GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 8368/1
Permit Holder:	Western Australian Land Authority TA LandCorp
Duration of Permit:	21 June 2019 – 21 June 2024

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I –CLEARING AUTHORISED

1. Purpose for which clearing may be done
Clearing for the purpose of improving vehicle sightlines and constructing a pylon sign.

2. Land on which clearing is to be done
Lot 424 on Plan 218390, Roebuck.

3. Area of Clearing
The Permit Holder must not clear more than 1.26 hectares of native vegetation within the area hatched yellow on attached Plan 8368/1.

4. Application
This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

5. Type of clearing authorised
This Permit authorises the Permit Holder to clear native vegetation for activities to the extent that the Permit Holder has the right to access land under the *Land Administration Act 1997* or any other written law.

6. Clearing not authorised
The Permit does not authorise the Permit Holder to clear *habitat tree/s.*

PART II –MANAGEMENT CONDITIONS

7. 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.

8. Fauna Management – Greater Bilby (*Macrotis lagotis*)

(a) Within two weeks of undertaking any clearing authorised under this Permit, the Permit Holder shall engage a *fauna specialist* to undertake clearance surveys using transects spaced at a maximum 200 metres within the areas cross-hatched yellow on attached Plan 8368/1 for any signs of greater bilby (*Macrotis lagotis*), including tracks, scats, diggings, burrows, etc. If any signs of the greater bilby is identified during the initial 200 metre transects, the Permit Holder shall undertake more intensive searches with transects spaced at a maximum of 20 metres.

(b) Where a greater bilby is identified under condition 8(a) of this Permit, the Permit Holder shall engage a *fauna specialist* to undertake the following measures:

(i) flag the location of any burrow/s;

(ii) determine whether the burrow/s is an *active burrow*;

(iii) fill in any visibly *inactive burrow/s* to prevent future use; and

(iv) monitor all *active burrows* with remote cameras for a minimum of three consecutive nights.

(c) Where monitoring under condition 8(b)(iv) does not identify any greater bilby activity, the Permit Holder shall ensure that a *fauna specialist* excavates the *inactive burrow* in accordance with Appendix 1 to confirm absence of greater bilby, and immediately fills in the *inactive burrow* to prevent future use.

(d) Where monitoring under condition 8(b)(iv) identifies greater bilby activity, the Permit Holder shall engage a *fauna specialist* to:

(i) avoid clearing of burrows, if possible and only if not possible;

(ii) partially excavate the *active burrow*, to encourage greater bilby *displacement*;

(iii) continually monitor with remote cameras any *active burrow/s* for a maximum period of three consecutive nights or until such time that greater bilby has been *displaced* from the *active burrow/s*;

(iv) fill in the *active burrow* to prevent future use where greater bilby is observed to have been *displaced*.

(e) Should greater bilby not be *displaced* under condition 8(d) of this Permit, the Permit Holder shall engage a *fauna specialist* to undertake the following measures:

(i) capture greater bilby utilising the *active burrow* via cage traps or yard traps (refer to Appendix 2), to be deployed for a maximum of three consecutive nights; and

(ii) relocate any captured greater bilby within 14 hours at a pre-selected release site more than five kilometres from the boundary of the area cross-hatched yellow on attached Plan 8368/1 in *suitable habitat*, in accordance with a Ministerial Authorisation to take or disturb threatened species under Section 40 of the *Biodiversity Conservation Act 2016.*

(f) Where greater bilby have been relocated under condition 8(e)(ii), the Permit Holder shall ensure that the *active burrow* from which the greater bilby was relocated is filled in to prevent future use.

(g) Within two days of undertaking any clearing authorised under this Permit, the Permit Holder shall engage a *fauna specialist* to undertake a walk-through of the area cross-hatched yellow on attached Plan 8368/1 to inspect previously filled burrows and ensure that greater bilby has not recolonised filled burrows, and no new burrows have been constructed.

(h) Should any new or recolonised burrows be identified under condition 8(g) of this Permit, the Permit Holder shall undertake measures in accordance with 8(e) of this Permit to remove and relocate greater bilby utilising the new or recolonised burrows.

(i) Where greater bilby burrows are identified under condition 8(a), 8(b) and/or 8(g) of this Permit, and/or greater bilby are *displaced* or are relocated under conditions 8(d), 8(e) and 8(h) of this Permit, the Permit Holder shall include the following in a report submitted to the Department of Water and Environmental Regulation:

(i) the location of any *active burrows* and/or *inactive burrows* identified, 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;

(ii) the date, time and location, 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 of any *active burrows* and/or *inactive burrows* identified that were filled in, in accordance with condition 8(b)(iii) and/or 8(d)(iv);

(iii) a description of the camera monitoring measures undertaken under condition 8(b)(iv) of this Permit, including photographic records demonstrating the method and the number of monitoring nights;

(iv) the date, time and location identified, 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, of any greater bilby recorded as being displaced from an *active burrow*;

(v) the gender of each greater bilby captured under conditions 8(e) and/or 8(h) of this Permit;

(vi) the location of any greater bilby captured 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;

(vii) the date, time, vegetation type and weather conditions at each location where greater bilby is captured under condition 8(i)(v) of this Permit;

(viii) the gender of each greater bilby relocated under conditions 8(e) and/or 8(h) of this Permit;

(ix) the location of any greater bilby relocated 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;

(x) the date, time, vegetation type and weather conditions at each location where greater bilby is relocated under condition 8(e)(ii) of this Permit;

(xi) the name of the *fauna specialist* that relocated greater bilby under condition 8(e) and/or 8(h) of this Permit; and

(xii) a copy of the Ministerial Authorisation authorising the relocation of greater bilby under conditions 8(e) and/or 8(h) of this Permit.

9. Fauna management

(a) Clearing shall be conducted in a slow, progressive manner to allow fauna to move out of the clearing area.

10. Weed control

(a) 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*:
   (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
   (ii) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
   (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

(b) At least once in each 12 month period for the term of this Permit, the Permit Holder must remove or kill any *weeds* growing within areas cleared under this Permit.

PART III - RECORD KEEPING AND REPORTING

11. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

(a) In relation to the clearing of native vegetation authorised under this Permit:
   (i) 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;
   (ii) the date that the area was cleared;
   (iii) the size of the area cleared (in hectares);

(iv) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 7 of the Permit;
(v) activities in relation to condition 8 and 9 of this Permit; and
(vi) actions taken to minimise the risk of the introduction and spread of *weeds* in accordance with condition 10 of this Permit.

12. Reporting

(a) The Permit Holder must provide to the *CEO* on or before 30 June of each year, a written report:
  (i) of records required under condition 11 of this Permit; and
  (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.

(b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar, a written report confirming that no clearing under this permit has been carried out, must be provided to the *CEO* on or before 30 June of each year.

(c) Prior to 21 March 2024, the Permit Holder must provide to the *CEO* a written report of records required under condition 11 of this Permit where these records have not already been provided under condition 12(a) of this Permit.

DEFINITIONS

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

active burrow means a burrow that is currently being utilised by greater bilby;

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

displaced/displacement means a greater bilby departing a burrow of its own volition and/or self-relocating;

fauna specialist: means a person who holds a tertiary qualification specialising in environmental science or equivalent, and has a minimum of 2 years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, and who holds a valid fauna licence or Ministerial Authorisation issued under the *Biodiversity Conservation Act 2016*;

fauna survey**:** means a field-based investigation of the biodiversity of fauna and/or fauna habitat of the Permit Area;

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

habitat tree/s: habitat tree(s) means trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater, that contains or has the potential to develop hollows or roosts suitable for native fauna;

inactive burrow means a burrow that is not currently being utilised by greater bilby;

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;

suitable habitat means habitat that is suitable for use by greater bilby (*Macrotis lagotis*)

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 species-led ecological impact and invasiveness ranking summary, regardless of ranking; or

(c) not indigenous to the area concerned.

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Ryan Mincham
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

22 May 2019

Appendix 1: burrow excavation

The following procedures should be followed when excavating burrows:

- Burrow excavation requires two people, each with a blunt-nosed shovel and/or garden trowels. It may take up to several hours to excavate a greater bilby burrow, depending on its length and other characteristics.
- To maintain sight of the burrow, place the shovel handle down the burrow entrance as far as possible.
- Slice away the ceiling with the second shovel or trowel, removing the sides and surrounding soils as required.
- Continue to slide the first shovel down into the burrow chamber so the burrow is not lost during excavation.
- Remove the soil with the second shovel or trowel as excavation proceeds and repeat.
- Excavate the burrow slowly and carefully, and stop often to see if a greater bilby is within reach or the end of the burrow is visible (a torch may be required). Be aware that other fauna species may be utilising the burrow.
- Do not collapse the burrow ahead of the shovel or trowel inside the burrow. Feel the shovel contact the other shovel with each stroke to avoid striking a greater bilby.
- Always excavate the burrow to its absolute end – be aware of forks, branches and plugged chambers and ensure all are excavated and inspected.
- If any fauna is observed, it may be either displaced or captured. Note that venomous species may be present in burrows.
- If a juvenile greater bilby is captured, then reunite with mother if possible by direct insertion into the pouch and taping.
- After excavating the burrow, fill in the remaining hole.

Appendix 2: greater bilby trapping

Burrow traps

Cage traps with internal-opening doors (spring closing) are required. Hessian should cover the top and sides of the trap but not the end, to enable a bilby to see through the trap. The wire mesh base should be lightly covered with sand. The sides of the burrow need to be carefully dug out using a small shovel to enable the trap to fit snugly inside the burrow, and deep enough so the treadle is just inside the burrow entrance (McGregor and Moseby 2014). Bait is unnecessary. Having no hessian on the base enables sand to obscure the wire mesh. However, the treadle needs to remain free and protected from sand build-up from below. The treadle can be camouflaged by spraying water over the treadle, and then sprinkling sand on top to affix.

Yard traps

A yard is built around a potentially active burrow using 3-4 m panels of 25x25 mm square mesh (or finer), 900 mm tall with a hinged 300-400 mm footing (Southgate *et al*. 1995). The hinged footing can be attached with ring fasteners. A rod through ring fasteners attached to the end of each panel can be used to join additional panels. The panels need to encircle the burrow, leaving about 1 m or more from the entrance. The footing needs to face inward toward the burrow entrance and can be cut to enable overlap and panels to curve around the burrow. The footing should be flat with the ground and covered with sand. At least three internally opening (spring closing) cage traps should be set inside the yard trap against the side of a panel and the wire mesh on the base obscured with sand. The top and sides of the traps should be covered with hessian but absent from the end. Bait may be used in traps.

Plan 8368/1

Legend

CPS areas approved to clear

base layers

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Road Centrelines

Local Government Authorities

Image

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Officer delegated under Section 20 of the
Environmental Protection Act 1986

GOVERNMENT OF
WESTERN AUSTRALIA

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8368/1
Permit type: Purpose Permit

1.2. Proponent details

Applicant's name: Western Australian Land Authority TA LandCorp

1.3. Property details

Property: Lot 424 on Plan 218390, Roebuck
Local Government Authority: Shire of Broome
Localities: Roebuck

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.26		Mechanical Removal	Improving vehicle sightlines and constructing a pylon sign

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 22 May 2019
Reasons for Decision:

The clearing permit application was received on 18 February 2019 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing may be at variance to principle (b), not at variance to principle (e) and not likely to be at variance to the remaining clearing principles.

The Delegated Officer considered that the implementation of a suitable weed management condition was appropriate to mitigate the impact of spreading weeds into adjacent vegetation.

The Delegated Officer determined that the application area contains suitable habitat for Greater Bilby (*Macrotis lagotis*; Vulnerable). To address this matter, the clearing permit contains conditions requiring the Permit Holder to undertake surveys prior to clearing, and where use by Bilbies is evident, to avoid burrows, and displace or relocate individuals if required.

The Delegated Officer determined that the application area may comprise high faunal diversity. To address this matter, the clearing permit also contains conditions requiring the Permit Holder to undertake clearing activities in a slow, progressive manner and retain large mature trees.

In determining to grant a clearing permit subject to conditions, the Delegated Officer found that the proposed clearing is unlikely to lead to an unacceptable risk to the environment.

2. Site Information

Clearing Description: The application is to clear up to 1.26 hectares of native vegetation within Lot 424 on Plan 218390, Roebuck, Shire of Broome, for the purposes of improving vehicle sightlines to a utilities facility and to construct a pylon sign (Figure 1). The proposed clearing is on the corner of Katsuyama Road and Broome Road. The proposed clearing will involve slashing vegetation at 20 centimetres above ground level with any significant trees retained (LandCorp, 2019).

Vegetation and Site Description: The application area is mapped in the following Beard vegetation association:

- 750 - Shrublands, pindan; *Acacia tumida* shrubland with grey box & cabbage gum medium woodland over ribbon grass & curly spinifex.

Vegetation Condition: Completely degraded: The structure of the vegetation is no longer intact and the area is completely or almost without native species (Keighery, 1994);

To

Very Good: Vegetation structure altered, obvious signs of disturbance (Keighery, 1994).

Soil and Landform Type: The application area is mapped within the Wanganut Land System, described as low-lying sandplain and dunefields with through-going drainage, pindan, supporting pindan woodlands and spinifex/tussock grasslands (Schoknecht and Payne, 2011).

Comment: The vegetation condition is based on available aerial imagery of the application area.

The local area referred to in the below assessment is defined as the area within a 20 kilometre radius of the application area.

The survey reports accompanying this clearing permit application were undertaken for the development of the Broome Road Industrial Area that is located immediately south of the application area. The Preliminary Environmental Impact Assessment and Biological Survey of the Broome Road Industrial Area was conducted in 2009 (GHD, 2010) and the targeted conservation significant fauna survey was conducted in 2014 (GHD, 2015). As such, these field surveys did not include the application area, however mapping of vegetation types, vegetation condition and fauna habitat types have been extrapolated into the application area based on the continuation of vegetation pattern observed on available aerial photography.

Figure 1. Application area (cross-hatched blue)

Figure 2. Representative photograph of vegetation proposed to be cleared (photograph taken in an area adjacent to the application area; GHD, 2015).

3. Assessment of application against clearing principles

Comments

The application proposes to clear up to 1.26 hectares of native trees to improve vehicle sightlines of a utilities facility and to construct a pylon sign. Based on available aerial imagery and extrapolating vegetation mapping from the flora and vegetation survey of the adjacent area (GHD, 2010) over the application area, the vegetation within the application area is determined to be Pindan Woodland, described as low open forest of *Acacia ?plectocarpa* subsp. *plectocarpa*, *Bauhinia cunninghamii* and *Eucalypt* spp. over open shrubland of *Waftheria indica*, *Melhania oblongifolia* and *Corchorus sidioides* subsp. *sidioides* over open tussock grassland of *Triodia schinzii*, *Sorghum plumosum* and *Yakirra* australiensis over scattered sedges of *Scleria brownii* (complex) and *Fimbristylis oxystachya* very open herbs of *Trianthema pilosa*, *Glycine tomentella* and *Pterocaluon serrulatum* (GHD, 2010). Based on aerial imagery, the majority of the application area is considered be in very good (Keighery, 1994) condition with some areas in a completely degraded (Keighery, 1994) condition, where access tracks have been previously cleared.

A review of available databases determined that 14 flora species of conservation significance have been recorded in the local area, comprising one threatened species, three Priority 1 species, one Priority 2 species and nine Priority 3 species (Western Australian Herbarium 1998-). Of these, ten flora species are considered to possibly occur within the application area based on the presence of suitable soils. The flora and vegetation survey conducted in the area adjacent to the application area recorded three priority flora species in 2009 (GHD, 2010), however two are no longer listed and one priority species, *Glycine pindanica*, is now listed as Priority 3 and not Priority 1. *Glycine pindanica* has previously been recorded from 19 locations from the general Broome area to the Dampier Peninsula (West Australian Herbarium, 1998-). Given the vegetation communities present are likely to be representative of the surrounding region, with no rare or unique communities or habitat restricted to the application site (DBCA, 2019), the proposed clearing is not likely significantly impact on the continued existence of priority or threatened flora species.

According to available databases, 96 terrestrial fauna species of conservation significance have been recorded in the local area, comprising 15 threatened species, nine Priority 4 species, three Priority 3 species, two Priority 2 species, 66 species protected under international agreement, and one species classified as 'other specially protected fauna' (Department of Biodiversity, Conservation and Attractions, 2007-). Based on available aerial imagery and representative photographs of nearby areas, the application area is considered to mostly be in very good (Keighery, 1994) condition, providing sufficient refuge and understorey for ground dwelling fauna. The previous survey conducted adjacent to the application area identified a number of suitable hollows for the Northern Brushtail Possum (*Trichosurus vulpecula arnhemensis*; Vulnerable) and Masked Owl (*Tyto novaehollandiae kimberli*, Priority 1) (GHD, 2010). As the application area has not been surveyed, it is unknown whether mature trees containing hollows occur within the application area. Mature trees provide opportunities for foraging, breeding and refuge, and should be retained. It is noted that the immediate vicinity (2 kilometre radius) of the application area has been utilised by the Greater Bilby (*Macrotis lagotis*) in the previous two years, with records of active burrows and diggings (DBCA, 2019). Given this, the proposed clearing may impact upon significant habitat for fauna. Potential impacts to fauna habitats within the application area may be minimised by the implementation of fauna management conditions.

Clearing activities have the potential to facilitate the spread of weeds into adjacent native vegetation. Weed species can decrease the biodiversity value of an area, as they out-compete native vegetation for available resources, contribute to land degradation and increase the frequency and intensity of fires. Potential impacts to biodiversity within and nearby the application area as a result of the proposed clearing may be minimised by the implementation of weed and dieback management practices.

Two threatened ecological communities (TECs) and three priority ecological communities (PECs) occur within the local area. The closest TEC is the 'Species-rich faunal community of the intertidal mudflats of Roebuck Bay' which is located approximately 4.17 kilometres from the application area. The survey undertaken in 2010 did not identify any PECs or TECs within the adjacent area (GHD, 2010). Based on aerial imagery, there is no differentiation in vegetation communities between the surveyed area and application area. Given this, the proposed clearing is not likely to comprise a whole, or part of, or is necessary for the maintenance of a TEC.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). The Dampierland IBRA bioregion and the mapped Beard's vegetation association 750 retains approximately 99.7 per cent of the pre-European extent of native vegetation (Government of Western Australia, 2018). The local area surrounding the application is not considered to be extensively cleared, as it also retains over approximately 90 per cent of native vegetation. The application area is not considered to be significant as a remnant of native vegetation in an extensively cleared landscape.

The application area does not occur within any conservation areas. The closest conservation area is an un-named reserve located approximately 1,142 metres northwest from the application area. Given this distance, and the clearing of native vegetation being limited to slashing vegetation adjacent to an existing public road, the proposed clearing is not likely to have an impact on the environmental values of any adjacent or nearby conservation areas.

The application area is located within the Broome Groundwater Area as proclaimed under the *Rights in Water and Irrigation Act 1914*. According to available database, no watercourses or wetlands intersect the application area. The closest wetland is the Roebuck Bay Marine Park, listed as a Wetland of International Importance under the Ramsar Convention, which is located approximately 5 kilometres south of the application area. The

application area is mapped as the Wanganut land system that is generally not considered to be susceptible to degradation or erosion (Schoknecht and Payne, 2011). Given the large extent of remaining vegetation within the local area, and the clearing of vegetation being limited to slashing 20 centimetres above ground level, it is considered that the proposed clearing is not likely to impact on water resources, lead to appreciable land degradation, deteriorate the quality of groundwater and surface water, or result in the exacerbation of flooding.

Given the above, clearing the vegetation under application may be at variance to principle (b), is not at variance to principle (e) and is not likely to be at variance to the remaining clearing principles.

Planning instruments and other relevant matters.

Comments

There are no registered Aboriginal Sites of Significance within the permit application area. It is the applicant's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

DBCA (2019) recommends that the pre-clearance survey for Greater Bilby, as conditioned, should be undertaken by a qualified zoologist in accordance with '*Guidelines for surveys to detect the presence of bilbies, and assess the importance of habitats in Western Australia, 2017*'. If any Greater Bilby individuals are located, clearing in this area should be avoided or alternatively, individuals should be relocated in accordance with '*Guidelines for the survey and relocation of bilby in Western Australia, 2018*' (DBCA, 2019).

The clearing permit application was advertised on 4 April 2019 with a 14 day submission period. No submissions were received in relation to this application.

4. References

Department of Biodiversity, Conservation and Attractions (2007-). NatureMap Mapping Western Australia's Biodiversity. Department of Parks and Wildlife, http://naturemap.dpaw.wa.gov.au/ (Accessed April 2019).

Department of Biodiversity, Conservation and Attractions (DBCA) (2019). Advice received in relation to clearing permit application CPS 8368/1. Department of Biodiversity, Conservation and Attractions, April 2019. (DER Ref: A1783823).

GHD (2010). Report for Broome Road industrial Area – Preliminary Environmental Impact Assessment and Biological Survey. Report for LandCorp prepared by GHD Pty Ltd, Western Australia, August 2010.

GHD (2015). Broome Road Subdivision Area Conservation Signficant Fauna Survey. Report for LandCorp prepared by GHD Pty Ltd, Western Australia, February 2015.

Government of Western Australia (2018). 2017 State-wide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of February 2018. WA Department of Parks and Wildlife, Perth.

Keighery, B.J. (1994). Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

LandCorp (2019). Application for a clearing permit and supporting documentation CPS 8368/1, Roebuck, Western Australia. (DWER Ref: A1766050).

Schoknecht N, and Payne, A.L. (2011). Land systems of the Kimberley Region, Western Australia. Department of Agriculture and Food, Western Australia, Perth. Technical Bulletin 98.

Western Australian Herbarium (1998-). FloraBase - The Western Australian Flora. Department of Biodiversity, Conservation and Attractions. http://florabase.dpaw.wa.gov.au/ (Accessed April 2019).

GIS Databases:
- Aboriginal Sites of Significance
- DPaW Tenure
- Hydrography, linear
- Hydrography, hierarchy
- SAC bio datasets accessed March 2019