Native Vegetation Clearance Data Report

Talia Farms – Irrigation Infrastructure Development (Revised)

Clearance under the *Native Vegetation Regulations 2017*

28th August 2025

Prepared by Sheree Edwards, Senior Environmental Consultant

Document Information

Client	URPS - , Graduate Consultant E
Issue Date	28/08/25
Version	1.0 FINAL
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1. Application information

Application Details

Applicant:	URPS for Talia Farms		
Key contact:	, URPS Graduate Consultant, Regional and Government Development | PH: | E:		
Landowner:	*Council Road Reserve under the care and control of the Renmark Paringa Council*		
Site Address:	Council road reserve adjacent H710700 S41, between Lower Pike Creek and River Murray, Lyrup		
Local Government Area:	Renmark Paringa	Hundred:	Paringa
Title ID:	N/A	Parcel ID	N/A

Summary of Proposed Clearance

Purpose of clearance	Clearance required for the construction of irrigation infrastructure associated with an agricultural development at Lyrup.
Native Vegetation Regulation	Regulation 12, Schedule 1; clause 34, Infrastructure
Description of the vegetation under application	0.102 ha - A1: *Acacia stenophylla* over Duma *florulenta* tall shrubs over +/- *Phragmites australis* 0.387 ha - B1: *Duma florulenta* mid open shrubland over low grasses, emergent *Acacia stenophylla* 0.25 ha - C1: *Tecticornia pergranulata* ssp. low samphire shrubland
Total proposed clearance - area (ha)	Addendum and revision to application previously approved - 2022/3191/753 0.741 ha proposed to be cleared.
Level of clearance	Level 4
Overlay (Planning and Design Code)	Native Vegetation Overlay applies.
Map of proposed clearance area	
Mitigation hierarchy	Refer to Section: Address the Mitigation Hierarchy
SEB Offset proposal	Payment: $16,904.68 (no GST) plus admin fee of $929.76 (GST incl) = $17,834.44

2. Purpose of clearance

2.1 Description & Background

On 7th July 2022 a decision notification was provided for an application to clear 1.09 ha of native vegetation incidental to the construction of irrigation infrastructure associated with an agricultural development at Lyrup by Talia Farms. The decision notification reference number is 2022/3191/753.

Below is a summary of the native vegetation clearance approval granted by the Native Vegetation Council as part of the initial approval.

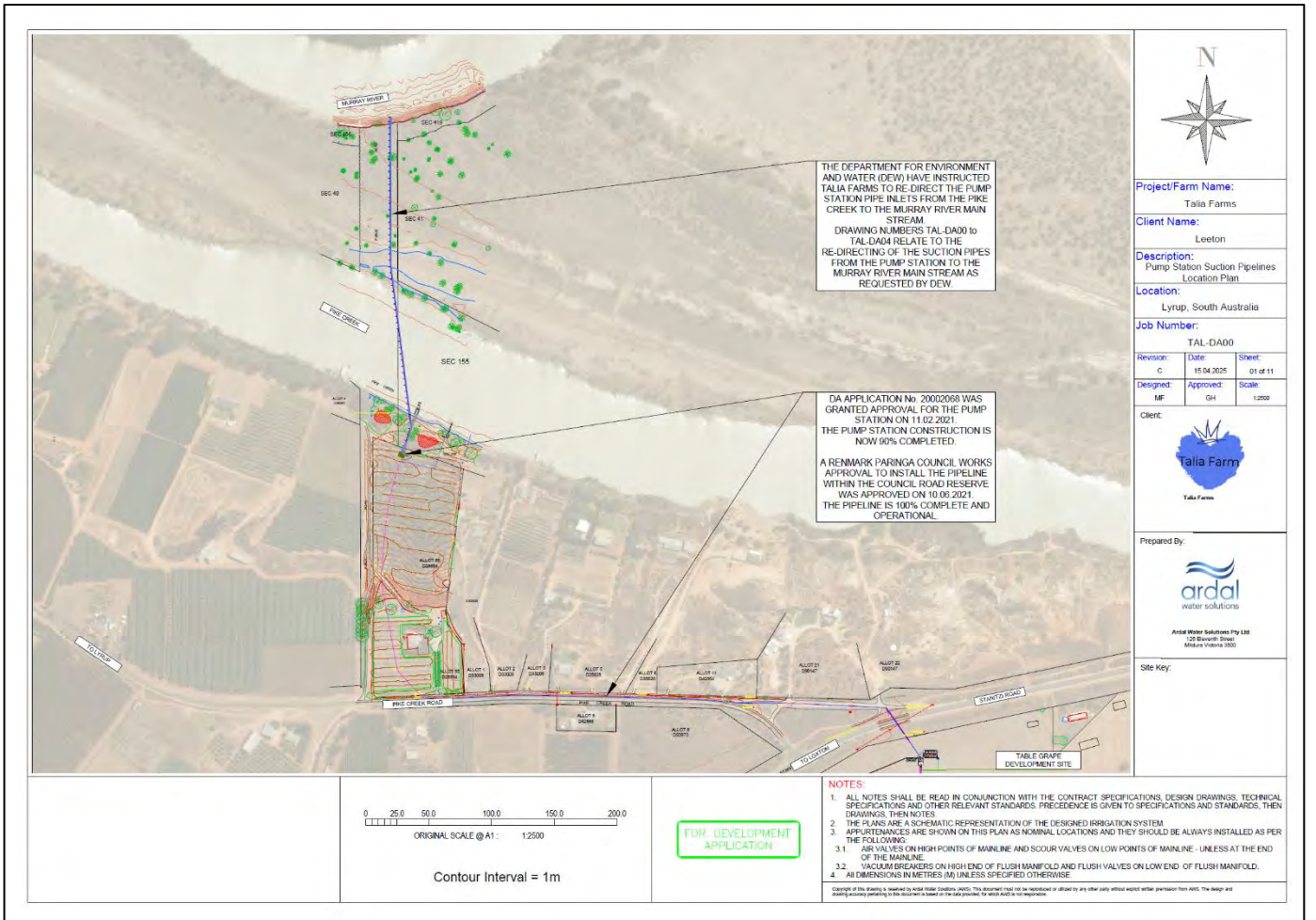
1.09ha of native vegetation consisting of:

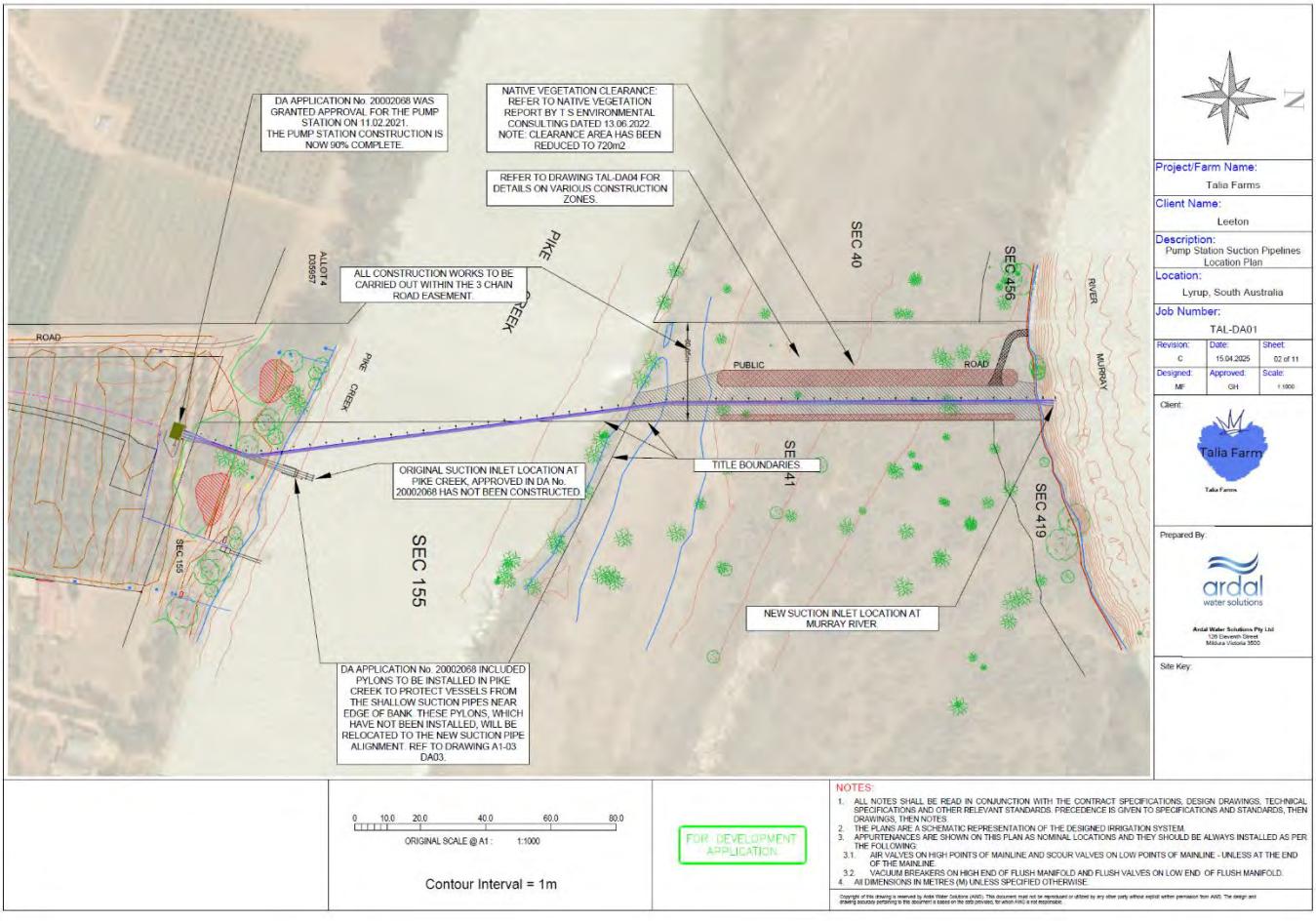
- 0.12 Ha *Eucalyptus camaldulensis var. camaldulensis* mid woodland over +/-*Acacia stenophylla* over *Duma florulenta* tall shrubs over, +/- *Phragmites australis*
- 0.64 Ha *Duma florulenta* mid open shrubland over low grasses
- 0.33 Ha *Tecticornia pergranulata* ssp. low samphire shrubland

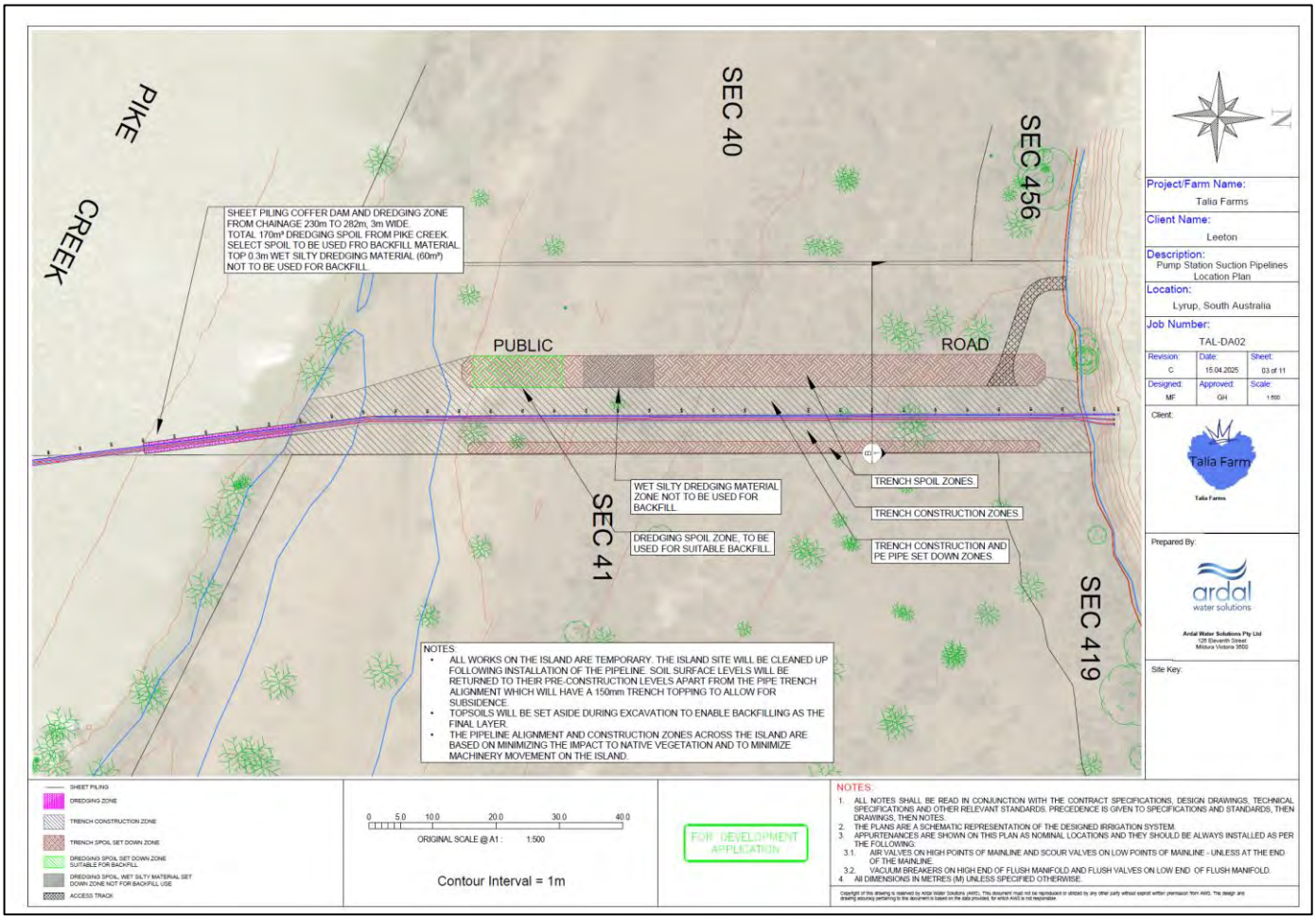
A request was received by URPS to review the assessment due to a change in the impacts to native vegetation resultant from amended site plans, and the lag in time from approval. The updated construction plans show the site will be prepared by trenching of the pipeline alignment and temporarily stockpiling the soil prior to laying the pipework. Following the pipework being laid in place, the topsoil will be retained and used to in-fill the excavated area. The previous construction plans involved de-watering the site and a larger area of native vegetation impacted.

2.2 General location map

2.3 Details of the proposal







2.4 Approvals <u>required</u> *or* <u>obtained</u> (but not limited to)

- *Native Vegetation Act 1991* – Application Number: 2022/3191/753
- *Planning, Development and Infrastructure Act 2016* - DA
- *Water Resources Act 1997* – Water License
- *Landscapes SA Act 2019* – Water Affecting Activity Permit
- *Aboriginal Heritage Act 1988* – Aboriginal Heritage Assessment

2.5 Native Vegetation Regulation

Schedule 1, Division 5 of the Native Vegetation Regulations – Regulation 12(34) – Infrastructure.

2.6 Development Application information

Conservation and Rural Zones.

Native Vegetation - *The Native Vegetation Overlay seeks to protect, retain, and restore areas of native vegetation.*

3. Method

3.1 Flora assessment

Recently approached by URPS to undertake a revised assessment of the proposed clearance area, due to the site construction requirement changing and subsequently less native vegetation impacted. The site was re-surveyed on the 8th of July 2025 by Matthew Humphrey from Terra Gana Pty Ltd who utilised the most up to date assessment method

and scoresheets. Revised site plans were provided by URPS. A Level 4 assessment was completed due to the size and nature of the proposed native vegetation clearance footprint.

(The initial survey was completed by Sheree Edwards (then Sheree Bowman) on the 14th of May 2022. The Bushland Assessment Methodology was used as approved by the Native Vegetation Council 1.14 Hectares of native vegetation was initially assessed as directed by Mark Lueth from Talia Farms during the field inspection.)

In line with the Bushland Assessment Methodology, a repeat desktop assessment was undertaken, including searches records of threatened flora species listed under the National Parks and Wildlife Act 1972 (SA) and the Environmental Protection and Biodiversity Conservation Act 1999 (Commonwealth). The following databases were queried for records since 1995 and within proximity to the proposed clearance site - EPBC Act Protected Matters Search Tool, Biological Database of South Australia, and Atlas of Living Australia.

3.2 Fauna assessment

A pre-field desktop assessment was undertaken utilizing searches for the presence of threatened fauna species listed under the National Parks and Wildlife Act 1972 (SA) and the Environmental Protection and Biodiversity Conservation Act 1999 (Commonwealth). The following databases were queried for records since 1995 and within 5km's of the proposed clearance site - EPBC Act Protected Matters Search Tool, Biological Database of South Australia, and Atlas of Living Australia. Refer to Appendix 3 for the EPBC Matters of National Significance Report.

Observations of both fauna species and habitat value were taken during the site visit on the 14th of May 2022, and the most recent survey on the 8th of July 2025. Refer to Section: Threatened Species Assessment for information on threatened species present and habitat suitability.

4. Assessment Outcomes

4.1 Vegetation Assessment

General description of the vegetation, the site and matters of significance

The site is situated within the Upper Murray Valley Land System. The land system is a complex landscape of wetlands and older terraces, with slopes and cliffs running up to the adjacent highlands. The soils are highly variable depending on the nature of the alluvium (on flats), or the older material exposed (on slopes) by the downcutting of the river. The wetlands and low terraces are little used for primary production but have high conservation and recreation value. The higher terraces dominated by medium to fine textured soils are commonly used for horticultural irrigation. The slopes with a range of sandy-to-sandy loam soils over highly calcareous subsoils are also widely used for horticulture, except where they are too steep and / or eroded.

The impact site is located within the Pike-Mundic Wetland Complex, on an island between the River Murray and the Lower Pike Creek. The proposed clearance footprint is restricted to a road reserve under the care and control of the Renmark Paringa Council. The site is immediately south of Penky Island, in the River Murray National Park, which is part of the Riverland Biosphere Reserve. The impact site is on land which is subject to inundation and within the 1956 River Murray flood extent. The assessment was completed over 3 vegetation associations and guided by the minimum requirements for clearance by Talia Farms – amended in the most recent construction and site plans.

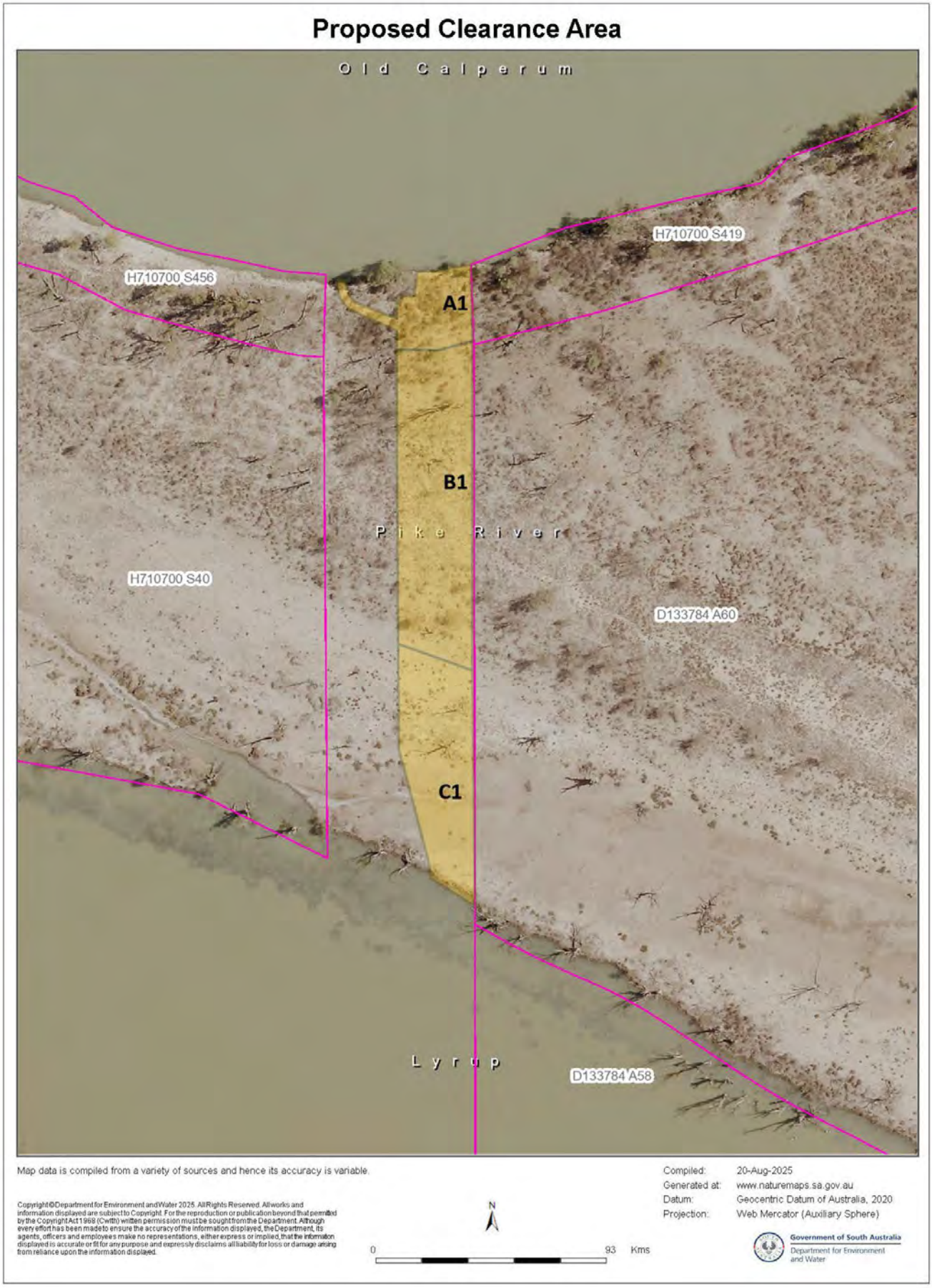
Details of the vegetation associations proposed to be impacted

Vegetation Association	A1: *Acacia stenophylla* over *Duma florulenta* tall shrubs over +/-*Phragmites australis*				
 					
General description	Open woodland vegetation, fringing the River Murray. The vegetation is patchy and has long dead standing *Eucalyptus camaldulensis ssp camaldulensis* present. The ground cover is consistent across the site and dominated by chenopods and annual ephemeral species. Die back of *Duma florulenta* observed across the site, consistent with a seasonally inundated vegetation community. This vegetation is benchmarked against: MDBSA 10.3: Freshwater/ Brackish Tall Herblands/ Emergent Shrubs and Trees due to the loss of the *Eucalyptus camaldulensis* upperstorey.				
Threatened species or community	*Myoporum parvifolium* was located within A1, listed as Rare under the National Parks and Wildlife Act SA 1972. There was an individual plant in the previous assessment (2022), which was excluded from the area impacted. Due to the change in the plant's distribution, this flora sp. is being now impacted by the construction works. No other threatened flora or fauna under the NP&W Act or EPBC Act listed species or community recorded.				
Landscape context score	1.17	Vegetation Condition Score	76.78	Conservation significance score	1.14
Unit biodiversity Score	102.41	Area (ha)	0.102	Total biodiversity Score	10.45

Vegetation Association	B1: *Duma florulenta* mid open shrubland over low grasses, emergent *Acacia stenophylla*				
 					
General description	The vegetation is patchy and has long dead standing Eucalyptus camaldulensis ssp camaldulensis present. The ground cover is consistent across the site and dominated by chenopods and annual ephemeral species. Die back of *Duma florulenta* observed across the site, consistent with a seasonally inundated vegetation community. This vegetation is benchmarked against: MDBSA 10.3: Freshwater/ Brackish Tall Herblands/ Emergent Shrubs and Trees				
Threatened species or community	No threatened flora or fauna under the NP&W Act or EPBC Act listed species or community recorded.				
Landscape context score	1.17	Vegetation Condition Score	54.39	Conservation significance score	1.10
Unit biodiversity Score	70.00	Area (ha)	0.387	Total biodiversity Score	29.09

Vegetation Association	C1: *Tecticornia pergranulata* ssp. low samphire shrubland				
 					
General description	The ground cover is sparse and consistent across the site and consists of only three plant species. Long dead *Duma florulenta* observed across the site. Large open areas of muddy flats, inter-dispersed with vegetated clumps and woody debris. This vegetation is benchmarked against: MDBSA 11.1: Low Samphire Shrublands with Tidal Inundation/ Hypersaline Soils				
Threatened species or community	No threatened flora or fauna under the NP&W Act or EPBC Act listed species or community recorded.				
Landscape context score	1.17	Vegetation Condition Score	57.59	Conservation significance score	1.10
Unit biodiversity Score	74.12	Area (ha)	0.25	Total biodiversity Score	18.53

<u>Site map</u> showing areas of proposed impact



4.2 Threatened Species assessment

Species observed on site, or recorded within 5 km of the application area since 1995, or the vegetation is considered to provide suitable habitat

Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
Polytelis anthopeplus monarchoides (Regent Parrot)	V	VU	4	-	Habitat comprises River Red Gum and sometimes Black Box communities for nesting, and large diverse blocks of mallee woodland for feeding. Nest trees are usually located within proximity to water but variable up to 200 metres from water and within 20 km of mallee foraging habitat. Non-breeding adults and immature birds rely on areas of mallee away from the Murray River floodplain throughout the year.	Not recorded during the visit or within 5kms in the BDBSA or MNES Search. The impact site provides roosting, perching, and nesting habitat for Regent Parrots and the site occurs within their natural range. There is a high likelihood of use of large standing dead River
Litoria raniformis (Southern Bell-Frog)	V	VU	3,5	21-Oct-2024	Adults are usually found close to or in water or very wet areas in woodlands, shrublands, and open and disturbed areas. Eggs and tadpoles can be found in permanent lakes, swamps, dams, and lagoons with still water.	Possible – offers valuable and varied habitat for this species. Last record is greater than 20 years ago which may reflect lack of survey effort, rather than populations numbers.
Anhinga novaehollandiae (Australasian Darter)	R	-	3	05-Dec-2023	Habitat is wetlands and sheltered coastal waters. It prefers smooth, open waters, for feeding, with tree trunks, branches, stumps, or posts fringing the water, for resting and drying its wings. Most often seen inland, around permanent, and temporary water bodies at least half a	Unlikely – the vegetation impacted is unlikely to provide valuable habitat for this species. Whilst the species may utilize tree trunks and branches fringing and overhanging water bodies, this is unlikely to be impacted in this

					metre deep. It requires waters with sparse vegetation that allow it to swim and dive easily. It builds its nests in trees standing in water and will move to deeper waters if the waters begin to dry up.	
Philemon citreogularis citreogularis (Little Friarbird)	R	-	3	26-Oct-2017	The Little Friarbird is found near water, mainly in open forests and woodlands dominated by eucalypts. Also found in wetlands, monsoon forests, mangroves, and coastal heathlands. Pairs nest in vegetation almost always near or overhanging water.	Unlikely – the vegetation impacted is unlikely to provide valuable habitat for this species.
Stictonetta naevosa (Freckled Duck)	V	-	3	26-Oct-2017	The Freckled Duck prefers permanent freshwater swamps and creeks with heavy growth of bullrushes, lignum or tea-tree. During drier times, the Freckled Duck moves from ephemeral (not permanent) breeding swamps to more permanent waters such as lakes, reservoirs, farm dams and sewerage ponds. They generally rest in dense cover.	Possible – this area does not provide valuable habitat for this species. It is degraded habitat and lacks much of what this species requires to thrive or utilize frequently.
Zapornia tabuensis (Spotless Crake)	R	-	3	14-Nov-2003	Australian Spotless Crakes inhabit the margins of well vegetated saline, brackish freshwater or wetlands, swamps, estuaries, saltmarsh lagoons, billabongs, and sewage ponds, and where they can usually remain hidden among dense shrubs, grass, or thickets, though they are	Likely – offers valuable and varied habitat for this species. Last record is almost 20 years ago which may reflect on lack of survey effort, rather than populations numbers.

					sometimes seen out in the open on areas of bare mud.	
Morelia spilota (Carpet Python)	R	-	3	27-Mar-2009	Carpet Pythons are often associated with River Red Gum habitat but can also be found in rocky areas and other habitats. They are known to sometimes shelter in roof spaces and pump houses.	Likely – large standing long dead red gums provide valuable habitat for this species and is in an area frequented by this species.
Varanus varius (Lace Monitor)	R	-	3	19-Nov-2003	Lace Monitors prefers heathy woodland and wet or dry forests and temperate woodland habitats with large Eucalypt trees with hollows. They shelter in burrows, hollow logs, and rock crevices. They utilise open paddocks and grazing land to search for food and shelter and when moving between patches of vegetation.	Possible– due to the seasonal inundation this site is unlikely to provide valuable habitat for this species, but it is possible to be utilized in drier times of the year.
Source; 1- BDBSA, 2 - AoLA, 3 – NatueMaps 4 – Observed/recorded in the field, 5 - Protected matters search tool, 6 – others NP&W Act; E= Endangered, V = Vulnerable, R= Rare EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable						

Criteria for the likelihood of occurrence of species within the Study area.

Likelihood	**Criteria**
Highly Likely/Known	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is present and falls within the known range of the species distribution or; The species was recorded as part of field surveys.
Likely	Recorded within the previous 20 years, the area falls within the known distribution of the species and the area provides habitat or feeding resources for the species.
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area provide limited habitat or feeding resources for the species. Recorded within 20 -40 years, survey effort is considered adequate, habitat and feeding resources present, and species of similar habitat needs have been recorded in the area.
Unlikely	Recorded within the previous 20 years, but the area provide no habitat or feeding resources for the species, including perching, roosting or nesting opportunities, corridor for movement or shelter. Recorded within 20 -40 years; however, suitable habitat does not occur, and species of similar habitat requirements have not been recorded in the area. No records despite adequate survey effort.

4.3 Cumulative impact

When exercising a power or making a decision under Division 5 of the Regulations, the NVC must consider the potential cumulative impact, both direct and indirect, that is reasonably likely to result from a proposed clearance activity.

As part of the final approvals process and thorough environmental impact and mitigation measures, all indirect and direct, including cumulative impacts have been taken into account in this application to clear native vegetation.

4.4 Address the Mitigation Hierarchy – <u>amended from initial application</u>

When exercising a power or making a decision under Division 5 of the Regulations, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimise, impacts on biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

a) Avoidance – outline measures taken to avoid clearance of native vegetation

Native vegetation could not be avoided as part of this development. All measures and potential impacts to native vegetation have been considered in planning this project. Initial discussions regarding impact minimisation and avoidance began during the initial site visit by the accredited consultant in 2020.

Due to the previous DA approval, construction commenced of the pump infrastructure, with the associated approval to draw water from the Lower Pike Creek. Due to the repeal of the Water Resource Works Approval since the initial DA approval, native vegetation is now proposed to be impacted on the island between the River Murray and the Lower Pike Creek. This will allow for the drawing of irrigation water from the River Murray, as instructed by the Department of Environment and Water as an alternative (to the Lower Pike Creek).

b) Minimisation – if clearance cannot be avoided, outline measures taken to minimise the extent, duration and intensity of impacts of the clearance on biodiversity to the fullest possible extent (whether the impact is direct, indirect or cumulative).

The applicant has minimized clearance of native vegetation by:

- *Firstly, seeking approval (incl initial DA approval for the development) to utilize water from the Lower Pike Creek (to avoid clearance and impacts to adjoining wetland environments), unfortunately this is no longer a feasible option due to the application to vary the Water Resources Works Approval being refused by the Department for Environment and Water.*
- *Noting the previous applications have sought to avoid and minimize clearance at all levels of the development planning process, including the most recent revision to dredge the pipeline alignment, rather than the de-watering plan and proposed works in the previously approved NV clearance application.*
- *The irrigation plans needed to change significantly between the first, subsequent and current development application.*
- *The applicant was able to utilise most of the existing clearance footprint for the infrastructure associated with the project on the southern (land) side of the Lower Pike Creek (not associated with this application), but additional native vegetation impacts are now proposed for the area across Lower Pike Creek.*
- *Avoiding the clearance of some large, long dead and standing Eucalyptus camaldulensis ssp camaldulensis within the native vegetation clearance footprint.*

c) Rehabilitation or restoration – outline measures taken to rehabilitate ecosystems that have been degraded, and to restore ecosystems that have been degraded, or destroyed by the impact of clearance that cannot be avoided or further minimised, such as allowing for the re-establishment of the vegetation.

The native vegetation clearance is temporary. The applicant will implement actions to re-establish the vegetation after clearance has occurred. This will be undertaken by scraping off the topsoil/ dredging the pipeline alignment, vegetation and sticks and placing it into a windrow to enable reinstating as final top dressing immediately following the construction. Enabling the soil structure and seed bank to re-establish post construction activities. It is anticipated that this activity will

be effective in restoring much for the site in the medium term, due to the site location, duration of site disturbance and site hygiene and protection measures which will be applied during the proposed activities. A 0.6 reduction factor for rehabilitation of the impact site has been applied in the assessment spreadsheets to reflect this rehabilitation works.

d) Offset – any adverse impact on native vegetation that cannot be avoided or further minimised should be offset by the achievement of a significant environmental benefit that outweighs that impact.

Th applicant will address the SEB Offset by making a payment into the Native Vegetation Fund. The NVC may choose to offset the initial payment against this.

The NVC will only consider an offset once avoidance, minimisation and restoration have been documented and fulfilled. The SEB Policy explains the biodiversity offsetting principles that must be met.

4.5 Principles of Clearance (Schedule 1, *Native Vegetation Act 1991*)

The NVC will consider Principles 1(b), 1(c) and 1(d) when assigning a level of Risk under Regulation 16 of the Native Vegetation Regulations. The NVC will consider all the Principles of clearance of the Act as relevant, when considering an application referred under the *Planning, Development and Infrastructure Act 2016*.

Principle of Clearance	**Considerations**
Principle 1a - it comprises a high level of diversity of plant species	Relevant information The number of plant species recorded (native and introduced) for each vegetation association: A1: 17 native & 1 introduced. Plant Diversity Score of 28/30 B1: 10 native & 0 introduced. Plant Diversity Score of 24/30 C1: 3 native and 0 introduced. Plant Diversity Score of 30/30
	Assessment against the principle Seriously at Variance – A1, B1 & C1.
	Moderating factors that may be considered by the NVC – The Native Vegetation Council may choose to consider the 'Amount of clearance related to area of remnant' moderating factor when assessing this native vegetation application. This determination is at the assessment and discretion of the Native Vegetation Council. Where only a very small area of vegetation will be impacted relative to the amount of vegetation within the local vicinity (less than 0.25% of the native vegetation within a 5 km radius to be impacted), this may reduce the impact from 'Seriously at variance' to 'At variance'. There is approx. 3,377 ha of native vegetation remaining within a 5k radius. (Calculation based on 43% (NatureMaps, August 2025)). 0.25% of this total is 8.44 ha of native vegetation. The area of impact is 0.44 ha, which is less than the 0.25% of the native vegetation within the 5km radius. The Native Vegetation Council may wish to reduce the impact from 'Seriously at Variance' to 'At Variance' for vegetation association identified as A1, B1 & C1.
Principle 1b - significance as a habitat for wildlife	Relevant information List of threatened species that may use the vegetation: *Polytelis anthopeplus monarchoides* (Regent Parrot) (B1 predominantly) VU Nationally, V in SA *Litoria raniformis* (Southern Bell-Frog) - VU Nationally, V in SA *Anhinga novaehollandiae* (Australasian Darter) – Rare in SA *Calidris acuminata* (Sharp-tailed Sandpiper) – VU Nationally

	Corcorax melanorhamphos – (White-winged Chough) – Rare in SA *Philemon citreogularis citreogularis* (Little Friarbird) – Rare in SA *Stictonetta naevosa* (Freckled Duck) – Vulnerable in SA *Zapornia tabuensis* (Spotless Crake) – Rare in SA *Morelia spilota* (Carpet Python) – Rare in SA *Trichosurus vulpecula* (Common Brushtail Possum) *Varanus varius* (Lace Monitor) – Rare in SA *Coturnix ypsilophora Australia* – Vulnerable in SA *Aphelocephala leucopsis leucopsis (S*outhern Whiteface) – sp. The native vegetation supports a high diversity of animal species, as part of the greater area in this wetland complex. The vegetation assists in providing a corridor for movements across the landscape and habitat refuge, particularly the large, long dead standing River Red Gums which provide habitat for many species on this list. The ephemeral vegetation across the site is transformative and adapts to the changing water heights and quality (salinity). This is observed in the dead and dying *Duma florulenta* and emergence of germination annuals and diverse perennials. Refer to Section 4.2: Threatened Species Assessment for a thorough assessment of individual species requirements. <u>Patches A1, B1 & C1.</u> Threatened Fauna Score – 0.1 Unit biodiversity Score – 102.41 (A1), 70.00 (B1) & 74.12 (C1).
	<u>Assessment against the principle</u> Seriously at Variance – A1, B1 & C1
	<u>Moderating factors that may be considered by the NVC:</u> The Native Vegetation Council may choose to consider the 'Impact Significance' moderating factor when assessing this native vegetation application. The Native Vegetation Council may chose to decrease the risk from 'Seriously at variance' to 'At Variance' with impact significance considerations. This determination is at the assessment and discretion of the Native Vegetation Council. It is unlikely that this clearance impact will result in accelerated declines of the listed threatened species. Including a decrease in species occupancy and population size. Due to the location, it is unlikely to fragment existing local threatened species populations or adversely affect critical habitats of a species. It is noted that the cumulative impacts (from clearance, land degradation and other impacts) contribute to declines across the landscape and this can be seen in incremental and long-term degradation of habitats and species decline. However, much of the declines in species' have been observed from long term historical degradation across the landscape. The clearance impacts are likely to displace some threatened fauna species such as the Regent Parrot, Lace Monitor and Carpet Python which may inhabit the long dead standing red gums on site. Other species such as Southern Bell Frog and wetland birds will be more likely to utilise higher quality and more suitable habitat in adjoining areas.
Principle 1c - plants of a rare, vulnerable or	<u>Relevant information</u> *Myoporum parvifolium* (Creeping Boobialla), Rare under the National Parks and Wildlife Act (SA) 1972 is present in A1. A majority of plants will be removed as part of this clearance proposal.

endangered species	Threatened Flora Score(s) – 0.04 (A1 only)
	<u>Assessment against the principle</u> At Variance – A1
	<u>Moderating factors that may be considered by the NVC:</u>
***Principle 1d - the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered*:**	<u>Relevant information</u> No threatened communities under the EPBC Act or threatened ecosystems under the DEW Provisional list of threatened ecosystems present. Threatened Community Score – 1
	<u>Assessment against the principles</u> Not at Variance - A1, B1 & C1.
	<u>Moderating factors that may be considered by the NVC: N/A</u>
Principle 1e - it is significant as a remnant of vegetation in an area which has been extensively cleared.	<u>Relevant information</u> Remnancy figures for IBRA Association and IBRA Subregion: IBRA Association (Renmark): 58% IBRA Subregion (Murray Scroll Belt): 56% The health of the remnant is relatively poor and declining, with long dead and standing River Red Gums and dead and dying *Duma florulenta*. There are areas which are dominated by only a handful of plant species with a low cover abundance. The vegetation has high diversity ratings, against their assigned benchmark vegetation communities.
	<u>Assessment against the principle</u> At Variance - A1, B1 & C1.
	<u>Moderating factors that may be considered by the NVC –</u> The Native Vegetation Council may choose to consider the 'Impact Significance' moderating factor when assessing this native vegetation application. The Native Vegetation Council may wish to decrease the risk from 'At variance' to 'Not at Variance' with impact significance considerations. This determination is at the assessment and discretion of the Native Vegetation Council.
Principle 1f - it is growing in, or in association with, a wetland environment.	<u>Relevant information</u> The vegetation is associated with a wetland. The impact site is located within the Pike-Mundic Wetland Complex, on an island between the River Murray and the Lower Pike Creek. The site is immediately south of Penky Island, in the River Murray National Park. The impact site is on land which is subject to inundation and within the 1956 River Murray flood extent.
	<u>Assessment against the principle</u> Seriously at Variance – A1, B1 & C1.

	Moderating factors that may be considered by the NVC – The Native Vegetation Council may choose to consider the 'Area of Impact' and 'Impact Significance' moderating factors when assessing this native vegetation application. The wetland area is relatively small, considering the wetlands within the River Murray wetland and tributary system and in a close proximity to the impact site. The Native Vegetation may consider the risk be reduced to 'At variance', from 'Seriously at Variance'. This determination is at the assessment and discretion of the Native Vegetation Council. The vegetation clearance would not impact the functioning of the adjoining wetland and riparian areas. The vegetation impact would not affect the ecological functioning or character of the adjoining wetland system. No hydrological change would occur, in addition to the habitat or lifestyle of any native species dependent upon the wetland being seriously affected. No measurable change in the physio-chemical status of the wetland would occur, i.e., change in the level of salinity, pollutants, or nutrients in the wetland, change in water temperature which may adversely impact on biodiversity.
Principle 1g - it contributes significantly to the amenity of the area in which it is growing or is situated.	Relevant information The proposed clearance footprint is restricted to a road reserve under the care and control of the Renmark Paringa Council. The amenity of the site in the long term will not be impacted due to the remediation works to be completed post construction as well as impact minimization onsite. The location of the site cannot be easily viewed or accessed by the public.

4.6 Risk Assessment

Determine the level of risk associated with the application

Total clearance	No. of trees	-
	Area (ha)	0.74
	Total biodiversity Score	56.22
Seriously at variance with principle 1(b), 1(c) or 1 (d)		1(b)
Risk assessment outcome		Level 4

5. Clearance summary

Clearance Area Summary Table

Block	Site	Species diversity score	Threatened Ecological community Score	Threatened plant score	Threatened fauna score	UBS	Area (ha)	Total Biodiversity score	Loss factor	Loadings	Reductions	SEB Points required	SEB payment	Admin Fee
A	1	30	1	0.04	0.1	102.41	0.102	10.45	0.6			6.9	$3,143.15	$172.87
B	1	24	1	0	0.1	70.00	0.387	27.09	0.6			17.88	$8,144.86	$447.97
C	1	30	1	0	0.1	74.12	0.252	18.69	0.6			12.33	$5,616.67	$308.92
						Total	**0.74**	**56.22**				**37.11**	**$16,904.68**	**$929.76**

Totals summary table

Economies of Scale Factor	0.5
Rainfall (mm) Factor	251
SEB Points of Gain/ha Factor	7

SEB Uplift Factor	1.10
Management Cost ($/ha)	$25,408

Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
56.22	37.11	$16,904.68	$929.76	$17,834.44

6. Significant Environmental Benefit

A Significant Environmental Benefit (SEB) is required for approval to clear under Division 5 of the Regulations. The NVC must be satisfied that as a result of the loss of vegetation from the clearance that a SEB will result in a positive impact on the environment that is over and above the negative impact of the clearance.

ACHIEVING A SEB

☒ Pay into the Native Vegetation Fund: $16,904.68 (no GST) plus admin fee of $929.76 (GST applied) = $17,834.44

This has been calculated with a reduction applied for rehabilitation of the impact site (0.6) (A1-C1), directly related to the backfilling and use of existing topsoil to re-establish the seed bank of the area.

The NVC may choose to offset the initial SEB payment against this.