Native Vegetation Clearance

Jones Property Repeater Station Road Naracoorte

Data Report

Clearance under the *Native Vegetation Regulations 2017*

June 2022

Prepared by Peter Tucker

Table of contents

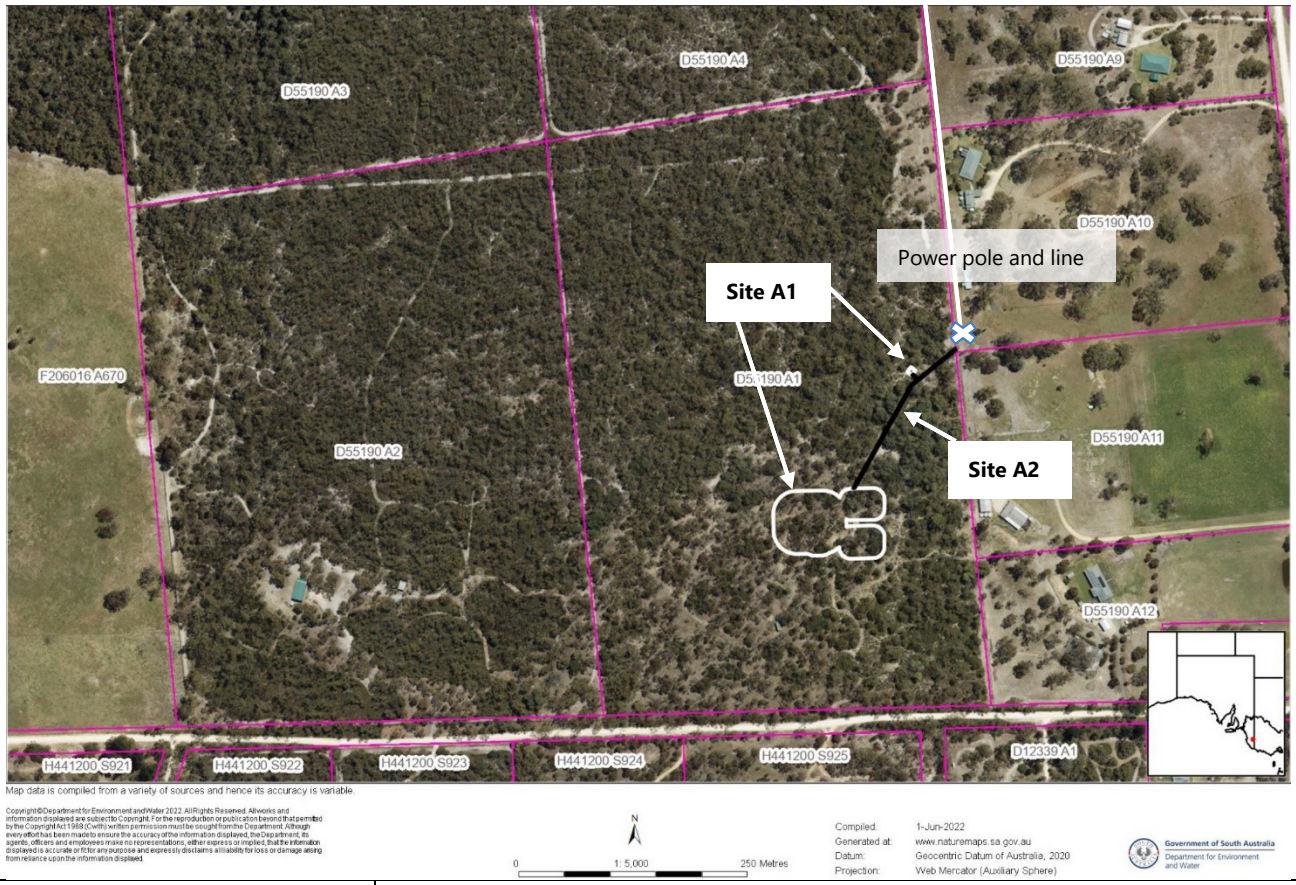
1. Application information

Application Details

Applicant:	Gareth Jeffrey and Suzanne Jane Jones		
Key contact:	Gareth Jones		
Landowner:	*If the applicant is not the landowner, written permission must be provided*		
Site Address:	[redacted] Repeater Station Road, Naracoorte		
Local Government Area:	Naracoorte Lucindale Council	Hundred:	Naracoorte
Title ID:	CT/5818/76	Parcel ID	D55190 A1

Summary of proposed clearance

Purpose of clearance	Clearance is required to build a house, garage, two sheds and associated infrastructure.
Native Vegetation Regulation	Regulation 12, Schedule 1; clause 33, New Dwelling or Buildings
Description of the vegetation under application	0.513ha of Pink Gum (*Eucalyptus fasciculosa*) Grassy Woodland in poor to moderate condition, and 0.032ha of Pink Gum (*Eucalyptus fasciculosa*) +/- Desert Stringybark (*Eucalyptus arenacea*) Woodland over Black Wattle (*Acacia mearnsii*) and Golden Wattle (*Acacia pycnantha*) in poor to moderate condition.
Total proposed clearance - area (ha) and number of trees	0.545ha of native vegetation is proposed to be cleared.
Level of clearance	Level 4
Overlay (Planning and Design Code)	Native Vegetation Overlay



Mitigation hierarchy	**Avoidance** – The house site was chosen to utilise an existing vehicle track from Repeater Station Road. The house site is heavily grazed by kangaroos with a high proportion of the exotic pasture grass Perennial Veldt Grass and avoids clearing vegetation in higher condition to the east and south east. Electricity supply to the property is available from a terminating power pole on an adjoining property to the east. (No electricity is available from Repeater Station Road.) Trenching power for 160m (2m wide impact) avoids clearing additional vegetation that would be required to extend the vehicle track to the house. Building closer to Repeater Station Road would require a longer trench and more vegetation clearance. **Minimisation** – The house site was chosen to minimise impacts from vegetation clearance. Vegetation to the east and south east is more complex and in better condition (Unit Biodiversity Score of 28.99 vs 46.69). Vegetation in alternative sites comprise more strata and includes dense ground cover with up to 75% Bracken Fern. **Rehabilitation or restoration** – The proposed vegetation clearance for Site A1 is the minimum required for the house and infrastructure. There will be no ability to rehabilitate or restore Site A1. Site A2 is the trench to provide electricity and water and will be filled in once compete. The trench line will be encouraged to regenerate naturally. Weeds will be managed on a regular basis to prevent them outcompeting native plants. **Offset** – It is proposed to offset vegetation clearance with payment into the Native Vegetation Fund.
SEB Offset proposal	Payment of $12, 532.55 into the Native Vegetation Fund.

2. Purpose of clearance

2.1 Description

Clearance is required to build a house, garage, two sheds and associated infrastructure, including trenching for electricity and water supply.

2.2 Background

The owners purchased the property on 6 January 2022 and wish to establish a house and associated infrastructure on the property. This property was selected after viewing a number of similar properties in the area over a period of time, including one further west along Repeater Station Road (H441200 S913). The current property was chosen because it required less vegetation clearance compared to other properties and the vegetation was in poorer condition due to extensive kangaroo grazing. Electricity for this property is more difficult to obtain, because there is no electricity line on this section of Repeater Station Road. Access to electricity can only be obtained from a terminating power pole on an adjoining property to the east (D55190 A11), requiring electricity to be trenched 160m to the house site.

The property is 17.87ha in size and comprises two vegetation types; Pink Gum (*Eucalyptus fasciculosa*) Grassy Woodland to the south and a Desert Stringybark (*Eucalyptus arenacea*) Open Forest to the north. The site is naturally vegetated, although the Pink Gum Grassy Woodland contains a high proportion of the exotic pasture grass, Perennial Veldt Grass (*Ehrharta calycina*) and the majority of trees are young suggesting it may have once been cleared in the distant past and since regenerated.

Prior to the owners taking ownership, the property was regularly visited by people removing firewood and have left numerous roughly cut stumps and some fallen timber, primarily in the Pink Gum Grassy Woodland area of the property. There are also numerous motorbike and quadbike tracks through the property, but more frequent in the southern part of the property.

The owners have undertaken considerable weed control efforts to reduce Boneseed (*Chrysanthemoides monilifera* ssp. *monilifera*). They have done this after contacting the local Limestone Coast Landscape Board's Landscape Officer for guidance and advice. The have since found Bridal Creeper (*Asparagus asparagoides f asparagoides*) in many areas and will initiate a control program for this weed in later winter.

Prior to the vegetation assessment, the owners located a shipping container within the area of the proposed vegetation clearance. The shipping container is located on the edge of the vehicle track, but has disturbed, kangaroo grazed vegetation nearby.

The surrounding land use is a mixture of large residential lifestyle blocks, dryland and irrigated pasture, native vegetation, forestry and Naracoorte township 3.8km to the south west. Naracoorte National Park is 13km to the south east, Heritage Agreement HA1235 is 1.2km to the east and HA1140 2.3km to the south east.

2.3 General location map

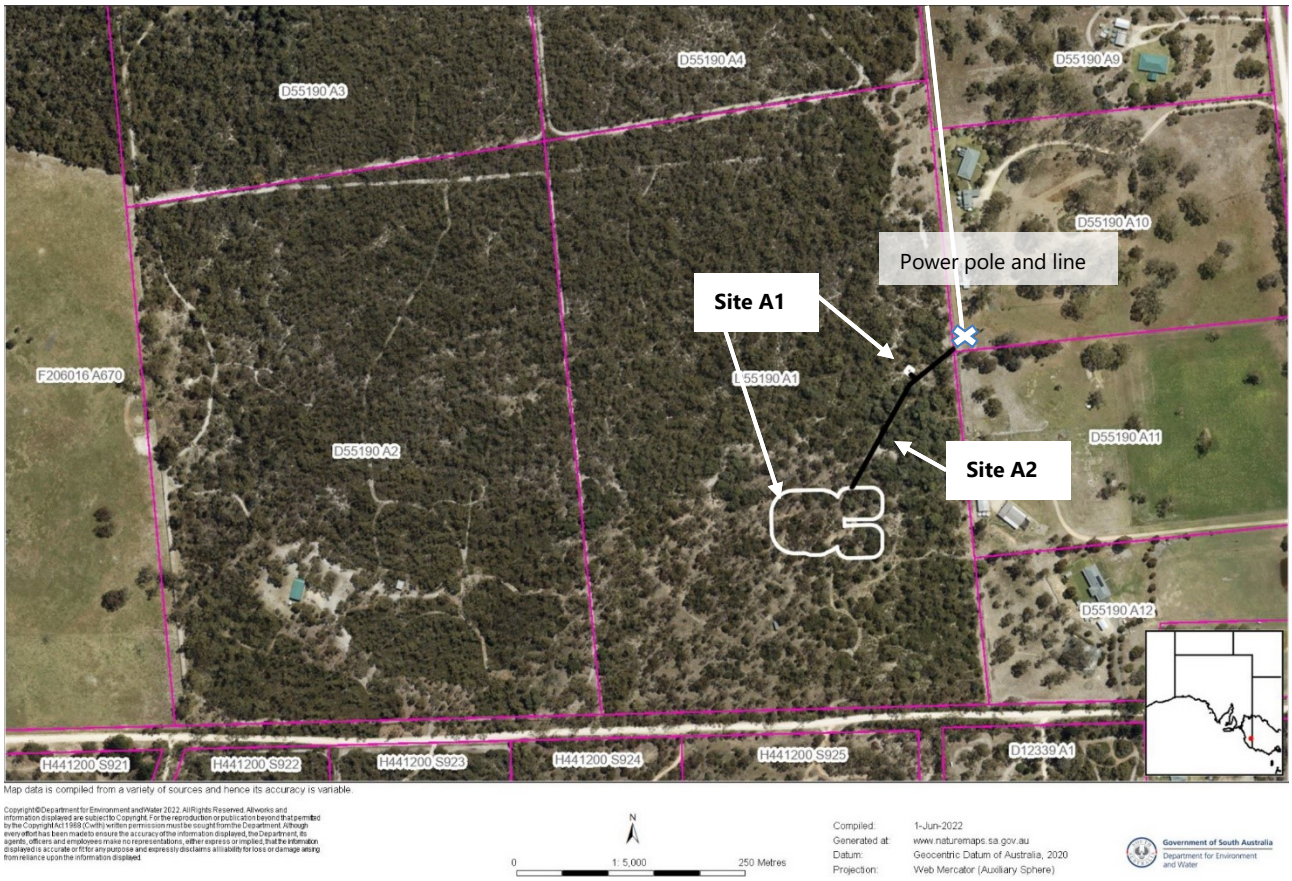


Figure 1. Site map of vegetation included in this application, Site A1 (white polygon) and Site A2 (black polygon).

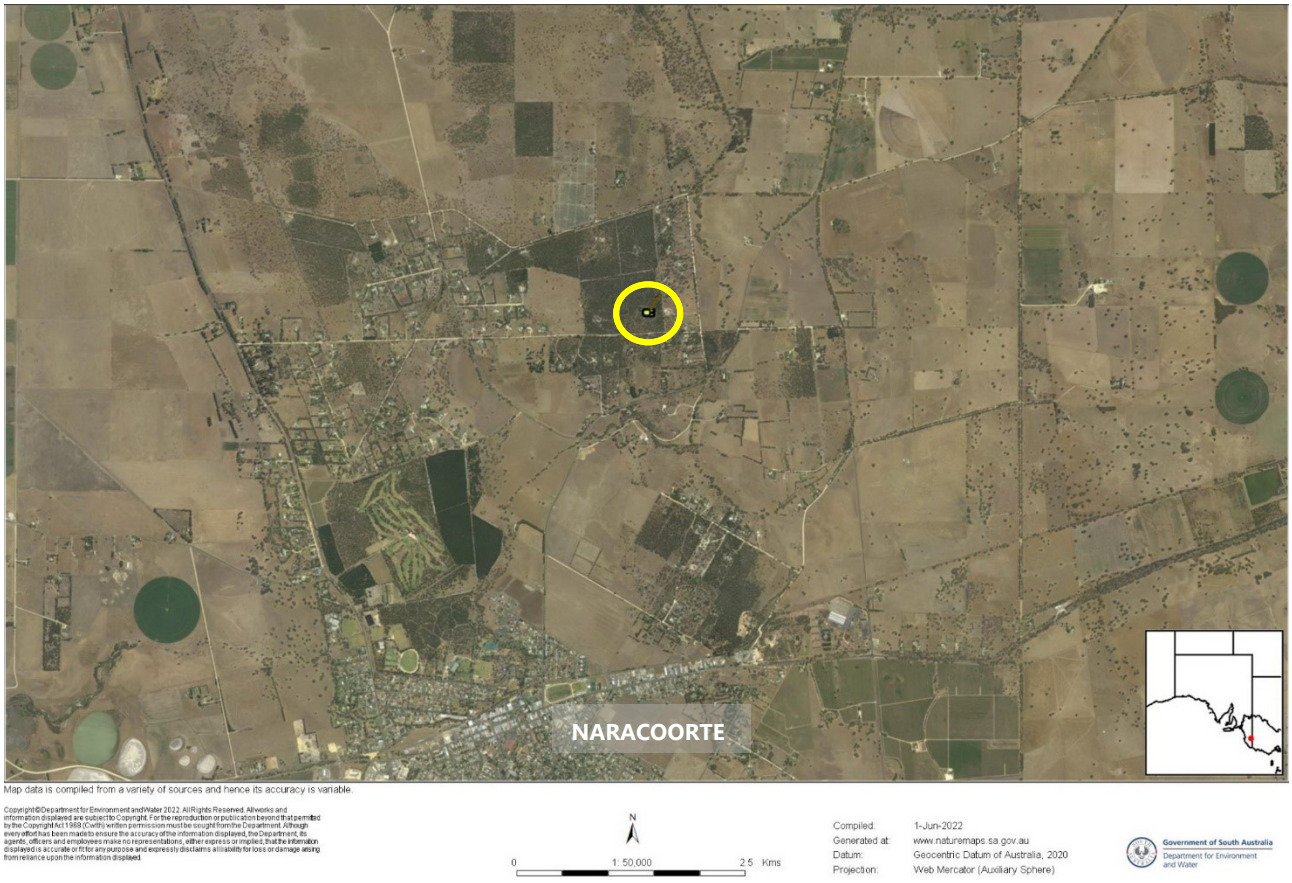


Figure 2. Location map of landscape surrounding proposed clearance, defined within yellow circle.

2.4 Details of the proposal

This proposal is to clear 0.545 hectares of native vegetation to establish a house, garage, two sheds, associated infrastructure and CFS requirements based on standard buffers of 20m for the house and 10m for shedding.

The proposed clearance is located in the southern part of the property 150 metres from Repeater Station Road along an existing vehicle track. The understorey is heavily grazed by kangaroos with a high proportion of exotic pasture, mainly Perennial Veldt Grass and avoids higher quality bushland to the north and south east corner the property. The proposed clearance area achieved a Unit Biodiversity Score of 28.99 compared to 46.99 for surrounding vegetation.

Electricity will be taken from a terminal power pole on a neighbouring property to the east. There is no electricity available from Repeater Station Road at this location. A 160m long trench had been dug prior to the site visit for vegetation assessment. However, the selected path avoided vegetation in higher condition and threaded between trees to avoid unnecessary damage (Figure 5). The trench will be encouraged to regenerate naturally.

A bore will be established in a small area near the eastern boundary and in close proximity to the trench.

An existing vehicle track from Repeater Station Road reaches the proposed clearance area and does not require additional clearance other than allowed under Regulation 8(13) *Vehicle Tracks*. Figure 3 demonstrates work the owners have been done to maintain the track.

Figure 3. Existing access track, which leads to the propose clearance area, GPS 478371 5913450 looking to the north.

House design plans are provided in the appendices.

2.5 Approvals <u>required</u> *or* <u>obtained</u>

Native Vegetation Act 1991.

This application addresses the approval process required under the Native Vegetation Act 1991. There have been no previous clearance applications on this land parcel and no future clearance applications are envisaged to be made by the owners for land identified in this application.

Planning, Development and Infrastructure Act 2016.

A development application has been lodged under the Planning, Development and Infrastructure Act 2016: Application No. 22008953.

Landscape South Australia Act 2019.

A permit has been granted under Landscape South Australia Act 2019 for well construction for water supply. Permit No. 413751.

Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 is addressed in this application.

National Parks and Wildlife Act 1972

The National Parks and Wildlife Act 1972 is addressed in this application.

2.6 Native Vegetation Regulation

Vegetation clearance approval is sought under Regulation 12 (33) – New Dwelling or Building.

2.7 Development Application information (if applicable)

Overlay: Native vegetation

Zone: Rural Living

3. Method

3.1 Flora assessment

Prior to site inspection a desktop assessment was conducted using NatureMaps, Atlas of Living Australia and an EPBC Protected Matters Search to determine possible presence of plant species listed under the EPBC Act 1999 or NP&W Act 1972. A radius of five kilometres around the site was used for the desktop search.

The site was inspected on 28 March 2022 using the methods outlined in the Native Vegetation Council Bushland Assessment Manual (July 2020). The survey involved walking the site for 2 hours and included targeted survey for potential threatened plant species identified in the desktop survey.

3.2 Fauna assessment

Prior to site inspection a desktop assessment was conducted on NatureMaps, Atlas of Living Australia and an EPBC Protected Matters Search to determine possible presence of fauna species listed under the EPBC Act 1999 or NP&W 1972 Act. A radius of five kilometres around the sites was used for the desktop searches. In addition, a search of birds likely to use vegetation within the Naracoorrte IBRA Environmental Association was undertaken (Source: G. Carpenter, Biodiversity Assessment Section, Department of Water, Land and Biodiversity Conservation).

The site was surveyed for fauna on 28 March 2022, which included walking the site searching for the presence of potential threatened fauna species or evidence of their recent presence, such as scats and tracks. The survey was conducted concurrently with the flora assessment.

All fauna captured in the desktop fauna assessments that could potentially use the site for habitat have been included in the NVC Bushland Assessment Scoresheets (attached).

4. Assessment Outcomes

4.1 Vegetation Assessment

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

The site is comprised of sandy soil and located near the crest of a low broad hill within the Naracoorte Range. The land falls gently to the east where it meets Naracoorte Creek 600m away. Several adjoining blocks to east have been developed into rural lifestyle living.

Two vegetation communities covering 0.545ha were assessed, which comprised;

1. 0.513ha of Pink Gum (*Eucalyptus fasciculosa*) Grassy Woodland in poor to moderate condition; and
2. 0.032ha of Pink Gum (*Eucalyptus fasciculosa*) and Desert Stringybark (*Eucalyptus arenacea*) Open Forest in poor to moderate condition.

The Pink Gum Grassy Woodland is heavily grazed by kangaroos, particularly where the house and sheds are proposed to be located. Ground layer vegetation was generally limited to a maximum of 10cm height. Much of the grazed ground cover contained the exotic pasture grass Perennial Veldt Grass (*Ehrharta calycina*). Nearby vegetation, not included in this assessment, contained large amounts of Bracken Fern (*Pteridium esculentum*) and a greater diversity of understory plants.

Adjoining vegetation on the property consisted of Desert Stringybark (*Eucalyptus arenacea*) Open Forest, which is a primary food source for the EPBC listed (Endangered) South East Red-tailed Black Cockatoo.

The surrounding landscape consists of native vegetation, rural living lifestyle blocks, dryland pasture and irrigation. Naracoorte Caves National Park is 13km to the south east, Heritage Agreement HA1235 is 1300 metres to the east and HA1140, 2.4km to the south west. The site lies 3.5km north east of Naracoorte township.

Details of the vegetation associates/scattered trees proposed to be impacted

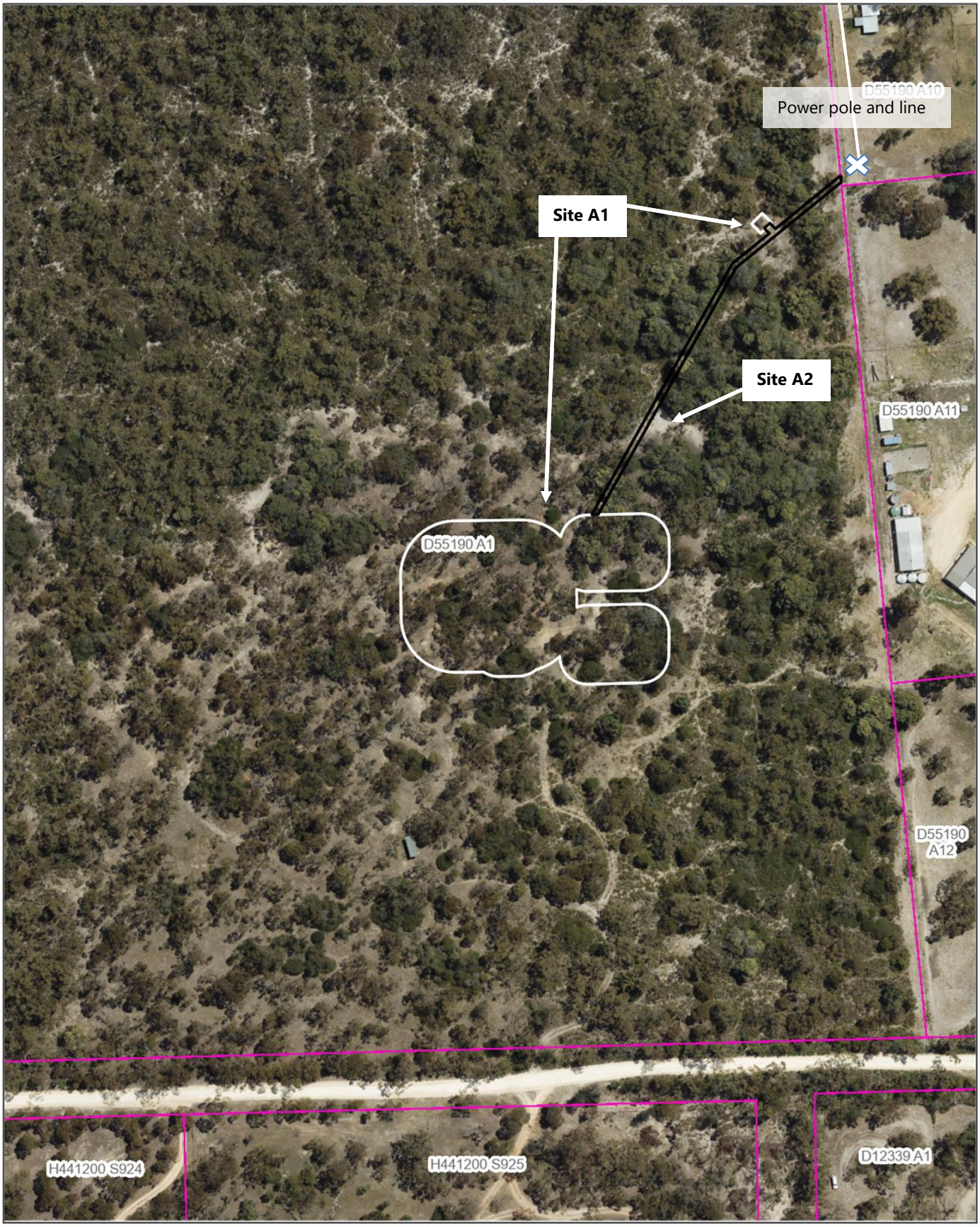
Vegetation Association A1	Pink Gum (*Eucalyptus fasciculosa*) Grassy Woodland.				
 *Figure 4.. Representative photograph of Site A1 looking to the north west, GPS 478316 5913511. Grass in foreground is primarily Perennial Veldt Grass. Distant shrub layer is beyond the proposed clearance area.*					
General description	The dominant native species is Pink Gum with minor occurrences of Golden Wattle (*Acacia pycnantha*), Black wattle (*Acacia mearnsii*) and Silver Banksia (*Banksia marginata*). The ground layer is dominated by the exotic pasture grass Perennial Veldt Grass (*Ehrharta calycina*), which is heavily grazed by kangaroos and limited to 10cm height. Also grazed very low were sparce occurrences of the native plants Flame Heath (*Stenanthera conostephioides*) and Pink Beard-heath (*Leucopogon ericoides*). Two Weeds of National Significance were also present; • Boneseed (*Chrysanthemoides monilifera* ssp. *monilifera*); and • Bridal Creeper (*Asparagus asparagoides f. asparagoides*). Overall, the vegetation condition is poor to moderate. Disturbance included kangaroo grazing and unauthorised property access by people on motorbikes and quadbikes or harvesting firewood. Recent impacts from siting a shipping container prior to the vegetation assessment were evident.				
Threatened species or community	Pink Gum is listed as Rare (NPW Act 1972). No threatened fauna (EPBC Act 1999, or NPW Act 1972) were observed during the assessment. No threatened community (EPBC Act 1999, or NPW Act 1972) was observed during the assessment. (Pink Gum Grassy Woodland on terra rossa soils are listed as Vulnerable under the SA Provisional list, however Site A1 occurs on grey sandy soil.)				
Landscape context score	1.15	Vegetation Condition Score	22.11	Conservation significance score	1.14
Unit biodiversity Score	28.99	Area (ha)	0.513	Total biodiversity Score	14.87

Vegetation Association A2	Pink Gum (*Eucalyptus* fasciculosa) +/- Desert Stringybark (*Eucalyptus arenacea*) Woodland over Black Wattle (*Acacia mearnsii*) and Golden Wattle (*Acacia pycnantha*).				

Figure 5 Representative photograph of Site A2 looking to the north east, GPS 478380 5913619. Trench for water and electricity was dug prior to assessment and will be encouraged to regenerate naturally.

General description	The dominant native species are Pink Gum, Black wattle and Golden Wattle. Desert Stringybark was also present. Site A2 traverses the transition between pure Pink Gum Woodland and Stringybark Open Forest. Understory is similar to Site A1, although Bracken Fern is more prominent, particularly at the northern end (left background of Figure 5) before the bore site (Site A1) is reached. The exotic Perennial Veldt Grass dominated the ground cover, particularly in the southern half (foreground of Figure 5.), which is grazed very low by kangaroos. Overall, the vegetation condition is poor to moderate. Disturbance included recent trenching for electricity and water supply and associated vehicle and machinery movements, grazing by native herbivores and previous unauthorised property access by people on motorbikes and quadbikes. Nearby, signs of recent and past unauthorised firewood collection were evident.				
Threatened species or community	Pink Gum is listed as Rare (NPW Act 1972). No threatened fauna (EPBC Act 1999, or NPW Act 1972) were observed during the assessment. No threatened community (EPBC Act 1999, or NPW Act 1972) were observed during the assessment.				
Landscape context score	1.15	Vegetation Condition Score	25.38	Conservation significance score	1.14
Unit biodiversity Score	33.27	Area (ha)	0.032	Total biodiversity Score	1.06

Site map showing areas of proposed impact



Map data is compiled from a variety of sources and hence its accuracy is variable.

Compiled: 6-Jun-2022
Generated at: www.naturemaps.sa.gov.au
Datum: Geocentric Datum of Australia, 2020
Projection: Web Mercator (Auxiliary Sphere)

N

0 93 Kms

Government of South Australia
Department for Environment and Water

Figure 6. Site impact map highlighting area of proposed clearance, Site A1 white polygon and Site A2 black polygon. Access track from Repeater Station Road has been upgraded and maintained within allowable limits to provide a clear envelope of 4m wide and 4m high.

4.2 Threatened Species assessment

Species observed on site, or recorded within 5km 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
Fauna						
Pteropus poliocephalus (Grey-headed Flying-fox)	R	VU	2, 3		Utilises a range of native and exotic trees for feeding and camping.	Highly likely- recorded by satellite tracking. Suitable habitat available.
Calyptorhynchus banksii ssp. *graptogyne* (SE Red-tailed Black Cockatoo)	E	EN	2, 3, 5	2012	Feeding, *Eucalyptus arenacea/baxteri or Allocasuarina luehmannii*. Perching, any tree.	Highly likely - feeding habitat in nearby bushland (80m). Trees in Site A1 may provide perching habitat.
Melithreptus gularis gularis (Black-chinned Honeyeater)	V		2, 3	2011	Canopy of Eucalypt forest and woodland, occasionally in gardens and street trees.	Highly likely – Site provides suitable habitat.
Entomyzon cyanotis cyanotic (Blue-faced Honeyeater)	R		6		Open forests and eucalypt woodlands, farmland, urban areas	Possible – not recorded, but suitable habitat present. Known to move through the region.
Neophema chrysostoma (Blue-winged Parrot)	V		2	2003	Coastal, sub-coastal and inland areas, favouring grassy habitats. And altered environments such as airfields, golf-courses and paddocks.	Highly likely – Site provides suitable habitat.
Falcunculus frontatus frontatus (Crested Shriketit)	R		2, 3	2011	Eucalypt forests and woodlands and sometimes seen in parks and gardens, on farms with scattered trees, and in pine plantations.	Highly likely – recent recording and site provides suitable habitat.
Petroica phoenicea (Flame Robin)	V			1997	Eucalypt woodland, preferring open habitat.	Possible – Site provides suitable habitat.
Microeca fascinans (Jacky Winter)	R		2	2006	Open woodland with an open shrub layer and bare ground. They are often seen in farmland and parks.	Likely – Site provides suitable habitat.
Parvipsitta pusilla (Little Lorikeet)	E		6		Open sclerophyll forest and woodland,	Possible – not recorded, but site

					usually dominated by Eucalypts. May occur in parkland and gardens.	provides suitable habitat. Known to move through the region.
Turnix varius (Painted Buttonquail)	R			2011	Eucalypt woodland with deep leaf litter.	Unlikely – no suitable habitat (leaf litter) present. Sites A1 & A2 heavily grazed.
*Myiagra inquieta (*Restless Flycatcher)	R		2	2003	Open forests and woodlands.	Likely – Site provides suitable habitat.
Delma impar (Striped Snake-lizard)	VU	E		2007	Tussock grasslands, and in SE of SA heavier clay-based soils.	Unlikely – no suitable habitat present. Sites are on sandy soil and heavily grazed.
Coracina papuensis (White-bellied Cuckooshrike)	R		2, 3	2003	Mostly forests and woodlands, also grasslands.	Likely – Site provides suitable habitat.
Calyptorhynchus funereus (Yellow-tailed Black Cockatoo)	V				Eucalypt woodlands and pine plantations.	Highly likely – Site provides suitable habitat. Commonly seen in the area, despite no recorded sightings.
Flora						
Caladenia formosa (Elegant Spider Orchid)	V	VU	3	2012	Heathy woodlands on sand.	Unlikely. No suitable habitat. Sites have heavily grazed grassy understory.
Dipodium campanulatum (Bell-flower Hyacinth Orchid)	V	EN	2, 3, 5	2009	Along the Naracoorte Range growing in stringybark, blue gum or heathy woodland on deep grey sands or limestone. Also in Vic.	Highly likely – no evidence found during assessment, but suitable habitat present.
Bothriochloa macra (Red-leg Grass)	R		2, 3	2000	Grassy Woodland and Grasslands on a range of soil types.	Possible – not sighted, but suitable habitat present.
Eucalyptus fasciculosa (Pink gum)	R		2, 3	2012	Generally considered to grow on well drained sandy soil of low fertility.	Known – observed on site during assessment.
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 Native Vegetation Regulations 2017, the NVC must consider the potential cumulative impact, both direct and indirect, that is reasonably likely to result from a proposed clearance activity.

This clearance application is to remove 0.545 hectares of native vegetation to establish a house, garage, two sheds, trenching for water and electricity supply and up to standard CFS requirements (20m for a house and 10m for other buildings). Waste water soakage beds will be retained inside the CFS clearance area. An existing vehicle access track from Repeater Station Road has been maintained within allowable limits to provide 4m wide by 4m high envelope for vehicle movement.

Trenching for electricity and water may impact the roots of nearby vegetation. However, the trench location was chosen to avoid larger trees and located in a line with least vegetation impacted (Figure 5). The trench will be filled in and encouraged to regenerate naturally. On going weed control will prevent new weeds becoming established.

During construction vehicles will only be allowed access the clearance area of Site A1. No vehicles or machinery will be parked on adjoining native vegetation areas. All waste created during construction will be contained within the property or removed from site.

Dust may increase during construction, but will cease once construction is finalised.

4.4 Address the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimize, 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

The site for the house and infrastructure was chosen to utilise an existing vehicle track from Repeater Station Road into the property. The site is heavily grazed by kangaroos with a high proportion of exotic pasture grass (Perennial Veldt Grass) and avoids clearing vegetation in higher condition to the east and south east.
The site is 160m from an existing electricity supply, where a power pole is located on an eastern neighbouring property (D55190 A11). (No electricity is available from Repeater Station Road.) The chosen house site avoids clearing additional vegetation to extend the vehicle track to a different house site, or to create a new track elsewhere. A house site closer to Repeater Station Road would require additional clearance for a longer electricity trench. Vegetation closer to the eastern boundary is more complex and in better condition, including a greater number of vegetation strata and denser ground cover (Bracken Fern up to 75% cover).
Alternative locations closer to Repeater Station along the existing vehicle track do not reduce native vegetation clearance, but do require further trenching, slightly increasing the clearance area that would be required.

b) Minimization – if clearance cannot be avoided, outline measures taken to minimize 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 house site was chosen to minimise impacts from vegetation clearance. Vegetation to the east and south east is more complex and in better condition (Unit Biodiversity Score of 28.99 vs 46.69). Vegetation in these areas comprise more strata and include dense ground cover with up to 75% Bracken Fern. Siting the house in the current location requires a narrow 160m trench to buried electricity and bore water supplies. Once finished, the trench will be encouraged to regenerate naturally. The trench line will be regularly maintained to prevent weeds becoming established.

Using the existing vehicle track avoids clearing vegetation to provide access to alternative sites.

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 minimized, such as allowing for the re-establishment of the vegetation.

The proposed vegetation clearance for Site A1 is the minimum required for the house and infrastructure. There will be no ability to rehabilitate or restore Site A1.

Site A2 is the trench to provide electricity and water and will be filled in once compete. The trench line will be encouraged to regenerate naturally. Weeds will be managed on a regular basis to prevent them outcompeting native plants.

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

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

It is proposed to offset vegetation clearance with a payment into the Native Vegetation Fund.

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

The Native Vegetation Council 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 Native Vegetation Council 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 for each vegetation association Native Species Introduced Species Site A1 16 8 Site A2 9 5 Bushland Plant Diversity Score Site A1 – 12 Site A2 - 12
	Assessment against the principles **At Variance**: Sites A1and A2
	Moderating factors that may be considered by the NVC *Amount of clearance related to area of remnant.*

	The proposed vegetation clearance represents a very small area compared to the amount of remnant native vegetation within a 5km radius of the site. Native vegetation covers 11% of the surrounding area (5km radius), which equates to 864 hectares. The proposed clearance of 0.545ha (Sites A1 and A2) represents 0.063% of native vegetation within the local vicinity.
Principle 1b - significance as a habitat for wildlife	Relevant information Fourteen threatened species were identified by the fauna assessment, including three EBPC listed species and 11 NPWS listed species including; • Grey-headed Flying-fox (AUS VU, SA R); • South East Red-tailed Black Cockatoo (AUS EN, SA E); • Black-chinned Honeyeater (SA V); • Blue-faced Honeyeater (SA R); • Blue-winged parrot (SA V); • Crested Shriketit (SA R); • Flame Robin (SA V); • Jacky Winter (SA R); • Little Lorikeet (SA E); • Painted Buttonquail (SA R); • Restless Flycatcher (SA R); • Striped Snake-lizard (AUS VU, SA E); • White-bellied Cuckooshrike (SA R); and • Yellow-tailed Black Cockatoo (SA V). No threatened fauna were observed during the site assessment. No hollow bearing trees were observed in Site A1, nor A2. Potentially, Sites A1 and A2 can support a high diversity of wildlife. Sites A1 and A2 are located within a 130ha patch of native vegetation across several land parcels. The larger patch of native vegetation would likely provide a movement corridor for wildlife, but Sites A1 and A2 are degraded and heavily grazed by kangaroos limiting wildlife movement opportunities. Fauna Habitat Score / Biodiversity Score Site A1: 0.1 / 28.99 Site A2: 0.1 / 33.27
	Assessment against the principles **Seriously at Variance:** Sites A1 and A2
	Moderating factors that may be considered by the NVC *Impact Significance* The proposed vegetation clearance does not meet any of the criteria of a significant impact on the listed threatened species. *Non-essential habitat* Sites A1 and A2 are in poor to moderate condition and of low habitat quality. While threatened species may use these areas, the sites are small and much larger areas of higher quality vegetation exists elsewhere on the property.
Principle 1c - plants of a rare, vulnerable or	Relevant information Sites A1 and A2 contain Pink Gum (*Eucalyptus fasciculosa*) (SA: R). Threatened flora species identified in database searches that could potentially be present, but undetectable at the time of assessment include; • Bell Flower Hyacinth Orchid (*Dipodium campanulatum*) (AUS: EN, SA: V); and

endangered species	• Red-leg Grass (*Bothriochloa macra*) (SA R). Threatened Flora Score(s) Site A1 Score 0.04 Site A2 Score 0.04
	Assessment against the principles **At Variance:** Sites A1 and A2
	Moderating factors that may be considered by the NVC The removal of Pink Gums from Site A1 and A2 is unlikely to cause a *Significant Impact* on the species. The Pink Gums proposed to be cleared represent significantly less than one percent of the Pink Gum population within a one kilometre radius. Sites A1 and A2 are degraded and dominated by exotic pasture grasses (Perennial Veldt Grass *Ehrharta calycina*). Despite thorough searching no evidence (emergent scapes, flowers or dead stalks from previous year) of *D. campanulatum* was found.
***Principle 1d - the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered*:**	Relevant information Sites A1 is a very degraded remnant of Pink Gum Grassy Woodland growing on grey sandy soil, which is not listed as a threatened community. Threatened Community Score – 1.0
	Assessment against the principles Not at Variance
	Moderating factors that may be considered by the NVC The Provisional List of Threatened Ecosystems of South Australia (DEH) identifies two Vulnerable communities containing Pink Gum; • *E. fasciculosa* Grassy Woodland on red terra rossa soils of low hills; and • *E. fasciculosa* +/- *E. leucoxylon* Heathy Woodland on sandy loams of flats and slopes Both Sites A1 and A2 occur on grey sands, which does not meet the criteria for either threatened community.
Principle 1e - it is significant as a remnant of vegetation in an area which has been extensively cleared.	Relevant information Remnancy; IBRA Association (Naracoorte) – 18% IBRA Subregion (Lucindale) – 13% Total Biodiversity Score Sites A1 and A2 inclusive – 15.93
	Assessment against the principles **At Variance**
	Moderating factors that may be considered by the NVC
Principle 1f - it is growing	Relevant information The proposed clearance area is not associated with a wetland environment.

in, or in association with, a wetland environment.	Assessment against the principles Not at Variance
	Moderating factors that may be considered by the NVC Not Applicable The closest recorded wetland is 1.3km to the north east. Naracoorte Creek lies 700m to the east.
Principle 1g - it contributes significantly to the amenity of the area in which it is growing or is situated.	Relevant information The proposed vegetation clearance is located within a landscape that has undergone a shift from farming to large residential lifestyle blocks. Adjoining native vegetation blocks contain residential houses. The property lies at the eastern extremity of Repeater Station Road, distant from Riddoch Highway, generally receives local traffic only and is not part of a tourist route. The proposed vegetation clearance is likely to have minimal impact on the landscape character.
	N/A
	Moderating factors that may be considered by the NVC The site of proposed clearance is zoned Rural Living and has experienced recent lifestyle housing developments in the immediate vicinity, particularly on the eastern side. Due to these surrounding developments, it is unlikely the proposed clearance would detract from the amenity value of the area.

Principles of Clearance (h-m) will be considered by comments provided by the local NRM Board or relevant Minister. The Data Report should contain information on these principles where relevant and where sufficient information or expertise is available.

4.6 Risk Assessment

Determine the level of risk associated with the application

Total clearance	No. of trees	N/A
	Area (ha)	0.545
	Total biodiversity Score	15.93
Seriously at variance with principle 1(b), 1(c) or 1 (d)		1 (b)
Risk assessment outcome		Level 4

5. Clearance summary

Clearance Area(s) 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	12	1	0.04	0.1	28.99	0.513	14.87	1			15.62	$11, 235.97	$617.98
A	2	12	1	0.04	0.1	33.27	0.032	1.06	0.8			0.89	$643.48	$35.39
						Total	**0.545**	**15.93**				**16.51**	**$11, 879.46**	**$653.37**

Totals summary table

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	15.94	16.51	$11, 879.46	$653.37	$12, 532.83

Economies of Scale Factor	0.5
Rainfall (mm)	538

Note; due to an embedded error in Summary Table spreadsheets the payment values in the summary table are incorrect and should be; SEB payment $11, 879.19, Admin Fee $653.36 and Total $12, 532.55.

6. Significant Environmental Benefit

A Significant Environmental Benefit (SEB) is required for approval to clear under Division 5 of the *Native Vegetation Regulations 2017*. The NVC must be satisfied that as a result of the loss of vegetation from the clearance that an SEB will result in a positive impact on the environment that is over and above the negative impact of the clearance.

ACHIEVING AN SEB

Indicate how the SEB will be achieved by ticking the appropriate box and providing the associated information:

☐ Establish a new SEB Area on land owned by the proponent.

☐ Use SEB Credit that the proponent has established. Provide the SEB Credit Ref. No. _____

☐ Apply to have SEB Credit assigned from another person or body. The application form needs to be submitted with this Data Report.

☐ Apply to have an SEB to be delivered by a Third Party. The application form needs to be submitted with this Data Report.

☒ Pay into the Native Vegetation Fund.

PAYMENT SEB

If a proponent proposes to achieve the SEB by paying into the Native Vegetation Fund, summary information must be provided on the amount required to be paid and the manner of payment:

The owners propose to achieve the required SEB by paying into the Native Vegetation Fund. Based on requirements to achieve **16.51 SEB points** within the Limestone Coast Landscape Board (**Economies of Scale 0.5**) and an average rainfall of **538mm**, based on data obtained from NatureMaps, the required payment into the fund is $11, 879.19 (GST exclusive), plus $653.36 Administration Fee (GST inclusive): total **$12, 532.55.**

7. Appendices

Appendix 1. Bushland Vegetation Assessment Scoresheets associated with the proposed clearance to be submitted in Excel format)

Appendix 2. House Design Plan

Appendix 3. Well construction permit