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Attention: Clearing Permit Section
Department of Water and Environmental Regulation
Locked Bag 33
CLOISTERS SQUARE WA 6850

Delivered by email to: info@dwer.wa.gov.au

Dear Sir/Madam,

CLEARING PERMIT (PURPOSE PERMIT) APPLICATION FOR BELMONT TRANSIT ORIENTATED DEVELOPMENT (TOD)—STAGE 1

Introduction and background

Emerge Associates (Emerge) has been engaged by Golden River Developments (WA) Pty Ltd. to provide environmental consultancy services to support the construction of a water pressure main and distribution main associated with the Belmont Park Racecourse Redevelopment.

The proposed clearing permit area extends over 0.087 ha of Balbuk Reserve located near the Swan River foreshore to the south east of the Belmont Peninsula (**Figure 1**). Construction of the water pressure main and distribution main will require the clearing of approximately 0.036 ha (360 m²) of native vegetation, with the remainder of the clearing permit area consisting of either cleared or completely degraded non-native vegetation.

This letter has been prepared to support an application for a clearing permit (purpose permit) pursuant to Part V of the *Environmental Protection Act 1986* (EP Act).

Environmental features

In accordance with the Environmental Protection Authority's (EPA's) *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016b)*, a flora and vegetation assessment to the standard required of a 'reconnaissance survey' was undertaken in January 2019. A fauna assessment to the standard required of a part level 1 survey (desktop assessment) in accordance with the Environmental Protection Authority's (EPA's) *Technical Guidance – Terrestrial fauna Surveys (EPA 2016a)* was also undertaken. A summary of the findings obtained from the desktop investigations and reconnaissance field survey is used in this letter to support the application for a purpose clearing permit.

The key environmental attributes of the clearing permit area include:

- No flora listed as threatened or priority under the *Commonwealth's Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) or *Biodiversity Conservation 2016* (BC Act) were recorded within the area.

- One Threatened Ecological Community (TEC) is mapped covering the area (Banksia Woodlands of the Swan Coastal Plain), however the reconnaissance survey did not record this as present within the area.
- An Environmentally Sensitive Area (ESA) covers the northern portion of the area, which follows the conservation category wetland (UF ID 13316) related to the Swan River Estuary.

Planning context

The site is partially located within the Swan and Canning River Development Control Area (DCA) boundary and is zoned 'Parks and Recreation' and 'Primary Regional Roads' under the Metropolitan Region Scheme (MRS) and the City of Belmont Local Planning Scheme (LPS) No.15. It is bound by Graham Farmer Freeway to the west and the Swan River to the east. Balbuk Reserve is heavily used by motorboat and water ski enthusiasts focused around the existing Goodwood boat ramp.

Landownership

The clearing permit area covers land in multiple ownerships, managed by the City of Belmont as 'Balbuk Reserve'. With reference to **Plate 1** below, the landowners are:

1. Lot 800 on DP 31953: Western Australian Planning Commission.
2. Oorong Road: Public Road Reserve, Main Roads.
3. P 20956: Unallocated Crown Land.
4. Lot 202 on DP 32694: Main Roads.

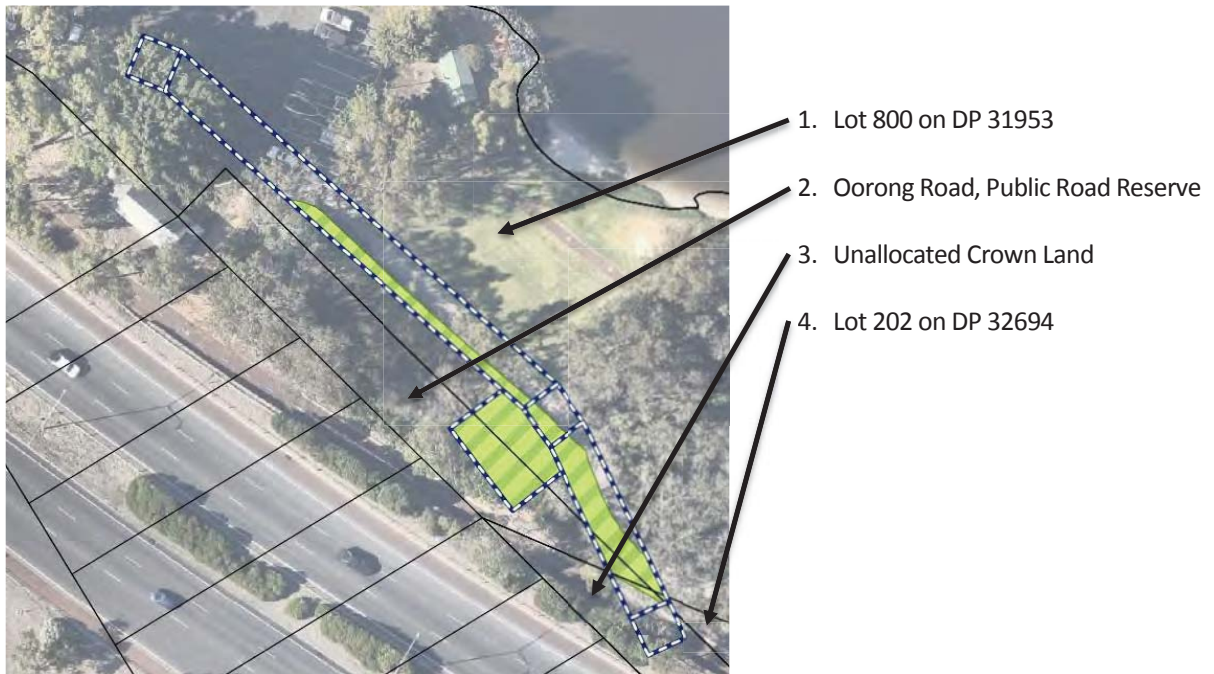


Plate 1: Landownerships within clearing permit area.

Application document index

Attachment 1 to this letter contains the signed clearing permit application form for processing by the Department of Water and Environmental Regulation (DWER).

Attachment 2 to this letter contains a Technical Memorandum (Emerge, 2019) detailing the flora, vegetation and fauna survey.

Email Attachments: attached to the email submitting this application are:

- A shp file of the clearing permit area.
- A zip file containing the IBSA data files.

Clearing permit area

The clearing permit area encompasses an envelope of sufficient size to accommodate the earthworks required to construct the water mains. It will be necessary to clear up to 0.036 ha of native vegetation to enable the construction works. **Figure 1** illustrates the boundary of the clearing permit area and the approximate location of the native vegetation to be cleared.

Flora and vegetation values

A reconnaissance flora and vegetation survey and a Level 1 fauna survey encompassing the clearing permit area was undertaken by Emerge Associates on 10 January, 2019 (**Attachment 2**). The following provides a summary of the flora and vegetation values pertaining to the clearing permit area.

A total of 18 native and nine non-native (weed) species were recorded during the field survey, representing 13 families and 21 genera. The dominant family recorded was Cyperaceae (eight native taxa) and Myrtaceae (four native taxa and two non-native taxa).

One native plant community was recorded within the clearing permit area, in addition to heavily disturbed and/or cleared parkland areas:

- **Er** - Open forest of *Eucalyptus rudis* over closed sedgeland of *Baumea articulata*, *Lepidosperma longitudinale* and *Centella asiatica*, including planted (revegetated) native species (**Plate 2**)
- Non-native parkland cleared- Predominantly non-native trees over landscaped areas or pavement (**Plate 3**).



Plate 2: Plant Community Er in 'very good' condition



Plate 3: Non-native parkland cleared in 'completely degraded' condition

Vegetation condition within the site ranged from 'very good' to 'completely degraded' using the Keighery scale (Keighery 1994). Vegetation in 'very good condition' comprised open forest of *Eucalyptus rudis* over closed sedgeland of *Baumea articulata*, *Lepidosperma longitudinale* and *Centella asiatica*, including planted (revegetated) native species. The remaining non-native parkland cleared area exists in a 'completely degraded' condition.

The extent of vegetation by condition category is detailed in **Table 1**.

Fauna values

A fauna assessment to the standard required of a part level 1 survey (desktop assessment) in accordance with the *Environmental Protection Authority's (EPA's) Technical Guidance – Terrestrial fauna Surveys (EPA 2016a)* was conducted. This involved a search for threatened and priority fauna within a 5 km radius of the clearing permit area using the *Protected Matters Search Tool* (DoEE 2019), *NatureMap* (DFCA 2019) and *Department of Biodiversity, Conservation and Attractions (DFCA)'s* threatened and priority fauna database.

Of the fauna species potentially occurring in the local area, only those with preferences of riverine and wetland habitats were deemed likely to occur within the clearing permit area. Three conservation significant fauna species were identified as having potential to utilise the habitat within the clearing permit area: *Ixobrychus dubius* (Australian Little Bittern), *Isoodon fusciventer* (Quenda) and *Hydromys chrysogaster* (Water-rat).

As established by the outcomes of the field survey assessment, the fauna habitat values within the clearing permit area were considered to be substantially reduced due to historical disturbance, its small area and its location, i.e. adjacent to a major transport infrastructure. Fauna diversity is likely to be well below levels present in undisturbed areas, such as remnant vegetation to the south east, and it is considered highly unlikely that any of the fauna species identified by the desktop search would be present within the clearing permit area.

Proposed clearing of vegetation

A breakdown of the vegetation within the clearing permit area, grouped by plant community and vegetation condition, is shown in **Table 1**. All reasonable efforts will be taken to retain vegetation where possible during the construction.

Table 1: Area of vegetation to be cleared according to plant communities and vegetation condition

Plant community	Vegetation condition	Area (ha)
Native - Er	Very good	0.036
Non-native - parkland cleared	Completely degraded	0.051
Total		0.087

Response to EP Act Clearing Principles

Under Section 51C of the EP Act, clearing of native vegetation is an offence unless a clearing permit has been obtained or an exemption applies. When assessing clearing applications, DWER has regard to the ten clearing principles contained in Schedule 5 of the EP Act so far as they are relevant to the matter under consideration.

In support of this purpose permit clearing application, we have considered and responded to the ten clearing principles in the following sections.

Principle (a) - Native vegetation should not be cleared if it comprises a high level of biological diversity.

Vegetation mapping undertaken by Heddle (Heddle *et al.* 1980) indicates the area is a part of the Bassendean complex - central and south, which is described as ranging from woodland of *Eucalyptus marginata* - *Allocasuarina fraseriana* - *Banksia* spp. to low woodland of *Melaleuca* spp. and sedgelands on the moister sites.

Although the clearing permit area contains native vegetation in a 'very good' condition, and is, in part, within the Swan Canning Riverpark conservation area, the clearing permit area is small in size and fragmented by the pedestrian footpath and Balbuk Way. The proposed clearing is therefore unlikely to have any significant impact on the biodiversity of the region.

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 indigenous to Western Australia.

Due to historical disturbance, the small size of the clearing permit area, and the proximity to a major road, the fauna habitat values within the area are considered reduced, and the fauna diversity is considered below levels likely to be present prior to historical disturbances.

Based on the results from the fauna assessment, the vegetation within the clearing permit area provides limited potential fauna habitat. In addition, there are also large areas of better-quality vegetation to the south east of the clearing permit area, which would be preferred by native fauna. As a result, clearing is not considered to be at variance with this principle.

Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

During the flora and vegetation assessment carried out by Emerge Associates in 2019, no threatened flora species were identified within the clearing permit area. As a result of the absence of threatened flora species within the clearing permit area, the proposed clearing is not considered to be at variance with this principle.

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.

The clearing permit area is mapped within a patch of banksia woodlands on the DBCA database, listed as floristic community type SCP21c 'low lying *Banksia attenuata* woodlands or shrublands'. However, the flora and vegetation survey has confirmed that there is no vegetation present within the clearing permit area or adjacent to it representative of a banksia woodland community. There are therefore no banksia woodlands of the Swan Coastal Plain TEC within the clearing permit area. The proposed clearing is not considered to be at variance with this principle.

Principle (e) – native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

The vegetation in the clearing permit area is unlikely to represent significant remnant native vegetation due to the small size and disturbed nature of the vegetation. There were no vegetation types or landscape units identified during the flora and vegetation survey that were considered as being rare, restricted or unique. Therefore, the proposed clearing is not considered to be at variance to this principle.

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 geomorphic wetlands occur within the clearing permit area. A conservation category wetland (UF ID 13316) associated with the Swan River Estuary is located approximately 20 m north from the clearing permit area. However, due to the small extent of the clearing footprint, impact on the vegetation associated with this wetland will be negligible.

There are no other significant water features occurring in close proximity to the clearing permit area, therefore, the proposed clearing is not considered to be at variance to this principle.

Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

The majority of the clearing permit area has been previously cleared and paved to allow for the construction of Balbuk Way footpath. The removal of vegetation is unlikely to increase any erosion within the clearing permit area given the small footprint of native vegetation to be removed. The clearing permit area is situated on relatively flat land and is unlikely to be subject to land degradation caused by wind or water erosion, given the set-back from the Swan River foreshore.

The proposed clearing of vegetation is not considered to be at variance with this principle.

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.

The clearing permit area intersects the Swan Canning Riverpark. The removal of native vegetation within the clearing permit area will not impact on the ecological values of the Riverpark due to the small extent to be removed and the fragmentation of the patch by the pedestrian footpath (Balbuk way). Therefore, the proposal is unlikely to be at variance with this principle.

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.

The environmental geology of the clearing permit area has been mapped by Perth Metro Region Environmental Geology (DPIRD-027) which indicates the majority of the area is identified as EnvGeol S7 Phase, which comprises of sand - pale and olive yellow, medium to coarse-grained. The clearing of native vegetation is unlikely to have any impact on surface water due to the permeability of the soil and the relatively flat topography of the area.

No Public Drinking Water Source Areas (PDWSA's) are within, or in close proximity to the clearing permit area.

The Acid Sulfate Soil (ASS) Risk Map, Swan Coastal Plain (DWER-055) indicates the clearing permit area is not situated within an area of ASS risk and the site unlikely to be affected by ASS.

The proposed clearing is not considered to be at variance with this principle.

Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

The clearing permit area is situated within the Swan River's floodplain. The proposed clearing of native vegetation is unlikely to cause or exacerbate the intensity of flooding in the area due to the small extent of vegetation to be removed. As a result, the proposal is unlikely to be at variance with the principle.

Summary and closing

The proposed clearing permit area is 0.087 ha in size and the construction of the water mains within this area requires up to 0.036 ha of native vegetation to be cleared. The remainder of the clearing permit area consists of completely degraded non-native parkland cleared vegetation.

The content of this letter demonstrates that the proposed clearing is consistent with the clearing principles.

In summary:

- Due to the small amount of native vegetation to be cleared, the proposed construction works will not impact on the level of biological diversity present within the clearing permit area.
- The vegetation within the clearing permit area does not represent habitat for any conservation significant fauna species.
- No threatened or priority flora species are located within the clearing permit area.
- No occurrences of TECs of PECs were identified within the clearing permit area. The area does not represent the mapped 'Banksia Woodlands of the Swan Coastal Plain' TEC due to the lack of Banksia Woodland floristic community types.
- The vegetation within proposed clearing permit area does not represent significant remnant native vegetation due the small patch size and high level of existing fragmentation.
- The proposed clearing will not cause appreciable land degradation.
- The proposed clearing is not considered to cause deterioration of surface or groundwater.
- The proposed clearing is not likely to cause or exacerbate the risk of flooding.

Should you have any questions regarding the content of this letter report please do not hesitate to contact the undersigned.

Yours sincerely
Emerge Associates



Julia Morgan
SENIOR ENVIRONMENTAL CONSULTANT

Encl: Figure 1: Clearing Permit Area
Attachment A: Civil Engineering Drawing
Attachment B: Clearing Permit Application C2 Form
Attachment C: Certificates of Title
Attachment D: Landowner Authority to Undertake Clearing
Attachment E: Credit Card Payment Form C3
Attachment F: Flora and Vegetation Survey and Fauna Survey Technical Memorandum (Emerge Associates 2019)

General references

- Environmental Protection Authority (EPA) 2016a, *Technical Guidance - Terrestrial Fauna Surveys*, Perth.
- Environmental Protection Authority (EPA) 2016b, *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment*, Perth.
- 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 (ed.), *Atlas of Natural Resources Darling System Western Australia*, Perth.
- Keighery, B. 1994, *Bushland Plant Survey: A guide to plant community survey for the community*, Wildflower Society of WA (Inc), Nedlands.

Online references

- Department of the Environment and Energy (DoEE) 2019, *Protected Matters Search Tool*, <<http://www.environment.gov.au/webgis-framework/apps/pmst/pmst.jsf>>.
- Western Australian Herbarium 2019, *FloraBase—the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions. <<https://florabase.dpaw.wa.gov.au>>.