



FEDERATION COUNCIL

100 Edward Street Corowa NSW 2646
PO Box 77, Corowa NSW 2646
(02) 6033 8999
council@federationcouncil.nsw.gov.au

APPLICATION FORM

DEVELOPMENT APPLICATION / CONSTRUCTION CERTIFICATE / COMPLYING DEVELOPMENT / PLUMBING

Environmental Planning and Assessment Act 1979 and Local Government Act 1993

- ~ Council will not accept incomplete applications. It is the responsibility of the applicant to ensure required information is provided.
~ Associated fees must be paid at time of lodgement.

PRIVACY STATEMENT: Information provided to Council may comprise personal information as defined under the Privacy and Personal Information Protection Act 1998. Personal information may be utilised by Council to assess any application under the Environmental Planning and Assessment Act 1979 and in accordance with other legislation. Please note that personal information may also be made available to third parties in accordance with the Government Information (Public Access) Act 2009.

TYPE OF APPLICATION

- ☒ Development Application (DA)
☐ Construction Certificate (CC)
☐ Complying Development Certificate (CDC)
☐ Plumbing Application (LGA)

Have you attended a pre-lodgement meeting with a Council Officer?

- ☐ No
☒ YES - If so, with whom Kate Larnach

PROPOSED DEVELOPMENT

Please provide a detailed description of your proposal – including details of subdivision, the use of any buildings, demolitions or tree removals.

Conservation holiday resort of transportable cabins

PROPOSAL WILL INVOLVE:

- ☐ Erecting, altering or adding to a building structure ☐ Demolition
☒ Is it a temporary building or structure? ☐ Other works (not including building work, subdivision or demolition).
☐ Subdividing land ☒ Changing the use of land or a building, or the classification of a building under the Building Code of Australia (without building, subdividing or demolishing)?
☐ Subdividing a building into strata units

NOTE: If you do not apply for demolition on this application, and you need to demolish structures on the site, a separate Development Application will need to be submitted to, and approved by Council, prior to the removal of any structures from the property.

APPLICANTS DETAILS

Name: Ben Fryer
Company: Warrawidge Pty Ltd Reference: _____
Postal Address: c/- PO Box 281
Town: Wodonga State: VIC Postcode: 3689
Phone No.: _____ Mobile: 0414 280 033
Email: _____

APPLICANT'S DECLARATION: I/We the applicant declare to the best of my/our knowledge and belief that all the particulars heron is correct in every detail and the information required has been supplied. I/We also hereby consent to Council displaying and copying the application and supporting documentation including designs, for the purpose of seeking public comment, when necessary.

Applicant Signature: [Signature] Date: 22/2/2018
Documentation Delivery Options: ☐ EMAIL* ☒ POST ☐ HOLD FOR COLLECTION

* Stamped plans will not be emailed and will be posted out to applicant's address.

PROPERTY DETAILS

Property Name: Warrawidge
Unit/House No.: 803 Street Name: Spring Drive
Town: Corowa Postcode: _____
Lot: 3 Section: _____ DP/SP: DP791136
Area Of Land: _____ m² 316 ha

TYPE OF CONSENT

Is your proposal a designated development? ☐ YES – Please attach an Environmental Impact Statement (EIS)
☒ ALL Other Developments – Please attach a Statement of Environmental Effects (SEE)

Is your development an Integrated Development?
(If your application requires one or more approvals from state agencies then your development is integrated. Please contact Council to determine which agencies you may require approvals from.)

☐ NO
☒ YES – Please list the approvals you require:
Office of Environment & Heritage
Roads & Maritime

NOTE: An amount of \$320 for each state agency that will assess your proposal must be paid to Council upon lodgement together with an additional copy of your application and relevant documentation for each agency.

STAGED DEVELOPMENT

You can apply for development consent for part of your proposal now and for the remaining part(s) at a later stage.

Are you applying for development consent in stages? ☐ YES ☒ NO

If Yes, please attach:

- ~ Information which describes the stages of your development;
- ~ Copy of any consents you already have for part of your development.

CONSTRUCTION STATISTICS

This information is required by the Australian Bureau of Statistics (ABS). The ABS uses this information as key economic indicators for the country. If there are two or more different material types to be used, then please nominate the primary material type.

Is proposed building a: ☒ New building ☐ Alterations to existing ☐ Additions to existing

Value of development including GST: \$ 10,000,000 Total floor area of development: _____ m²

Description of existing developments on land: Cattle and horse farming, including dwelling, yards & sheds

FLOOR	FRAME	WALLS		ROOF
☐ Concrete or Slate	☐ Timber	☐ Brick Veneer	☐ Curtain Glass	☐ Tiles
☒ Timber	☒ Steel	☐ Full Brick	☐ Steel	☒ Steel/Colourbond
☐ Other	☐ Aluminum	☐ Concrete or Stone	☒ Aluminium	☐ Other
☐ Not Applicable	☐ Other	☐ Fibre Cement	☐ Other	☐ Not Applicable
	☐ Not Applicable	☒ Timber	☐ Not Applicable	

No. of existing dwellings on land which the new building is to be erected: _____

No. of dwellings to be demolished in connection to the new building: _____

Number of storeys: 1 Number of residential units: _____

BUILDER'S DETAILS

Name: _____
Licence Number: _____ ☐ Owner Builder
Address: _____
Email: _____
Phone No.: _____ Mobile No.: _____

PLUMBER'S DETAILS

Name: _____ ☐ No plumbing works being undertaken
Licence Number: _____
Address: _____
Email: _____
Phone No.: _____ Mobile No.: _____

OWNER'S DETAILSName: Warrawidge Pty LtdPostal Address: C/- PO Box 281Town: Wodonga State: VIC Postcode: 3689

Phone No.: _____ Mobile: _____

I/We the owner(s) of the property described in this application, consent to its lodgement and hereby permit any duly authorised officer of Federation Council to enter the land or premises to carry out inspections as required for the administration of the Act(s), Regulations or Planning Instrument.

Name (Print): Peter R. Chomley Capacity (Owner/Director): OwnerSignature: P. R. Chomley Date: 21/2/18

Name (Print): _____ Capacity (Owner/Director): _____

Signature: _____ Date: _____

All owners of the land to be developed **must** complete this section. If the land is owned by Crown Land, an authorized officer of the relevant department must sign the application.

If you have recently purchased the land, you must provide a Certificate of Title or Transfer Certificate showing transferor, transferee and the current Lot and DP number of the property.

If the land is owned by a private company (P/L), the signature of at least one (1) director residing in Australia is required. In the case of a public company, the signatures of three (3) directors are required, two (2) of which must reside in Australia.

REQUIRED DOCUMENTATION

Please provide four (4) copies of all documentation excluding application form unless indicated below.
Plans are to be provided in A3 size (drawn to scale). All plans must show North Point. Larger plans maybe requested.

Development Applications	Construction Certificate	Complying Development	Plumbing Application
☒ Locality Plan	☐ Locality Plan	☐ Locality Plan	☐ Site plan
☒ Site Plan	☐ Site Plan	☐ Site Plan	☐ BASIX or BCA Section J Report (where applicable)
☒ Elevations	☐ Elevations	☐ Elevations	☐ Floor Plan (existing and proposed works shown separately)
☐ BASIX or BCA Section J Report (where applicable)	☐ BASIX or BCA Section J Report (where applicable)	☐ BASIX or BCA Section J Report (where applicable)	☐ Hydraulic design (larger commercial projects)
☒ Floor Plan (existing and proposed works shown separately)	☐ Floor Plan (existing and proposed works shown separately)	☐ Floor Plan (existing and proposed works shown separately)	
☒ Statement of Environmental Effects (2 copies)	☐ Sectional plans (indicating detailed construction)	☐ Sectional plans (indicating detailed construction)	
	☐ Specifications	☐ Specifications	
	☐ Structural or Civil Engineers design	☐ Structural or Civil Engineers design	

COPYRIGHT STATEMENT:

- To the extent that the signatory to this form is the copyright owner of documents lodged with this application, you licence Council to make all documents publicly available, and further licence Council to reproduce and/or communicate all such documents for any purpose associated with the exercise of its functions, and for the purpose of complying with its obligations under the Government Information (Public Access) Act 2009 and any other applicable legislation.
- By executing this form, the signatory warrants that to the extent that he/she is not the copyright owner of any documents lodged with this application, Council is licensed by the copyright owner to use the documents lodged with this application in accordance with paragraph 1 above.
- By executing this form, the signatory indemnifies Council against all claims and actions in respect of a breach of copyright arising from any unauthorised use of any documents lodged with this application.

OFFICE USE ONLY

Application Number: _____

Date Documentation Received: _____

Total Fees \$ _____ Receipt Number: _____ Date Paid: _____

Document [Browse](#)

Development Applications	10	-	2018	-	39	-	1	Parcel	1591	ID	
Eco Resort											
Address Warrawidgee 803 Spring Drive COROWA NSW											
Property Title Lot: 3 DP: 791136 1 PARCEL											
Zoning E3 - Environmental Management Compliance N											
PCA Federation Council CNCL											
Applicant B Fryer											
Curr Owner Warrawidgee Pty Ltd											
Workflow LOCA Local Development Est Cost 10000000											
Lodged 23/02/2018 Due Date 04/04/2018 Payments \$16095.00											
Officer KLAR K D Larnach Conditions 0											
Ext Ref											

Determination											
Code ACTI Active Date 23/02/2018 L Local											
Appeal Date											

Current Status											
Action NOT Neighbour Notify - Letters Officer JNAG J S Nagle											
Opened 07/03/2018 Closed 23/03/2018 File Location											

Created 2018-02-23 09:03:08 Modified 2019-04-24 16:35:24 Operator 61428 Megan Leahy

Favourites

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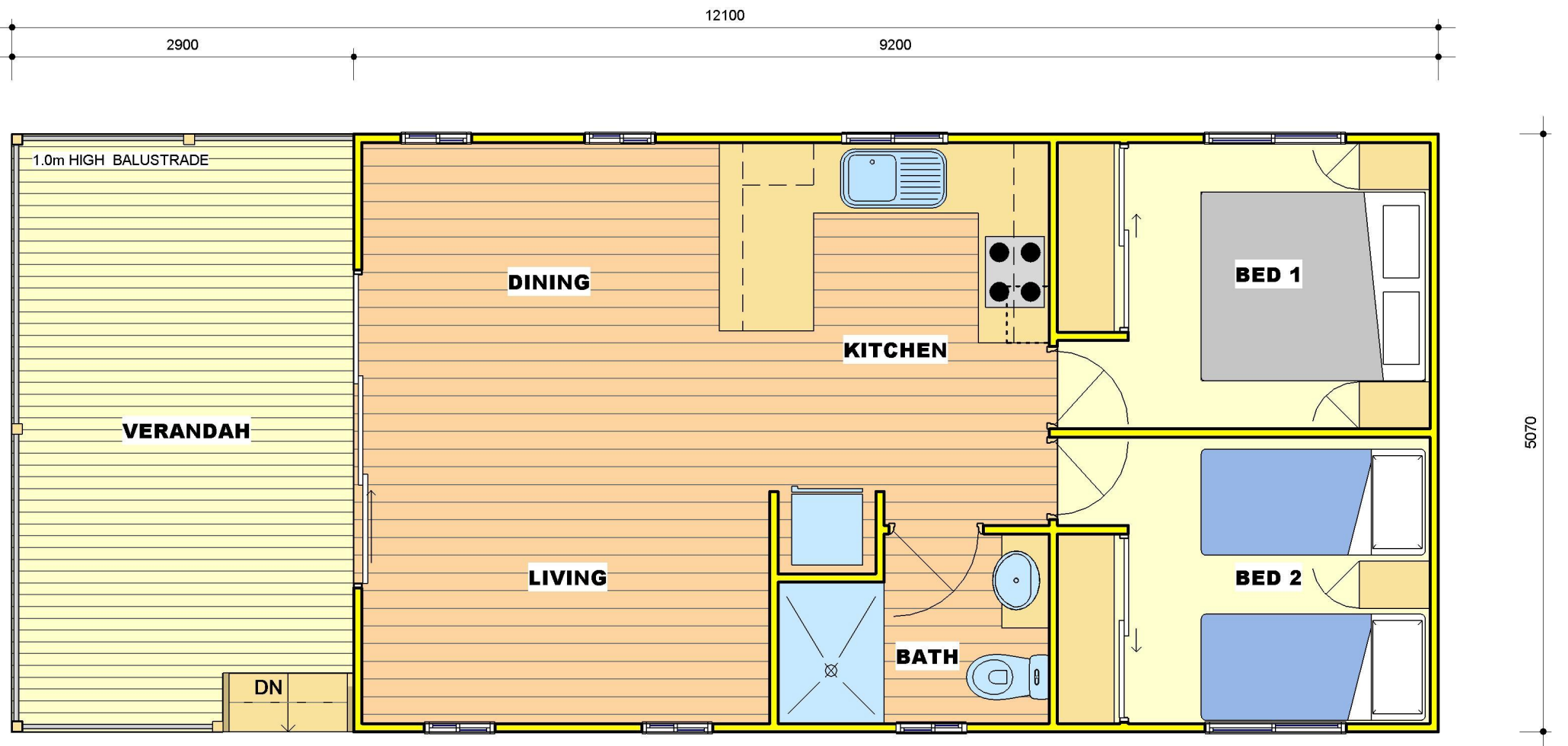
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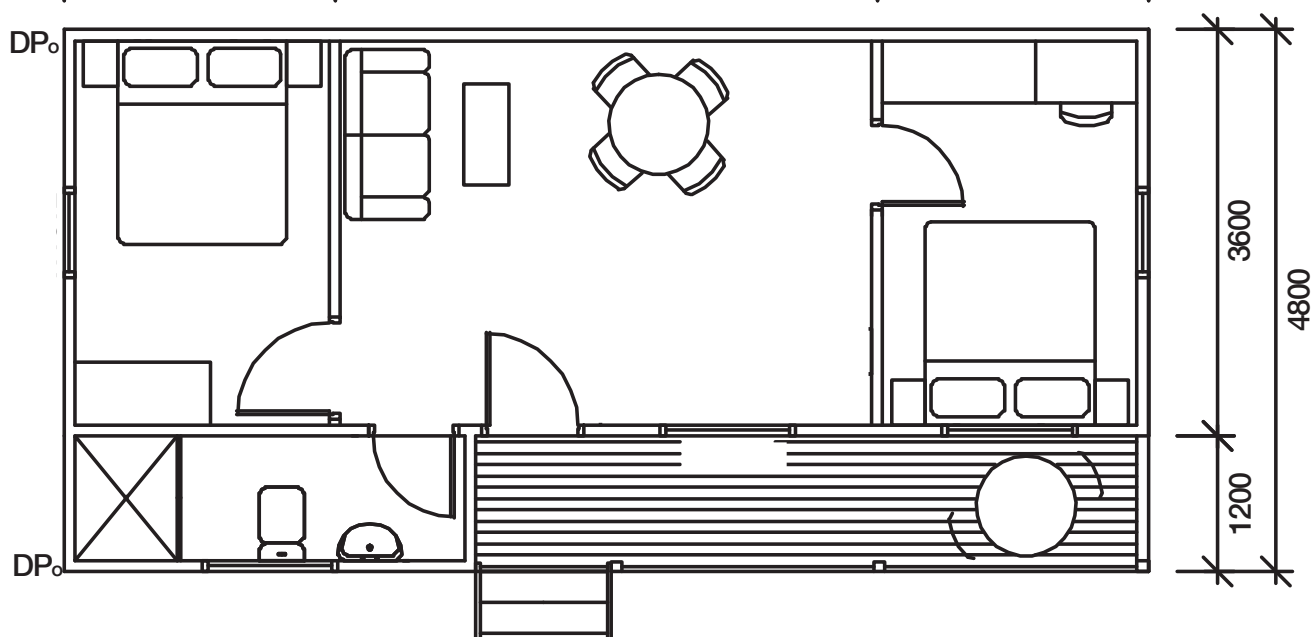
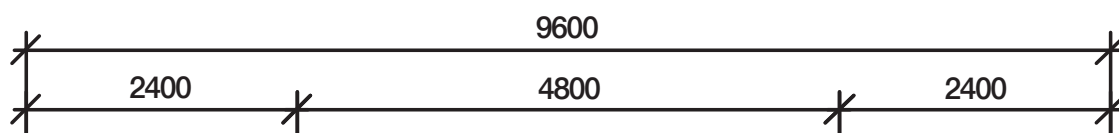
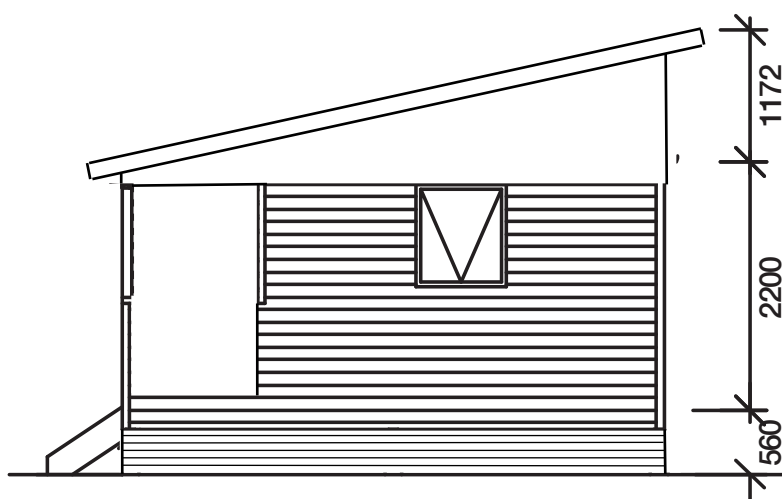
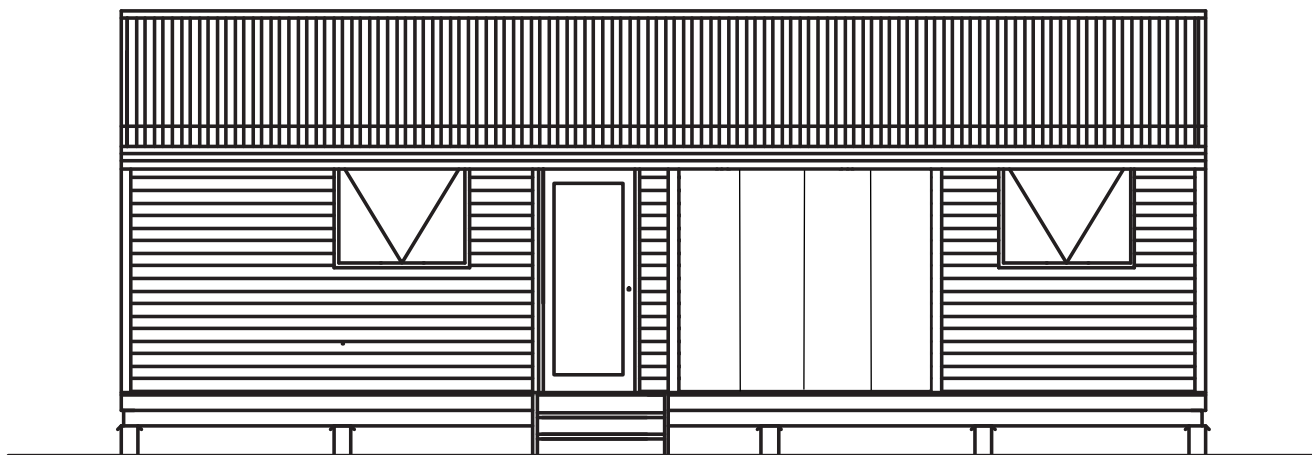
[Add Certificate](#)[Memos](#)[Certificates](#)[Tracking](#)[Tracking View](#)[Conditions](#)[Conditions View](#)[Property Links](#)[Property Links Vie](#)[Name Links](#)[Name Links View](#)[Proposal](#)[Proposal View](#)[Payment Requests](#)[Payment Requests V](#)[Submissions](#)[DoP Attributes](#)[DoP Attributes Vie](#)[SEPP Attributes](#)[SEPP Attributes Vi](#)

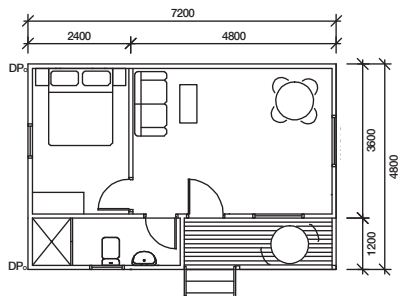
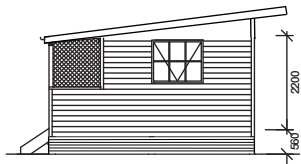
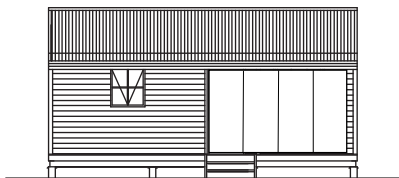


Yarrawonga Manufactured Housing
 Lot 11 McCarthy Street, Mulwala 2647 nsw
 P: 03 5744 2388 F: 03 57442744
 W: www.yarrahousing.com.au
 E: info@yarrahousing.com.au

The Henty Villa **12.1m x 5.07m**







Price List - Cottage Series

Classic Beach & Country Style 2015/16

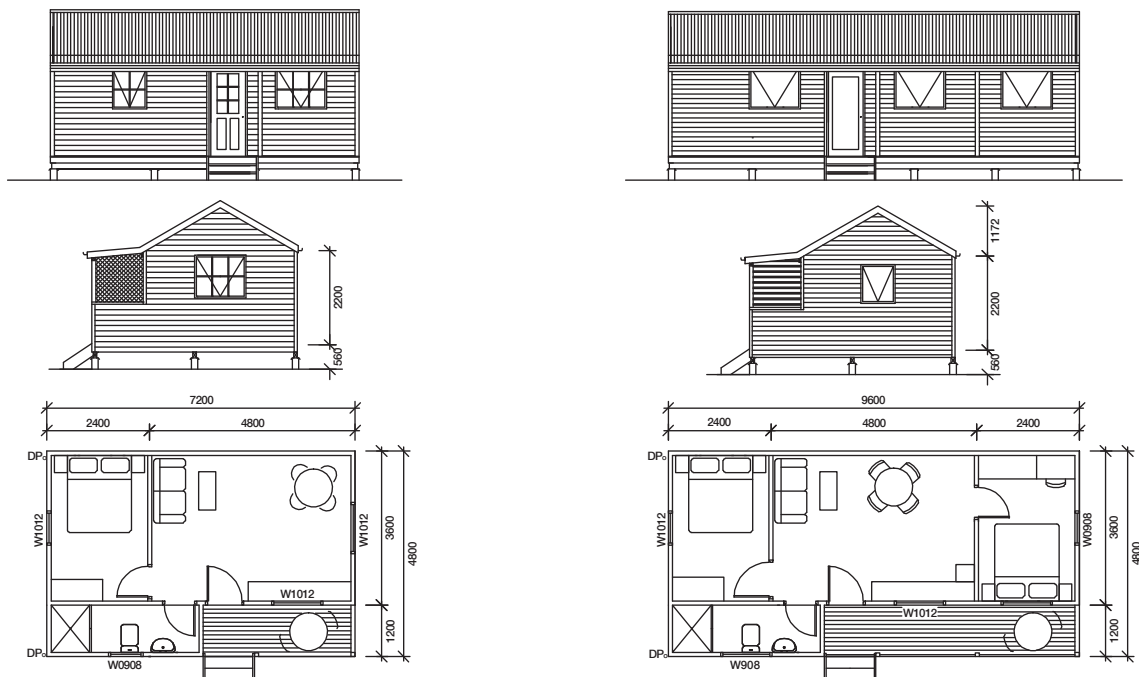
(All prices are in Australian Dollars and include GST)

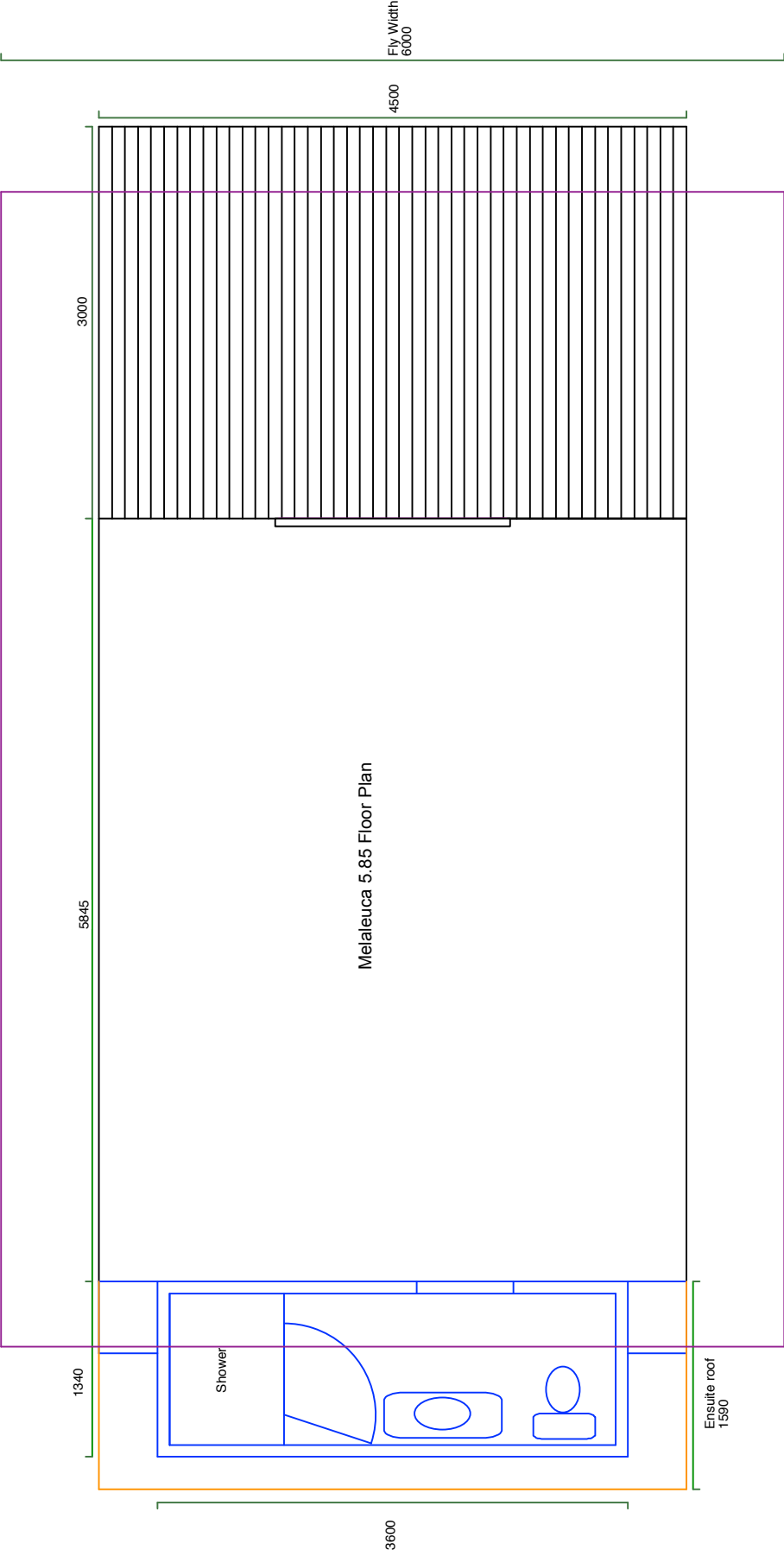
Size (metres)		Price (AUD)		Options			
Width	Depth	Kit*	or Supply & Erect	Windows	interior lining for kits architraves & skirtings	interior lining, installed, architraves & skirtings	Guttering, downpipes for kits
Cottage 1							
7.2m	4.8m	\$30,363	\$44,417	4	\$2,686	\$5,909	\$948
Cottage 2							
9.6m	4.8m	\$35,086	\$52,636	5	\$2,193	\$7,022	\$1,139

- Note:**
- * Erected price supplied is constructed to lock-up stage and includes footings, treated subfloor frame, sheet flooring, treated wall frame, dressed/primed roof frame with fibre cement ceiling lining, standard windows/doors, corrugated roofing/capping with blanket insulation and stairs up to 3 treads.
 - * Kit-supply is ready to construct to lock-up stage with pre-assembled frame sections, roof frame, standard windows/doors and all materials supplied for external finish with stairs up to 3 treads.
 - * Overall sizes include 1.2m verandah with treated pine decking boards. (Hardwoods P.O.A.)
 - * All prices are for Sydney Metropolitan area. (Other areas P.O.A.)

Additional Options

Eaves - rear & sides 450mm	1 bed \$1,430 2 bed \$1,980
Bathroom Fitout (Includes plumbing/drainage*, waterproofing, tiling in shower recess to 2m high and skirting tile to remainder. Includes PC \$1750.00 for toilet, shower screen, 600mm vanity, taps, rose, waste, basin mixer, toilet roll holder, towel rail) *Plumbing/drainage allowance is for 10m to service connection	\$14,476
Lights (Includes labour and materials. PC Light Fitting \$40.00)	\$191 each
Powerpoints (Includes labour and materials.) (Power supply by site investigation)	\$191 each
Hot Water Service, Planning/Approvals, Painting, Stormwater Management	P.O.A.

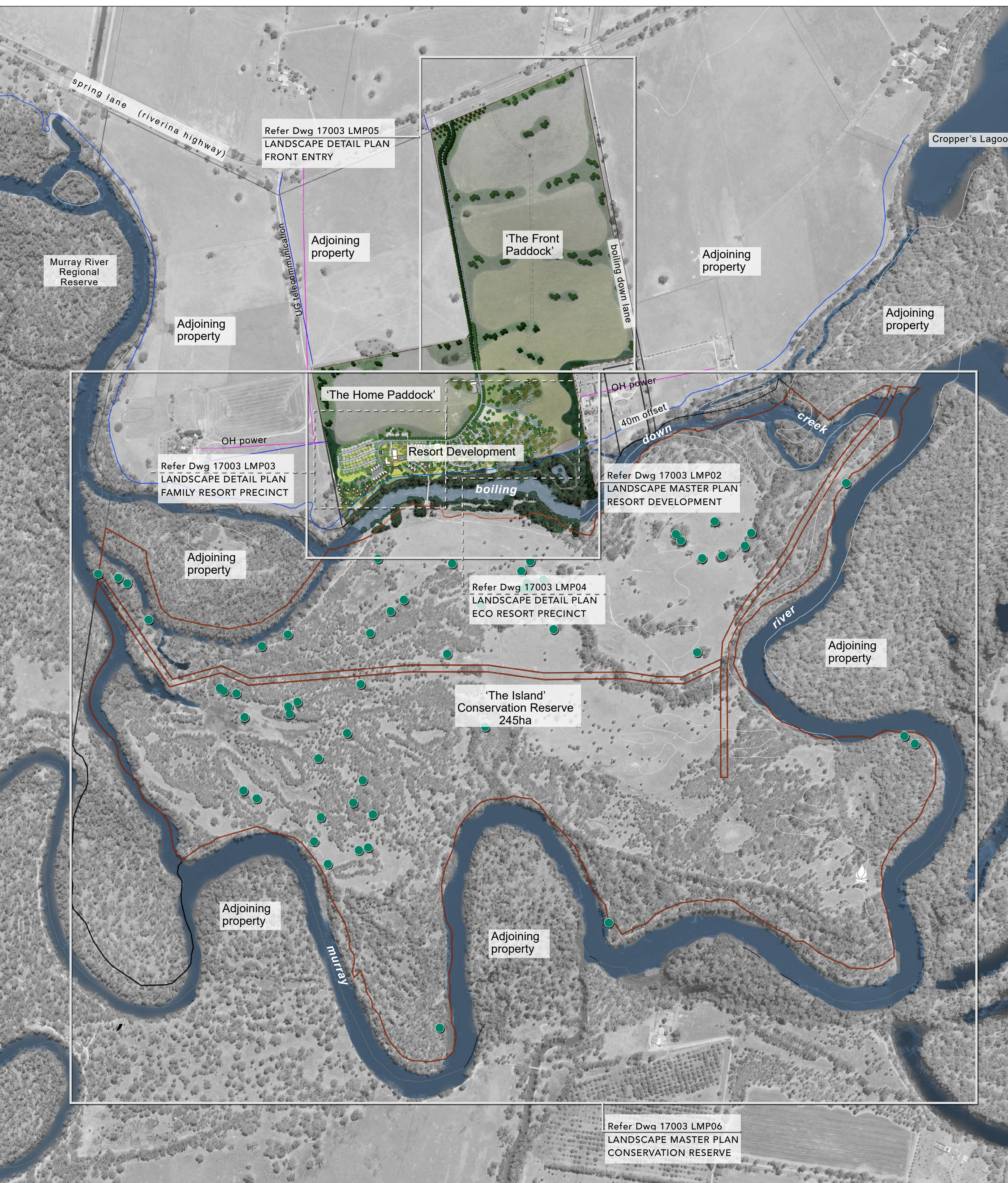






KEY

- kitchen / mess hall / meeting space
- ablutions block 16 x 8.5m
- 8 person lodge = 6 14.5 x 5.5m
- 3 bed cottage = 13 14 x 5.5m
- 2 bed cottage = 17 10 x 6m
- 2 bed eco-cottage = 33 10 x 6m
- safari tent = 14 10.5 x 4.5m
- eco-retreat studio = 22 7 x 5m
- caravan sites = 60 10 x 10m
- pedestrian path
- waste water treatment site
- potable water treatment
- car spaces
- road reserve crushed granite
- stage boundary
- 1 BBQ and camp kitchen
- 2 stage / viewing deck
- 3 pool
- 4 possible cafe / restaurant conversion of old farm house (stage 4)
- 5 playspace
- 6 shearing shed partly demolished for undercover area
- 7 existing cattle yards retained
- 8 pool / day spa / gym
- 9 6m wide primary access road
- 10 reception and managers residence



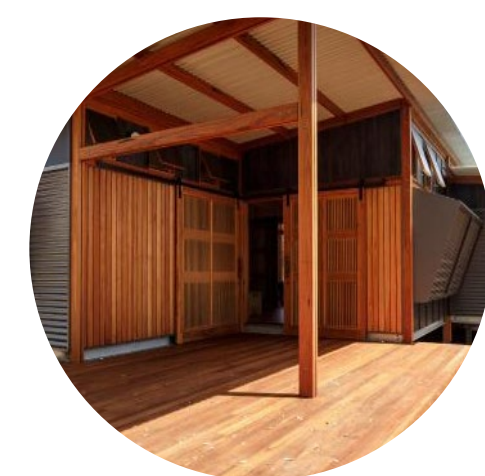
Limited palette of high quality materials which reference the natural landscape setting



Unified design of all buildings, including amenities, service buildings and accommodation



Contemporary and cohesive use of materials and design across the site



A modern take on traditional rural forms

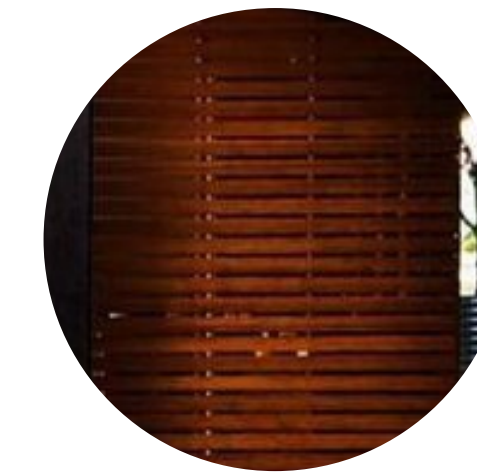


Custom designed manufactured accommodation

BUILT FORM



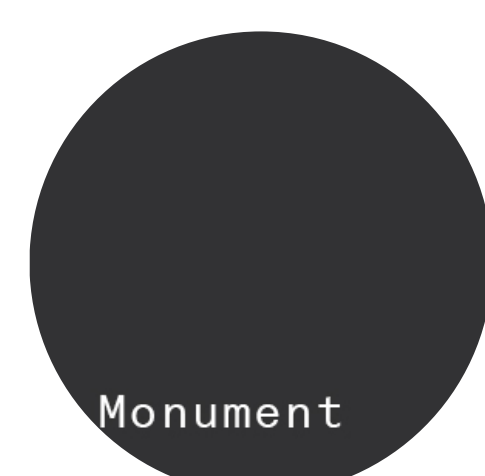
Cement sheet cladding



Recycled fire-rated recycled timber (or similar) cladding

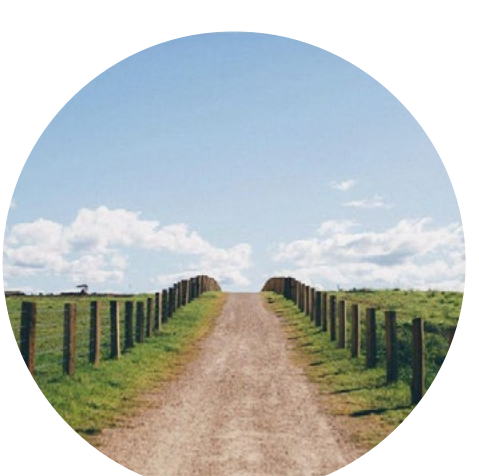


Powder-coated steel / colorbond



Monument

Dark grey coloured steel (e.g. Colorbond 'Monument')



Raw timber fencing

MATERIALS AND COLOURS

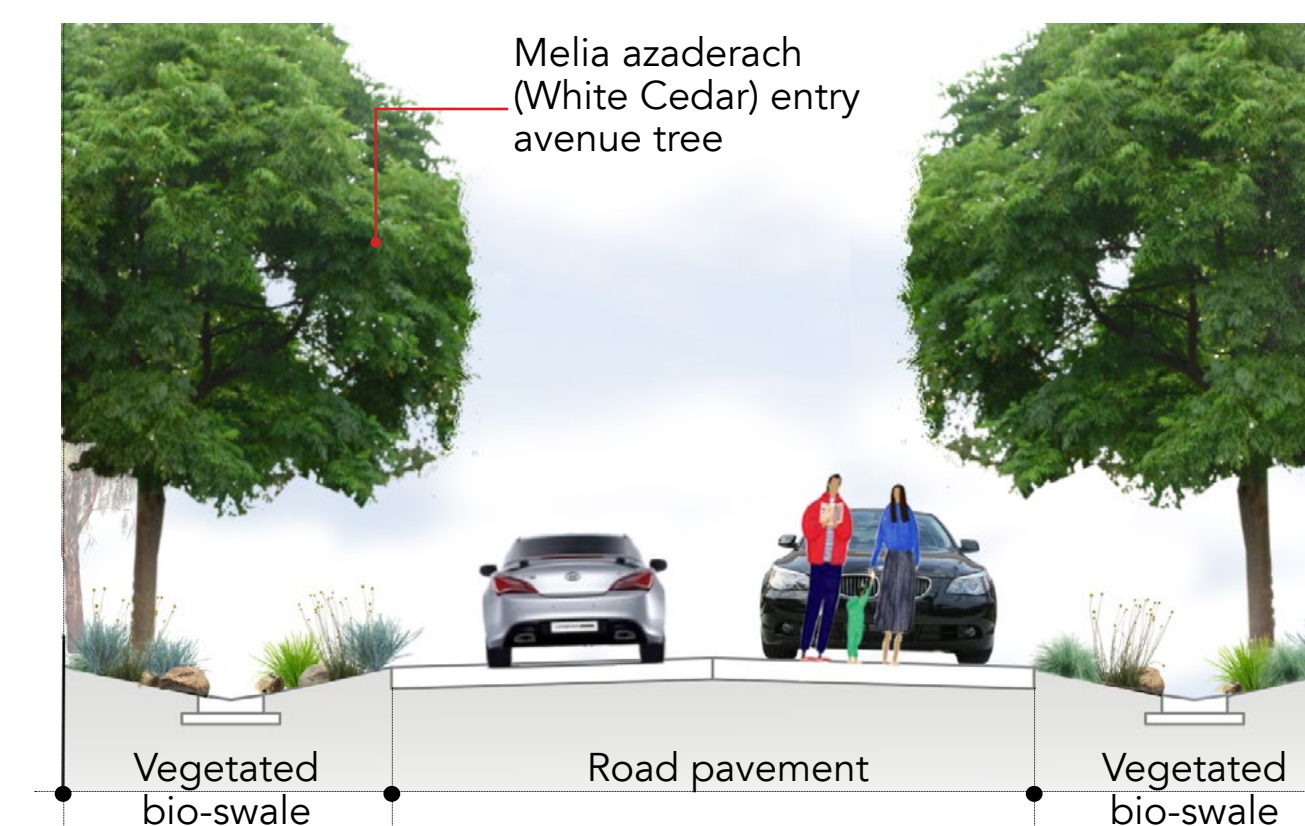
VISION

Warrawidgee Island is a conservation resort on the Murray River providing unique experiences to get away from it all and discover nature.

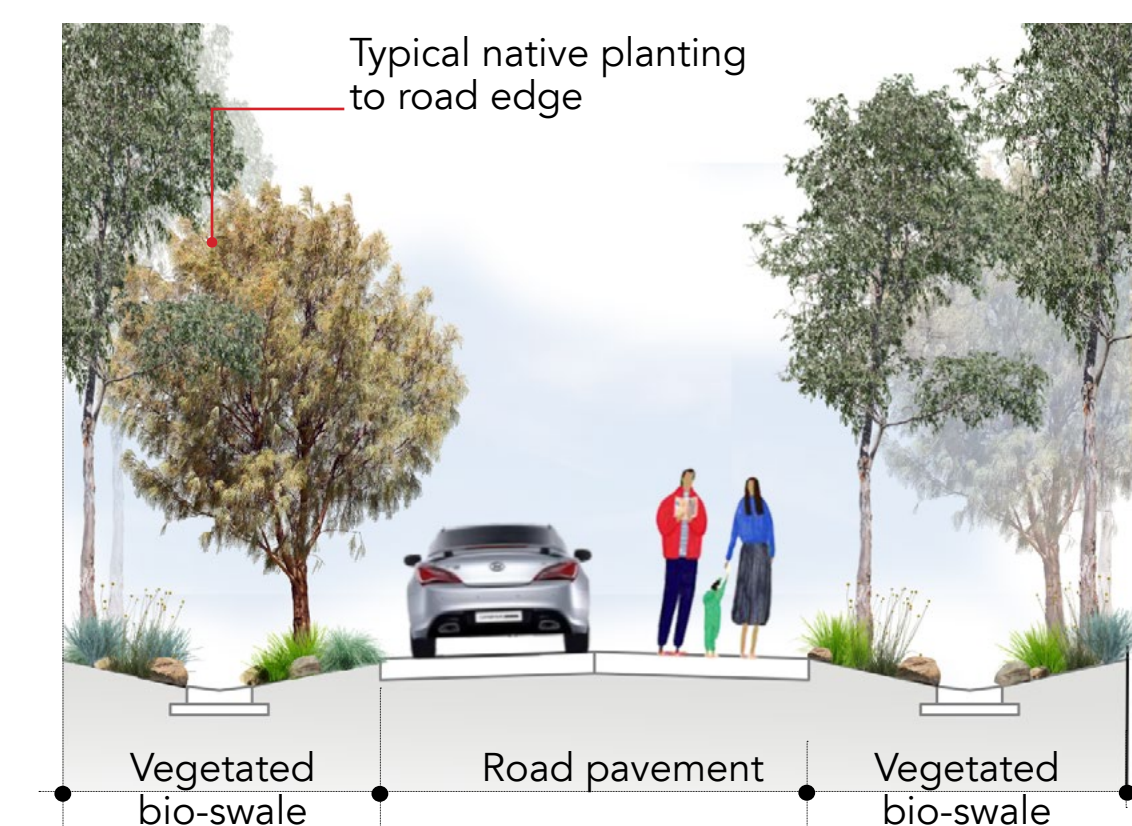
The property is a working cattle farm and demonstrates tourism, conservation and agriculture working hand in hand.

The resort integrates seamlessly with the environment. Built form is sensitively sited and designed using local, natural materials and best practice ESD principles. The landscape is being rehabilitated through sustainable farming practices and land management. Habitat for threatened species including Stone Bush Curlew, Barking Owl and Squirrel Glider is being protected and restored.

The Warrawidgee Island experience is about slowing down and taking the time to appreciate our natural world - and helping conserve it, for future generations, at the same time.



8m wide road reserve



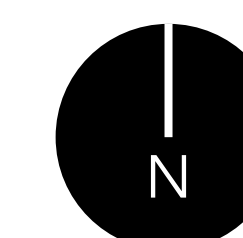
6m wide road reserve

TYPICAL ROAD CROSS SECTIONS

WARRAWIDGEE ISLAND CONSERVATION RESORT DEVELOPMENT, COROWA NSW

LANDSCAPE CONTEXT AND APPROACH

75 150 225 300 375m 1:7500@A1
150 300 450 600 750m 1:15000@A3



Date: February 2018
For: DISCUSSION

Dwg no.: 17003 LMP 01
Rev: -

CONCEPT DESIGN ONLY. NOT TO BE USED FOR CONSTRUCTION PURPOSES.

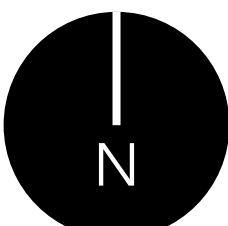


- KEY**
- Existing tree to be retained
 - Resort entry trees
e.g. *Melia azaderach*
 - Larger native trees
e.g. *Eucalyptus leucoxylon*
 - Smaller native trees
e.g. *Allocasuarina luehmannii*
 - Larger exotic trees
e.g. *Quercus rubra*
 - Smaller exotic trees
e.g. *Parrotia persica*
 - Shrub and tuft planting
e.g. *Acacia* & *Eremophila* sp
 - Tuft planting
e.g. *Dianella* & *Poa* sp.
 - Grey Box Woodland revegetation
 - River Red Gum Forest revegetation
 - Grassing
 - Native grassing
 - Timber decking
 - Carparks
 - Path
- Screen planting to boundary
 - Possible future agricultural / environmental use
 - Wetland path & jetty
 - Playspace
 - Pool, pool terrace & adjacent grass area
 - Stage / viewing deck & grass amphitheatre
 - Screen planting between Cottages & Lodge
 - Entry avenue tree planting
 - Screen planting between Lodge & Eco-cottages
 - Pool, day spa and gym
 - Screen planting between Eco-cottages & road
 - Revegetation with Grey Box Woodland species to augment existing

WARRAWIDGEE ISLAND CONSERVATION RESORT DEVELOPMENT, COROWA NSW

LANDSCAPE MASTER PLAN RESORT DEVELOPMENT

10 20 30 40 50m 1:1000@A1
20 40 60 80 100m 1:2000@A3



Date: February 2018
For: DISCUSSION
Dwg no.: 17003 LMP 02
Rev: -
CONCEPT DESIGN ONLY. NOT TO BE USED FOR
CONSTRUCTION PURPOSES.



- ① Sensitive design with minimal hard paving and planting between sites to create privacy and minimise noise / visual impact.



- ② Natural world themed adventure playspace



- ③ Kitchen garden to supply cafe and provider with organic and site grown produce



- ④ Contemporary swimming pool with enclosed terrace space and shade structure



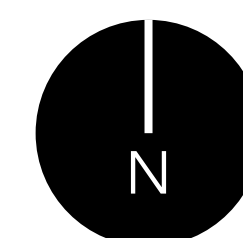
- ⑤ Boardwalk access to creek edge



WARRAWIDGEE ISLAND CONSERVATION RESORT DEVELOPMENT, COROWA NSW

LANDSCAPE DETAIL PLAN FAMILY RESORT PRECINCT

5 10 15 20 25m 1:500@A1
10 20 30 40 50m 1:1000@A3



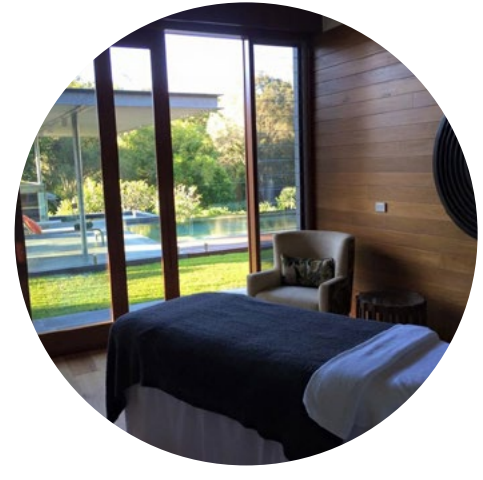
Date: February 2018
For: DISCUSSION

Dwg no.: 17003 LMP 03
Rev: -

CONCEPT DESIGN ONLY. NOT TO BE USED FOR CONSTRUCTION PURPOSES.



- 1 Opportunities for communal gathering around firepits at 'The Common'



- 2 Day spa with views out to the surrounding landscape



- 3 Contemporary swimming pool and shade structure



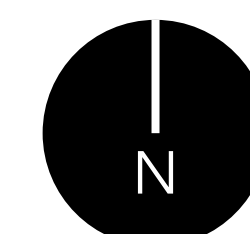
- 3 Contemporary swimming pool with infinity edge



- 4 Grey Box Woodland buffer planting to eastern boundary

WARRAWIDGEE ISLAND CONSERVATION RESORT DEVELOPMENT, COROWA NSW LANDSCAPE DETAIL PLAN ECO-RESORT PRECINCT

5 10 15 20 25m 1:500@A1
10 20 30 40 50m 1:1000@A3



Date: February 2018
For: DISCUSSION

Dwg no.: 17003 LMP 04
Rev: -

CONCEPT DESIGN ONLY. NOT TO BE USED FOR CONSTRUCTION PURPOSES.

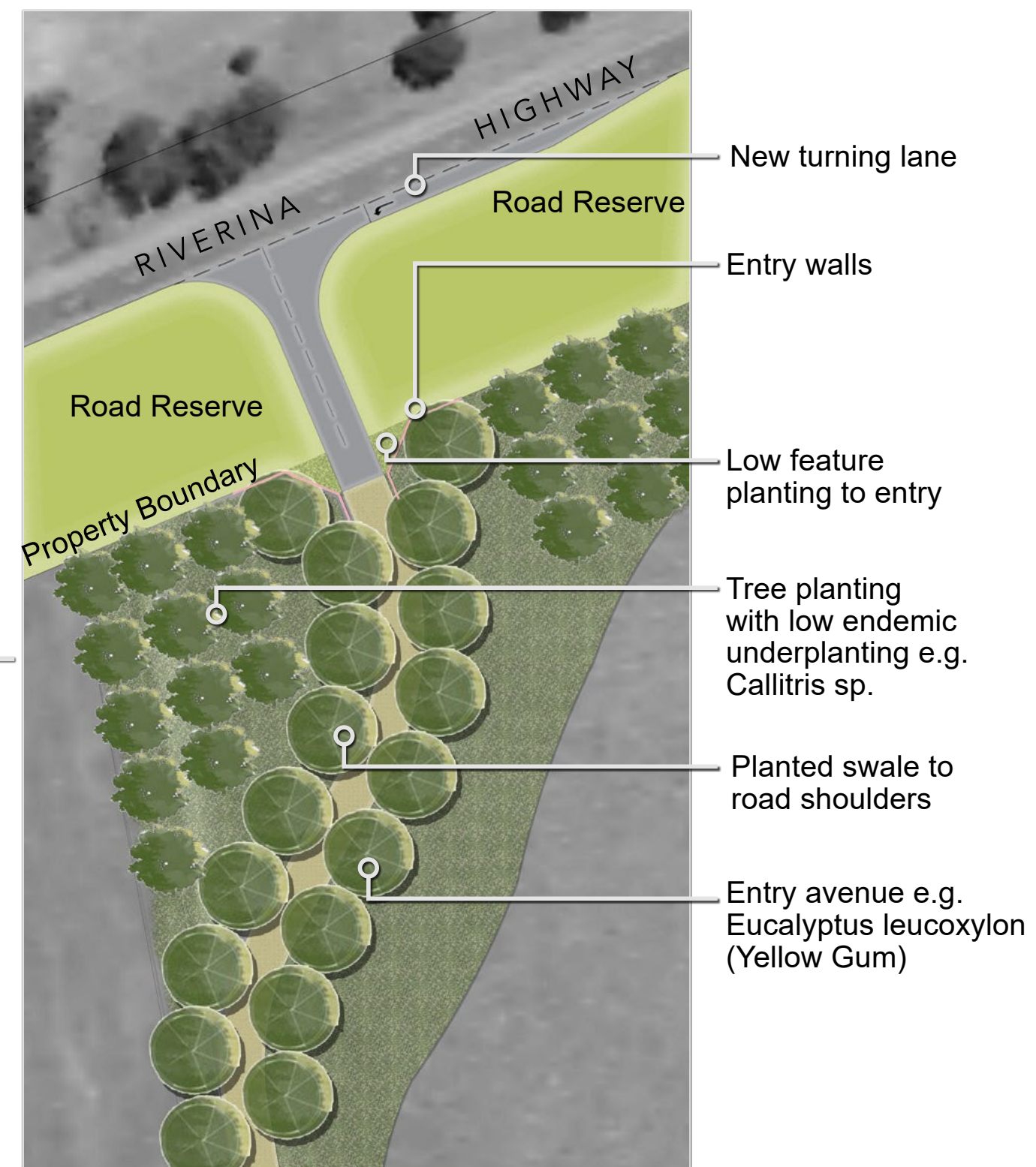


fiona slade
LANDSCAPE ARCHITECT

© Fiona Slade Landscape Architect 2018



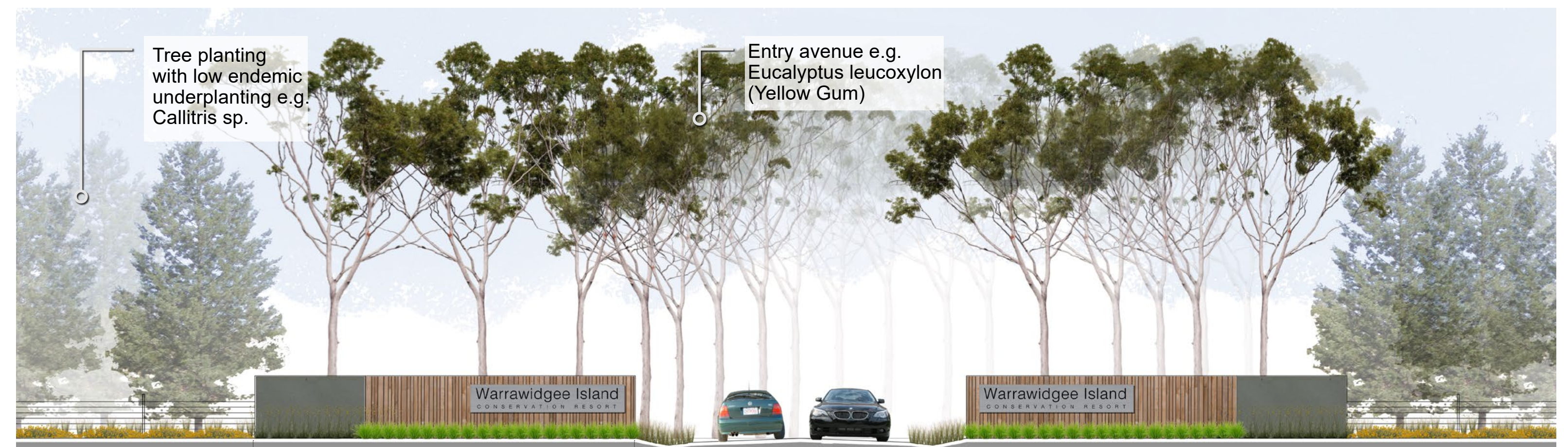
CONTEXT PLAN
NOT TO SCALE



DETAIL PLAN
NOT TO SCALE



PRECEDENT IMAGES



Riverina Highway
Rural fence and formal native planting

Entry Wall and Sign
Angled 1.7m high timber clad and rendered entry wall with signage

Entry Road
Crushed granite construction with vegetated bio-swale to shoulders

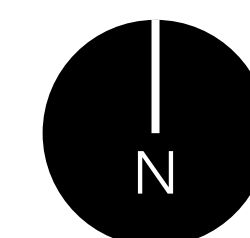
Entry Wall and Sign
Angled 1.7m high timber clad and rendered entry wall with signage

Riverina Highway
Rural fence and formal native planting

TYPICAL ELEVATION
1:200 @A3

WARRAWIDGEE ISLAND CONSERVATION RESORT DEVELOPMENT, COROWA NSW

DETAIL LANDSCAPE PLAN ENTRY EXPERIENCE



Date: February 2018
For: DISCUSSION
Dwg no.: 17003 LMP 05
Rev: -
CONCEPT DESIGN ONLY. NOT TO BE USED FOR CONSTRUCTION PURPOSES.

NOTES

- 1

The Bridge

 - ▶ Create a key orientation node for trails, walks and hikes with directional and interpretive signage.
 - ▶ Investigate requirements for cattle yards should grazing continue on the island.
- 2

The Levee Bank

 - ▶ Create a bike path along the existing levee bank.
 - ▶ Provide a rest stop with interpretive signage at the cultural heritage site.
 - ▶ End the path at the confluence of the river and the creek.
- 3

River / Creek Eastern Confluence

 - ▶ Provide canoe launching facilities for canoe paths.
 - ▶ Provide interpretive signage about erosion control and ecology of the creek.
- 4

The Crossing

 - ▶ Construct new creek crossing.
 - ▶ Provide directional signage at junction points.
- 5

Day Camp 1

 - ▶ Develop a day use site with controlled vehicular access.
 - ▶ Provide walking trail connection to beach and canoe launch area and back through wetlands.
 - ▶ Consider birdhide if appropriate.
- 6

'Hearth' cultural heritage site

 - ▶ Provide appropriate interpretive signage.
 - ▶ Fence off area as required.
- 7

Degraded landscape

 - ▶ Area of high weed load which may be grazed periodically harder than others.
- 8

High conservation value landscape

 - ▶ Consider guided walk or '4WD safari' through the area.
 - ▶ Focus on interpretation and habitat protection for squirrel glider and Barking Owl.
 - ▶ Area to be excluded from grazing.
 - ▶ Consider creating a fox exclusion zone to establish a Bush Stone Curlew community.
 - ▶ Canoe launch area at the beach.
- 9

Nocturnal Big Tree Walks

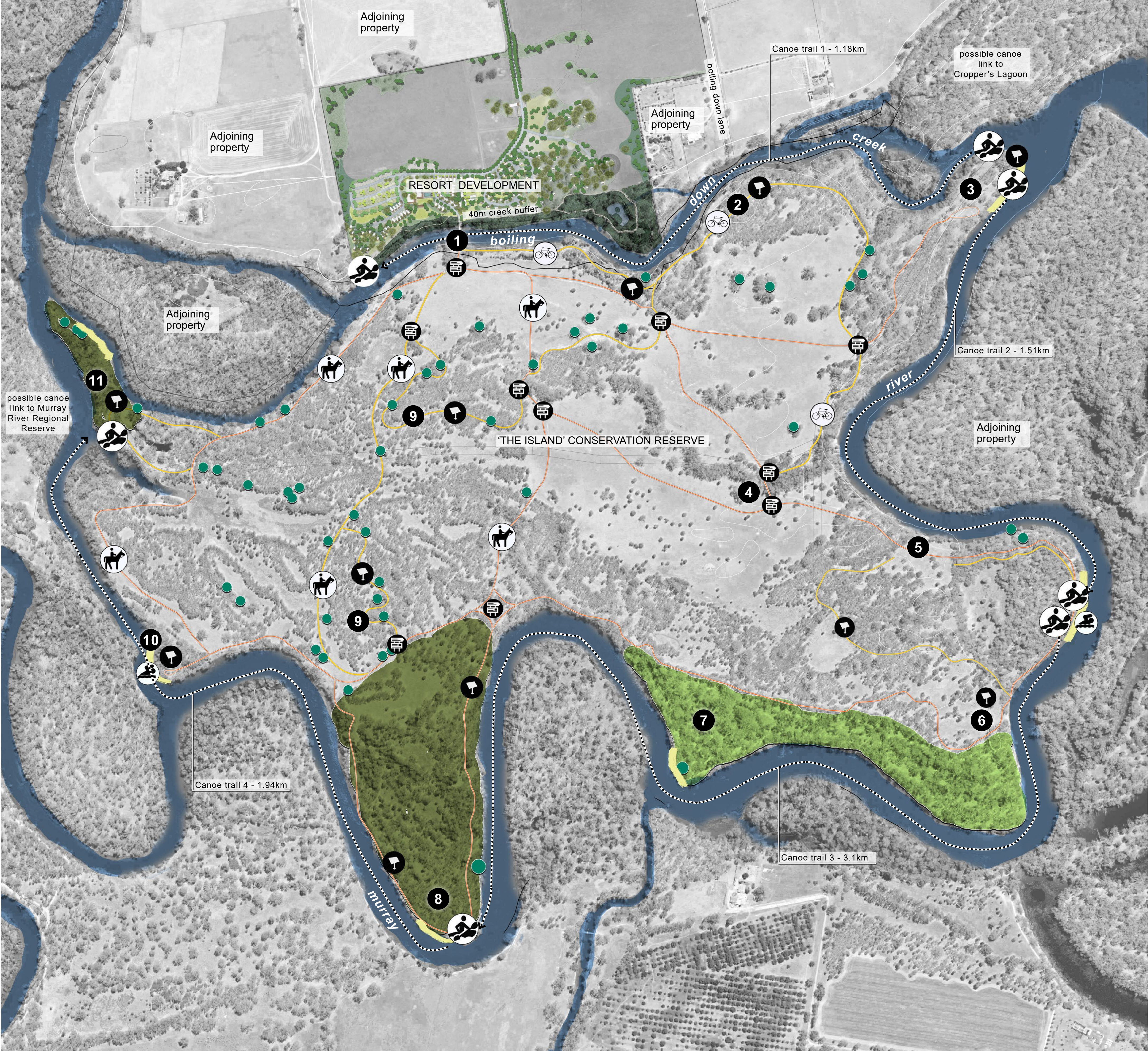
 - ▶ Potential 'nocturnal' walking trail past large hollow bearing trees.
 - ▶ Include interpretive signage about for arboreal mammals and Barking Owl.
- 10

Day Camp 2

 - ▶ Develop a day use site with controlled vehicular access.
 - ▶ Provide walking trail connection to beach.
 - ▶ Include interpretive signage about cod breeding program.
- 11

- ▶ High conservation value landscape
 - ▶ Area to be excluded from grazing.
 - ▶ Canoe launch area.
 - ▶ Interpretive signage about ecological values and fauna it supports.

Refer to report prepared by Red Gum Environmental Consulting for environmental management recommendations.



KEY

-
- Degraded landscape
-
- Conservation landscape
-
- Existing trail
-
- Proposed trail
-
- 'Big' tree
-
- Canoe launch area
-
- Horse trail
-
- Cycle trail
-
- Swimming /fishing beach
-
- Interpretive signage
-
- Directional signage
-
- Canoe trail



Furniture constructed from site materials

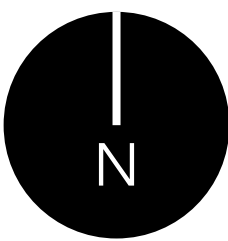


Habitat conservation and management



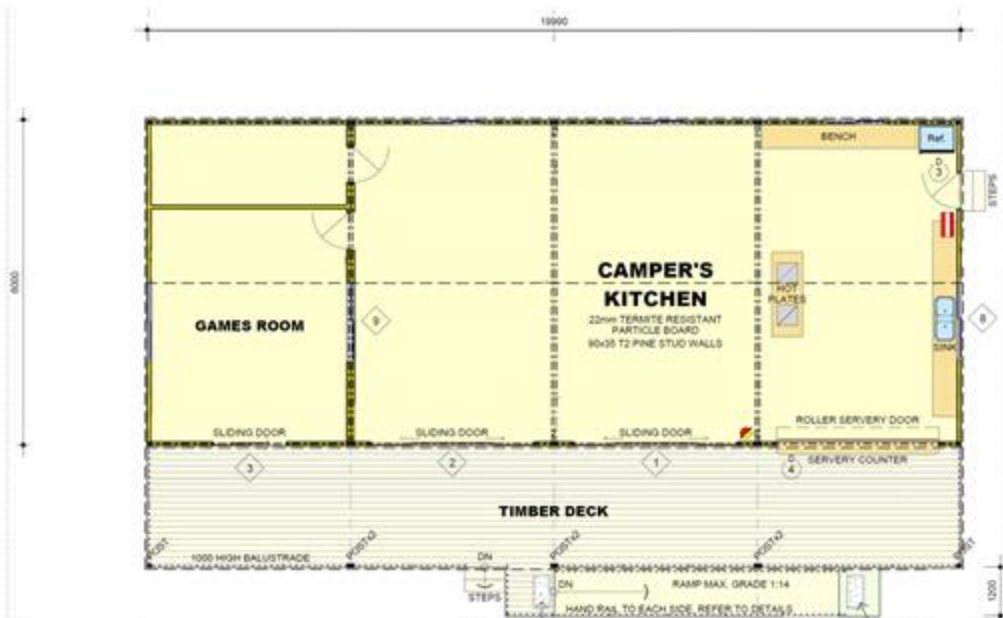
Way-finding and interpretive signage

WARRAWIDGEE ISLAND CONSERVATION RESORT DEVELOPMENT, COROWA NSW
LANDSCAPE MASTER PLAN CONSERVATION RESERVE



Date: February 2018
For: DISCUSSION
Dwg no.: 17003 LMP 06
Rev: -
CONCEPT DESIGN ONLY. NOT TO BE USED FOR CONSTRUCTION PURPOSES.



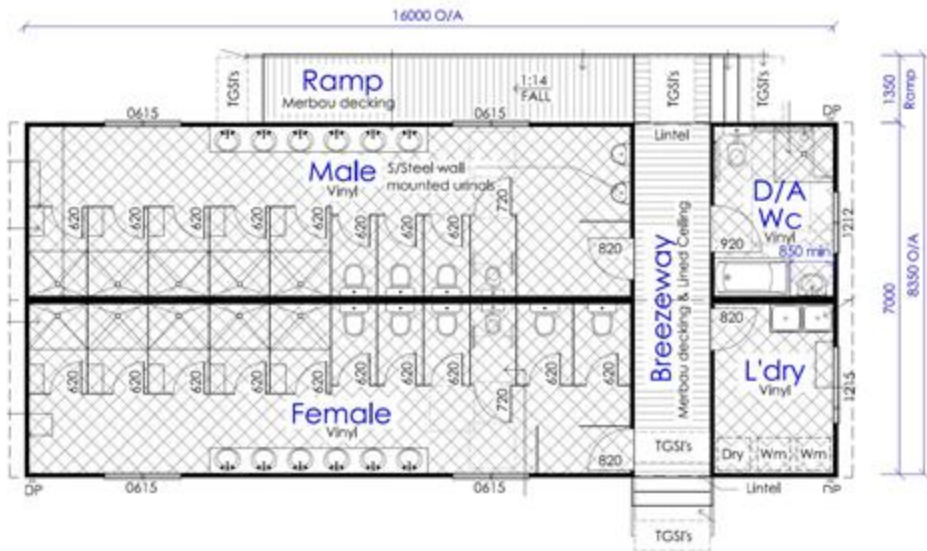


Campers Kitchen
19.99m x 8m



KEY

-  kitchen / mess hall / meeting space
-  ablutions block
16 x 8.5m
-  8 person lodge = 6
14.5 x 5.5m
-  3 bed cottage = 13
14 x 5.5m
-  2 bed cottage = 17
10 x 6m
-  2 bed eco-cottage = 33
10 x 6m
-  safari tent = 14
10.5 x 4.5m
-  eco-retreat studio = 22
7 x 5m
-  caravan sites = 60
10 x 10m
-  pedestrian path
-  waste water treatment site
-  potable water treatment
-  car spaces
-  road reserve crushed granite
-  stage boundary
- 1** BBQ and camp kitchen
- 2** stage / viewing deck
- 3** pool
- 4** possible cafe / restaurant conversion of old farm house (stage 4)
- 5** playspace
- 6** shearing shed partly demolished for undercover area
- 7** existing cattle yards retained
- 8** pool / day spa / gym
- 9** 6m wide primary access road
- 10** reception and managers residence



Toilet Block
10 Shower & Disabled

Aboriginal Cultural Heritage Due Diligence Advice

Warrawidgee Island, Spring Drive,
Corowa NSW

Prepared for
Warrawidgee Pty Ltd
20th February 2018



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Environmental Consulting



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TABLE OF CONTENTS

1	Introduction	3
2.	Background	3
3.	Description of Proposed Work.....	5
4	The Due Diligence System.....	7
4.1	Site Records	8
4.2	Landscape Features	9
4.3	Aboriginal People in the Region	10
4.4	Regional Archaeology	11
5	Aboriginal Community Consultation	12
6	Field Survey	13
6.1	Approach	13
6.2	Results	13
6.3	Survey Coverage & Effectiveness.....	13
6.4	Predictive Assessment of Likelihood of Sites within the Study Area	14
7	Recommendations & Contingencies	20
7.1	Recommendations:	20
7.2	Contingencies:	22
8	REFERENCES	23

LIST OF FIGURES

Figure 1: Project Location – “Warrawidgee”, Spring Drive, Corowa NSW.....	4
Figure 2: Proposed works – “Warrawidgee”, Spring Drive, Corowa NSW.....	6
Figure 3: Generic Due Diligence process in NSW	7
Figure 3: AHIMS and VAHR recorded sites within 10km of the site.....	9
Figure 4: Aboriginal Groups (Tindale, 1974)	10
Figure 5: Landforms Mapped for Survey Coverage Data.....	16
Figure 6: Survey Route	17
Figure 7: Works exclusion zone	21

1 INTRODUCTION

Warrawidgee Pty Ltd are proposing development of a resort facility that is respectful of the environment, Aboriginal cultural heritage and delivers a unique opportunity for visitors to engage in various passive recreational pursuits.

This report documents an assessment of the potential for the project to have an impact on Aboriginal objects or places. The assessment finds that there are no previously recorded Aboriginal objects within the project area, three (3) were located during archaeological survey, however it is not predicted that significant potential exists for undiscovered Aboriginal sites to be impacted. This largely relates to the extent of previous ground disturbance in the area proposed for development and the fact that no significant development is proposed for the Murray River floodplain portion of the site.

The advice and reporting provided here follows the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (DECCW, 2010a). In following these requirements, it has been issued to Warrawidgee Pty Ltd for lodgement with their Development Application to the determining authority. The documentation should be retained for 5 years as it may provide for a defence against prosecution in the event of unanticipated harm.

The work has been prepared by Damian Wall (Red-gum Environmental Consulting Pty Ltd). Damian holds the relevant qualifications for undertaking formal archaeological assessment in New South Wales (as set out in the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b).

2. BACKGROUND

The project site is known as 'Warrawidgee', and is located approximately 8 km west of Corowa, on Spring Drive (Riverina Highway). The land of interest is known as Lot 3 DP791136 and is made up of two parcels with a total area of 316.2 ha.

The current Warrawidgee farm in its entirety, consists of land on both north and south sides of Spring Drive extending from Spring Drive to the Murray River and includes Boiling Down Creek (**Figure 1**). The current group of owners purchased the land in December 2007 and have leased out the farm land on the northern block to Riverina Dairy, while retaining the balance of the land south of Spring Drive for small-scale farming and general land management.

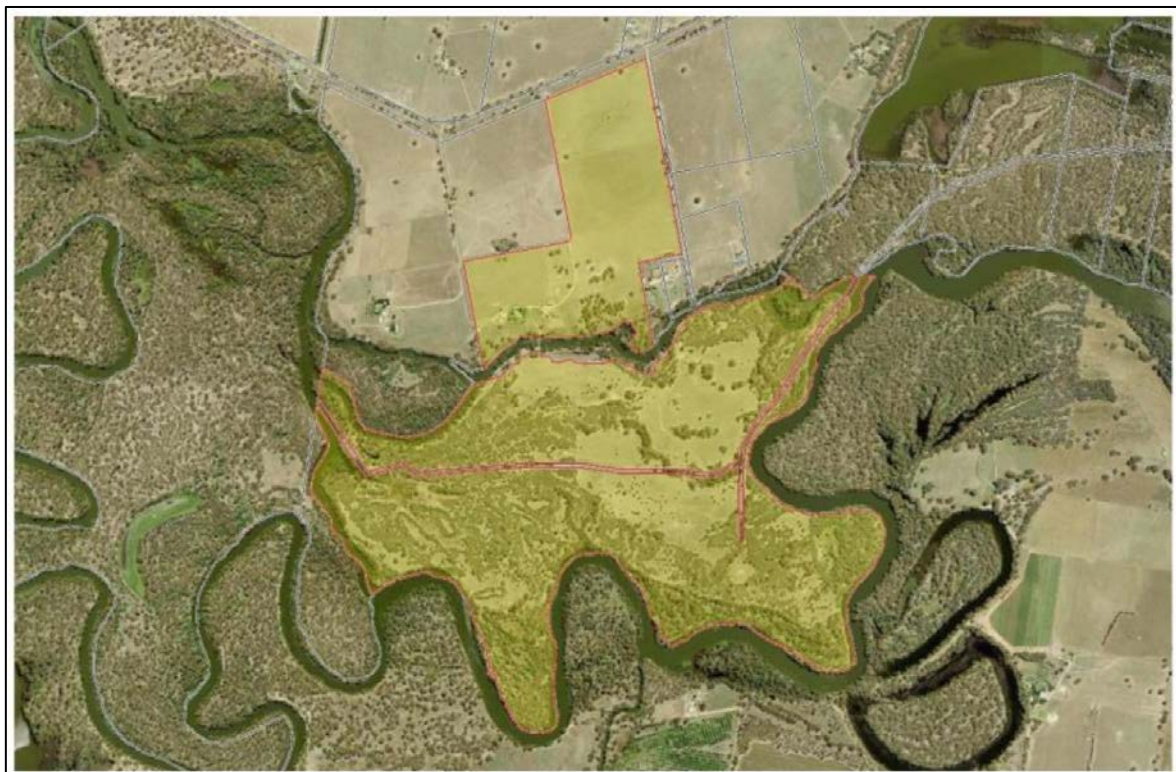
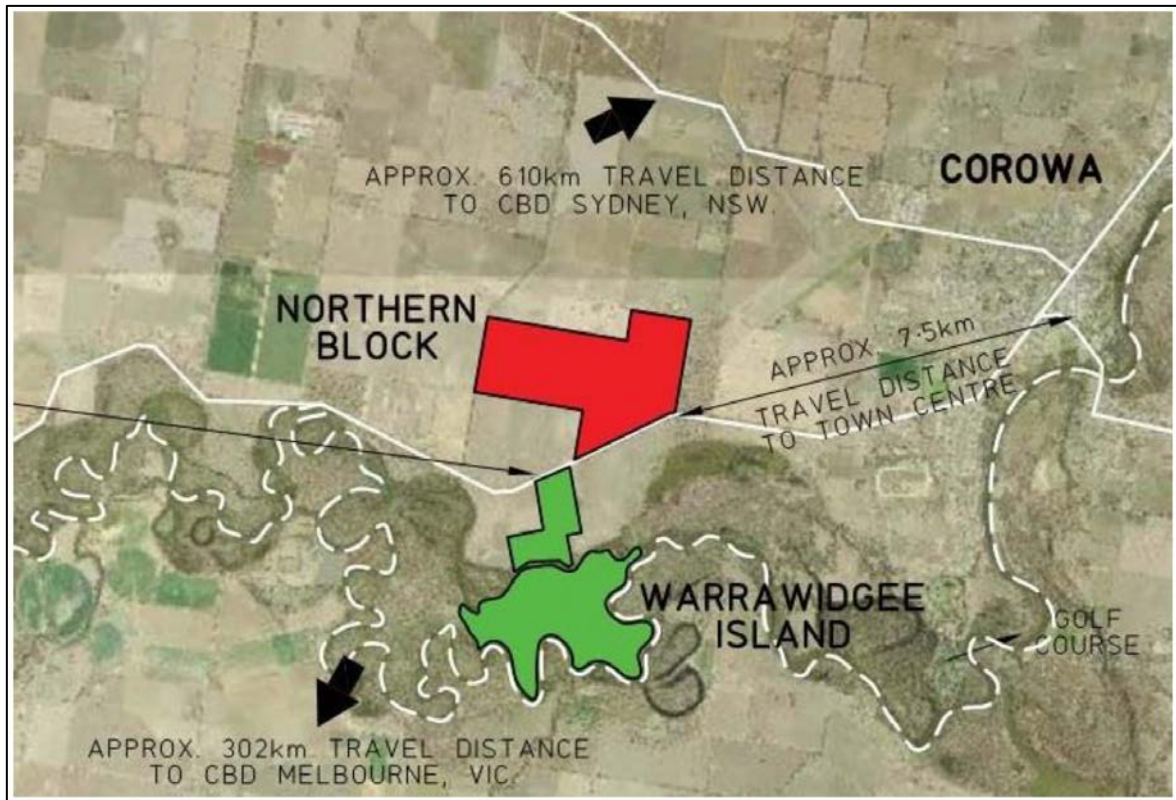


Figure 1: Project Location – “Warrawidgee”, Spring Drive, Corowa NSW

3. DESCRIPTION OF PROPOSED WORK

The Owners and acquaintance's during this time have enjoyed holidaying and recreational pursuits on the property since 2007. It is this land south of Spring Drive that is the focus of the proposed eco-tourist development. The two parcels are formed by the east-west alignment of Boiling Down Creek and can be generally described as:

- a) House block/upper terrace: This area is above the flood plain and generally contains all the typical farming structures and facilities along with road access to Spring Drive.
- b) Island/lower terrace: This area is land that forms the flood plain and is the full frontage of the property to the Murray River. To connect the two parcels a single-lane concrete bridge is currently in place across Boiling Down Creek..

The land represented by 'a)' above is the primary are to be developed as it is above the 1:100 year flood level (Figure 2). No development aside from day-use infrastructure (e.g. picnic tables and temporary shade structures) is proposed for the floodplain area represented by 'b)' above.

The study area is within the Albury Local Aboriginal Land Council (Albury LALC) area and adjacent to the Registered Aboriginal Party (RAP) area administered by the Yorta Yorta Nation Aboriginal Corporation (YYNAC) in Victoria. The proponent and contact details are:

Mr Ben Fryer
Director
Scope Project Consulting

Ph: 0414 280 033 Web: <http://www.scopepc.com.au>

The proposed development will involve a degree of soil disturbance to both surface and buried land surfaces. The types of impacts that are likely to occur during the course of the development include:

- Stripping/removing topsoil, utilising heavy machinery. The topsoil may be stockpiled within the site for later use in rehabilitation.
- Import of clean fill material (from licenced quarries or locations approved to provide such materials).
- Excavation of proposed road alignments (to a maximum depth of 200mm) utilising heavy machinery and shaping of roadsides to their final levels.
- Road building, pavement, kerb and gutter and all other associated impacts with development of a trafficable road.
- Installation of underground and above ground services and utilities as required. This will involve excavation of up to 1.2 m deep and all associated earth works as described above.
- Construction of footings for huts, out-houses, sheds and general landscaping associated with the proposed development. Most buildings will be 'transportable' and built off-site and transported to site.
- Levelling of areas for day-use infrastructure and slashing of grass for walking paths.



Figure 2: Proposed works – “Warrawidgee”, Spring Drive, Corowa NSW

4 THE DUE DILIGENCE SYSTEM

The OEH *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* provides a step-wise process to help determine whether an activity is likely to cause 'harm' to 'Aboriginal objects' (both as defined in the *National Parks and Wildlife Act 1974*). If it is determined that the work may 'proceed with caution' and harm later occurs, the documentation of due diligence may provide a defence against prosecution. The following report sections address the questions set out in the generic due diligence system as shown in Figure 3.

Following this schematic version of the due diligence system, clearance for the work to go ahead without an AHIP occurs variously at:

- Step 2 – where there are no relevant indicators of Aboriginal cultural heritage potential;
- Step 3 – where potential harm can be avoided;
- Step 4 – where desktop assessment and archaeological survey determine that Aboriginal objects are unlikely to be present.

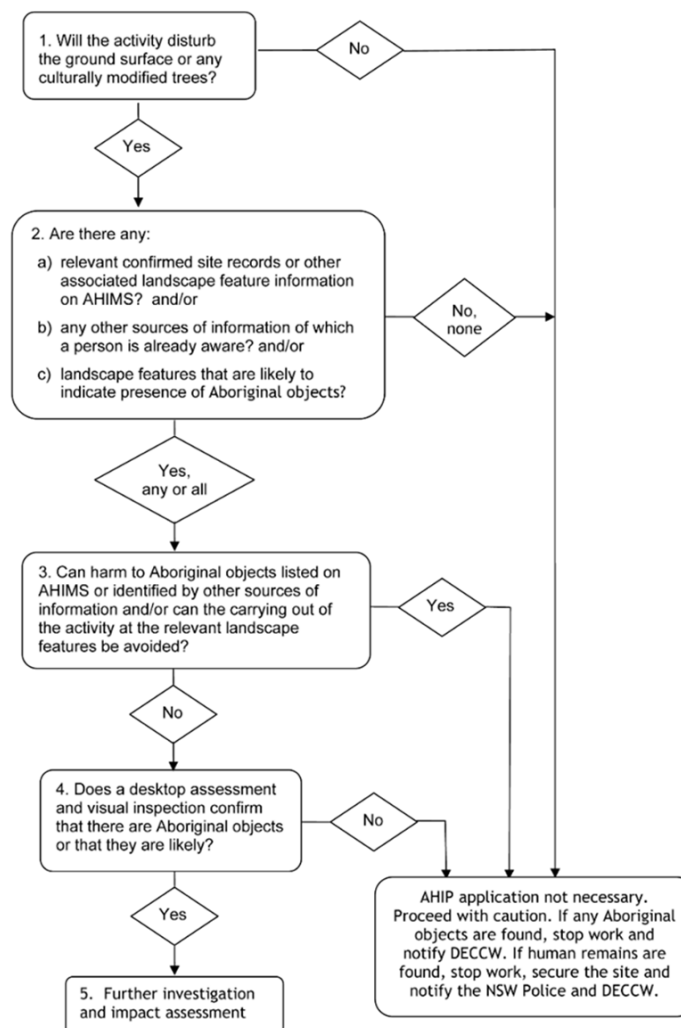


Figure 3: Generic Due Diligence process in NSW

4.1 SITE RECORDS

An AHIMS search was conducted on 20/12/17 returned zero (0) records within the site boundary, but twenty (20) records in NSW within 10km of the site (Client Service ID: 319627) consisting of scarred trees (n=5) and artefact scatters (n=15).

The Victorian Aboriginal Heritage Register (VAHR) was initially searched on 20/12/17 indicating that there are thirty-three (33) previously recorded Aboriginal places recorded on the Victoria side of the Murray River within 10km of the site (Figure 4) consisting of scarred trees (n=24), artefact scatters (n=2), earth features (n=2), Aboriginal Ancestral Remains (n=4), and Aboriginal historical places (n=1).

Previous survey results within the region allow some predictions to be made about local site distribution:

- Scarred trees are concentrated along waterways, which are the areas with the highest focus of Aboriginal land use and where a number of suitable tree species are found;
- There is a tendency for concentrations of stone artefacts to be found within 200m of permanent and ephemeral water sources, particularly on raised areas such as sand hills by the river and elevations (commonly aeolian sand or red soil) adjacent to ephemerally flooded areas or billabongs. These sites may also contain burnt clay balls that were used as heat retainers for cooking;
- Lithic sites are however rarely recorded along the lower alluvial floodplains of the major river margins – in part because of the favoured use of raised areas by Aboriginal people, but also because these are dynamic depositional environments where potential sites are rarely preserved or exposed;
- Shell midden deposits dominated by freshwater mussel (*Velesunio* sp.) occur along river margins, typically also associated with flaked stone artefacts; these are rarely evident as surface deposits and are usually found as exposed sections in eroded river banks;
- Burial sites are most typically associated with prominent raised sand hills ('source bordering dunes') near the river;
- Clay heat retainers, artefacts and faunal material are also found in association with raised earth mound sites where ephemeral water may have led to seasonal availability of cumbungi (*Typha* sp.); these earth mound sites are a distinctive archaeological feature of the Hay Plains and other parts of the Riverina, although many have been destroyed over the last century.

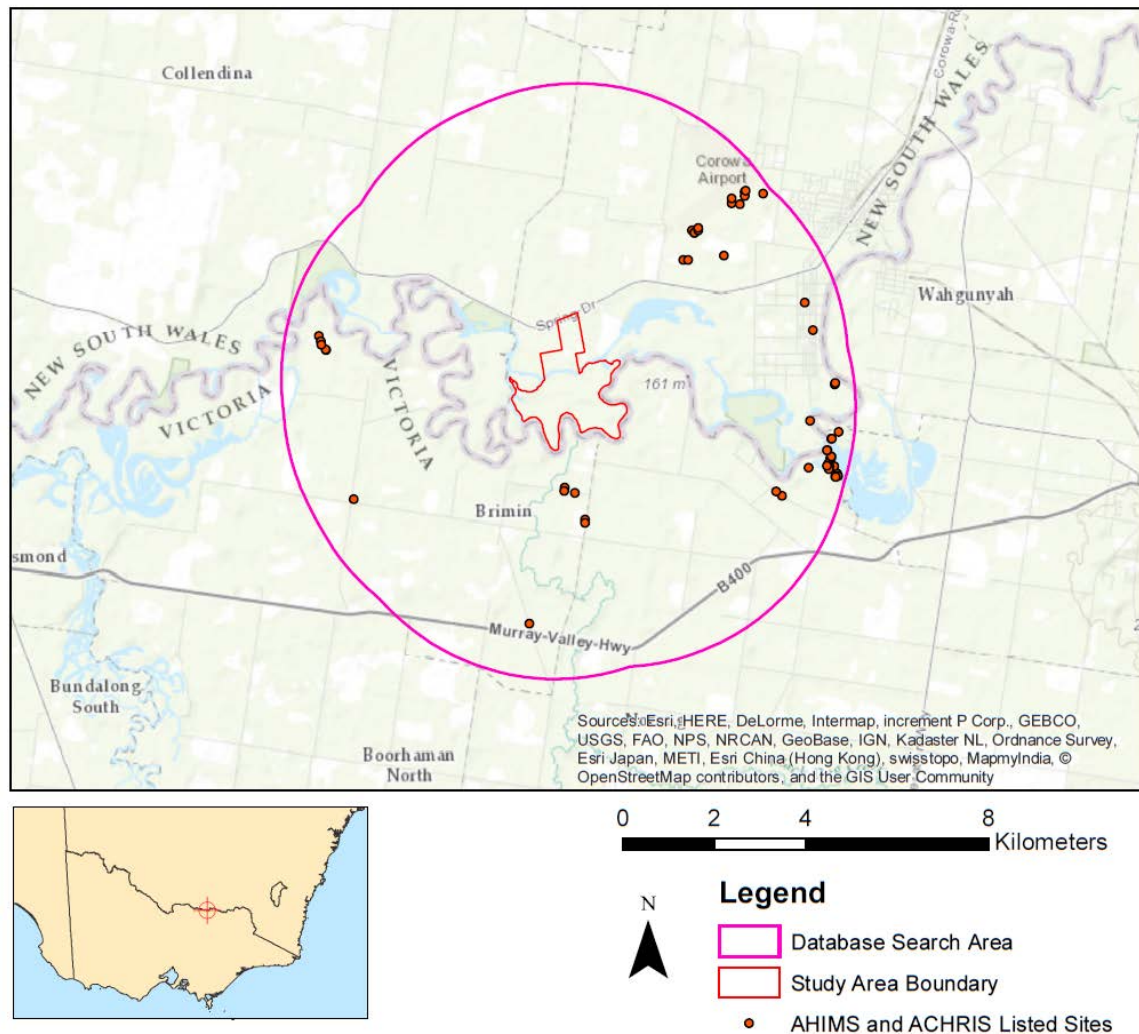


Figure 3: AHIMS and VAHR recorded sites within 10km of the site

4.2 LANDSCAPE FEATURES

The Due Diligence Code (DECCW, 2010a) specifies a number of landscape features which are most associated with the likely presence of Aboriginal objects and which therefore require further assessment if present. These are areas that are: within 200m of waters; located within a sand dune system; located on a ridge top, ridge line or headland; located within 200m below or above a cliff face; within 20m of or in a cave, rock shelter, or a cave mouth.

Of these, proximity to mapped waterways is the only relevant factor. However, all areas were subject to archaeological survey.

4.3 ABORIGINAL PEOPLE IN THE REGION

Brown (2008) contends that the pre-invasion ethnohistory of the Albury region is relatively poorly known. Most of the first Europeans to come to the area had little interest in, or training for, recording much about the society they encountered. It has been noted that the writings of European explorers, such as Hume and Hovell who sighted the Murray in 1824, seem to have had more to say about the fish, birds and mammals that they saw than about the Aboriginal people (Paton 1994:7; Andrews 1988; Jones 1991).

In most contexts where reliable ethnographic descriptions were made anywhere in the Murray Darling basin, the high resource availability was reflected in relatively high population, and this is most likely to have been the case in the study area. Further, as Bowler et al. (1976) notes, supported by Pardoe (2003) - regardless of the situation at 'contact', we should assume the presence of large numbers of Aboriginal people in the area throughout prehistory on environmental grounds alone.

According to Tindale (1974), the Albury region was essentially a junction between the territories of a number of different Aboriginal groups. Tindale's map (Figure 4) has: the Jeithi people living on the north side of the Murray from just west of Albury extending to the NW beyond Jerilderie (and therefore covering the study area).

However, Brown (2008) noted a local Wiradjuri Elder and academic, Yalmambirra, claimed that Wiradjuri Country extends along both sides of the River (citing Wesson 2000) in the area but does not specify whether this is according to pre- or post-invasion lines.

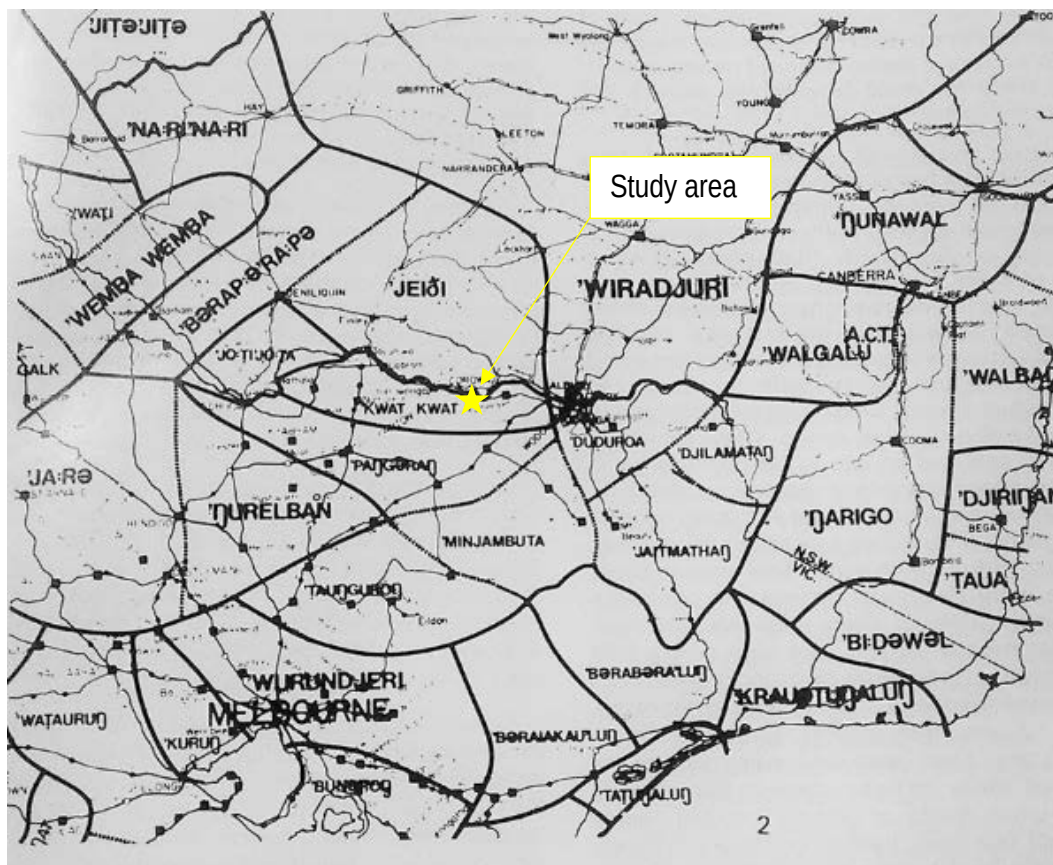


Figure 4: Aboriginal Groups (Tindale, 1974)

David Horton (1994) in his mapping puts the area north of the Murray entirely in Wiradjuri country without separate mapping of a *Jeithi* territory. Brown (2008) points out that group boundaries are also different on the south side of the river, referencing A.W. Howitt who quite specifically declares that he was “*not able to obtain any information as to the tribes occupying the course of the Murray between the Bangerang and Albury*” (Howitt 2001:54), which includes the study area.

4.4 REGIONAL ARCHAEOLOGY

The NSW Southwestern Slopes has an Aboriginal archaeological record derived from Aboriginal occupation and land use that was concentrated on drainage lines but includes dispersed evidence throughout the landscape (Brown & Wall 2017). Regionally occurring sites such as human burials and faunal deposits are unlikely to occur in the study area as these are essentially confined to areas above the actively floodplain on larger rivers and/or their source bordering sandy deposits. No development is proposed for the floodplain proportion of the site and no source bordering dune deposits existing on the terrace above the floodplain.

Cultural material is dominated by flaked stone tools (lithics) and lithic sites in NSW are listed by the features of either ‘Artefact’ or ‘PAD’ (potential archaeological deposit) in the AHIMS register. While not as significant as human burials, stone artefacts have variable distribution that can largely be correlated with different landform types. Many authors have stressed the importance of proximity to water as well as relatively common-sense amenity factors such as level, well-drained areas with useful views of resource use areas or a watercourse (Brown O., 2008).

Stone artefacts may be found as occasional pieces (background scatter) or in concentrations typically described as ‘Open Camp Sites’ (even if not interpreted as having been a site where people camped). At these sites, the presence of large numbers of stone tools and the debitage from making and maintaining them provide evidence about the nature of the human use of the location.

Scarred trees are also found relatively commonly along the Murray River and its major tributaries. Mature trees may bear evidence of the removal of bark for the making of implements such as coolamons (bowls), shields and sometimes pieces large enough to have potentially provided for a canoe (Brown 2008).

Elsewhere, midden deposits and hearth sites can occasionally be found that contain valuable evidence about the types of resources used by Aboriginal people based on the identification of the bones and shells found within them.

While some rock art sites do occur regionally (e.g. at Tabletop to the east), suitable rock substrate does not occur in the study area. Hearth sites, other than vaguely fired patches of clay subsoil, are unlikely to occur due to the history of relatively intensive land use; while large mound cooking hearth are not locally known (these occur further north west in the Riverina (Balme & Beck, 1996).

There are no Aboriginal Places (locations nominated and listed as having special significance to the Aboriginal community) in or adjacent to the subject area.

5 ABORIGINAL COMMUNITY CONSULTATION

Formal Aboriginal community consultation is not a prescribed requirement of Aboriginal cultural heritage assessment leading to due diligence advice (i.e. where it is determined that no Aboriginal objects will be affected). However, as matter of best practice and recognition of their role and local knowledge in the management of Aboriginal cultural heritage in the area, the Albury Local Aboriginal Land Council and Yorta Yorta Nation Aboriginal Corporation were consulted during the assessment.

The outcomes of this consultation were:

- In November 2017, Damian Wall (Red-Gum) contacted Mr Ray Williams, as a prior known Albury LALC field work rep, about the proposed works and possible site assessment and to request the involvement of YYNAC. Mr Williams advised of the current state of the Albury LALC¹ and verbally approved of contacting YYNAC;
- Damian Wall (Red-Gum) contacted Wade Morgan of the YYNAC, asking if his organisation would appreciate the opportunity to assess the site in partnership with the Albury LALC representatives;
- Consultation was ongoing through Damian Wall remaining in contact with Ray Williams, Simon Williams and Wade Morgan.
- In January 2018, additional effort was made to liaise with Mr Shaun Williams of Brolga Family Aboriginal Corporation (BFAC) and the newly appointed Executive Officer of the Albury LALC, Mr Sam Kirby. Both parties were emailed a copy of the proposal and invited to attend site.
- Two (2) members of the BFAC and Sam Kirby, CEO of the Albury LALC attended site on Monday 5th February and all attendees agreed that the site has been subject to significant disturbance throughout. Red-Gum agreed to send the draft DDA to each group for comment. See Section 9, Appendix A.
- Correspondence was also sent to various official bodies (NTSCorp, NNTT & ORALRA) seeking contact details of any other potentially interested parties. See Section 9, Appendix B.
- The Client has sought community involvement for the on-going purposes of developing a Cultural Heritage theme for the new development. It is anticipated that consultation will be ongoing with respect to interpretive information about country to enhance the user experience.

¹ Red-Gum notes that the Albury LALC was in 'voluntary administration' when the request for field reps was made in November 2017. As a result, Mr Ray Williams and Mr Simon Williams volunteered their time to liaise about the site, the proposed development and associated field work to conduct the due diligence assessment.

6 FIELD SURVEY

6.1 APPROACH

A pedestrian survey was undertaken on the 18th December 2017 by Damian Wall from Red Gum Environmental Consulting accompanied by Mr Ashleigh Miller and Ms Janarli Bux (YYNAC Field Representatives) and Simon Williams (Albury LALC). A second survey was undertaken on 5th February with two members of the Brolga Family Aboriginal Corporation and Sam Kirby, CEO of Albury LALC.

Both survey teams walked the 'House block/upper terrace' described in Section 3 and shown in Figure 2. Four-wheel drive vehicles were used to travel between sections of the property and circumnavigate the 'Island/lower terrace' (also described in Section 3) stopping regularly to inspect randomly chosen features on the floodplain, exposures and mature Red Gums for cultural scarring.

Because no development is proposed on the floodplain, a relatively small area of the upper terrace was considered 'un-developed' and all sections were surveyed on foot - it achieved full coverage. There was also high surface visibility in many areas along existing tracks, eroded horse paddocks and gateways making the survey highly effective and able to test and refine a reliable artefact distribution model.

6.2 RESULTS

No (zero) artefacts, disturbed cultural features (e.g. burnt clay indicating hearths), bones, scarred trees or other Aboriginal objects were recorded on the property, on the upper terrace or the island.

It was confirmed that the construction techniques to be employed (Section 3) will see relatively small disturbance to the subsurface (e.g. pier hole construction rather than excavated slabs), excavation of previously excavated fill (below the existing dwellings which will be retained on site) and no removal of any excavated material off the property. The fill and trafficked areas around the existing dwellings, yards and infrastructure typically exhibited high visibility and exposure without revealing any apparent Aboriginal objects.

It is acknowledged that in the context of the ubiquitous 'background scatter' of artefacts that exists in almost any Australian landscape, undetected Aboriginal objects may be present in the fill and topsoil material that is to be returned to its original location post works on access roads, tracks and hut sites etc. However, in the absence of any detectable surface representation upon which to base the targeting of subsurface testing (in an obviously disturbed landscape), *there is no reasonable trigger by which to seek an Aboriginal Heritage Impact Permit (AHIP) for the work.*

6.3 SURVEY COVERAGE & EFFECTIVENESS

The purpose of compiling survey coverage data is to measure the limitations of site detectability at the time of the survey. For example, a survey transect across a heavily grassed paddock has little likelihood of finding lithic material on the surface regardless of the survey effort spent. For the current investigation on the Upper Terrace, soil surface visibility was excellent because the paddock was being used as a horse holding paddock and the grass cover was very short with many areas of bare soil exposed, allowing > 80% visibility (see Plate 2 for example).

The quantification of survey coverage data also usually relies on an assessment of the soil surface visibility in relation to other variables, principally the different landforms included in the survey and the amount of survey effort spent on each.

For the current investigation, five (5) landform units were identified (Figure 5). The classification 'Terrace' is used for the area overlooking Boiling Down Creek. This grades very gradually into the area classified as 'Plain' as you move north across the site, with the division as it is mapped being largely arbitrary and almost entirely intended to draw an important distinction between the areas where occupation/artefact sites (i.e. within 200m of the watercourse) are more likely to occur than those that are less likely.

The area mapped as stream bank is also partly arbitrary, as the area to the south of the terrace (Murray River floodplain below the 1:100 year flood level) is of a very different nature to the rising bank on the north side of Boiling Down Creek (mapped as 'Terrace'). The purpose here again being simply to delineate zones of higher probability of encountering cultural heritage versus zones with a lower probability.

Within the terrace area the proposed development area was treated as a discrete survey unit that was subject to detailed inspection. The survey route (mapped from handheld GPS unit) marked in (Figure 6) indicates the route taken by the survey team on 18th December 2017. Within the proposed development area of the terrace (101,650 m²), each participant is estimated to have walked an average of 900 m with an effective field of view of 2 m (that is, 2 m within a total field of view of >4m) which equates to an effective survey coverage of easily visible bare earth of at least 3,600 m² per person, or 3.5 % of the proposed development area per person. The survey team, consisting of 5 people, had a total pedestrian survey of up to 18,000 m² or 17.5% of the proposed development area.

The car survey extended for 8.4 km but is certainly a far less effective survey effort. The effectiveness is estimated to only 1%, compared to a 100% likelihood of seeing surface artefacts during foot survey. The vehicle survey is therefore considered relatively ineffective in locating isolated finds – however the Survey team conceded that the floodplain area is not considered 'at risk' by development and travel over these areas by vehicle was undertaken with a view to potentially identifying larger archaeological features such as middens, hearths or culturally scarred trees.

6.4 PREDICTIVE ASSESSMENT OF LIKELIHOOD OF SITES WITHIN THE STUDY AREA

In addition to the field survey, a predictive assessment of the likelihood of the occurrence of undetected and/or subsurface Aboriginal cultural heritage material was conducted. This is an intuitive assessment using generalised contextual information rather than a geostatistical assessment using digitised (raster) map data of landforms and known locations of other sites.

Generally speaking, Aboriginal places would be expected to be situated close to either an ephemeral or permanent water source, providing adequate shelter from the elements and rising floodwaters, and have access to a food source. Additionally, for Aboriginal places to remain in these situations through time, the landscape will not have sustained significant ground disturbance activities.

Brown (2008) notes that although intuitive assessments are rarely afforded much written favour by archaeologists, they are in fact used by almost all. The term 'modelling' may be frequently inserted to infer statistical rigour that is usually not present nor for that matter. A *modelled predictive assessment* typically combines rule-based definitions of known site distribution factors with available mapped data that lacks the full range of detail that would affect human choices and behaviour - or the map data may quite simply be wrong (Brown, 2008).

Search of the AHIMS database within the geographic region, suggests that artefact scatters (n=15) and scarred trees (n=5) are likely to be the site types likely to be recorded within the site. It should be noted that the site does not possess any 'sand dune' or 'dune like' features within or adjacent to the terrace or plains landforms units as mapped in Figure 5. There are depositional 'scrolls' (very sandy depositional lunettes that traverse the area in an east/west direction) located on the floodplain between Boiling Down Creek and the Murray River (Plate 3), however these areas are not considered to be impacted by the development as it is proposed, and they are likely very recently affected by major flooding and depositional events within the Murray River.

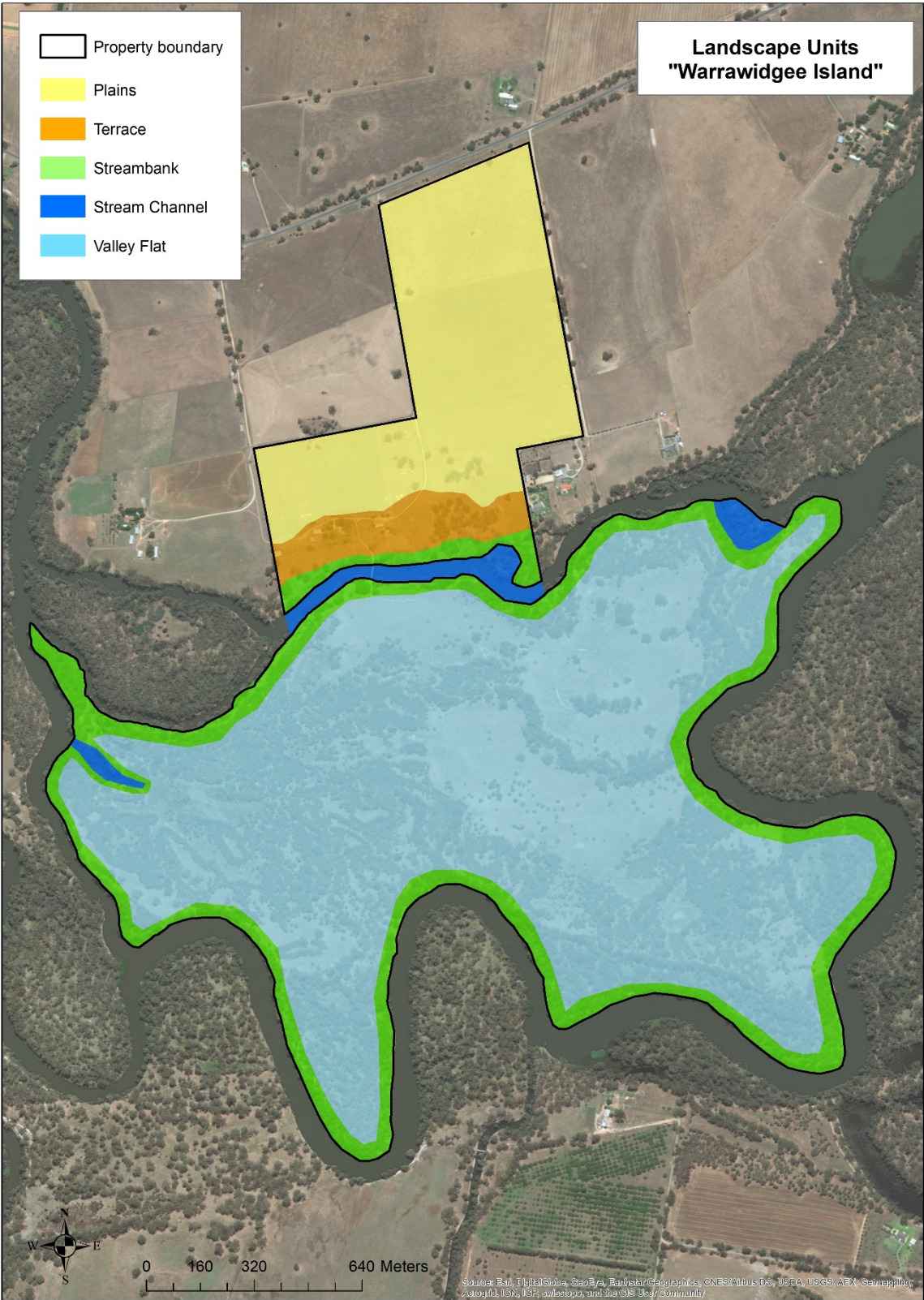


Figure 5: Landforms Mapped for Survey Coverage Data

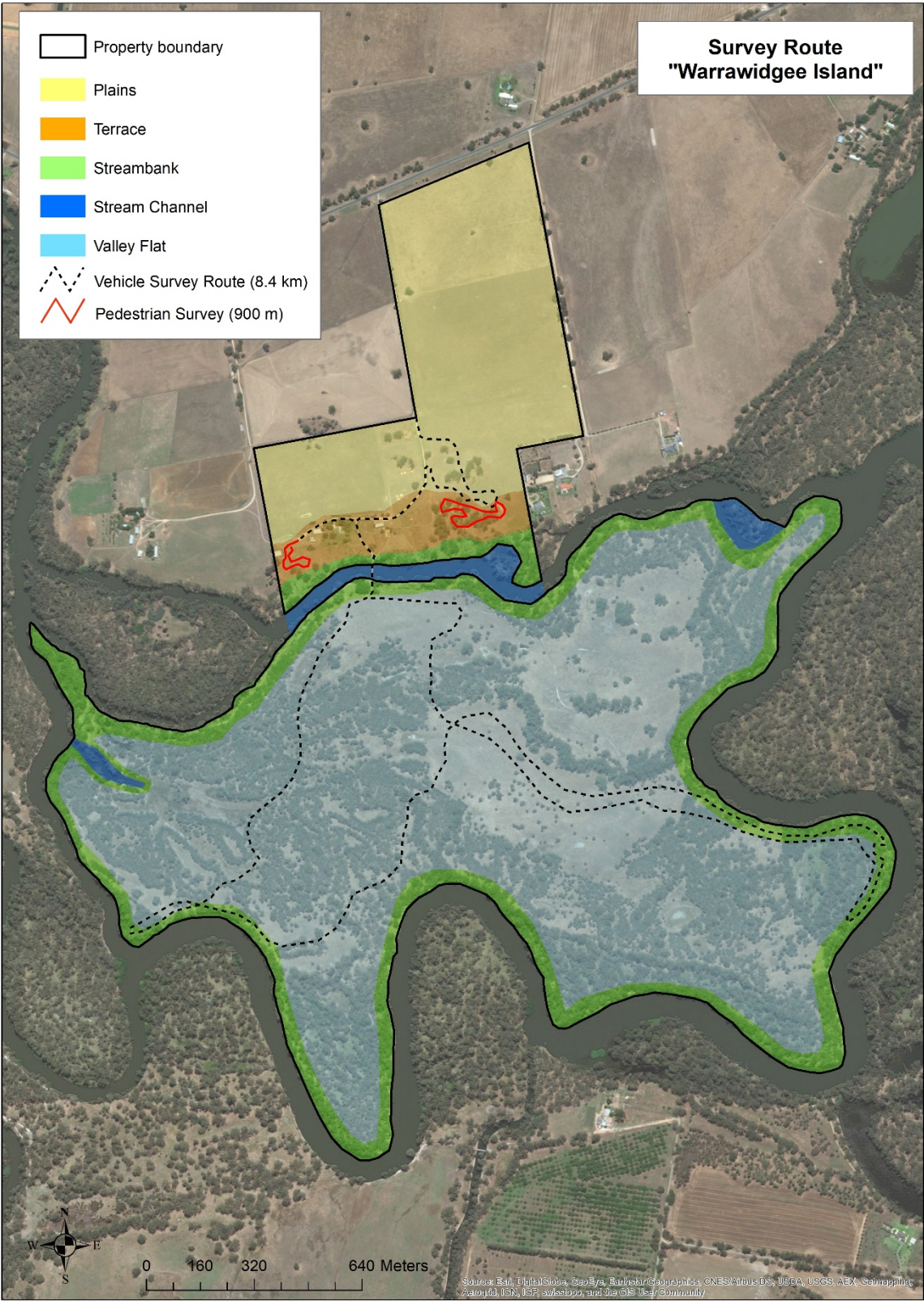


Figure 6: Survey Route

Plates 1-10 below show the current environs of the survey area to be impacted by the proposed work.



Plate 1: Highly disturbed (earth works) terrace below the main house.



Plate 2: Bare soil (High GSV) in terrace zone north of Grey Box stand.



Plate 3: Sandy rise on the floodplain between BD Creek and the Murray River.



Plate 4: Formed driveway across the plains landform extending south from the highway.



Plate 5: Upper terrace with stand of Grey Box overlooking Boiling Down Creek.



Plate 6: Historical disturbance on the terrace is evident with derelict buildings and debris throughout.



Plate 7: General GSV on terrace. Good to Very good surface visibility (65-85%).



Plate 8: Infrastructure development on the terrace.



Plate 9: Infrastructure development on the terrace.



Plate 10: House and out-buildings on the terrace. Assumption is that these areas are disturbed.



Plate 11: General disturbance on the upper terrace



Plate 11: General disturbance on the upper terrace

7 RECOMMENDATIONS & CONTINGENCIES

7.1 RECOMMENDATIONS:

1. On the basis of desktop assessment (AHIMS records, previous work in the region and general regional site distribution patterns) and the survey, it is considered that harm to Aboriginal objects as a result of the proposed work is unlikely.
2. It is therefore considered that there is no need for an application for a further AHIP if works avoid the area highlighted in Figure 7. This area has been significantly disturbed, but it does have attributes (i.e. soil type, aspect and position in the landscape – terrace overlooking the floodplain) that may contain Aboriginal cultural heritage *in a disturbed context*.
3. No further assessment is considered warranted if the area in Figure 7 is avoided and low impact building practices are employed at all stages that:
 - o Minimise soil disturbance;
 - o Maximise the use of significantly disturbed areas in the first instance;
 - o Ensure no topsoil is removed from site; and
 - o Ensure no removal or damage to existing native vegetation.
4. Cultural awareness induction is considered appropriate at this site before any works commence. An invitation to be sent to the Aboriginal community, requesting their involvement in the induction process, is also considered appropriate. The induction is to be undertaken by employees who are supervising works during the activity in relation to earthmoving or ground disturbance works. All ground disturbance works must be supervised by a person who has undertaken the cultural awareness training. It is the responsibility of the client to:
 - o Ensure that the training be undertaken prior to the commencement of works to familiarise employees and contractors with local Aboriginal traditions and culture;
 - o Familiarise employees and contractors with Aboriginal places and objects (particularly stone artefacts and features such as hearths and shell midden lenses) so that they may recognise Aboriginal cultural heritage that may be exposed during works. Information sheets to assist in the identification of Aboriginal cultural heritage should be provided during this training.
 - o Promote a knowledge and understanding of and respect for Aboriginal tradition and culture;
 - o Assist with compliance with relevant Commonwealth and State cultural heritage legislation; and
 - o Foster good relationships between the client and all relevant Aboriginal stakeholders.
5. If ANY works other than placement of non-permanent facilities for day-use visitors (i.e. picnic tables, shade structures, BBQ places) is proposed on the 'Island/lower terrace', then the works are to be subject to further *Due Diligence Assessment* as a minimum requirement.
6. The information presented above meets the requirements of the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*. It should be retained as 'shelf documentation' for five years as it may be used to support a defence against prosecution in the event of unanticipated harm to Aboriginal objects.



Figure 7: Works exclusion zone

7.2 CONTINGENCIES:

- If unanticipated Aboriginal objects are located during the proposed, work should stop immediately. Contact should be made with the Office of Environment and Heritage (OEH), Albury Office, for advice on an appropriate response. Contact should also be made with the Albury LALC.
- If human skeletal material is discovered, the *Coroners Act 2009* requires that all works should cease and the NSW Police and that the NSW Coroner's Office be contacted. Traditional Aboriginal burials (older than 100 years) are protected under the *National Parks and Wildlife Act 1974* and if found, all works should stop. Interpreting the age and nature of skeletal remains is a specialist field and an appropriately skilled archaeologist or physical anthropologist should be consulted in this event. Should the skeletal material prove to be archaeological Aboriginal remains, notification of Office of Environment and Heritage (OEH) and relevant Aboriginal stakeholders will be required. Notification should also be made to the Commonwealth Minister for the Environment, under the provisions of the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*.

8 REFERENCES

Brown 2008

DECCW. (2010a). *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*. Sydney: Department of Environment, Climate Change and Water.

DECCW. (2010b). *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*. Sydney: Department of Environment, Climate Change and Water NSW.

Wesson, S. 2000. An historical atlas of the Aborigines of eastern Victoria and far south-eastern New South Wales. Melbourne: Monash University Paton 1994

Andrews, A. 1988. The History of Albury: 1824-1895. Albury: Renwick Pride.

Jones, H.C. 1991. Albury Heritage. Melbourne: VIP Printing.

Brown, O. & Wall, D.J 2017. Consultation Draft Aboriginal Cultural Heritage Assessment and Archaeological Report, Proposed Development, Diamond Drive, Albury NSW. Report to Namany Pty Ltd.

Brown O., 2008. Investigation of Aboriginal Cultural Heritage and Archaeology at "Riverview", Riverina Highway, Howlong. Total Earth Care Ltd.

J.M. Bowler, G.S. Hope, J.N. Jennings, G. Singh and D. Walker, 1976. Late Quaternary climates in Australia and New Guinea. *Quaternary Research* 6:359-394.

Pardoe, C. 2003. The Menindee Lakes: A regional archaeology. *Australian Archaeology* 57:42-53.

Tindale, N. B. (1974), *Aboriginal Tribes of Australia*. ANU Press: Canberra.

Horton, D. 1994. *Encyclopaedia of Aboriginal Australia*. Canberra: AITSIS.

Howitt, Richie (2001), *Rethinking Resource Management: Justice, Sustainability and Indigenous Peoples*, London: Routledge.

Hughes P.J & Berryman A. (1985) *Aboriginal resources planning study for the Wakool Shire Council, NSW : a report to the New South Wales National Parks and Wildlife Service, Western Region, Broken Hill*.

Balme, J. and W. Beck. 1996. Earth mounds in South-eastern Australia. *Australian Archaeology* 42:39-51.

9 APPENDIX

APPENDIX A: FEEDBACK FROM INTERESTED ABORIGINAL PARTIES

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APPENDIX B: FEEDBACK FROM NTSCORP, NNTT & ORALRA

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Damian Wall

From: Enquiries <Enquiries@nntt.gov.au>
Sent: Friday, 19 January 2018 5:20 PM
To: 'damian.wall@red-gum.com.au'
Subject: RE: SR3643 - Request for Information - Warrawidgee Island, Corowa NSW SR3643

UNCLASSIFIED

Native title search – NSW Parcel – LOT 3 DP791136
Your ref: Warrawidgee Island, Corowa- **Our ref:** SR3643

Dear Damian Wall,

Thank you for your search request received on 19 January 2018 in relation to the above area.

Please note: Records held by the National Native Title Tribunal as at 19 January 2018 indicate that the identified parcel appears to be freehold, and freehold tenure extinguishes native title.
The National Native Title Tribunal does not hold data sets for freehold tenure; consequently, we **cannot** conduct searches over freehold. For confirmation of freehold data, please contact the NSW Land and Property Information office or seek independent legal advice.

For further information, please visit our [website](#).

Should you have any further queries, please do not hesitate to contact us on the free call number 1800 640 501.

Regards,

Enquiries

Public enquiry hours are 8.30am to 4.30pm

National Native Title Tribunal | Perth

Facsimile (08) 9425 1193 | Email enquiries@nntt.gov.au

Freecall 1800 640 501 | www.nntt.gov.au

Shared Country Shared Future

From: Damian Wall [[mailto:](mailto:damian.wall@red-gum.com.au)]
Sent: Friday, 19 January 2018 2:29 PM
To: Enquiries <Enquiries@nntt.gov.au>
Subject: SR3643 - Request for Information - Warrawidgee Island, Corowa NSW
Importance: High

G'day,

Please see attached. Number 2 of 2 for the day.

Cheers
D.

Mr Damian Wall
Managing Director
Red-Gum Environmental Consulting

94 Kirby Flat Road,
Yackandandah, VIC 3749

23 January 2018

Damian Wall
Red-Gum Environmental
94 Kirby Flat Road
YACKANDANDAH VIC 3749

Dear Damian

Request - Search for Aboriginal Land Claim

I refer to your request dated 19 January 2018 to search the Register of Aboriginal Land Claims (**the Register**) database in relation to land described by you as:

Lot	Section	DP	Parish	County
3		791136	Corowa	Hume

I have searched the Register and the property above *do not appear* as being affected by an Aboriginal Land Claim in pursuant to sections 36 or 37 of the Aboriginal Land Rights Act 1983.

Regards



Tabatha Dantoine
Directorate Support Officer
Office of the Registrar,
Aboriginal Land Rights Act 1983 (NSW)

Please Note:

1. Search requests should not be made over privately owned land. Crown Land is the only land in NSW that is likely to be affected by an ALC under the Aboriginal Land Rights Act. If an ALC has been made over privately owned land it would be refused as soon as this is known.

2. Land across NSW with older land descriptors such as "portion, REF & TSR" have been allotted new descriptors over the last 10 years & many of these now have "Lot & DP" numbers. The ORALRA database lists the land descriptor at lodgement & may not include an updated land descriptor. If this may affect the land that you've described, we advise that you contact the Aboriginal Land Claims Investigation Unit on (02) 6883 3396.

Mr Ben Fryer
Director
Scope Project Consulting
Wodonga, VIC 3690



By email: 12/1/18 to ben.fryer@scopepc.com.au

Re: Flora and Fauna Assessment considering impacts on EPBC Act (Commonwealth) and TSC Act (State) Listed Threatened Species resulting from the Proposed Development at Warrawidgee Island, Corowa NSW.

Dear Ben,

Thank-you for the opportunity to assist with the project (as described by email on 21st April 2017). Please be advised that this assessment has been conducted considering the likely impacts of the development (as it is currently proposed) on Environment Protection and Biodiversity Conservation Act 1999 (The EPBC Act) and Biodiversity Conservation Act 2016 (The BC Act) listed species.

The EPBC Act provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places — defined in the Act as *Matters of National Environmental Significance*. The BC Act 2016 began on 25 August 2017 and replaces the *Threatened Species Conservation Act 1995* as the key piece of legislation that identifies and protects threatened species, populations and ecological communities in NSW.

A desktop assessment and site survey were undertaken to determine the potential presence or proximity of listed threatened species in relation to the site (**Attachment A**). The desktop survey included, but was not limited to:

1. Search of the EPBC Protected Matters database (10th January 2018),
2. Review of relevant policies and legislation pertaining to *Key Threatening Processes* in NSW; and
3. Search and consultation with *NSW BioNet* which is the repository for biodiversity data products managed by the Office of Environment and Heritage (OEH).
4. Use of the Vegetation Information System (VIS) Flora Survey database to determine appropriate Plant Type Communities (PCT) present on the site. The VIS is a central, authoritative database for systematic vegetation survey data in NSW.

A search of the Protected Matters register revealed three (3) Endangered and two (2) Critically Endangered EPBC listed Threatened Ecological Communities, nine (9) threatened terrestrial bird species, four (4) fish species and four (4) threatened mammals whose habitat may occur within a 10km radius of the site. The results assisted the design of the site survey with respect to targeted species, search method and survey effort required to ensure an appropriate level of due diligence is observed. See **Attachments B & C**.

Considering the site location and range of potential habitat on site, the following species were deemed to have the 'potential'¹ to be found on site:

1. Regent Honeyeater (<i>Anthochaera Phrygia</i>)	6. Mueller Daisy (<i>Brachyscome muelleroides</i>)
2. Painted Honeyeater (<i>Grantiella picta</i>)	7. White-bellied Sea-Eagle (<i>Haliaeetus leucogaster</i>)
3. Swift Parrot (<i>Lathamus discolor</i>)	8. Rainbow Bee-eater (<i>Merops ornatus</i>)
4. Southern Bell Frog (<i>Litoria raniformis</i>)	9. Floating Swamp Wallaby-grass (<i>Amphibromus fluitan</i>)
5. Superb Parrot (<i>Polytellis swainsonii</i>)	10. Grey-headed Flying-fox (<i>Pteropus poliocephalus</i>)

¹ A suitable habitat for a species occurs on the site, but there is insufficient information to categorise the species as 'likely' or 'unlikely' to occur.

Plant Community Type

A search of the BioNET Vegetation Classification database using the appropriate bioregion and sub-region combined with the floristic survey results has determined that the closest PCT match for the site is ID no.2 being *River Red Gum-sedge dominated very tall open forest in frequently flooded forest wetland along major rivers and floodplains in south-western NSW*. Some areas on the terrace overlooking the floodplain are likely to be more closely aligned with PCT ID 76 being *Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions*. See **Attachment G**, [Riverina Bioregion Vegetation Mapping 1998](#). A full description of both PCTs can be found at **Attachment D**.

Known extent & previous recorded threatened species

A search of Bionet Atlas of NSW Wildlife on 10/1/18 revealed twenty-nine (29) recorded sightings of threatened fauna within 10km of the site ([NSW BioNET results map](#), **Attachment G**). Six (6) of those sightings were recorded within 2.5km of the site, however the last recorded entry into the Atlas was 2013. Date ranges on all sightings were between 1992 and 2013 and from a variety of sources. The nearest recorded threatened species is listed as a Flame Robin (*Petroica phoenicea*) approximately 2km north east of the site.

Site Survey

The site survey was undertaken between the 8th and 11th of June 2017 by Damian Wall and Andrew Bell from Red Gum Environmental Consulting (Red-Gum) accompanied by Dr Damian Michael (Ecotone Wildlife and Habitat Assessments) and Mr Nigel Jones (NSW Biodiversity Conservation Trust). The site survey considered the overall ecological significance of habitat features on site, with emphasis on the existence (or potential for existence) of threatened species (flora and fauna), endangered ecological communities or threatened species habitat. Both diurnal and nocturnal surveys were conducted.

The study area contains large areas of mature River Red Gum (*Eucalyptus camaldulensis*) and a high density of hollow-bearing trees. The area also supports a significant network of ephemeral wetlands and derived grasslands. These habitat features are likely to support a broad range of threatened species including hollow-dependant fauna such as the Barking Owl (*Ninox-connivens*), Brown Treecreeper (*Climacteris-picumnus*), Little Lorikeet (*Glossopsitta pusilla*), Superb Parrot (*Polytelis swainsonii*), Turquoise Parrot (*Neophema pulchella*) and Squirrel Gliders (*Petaurus norfolcensis*). Species that are not reliant on hollows such as the Black-chinned Honeyeater (*Melithreptus gularis*), Grey-headed Flying Fox and Koala could also feasibly be present and supported by the connected vegetation cover that the island affords. See **Attachment G**, [Native Fauna Habitat Assessment](#).

Overall, the site has reasonable floristic diversity, especially in areas of good condition which were dominated by a native ground cover of mostly river tussock grasses (*Poa labillardierei*). Large areas of the island's original native ground cover has been substantially modified and are now dominated by introduced species such as phalaris and rye grass. Despite this, there is a good cover of River Red Gum (much of which are a younger cohort ~30 years old). There are some areas of fenced revegetation which are healthy and include shrub species such as Silver wattle, River bottlebrush and Rough-barked honey myrtle which were once very common along the Murray River. See **Attachment E** for a full list of observed flora during the survey period. See **Attachment G**, [Vegetation Quality Assessment](#).

Of interest is the native herbs in the inter-tussock spaces such as Tufted burr-daisy (*Calotis scapigera* Hook), Native buttercups (*Ranunculus colonorum*) and Ivy-leaf violet (*Viola hederacea*). These herbs are especially vulnerable to over grazing by stock and would benefit from increased control of stock throughout the property. There may be even more native herbs/forbs evident in Spring which would be a better time to survey these species emerging from the ground, some of which would be in flower. The native Austral bluebell (*Wahlenbergia stricta*) was not observed, however it is highly likely to also be present on site as it is found in abundance on the forest on the Victorian side of the Murray.

The highest priority woody weed on the Island is Blackberry (*Rubus genus*). The good quality vegetation patches bordering the Murray River in the south of the site are highly affected by Blackberry with isolated patches of Kikuyu grass and occasional incidental garden escapes such as Bridal creeper (on north-western spit). Sweet Briar (*Rosa rubiginosa*) has formed a shrub layer in the absence of appropriate woody weed management. Small Native birds such as Superb fairy-wren (*Malurus cyaneus*) seem to have developed a dependence on the briars for nesting sites where no native shrubs remain. Occasional Phalaris spot spray control could be trialed in good quality native Poa tussock dominated woodland patches and Briar control should only occur in areas where a substitute native shrub layer exists.

A total of fifty-six (56) bird species, five (5) mammal species, two (2) reptile species and one (1) frog species were recorded during the survey period. Approximately one-hundred forty-nine (149) bird species (including waterbirds and summer migrants), twenty (21) reptile species, six (6) frog species and nine (9) terrestrial mammal species are predicted to occur in the area based on their habitat requirements and geographical distribution. Additional surveys conducted during spring and summer will undoubtedly increase the species inventory. See **Attachment F** for a complete list of recorded fauna.

A pair of Barking Owls and several Brown Treecreepers were recorded within the study area during the survey period. These were the only threatened fauna species recorded during the survey period. Twenty-two (22) additional threatened birds, four (4) mammal species and one (1) frog species may potentially occur in the study area based on suitable habitat and distance to existing records. No (zero) threatened lizards are expected to occur in the study area due to the lack of suitable habitat.

The ephemeral wetlands dotted throughout the southern part of the study area are likely to provide suitable habitat for the threatened Sloane's Froglet, Australian Bittern, Australian Painted Snipe, Brolga and Freckled Duck – while the extensive stands of regrowth vegetation in the central and western part of the site are likely to provide important breeding and nesting habitat for many threatened woodland birds, including the Speckled Warbler, Grey-crowned Babbler, Hooded Robin, Painted Honeyeater, Scarlet Robin, Dusky Woodswallow and Varied Sitella.

Further, the small stand of Grey Box (*E. macrocarpa*) and Yellow Box (*E. melliodora*) on the northern side of Boiling Down Creek provides important habitat for Brown Treecreeper and is also likely to support Squirrel Gliders with the potential to support Bush Stone-curlews under appropriate management. The open grasslands in the central part of the site (while degraded) are likely to provide suitable foraging habitat for the Flame Robin, Diamond Firetail, Spotted Harrier and White-fronted Chat.

Conservation Recommendations

There are several management actions that could be implemented to enhance threatened species conservation outcomes in the study area.

- Threatened species such as Squirrel Gliders and Bush Stone-curlews will benefit from an intensive fox baiting and feral cat control program.
- Installing species-specific nest boxes for Squirrel Gliders and Superb Parrots will provide additional habitat for these species and provide a method for monitoring populations.
- Maintaining large areas of natural regrowth will ensure suitable habitat for a broad range of regrowth-dependent bird species.

Due to the high cover of exotic species (e.g. phalaris) and the high fertility of floodplain soil, total grazing exclusion for long periods (>3 years) is not recommended due to the potential for highly competitive species such as exotic grasses to outcompete the smaller native species. Indeed, grazing by cattle will be an important tool for the land manager to try to increase the extent of the desirable native species by grazing weed species when they are most vulnerable (just prior to seeding) for short periods of high stocking density. Temporary fencing is proposed as an important method of controlling stock movements, due to the potential damage that could occur to permanent fencing during times of high flooding.

Pest control will be primarily limited to foxes (potential for rabbits on sandy areas upslope off floodplain however no harbor or rabbits were recorded). Fox control is best conducted in conjunction with neighbours for best effect and there is potential to consider installation of fox proof fencing around north eastern woodland (off floodplain) to assist in the establishment of a Bush-stone curlew population. See Murray Nature Conservation Working Group <http://www.bushstonecurlew.com.au> to investigate opportunities to participate.

Revegetation is recommended to plant out areas where the native shrub layer has been removed or highly modified. Shrubs planted along current river frontage such as Silver wattle, Rough-barked honey myrtle, River bottlebrush should be the primary species introduced and Poa tussocks could be planted out along key eroding areas for stabilisation. Phragmites should naturally establish over time with sufficient grazing control. The South West Slopes Revegetation Guide produced by the Murray Catchment Management Committee & Department of Land & Water Conservation (1998) is an excellent resource for illustrating the differences in vegetation community corresponding with landform, with guidance for what species to plant.

Ecological thinning may be considered for areas on the island that feature dense cohorts of regenerating River Red Gum (mostly located within the areas marked “Medium” on the Vegetation Quality Assessment Map, **Appendix G**). Based on a recent thinning study being undertaken by the NSW Office of Environment and Heritage in nearby Millewa Forest, thinning these areas to create lower-density stands is likely to result in long-term ecological gains of:

- a) More hollow bearing trees than high-density stands
- b) Larger tree crowns than high-density stands
- c) Higher cover of live understorey vegetation than high-density stands
- d) Different plant community composition to high-density stands

Survey effectiveness

By way of limitations to the survey effectiveness – the original survey timing (Winter) of the survey was not ideal for identifying Spring/Summer active flora or fauna, but it agreed that the field time was sufficient to confirm the presence of a range of suitable habitat for threatened species, identify several opportunities for low impact recreational pursuits and ecological management strategies.

Summary of observations

1. Many old large trees exist on site, despite the obvious forestry history throughout. The oldest of the trees on site (estimated at 600-800 years) contain 10-20 hollows suitable for woodland birds and mammals alike to occupy. Generally, hollows large enough to annually support the listed threatened species can take up to 100 years to form².
2. The area subject the majority of development (i.e. above the floodplain) site lacks many structural components and/or features required to support threatened species, more than opportunistic foraging or transit respite areas. Large areas of the upper terraces have been cleared to bare earth by previous vegetation removal, installation of utilities, farming infrastructure etc and colonizing species are largely exotic.
3. In the Grey Box Woodland area, log count is low, there is no distinct shrub layer and some native grasses the only other structural component below the overstorey that may provide habitat features for ground-dwelling fauna.
4. Of the winter flowering native species which are typically frequented by threatened woodland birds previously recorded in the region, only immature Yellow Box and Grey Box are present within development site.

² Office of Environment and Heritage. (1999). *Natural tree hollows: essential for wildlife*. Retrieved from <http://www.environment.nsw.gov.au/resources/nature/Factsheet5TreeHollows.pdf>

Matters of National Environmental Significance Significant impact guidelines

The development and associated impacts has been assessed against the guidelines to provide advice on whether or not the proponent should submit a referral to the Australian Government Department of the Environment (the Department) for a decision by the Australian Government Environment Minister (the minister) on whether assessment and approval is required under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). See **Attachment H** for a decision table that considers the 'Significant impact criteria' for each of the listed threatened species on Page 1 of this letter.

Conclusion

The site is modified throughout, but has distinct zones of varying ecological value. Ground covers are predominantly non-native and forming a thick cover in the open grazing country atop the river terrace and cleared areas on the floodplain, with thick woody weed (Blackberry) in some areas of the riparian zone. Red-Gum acknowledges that the proposed works on the terrace have been designed to avoid the loss of any large hollow-bearing trees or significant ground layer disturbance beyond levels that it is already experiencing. In summary:

1. One (1) threatened species (NSW) were recorded on site after a collective 41 hours of survey (Winter 2017);
2. There are no (zero) recorded sightings of NSW or EPBC listed species on the site;
3. The site does contain the typical floristic range and structure that normally supports several EPBC listed threatened species; however
4. The responses to the 'Significant impact criteria' test do not warrant an EPBC referral.

Red-Gum contends that the activities as proposed will not have a significant effect on threatened species and ecological communities and their conservation. Nonetheless, should the development be granted by the determining authority and development proceed, the following environmental safeguards are to be considered:

- A suitably qualified professional is to be engaged to oversee the trimming of native trees.
- Native trees that are designated for removal, should be clearly marked and inspected (by a suitably qualified professional) for arboreal fauna that may be using any hollows, before clearing commences.
- Any and all trimming or clearing should be conducted by appropriately qualified Arborists to ensure the lowest impact clearing methods (i.e. staged removal not drop fell) are employed.
- Trees designated for removal are kept on site for as long as possible.
- All clearing and trimming is to be conducted outside of Spring to avoid possible nesting events by woodland birds that might be using the site opportunistically.

Please be advised that any advice and/or opinions offered within this letter does not constitute legal advice or represent those of any third party. Also, the content herein remains the property of your client and it may not be used, reproduced or distributed in any way without their written consent.

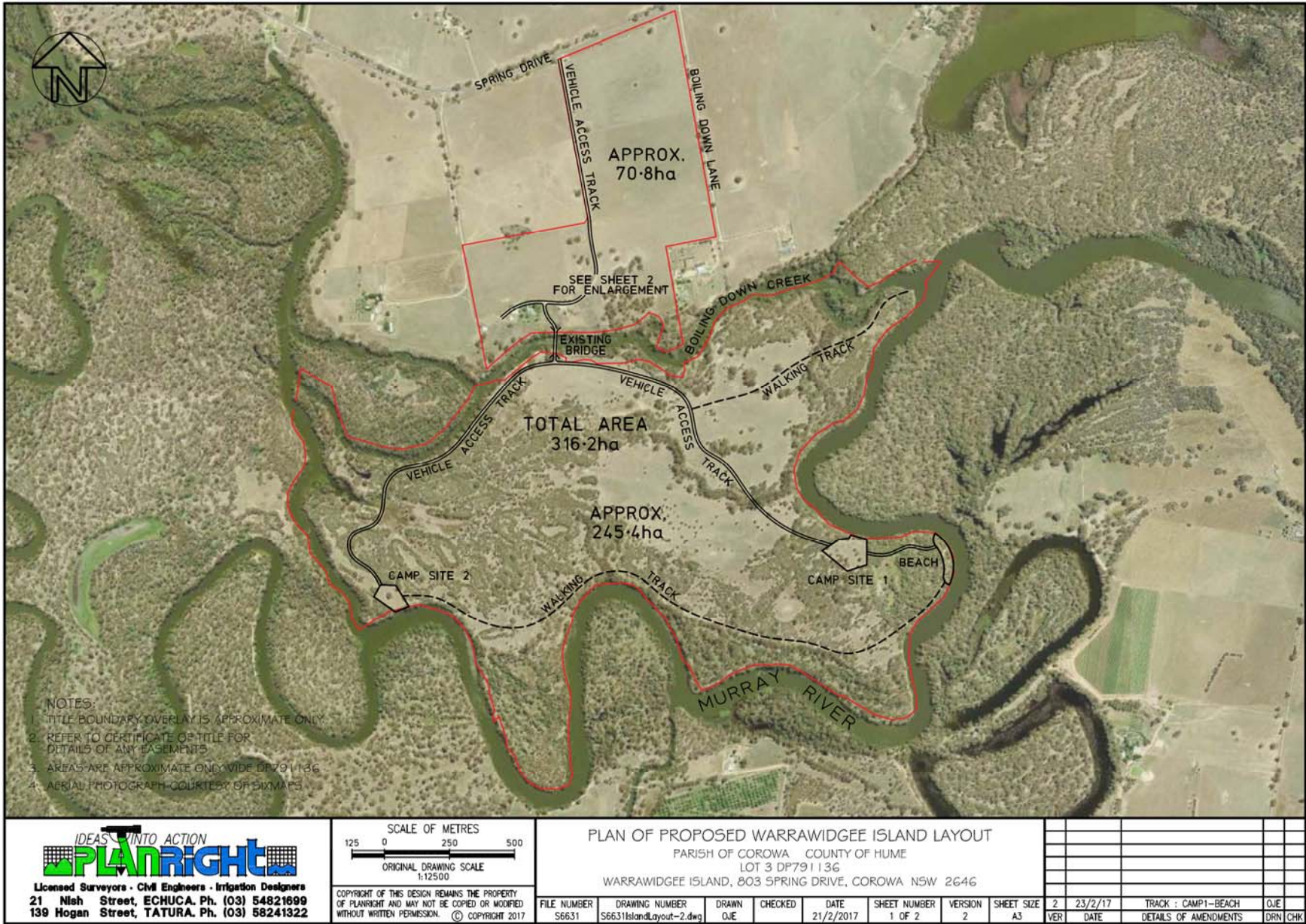
Feel free to contact me should you require any clarification and good luck with the project.

Regards



Mr Damian Wall
Managing Director
BAppSc, MEnvMgt, GradCert CHM

Attachment A: Assessment Site – “Warrawidgee Island”, Spring Drive, Corowa NSW.





6. WARRAWIDGEE ISLAND CONSERVATION RESORT DEVELOPMENT, COROWA NSW DRAFT DEVELOPMENT MASTER PLAN

10 20 30 40 50m 1:1000@A1
30 40 50 60 70m 1:2000@A3
Date: July 2017
For: BISC 00010 H
Design no.: 170123 H P 01
Rev: A



Scope
Project Visualisation

fiona slade
LANDSCAPE ARCHITECT

Attachment B: Threatened Flora Species – EPBC Act

Species	Preferred Habitat	EPBC Act Status	Likelihood ¹
Ecological Communities			
White Box – Yellow Box – Blakley's Red Gum Grassy Woodland and Derived Native Grassland	N/A	Critically endangered	No
Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions	N/A	Endangered	No
Natural Grasslands of the Murray Valley Plains	N/A	Critically endangered	Unlikely
Weeping Myall Woodlands	N/A	Endangered	No
Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia	N/A	Endangered	Potential
Plants			
<i>Amphibromus fluitans</i> (River Swamp Wallaby-grass, Floating Swamp Wallaby-grass)	Permanent swamps & lagoons	Vulnerable	Potential
<i>Brachyscome muelleroides</i> Mueller Daisy	Margins of claypans, moist grassland, lagoons in mud or water swampy Red Gum Forest in depressions.	Vulnerable	Potential
<i>Caladenia tensa</i> Greencomb Spider-orchid, Rigid Spider-orchid	Red-brown sandy loams on rises in open woodland dominated by Yellow Gum	Endangered	No
<i>Sclerolaena napiformis</i> Turnip Copperburr	Remnant grassland habitats and plains in tussock grassland in grey cracking clay.	Endangered	No
<i>Swainsona recta</i> Small Purple-pea, Mountain Swainson-pea, Small Purple Pea	Grassy understorey of woodlands & open-forests	Endangered	No

¹ Five categories for the 'likelihood of occurrence' have been used. The categories are based on recorded sightings listed in credible databases, the presence or absence of suitable habitat, other features of the site, results of the field survey and professional judgement. The 5 categories are:

'Yes'	The species/community was or has been observed on the site.
'Likely'	A medium to High probability that a species uses the site.
'Potential'	A suitable habitat for a species occurs on the site, but there is insufficient information to categorise the species as 'likely' or 'unlikely' to occur.
'Unlikely'	A Very Low to Low probability that a species uses the site.
'No'	Habitat on the site and in the vicinity is unsuitable for the species.

Attachment C: Threatened Fauna Species – EPBC Act

Species	Preferred Habitat	EPBC Act Status	Likelihood ¹
Birds			
<i>Anthochaera phrygia</i> - Regent Honeyeater	Feeds on nectar from eucalypts and mistletoes. Prefers taller and larger diameter trees for foraging. Movement is governed by the flowering of select eucalypt species.	Endangered	Potential
<i>Botaurus poiciloptilus</i> Australasian Bittern	Southern coastal areas and in the Murray River region of central northern Victoria lives in wetlands where it forages.	Endangered	No
<i>Calidris ferruginea</i> - Curlew Sandpiper	Intertidal mudflats in sheltered coastal areas and around non-tidal swamps, lakes and lagoons near the coast.	Critically endangered	No
<i>Grantiella picta</i> Painted Honeyeater	Inhabits mistletoes in eucalypt forests/woodlands, riparian woodlands of black box and river red gum, box-ironbark-yellow gum woodlands.	Vulnerable	Potential
<i>Lathamus discolor</i> Swift Parrot	On the mainland it disperses widely and forages on flowers and psyllid lerps in Forests and box gum woodlands dominated by winter flowering eucalypts.	Critically endangered	Potential
<i>Numenius madagascariensis</i> - Eastern Curlew	Sheltered coasts, mangrove swamps, bays, harbours and lagoons that contain mudflats and sandflats, often with beds of seagrass.	Critically endangered	No
<i>Pedionomus torquatus</i> - Plains-wanderer	Sparse grasslands with 50% bare ground, with most vegetation less than 5 cm in height.	Critically endangered	No
<i>Rostratula australis</i> --- Australian Painted Snipe	Shallow terrestrial freshwater (occasionally brackish) wetlands.	Endangered	No
<i>Polytelis swainsonii</i> Superb parrot	Box-Gum, Box-Cypress-pine and Boree Woodlands and River Red Gum Forest	Vulnerable	Potential
Fish			
<i>Galaxias rostratus</i> - Flathead Galaxias	Still or slow flowing waters. Spawns in spring when water temperatures rise above 10.5°C.	Critically endangered	Unlikely
<i>Maccullochella peelii</i> --- Murray Cod	A diverse range of habitats from clear rocky streams to slow-flowing, turbid lowland rivers and billabongs	Vulnerable	Likely ³
<i>Macquaria australasica</i> Macquarie Perch	Upper reaches of the Mitta Mitta, Ovens, and Broken Rivers.	Endangered	No
<i>Maccullochella macquariensis</i> Trout Cod	Slow-flowing, turbid lowland rivers and billabongs	Endangered	Likely
Frogs			
<i>Litoria raniformis</i> --- Southern Bell Frog	Found mostly amongst emergent vegetation, in or at the edges of still or slow-flowing water bodies such as lagoons, swamps, lakes, ponds and farm dams.	Vulnerable	Potential
Mammals			
<i>Nyctophilus corbeni</i> - Corben's Long-eared Bat, South-eastern Long-eared Bat	Scattered distribution mostly within the Murray-Darling Basin. Common in box, ironbark and cypress pine woodland on the western slopes and plains.	Vulnerable	Unlikely
<i>Petauroides Volans</i> - Greater Glider	Typically found in taller, montane, moist eucalypt forests with relatively old trees.	Vulnerable	No

³ Both the Murray Cod and Trout Cod are assumed present in the Murray River and Creek surrounding the site. Neither were recorded present.

Species	Preferred Habitat	EPBC Act Status	Likelihood ¹
<i>Phascolarctos cinereus</i> - Koala	Found in a range of habitats, from coastal islands and tall eucalypt forests to low woodlands inland.	Vulnerable	Potential
<i>Pteropus poliocephalus</i> - Grey-headed Flying-fox	A canopy-feeding frugivore and nectarivore, which utilises vegetation communities including rainforests.	Vulnerable	Potential
Insects			
<i>Synemon plana</i> Golden Sun Moth	Native temperate grassland and open grassy woodlands dominated by wallaby grass.	Critically Endangered	No
Reptiles			
<i>Aprasia parapulchella</i> - Pink-tailed Worm - lizard	Rocky outcrops or scattered partly buried rocks. It occurs under rocks in grassland and woodland in south-east Australia.	Vulnerable	No
Migratory Marine Birds			
<i>Apus pacificus</i> - Fork-tailed Swift	Spend most their life airborne. Build their nests on cliffs.		No
Migratory Terrestrial Species			
<i>Hirundapus caudacutus</i> - White throated Needletail	Almost exclusively aerial. Above wooded areas, including open forest and rainforest.		No
<i>Motacilla flava</i> - Yellow Wagtail	Damp or wet areas with low vegetation, e.g. pastures, meadows, hay fields and marshes, damp steppe and grassy tundra.		No
<i>Myiagra cyanoleuca</i> - Satin Flycatcher	Heavily vegetated gullies in eucalypt-dominated forests and taller woodlands.		No
Migratory Wetland Species			
<i>Actitis hypoleucos</i> - Common Sandpiper	Found in coastal or inland wetlands, both saline or fresh. It is found mainly on muddy edges or rocky shores.		No
<i>Calidris acuminata</i> - Sharp-tailed Sandpiper	During the non-breeding season, the sharp-tailed sandpiper is found on a wide variety of coastal and inland wetlands.		No
<i>Calidris ferruginea</i> Curlew Sandpiper	Intertidal mudflats in sheltered coastal areas	Critically Endangered	No
<i>Numenius madagascariensis</i> Far Eastern Curlew	Intertidal mudflats in sheltered coastal areas	Critically Endangered	No
<i>Pandion cristatus</i> Eastern Osprey	Littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia.		No
<i>Tringa nebularia</i> Common Greenshank	Inland wetlands and sheltered coastal habitats of varying salinity		No
<i>Calidris melanotos</i> - Pectoral Sandpiper	Found most commonly on mudflats with short grass or weedy vegetation, seems to prefer grass than water.		No
<i>Gallinago hardwickii</i> - Latham's Snipe, Japanese Snipe	Permanent and ephemeral wetlands in temperate and tropical regions. Open, freshwater wetlands with low, dense vegetation.		No
Listed Marine Species			
<i>Apus pacificus</i> - Fork-tailed Swift	Almost exclusively aerial, flying from less than 1m to at least 300m above ground.		No
<i>Actitis hypoleucos</i> Common Sandpiper	Coastal wetlands and some inland wetlands, with varying levels of salinity		
<i>Calidris acuminata</i> - Sharp-tailed Sandpiper	During the non-breeding season, the sharp-tailed sandpiper is found on a wide variety of coastal and inland wetlands.		No