GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 8220/1
Permit Holder:	City of Joondalup
Duration of Permit:	30 April 2019 to 30 April 2026

ADVICE NOTE
The funds referred to in condition 9 of this permit are intended for contributing towards the purchase of 1.636 hectares of native vegetation with similar environmental values to the area to be cleared.

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 constructing a dual use path.

2. **Land on which clearing is to be done**
   Lot 9505 on Plan 52070, Tamala Park
   Lot 3050 on Plan 47951, Mindarie
   Lot 3000 on Plan 44066, Burns Beach
   Marmion Avenue road reserve (PIN 1135104), Tamala Park

3. **Area of Clearing**
   The Permit Holder must not clear more than 2.53 hectares of native vegetation within the area cross hatched yellow on attached Plan 8220/1a.

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 the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

6. **Type of clearing not authorised**
   This Permit does not authorise the Permit Holder to clear native vegetation after 30 April 2024.

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. Weed and dieback 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 *dieback* and *weeds:*

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

9. Monetary contributions to a fund maintained for the purpose of establishing or maintaining vegetation (offset)

Prior to undertaking any clearing authorised under this Permit and no later than 30 April 2020, the Permit Holder shall provide documentary evidence to the CEO that funding of $23,506.05 has been transferred to the Department of Water and Environmental Regulation for the purpose of establishing or maintaining native vegetation.

10. Revegetation

The Permit Holder shall implement and adhere to the Mindarie to Burns Beach Dual Use Path – Tamala conservation Park Revegetation Plan CPS 8220/1, including but not limited to the following actions;

(a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared within the area cross-hatched red on the attached Plans CPS 8220/1b, 8220/1c, 8220/1d, 8220/1e, 8220/1f, 8220/1g and 8220/1h;
(b) prior to 31 August 2021 commence *revegetating* and *rehabilitating* the areas hatched red on Plans 8220/1b, 8220/1c, 8220/1d, 8220/1e, 8220/1f, 8220/1g and 8220/1h by
    (i) laying the vegetative material and topsoil retained under condition 10(a);
    (ii) deliberately *planting* of tube stock and salvaged native vegetation that will result in similar species composition, structure and density of native vegetation to the reference sites; and
    (iii) ensuring only *local provenance* seeds and propagating material are used to *revegetate* and *rehabilitate* the area.
(c) water planted vegetation between October and March for the first two years post planting as required;
(d) install signage to educate reserve users of the revegetation activities being undertaken;
(e) implement hygiene protocols by cleaning earth-moving machinery of soil and vegetation prior to entering and leaving the site;
(f) undertake weed control activities on an ‘as needs’ basis to maintain a minimum 90 per cent weed free state by the end of the project maintenance period;
(g) achieve the following completion criteria after the three year monitoring period for areas *revegetated* and *rehabilitate*d under this Permit;

Criterion	Baseline floristic data	Completion targets	Completion criteria	Monitoring
1	Species richness is the average number of species between the reference sites of each vegetation community .	Minimum of 50% of native vegetation species returned based on propagation capacity of species. Therefore revegetation areas shall have a minimum of 50% native species per quadrat, as obtained by the average recorded at the reference sites.	Species richness and number of plants / m2 in the revegetation areas shall have a minimum of 50% native species per quadrat, as obtained by the average recorded at the reference sites.	The species and number of plants / m2 in the revegetation areas will be counted in years 2 and 3.
2	% cover of weeds in reference sites of each vegetation community is less 2%< to <30%	Weeds are mostly absent from the reference sites. Considering external pressures (adjacent to dual use path) a target of ≤10% has been established for the revegetation areas.	The revegetation areas must have % cover of ≤10% weeds.	Monitor revegetation areas in years 2 and 3.
3	One declared weed (**Asparagus asparagoides)* is present	Declared Weeds are managed in accordance with the *Biosecurity* and *Agriculture Management Regulations 2013.*	Declared weeds are absent from the rehabilitation areas.	Monitor the revegetation site for declared weeds by traversing the area in years 2 and 3.
4	Survival rate to be achieved	If after year 2 and year 3 of planting, a survival rate of 2plants/m^2 is not achieved, all planted tube stock that have not survived must be replanted within 12 months and monitored for a further 1 year.	The revegetation site needs to ensure a survival rate of at least 2 plants/m^2 is achieved after three years, and replant any plants within 12 months of dying.	The number of surviving plants in the revegetation areas will be counted in years 2 and 3.
5	Rubbish is present in bushland.	Rubbish is absent from the revegetation site.	The revegetation site contains minimal rubbish.	Monthly asset inspections

(h) undertake remedial actions for area *revegetated* and *rehabilitated* where monitoring indicated that revegetation has not met the completion criteria, outlined in 10(g); including
  (iv) revegetate the area by deliberately *planting* native vegetation that will result in the minimum target in 10(g) and ensuring only *local provenance* seeds and propagating material are used;
  (v) undertake further weed control activities;
  (vi) undertake further watering activities; and
  (vii) annual monitoring of each *revegetated* and *rehabilitated* site, until the completion criteria, outline in 10(g) are met.

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, 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 7 of this Permit;
(e) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 8 of this Permit;
(f) In relation to the revegetation of areas pursuant to condition 10 of this Permit;
  (i) a description of the *revegetation* and *rehabilitation* activities undertaken;

(ii) the size of the area *revegetated* and *rehabilitated* (in hectares); and
(iii) the date that the area was *revegetated* and *rehabilitated*.

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 30 April 2026, 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:

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

dieback means the effect of *Phytophthora* species on native vegetation;

direct seeding means a method of re-establishing vegetation through establishment of a seed bed and the introduction of seeds of the desired plant species;

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

local provenance means native vegetation seeds and propagating material from natural sources within 100 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the area cleared;

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;

planting means the re-establishment of vegetation by creating soil conditions and planting seedlings of the desired species;

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

revegetate/ed/ion means the re-establishment of a cover of local provenance native vegetation in an area using methods such as natural regeneration, direct seeding and/or planting so that the species composition, structure and density is similar to pre-clearing vegetation types in that area; and

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

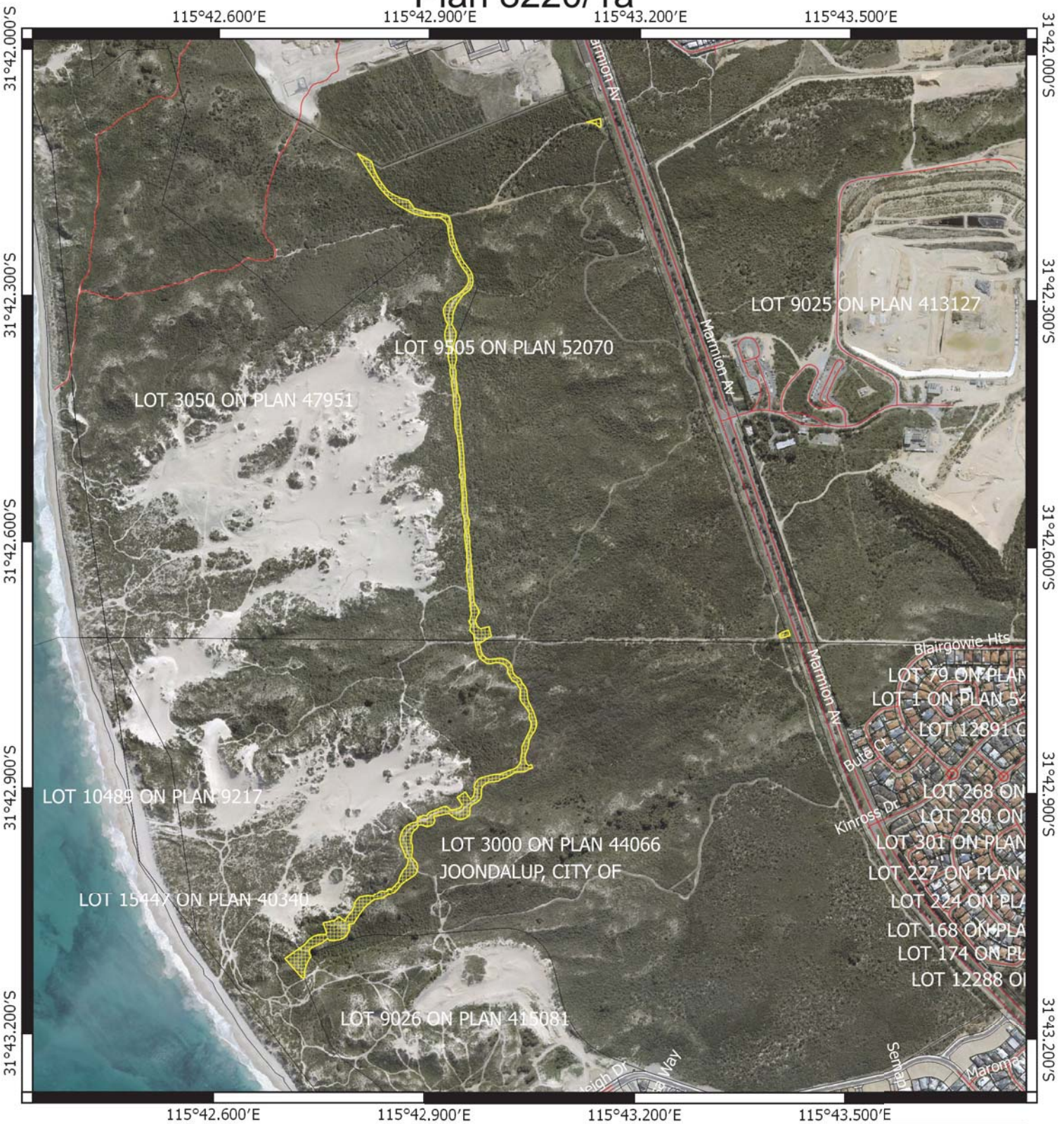
(c) not indigenous to the area concerned.

Samara Rogers
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

5 April 2019

Plan 8220/1a



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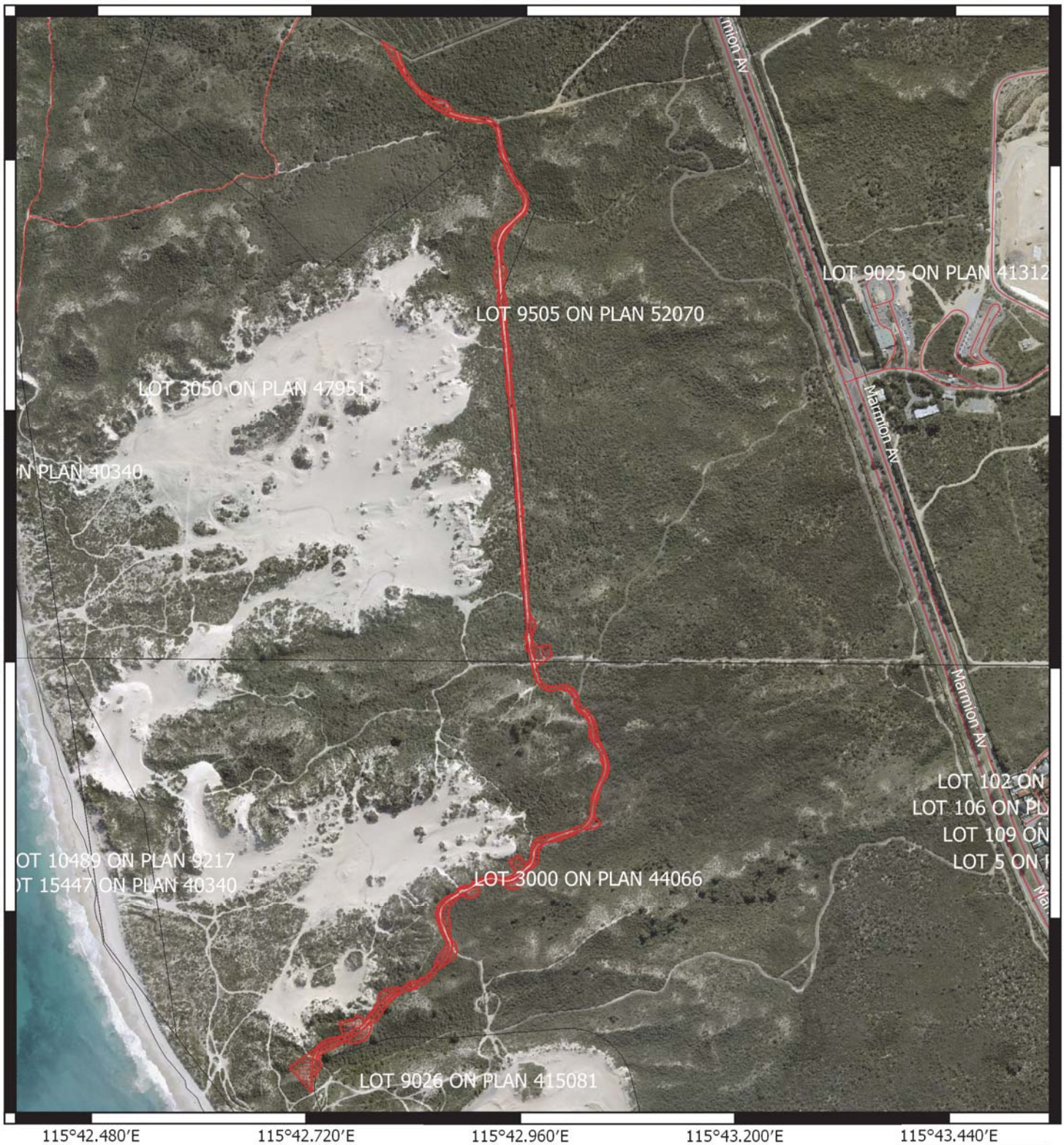
Officer with delegated authority under Section 20
of the Environmental Protection Act 1986

GOVERNMENT OF
WESTERN AUSTRALIA

Plan 8220/1b



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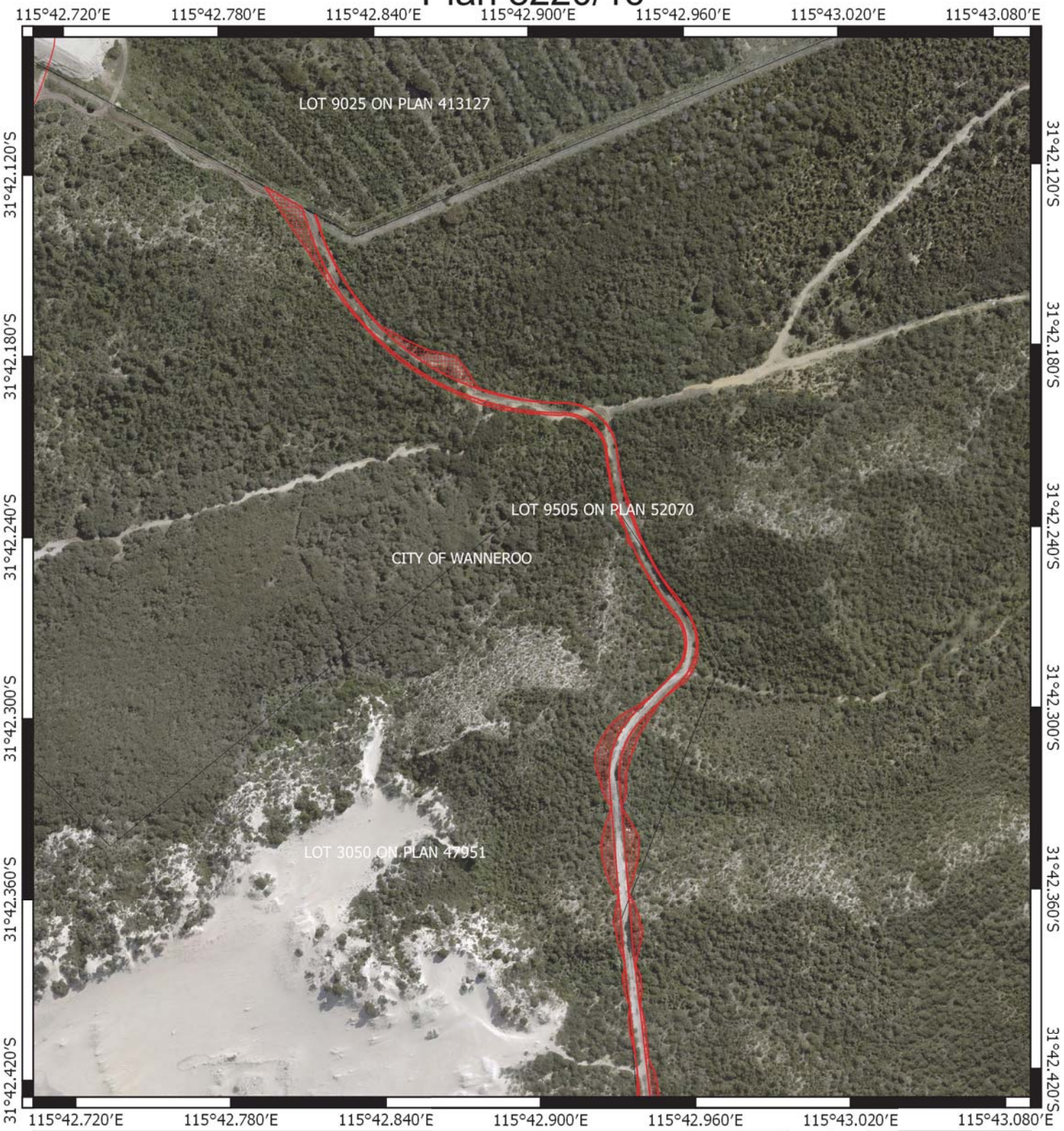
GOVERNMENT OF
WESTERN AUSTRALIA

Plan 8220/1c



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GOVERNMENT OF
WESTERN AUSTRALIA

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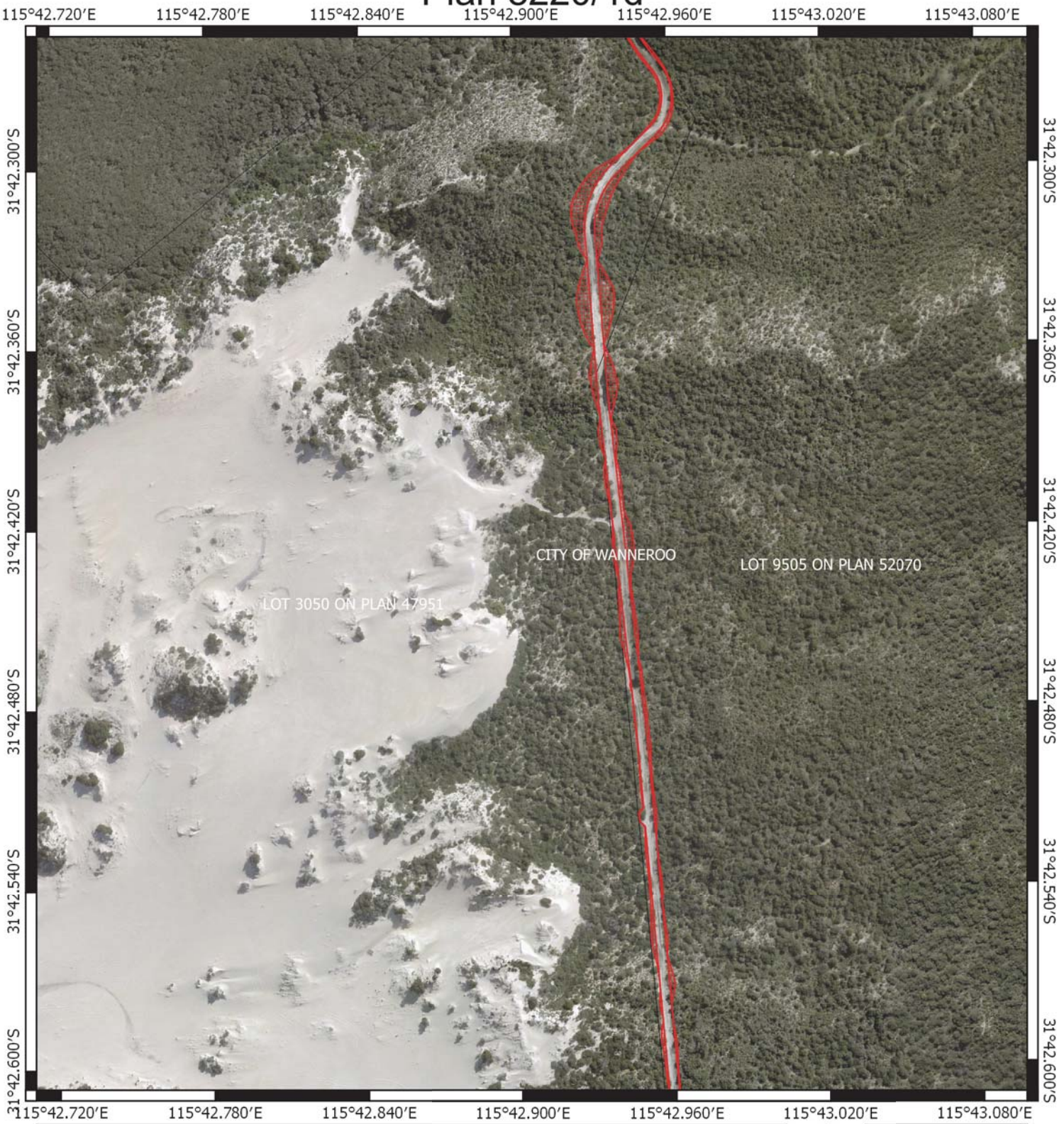

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WESTERN AUSTRALIA

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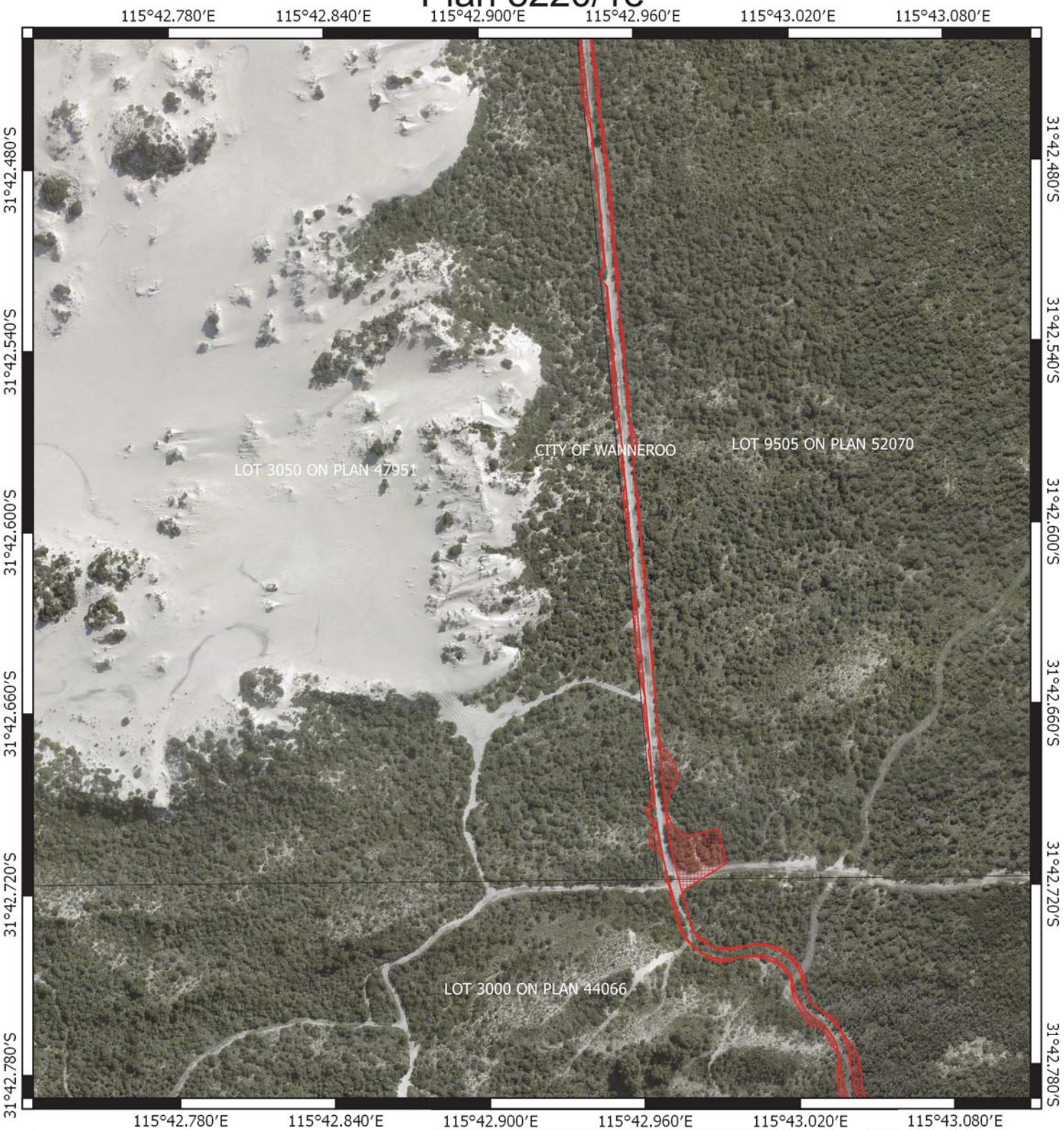

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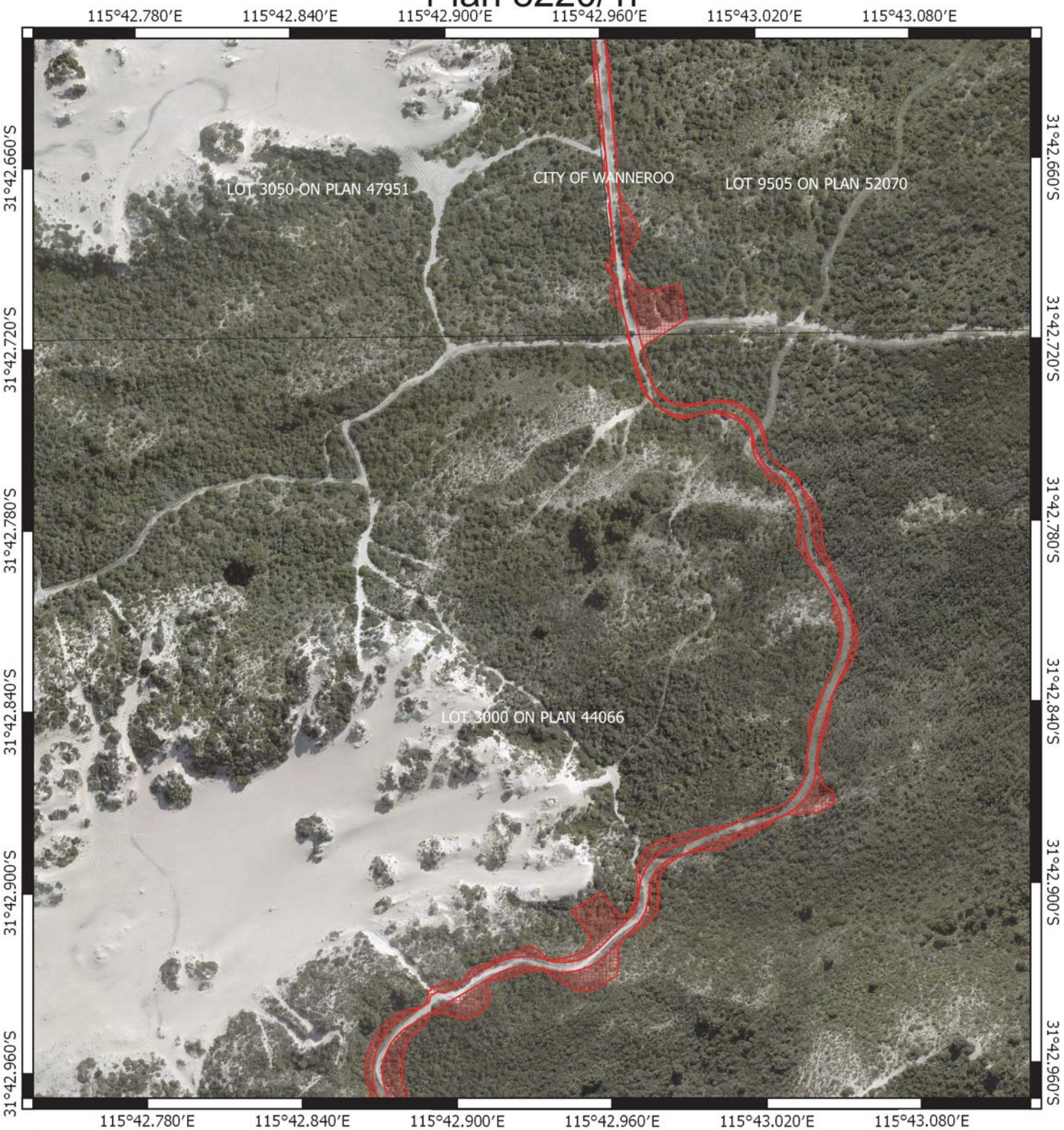
GOVERNMENT OF WESTERN AUSTRALIA

Plan 8220/1f



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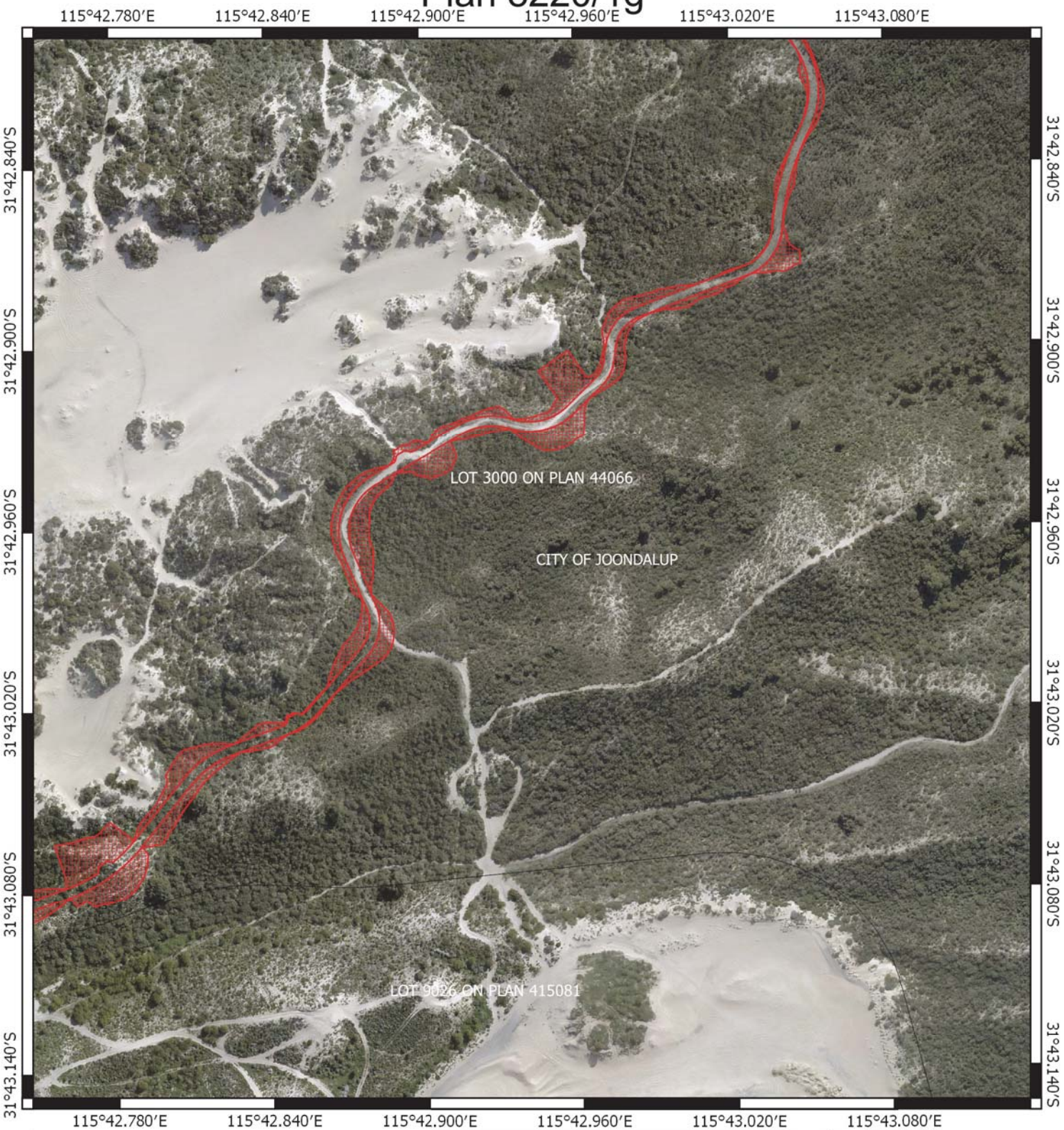
Plan 8220/1g



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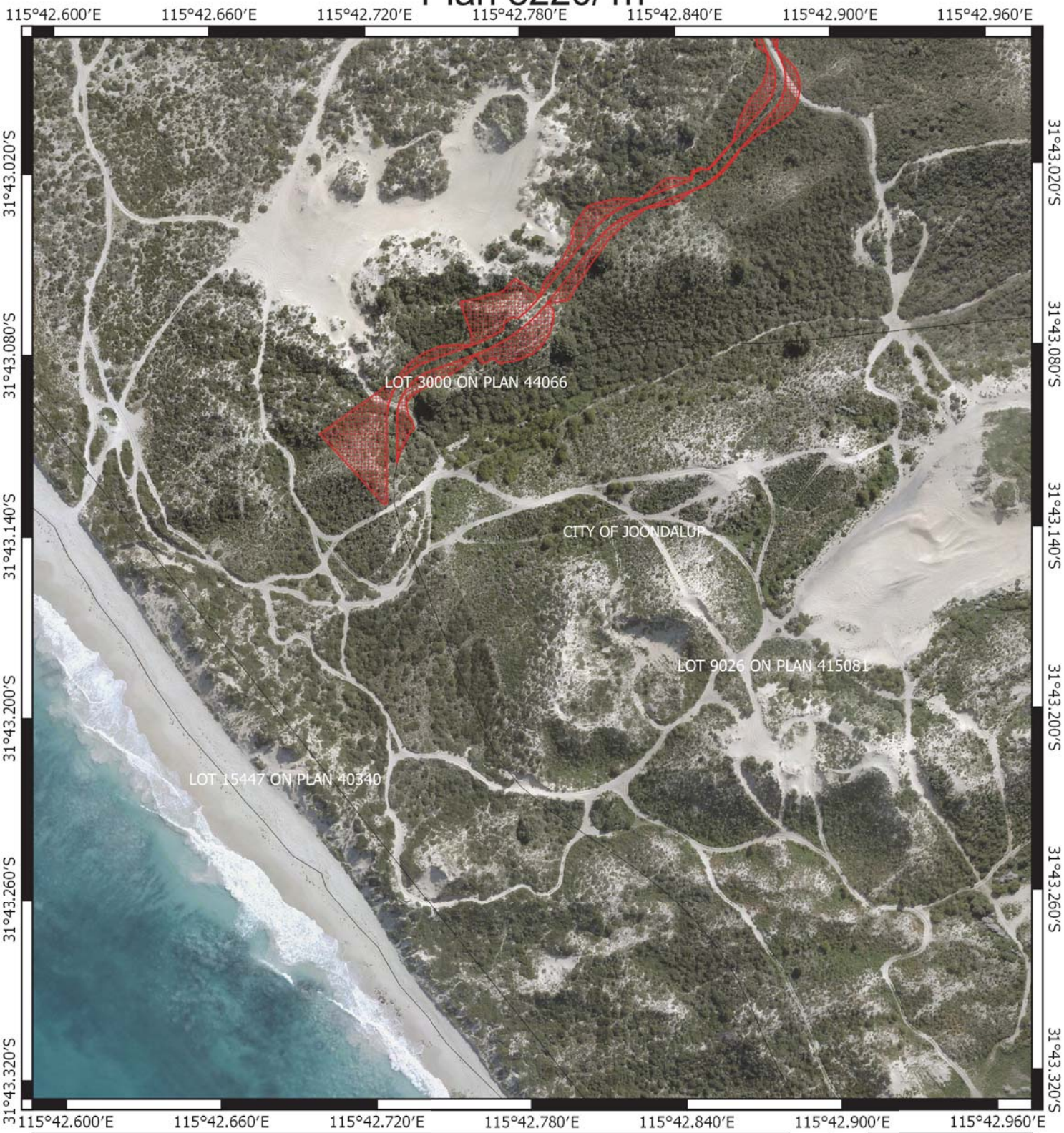
Plan 8220/1h



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Officer with delegated authority 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.: 8220/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: City of Joondalup
Application received date: 10 October 2018

1.3. Property details

Property: Lot 9505 on Plan 52070, Tamala Park
Marmion Avenue road reserve - 1135104, Tamala Park
Lot 3000 on Plan 44066, Burns Beach
Lot 3050 on Plan 47951, Mindarie
Local Government Authority: JOONDALUP, CITY OF and WANNEROO, CITY OF
Localities: TAMALA PARK and MINDARIE and BURNS BEACH

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
2.53		Mechanical Removal	Construction of a dual use pathway

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 5 April 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 (h), and is not likely to be at variance to the remaining principles.

Through the assessment it has been determined that the application area comprises of Bush Forever site 322. The Delegated Officer determined that the proposed clearing is likely to impact on the environmental values of this conservation area.

The applicant avoided, minimised and mitigated impacts to the Bush Forever site by implementing a revegetation plan which aims to revegetate and rehabilitate 1.7 hectares, effectively reducing the impact to the Bush Forever site from 2.518 hectares to 0.818 hectares. To address the remaining residual impacts, the applicant is required to provide a monetary contribution of $23,506.05 to the Department of Water and Environmental Regulation for the purchase of 1.636 hectares of native vegetation with similar values to the area to be cleared.

After consideration of the above, the Delegated Officer determined that the offset will ensure that the integrity of Bush Forever site 322 is upheld and is consistent with State Planning Policy 2.8 Bushland Policy for the Perth Metropolitan Region (SPP 2.8).

The Delegated Officer determined that the proposed clearing may increase the risk of weeds and dieback spreading into surrounding Bush Forever site and vegetated areas. A weed and dieback management condition has been placed on the permit to mitigate the impact of spreading weeds and dieback into adjacent vegetation.

The Delegated Officer considers that the proposed clearing is not likely to result in a significant environmental impact. The Delegated Officer decided to grant a clearing permit subject to weed and dieback management, avoidance and mitigation, revegetation and offset conditions.

2. Site Information

Clearing Description

The application is to clear 2.53 hectares of native vegetation within a 3.6 hectare clearing footprint at Lot 9509 on Plan 52070, Tamala Park, Lot 3050 on Plan 47950, Mindarie, Lot 3000 on Plan 44066, Burns Beach, and Marmion Avenue road reserve (PIN 1135104), Tamala Park, for the purpose of constructing a dual use path (Figure 1).

Vegetation Description

The application area has been mapped as Swan Coastal Plain vegetation (previously Heddle) Quindalup complex and Cottesloe Complex-central and/south, which are described as;

"Coastal dune complex consisting mainly of two alliances - the strand and fore-dune alliance and the mobile and stable dune alliance. Local variations include the low closed forest of *Melaleuca lanceolata* (Rottnest Teatree) - *Callitris preissii* (Rottnest Island Pine), the closed scrub of *Acacia rostellifera* (Summer-scented Wattle) and the low closed *Agonis flexuosa*" (Peppermint) (Heddle et al., 1980).

And

"Woodland and open forest and closed health - supports heaths on the limestone outcrops which resembles those in the north. The deeper sands support a mosaic of a woodland of tuart and an open-forest of tuart-jarrah-marri. The distinctive dominance of tuart distinguishes the southern section from the north section of the Cottesloe Complex-north, respectively (Heddle et al., 1980).

Vegetation Condition

Degraded: Basic vegetation structure severely impacted by disturbance, scope for regeneration but not to a state approaching good condition without intensive management (Keighery, 1994).

To

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

Soil Type

The application area has been mapped as the following six soil categories;

Karrakatta shallow soils Phase which is described as "Low hills and ridges. Bare limestone or shallow siliceous or calcareous sand over limestone. Dense low shrub dominated by Dryandra sessilis, Melaleuca huegellii and species of Grevillea".

Quindalup South oldest dune Phase which is described as "The oldest phase. Dunes or remnants with low relief. Calcareous sands have organic staining to about 30 cm, overlying pale brown sand with definite cementation below 1 m".

Quindalup South third dune Phase which is described as "The third phase. Irregular dunes with high relief and slopes up to 20%. Loose calcareous sand with little surface organic staining and incipient cementation at depth".

Quindalup South deep sand flat Phase which is described "Undulating landscapes with deep calcareous sands overlying limestone. Soils have dark grey-brown sand to about 50 cm and then pale brown sand. Remnants of hummocks are often present".

Quindalup South second dune Phase which is described as "The second phase. A complex pattern of dunes with moderate relief. Calcareous sands have organic staining to about 20 cm, passing into pale brown sand; some cementation below 1 m".

Karrakatta Sand Yellow Phase which is described as "Low hilly to gently undulating terrain. Yellow sand over limestone at 1-2 m. Banksia spp. woodland with scattered emergent E. gomphocephala and E. marginata and a dense shrub layer".

Comment

The condition and structure of the vegetation was determined by a site inspection undertaken by the Department of Water and Environmental Regulation (DWER) on 12 November 2018.

The local area considered in the assessment of this application is defined as a 10 kilometre radius measures from the centre of the areas under application.

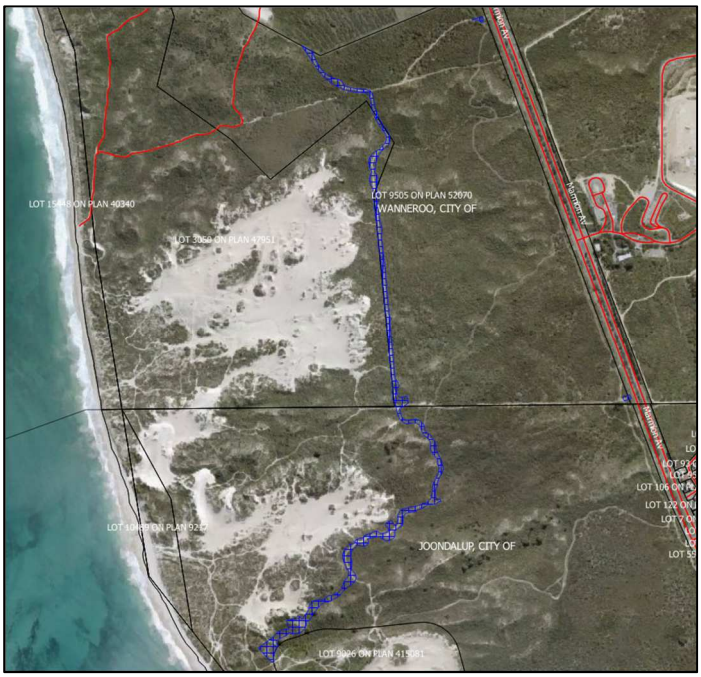

Figure 1: Application area hatched in blue.

3. Minimisation and mitigation measures

The applicant has aligned the route along existing cleared tracks and firebreaks where possible to reduce the clearing footprint. Several combinations of cleared tracks have been traversed to determine the alignment that achieved a balance between a walkable path and minimised clearing (City of Joondalup, 2018).

A phone call was received 14 January 2019 from the applicant requesting to increase the application area by 0.0262 hectares, for an additional access track. Therefore the total area changed from 2.5 hectares to 2.53 hectares. The applicant was advised that the impact to Bush Forever site 322 has therefore increased from 2.5 hectares to 2.518 hectares and that the corresponding offset requirement, in accordance to Appendix 4 of State Planning Policy 2.8 Bushland Policy for the Perth Metropolitan Region, is 5.036 hectares.

On 28 February 2019, the applicant provided an offset proposal that consisted of a monetary contribution for 3.336 hectares to contribute to an offset fund determined by DWER and the revegetation and rehabilitation of 1.7 hectares of area disturbed during clearing. The proposed revegetation works is considered a form of mitigation, given it will be occurring on-site (The Government of Western Australia, 2011). Therefore, the environmental impact to the Bush Forever site 322 is reduced to 0.818 hectares and the corresponding offset to satisfy the Bush Forever requirements is 1.636 hectares.

4. Assessment of application against clearing principles

The application is to clear 2.53 hectares of native vegetation within a 3.6 hectare clearing footprint at Lot 9509 on Plan 52070, Tamala Park, Lot 3050 on Plan 47950, Mindarie, Lot 3000 on Plan 44066, Burns Beach, and Marmion Avenue road reserve (PIN 1135104), Tamala Park, for the purpose of constructing a dual use path.

According to available databases, two threatened flora species and 10 priority flora species have been recorded within the local area. *Eucalyptus argutifolia* (Threatened), *Jacksonia sericea* (Priority 4), *Hibbertia spicata subsp. Leptotheca* (Priority 3), *Marianthus paralius* (Threatened), *Conostylis bracteata* (Priority 3), *Jacksonia gracillima* (Priority 3), *Grevillea sp. Ocean Reef (D. Pike Joon 4)* (Priority 1), and *Stylidium maritimum* (Priority 3), have been mapped within similar soil and vegetation types as the application area. The remaining threatened and priority flora have been mapped within different soil and vegetation types than that mapped within the application area.

A flora survey undertaken in September, October and November 2018 did not identify any threatened flora species listed under the *Environmental Protection Biodiversity Conservation Act 1999* (EPBC Act) or *Biodiversity Conservation Act 2016* (BC Act) within the *Wildlife Conservation (Rare Flora) Notice 2018* (AECOM, 2018). No priority flora species listed by the Department of Biodiversity, Conservation and Attractions were identified during the 2018 survey (AECOM, 2018).

A fauna survey undertaken in September and October 2018 identified three conservation significant fauna species within the application area (AECOM, 2018). These species are Carnaby's cockatoo (*Calyptorhynchus latirostris*), quenda (*Isoodon fusciventer*) and western brush wallaby (*Notamascropus Irma*).

Carnaby's cockatoo is listed as endangered under the EPBC Act. One Carnaby's cockatoo was seen flying over the application area (AECOM, 2018). This species nests in hollows in live or dead trees of karri, marri, wandoo, tuart, salmon gum, jarrah, flooded gum, York gum, powder bark, bullich and blackbutt (Commonwealth of Australia, 2012). Black cockatoos have a preference for foraging habitat that includes jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia sp.*, *Hakea sp.*, and *Grevillea sp.* (Commonwealth of Australia, 2012).

Quenda is listed as a Priority 4 species under the BC Act within the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*. This species prefers dense scrubby vegetation such as coastal heath for nesting (AECOM, 2018). Western brush wallaby is listed as a Priority 4 species under the BC Act. This species prefers open forest or woodland, seasonally wet flats with low grasses, open scrubby thickets and mallee, including Banksia dominated woodland (AECOM, 2018). Given there is substantial, similar fauna habitat surrounding the application area, the proposed clearing is not likely to contain significant habitat for the three fauna species discussed above.

According to the available databases one threatened ecological community (TEC) occurs within the local area. The Commonwealth listed TEC "Banksia Dominated Woodlands of the Swan Coastal Plain IBRA region" (Banksia Woodlands TEC) (listed as endangered) occurs approximately 4900 metres east to southeast of the application area. Noting the species composition of this TEC and the mapped vegetation type within the application area, the application area is not likely to consist of this TEC. The application area is not likely to comprise the whole or part of, or is necessary for the maintenance of a TEC.

According the flora survey, 57.08 hectares of the State-listed PEC "Northern Spearwood Shrublands and Woodlands" and 31.11 hectares of the State-listed PEC "Acacia Shrublands on Taller Dune" was identified within the survey area (293 hectare area) and the application area includes these two PECs. Given the relatively large areas of PECs identified within the larger survey area, the proposed clearing is not likely to significantly impact on these PECs.

The National Objectives and Targets for Biodiversity Conservation include a target to prevent the clearance of ecological communities with an extent below 30 per cent of that present pre-European settlement (Commonwealth of Australia, 2001). The application area falls within the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and is mapped as the Swan Coastal plain (previously Heddle) Quindalup complex, retaining 38.57 per cent and 60.44 per cent of their pre-European vegetation extents respectively (Government of Western Australia, 2018a; Government of Western Australia, 2018b). Given these extents are above 30 per cent, the application area is not considered a significant remnant in an area that has been extensively cleared.

The application area falls within Bush Forever (BF) site 322 "Burns Beach Bushland". BF site 322 contains 407.9 hectares if bushland (Government of Western Australia, 2000). A site inspection of the application area determined that the vegetation under application varied between degraded and very good (Keighery, 1994) condition (DWER, 2018). However the majority of the area was in good to very good (Keighery, 1994) condition (DWER, 2018). The proposed clearing will impact on the environmental values of this BF site through the direct removal of vegetation and through the potential introduction/spread of weeds and dieback.

To ensure the integrity of BF site 322 is upheld, and proposed clearing is consistent with State Planning Policy 2.8 Bushland Policy for the Perth Metropolitan Region (SPP 2.8), the Department of Planning, Lands and Heritage (DPLH) recommends that an offset package is prepared by the applicant, prior to clearing of native vegetation in accordance with the Western Australian Environmental Offset Policy (Government of Western Australia, 2011) and with guidance from SPP 2.8 Appendix 4 (DPLH, 2018).

There are no wetlands or watercourses mapped within the application area. Subsequently, it is considered that the proposed clearing is unlikely to impact on vegetation growing in association with a wetland or watercourse, deteriorate the quality of groundwater or surface water or cause, or exacerbate, the incidence or intensity of flooding. Soils within the application area are considered to have a high to extreme risk of wind erosion (Quindalup South third dune Phase >70% of map unit has a high to extreme wind erosion risk; Quindalup South second dune Phase 50-70% of map unit has a high to extreme wind erosion risk; Karrakatta Sand Yellow Phase >70% of map unit has a high to extreme wind erosion risk (Schoknecht et al., 2004), suggesting that clearing may contribute to further wind erosion. However, given there is substantial vegetation located east of the area under application, the risk of wind erosion will be minimal. Therefore, it is not considered likely for the proposed clearing to cause appreciable land degradation.

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

Planning instruments and other relevant matters

According to available databases, the Aboriginal Site of Significance called Mindarie Waugal was mapped within the application area. It is the applicant's responsibility to comply with the Aboriginal Heritage Act 1972 and ensure that no Sites of Aboriginal Significance are damaged through the clearing process.

The Department of Planning, Lands and Heritage (DPLH) has advised that an offset package should be prepared and approved by DWER prior to the clearing of any native vegetation, in accordance with WA Environmental Offset Policy (2011) and Appendix 4 of SPP 2.8. It is recommended that there is an environmental gain for any clearing undertaken, i.e. at least 2x the calculated loss in habitat hectares, which can include revegetation. It would be preferable that the offset measures are provided onsite within Bush Forever 322 (DPLH, 2018).

DPLH also recommended fencing where appropriate be installed to mitigate adverse impacts from pedestrian traffic.

The clearing permit application was advertised on the DWER website on 23 October 2018 with a 21 day submission period. Two public submissions were received in relation to this application. The clearing permit application was re-advertised on the DWER website on 1 February 2019 with a 7 day submission period. An additional of one public submission were received in relation to this application.

Submission one were concerned about the information discrepancies for the following reason (Submission, 2019a):

- Concerned that the information provided on Clearing Permit Systems (CPS) and on the DWER website varied greatly in depicting the area to be cleared. The application form excerpt states the proposed clearing is 2.466 within a clearing

footprint of 3.551 hectares (3.6 hectares), while the clearing area stated is 2.5262 hectares and on CPS it shows a rectangular parcel that is 0.0262 hectares.

To address the above, the rectangular parcel of 0.0262 hectares was added during the assessment stage of the clearing permit application process. Therefore a second proposal in the proposal tab is required. Thus, by combining 0.0262 hectares for the additional area and 2.5 hectares of the original area, you get a total proposed clearing area of 2.53 hectares. The clearing footprint area has not changed.

Submission two express their support of the clearing permit application (Submission, 2018b).

Submission three was a general submission regarding unauthorised access to the site and the hopes of access points to the site and dual path area fenced off. Impacts to adjacent native vegetation will be minimised through weed and dieback management conditions (Submission, 2018c).

5. Suitability of Proposed Offset

In line with State Planning Policy 2.8 Bushland Policy for the Perth Metropolitan Region (SPP 2.8) section 5.1, a 2:1 ratio offset is required to counterbalance the removal of 2.52 hectares of native vegetation within Bush Forever site 322. Taking this ratio into account and the mitigation measures proposed via revegetation and rehabilitation, the size of the offset required is 1.636 hectares.

6. References

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Submission (2018b) Public Submission received on 9 November 2018. Department of Water and Environmental Regulation, Western Australia, DWER A1740347

Submission (2018c) Public Submission received on 13 November 2018. Department of Water and Environmental Regulation, Western Australia, DWER A1740348.

Submission (2019a) Public Submission received on 8 February 2019. Department of Water and Environmental Regulation, Western Australia, DWER A1763662.

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7. GIS Datasets

GIS Datasets

- Aboriginal Sites of Significance
- Bush Forever
- Department of Biodiversity, Conservation and Attractions tensure
- SAC bio datasets access October 2018.