

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number:8451/2File Number:DWERVT2624Duration of Permit:From 12 September 2019 to 12 September 2021

PERMIT HOLDER

Shire of Broome

LAND ON WHICH CLEARING IS TO BE DONE

Lot 511 on Plan 409418, Minyirr Lot 1197 on Plan 213540, Minyirr

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.43 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8451/2.

CONDITIONS

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

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in 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 control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *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. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

- (a) 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 or decimal degrees;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares);
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit; and
- (e) actions taken to minimise the risk of the introduction and spread *weeds* in accordance with condition 2 of this Permit.

4. Reporting

The Permit Holder must provide to the *CEO* the records required under condition 3 of this Permit, when requested by the *CEO*.

DEFINITIONS

The following meanings are given to terms used in this Permit:

CEO: means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

fill means material used to increase the ground level, or fill a hollow;

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;

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Biodiversity, Conservation and Attractions Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

Meenu Vitarana A/MANAGER NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

22 July 2020

Plan 8451/2



0

20

40

1:1500 MGA Zone 51

Geocentric Datum of Australia 1994

60 m

8011400

Environmental Protection Act 1986

GOVERNMENT OF

WESTERN AUSTRALIA



Clearing Permit Decision Report

1. Application deta	ils and outcome
1.1. Permit application	on details
Permit number:	CPS 8451/2
Permit type:	Area Permit
Applicant name:	Shire of Broome
Application received:	3 June 2020
Application area:	0.43 hectares (ha) of native vegetation
Purpose of clearing:	Constructing a car park, stormwater pipe and cold water break tank and pump.
Method of clearing:	Mechanical removal
Property:	Lot 550 on Deposited Plan 417409
Location (LGA area/s):	Shire of Broome
Localities (suburb/s):	Minyirr

1.2. Description of clearing activities

This amendment is to increase the area of clearing by 0.03 hectares across two separate areas to facilitate the safe installation of a stormwater pipe and the installation of a cold water break tank and pump (see Figure 1, Section 1.5). CPS 8451/1 allowed for the clearing of a 4 metre corridor to facilitate the excavation and trenching required to install the stormwater pipe, however this area was not sufficient due to the sandy conditions and steep incline in the area and the required trench depth, and as such a 6 metre wide corridor was proposed. An additional area (approximately 0.003 hectares) was also added to facilitate the installation of cold water break and pump that was not considered in the initial plans. The entire clearing permit footprint authorised under CPS 8451/2 is 0.43 ha.

1.3. Decision on application and key considerations		
Decision:	Granted	
Decision date:	22 July 2020	
Decision area:	0.43 hectares (ha) of native vegetation (refer to Section 1.5 below)	

1.4. Reasons for decision

The clearing permit amendment application was received on 3 June 2020 and relates to a request to amend Clearing Permit CPS 8451/1 to increase the area of the permit by 0.03 hectares. The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 510 of the *Environmental Protection Act 1986* (EP Act), and the Delegated Officer has concluded that the proposed assessment has not changed since the assessment for CPS 8451/1, except in the case of principle (a) and principle (d). The monsoon (vine) thickets on coastal sand dunes of Dampier Peninsula threatened ecological community, listed as endangered under the *Environment Protection and Biodiversity Conservation Act 1999* is considered under principle (a) in this assessment. The Delegated Officer determined that the proposed additional clearing of 0.03 hectares is not likely to be at variance to any of the clearing principles.

CPS 8451/1 was issued to the Broome Golf Club Committee, however given that the relevant properties are vested with the Shire of Broome, the Shire of Broome has been designated the Permit Holder of 8451/2.

In determining to grant a clearing permit subject to conditions, the Delegated Officer considered that the proposed clearing is not likely to lead to an unacceptable risk to the environment.



Figure 1. Map of the application area. The areas cross-hatched yellow indicates the areas authorised to be cleared under amendment permit CPS 8451/2.

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 1.3), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- 1. The precautionary principle;
- 2. The principle of intergenerational equity; and
- 3. The principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- Biodiversity Conservation Act 2016 (BC Act)

The key guidance documents which inform this assessment are:

- A guide to the assessment of applications to clear native vegetation (December 2013)
- Procedure: Native vegetation clearing permits (DWER, October 2019)
- Technical guidance Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016)
- Technical guidance Terrestrial Fauna Surveys for Environmental Impact Assessment (EPA, 2016)
- Approved Conservation Advice for the Monsoon vine thickets on the coastal sand dunes of Dampier Peninsula (DSEWPC, 2013)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

The amendment application form submitted by the applicant states that measures to avoid increasing the application area were considered, including various excavation options and revised engineering solutions to undertake the installation of the stormwater pipe within the existing approved clearing permit footprint. However, due to safety issues these avoidance alternatives were not considered viable.

The cold water break tank and pump are being installed in an area that is predominantly already cleared of native vegetation. In addition, the applicant has stated that to mitigate the impacts of the clearing required for the installation of the stormwater pipe, once development has concluded, the area will be revegetated with native vegetation.

3.2. Assessment of environmental impacts

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 510 of the EP Act. A review of current environmental information (Appendix C) reveals that the assessment against the clearing principles has not changed significantly from the Clearing Permit Decision Report CPS 8451/1.

The additional proposed clearing area may contain the Monsoon (vine) thickets on coastal sand dunes of Dampier Peninsula threatened ecological community, listed as endangered under the EPBC Act and as vulnerable under the BC Act. However, given the extent of the additional clearing and the avoid and mitigation measures proposed and conditioned on the permit, the clearing is not considered to have result in significant impacts to this community. The additional proposed clearing area is not likely to contain locally / regionally significant flora or fauna species.

3.3. Relevant planning instruments and other matters

Other relevant authorisations required for the proposed land use include:

• Development approval under the *Planning and Development Act 2005* (issued by the Shire of Broome).

In a letter dated 20 June 2019, the Shire of Broome advised DWER that a development approval for the redevelopment of the existing Broome Golf Club has previously been issued and further local government approvals are not required, and that the clearing is consistent with the Shire's Local Planning Scheme.

The application area is mapped within two areas mapped as "Contaminated – Remediation required" and "Possibly contaminated – investigation required" under the Contaminated Sites Act 2003. Advice provided from the DWER Contaminated Sites branch is that contamination issues at the site are associated with groundwater only, and that the proposed clearing does not have any adverse implications in relation to the contamination issues and is unlikely to impact on investigations, assessments or remediation works associated with site contamination.

Several Aboriginal sites of significance have been mapped within the application area. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act* 1972 and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

Appendix A – Additional information provided by applicant

Summary of comments	Consideration of comment
The amendment to increase the application area of CPS 8451/1 from 0.4 hectares to 0.43 hectares is to allow for safe access for contractors installing the stormwater drainage infrastructure associated with the upgrade of the Broome Golf Clubhouse as the existing clearing permit does not allow enough room for the excavation and trenching required.	It is considered that the applicant has adequately considered avoidance and mitigation measures for the proposed additional clearing.
The applicant advised that various excavation options and revised engineering solutions were investigated, however the increase in clearing area was required to allow for the safe installation of the infrastructure.	
Once the civil works have been completed, the cleared area will be revegetated.	

Appendix B – 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 C.

Site characteristic	Details
Local context	The proposed clearing area is part of a 2 kilometre long tract of native vegetation along the dunes of Roebuck Bay. It is surrounded by the existing Broome Golf Course to the west, Roebuck Bay to the immediate east and native vegetation to the north and south. The proposed clearing area is part of a large 790 ha area of vegetation, fragmented slightly roads and pockets of development. Spatial data indicates the local area (50 kilometre radius of the proposed clearing area) retains approximately 99% of the original native vegetation cover.
Vegetation description	The vegetation survey undertaken by Phil Docherty (2019) determined the vegetation within the majority of the proposed clearing area consists of low shrubland and grassland on coastal sand dunes. The survey indicates that the proposed clearing for the stormwater pipe may be within a fragmented area of the "monsoon vine thickets on the coastal sand dunes of Dampier Peninsula" threatened ecological community. The full survey descriptions are available in Appendix E.
	A total of 28 flora species from 25 genera and 14 families were recorded within the survey area during the field assessment, including 22 (81%) locally native species and six introduced (exotic) or naturalised weed species (Docherty, 2019).
	The survey (Docherty, 2019) indicates vegetation within the application area is consistent with the mapped vegetation type:
	• Beard vegetation association 750, which is described as Shrublands, pindan; <i>Acacia tumida</i> shrubland with grey box & cabbage gum medium woodland over ribbon grass & curly spinifex (Shepherd et al, 2001).
Vegetation condition	The vegetation survey undertaken by Phil Docherty (2019) determined that the vegetation within the proposed clearing area is in very good condition (Trudgen, 1991), described as:
	 Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
	The full Trudgen condition rating scale is provided in Appendix E, below. The full survey descriptions are available in Appendix E.

1. Site characteristics

Site characteristic	Details
Soil description	The soil within the proposed clearing area is mapped as the following land subsystem (Department of Primary Industries and Regional Development (DPIRD), 2020):
	Carpentaria Low Subsystem low capacity WKY, which is described as bare coastal mudflats, minor sandy margins and seaward margins, little vegetation except for mangrove fringing thickets (Map Unit 335Cr_2).
Land degradation risk	A summary of land qualities (DPIRD, 2019) for the Carpentaria Low Subsystem low capacity WKY soil system indicates that:
	 80% of the map unit is likely to be alkaline; 70% of the map unit has an extreme risk of surface salinity; 100% of the map unit has a low acidification risk; and 100% of the map unit has a nil risk of water repellence.
Waterbodies	The desktop assessment and aerial imagery indicate that no watercourses or wetlands were identified within the proposed clearing area. The closest waterbody to the site is Roebuck Bay Wetland located 125 metres south east of the application area, which is on the Directory of Important Wetlands in Australia.
Conservation areas	The desktop assessment indicate that there are no conservation areas located within the proposed clearing area. The closest conservation area is located approximately 2.2 kilometre form the application area.
Climate and landform	The proposed clearing area is located within a tropical climate, with mean temperatures of between 29°C and 34.3°C across the year. Annual rainfall exceeds 600 mm, predominantly occurring during the wet season, between December – March (BoM 2020). Topography within the application area ranges from 28 m AHD at the site of the existing building, sloping downwards from the building on all sides to as low as 24 m AHD (Laird Tran 2019).

2. Flora, fauna and ecosystem analysis

With consideration for the site characteristics set out above, relevant datasets (see Appendix G), and biological survey information, the following conservation significant flora and fauna species, and ecological communities may be impacted by the clearing.

Species / Ecological Community	Distance of closest record to application area (kilometres)	Suitable soil type? (flora, ecological community)	Suitable vegetation type? (flora, ecological community)	Suitable habitat features (fauna)	Surveys adequate to identify? (Y, N, N/A)
Monsoon vine thickets on the coastal sand dunes of Dampier Peninsula	Mapped as occurring within the application area	Yes	Yes	N/A	Yes

Appendix C – Assessment against the Clearing Principles

Clearing Principle	Variance level	Is further consideration required?	
Environmental value: biological values	-		
<u>Principle (a):</u> "Native vegetation should not be cleared if it comprises a high level of biodiversity."	May be at variance	Yes Refer to Section 3.2	
Assessment: The additional proposed clearing area may contain locally or regionally significant assemblages of plants.	(changed from CPS 8451/1)	above.	

Clearing Principle	Variance level	Is further consideration required?
Principle (b): "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 (as per CPS 8451/1)	No
Assessment: As per CPS 8451/1 <u>Principle (c):</u> "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora." <u>Assessment:</u> As per CPS 8451/1	Not likely to be at variance (as per CPS 8451/1)	No
Principle (d): "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." <u>Assessment:</u> The additional proposed clearing area may contain species that can indicate a threatened ecological community.	May be at variance (as per CPS 8451/1)	Yes Refer to Section 3.2 above.
Environmental values: significant remnant vegetation and conser	vation areas	I
<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 variance (as per CPS 8451/1)	No
<u>Assessment:</u> As per CPS 8451/1 <u>Principle (h):</u> "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 (as per CPS 8451/1)	No
Environmental values: land and water resources		
<u>Principle (f):</u> "Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."	Not likely to be at variance (as per CPS 8451/1)	No
Assessment: As per CPS 8451/1		
<u>Principle (g):</u> "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation." <u>Assessment:</u> As per CPS 8451/1	Not likely to be at variance (as per CPS 8451/1)	No
<u>Principle (i):</u> "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 (as per CPS 8451/1)	No
Assessment: As per CPS 8451/1		
<u>Principle (j):</u> "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 (as per CPS 8451/1)	No
Assessment: As per CPS 8451/1		

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.

Condition	Description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very Good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds
Poor	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Very Poor	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely Degraded	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

Measuring Vegetation Condition for the Eremaean and Northern Botanical Provinces (Trudgen, 1988)

Appendix E – Biological survey information excerpt Additional Vegetation Description Information Low shrubland and grassland on coastal sand dunes. Condition: Low sparse shrubland consisting of Acacia bivenosa, Crotalaria cunninghammii, Very Good Corchorus pumilo, Tephrosia rosea, Aerva javanica, Waltheria indica, and Cullen martinii over open hummock grassland of 1 weed species: Chrysopogon pallidus and Triodia schinzii with sprawling groundcovers Boeharvia dominii, Euphorbia myrtoidies. Aerva javanica Due to the timing of the survey groundcover was only about 30% Fragmented TEC monsoon vine thicket on coastal sand dunes. (Located at the Condition: north eastern end of the propsed area of redevelopment) Very Good Low tree cover consisting of Gyrocarpus americanus and shrubs Grewia 1 weed species: breviflora, Clerodendrun tomentosum and Acacia monticola incorporating vines Aerva javanica Tylophora cinerescens, Tinaspora smilacina and Abrus precatorius over low shrubland of Crotalaria cunninghamii, Cleome viscosa and groundcovers Boeharvia dominii and Euphorbia myrtoidies.

Figure 2: Vegetation descriptions and condition (Docherty, 2019)

Appendix F – References and databases

1. GIS datasets

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

- Aboriginal Heritage Places (DPLH-001)
- Cadastre Address (LGATE-002)
- Contaminated Sites (DWER-059)
- 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)
- IBRA Vegetation Statistics
- Local Planning Scheme Zones and Reserves (DPLH-071)
- Regional Parks (DBCA-026)
- Soil and Landscape Mapping Best Available (DPIRD-027)

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)

2. References

Broome Golf Club Committee (2020). Application form and supporting documentation for CPS 8451/2. DWER Ref: A1898389.

- Broome Golf Club Committee (2019a). E-mail correspondence with applicant in relation to amendments to the application area. DWER Ref: A1806142.
- Broome Golf Club Committee (2019b). E-mail correspondence with applicant in relation to amendments to the application area. DWER Ref: A1812821.
- Broome Golf Club Committee (2019c). E-mail correspondence with applicant in relation to amendments to the application area. DWER Ref: A1814249.
- Docherty, P. (2019). Flora, Vegetation and Fauna survey Broome Golf Club Redevelopment. Flora and Fauna survey in relation to Clearing Permit Application CPS 8451/1. DWER Ref: A1792503.
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- Laird Tran (2019). Broome Golf Club Redevelopment, existing site plan and demolition area plan. DWER ref: A1779872.
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- Trudgen, M. (1988). A report on the Flora and Vegetation of the Port Kennedy Area. Unpublished report prepared for Bowman Bishaw and Associates, West Perth.