

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number:	CPS 9289/1
File Number:	DWERVT7940
Duration of Permit:	From 22 October 2021 to 22 October 2023

PERMIT HOLDER

City of Albany

LAND ON WHICH CLEARING IS TO BE DONE

Lot 7710 on Deposited Plan 190612, Spencer Park

AUTHORISED ACTIVITY

The permit holder must not clear more than 0.013 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

CONDITIONS

1. Avoid, minimise, and reduce impacts and extent of clearing

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

- (a) avoid the clearing of *native vegetation*;
- (b) minimise the amount of *native vegetation* to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

2. Weed and dieback management

When undertaking any clearing authorised under this permit, the permit holder must take the following measures to minimise the risk of introduction and spread of *weeds* and *dieback*:

(a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;

- (b) ensure that no known *dieback* or *weed*-affected soil, *mulch*, *fill*, or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

3. Directional clearing

The permit holder must conduct clearing activities in a slow, progressive manner from West to East to allow fauna to move into adjacent native vegetation ahead of the clearing activity.

4. **Records that must be kept**

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

Table 1: Records that must be kept

No.	Relevant matter	Spec	rifications
1.	1. In relation to the authorised clearing		the species composition, structure, and density of the cleared area;
	activities generally	(b)	the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
		(c)	the date that the area was cleared;
		(d)	the size of the area cleared (in hectares);
		(e)	actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 1; and
			actions taken to minimise the risk of the introduction and spread of <i>weeds</i> and <i>dieback</i> in accordance with condition 2.

5. Reporting

The permit holder must provide to the *CEO* the records required under condition 4 of this permit when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table have the meanings defined.

Table 2: Definitions

Term	Definition					
СЕО	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> .					
clearing	has the meaning given under section 3(1) of the EP Act.					
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.					
fill	means material used to increase the ground level, or to fill a depression.					
dieback	means the effect of <i>Phytophthora</i> species on native vegetation.					
department	means the department established under section 35 of the <i>Public Sector</i> <i>Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.					
EP Act	Environmental Protection Act 1986 (WA)					
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.					
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.					
	means any plant –					
	(a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i> ; or					
weeds	 (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or 					
	(c) not indigenous to the area concerned.					

END OF CONDITIONS

Mathew Gannaway MANAGER NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

28 September 2021

CPS 9289/1, 28 September 2021

SCHEDULE 1

The boundary of the area authorised to be cleared is shown in the map below

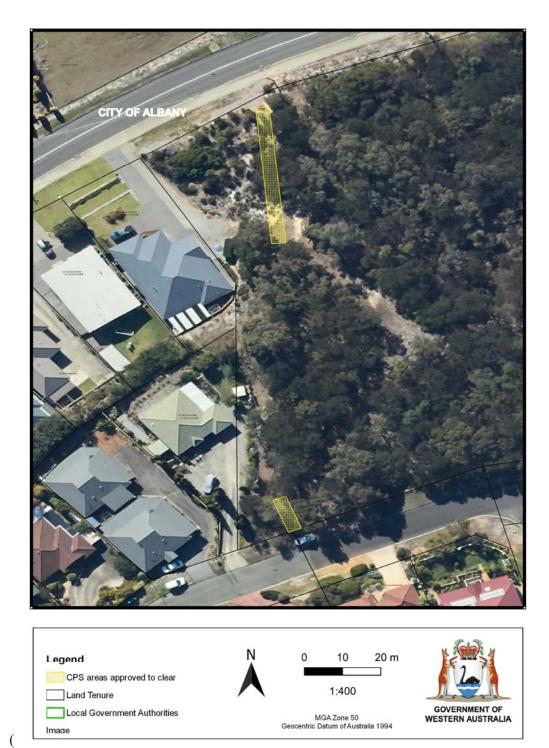


Figure 1).

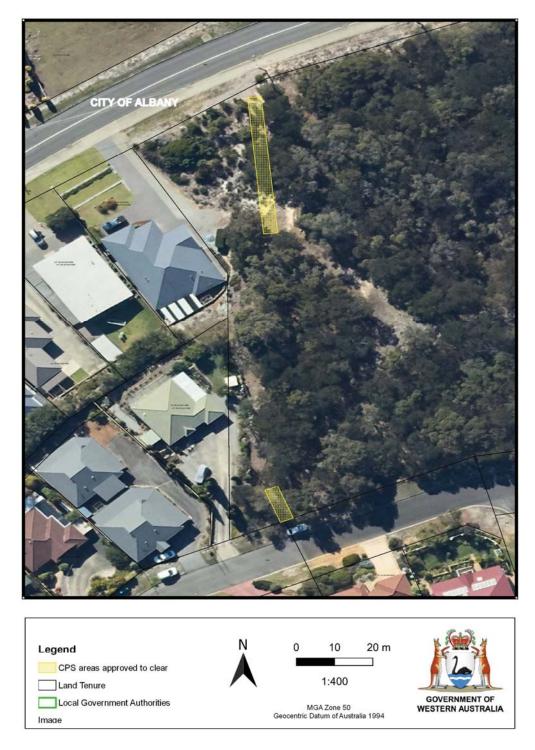


Figure 1: Map of the boundary of the area within which clearing may occur



Clearing Permit Decision Report

1 Application details	and outcome
1.1. Permit application	on details
Permit number:	CPS 9281/1
Permit type:	Area permit
Applicant name:	City of Albany
Application received:	13 May 2021
Application area:	0.013 hectares of native vegetation
Purpose of clearing:	Installation of underground stormwater pipe
Method of clearing:	Mechanical
Property:	Lot 7710 on Deposited Plan 190612
Location (LGA area/s):	City of Albany
Localities (suburb/s):	Spencer Park

1.2. Description of clearing activities

The vegetation proposed to be cleared is contained within two separate areas along the fire break line between Spencer Park (Reserve No. 32935) and the residential area immediately east of the park (see Figure 1, Section 1.5). The proposed clearing is required to install an underground stormwater pipe. The vegetation within the firebreak area is predominantly cleared, therefore the proposed clearing is limited to an area at the southern and northern ends of the firebreak line for pipe excavation and stormwater alignment. Most tree stands within the clearing area will be retained.

1.3. Decision on application

Decision:	Granted
Decision date:	28 September 2021
Decision area:	0.013 hectares of native vegetation as depicted in Section 1.5, below.

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 14 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix A), relevant datasets (see Appendix E), information provided by the applicant, the clearing principles set out in Schedule 5 of the EP Act (see Appendix B), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). The Delegated Officer also took into consideration the applicant's efforts to avoid and minimise clearing and mitigate its impact.

In particular, the Delegated Officer has determined that:

- The application area may be used by conservation significant fauna, including Western Ringtail Possum (WRP) (*Pseudocheirus occidentalis*) and black cockatoos (*Calyptorhynchus* sp.). However, given the vegetation condition and the limited extent of clearing, the application area is not likely to comprise significant habitat within the context of local area; and
- Clearing may introduce and spread weeds and dieback into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values. The likelihood of introduction and spread of weed and dieback could be reduced by applying weed and dieback management measures.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing is not likely to lead to long-term adverse impacts on the adjacent native vegetation and its habitat values.

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid and minimise to reduce impacts and extent of clearing
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback
- undertake slow, progressive clearing in west to east direction to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity to minimise impact to individuals.

1.5. Site map



The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

2 Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection* (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations).

In addition to the matters considered in accordance with section 510 of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- Biodiversity Conservation Act 2016 (WA) (BC Act)
- Conservation and Land Management Act 1984 (WA) (CALM Act)
- Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)
- Planning and Development Act 2005 (WA) (P&D Act)
- Soil and Land Conservation Act 1945 (WA)

The key guidance documents which inform this assessment are:

- A guide to the assessment of applications to clear native vegetation (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The underground stormwater pipe is to be installed along the firebreak line to minimise clearing and its potential impacts on adjacent vegetation. The applicant is committed to minimal clearing of understory vegetation on the southern and northern side of the clearing area. Tree stands on these areas will be retained with only trimming of the trees required to provide access to the works. The applicant is also committed to revegetate the disturbed area (City of Albany, 2021a). The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see Appendix B) identified that the impacts of the proposed clearing present a risk to fauna and clearing in an extensively cleared landscape. The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1. Biological values - Fauna - Clearing Principle (b)

Assessment

Ninety-four conservation significant fauna have been recorded from the local area. Many of these records are historical in nature and distanced from the application area that their occurrence in the application area is not likely. Being close to the ocean, the records include numerous marine species and migratory birds associated with water. The aquatic marine environment would not be directly impacted by the proposed clearing. Migratory birds may use the vegetation in the proposed clearing area in their transits. Given the small clearing extent and presence of similar vegetation within the local area, the vegetation proposed to be cleared is unlikely to comprise significant habitat for migratory birds.

Of the vertebrate fauna species of conservation significance identified, the species most likely to occur over the application area are the Critically Endangered WRP, Priority 4 Quenda (*Isoodon fusciventer*), Endangered Baudin's cockatoo (*Calyptorhynchus baudinii*) and Carnaby's cockatoo (*Calyptorhynchus latirostris*) and the Vulnerable Forest red-tailed Black cockatoo (*Calyptohynchus banksii naso*), together referred to as Black cockatoos.

WRP has been recorded within Spencer Park, approximately 0.9 km from the application area in 2020. WRP is known to inhabit peppermint (*Agonis flexuosa*) woodlands with high canopy connectivity (DPAW, 2017). The vegetation within the application area is in Degraded condition (Keighery, 1994) in comparison to the intact woodlands within the park where WRP occurrence was recorded. Although dispersing WRP may use the habitat within the application area, given the above, it is unlikely that the application area comprises significant habitat for WRP.

Quenda requires dense understory for cover, including exotic species (van Dyck and Strahan, 2008). The application area is void of dense understory preferred by Quenda (Watson, 2018). It is unlikely that Quenda inhabits the application area. The proposed clearing is not likely to impact on Quenda's habitat.

Numerous records of Black cockatoo are known tin the local area. The nearest record to the application area is within one kilometre. Vegetation within the application area comprises of *Eucalyptus* species sapling, stands of young peppermint trees over sparsely scattered herbs and weeds (Appendix D). The vegetation proposed to be cleared does not consist of Black cockatoo breeding or roosting habitat. Whilst the application area may provide foraging habitat for Black Cockatoos, the application area is unlikely to comprise significant habitat due to the size trees being cleared.

Conclusion:

Based on the assessment, it is considered that the proposed clearing does not constitute significant habitat for conservation significant fauna. WRP, or other fauna, may be present in the application area during the time of clearing.

Condition:

To minimise potential impacts on any fauna that may be present at the time of clearing, slow directional clearing to allow fauna to move into adjacent vegetation ahead of the clearing activity will be required as a condition on the clearing permit.

3.2.2. Significant remnant vegetation and conservation areas - Clearing Principle (e)

Assessment:

The application area is mapped within the Albany vegetation association and the Jarrah / Sheoak / *Eucalyptus staeri* Sandy Woodland vegetation complex mapped by the Albany Regional Vegetation Survey (Sandiford and Barrett, 2010), which retain approximately 27.3 and 11.7 per cent of the original native cover respectively. The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 percent of that present prior to the year 1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). However, the local area (within 20-kilometre radius from the area proposed to be cleared) retains approximately 38.5 percent of its original native vegetation cover. The proposed clearing will not significantly reduce the vegetation cover within the local context.

The vegetation proposed to be cleared is a part of a Strategic Zone B of the Western Australian South Coast Macro Corridor Network, which potentially provides a significant ecological linkage in the local area (Wilkins et al., 2006). Given the small scale of clearing within the context of the local area, the presence of adjacent vegetation in better condition and its location on the edge of a vegetation patch, it is unlikely that the proposed clearing provides significant functionality as an ecological linkage. Therefore, it is also unlikely that the proposed clearing will have a significant impact on the functionality of the remnant vegetation.

The area proposed to be cleared is located along the edge of a 3.25 hectare remnant within the Spencer Park reserve. Noting that the vegetation under application forms part of a larger remnant, the proposed clearing may result in the spread of weeds and dieback into adjacent native vegetation and inadvertently impact on its environmental values. Weed and dieback management practices would assist in minimising this risk.

Conclusion:

Based on the above assessment, despite the vegetation within the mapped vegetation complexes are the national retention target of 30 percent, the vegetation proposed to be cleared is not considered a significant remnant due to the small scale of clearing, lack of significant values, and the vegetation cover within the local context. Potential indirect impacts of the proposed clearing on the surrounding vegetation could be managed by taking steps to minimise the risks of introduction and spread of dieback and weeds.

Conditions:

To address the above impacts, dieback and weed management measures to mitigate impacts to adjacent vegetation will be required as a condition on the clearing permit.

3.3. Relevant planning instruments and other matters

Clearing permit application CPS 9289/1 was advertised on the DWER website on 20 May, with a 14 day submission period. No public submissions were received regarding this application.

Several Aboriginal Sites of Significance have been mapped within the local area. None are located within the application area itself. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

End

Appendix A. Site characteristics

The information provided below describes the key characteristics of the area proposed to be cleared and is based on the best information available to DWER at the time of this assessment. This information was used to inform the assessment of the clearing against the Clearing Principles, contained in Appendix B.

A.1. Site cha	aracteristics
Characteristic	Details
Local context	The area proposed to be cleared is located along the edge of a 3.25 hectare remnant of native vegetation within the Spencer Park reserve. The application area is situated along a firebreak line between the park and the residential area nearby.
	The local area (20-kilometre radius from the centre of the area proposed to be cleared) retains approximately 38.74 per cent of its original native vegetation cover.
Ecological linkage	The application area occurs within Strategic Zone B of the South Coast Macro Corridor (Wilkins et al., 2006).
Conservation areas	The application area does not occur within or nearby to any conservation area.
Vegetation description	Photographs supplied by the applicant indicate the vegetation within the proposed clearing area consists of Peppermint trees, <i>Allocasuarina</i> (Sheoak), and possibly <i>Eucalyptus staeri</i> over <i>Anigozanthos</i> sp., <i>Leucopogon</i> sp. and other native and non-native shrubs. Representative photos and maps are available in Appendix D.
	This is consistent with the vegetation complex mapped by the Albany Regional Vegetation Survey (Sandiford and Barrett, 2010), that is, the Jarrah / Sheoak / <i>Eucalyptus staeri</i> Sandy Woodland.
	The mapped vegetation complex retains approximately 11.7 per cent of the original extent (Sandiford and Barret, 2010)
Vegetation condition	Photographs supplied by the applicant indicate the vegetation within the proposed clearing area is in Completely Degraded to Degraded (Keighery, 1994) condition. The full Keighery (1994) condition rating scale is provided in Appendix C. Representative photos are available in Appendix D.
Climate and landform	Local climate is characterised by mean annual rainfall of 930 mm and evapotranspiration of 800 mm. The application area lies on a gentle slope with an elevation ranging between 10 and 25 m above sea level.
Soil description	The soils are mapped as Minor Valleys S7 slope phase, described as broad valleys in sedimentary rocks; 30 m relief; smooth slopes; deep sands and iron podzols on slopes; Albany Blackbutt-jarrah-sheoak woodland. Podzols and yellow duplex soils on floors; with paperbark woodland and tea tree heath.
Land degradation risk	 Wind erosion risk: H1: 50-70% of map unit has a high to extreme wind erosion risk Water erosion risk: L2: 3-10% of map unit has a moderate to high water erosion risk Water logging risk: M2; 10-30% of map unit has a moderate to very high waterlogging risk Flood risk : L2: 3-10% of map unit has a moderate to high flood risk Salinity risk: L1: <3% of map unit has a moderate to high salinity risk or is presently saline Nutrient export risk: M2: 10-30% of map unit has a moderate to very high waterlogging risk
Waterbodies	The desktop assessment and aerial imagery indicated that no watercourses transect the area proposed to be cleared. The Yakamia Creek is located approximately 375 metres northeast of the application area.
Hydrogeography	The application area is mapped within the Manypeaks consanguineous wetland suite.
Flora	Thirty-six conservation significant flora have been recorded within 20 km radius of the application area, twelve of which are threatened species. None of the flora species are recorded within the application area or in close proximity.

A.1. Site characteristics

Characteristic	Details
Ecological communities	Within the local area, seven priority ecological communities are mapped. The nearest to the application area is the <i>Banksia coccinea</i> Shrublands/ <i>E. staeri</i> / Sheoak open woodland, located approximately 1 km from the application area. The application area does not exhibit the characteristic of any priority ecological community.
Fauna	More than 90 conservation significant fauna species have been recorded from the local area. None of these occur within the application area, although WRP and Black Cockatoo species have been recorded within a 2 km radius from the application area.

A.2. Vegetation extent

	Pre- European extent (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre- European extent in all DBCA managed land
IBRA bioregion*					
Jarrah Forest (Southern Jarrah Forest)	4,506,660	2,399,838	53.25	1,673,614	69.73

Vegetation complex

Beard vegetation association: Albany	46,537	12,694	27.28	3,358	26.46
Vegetation complex name Jarah / Sheoak / <i>E. staeri</i> Sandy Woodlands (Albany Regional Vegetation Survey) (Sandiford and Barret, 2010)		5,148	11.7	1,878	36.5
10km radius	81,388	31, 527	38.74	-	-

*Government of Western Australia (2019a)

**Government of Western Australia (2019b)

A.3. Flora analysis table

Species name	Conservati on status (WA)	Suitab le habita t featur es? [Y/N]	Suitable vegetatio n type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to applicati on area (km)	of known records	Are surveys adequate to identify? [Y, N, N/A]
Andersonia pinaster	Т	N	Y	Ν	16.37	4	N/A
Banksia brownii	Т	N	Y	Y	6.82	24	N/A
Banksia goodii	Т	N	Y	Y	6.94	30	N/A
Banksia verticillata	Т	N	N	Ν	10.77	22	N/A
Caladenia harringtoniae	Т	N	Y	Ν	2.89	2	N/A
Calectasia cyanea	Т	Ν	Ν	Ν	9.39	7	N/A

Species name	Conservati on status (WA)	Suitab le habita t featur es? [Y/N]	Suitable vegetatio n type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to applicati on area (km)	of known records	Are surveys adequate to identify? [Y, N, N/A]
Chordifex abortivus	Т	N	Y	Ν	8.02	3	N/A
Diuris drummondii	Т	N	N	Ν	13.04	1	N/A
Drakaea micrantha	Т	N	Y	Y	3.22	3	N/A
Isopogon uncinatus	Т	N	Y	Ν	6.53	19	N/A
Microtis globula	Т	N	Y	Y	9.11	5	N/A
Verticordia fimbrilepis subsp. australis	Т	N	Y	Ν	7.32	1	N/A

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

A.4. Fauna analysis table

Species name	Conservati on status	Suitabl e habitat feature s? [Y/N]	Suitable vegetatio n type? [Y/N]	Distance of closest record to applicatio n area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
<i>Calyptorhynchus banksii naso</i> (forest red-tailed black cockatoo)	VU	N	N	1.38	63	N/A
<i>Calyptorhynchus baudinii</i> (Baudin's cockatoo)	EN	N	N	0.99	347	N/A
<i>Calyptorhynchus latirostris</i> (Carnaby's cockatoo)	EN	N	Ν	1.08	562	N/A
<i>Calyptorhynchus sp.</i> 'white-tailed black cockatoo'(White-tailed black cockatoo)	EN	N	Ν	1.00	246	N/A
<i>Isoodon fusciventer</i> (Quenda, southwestern brown bandicoot)	P4	N	N	1.43	242	N/A
Phascogale tapoatafa wambenger (south-western brush-tailed phascogale, wambenger)	CD	N	N	1.98	11	N/A
<i>Pseudocheirus occidentalis</i> (Western ringtail possum, ngwayir)	CR	N	Y	0.09	679	N/A

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

A.5. Ecological community analysis table

Community name	Conserva tion status	Suitabl e habitat feature s? [Y/N]	Suitable vegetatio n type? [Y/N]	Suitabl e soil type? [Y/N]	Distance of closest record to applicati on area (km)	Number of known records within 20 km radius (total)
Astartea scoparia Swamp Thicket	Priority 1	Ν	Ν	Ν	1.92	14
<i>Banksia coccinea</i> Shrubland / Melaleuca striata / Leucopogon flavescens Heath (all/or portion in EPBC listed Kwongkan community)	Priority 1	N	N	Y	18.68	4
Banksia coccinea Shrubland/Eucalyptus staeri/Sheoak Open Woodland (Community 14a - Sandiford & Barrett 2010)(all/or portion in EPBC listed Kwongkan community)	Priority 1	N	N	Y	0.95	155
Banksia littoralis woodland / Melaleuca incana Shrubland	Priority 1	N	N	Y	7.20	10
Coastal <i>Melaleuca incana / Taxandria juniperina</i> Shrubland/Closed Forest	Priority 1	N	N	Y	7.36	6
<i>Melaleuca striata Banksia spp</i> Coastal Heath (all/or portion in EPBC listed Kwongkan community)	Priority 1	N	N	N	12.21	4
Subtropical and Temperate Coastal Saltmarsh	Priority 3	N	N	Ν	2.60	45
T: threatened, CR: critically endangered, E	EN: endanger	ed, VU: vul	Inerable, P:	priority		

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values	1	
<u>Principle (a):</u> "Native vegetation should not be cleared if it comprises a high level of biodiversity." Assessment:	Not likely to be at variance	No
The area proposed to be cleared does not contain significant flora, fauna, habitats, or assemblages of plants. The size and condition of the area to be cleared is not likely to contain conservation significant flora.		
<u>Principle (b):</u> "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."	Not likely to be at variance	Yes Refer to Section 3.2.1, above.
Assessment:		- ,
Numerous conservation significant fauna have been recorded from the local area. The application area may be utilised by Western Ringtail Possum and Black cockatoo species. Given the small extent of clearing and the availability of vegetation in better condition within the reserve nearby, the application area is unlikely to comprise significant habitat for these fauna species.		
<u>Principle (c):</u> "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."	Not likely to be at variance	No
Assessment	Valiance	
Twenty threatened flora species have been recorded within 20 km radius from the application area. The application area does not exhibit the characteristics required by these flora species. Noting the distance of the records and the Completely Degraded to Degraded condition (Keighery, 1994) of the vegetation within application area, the application area is unlikely to contain habitat for flora species listed under the BC Act.		
<u>Principle (d):</u> "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."	Not likely to be at variance	No
Assessment:		
The area proposed to be cleared does not contain species that indicate a threatened ecological community.		
Environmental value: significant remnant vegetation and conservation ar	eas	
<u>Principle (e):</u> "Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."	Not likely to be at	Yes
Assessment:	variance	Refer to Section 3.2.2, above.
The extent of native vegetation in the local area is consistent with the national objectives and targets for biodiversity conservation in Australia. The extent of the vegetation types within the application area is below the 30 percent threshold for retaining native vegetation. The application area is within a reserve with relatively intact vegetation that may be indirectly impacted by the clearing through the introduction and spread of weeds and dieback.		

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (h): "Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."	Not likely to be at variance	No
Assessment:		
The application area does not occur within or nearby to any conservation area.		
Environmental value: land and water resources	<u> </u>	
Principle (f): "Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."		No
<u>Assessment:</u> The proposed clearing area is not identified as an environment associated with a watercourse or wetland. The proposed clearing is unlikely to impact on- or off-site hydrology and water quality.		
Principle (g): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation." Assessment:	Not likely to be at variance	No
Located near to the ocean, the application area is prone to wind erosion. Noting the extent of the application area and the condition of the surrounding vegetation, the proposed clearing is not likely to have an appreciable impact on land degradation.		
Principle (i): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."	Not likely to be at variance	No
Assessment:		
Given no water courses or wetlands are recorded within the proximity of the application area, the proposed clearing is unlikely to impact surface or ground water quality.		
Principle (j): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."	Not likely to be at variance	No
Assessment:		
The mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding or waterlogging.		

Appendix C. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale devised by Keighery, B.J. (1994) below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

Appendix D. Photographs of vegetation (City of Albany, 2021a & b)

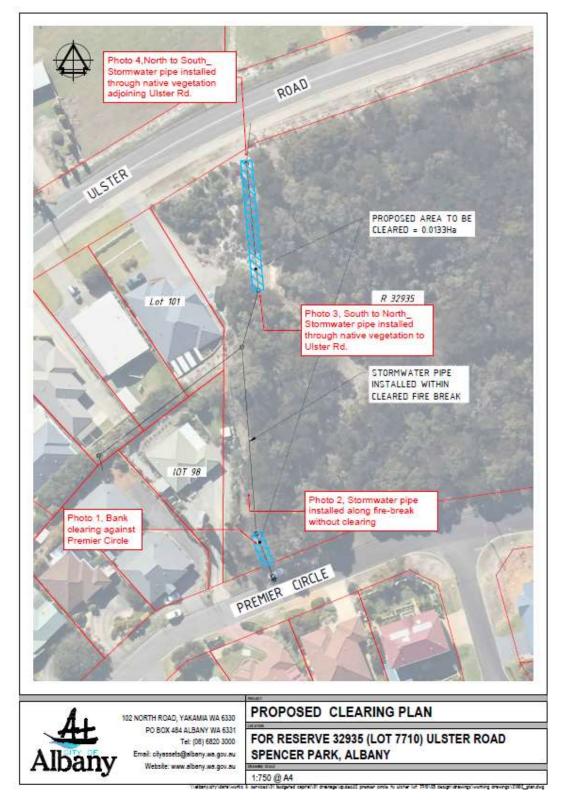


Figure 2. Layout of the storm water pipeline and location of vegetation to be cleared in Photographs 1 to 4 in Figures 3 to 6 (Source: City of Albany, 2021).

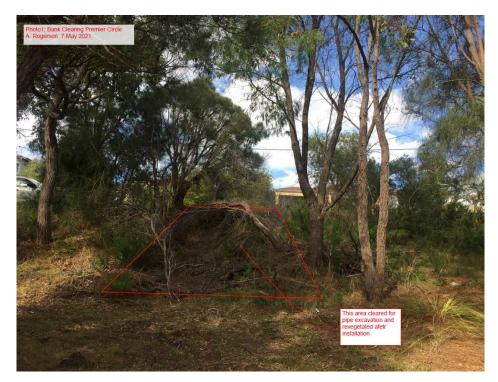


Figure 3. (Photograph 1) vegetation in the application area - looking south against Premier Circle. Area to be cleared is within the red polygon (Source: City of Albany, 2021a).



Figure 4. Firebreak area along the western border of the park where the underground stormwater pipe is to be installed. Vegetation is in Completely Degraded condition (Source: City of Albany, 2021a).



Figure 5. Vegetation within the application area (looking north) where stormwater alignment is requiring some clearing.

The *Allocasuarina* trees on the right hand side of the photograph will not be cleared but will need some trimming (Source: City of Albany, 2021a).



Figure 6. Looking south from Ulster Road. The vegetation required to be cleared for stormwater pipe alignment (Source: City of Albany, 2021a).



Figure 7. Some of the understory vegetation within the application area (Source: City of Albany, 2021b) (A) *Anigozanthos sp.* (B) *Banksia nivea* (C) *Leucopogon sp*, (D) Victorian tea tree. (Source: City of Albany, 2021).

Appendix E. Sources of information

E.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- DBCA Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography Inland Waters Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Offsets Register Offsets (DWER-078)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality Flood Risk (DPIRD-007)
- Soil Landscape Land Quality Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping Best Available
- Soil Landscape Mapping Systems
- Wheatbelt Wetlands Stage 1 (DBCA-021)

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

E.2. References

City of Albany (2021 a) *Clearing permit application CPS* 9289/1, received 13 May 2021 (DWER Ref: DWERDT451533).

City of Albany (2021 b) Supporting information for clearing permit application CPS 9289/1, received 28 June 2021 (DWER Ref: A2021459)

- Commonwealth of Australia (2001) *National Objectives and Targets for Biodiversity Conservation 2001-2005*, Canberra.
- Department of Environment Regulation (DER) (2013). A guide to the assessment of applications to clear native vegetation. Perth. Available from: https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf.
- Department of Parks and Wildlife (DPAW) (2017). *Western Ringtail Possum* (<u>Pseudocheirus oocidentalis</u>) Recovery Plan. Perth.
- Department of Primary Industries and Regional Development (DPIRD) (2019). *NRInfo Digital Mapping. Department of Primary Industries and Regional Development.* Government of Western Australia. URL: https://maps.agric.wa.gov.au/nrm-info/ (accessed in August 2021).
- Department of Water and Environmental Regulation (DWER) (2019). *Procedure: Native vegetation clearing permits*. Joondalup. Available from: <u>https://dwer.wa.gov.au/sites/default/files/Procedure Native vegetation clearing permits v1.PDF</u>.
- Government of Western Australia (2019) 2018 South West Vegetation Complex Statistics. Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth, https://catalogue.data.wa.gov.au/dataset/dbca
- Government of Western Australia. (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <u>https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics</u>
- Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) *Vegetation Complexes of the Darling System, Western Australia*. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68) *Atlas of Australian Soils*, Sheets 1 to 10, with explanatory data. CSIRO and Melbourne University Press: Melbourne.
- Sandiford, E.M. and S. Barrett (2010). *Albany Regional Vegetation Survey. Extent, Type and Status.* Department of Environment and Conservation, Western Australia.
- Schoknecht, N., Tille, P. and Purdie, B. (2004) *Soil-landscape mapping in South-Western Australia Overview of Methodology and outputs* Resource Management Technical Report No. 280. Department of Agriculture.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) *Native Vegetation in Western Australia, Extent, Type and Status*. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- Valentine, L.E. and Stock, W. (2008) Food Resources of Carnaby's Black Cockatoo (Calyptorhynchus latirostris) in the Gnangara Sustainability Strategy Study Area. Edith Cowan University and Department of Environment and Conservation. December 2008.
- Western Australian Herbarium (1998-). *FloraBase the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions, Western Australia. https://florabase.dpaw.wa.gov.au/ (Accessed in August 2021)
- Wilkins, P., Gilfillan, S., Watson, J. and Sanders, A. (ed). (2006). The Western Australian South Coast Macro Corridor Network – a bioregional strategy for nature conservation. Department of Conservation and Land Management (CALM) and South Coast Regional Initiative Planning Team (SCRIPT), Albany, Western Australia.