours of every aircraft in training unit. ACW Ruby Grieve adds day's totals.



**ACW BETTY SHIRLEY** cooks for 250 in airmen's mess in former hotel in North. Husband is a P.O.W.



**"DOPING" PATCHES** on a flying-boat. Tarmac is right on the beach at this maintenance unit. Aircraft come direct from operational areas, often with bullet and shrapnel holes in fabric.



## HAPPY IN THE SERVICE



AIRCRAFT RIGGER ACW Iris Smith, working on repairs in the gun blister of a Catalina at Rathmines flying-boat base, N.S.W. You have to look twice among aircraft hands on airstrips to pick out the girls from the boys. They all wear the same working uniform—blue jeans.



BACKYARD FENCE is hotbed for Waaafs and airmen at their mess, a former hotel, in the Far North. L. to R.: Telegraphist ACW Jili Davies, fabric-worker ACW Carol Horman. Girls belong to twelve musterings here—office and nursing orderlies, wireless telegraph and telephone operators, signals clerks, cypher assistants, clerks, drivers, fabric workers, cooks, cook's assistants.

## Veterans and newcomers find staunch friendships and absorbing work in the W.A.A.A.F.

By ADELE SHELTON SMITH

"Me and my girl friend thought it out during morning smoko."

This was what a nineteen-year-old groundstaff man said when his C.O. asked him how he had thought out an idea he had submitted to speed up maintenance work in the hangar.

The C.O. told the story as an illustration of the splendid co-operation between the R.A.A.F. and the W.A.A.A.F.

MEMBERS of the W.A.A.A.F. have been working alongside the R.A.A.F. now for four years.

Some of them have been doing the same work day in day out for four years, serving meals, cooking, typing, working switchboards.

Others have changed their mustering several times as the scope of the W.A.A.A.F.'s work has widened.

Some girls have continued to do the job they did in civilian life on faraway R.A.A.F. stations without the amenities and comforts of their homes.

Others have taken on men's work in the big aircraft hangars or out on the tarmac in all weathers.

The girls talk like veterans, in that maddening and mysterious language of initials—S.A.O., O.I.C., D.M.T.—and the slang of the R.A.A.F. is theirs, too.

But they also take a wistful interest in civilian clothes, begging to touch the pre-war silk in a civilian dress or try on your civilian shoes.

More than 500 Waaafs work in the town where North-eastern Area has its headquarters. They are housed in a former Y.W.C.A. hotel, in a big girls' school, and in a camp of prefabricated huts three miles out of the town.

When we arrived they were coping with the problems and hilarities of the "wet" season, some for the third time since they joined the Service. A few had turned to with spades to dig drainage trenches round their huts when they were threatened with flood.

Shooting half a dozen frogs out from under the bed and a cloud of

flies—ants away from the mosquito net—was a nightly ritual when going to bed.

They were still laughing about the girls who took their showers with their hats on.

At the camp the showers have no roof. The rain was falling in inches, not points, but the girls didn't want to spoil their hair-do, so they put on their felt hats or tin hats before getting under the hot showers.

Smart appearance has always been a jealously guarded tradition with the Waaafs, and probably nowhere is it so difficult to keep up as at these Far North stations. Laundering drab uniforms is a matter for much detailed and scientific discussion.

### Crisp and smart

THERE is the boiled-starch school, the cold-starch school, and the starch - applied - with - nail - brush school. All of them mean hard work, but the results are fine.

However hot and damp the weather, all the Far North girls looked crisp and smart.

We met some "veterans" here. There was Staff-Officer Wing-Officer Dorothy ("Dave") Hawthorne, No. 5 enlistment in the Service, the only member who wears a decoration, the ribbon of the Coronation Medal awarded her for her work for the Girl Guide Movement.

As Deputy State Commissioner for Queensland she travelled widely in New Guinea and the Pacific Islands.

A well-known horsewoman, she has shown horses at Sydney and Brisbane shows, and has persuaded a few fellow officers to learn to ride. They have acquired a couple of Army remounts, and go riding before breakfast every morning.

A.S.O. Joyce Griffiths, of Cremo, has been in the service for

four years. She spent 19 months as a telegraphist with Air Board in the early months of the war, describes it as the most interesting period in her life.

"On the night shift you would work eight hours without leaving your desk, with a pile of highly secret messages beside you, working directly with the Air Ministry in London," she said.

A.S.O. Griffiths said she thought the reason why everybody enjoyed the life was that you met girls from all walks of life, whom you wouldn't ordinarily meet.

"The friendships you form in the Service," she said, "seem deeper than in civil life."

At the school barracks out on the tree-shaded seaford we met two more veterans—Wireless Telegraphist Sgt. Rosalind Kosker, of Goulburn, N.S.W., and Cpl. Jean Moran, of Hurstville, N.S.W.

They do day and night shift, "working" (directing) aircraft in.

Cpl. Moran's most vivid memories are "working" the islands—Baker, Honolulu, Singapore—taking details every night of Japanese air raids, and the night at another unit when a plane crashed into a nearby hangar and the engine shot through the wall into the Wireless Telegraphy office.

Under-Officer Billie Williams, of Melbourne, is a cypher assistant, started as a teleprinter operator four years ago in the first W.A.A.A.F. camp, and the night at another unit when a plane crashed into a nearby hangar and the engine shot through the wall into the Wireless Telegraphy office.

Her sister Noreen is a cypher officer at another Queensland base. Fifty Waaafs are stationed with a

Calcutta, Far East, the wireless telegraphist, and the night at another unit when a plane crashed into a nearby hangar and the engine shot through the wall into the Wireless Telegraphy office.

Under-Officer Billie Williams, of Melbourne, is a cypher assistant, started as a teleprinter operator four years ago in the first W.A.A.A.F. camp, and the night at another unit when a plane crashed into a nearby hangar and the engine shot through the wall into the Wireless Telegraphy office.

Under-Officer Billie Williams, of Melbourne, is a cypher assistant, started as a teleprinter operator four years ago in the first W.A.A.A.F. camp, and the night at another unit when a plane crashed into a nearby hangar and the engine shot through the wall into the Wireless Telegraphy office.

## ... DOING A VITAL JOB



ENJOYING in new recreation hut for W.A.A.A.F. at Tocumwal. Girls at their boy-friends to supper at the hut on three nights a week. R. Gertrude Gibson, instrument repairer, is playing the piano.



ADELE SHELTON SMITH, author of the article, is here with stories of the W.A.A.A.F.

Maintenance Unit in the Far North. The girls are in an old wooden hotel, the road to another former hotel, the road to another former hotel, the road to another former hotel.

Waaafs control all movements of aircraft at this station. In the Wireless Telegraphy office upstairs in a wooden shop building in the main street, the Waaaf telegraphists "work" aircraft in from more than 200 miles away.

They exchange technical data with the pilots, but the conversation is not always formal.

It may go this way: Telegraphist: "How many of you will be needing a meal?" and the pilot supplies the information.

Or the pilot may say: "What's on for tea?" Don't forget to tell the cook to keep some for us."

We had a special invitation from the transport unit to meet Minnie.

Minnie is a goat which the unit acquired two years ago when she was a kid. They fed her on condensed milk, put her to bed in a kerosene case. Now her favorite delicacies are fruit and tobacco.

At one stage the unit were directed to get rid of Minnie. They took her out to the beach where she could "live off the country," but a few days after they found her with a broken leg.

An American veterinary surgeon set the leg, and the unit, feeling Minnie was unable to fend for herself, took her home again.

At Tocumwal, Australia's largest aerodrome, the 420 Waaafs are the largest number on any one station. They live in wood and fibre cottages, 28 girls to a cottage, and they have worked hard to make them like home.

They have painted the inside walls themselves and made curtains, each hut with its own color-scheme.

A few stout-hearted groups have established garden plots in spite of the heart-breaking inroads of sand and wind.

Because of the isolation of the station, the girls work six and a half days a week, with accumulated leave every six weeks.

They have formed a rowing club, go swimming, play basketball.

One of the biggest groups here is the messing staff, most of them Waaafs.

The messing staff of 92 includes 20 cooks. Apart from the airmen's and airwomen's messes, there are 500 officers, and nearly 2000 N.C.O.s to be fed three times a day.



MINNIE, mascot of the transport unit at a flying-boat maintenance base in the Far North, photographed with transport driver ACW Rose Hayes, of Townsville.



HAPPY TRUCKLOAD of off-duty Waaafs and flying-men returning to their Far North station after an afternoon's swimming.



MESS STEWARDESS, ACW May McKenzie, in the officers' mess at a Far North flying-boat maintenance unit. She has been serving meals for two and a quarter years, was formerly a fruit-packer at Griffith, N.S.W. Messing officer for the station is Section-Officer Sheila Patrick, Officer-in-Charge W.A.A.A.F.



## Editorial

MARCH 24, 1945

### FOUR YEARS OF SERVICE

FOUR years ago 200 girls were enrolled to run the first W.A.A.A.F. training depot.

Apart from the nursing services they were Australia's first service-women, and everyone watched to see how they would "make out."

From that small nucleus has grown a force of 18,500 women, accepting discipline, knowing comradeship and the satisfaction of working together toward a common goal.

To visit the W.A.A.A.F. on R.A.A.F. stations is to realise just how well they have "made out."

The extent to which they have fulfilled the challenge of recruiting posters, "Release a man for more urgent duty," is impressive and inspiring.

So is their relationship with the men of the R.A.A.F. There is a commonsense comradeship between the girls and men working alongside each other that makes the arguments about women in the post-war world seem unnecessary fussation.

The girls are justifiably proud they have proved themselves competent to work alongside men, but most of them have already made up their minds that a home, husband, and family will come first when they say good-bye to service life.

For those who have not seen the W.A.A.A.F. actually on the job it is difficult to realise the sense of urgency that still actuates them as strongly now as it did in the first rush of enlistments.

As the offensive in the Pacific speeds up, heavier demands will be made on the W.A.A.A.F. They will continue to "make out" with flying colors.



### SAILORS' MOTHERS

AFTER H.M.A.S. Australia and Shropshire were in action recently, A/B. John Corcoran, of Shropshire, wrote to his mother in Bondi, N.S.W. "Some of the Australia boys have been badly burned. You will find out where they are. Try to make them comfortable and happy."

Mrs. Corcoran located two, Billy Sutton (W.A.) and Alvin Williams (S.A.), only survivors of their particular group. Both were badly burned, and Billy hung between life and death for several weeks.

Mrs. Corcoran and a neighbor, Mrs. Clarke, another sailor's mother, visited the boys, organised social functions, and with the proceeds and other donations bought the boys a radio each and other comforts.

SEVERAL three-pences sent in a Christmas pudding helped to save the life of an A.I.F. Commando in the Torricelli Mountains in New Guinea.

Mrs. A. L. Shields, of Wangaratta, Vic., sent the pudding to her son, Lieut. W. R. J. Shields, in a Commando unit.

When an intricate brain operation had to be performed on one of his mates, the three-pences were made into tiny silver scalp clips by Corporal Armorer H. McIntosh, of Melbourne, and his assistant, Trooper G. Poeden, Inverell, N.S.W.

FRENCH aircraft workers of the factories at Suresnes recently presented to Minister for Air Charles Tillon the hundredth plane built in France since the liberation.

### Responsible

HAILETT ABEND in his "Pacific Charter" leaves no doubt that Hirohito, 124th Emperor of his line, and supposed lineal descendant of the Sun Goddess, known of the atrocities committed by the Japanese Army.

He says a high civilian Japanese official made a personal report to the Emperor on the rape of Nanking.

"This man told me things about the conduct of Nippon's soldiers which I had not heard from other sources and which were too horrible to set forth in print," says Abend.

Abend quotes the official thus: "I was accorded the very rare honor of a summons to the palace for more than two hours of private conversation with the Emperor. When I entered the great hall of audience he ordered all attendants to retire to the doors beyond hearing."

"Then he had a pillow placed for me and I spent two hours on my knees at his feet while he bent over and had me whisper into his ear all that I knew about the events following the capture of Nanking. I kept nothing back and he asked many searching questions."

"The secret interview lasted so long that gradually my feet and legs became temporarily paralysed, and when he finally had learned all he wanted to know the Emperor graciously permitted me to continue kneeling while he arose and left the room. Court attendants then raised me to my feet and I was massaged and exercised until I was able to walk unassisted once more."

## RWORTH Reporting

### Moresby legend

LEGENDS have grown up round a battered wreck lying in Moresby Harbor. Some say she is the remains of a last-war German raider, others a tramp that traded nefariously round the Pacific.

"Wings," official Air Force journal, states she is the British freighter Pruth, which ran aground in 1927 with a cargo of galvanised iron, barbed wire, automobiles, and oil.

Port authorities offered assistance but the Captain felt he could move off alone at high tide. But a tropical gale blew the Pruth 200 yards on the reef and all salvage efforts failed.

Since 1942 Australian and American air crews have used her rusty hull for bombing and strafing practice, and once the Japs mistook her for a loaded Allied freighter and plastered her with bombs, to the delight of soldiers and airmen sheltering in the harbor.

In 1943 she was the practice target

### Animal Antics



"I think he's a fugitive from a mule team!"

for aircraft which took part in the Blenheim Sea battle. They perfected the skip-bombing technique which two days later was to cripple the Jap fleet of transports and destroyers.

SIGN of to-day's shopping habits. A notice in a city bookshop reads: "Please do not rest suitcases on the books."

### Convert to soap

FOR 17 years Olga Petrova, retired screen and stage star, did not wash her face. She cleaned it only with cold cream. Recently she was so enchanted by a radio talk on soap that now she has gone over to the soap-and-water school of thought.

Petrova played in such productions as "The White Peacock," "Daughter of Destiny," and "The Orchid Lady."

### 3000 Women

THREE thousand English, Australian and American women were set free from Camp Vittel internment camp when the Allies took Frankreich.

An Australian, Miss Mary Hall, who lived in Paris for twelve years and had been interned since 1942, writes from Paris:

"The first liberating soldiers we saw were Arabs in the French Army. We gave them Red Cross tins of salmon, packets of raisins, and some of our colored scarves, which they tied round their necks."

Later American soldiers arrived. Some of them, seeing us almost speechless, gave us their old boots, old socks and shirts.

"In Paris the people have lost that frightened look and now they simply look sad and bored."

"I am delighted to be back in my own little flat after being jammed up with 3000 women, but I don't like Paris any more, or Europe. They can have their next war without me. I am going back to Australia."

FORMER globe-trotter showing friend photograph of Cologne: "Oh, yes, that's the Cathedral. Stained-glass windows? Yes; but you should have seen the huge stained-glass window at the railway station advertising real eau-de-Cologne!"

### Pay rise for Chinese

CHINA'S National Military Council has revised the scale of Army pay.

Privates will now receive approximately £10 a month (3/4 to 6/8 a day), a sixfold increase on their former pay.

Full general will receive approximately £333 a month, major-general, approximately £267, double their former pay.

Captain's pay has been tripled to approximately £133 a month.

Improvements are also to be made in rations and nutrition.

### Nutshell description

KING IBN SAUD, from whom Mr. Churchill, on his way home from Yalta received gifts of Arab ceremonial robes, some coffee, and a jewel-encrusted gold sword and dagger, is 60 years old, has a body that reaches more nearly to seven feet than to six, the manners of a true son of the desert, a soft-spoken voice, a heavy fist, and several dozen sons.

### Not a sparrow falls

THE sparrows of London were remembered in the will of a woman invalid who spent many of her later days watching them in the Embankment Gardens. She left money to provide crumbs for them.

Her husband, anxious that her wishes should be fully carried out, left money in his own will by which different waiters of the Savoy Hotel annually take over the duty of casting the crumbs in the Gardens.

They are thrown near the memorial to Sir Arthur Sullivan, of Gilbert and Sullivan fame.

### HOLIDAY

ONE is moved to wonder regularly each year Whether holidays are worth the preparatory wear and tear Caused by the scurry to get work up to date And tidying the desk in one furious spate, Clearing the drawers of the junk that encumbers, Such as letters, bills, and mysterious phone numbers, To say nothing of remembering to explain to one's reliever That there is no need to get into a frenzied fever Over the folder marked "Urgent," which, in point of fact, Has lain crammed full of rubbish for the last year, intact.

—DOROTHY DRAIN.

WHEN a man retires, and time is no longer a matter of importance, his colleagues generally present him with a clock.—R. C. Sherriff.

## Interesting People

### F/LT. H. E. SHELLY

... London air service

OPERATIONS OFFICER in Sydney with newly established R.A.F. Transport Command London - Australia

Service is Canadian Flight-Lieut. H. E. Shelly, R.A.F. Is in charge of flying operations on Australia - New Zealand sector of service. Formerly Royal Canadian Air Force chief ground instructor—youngest in Canada—he transferred to R.A.F. Transport Command in 1942. Was despatcher of long-range ferrying and communication flying in Canada and U.S.A. before coming to Australia.



MISS J. STAVRIDI ... Work in Greece

TENDING British wounded in Crete and occupied Greece has for past five years been work of Miss Joanna Stavridi, daughter of Greek millionaire banker. After German invasion of Greece she escaped to Crete, where she nursed wounded. When Crete fell, Germans found her still at her task. Was sent back to Greece, but permitted to continue her work. Recently arrived, she has been awarded Distinguished Service Certificate by British Red Cross.



MR. J. T. TOMASETTI ... Director of Stores

DIRECTOR of Stores, Australian Red Cross, Mr. J. T. Tomasetti, of Melbourne, recently visited Middle East to review stores and relief for transport to Greece. Also inspected stores in Ceylon, where he expects there will be special service unit established for P.O.W.s liberated from Japanese camps. He served with A.I.F. in last war. Has travelled widely in the East.



BUT MY FIANCÉE HAS INQUIRED ABOUT FATHERS



Wing Commander A. L. C. Hubbard, D.S.O., D.F.C., is one of our best-known bomber pilots. Among his operational flights he counts an attack on the Schamhorst and Gneisenau.



"The girls of the W.A.A.A.F. have every reason to be proud of themselves, and the Air Force is proud of them, too"

... says Wing Commander A. L. C. Hubbard, D.S.O., D.F.C.

The Air Force girls have given splendid support to the men who fly the planes. Air Crew and Ground Staff alike are proud of them, and Wing Commander Hubbard, D.S.O., D.F.C., says: "The girls of the W.A.A.A.F. have every reason to be proud of themselves. But their work is by no means at an end. The biggest job of the war lies ahead and the Air Force needs thousands more young women for the great drive to speed the Victory."

What a chance the Air Force offers you! Join up now. Vital, interesting work is waiting for you. You will be as much a member of our gallant Air Force as the men who fly the 'planes.

And you can choose the work you want to do from the variety of jobs open to you. Pay is good, leave is on a generous scale and conditions are comfortable.

Here is your opportunity to live a thrilling, wonderful life—to do a job that you'll always look back on with keen pleasure and a feeling of well-deserved pride.

The Air Force needs you—to-day! Join it, work with it, share in its triumphs. You can obtain full particulars from your local R.A.A.F. Recruiting Committee, or from the R.A.A.F. Recruiting Centre in any capital city.

SERVE WITH THE AIR FORCE ... **Women's Auxiliary Australian Air Force**

W7310.25