

# Statement of Environmental Effects

Low Darling Road, Wentworth

May 2022

planning & development specialists

[www.jgconsult.com.au](http://www.jgconsult.com.au)



**James Golsworthy Consulting**

140 Pine Avenue Mildura VIC 3500  
PO Box 1650 Mildura VIC 3502

**telephone** 03 5022 8411  
**email** admin@jgconsult.com.au

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## Introduction

Development approval is sought for works associated with extension and operation of an existing irrigation pump station on the bank of the Darling River, to service a maturing vineyard to the west on the same landholding.

The land subject for the development is currently used as an access to the Darling River and houses the only pump station to service the recently established vineyard. The current infrastructure does not have sufficient capacity to meet the irrigation requirements of the maturing vineyard. The new infrastructure that will be installed through the proposed works will be located immediately to the south of the existing works and replicate the existing infrastructure to meet the irrigation demands in the future.

The proposed site is located on the western bank of Darling River approximately 25 kilometres north of the township of Wentworth. The selected pump site is located on the bank of river at Lot 2 DP 1253993 which is owned by proponent and can be accessed through an existing farm access from the Low Darling Road.

Following consideration of the Wentworth LEP, relevant SEPP's, integrated approval requirements and other documents, the proposal to install the new pontoons, pumps and associated works is worthy of support.

The adjoining land to the north is developed for horticultural production separate to the subject land and which includes independent river pump station. The new works have been designed and located to minimise any significant negative impacts upon the environment.

The proposal is consistent with Wentworth LEP and should be supported through the issue of a development consent.



Figure 1 *Site of the proposed pump station*

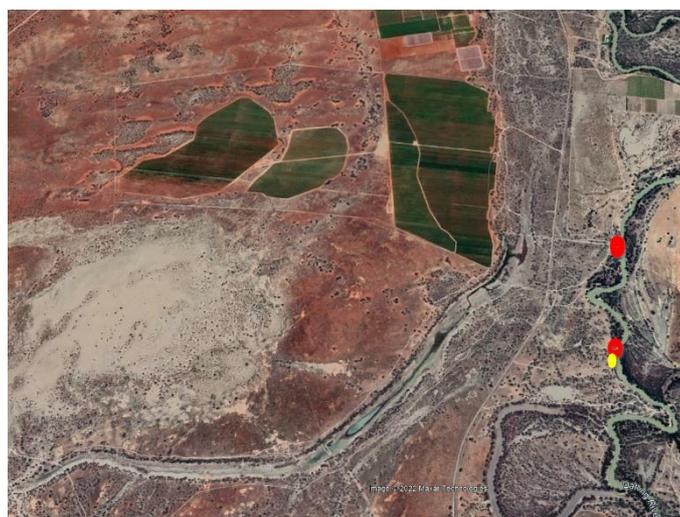


Figure 2 *Existing two pump stations located on the land and adjoining land, highlighted in red*

# Proposal

## Project justification

The aim of the project is to construct and operate a pump station to meet the irrigation demand of vineyards which the proponents have established to the western side of Low Darling Road.

The pump station will consist of three floating pontoons, each of which will house two pumps and suction. The existing control room will be extended to house the required infrastructure to run the system. Power will be supplied from the existing diesel genset on site. The site will soon be energised by extending electricity north of property o Low Darling Road. The control room will be designed and constructed at a level to ensure the pump remains operational in the 1:100-year flood event. It will be clad in colours sympathetic to the locality.

One pontoon will be installed immediately following the consent being granted. The remaining two pontoons will be installed over a period of 5 years as the vines mature.

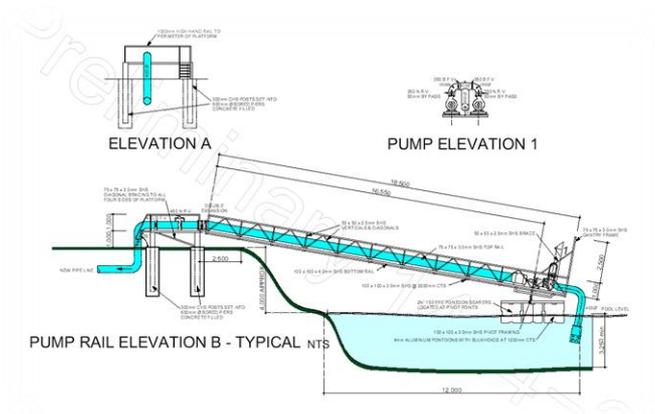


Figure 4 Pump Rail elevation A & B



Figure 5 Location plan

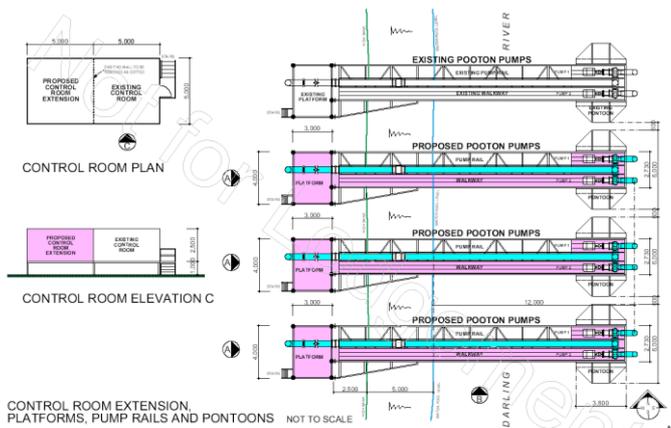


Figure 3 Pump rail and platform plan view

## Construction plan

Works at the site will broadly follow the outline below:

- ◆ The structural elements will be fabricated offsite. Other modular elements will be purchased and fitted out as required.
- ◆ Bore holes will be drilled at the riverbank and poured with concrete to provide a support for the raised platform.
- ◆ The pontoon will be lifted into place and tethered.
- ◆ The prefabricated gantry will be lifted into position and affixed to the pontoon and to the pump shed.
- ◆ The pumps, suctions and delivery mains will be installed.
- ◆ The control room will be extended.
- ◆ The works will be energised and commissioned.



Figure 7 Site for the additional pump sets

## Access

The site can be accessed via a private track off the Low Darling Road. There is ample room available for vehicles parking on site. Therefore, no additional access tracks or parking areas will be required or be created for parking contractors' vehicles.



Figure 6 Access from Darling River west to Low Darling Road

## Planning controls

**Table 1** Planning controls for the land

Type	Planning Control
Local Environment Plan	Wentworth LEP 2011
Land Zoning	W1 – Natural Waterways Zone
	RU1 – Primary production
Minimum lot size	10,000 ha
Terrestrial Biodiversity	Terrestrial Biodiversity
Regional Plan Boundary	Far West

### Definition

The works are defined as a Water Supply System for which the LEP provides the definition as:

any of the following:

- a water reticulation system,
- a water storage facility,
- a water treatment facility,
- a building or place that is a combination of any of the things referred to in paragraphs (a)–(c).

### Zoning

In accordance with the Wentworth LEP zoning maps the land is contained within W1 Zone – Waterways and RU1 – Primary production.

### Waterways

The objectives of zone W1 are:

- To protect the ecological and scenic values of natural waterways.
- To prevent development that would have an adverse effect on the natural values of waterways in this zone.
- To provide for sustainable fishing industries and recreational fishing.

Development consent is required under zone W1 for the Water Supply System.

### Primary production

The objectives of zone RU1 are:

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To ensure the protection of both mixed dryland and irrigation agricultural land uses that together form the distinctive rural character of Wentworth.
- To ensure land is available for intensive plant agricultural activities.
- To encourage diversity and promote employment opportunities related to primary industry enterprises, including those that require smaller holdings or are more intensive in nature.

Development consent is required under zone RU1 for the Water Supply System.

A small portion of the works are included within Zone RU1. The proposed pump station is consistent with the objectives of the zone primarily through it being required to support the approved development of the land to produce wine grapes. Sustainable primary industry is encouraged through the zone which is being undertaken on the land.

The development being enabled will establish further diversity in primary production which is dominated by dryland farming enterprises. The proposal will enable expansion of irrigated horticulture to the locality being a form of intensive farming enabled by the proximity of the land to the Darling River which is within the weir pool therefore securing the required water source for the plantings.

Land use conflict will be minimised due to the lack of sensitive uses adjoining the land.

Employment will be created through the development being undertaken. Employment opportunities will primarily be on farm relating to the operation of the vineyard.

### Additional Local Provisions

Other relevant clauses from the LEP are as follows:

- ◆ 7.1 Earthworks
- ◆ 7.4 Terrestrial Biodiversity
- ◆ 7.5 Wetlands
- ◆ 7.6 Development on riverfront areas
- ◆ 7.7 Riparian land and Murray River and other watercourses – general principles
- ◆ 7.8 Additional provisions – development on riverbed and banks of the Murray River

An assessment of the relevant clauses is outlined below.

### Additional Planning Controls

The land is affected by the following mapping in addition to the zoning of the land:

- ◆ Riparian lands and watercourse
- ◆ Terrestrial biodiversity
- ◆ Wetlands

due care and diligence have been taken to identify and avoid impacts on archaeological sites through construction works.

An AHIMS search has been undertaken which confirms there is no aboriginal site, and the result of the search is detailed below.

### Water Management Act

A controlled activity approval authorises its holder to carry out a specified controlled activity at a specified location in, on or under waterfront land. Under the Water Management Act 2000 (WM Act), a controlled activity means:

- ◆ *the erection of a building or the carrying out of a work (within the meaning of the Environmental Planning and Assessment Act 1979), or*
- ◆ *the removal of material (whether extractive material) or vegetation from land, whether by way of excavation or otherwise, or*
- ◆ *the deposition of material (whether extractive material) on land, whether by way of landfill operations or otherwise, or*
- ◆ *the carrying out of any other activity that affects the quantity or flow of water in a water source.*

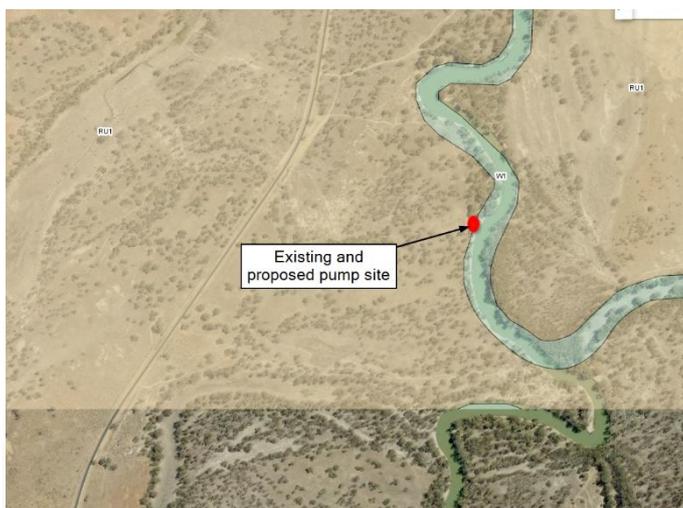


Figure 8 Zone Map

### Aboriginal cultural heritage

All Aboriginal cultural heritage is protected by the NSW National Parks and Wildlife Act 1974. Responsibility rests with the proponent of a development to demonstrate that

## Site and surrounding area

### Subject site

The site of the proposed pump station is on the western bank of Darling River at Wentworth. The site is accessed via a private track off the Low Darling Road. The site is located on the riverbank at Lot 2 DP1253993 which is freehold land.

The closest pump station to the proposal is immediately north on the property, development consent for which was issued by Council in 2021. A further pump site is approximately 900 meters upstream which supplies irrigation water to established vineyards.

There are parcels of land both on north and south of subject land which are already developed for permanent plantings.



Figure 10 Darling River looking upstream



Figure 11 Darling River looking downstream

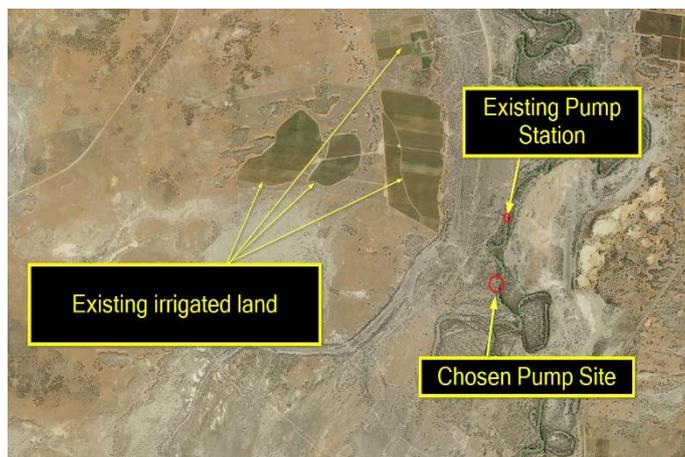


Figure 9 Aerial view of the surrounding area

The proposed site is currently devoid of any vegetation. Thus, there will be no harm to any vegetation while installing the pumps and accessories.



Figure 12 Location of the pump site



Figure 13 *Pump site toward Low Darling Road*



## Locality

The pump station will service a vineyard production enterprise that proponents have established on the western side of Low Darling Road, Wentworth.

The locality is used for agricultural pursuits with the predominant use being dryland grazing. Due to the proximity of the Darling River (being in the weir pool), suitable land has been developed for horticultural purposes mainly consisting of permanent plantings.

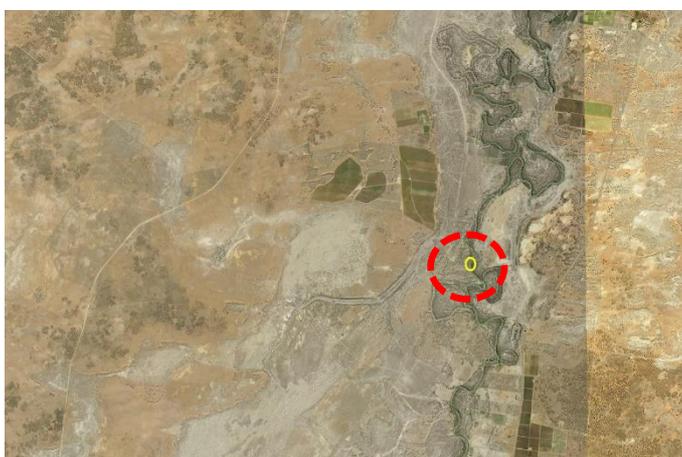


Figure 14 Aerial image of pump site and locality

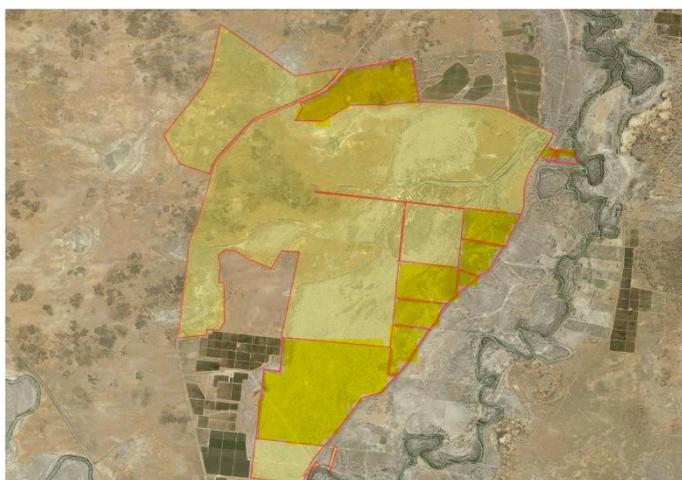


Figure 15 Aerial image of the landholding

## Planning assessment

### Policy context

The works subject to approval in this application constitute the smaller portion of a much larger overall project. The greater part of the works associated with this project are located on the land proper in terms of where the plantings are located to be irrigated. The necessary investigations into soils and hydrology have suggested the suitable lands in order to enable the development.

The proponent has engaged a number of suitably qualified persons to undertake assessments of, and provide expert opinion on, a number of aspects concerning this application. These include the impacts on soils, groundwater, and cultural heritage.

The results of these assessments were used to justify the project scope and were incorporated early on in the design and planning phase of the project.

### Aboriginal Cultural Heritage

A due diligence assessment has been undertaken by a senior archaeologist and suggested that there is no potential to harm the Aboriginal cultural heritage through the proposed development at the riverfront.

A search of AHIMS database was undertaken and it revealed that there are no aboriginal cultural heritage sites recorded at or close to site location.

The works will involve digging and excavation for constructing platform for control panel and floating type pontoon and installing pipeline.

The cultural heritage due diligence assessment has suggested that the development proposed through this proposal will not have any impacts to cultural heritage items as the site is previously disturbed, therefore, the probability of damaging any Aboriginal cultural heritage item is extremely low.

If there is interaction with any possible aboriginal cultural heritage items, all the works will be paused immediately, and relevant authorities will be notified.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

Figure 16AHIMS search for the lot pump site

### Fauna

The design of the pump station is a pontoon and gantry system. The pumps and rising main will be supported by the pontoon. As a result of this design, there are no contact with the riverbed or the riverbank.

The pump intake will be fitted with mesh exclusion screens to prevent the ingress of macroinvertebrates and other aquatic species into the pumping system.

Consequently, there will be no impact on aquatic or terrestrial habitat and no impact on the faunal species is likely to occur at the site.

### Wentworth LEP

The site is in Zone W1 Natural Waterways. The proposed works are consistent with the relevant objectives of this zone, including:

- ♦ *To protect the ecological and scenic values of natural waterways*

There are existing operational pump stations both upstream and downstream to irrigate the respective benefiting land. The proposed development will have no additional impact on the ecological values of the immediate region. The design siting and layout of the facility has considered impacts as necessary. The works have been cited in an area which is clear of vegetation and

has been previously disturbed by agricultural activities undertaken on the land.

The works site is a private property owned by the proponent and has no significant ecological value as habitat. The aquatic habitat will not be interfered with as there is no contact with the bed of the river. No snags will be removed from the river through the installation of the pontoon.

- ♦ *To prevent development that would have an adverse effect on the natural values of waterways in this zone*

The proposed development has been designed carefully to extract the required amount of water for the growth of horticultural crops which proponent is planning to establish. There will be no significant impacts resulting from the proposal.

- ♦ *To provide for sustainable fishing industries and recreational fishing*

There will be no adverse impacts on fishing as a result of the proposed development. The suctions will be fitted with appropriate mesh screens to prevent fish ingress leading to fish kills.

## Site Constraints

The principal site constraint is that the entire site is located on the sloping bank of the Darling River. The site has been carefully chosen to have no effect on native vegetation.

The slope of the riverbank presents additional complexities that have been accounted for both in the project design and the proposed works plan.

## Potential Impacts

Potential impacts on the site as result of this proposal have been identified through a process involving consultation with expert consultants, visits to the site, and negotiation with various consent authorities and service providers.

Below is a list of the potential impacts that have been identified during the planning phase for this project. The issues identified also includes the necessary steps that have been identified to minimise the impacts.

### Tree removal or damage

The site is devoid of vegetation so there will be no impacts to vegetation. There will be no need to remove, lop or cause any harm to vegetation at the site.

### Visual and aesthetic impact

The site has been carefully chosen next to the existing pontoon. Siting of the pump station in this location ensures maximum opportunity for screening of the works from the existing operations. Accordingly, there will be minimal changes to the site's visual environment.

An appropriate colour palette (including muted tones) will be used for all site infrastructure to ensure that it blends into the setting as much as possible.

### Traffic impacts

There will be a small amount of additional traffic generated through the works of establishing the pump station. There will be a minor increase in traffic volume during the short period of construction, but this will be confined to the period of installing pump station which will be 1-2 weeks.

### Impact on flow paths

There will be no impacts on any flows as a result of this proposal.

### Waste management

The production of waste will be limited to the construction phase of the project. During construction, the management of waste will be a priority. Workers at the site will be required to remove all waste materials from the site at the conclusion of each working day.

The operational pump station will produce no onsite waste.

### Siting impacts

The pump station will not interrupt views of, or disrupt access to, the river and its environs. The infrastructure owner is in the process of obtaining a Crown Lands Licence for the site.

### Visual appearance

The visual impact of the infrastructure at the site will reflect its function. The appearance will be attenuated as far as possible through the careful choice of materials and colours where scope to do so exists.

### Design impacts

There will be minimal changes to the site's appearance. The site will be developed for a pump station and the infrastructure at the site will reflect this use.

### Noise, vibration, and dust

The pump station is in a relatively remote area of New South Wales. There are no residences that are close enough to detect noise from the operating pump station. There will be no detectable vibration or dust or any other type of emissions from the operating pump station.

### Impact Minimisation

The proposal to install a new pump station has been chosen carefully to have a minimum impact both to River and its environs.

- ◆ No contact with the riverbank or riverbed. The gantry spans the riverbank and eliminates impacts with the bank and riverbed.
- ◆ Reduced maintenance and service callouts. The newly designed pumps have increased service intervals and require less maintenance.
- ◆ Safe access to the pumps. The Pumps are easily and safely accessed via the walkway on the gantry.
- ◆ The pumps will automatically respond to the changes in the river levels. The floating pontoon means that there is no need for workers to attend the site and manually reposition the pump to ensure that pumping can continue each time there are changes to river heights.
- ◆ The pumping design and siting offer reliability and efficiency ensuring that the vineyard has sufficient irrigation water during peak demand times and river flow regimes.

### Construction Impact

The proponent will implement several control measures to ensure that the potential impacts to the site because of construction activity will be controlled and minimised. These include the following:

#### Silt fencing

If required, silt fencing will be erected at the site. The first fence will be placed along the riverbank, close to the water's edge. This will prevent any loose soil or any other debris from entering the river. Any material trapped by the fence will be picked up by and removed from the site.

### Vegetation impact

The project will have no impact on vegetation. No vegetation will be cleared, trimmed, or lopped at any time during construction.

### Fauna impact

Impacts on faunal species because of the projects design and siting will be minimal. No snags or logs will be removed from the water. The pumps' suction intakes will be fitted with exclusion screens to prevent organisms being drawn into the pumps.

### Rubbish and waste

Contractors will be required to remove all wastes from the site each day. No waste of any type will be permitted to be stored at the site.

### Noise

Noise generated during construction will be general construction noise. Construction hours will be confined to the EPA recommended times.

### Dust, vibration, and other emissions

It is not expected that construction activity will result in emissions of dust, vibration, or any other type of emissions. The operational pump station will have none of these impacts.

## Conclusion

In conclusion, it is considered for the reasons outlined above, the development responds well to the opportunities and constraints of the site and is consistent with the relevant provisions.

The proposal is appropriate for the site for the following reasons:

- ♦ The proposal is consistent with Wentworth LEP.
- ♦ The proposal supports primary production industry in the region with the attendant benefits this brings to the wider region.
- ♦ There will be no loss of vegetation and no other substantial impact on ecological or biodiversity values of the locality.
- ♦ The proposal responds well to the site's characteristics and opportunities and has considered the potential impacts upon the locality and particularly of this section of the Darling River.
- ♦ The proposal will establish further diversity in primary production which is dominated by dryland farming in the area.
- ♦ The proposal will generate employment opportunities in the region primarily on the farm to operate and establish a vineyard.

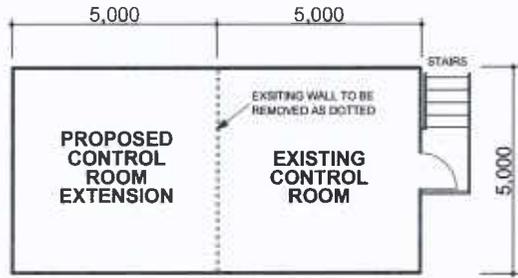
**James Golsworthy Consulting**

140 Pine Avenue Mildura VIC 3500  
PO Box 1650 Mildura VIC 3502

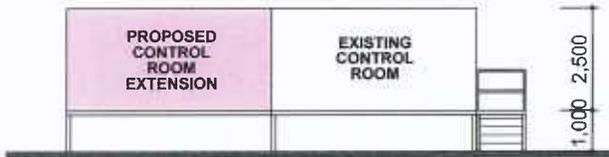
telephone 03 5022 8411  
email admin@jgconsult.com.au

[www.jgconsult.com.au](http://www.jgconsult.com.au)

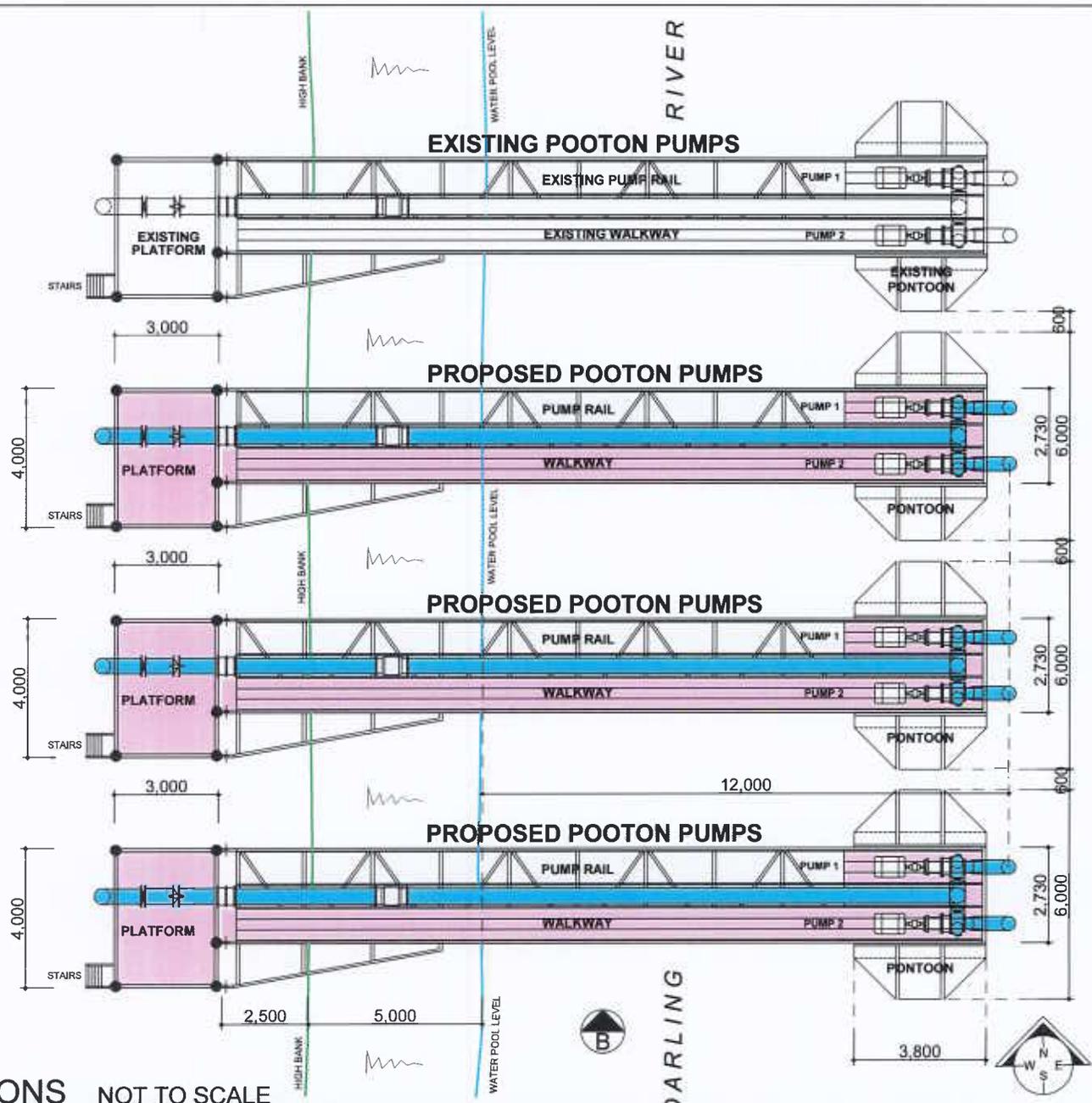




CONTROL ROOM PLAN



CONTROL ROOM ELEVATION C



CONTROL ROOM EXTENSION, PLATFORMS, PUMP RAILS AND PONTOONS NOT TO SCALE

A3





## LOCATION PLAN



A3





Reference: 21008

12 April 2021

Vasu Singla  
James Golsworthy Consulting  
Environmental Project Planner  
140 Pine Ave Mildura 3500

Dear Vasu,

**RE: ABORIGINAL CULTURAL HERITAGE DUE DILIGENCE ASSESSMENT  
FOR  
CROWN LAND ADJACENT TO JUNCTION VINEYARDS, AVOCA STATION,  
WENTWORTH, NEW SOUTH WALES**

Austral Archaeology Pty Ltd (Austral) has been engaged by James Golsworthy Consulting to provide Aboriginal Cultural Heritage Due Diligence Advice (ACHDDA) for the proposed Junction Vineyards Project at Avoca Station, Wentworth, New South Wales, New South Wales (NSW). This advice is intended to assist James Golsworthy Consulting in determining their obligations with regards to the *National Parks and Wildlife Act 1974* (NPW Act) and to determine whether the project will involve activities that may harm Aboriginal objects or places. Where an activity is likely to harm Aboriginal objects or places, consent in the form of an Aboriginal Heritage Impact Permit (AHIP) is required.

Austral (2021) completed a ACHDDA for the proposed impact area and during the site visit inspected all areas associated with the proposed development including Crown Land. The Crown Land associated with this project is the Darling River Bank and the river bed.

Neil Fenley (Senior Archaeologist, Austral) inspected the area on 11 February 2021 and determined there was no cultural heritage present or likely within the proposed impact area in the Crown Land allotment. The archaeological survey was conducted on foot and in accordance with Requirements 5 to 8 of the *Code of practice for archaeological investigation of Aboriginal objects in NSW* (DECCW 2010b).

It is therefore determined, based on the ACHDDA, that no cultural heritage will be impacted during the proposed development and no further archaeological assessment of the Crown Land is required for this project.

If unexpected finds are located during the construction phase, work should cease and a suitably qualified archaeologist should inspect the find to determine the best course of action in accordance with the NPW Act.

Please do not hesitate to contact me on 0429 019 106 if you wish to discuss any aspect of this submission.

Yours sincerely,



Amanda Atkinson

Director

Austral Archaeology Pty Ltd

ABN: 55 629 860 975

M: 0429 019 106

E: [amandaa@australarch.com.au](mailto:amandaa@australarch.com.au)

## 1. REFERENCES

DECCW 2010b, '*Code of practice for archaeological investigation of aboriginal objects in New South Wales*'.