



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8300/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: City of Canning
Application received date: 12 December 2018

1.3. Property details

Property: Lot 500 on Deposited Plan 54383
Lot 800 on Deposited Plan 413041
Lot 5022 on Deposited Plan 38823
Local Government Authority: City of Canning
Localities: Cannington

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
0.531		Mechanical Removal	Road Construction and Maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 26 March 2019

Reasons for Decision: The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986* (EP Act). It has been concluded that the proposed clearing is at variance to principle (f) and is not likely to be at variance to any of the remaining clearing principles.

The Delegated Officer determined that the proposed clearing may increase the spread of weeds and dieback into adjacent native vegetation. To minimise this impact, a condition has been placed on the permit requiring the implementation of weed and dieback management measures.

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 This application is for the clearing of up to 0.531 hectares of native vegetation within Lot 500 on Deposited Plan 54383, Lot 800 on Deposited Plan 413041 and Lot 5022 on Deposited Plan 38823, Cannington, for the purposes of facilitating the construction of Stage 2 of the Southern Link Road development.

The application area has been reduced from 0.786 hectares of clearing to 0.531 hectares of clearing in accordance with correspondence received from the applicant on 30 January 2019.

Vegetation Description The application area is situated within the mapped Guildford Complex (Hedde et al. 1980). This vegetation association is defined as a mixture of open forest to tall open forest of *Corymbia calophylla* (Marri) - *Eucalyptus wandoo* (Wandoo) - *Eucalyptus marginata* (Jarrah) and woodland of *Eucalyptus wandoo* (Wandoo) (with rare occurrences of *Eucalyptus lane* - *poolei* (Salmon White Gum)). Minor components include *Eucalyptus rudis* (Flooded Gum) and *Melaleuca raphiophylla* (Swamp Paperbark).

A review of aerial photography of the application area found that much of the application area has been previously cleared to facilitate urban development. Ground truthing undertaken by Environmental Officers from the City of Canning on 13 November 2018 determined the vegetation remaining in the application area comprises a loose association of *Leptocarpus canus* (Hoary Twine-rush), *Viminaria juncea* (Swishbush), *Melaleuca lateritia* (Robin Redbreast Bush), *Acacia saligna* (Orange Wattle) and *Acacia pulchella* (Prickly Moses) (City of Canning 2019a).

Vegetation Condition A review of aerial photography of the application area and photographs of the vegetation to be cleared, as provided by the applicant (City of Canning 2019a), determined the vegetation is in a Completely Degraded condition (Keighery 1994). This condition ranking is defined as the structure of the vegetation that is no longer intact and the area is completely or almost completely without

native species (Keighery 1994).

Soil type

The application area is mapped as occurring within the EnvGeol S10 Phase land system (Department of Primary Industry and Regional Development 2017). This land system is mostly consistent with the EnvGeol S8 Phase land system, which is described as very light grey sand at the surface, yellow at depth, fine to medium-grained, sub-rounded quartz, moderately well sorted and of eolian origin (Department of Primary Industry and Regional Development 2017). The EnvGeol S10 Phase land system deviates from the EnvGeol S8 Phase land system through the inclusion of a relatively thin veneer over sandy clay to clayey sand (Department of Primary Industry and Regional Development 2017).

Comments

The local area referred to in the below assessment is defined as the area within a 10 kilometre radius of the application area.

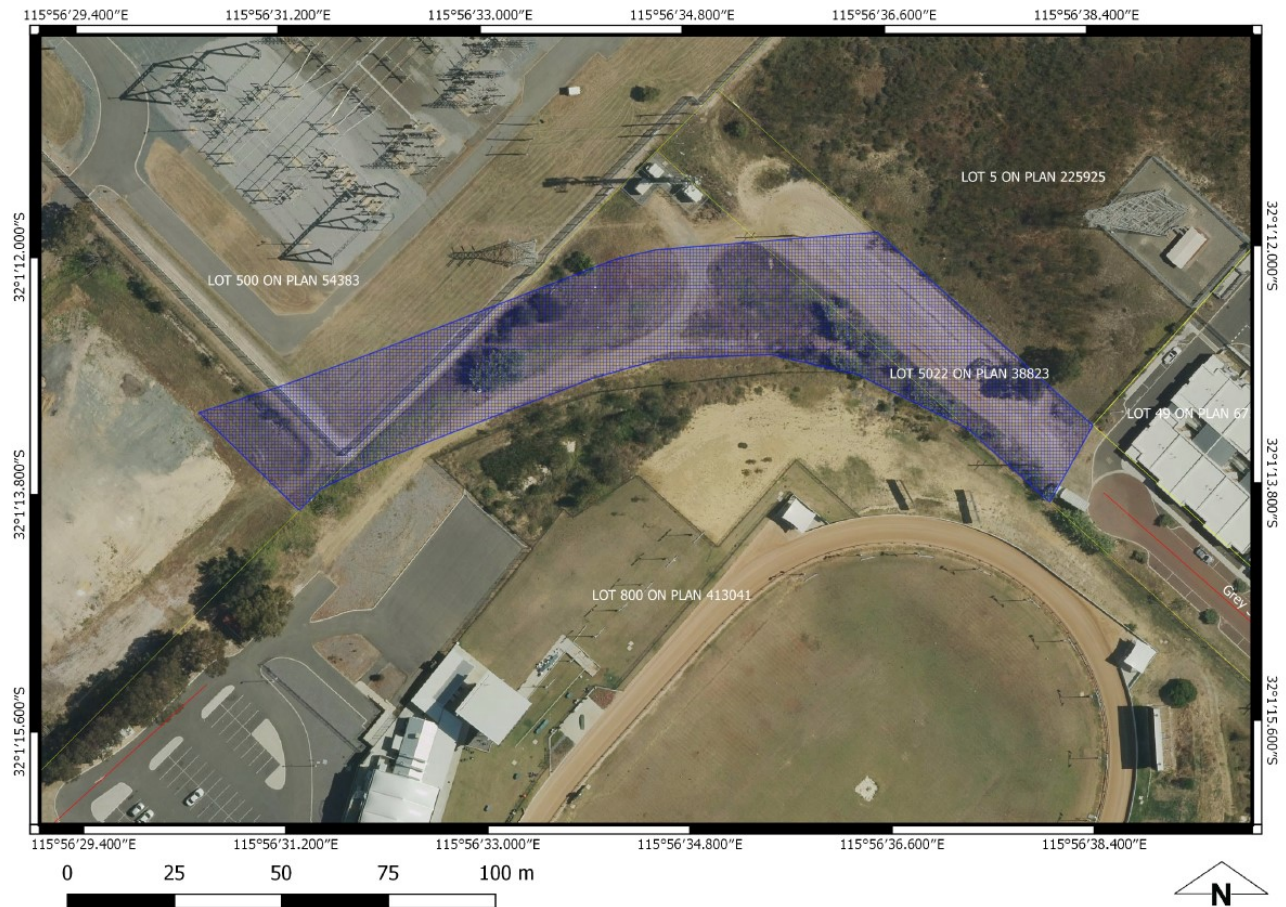


Figure 1: The application area (shown in blue), in the context of the local lot boundaries (shown in yellow).

3. Minimisation and mitigation measures

In correspondence dated 30 January 2019, the applicant reduced the application area from 0.786 hectares to 0.531 hectares of clearing. As discussed in Section 2, the application area has also been positioned in an area which has undergone extensive clearing to facilitate the establishment of electricity generation infrastructure, a greyhound racing facility and existing road developments.

4. Assessment of application against clearing principles

A review of available databases determined that 93 flora species of conservation significance have been recorded in the local area, comprising nine Priority 1 flora species, 11 Priority 2 flora species, 33 Priority 3 flora species, 17 Priority 4 flora species and 23 Threatened flora species. No occurrences of the above conservation significant flora species have been recorded within the application area. Given the extent of the application area, the extensively cleared nature of the application area and the composition and condition of the remaining vegetation in this area, the application area is not likely to comprise suitable habitat for flora species of conservation significance. Based on the above, the proposed clearing is not likely to adversely impact the conservation status or distribution of any conservation significant flora species.

A review of available databases determined that 50 fauna species of conservation significance have been recorded within the local area (Department of Biodiversity, Conservation and Attractions 2007-). Given the extent of the proposed clearing, and the composition and condition of the remaining vegetation, the application area is not likely to comprise suitable habitat for fauna species of conservation significance. Based on the above, the proposed clearing is not likely to adversely impact the conservation status or distribution of any conservation significant fauna species.

A review of available databases determined that nine Threatened Ecological Communities (TEC) and five Priority Ecological Communities (PEC) comprising of one Priority 3, three Priority 3, and one Priority 4 are recorded within the local area.

The application area's eastern margin is located approximately 2.5 metres from an occurrence of the 'Shrublands and woodlands on Muchea Limestone' TEC. The application area in the vicinity of the TEC comprises an area previously disturbed to support road upgrades. A review of aerial photography has found this area to be devoid of vegetation, with the exception of fringing vegetation on the edge of the area previously disturbed, which is in Completely Degraded (Keighery 1994) condition. As the proposed clearing will not impact the occurrence of this TEC, or remove vegetation providing an ecological buffer, the proposed clearing is not anticipated to adversely impact the ecological values of this TEC. The proposed clearing has the potential to spread weeds and pathogens into areas of surrounding vegetation. Weed and dieback management measures should mitigate this risk. Given the application areas condition and native species composition, the application area is not likely to comprise an ecological linkage promoting species diversity and recruitment within a TEC.

When the separation distances between the application area and the other ecological communities of conservation significance recorded within the local area are considered, it is not anticipated that the proposed clearing will adversely impact the ecological values of these ecological communities of conservation significance. A review of aerial photography of the local area has determined the application area does not comprise an ecological linkage linking these ecological communities, or other areas of remnant vegetation.

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 application area forms part of the 'Swan Coastal Plain' IBRA region. This IBRA region retains over 38.5 per cent of its pre-European clearing extent (Government of Western Australia 2017a). The mapped Guildford Complex vegetation association currently retains only approximately 5 per cent of its pre-European clearing extent (Government of Western Australia 2017b). A review of available databases determined the local area retains over 24.6 per cent of its pre-European clearing extent. As discussed in Section 2 of this report, the application area is comprised of extensively cleared areas and areas of remnant vegetation comprised of a small number of native species (City of Canning 2019a). When the composition of the vegetation found in the application area is considered alongside the Completely Degraded (Keighery 1994) condition of this vegetation, the application area is not representative of the Guildford Complex vegetation association. Based on the above, the application area is not considered representative of a significant remnant of native vegetation in an area that has been extensively cleared.

A review of available databases and aerial photography has determined that no watercourses occur within the application area. A review of available databases has determined the application areas eastern boundary narrowly overlaps the western boundary of Carousel Swamp, a high-value Conservation Category Wetland (ID 4842). The database review determined the overlap between the application areas eastern boundary and the aforementioned wetland is less than one metre at its widest point. As the proposed clearing will likely involve the removal of vegetation growing in association with a wetland environment, the proposed clearing is at variance to principle (f). A review of aerial photography of the overlapping area between the application area and the aforementioned wetland found the vegetation in this area is Completely Degraded (Keighery 1994) and comprises fringing vegetation growing on the edge of an area previously disturbed. Given the limited intrusion of the application area into the wetland environment, alongside the composition and condition of the vegetation, it is not anticipated that the proposed clearing will result in adverse impacts to the ecological values of Carousel Swamp.

A review of aerial photography of the application area and its surrounds has not identified any land degradation impacts from past clearing campaigns to support urban development. When consideration is given to the limited extent of native vegetation remaining in the local area, the heavily cleared nature of the application area, the condition and composition of the remaining vegetation and the extent of the proposed clearing, no land degradation impacts are expected to result from the proposed clearing activities.

Whilst the proposed clearing will marginally overlap with vegetation associated with the Carousel Swamp, given the limited loss of vegetation within this wetland as result of the proposed clearing, the vegetation buffer associated with this wetland is not anticipated to be impacted. It is not likely that impacts to the quality of surface water resources in the aforementioned wetland environment will occur as a result of the proposed clearing. A review of available databases determined the groundwater resources in the vicinity of the application area have been mapped at a total dissolved solids content of 500 – 1,000 milligrams per litre. Given the limited extent of the application area, the proposed clearing is not likely to result in adverse impacts to the quality of local groundwater resources.

Numerous conservation reserves and Bush Forever Sites are situated within the local area. The nearest conservation reserve to the application area is an unnamed conservation reserve situated approximately 540 metres south west of the application area. The application area is situated approximately 525 metres northeast of the nearest Bush Forever Site. Given the separation distances between the application area and the above conservation areas, no impacts to the ecological values of these conservation areas are anticipated to result from the proposed clearing activities. A review of aerial photography of the local area found the application area does not comprise part of an ecological linkage linking these conservation areas to each other, or other areas of remnant vegetation. Therefore, the proposed clearing is not anticipated to impact any ecological linkages promoting species diversity and recruitment within the above conservation areas.

Given the above, the proposed clearing is at variance to principle (f) and is not likely to be at variance to any of the remaining clearing principles.

Planning instruments and other relevant matters.

No Aboriginal sites of significance have been mapped within the application area.

The clearing permit application was advertised on the DWER website on 18 January 2019 with a 14 day submission period. This submission period was extended by a further seven days on 30 January 2019 to account for the reduction in the size of the application area.

One submission was received during the advertising period. The submission raised concerns that the proposed clearing will enable additional road extensions which will impact the adjacent 'Shrublands and woodlands on Muchea Limestone' TEC. The submitter noted the applicant's efforts to determine the hydrological impact of the construction of Stage 2 of the Southern Link Road on the TEC. The modelling undertaken by Urbaqua determined the construction of Stage 2 of the Southern Link Road is not likely to materially impact surface and groundwater levels or quality within the Carousel Swamp (Urbaqua 2018), which corresponds with the location of the aforementioned TEC. The submitter contends that since Stage 2 of the Southern Link Road will enable additional road infrastructure to be built, the construction of Stage 2 of the Southern Link Road is contradictory to the City of Canning's efforts to prevent impacts on the aforementioned TEC's ecological values. The submitter advised that they are opposed to the grant of the clearing permit on these grounds.

The City of Canning (2019b) has advised that Stage 2 of the Southern Link Road can create a positive impact on local traffic flows without requiring additional road infrastructure be installed. In addition, the document *A Guide to the Assessment of Applications to Clear Native Vegetation under Part V of the Environmental Protection Act 1986* (December 2014) outlines the Department's considerations in undertaking an assessment of a clearing permit application in more detail. The Department's role is to conduct an assessment of the proposed clearing area, identify the environmental values and potential impacts from clearing, and impose conditions to mitigate and limit these impacts. The environmental impact which may result from the construction of additional road infrastructure in the surrounding area at a later date is not a relevant consideration in assessing a clearing permit application. It is the responsibility of the Permit Holder to consider such matters when planning future developments.

5. References

- City of Canning (2019a) Vegetation photographs within the application area, map with GPS coordinates. Saved on the DWER internal achieve system (A1770222).
- City of Canning (2019b) Clearing Permit and Strategic Importance of the Project. Letter dated 13 December 2018 and provided in support of the clearing permit application package. Saved on the DWER internal achieve system (A1749003).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Biodiversity, Conservation and Attractions (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed February 2019.
- Department of Primary Industry and Regional Development (2017). NRInfo Digital Mapping. Department of Primary industry and Regional Development. Government of Western Australia. URL: <https://maps.agric.wa.gov.au/nrm-info/>. Accessed February 2019.
- Government of Western Australia (2017a) 2017 Statewide Vegetation Statistics (formerly the CAR Reserve Analysis) – Full Report. Current as of December 2017 (based on most recent date of input datasets). Prepared by the Department of Biodiversity, Conservation and Attractions (DBCA), Perth. Published February 2018.
- Government of Western Australia (2017b) 2017 South West Vegetation Complex Statistics Report, Current as of October 2017.
- Hedde, 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.
- Urbaqua (2018) Southern Link Road Stage 2, Water Management & Impact Assessment. Prepared for the City of Canning by Urbaqua, November 2018.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <http://florabase.dpaw.wa.gov.au/> (accessed February 2019).

GIS Databases:

- Aboriginal Sites of Significance
- Department of Biodiversity, Conservation and Attractions, Tenure
- Hydrography, Linear
- Hydrography, WA 250k – Surface Water Lines
- Geomorphic Wetlands Management Category
- SAC bio datasets
- Swan Coastal Plain – Vegetation Complex Mapping
- TPFL Data Dec 2018
- WAHerb Data Dec 2018
- WA TEC PEC Boundaries