GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 8116/2
Permit Holder:	Shire of Capel
Duration of Permit:	13 October 2019 to 13 October 2029

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 road widening.

2. Land on which clearing is to be done
Boyanup Road West road reserve (PIN 1328954) Boyanup
Boyanup Road West road reserve (PIN 1328917) Elgin
Boyanup Road West road reserve (PIN 1323149, 1323148, 1323147, 1323146, 1254316, 1323143 and 1253621) Statham.

3. Area of Clearing
The Permit Holder must not clear more than 2.21 hectares of native vegetation within the area shaded yellow on attached Plan 8116/2a, Plan 8116/2b, Plan 8116/2c and Plan 8116/2d.

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. Period in which clearing is authorised
The Permit Holder shall not clear any native vegetation after 13 October 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 *weeds* and *dieback*:

(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 or 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. Fauna management – Carnaby's cockatoo, forest red-tailed black cockatoo and Baudin's cockatoo

(a) Prior to undertaking any clearing authorised under this Permit, the Permit Holder shall engage a *fauna specialist* to conduct a *fauna survey* of the Permit Area to identify *black cockatoo habitat tree/s* being utilised by fauna species listed below:

(i) *Calyptorhynchus lateriosis* (Carnaby's cockatoo);

(ii) *Calyptorhynchus banksii naso* (Forest red-tailed black cockatoo); and

(iii) *Calyptorhynchus baudinii* (Baudin's cockatoo).

(b) Each black cockatoo breeding tree identified under condition 9(a) shall be inspected by a fauna specialist for evidence of current or past breeding use by Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*) or forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*).

(c) Prior to undertaking any clearing authorised under this Permit, the Permit Holder shall provide the results of the *fauna survey* in a report to the *CEO*.

(d) The *fauna survey* report must include the following;

(i) the location of the *black cockatoo habitat tree/s* 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; and

(ii) the location of any fauna species, listed in condition 8(a) if identified, 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; and

(iii) the name and amount of each fauna species identified; and

(iv) the methodology, used to survey the Permit Area; and

(v) a description of the *black cockatoo habitat tree/s* identified.

(e) Where *black cockatoo habitat tree/s* are identified within the Permit Area and are showing evidence of current or past breeding use by Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*) or forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) under condition 9(b) of this Permit, the Permit Holder shall ensure that no clearing occurs within 10 metres of *black cockatoo habitat tree/s* showing evidence of past or current use of the identified fauna.

10. Fauna management – red-tailed phascogale

(a) Prior to undertaking any clearing authorised under this Permit:

(i) the area shaded yellow on attached Plan 8116/2a, Plan 8116/2b, Plan 8116/2c and Plan 8116/2d shall be inspected by a *fauna specialist* who shall identify *red-tailed phascogale habitat trees*; and

(ii) each *red-tailed phascogale habitat tree* identified shall be inspected by a *fauna specialist* for evidence of use by red-tailed phascogale (*Phascogale calura*).

(b) Where a *red-tailed phascogale habitat tree(s)* occupied by red-tailed phascogale is identified and cannot be avoided in accordance with condition 10(a) of this Permit, that tree(s) shall only be cleared:

(i) immediately after a repeat inspection undertaken by a *fauna specialist* if that inspection confirms it is not occupied by red-tailed phascogale.

(c) Where a *red-tailed phascogale habitat tree(s)* with evidence of use (but not occupied) by red-tailed phascogale is identified and cannot be avoided in accordance with condition 10(a) of this Permit, that tree(s) shall only be cleared:
  (ii) immediately after the inspection; or
  (iii) immediately after a repeat inspection undertaken by a *fauna specialist* if that inspection confirms it is not occupied by red-tailed phascogale.

(d) For each *red-tailed phascogale habitat tree*, that cannot be avoided in accordance with conditions 10(b) and 10(c) of this Permit, the Permit Holder shall install a nest box.

(e) The nest boxes (s) required by condition 10(d) of this Permit must:
  a) be installed within the area hatched red on attached Plan 8151/2e, Plan 8151/2f , Plan 8151/2g and Plan 8151/2h, being the Boyanup Road West Road reserve (PINs 1328954, 1328917, PIN 1323149, 1323148, 1323147, 1323146, 1254316, 1323143 and 125362), Boyanup, Elgin and Stratham; and
  b) be designed and placed in accordance with the guidelines provided in Schedule 1 to this Permit.

11. Mitigation – Revegetation and rehabilitation within Boyanup West Road reserve

The Permit Holder shall;

(a) within six months following clearing authorised under this Permit within the area hatched yellow on attached Plan 8116/2a, Plan 8116/2b, Plan 8116/2c and Plan 8116/2d provide to the *CEO* for the *CEO*'s approval, a *Revegetation Plan* for the *revegetation* and *rehabilitation* of 1.6 hectares within the area hatched red on attached Plan 8116/2e, Plan 8116/2f, Plan 8116/2g and Plan 8116/2h within Boyanup Road West Road reserve (PINs 1328954, 1328917, PIN 1323149, 1323148, 1323147, 1323146, 1254316, 1323143 and 1253621), Boyanup, Elgin and Stratham.

(b) The Permit Holder shall adhere to and implement the *Revegetation Plan* approved by the *CEO*.

(c) The *Revegetation Plan* required under condition 11(a) must be designed by an *environmental specialist* to resemble the composition, structure and density to that of pre-clearing vegetation types in that area (the *Guildford complex*) and must include the following steps:
  (i) *site preparation*;
  (ii) *weed* control;
  (iii) *regeneration, direct seeding* or *planting*, at an *optimal time*;
  (iv) a *vegetation establishment period* of at least five years;
  (v) revegetation success completion criteria for weed cover, species density, species diversity and species composition;
  (vi) remedial actions including but not limited to infill planting and/or seeding and weed control, to be undertaken if success completion criteria are not met;
  (vii) ongoing maintenance and monitoring of the area to be revegetated and rehabilitated;
  (viii) timeframes for completion of the activities; and
  (ix) management commitments that will be achieved.

12. Offset – Lot 150 on Deposited Plan 29857

The Permit Holder shall;

(a) within six months following clearing authorised under this Permit within the area hatched yellow on attached Plan 8116/2a, Plan 8116/2b, Plan 8116/2c and Plan 8116/2d provide to the *CEO* and the *CEO DBCA* for the *CEO*'s and the *CEO DBCA's* approval, a *Revegetation Plan* for the *revegetation* and *rehabilitation* of 3.62 hectares within the area hatched red on attached Plan 8116/2i within Lot 150 on Deposited Plan 29857, Parkfield.

(b) The Permit Holder shall adhere to and implement the *Revegetation Plan* approved by the *CEO* and the *CEO DBCA*.

(c) The *Revegetation Plan* required under condition 12(a) must be designed by an *environmental specialist* and must include the following steps:
  (i) *site preparation*;

(ii) *weed* control;
(iii) *regeneration, direct seeding* or *planting*, at an *optimal time*;
(iv) a *vegetation establishment period* of at least five years;
(v) revegetation success completion criteria for weed cover, species density, species diversity and species composition;
(vi) remedial actions including but not limited to infill planting and/or seeding and weed control, to be undertaken if success completion criteria are not met;
(vii) ongoing maintenance and monitoring of the area to be revegetated and rehabilitated;
(viii) timeframes for completion of the activities; and
(ix) management commitments that will be achieved.

PART III – RECORD KEEPING AND REPORTING

13. Records must be kept

(a) The Permit Holder must maintain the following records for activities in relation to the clearing of native vegetation pursuant to condition 3 of 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 or decimal degrees;
(ii) the date that the area was cleared;
(iii) the size of the area cleared (in hectares); and
(iv) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 7 of this Permit.
(v) actions taken to minimise the risk of the introduction and spread of weeds and dieback in accordance with condition 8 of this Permit; and
(vi) actions taken in accordance with conditions 9 and 10 of this Permit.

(b) In relation to the revegetation and rehabilitation of areas pursuant to conditions 11 and 12 of this Permit:
(i) the location of any areas revegetated and rehabilitated, 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;
(ii) a description of the revegetation and rehabilitation activities undertaken;
(iii) the size of the area revegetated and rehabilitated (in hectares);
(iv) the species composition, structure and density of revegetation and rehabilitation,
(v) a copy of the environmental specialist's report;
(vi) the date the *Revegetation Plan* is submitted to the *CEO* and the *CEO DBCA* for approval; and
(vii) the date the *Revegetation Plan* is approved by the *CEO* and the *CEO DBCA*.

14. 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 13 of this Permit; and
(ii) concerning activities done by the Permit Holder under this Permit between 1 January and 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 year, 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 13 July 2024 the Permit Holder must provide to the *CEO* a written report of records required under condition 9 of this Permit where these records have not already been provided under condition 14(a) of this Permit.

DEFINITIONS

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

black cockatoo breeding tree/s: means trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater (or 30 centimetres or greater for *Eucalyptus salmonophloia* or

Eucalyptus wandoo) that contain hollows suitable for breeding by Carnaby's cockatoo (*Calyptorhynchus latirostris*), forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) or Baudin's cockatoo (*Calyptorhynchus baudinii*);

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

CEO DBCA means the Chief Executive Officer of the Department of Biodiversity, Conservation and Attractions who is responsible for the administration of the *Biodiversity Conservation Act 2016;*

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

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

fauna specialist: means a person who holds a tertiary qualification specializing 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, or who is approved by the *CEO* as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the *Biodiversity Conservation Act 2016*;

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

Guildford complex means 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 lanepoolei* (Salmon White Gum)). Minor components include *Eucalyptus rudis* (Flooded Gum), *Melaleuca rhaphiophylla* (Swamp Paperbark); as defined in Heddle, 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.

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;

optimal time means the period from April to June for undertaking *planting* and *seeding*;

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

red-tailed phascogale habitat tree(s) means a tree of the Eucalyptus genus that contains a hollow(s) suitable to be used by red-tailed phascogale (*Phascogale calura*).

regeneration means *revegetation* that can be established from in situ seed banks contained either within the topsoil or seed-bearing *mulch*;

Rehabilitate, rehabilitated and rehabilitation 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;

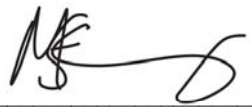
revegetation plan means a plan developed by the Permit Holder for the *revegetation* and *rehabilitation* of a site in accordance with condition 11 and 12 of this Permit;

site preparation means management of existing site topsoil and preparation of the finished soil surface, for example by ripping or tilling the soil surface and respreading site topsoil and chipped native vegetation;

vegetation establishment period means a period of at least two summers after the *revegetation* during which time replacement and infill *revegetation* works may be required for areas in which *revegetation* has been unsuccessful, and involves regular inspections of *revegetation* sites to monitor the success of *revegetation*;

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.



Mathew Gannaway
MANAGER
NATIVE VEGETATION REGULATION

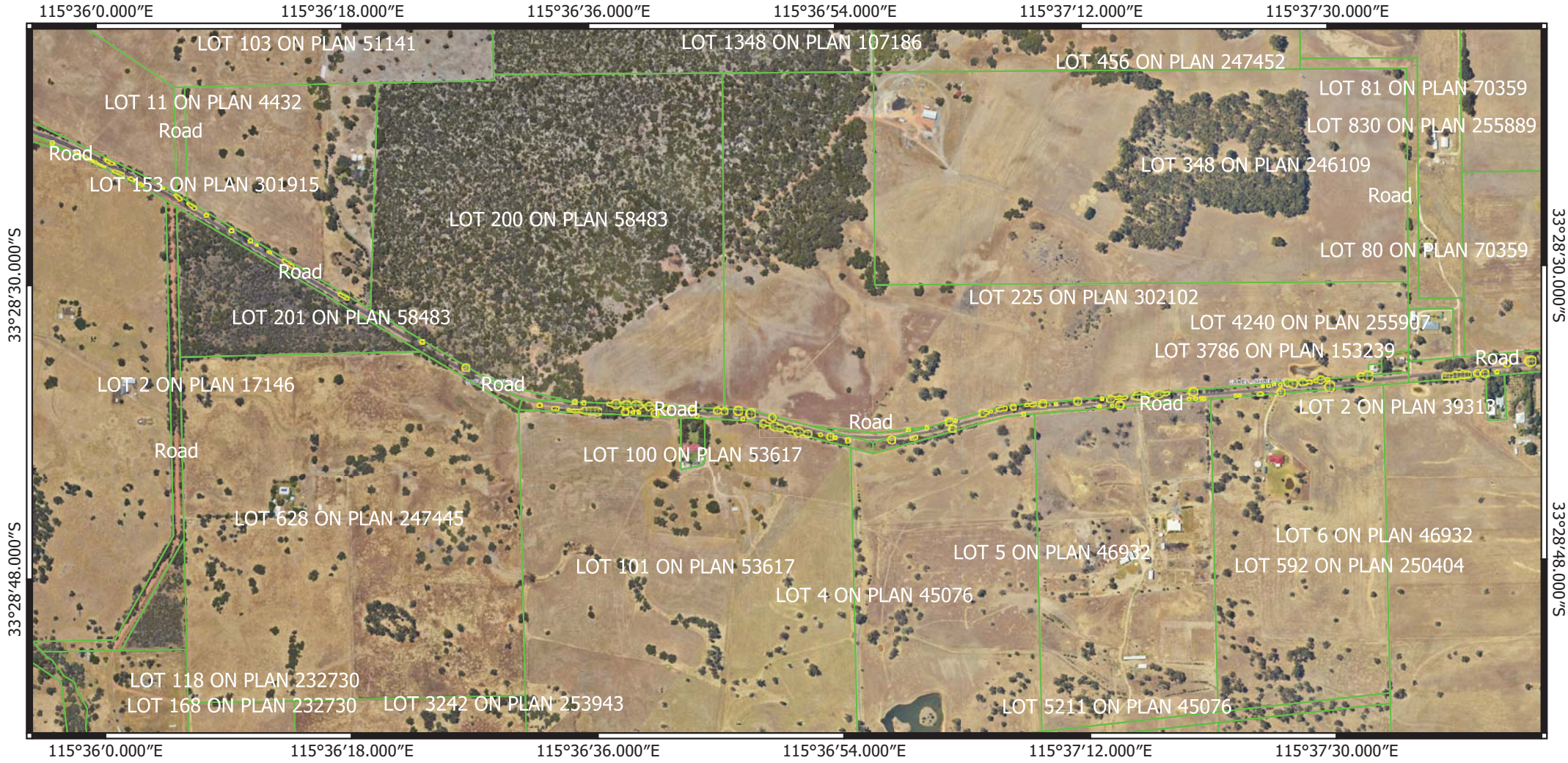
Officer delegated under section 20
of the *Environmental Protection Act 1986*

26 May 2020

Schedule 1

Nest Boxes for Red-tailed Phascogales

Plan 8116/2a



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CPS areas approved to clear

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Cadastre - LGATE 218

Local Government Authority (LGA) Boundaries (LGATE-233)

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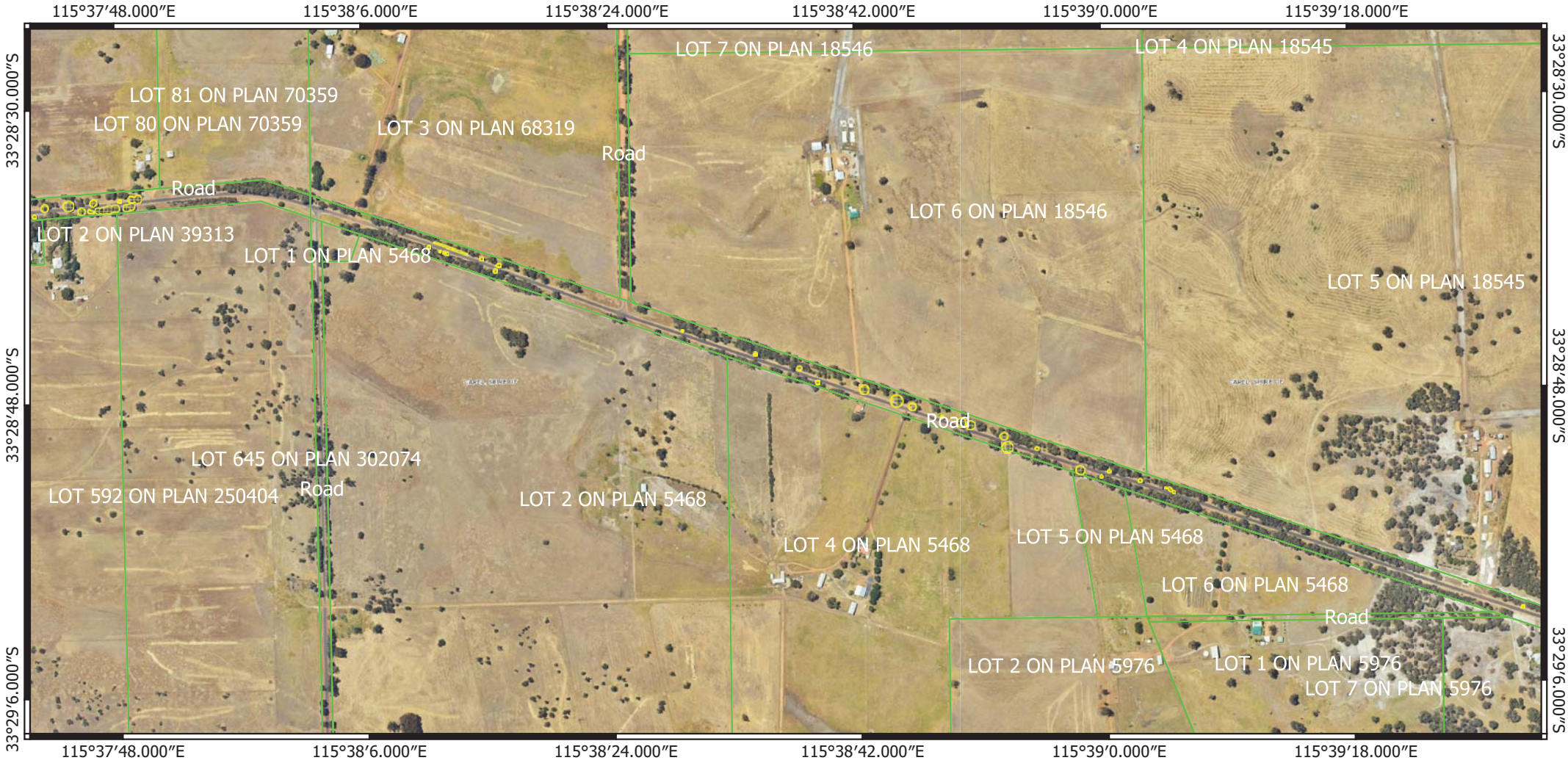
Officer delegated under section 20 of the Environmental Protection Act 1986

GOVERNMENT OF WESTERN AUSTRALIA

Plan 8116/2b



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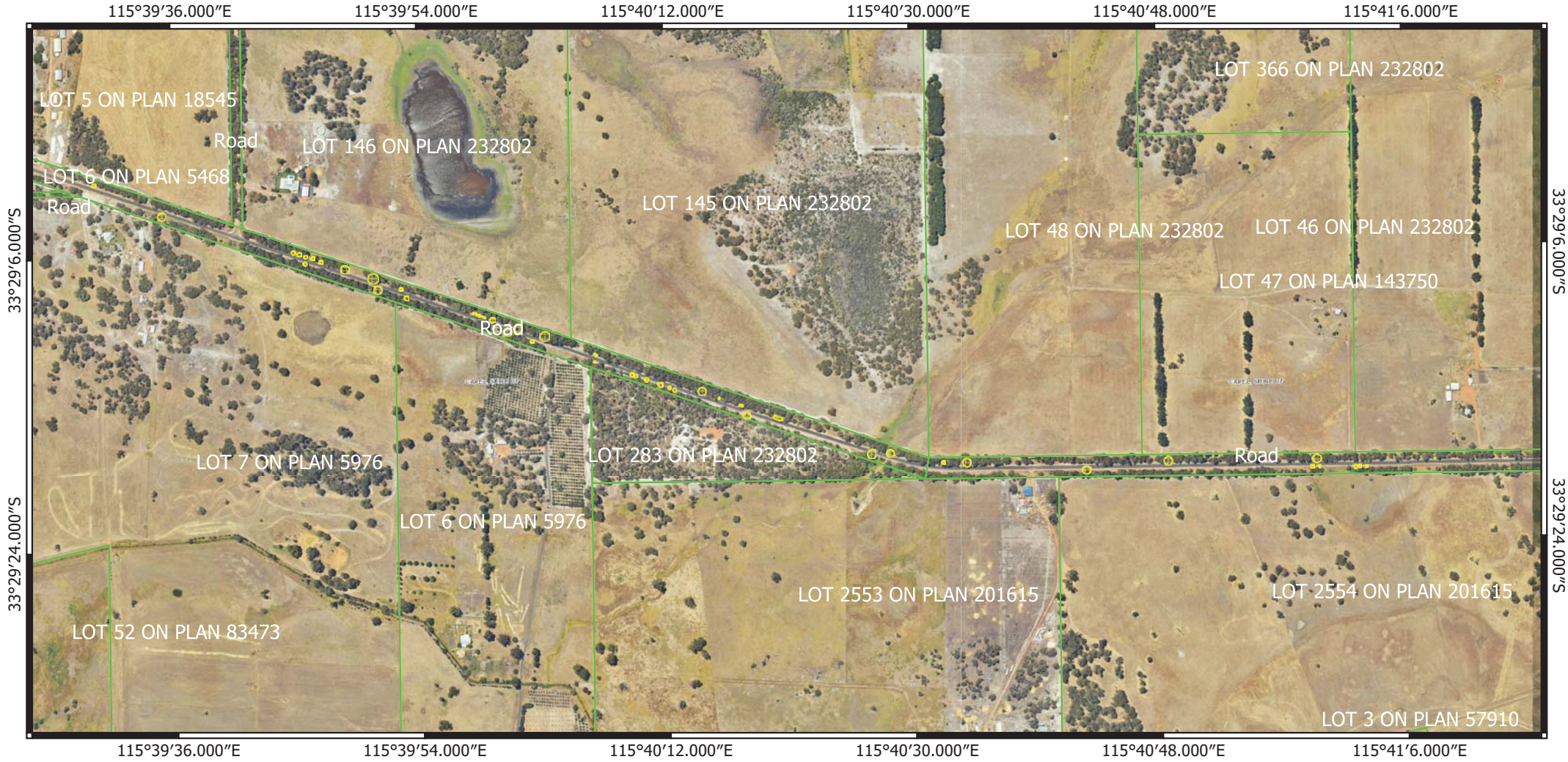

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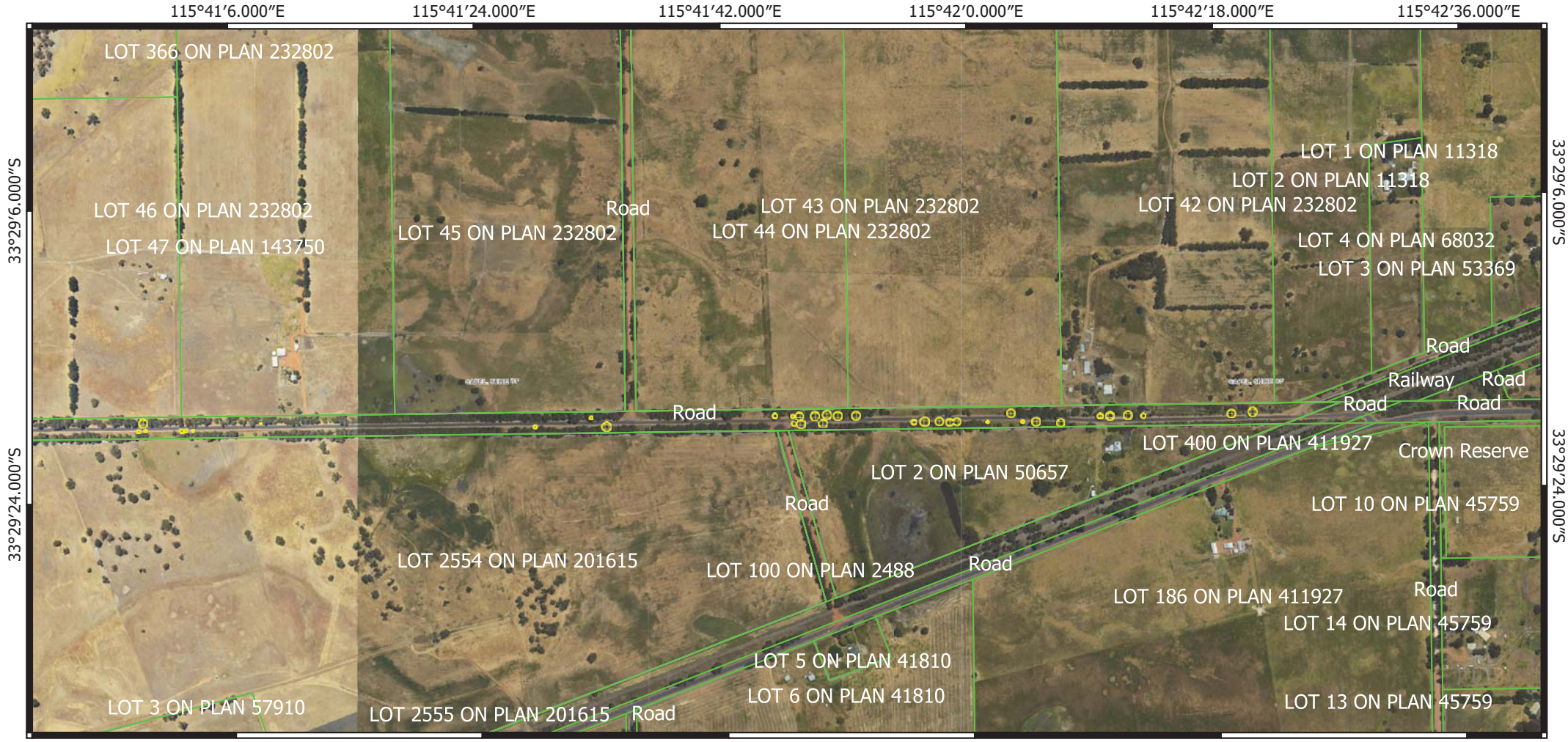

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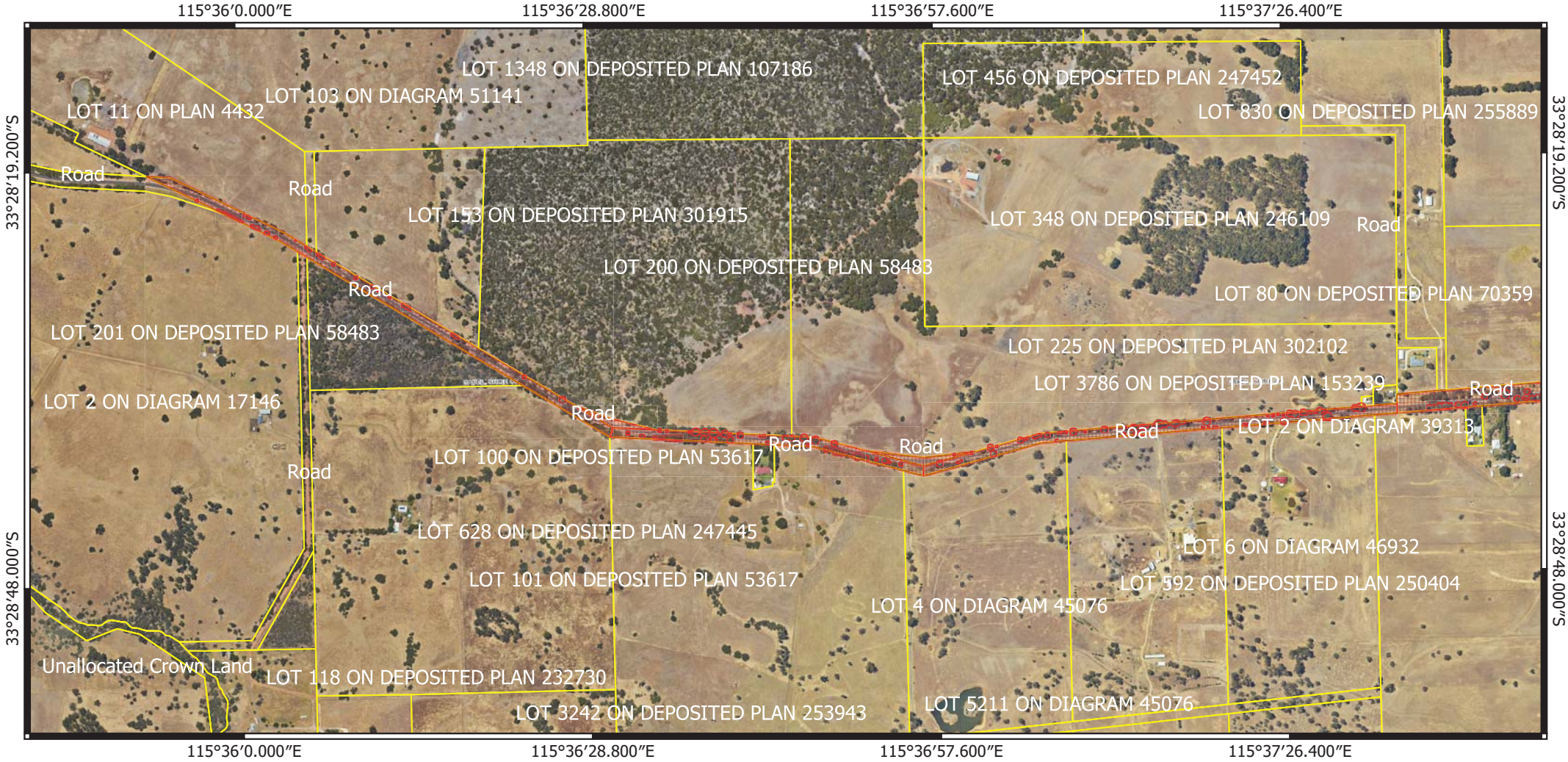

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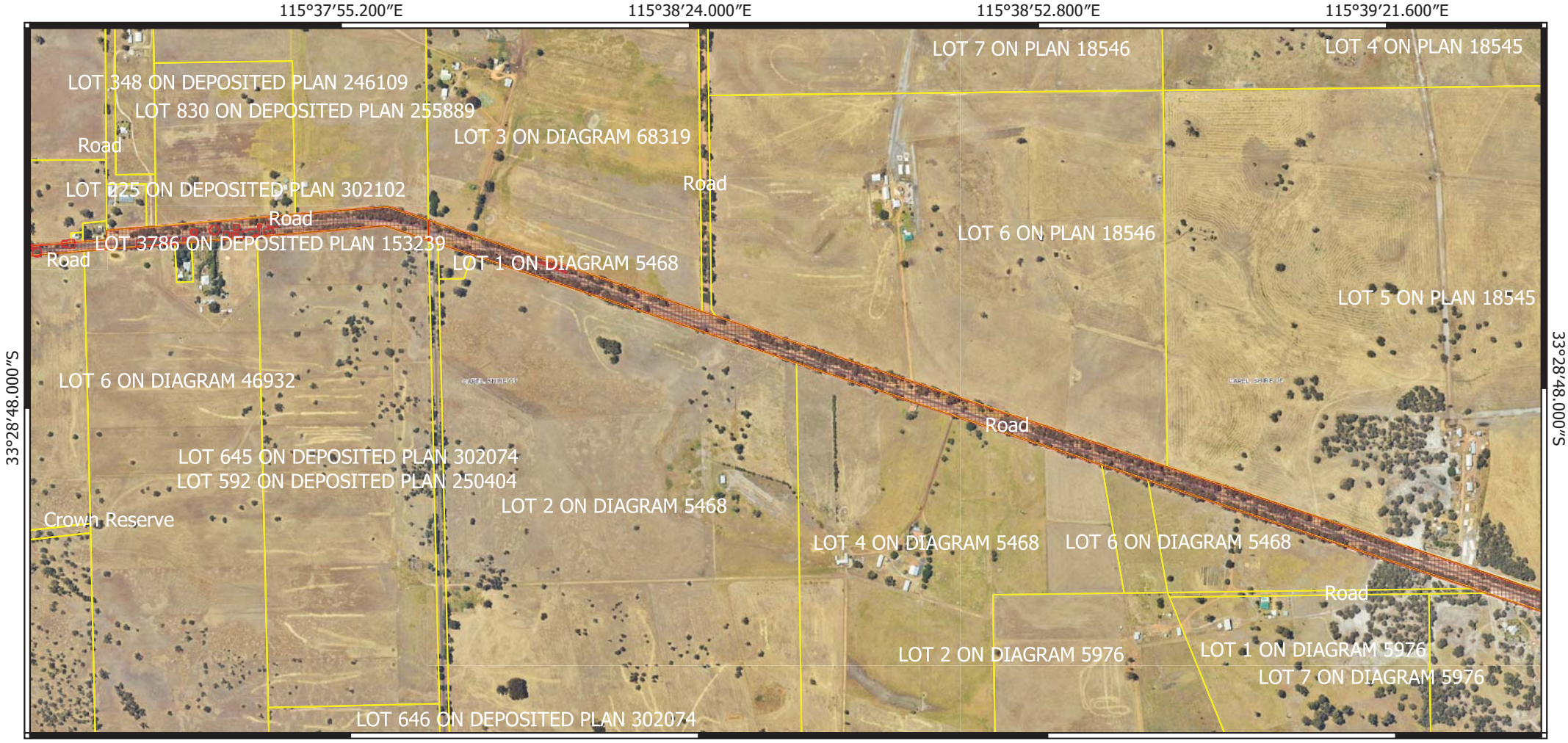
GOVERNMENT OF WESTERN AUSTRALIA

Plan 8116/2f



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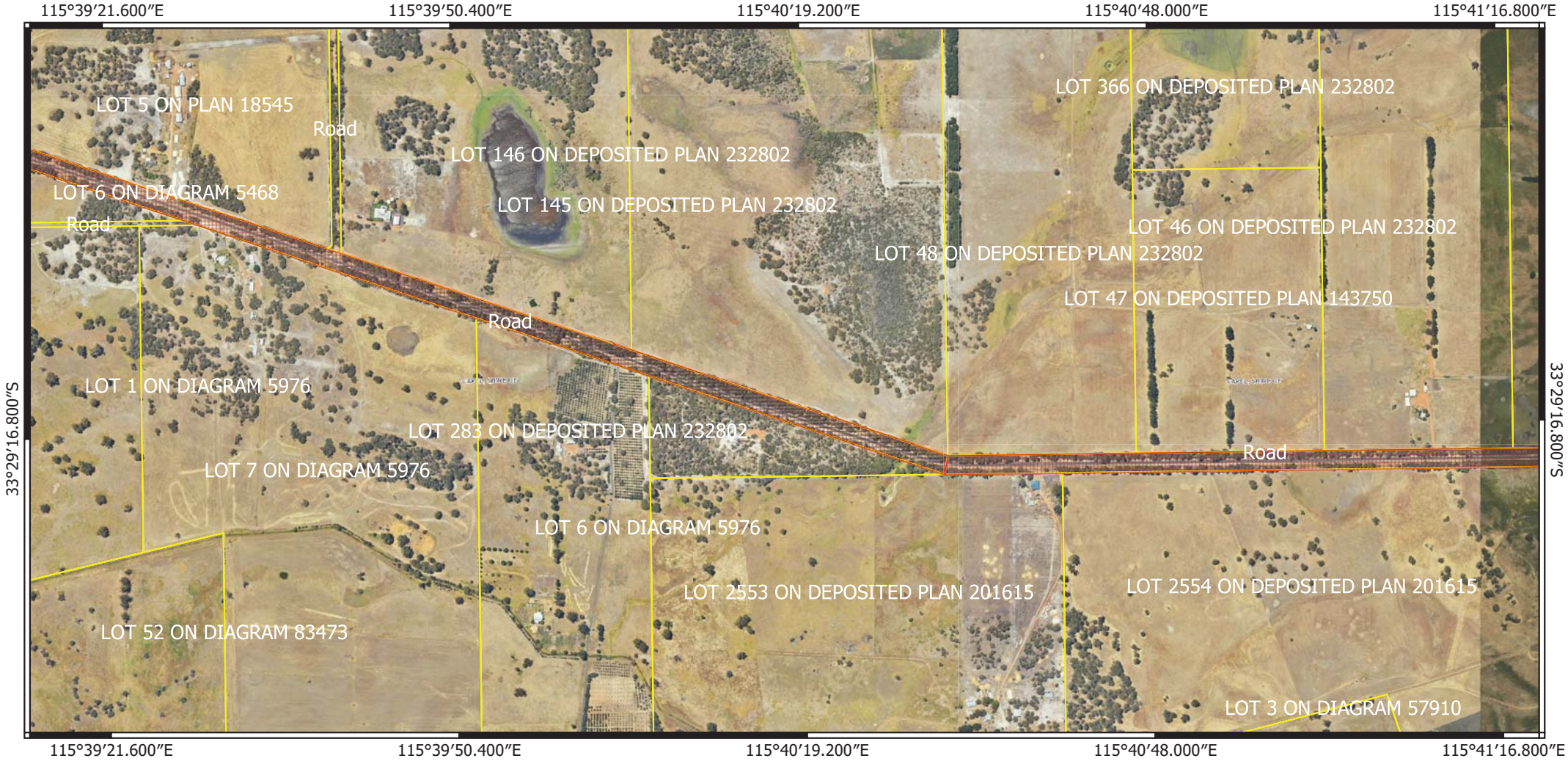
GOVERNMENT OF WESTERN AUSTRALIA

Plan 8116/2g



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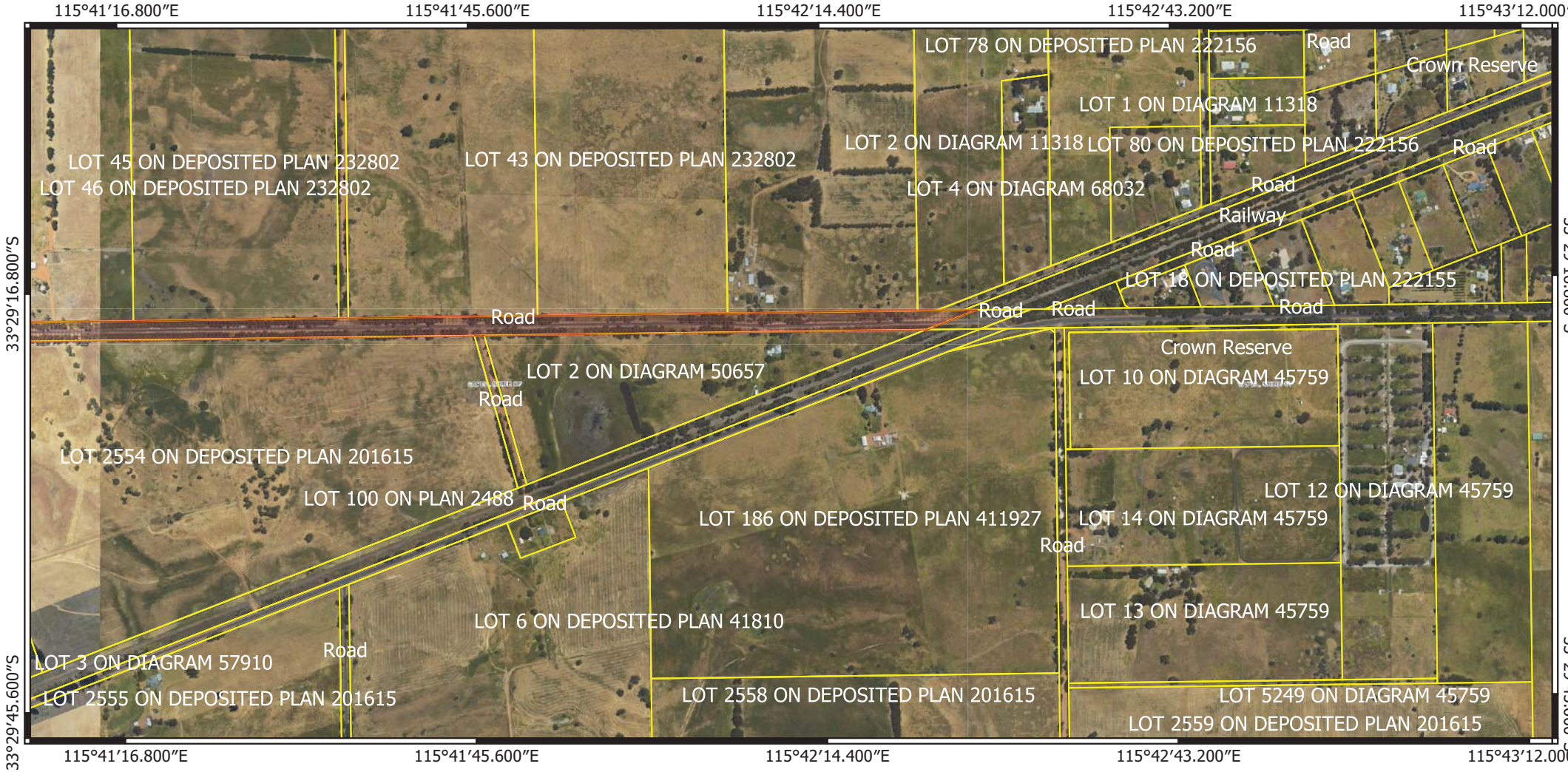

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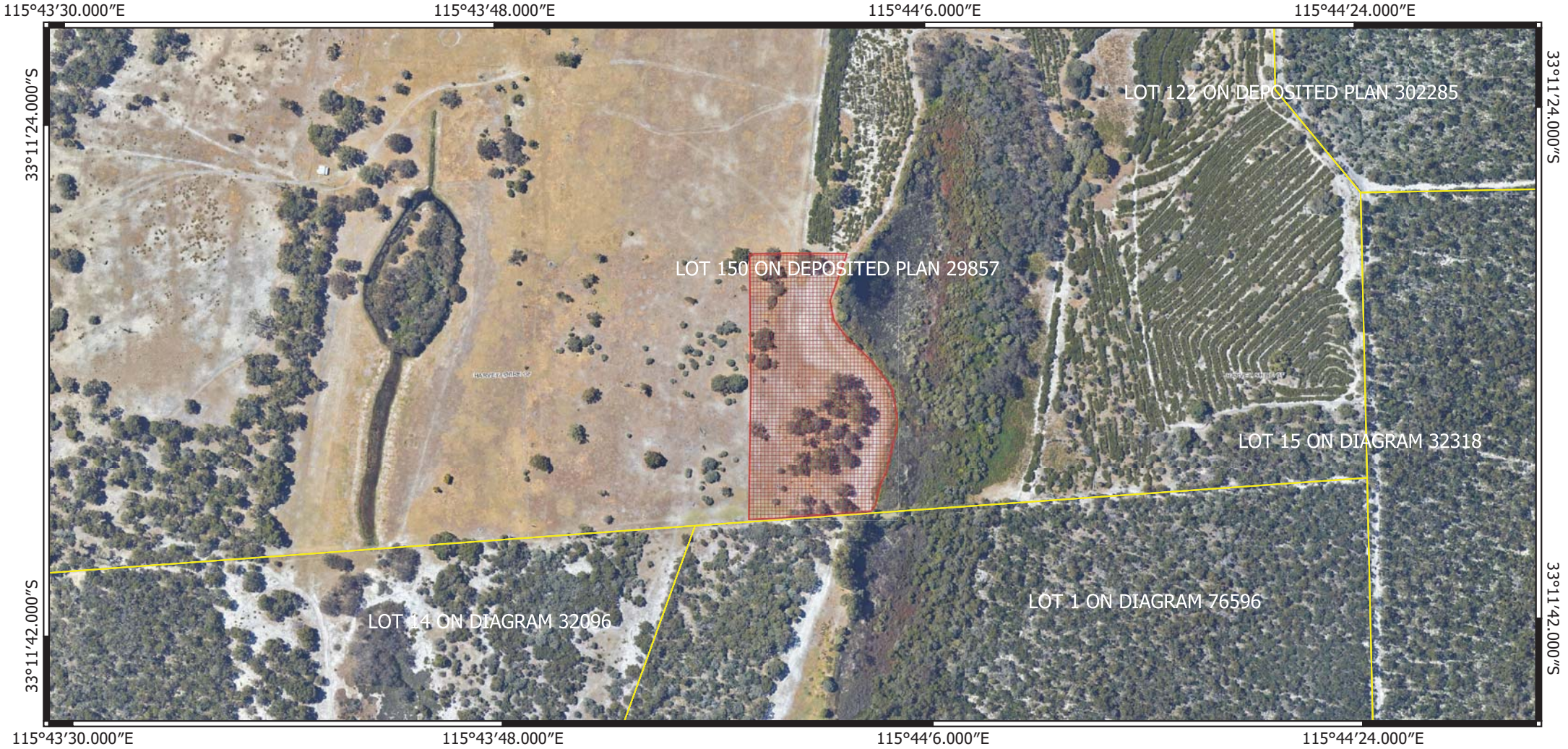

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Local Government Authority (LGA) Boundaries (LGATE-233)

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Officer delegated under section 20 of the Environmental Protection Act 1986

GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

3. Application details

3.1. Permit application details

Permit application No.: 8116/2
Permit type: Purpose Permit

3.2. Applicant details

Applicant's name: Shire of Capel

3.3. Property details

Property: Boyanup Road West road reserve (PINs:, 1328954, Boyanup; PIN: 1328917, Elgin; and PINs: 1323149, 1323148, 1323147, 1323146, 1254316, 1323143 and 1253621, Stratham)
Local Government Authority: Shire of Capel
Localities: Boyanup, Elgin and Stratham

3.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.21 hectares revised		Mechanical Removal	Road widening

3.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 26 May 2020
Reasons for Decision:

On 13 September 2019, Clearing Permit CPS 8116/1 was granted to clear up to 2.21 hectares of native vegetation for the purpose of road widening within Boyanup Road West Road reserve (PINs:, 1328954, Boyanup; PIN: 1328917, Elgin; and PINs: 1323149, 1323148, 1323147, 1323146, 1254316, 1323143 and 1253621, Stratham). One appeal was lodged against the grant of this permit.

This clearing permit amendment gives effect to the determination of the Minister for Environment (Minister) to allow the appeal in part (Appeal number: 049 of 2019). The Minister has requested the Department of Water and Environmental Regulation (DWER) to:

- Require the Shire to inspect any potential habitat trees for phascogales, delay clearing of any trees found to be occupied by these species until no longer in use, and install artificial nesting boxes to replace any confirmed habitat trees required to be cleared; and
- Apply a condition requiring the Shire to provide an offset and requiring the preparation and implementation of an appropriate revegetation plan to guide the revegetation activities undertaken that allows clearing to commence while the plan is under preparation.

It is noted that the revegetation is within two separate conditions in the clearing permit amendment, one condition requires the revegetation and rehabilitation of 1.6 hectares within the Boyanup West Road reserve ((PINs:, 1328954, Boyanup; PIN: 1328917, Elgin; and PINs: 1323149, 1323148, 1323147, 1323146, 1254316, 1323143 and 1253621, Stratham) as a mitigation measure to reduce impacts to ecological linkage and to the Guildford vegetation complex within the Boyanup West Road reserve.

Further revegetation and rehabilitation of 3.62 hectares within Lot 150 on Deposited Plan 29857, Parkfield, has been added as an offset condition for the residual impacts to black cockatoo foraging habitat.

In addition to the amendments made to give effect to the Ministers Determination, the following amendments were made:

- The duration of the permit was extended until 13 October 2029 to allow for rehabilitation monitoring and management of the revegetation requirements; and
- A condition was added to restrict authorized clearing until 13 October 2024.

Given the above, the Delegated Officer decided to grant a clearing permit to reflect the Minister's determination.

2. Site Information

Clearing Description: The application is to clear up to 2.21 hectares of native vegetation within various locations along Boyanup Road West (approximately 10.3 kilometres long), for the purpose of road upgrades. During the assessment the applicant reduced the proposed clearing from 18.21 hectares to 2.21 hectares.

Vegetation Description: The application area is mapped as two Heddle vegetation complexes:

- Guildford Complex (90 per cent of application area): 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) - *Melaleuca rhaphiophylla* (Swamp Paperbark); and
- Bassendean Complex-Central and South (10 per cent of application area): Vegetation ranges from woodland of *Eucalyptus marginata* (Jarrah) - *Allocasuarina fraseriana* (Sheoak) - Banksia species to low woodland of Melaleuca species, and sedgelands on the moister sites. This area includes the transition of *Eucalyptus marginata* (Jarrah) to *Eucalyptus todtiana* (Pricklybark) in the vicinity of Perth. (Heddle et al., 1980).

A level 2 vegetation and flora survey was undertaken by Natural Area Consulting Management Services (Natural Area) in October 2018. The road reserve surveyed is approximately 40.2 hectares in area, including the current road area. A total of five vegetation types were identified during the survey (Natural Area, 2018).

Table 1: Vegetation types identified during the survey

Vegetation Type	Vegetation Description	Proposed Clearing Total
Marri Woodland	*Corymbia calophylla* over mixed herbs and sedges. Associated *Agonis flexuosa* in sandier areas and *Melaleuca* spp in wetter areas. Most of the area is Completely Degraded, with a dense, weedy grass understory.	1.52 hectares
Peppermint Woodland	*Agonis flexuosa* over mixed shrubs and sedges. Most of the area is Completely Degraded, with a dense, weedy grass understory.	0.113 hectares
Melaleuca Woodland	*Melaleuca rhaphiophylla* or *M. preissiana* with associated *M. lateritia* over a Kikuyu grass or mixed weed understory.	0.007 hectares
Flooded Gum Woodland	*Eucalyptus rudis* over a dense, weedy understory.	0.46 hectares
Foreign Eucalypt Woodland	Mixed, planted, non-native Eucalyptus species over a dense, grassy weed understory.	0.11 hectares

Vegetation Condition: Good; Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).
To
Completely Degraded; No longer intact, completely/almost completely without native species (Keighery, 1994).

The condition and structure of the vegetation under application was determined by a site inspection undertaken by the Department of Water and Environmental Regulation (DWER) on 10 August 2018 and the flora and vegetation survey (Natural Area, 2018). It should be noted that the flora survey covered all the vegetation present within the road reserves (40.2 hectares), with the vegetation condition ranging as per the table below;

Vegetation Condition	Excellent	Very Good	Good	Degraded	Completely Degraded	Total
Area (ha)	0.1ha	0.9ha	3ha	12.4ha	23.8ha	40.2ha

Whilst the flora survey identified better quality vegetation in 'excellent' to 'very good' condition (Keighery, 1994), is should be noted that these areas do not occur within the proposed clearing footprint. Consequently, the vegetation under application has been described as being in a 'good' to 'completely degraded' (Keighery, 1994) condition.

Soil and Landform Type: The application area is mapped within the following land subsystems;

- Pinjarra P8 Phase: Broad poorly drained flats and poorly defined stream channels with moderately deep to deep sands over mottled clays; acidic or less commonly alkaline gley and yellow duplex soils to uniform bleached or pale brown sands over clay.
- Spearwood S1b Phase: Dune ridges with deep siliceous yellow brown sands or pale sands with yellow-brown subsoil and slopes up to 15 per cent.
- Pinjarra P1a Phase: Flat to very gently undulating plain with deep acidic mottled yellow duplex soils. Shallow pale sand to sandy loam over clay; imperfect to poorly drained and generally not susceptible to salinity.

- Bassendean B1 Phase: Extremely low to very low relief dunes, undulating sandplain and discrete sand rises with deep bleached grey sands sometimes with a pale yellow B horizon or a weak iron-organic hardpan at depths generally greater than two metres; banksia dominant.
- Bassendean B4 Phase: Broad poorly drained sandplain with deep grey siliceous sands or bleached sands, underlain at depths generally greater than 1.5 metres by clay or less frequently a strong iron-organic hardpan.
- Bassendean wet, swamp Phase: Bassendean wet, swamp Phase
- Pinjarra P1b Phase: Flat to very gently undulating plain with deep acidic mottled yellow duplex soils. Moderately deep pale sand to loamy sand over clay: imperfectly drained and moderately susceptible to salinity in limited areas.
- Pinjarra P1d Phase: Flat to very gently undulating plain with deep acidic mottled yellow duplex soils. Shallow pale sand to sandy loam over clay; imperfect to poorly drained and moderately susceptible to salinity. (Schoknecht et al., 2004).

As indicated above, the application areas comprises of eight land subsystems, however, 80 percent of the application area falls within the Pinjarra P8 Phase and Pinjarra P1b Phase.

Comment:

The local area referred to in this assessment is defined as the area within a 10 kilometre radius from the perimeter of the application area. Aerial imagery indicates that the local area retains approximately 22 per cent native vegetation cover.

Figure 1: Western section of the application area

Figure 2: Central western section of the application area

Figure 3: Central eastern section of the application area.

Figure 4: Eastern section of the application area.

Photographs of vegetation within the application area

Photo 1: Taken of the vegetation in the western section of the application area on the northern side of the road reserve adjacent to the mapped occurrence of a TEC which is mapped on the southern side of the road reserve.

Photo 2: Taken of the vegetation in the central western section of the application area.

Photo 3: Taken of the vegetation in the central eastern section of the application area.

Photo 4: Taken of the vegetation in the eastern section of the application area.

3. Minimisation and mitigation measures

On 2 October 2018, DWER wrote to the applicant to advise that the proposed clearing of 18.21 hectares had the potential to result in environmental impacts to the following:

- Conservation significant flora;
- Threatened ecological communities (TEC); and
- Conservation significant fauna.

It was also noted that the application occurs within an extensively cleared area and contains Heddle vegetation complex 'Guilford Complex' which is poorly represented.

The applicant subsequently amended the clearing footprint and reduced the clearing size from 18.21 hectares to 2.21 hectares, minimising some of the environmental impacts listed above. The applicant commissioned a Level 2 flora and vegetation survey of the application area. The survey indicated that no flora of conservation significance will be impacted upon within the revised clearing footprint. It is also determined that the vegetation within the revised application area is unlikely to be a representation of a TEC. The revised application area has also reduced the amount of suitable foraging habitat for black cockatoos and preferred habitat for the western ringtail possums.

4. Assessment of application against clearing principles, planning instruments and other relevant matters

This amendment is the result of an appeal determination made by the Minister for Environment regarding the conditions of Clearing Permit CPS 8116/1 (DWER, 2019).

In reconsidering the residual environmental impacts of the clearing authorised under CPS 8116/1 and noting the Ministers recommendation for an offset and revegetation within the road reserve to counterbalance the significant residual impacts, DWER has undertaken an additional assessment to determine a suitable offset and mitigation measure to counterbalance these impacts.

The Ministers recommendation for the revegetation within the Boyanup Road West Road reserve is considered by DWER as a mitigation measure for the loss of ecological linkage values within the road reserve. The amended Permit has been conditioned to require the Shire to revegetate 1.6 hectares within Boyanup Road West road reserve (PINs: 1328954, Boyanup; PIN: 1328917, Elgin; and PINs: 1323149, 1323148, 1323147, 1323146, 1254316, 1323143 and 1253621, Stratham) to be representative of the extensively cleared Guildford complex. The condition also includes the requirement of the Permit holder to provide DWER with a Revegetation Plan for the proposed works for approval within six months of commencing the approved clearing.

The additional assessment and calculation by DWER, consistent with the WA Environmental Offsets Policy 2011 determined that an offset comprised of revegetating 3.62 hectares of native vegetation would sufficiently counterbalance the significant residual impacts to foraging habitat for black cockatoo species (i.e. the loss of 1.52 hectares of black cockatoo foraging habitat). The offset site (Lot 150 on Deposited Plan 29857, Parkfield) is vested with the Department of Biodiversity, Conservation and Attractions (DBCA) for the purpose of conservation and is located approximately 32 kilometers north of the application area. The revegetation of 3.62 hectares within Lot 150 on Deposited Plan 29857, Parkfield, with similar species composition, structure and density to the pre-clearing vegetation type (Yoongarillup complex) of that area is considered suitable to provide foraging habitat for black cockatoo species.

The offset condition also requires the Permit holder to provide to the CEO of DWER and CEO of DBCA with a Revegetation Plan for approval within six months of commencing the approved clearing.

The assessment against the clearing principles outlined in Schedule 5 of the *Environmental Protection Act 1986* is unchanged and can found in the Decision Report prepared for Clearing Permit CPS 8116/1.

Planning instruments and other relevant matters.

The assessment against planning instruments and other matters is unchanged and can be found in the Decision Report prepared for Clearing Permit CPS 8116/1.

5. References

Department of Water and Environmental Regulation (2018). Site Inspection Report for Clearing Permit Application CPS 8116/1 – Shire of Capel. DWER Ref:A1818975

Department of Water and Environmental Regulation (2019). CPS 8116/1 Decision report and Permit. URL: ftp://ftp.dwer.wa.gov.au/permit/8116/Permit/

Heddle, 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.

Natural Area Consulting Management Services (2018) Level 2 Flora and Vegetation Survey Boyanup West Road V1- November 2018. Supporting Information received in relation to Clearing Permit Application CPS 8116/1 – Shire of Capel (DWER Ref:A1818980)

Office of the Appeals Convenor (20120) Report to the Minister for Environment – Appeal against decision to grant a clearing permit – Clearing Permit CPS 8116/1: Upgrade of Boyanup Road West, Shire of Capel. Office of the Appeals Convenor, Western Australia. Available at: https://www.appealsconvenor.wa.gov.au/cps-81161-boyanup-road-west-road-reserve-shire-capel

Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.

GIS Databases:

- Aboriginal Sites of Significance
- Acid Sulfate Soil Risk Map, Swan Coastal Plain
- DBCA Managed Estate
- Directory of Important Wetlands
- Groundwater salinity, Statewide
- Hydrography, hierarchy
- Hydrography, linear
- Land Degradation datasets
- NLWRA, Current Extent of Native Vegetation
- SAC Bio Datasets
- Soils, Statewide
- Topographic contours
- Vegetation Complexes SCP
- Wetlands, Swan Coastal Plain