GOVERNMENT OF
WESTERN AUSTRALIA

# CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

| | |
|---|---|
| **Purpose Permit number:** | CPS 10433/2 |
| **Permit Holder:** | UGL Engineering Pty Ltd and Public Transport Authority |
| **Duration of Permit:** | From 12 September 2024 to 29 August 2035 |

The permit holder is authorised to clear *native vegetation* subject to the following conditions of this permit.

## PART I – CLEARING AUTHORISED

### 1. Clearing authorised (purpose)

The permit holder is authorised to clear *native vegetation* for the purpose of upgrading the radio system for the Perth rail network.

### 2. Land on which clearing is to be done

Lot 601 on Diagram 97196, Joondalup;
Lot 100 on Plan 19570, Joondalup;
Sundew Rise Road reserve (PIN 12097849), Joondalup;
Lot 8001 on Deposited Plan 69102, Bertram;
Lot 8601 on Deposited Plan 69102, Bertram;
Lot 8010 on Plan 69110 (Crown Reserve 33581), Leda;
Lot 8060 on Deposited Plan 69127, Karnup;
Lot 169 on Deposited Plan 69127, Karnup;
Lot 167 on Deposited Plan 69126, Karnup;
Mandurah Road reserve (PIN 11750647), Karnup;
Unnamed Road reserve (PIN 11571912), Como;
Lot 3323 on Deposited Plan 219820 (Crown Reserve 27575), Neerabup;
Lot 14043 on Deposited Plan 221400 (Road Reserve PIN 1352254), Neerabup;
Lot 320 on Deposited Plan 61379 (Crown Reserve 51572), Beckenham;
Railway Parade Road Reserve (PIN 11870267), Beckenham;
Lot 2730 on Deposited Plan 215879 (Crown Reserve R 38812), Cooloongup;
Ennis Avenue Road Reserve (PIN 11760186), Cooloongup;
Lot 8046 on Deposited Plan 69121, Port Kennedy; and
Ennis Avenue Road Reserve (PIN 11753947), Port Kennedy.

**3. Clearing authorised**

The permit holder must not clear more than 1.24 hectares of *native vegetation* within the combined areas cross-hatched yellow in Figure 2, Figure 3, Figure 4, Figure 5, Figure 6, Figure 7, Figure 8, Figure 9 and Figure 10 of Schedule 1.

**4. Period during which clearing is authorised**

The permit holder must not clear any *native vegetation* after 12 September 2029.

## PART II – MANAGEMENT CONDITIONS

**5. Avoid, minimise, and reduce impacts and extent of clearing**

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending 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.

**6. Weed and dieback management**

When undertaking any clearing authorised under this permit, the permit holder must take the following measures to minimise the risk of 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.

(d) only move soils in *dry conditions*; and

(e) where *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is to be removed from the area to be cleared, ensure it is transferred to areas of comparable *soil disease status*.

**7. Directional clearing**

The permit holder must:

(a) conduct clearing activities in a slow, progressive manner towards adjacent remnant *native vegetation*; and

(b) allow reasonable time for fauna present within the area being cleared to move into adjacent *native vegetation* ahead of the clearing activity.

**8. Revegetation and rehabilitation (*temporary works*)**

The permit holder must:

(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;

(b) at an optimal time within twelve (12) months following clearing authorised under this permit, *revegetate and rehabilitate* the area(s) that are no longer required for the authorised purpose under this permit by:

(i) re-shaping the surface of the land so that it is consistent with the surrounding five metres of uncleared land;

(ii) ripping the ground on the contour to remove soil compaction; and

(iii) laying the vegetative material and topsoil retained under condition 8(a) on the cleared area(s).

(iv) undertake *weed* control activities on an 'as needed' basis to reduce *weed* cover within the cleared areas to no greater than the *weed* cover within the surrounding five (5) metres of uncleared land.

(c) Within 24 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 8(a) of this Permit:

(i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and

(ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 8(c)(i) of this permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, *revegetate* the area by deliberately *planting* and/or *direct seeding native vegetation* that will result in a similar species composition, structure and density of *native vegetation* to pre-clearing vegetation types in that area and ensuring only *local provenance* seeds and propagating material are used.

(d) Where additional *planting* or *direct seeding* of *native vegetation* is undertaken in accordance with condition 8(c)(ii) of this permit, the permit holder shall repeat condition 8(c)(i) and 8(c)(ii) within 24 months of undertaking the additional *planting* or *direct seeding* of *native vegetation*.

(e) Where a determination by an *environmental specialist* that the composition, structure and density within areas *revegetated* and *rehabilitated* will result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, as determined in condition 8(c)(i) and (ii) of this permit, that determination shall be submitted for the *CEO*'s consideration. If the *CEO* does not agree with the determination made under condition 8(c)(ii), the *CEO* may require the permit holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under condition 8(c)(ii).

## 9. Revegetation and rehabilitation

Within 12 months of undertaking clearing within the area cross-hatched yellow in Figure 8 of Schedule 1 authorised under this permit, the permit holder must:

(a) undertake deliberate *planting* of at least five *Corymbia calophylla* trees within the area cross-hatched red in Figure 1 of Schedule 2 by ensuring *planting* is undertaken at the *optimal time*;

(b) undertake watering and *weed* control of *plantings* for at least two years post *planting*;

(c) the permit holder must within 24 months of *planting* the trees in accordance with condition 9(a) of this permit:

(i) engage an *environmental specialist* to make a determination that at least five *Corymbia calophylla* trees will survive.

(ii) if the determination made by the *environmental specialist* under condition 9(c)(i) is that at least five of the *planted* trees will not survive, the permit holder must *plant* additional trees that will result in at least five *Corymbia calophylla* trees, persisting within the area cross-hatched red in Figure 1 of Schedule 2.

(d) where additional *planting* of trees is undertaken in accordance with condition 9(c), the permit holder must repeat the activities required by condition 9(a), 9(b) and 9(c) of this permit.

## PART III - RECORD KEEPING AND REPORTING

### 10. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

**Table 1: Records that must be kept**

| No. | Relevant matter | Specifications |
|---|---|---|
| 1. | In relation to the authorised clearing activities generally | (a) the species composition, structure, and density of the cleared area;<br>(b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings;<br>(c) the date that the area was cleared;<br>(d) the size of the area cleared (in hectares);<br>(e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 5;<br>(f) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 6; and<br>(g) actions taken in accordance with condition 7. |
| 2. | In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 8 | (a) the species composition, structure, and density of the *revegetation* area<br>(b) the size of the area *revegetated* and *rehabilitated*;<br>(c) the location of any *revegetated* and *rehabilitated* areas, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings or decimal degrees;<br>(d) a description of the *revegetation* and *rehabilitation* activities undertaken; and<br>(e) the date(s) on which the *revegetation* and |

| No. | Relevant matter | Specifications |
|---|---|---|
| | | *rehabilitation* was undertaken<br>(f) a copy of the *environmental specialist's* report<br>(g) any remedial actions required to be undertaken. |
| 3. | In relation to the revegetation and rehabilitation pursuant to condition 9 | (a) the date(s) the *planting* occurred;<br>(b) the locations of trees *planted*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings or decimal degrees;<br>(c) a description of the *planting* activities undertaken;<br>(d) the total number of trees planted in accordance with condition 9(a);<br>(e) a copy of the *environmental specialist*'s monitoring report and determination; and<br>(f) a description of any *remedial actions* undertaken pursuant to condition 9(c) of this permit. |

**11. Reporting**

The permit holder must provide the *CEO* the records required under condition 10 of this permit when requested by the *CEO*.

## DEFINITIONS

In this permit, the terms in Table  have the meanings defined.

**Table 2: Definitions**

| Term | Definition |
|---|---|
| CEO | Chief Executive Officer of the department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*. |
| clearing | has the meaning given under section 3(1) of the EP Act. |
| condition | a condition to which this clearing permit is subject under section 51H of the EP Act. |
| fill | means material used to increase the ground level, or to fill a depression. |
| dieback | means the effect of *Phytophthora* species on native vegetation. |
| department | means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3. |
| 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. |
| dry conditions | means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches |

| Term | Definition |
|---|---|
| environmental specialist | means a person who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit, or who is approved by the *CEO* as a suitable environmental specialist. |
| EP Act | *Environmental Protection Act 1986* (WA) |
| fill | means material used to increase the ground level, or to fill a depression. |
| 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. |
| native vegetation | has the meaning given under section 3(1) and section 51A of the EP Act. |
| optimal time | means the period from May to August |
| plant/ed/ing | means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species |
| rehabilitate/ed/ion | means actively managing an area containing native vegetation in order to improve the ecological function of that area. |
| remedial action/s | means for the purpose of this permit, any activity that is required to ensure successful re-establishment and survival of planted trees. |
| 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 |
| soil disease status | means soil types either infested, not infested, uninterpretable or not interpreted with a pathogen. |
| temporary works | means access tracks, spoil areas, side tracks, site offices, storage areas, laydown areas, extraction sites, camps, project surveys, pre-construction activities, and similar works associated with a project activity that are temporary in nature. |
| weeds | means any plant –<br>(a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or<br>(b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or<br>(c) not indigenous to the area concerned. |

**END OF CONDITIONS**

J Burton

Jessica Burton
MANAGER
NATIVE VEGETATION REGULATION

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

6 August 2025

# Schedule 1

The boundary of the area authorised to be cleared is shown in the maps below (Figure 2 to Figure 10).

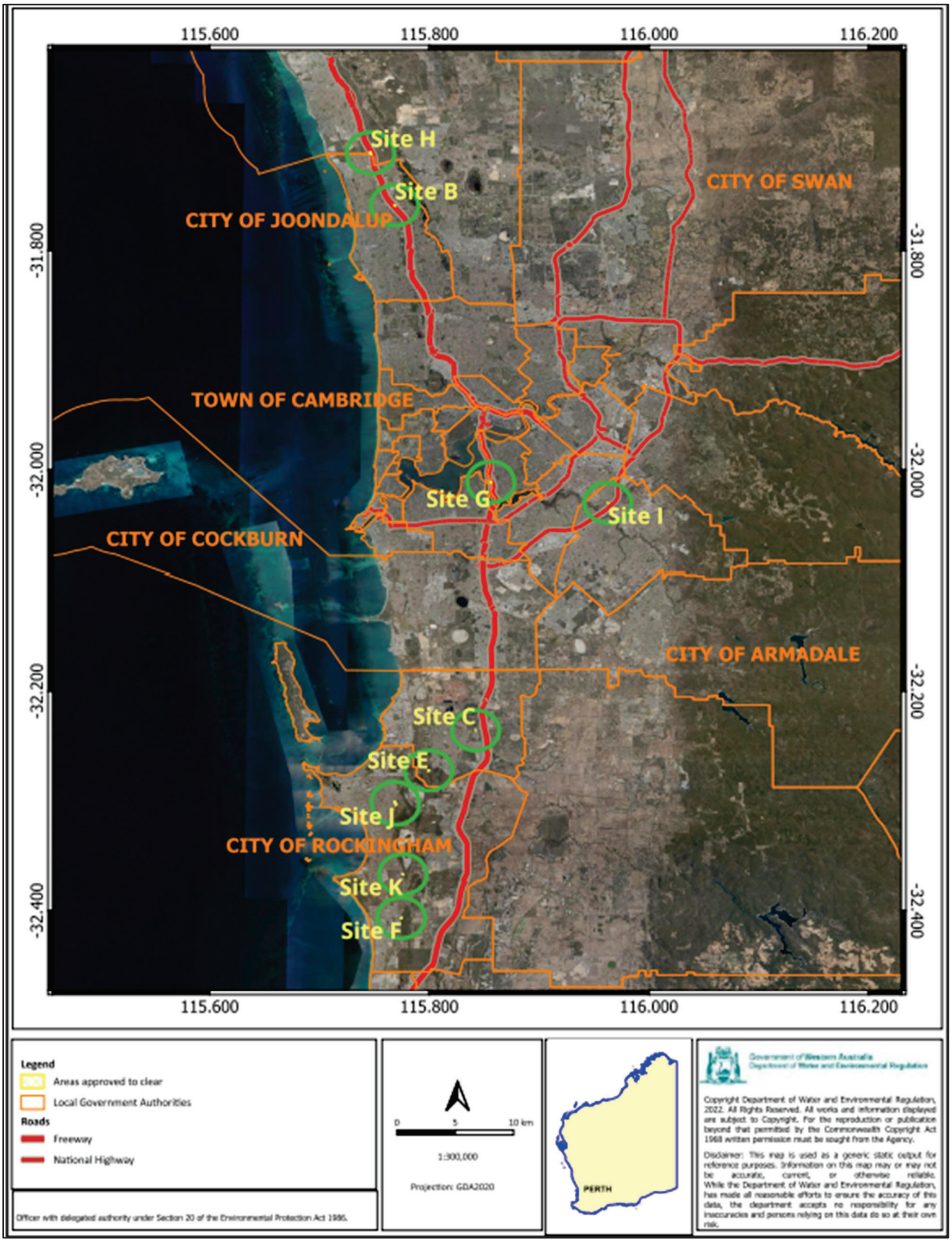


**Figure 1. Context map of the application area (including nine separate sites)**

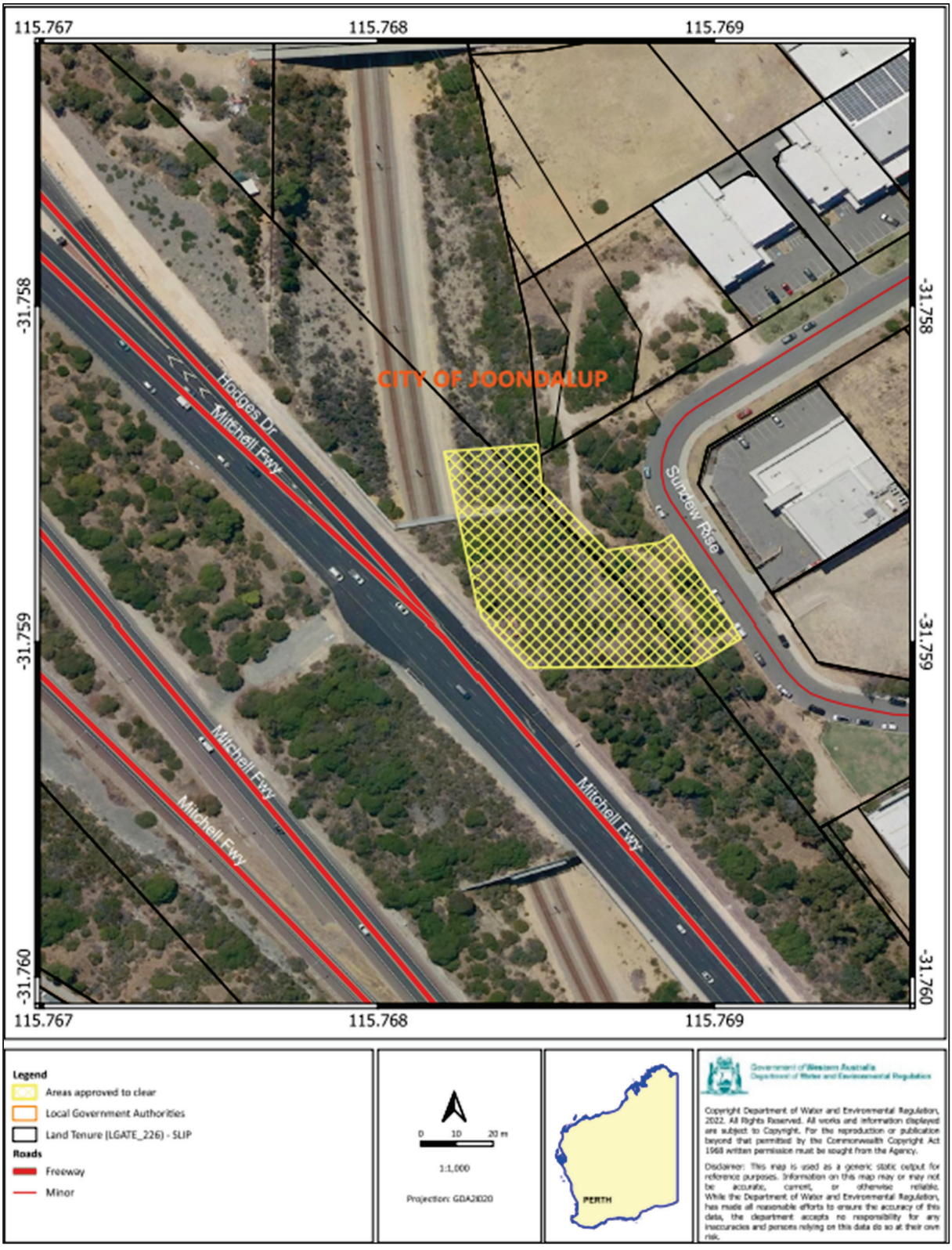


**Figure 2: Map of the boundary of the area within which clearing may occur (site B)**


**Figure 3: Map of the boundary of the area within which clearing may occur (site C)**


**Figure 4: Map of the boundary of the area within which clearing may occur (site E)**


**Figure 5: Map of the boundary of the area within which clearing may occur (site F)**

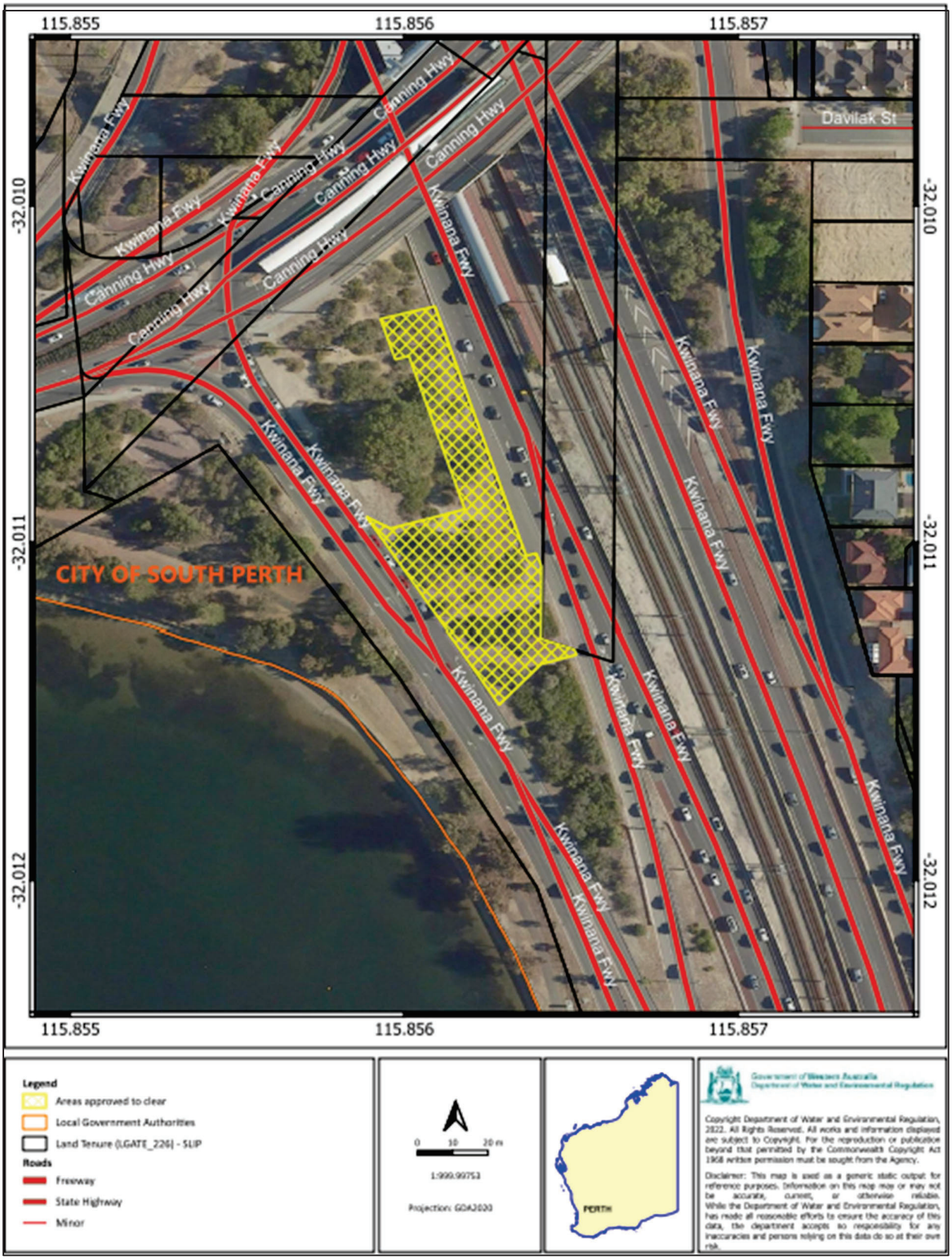


**Figure 6: Map of the boundary of the area within which clearing may occur (site G)**


**Figure 7: Map of the boundary of the area within which clearing may occur (site H)**

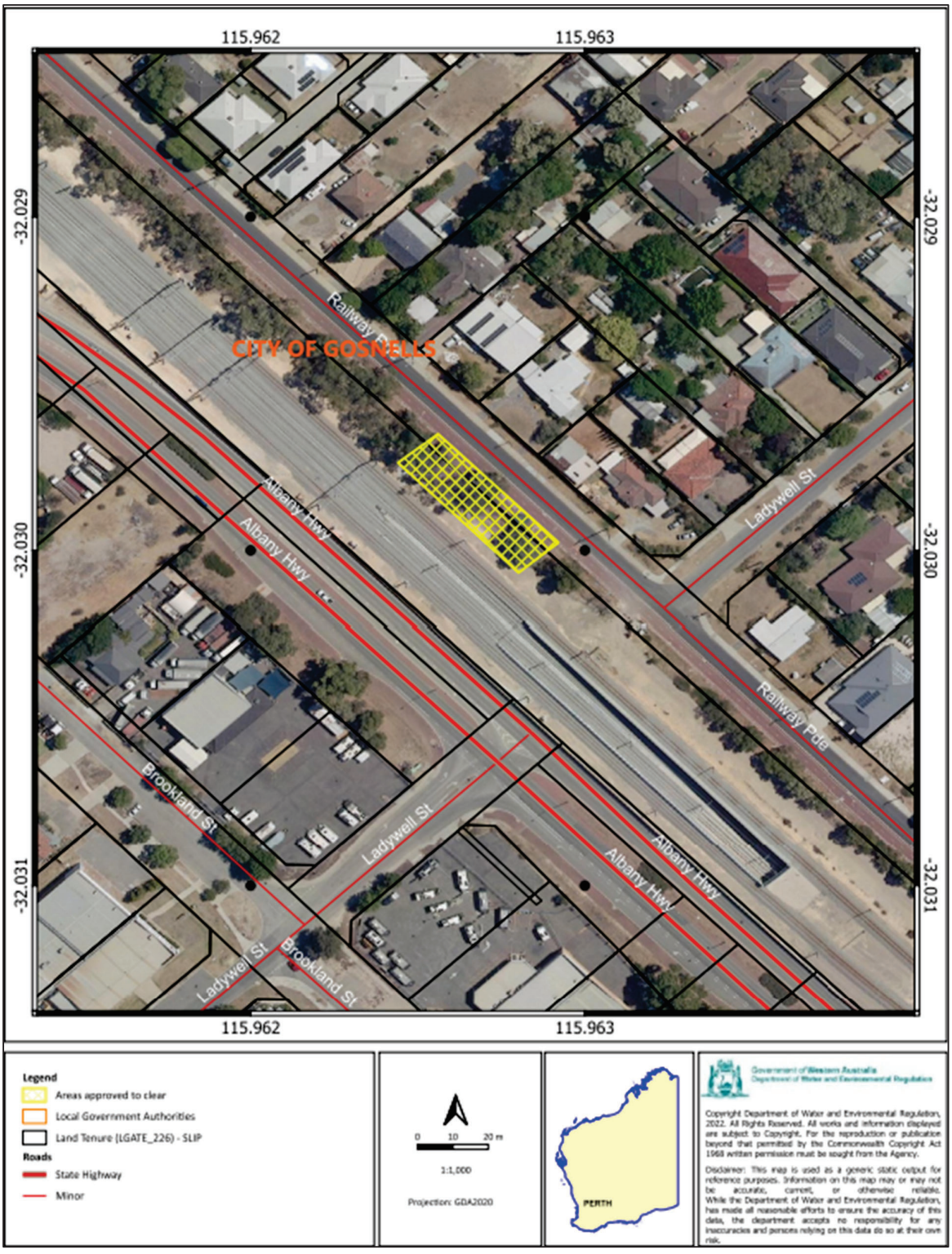


**Figure 8: Map of the boundary of the area within which clearing may occur (site I)**

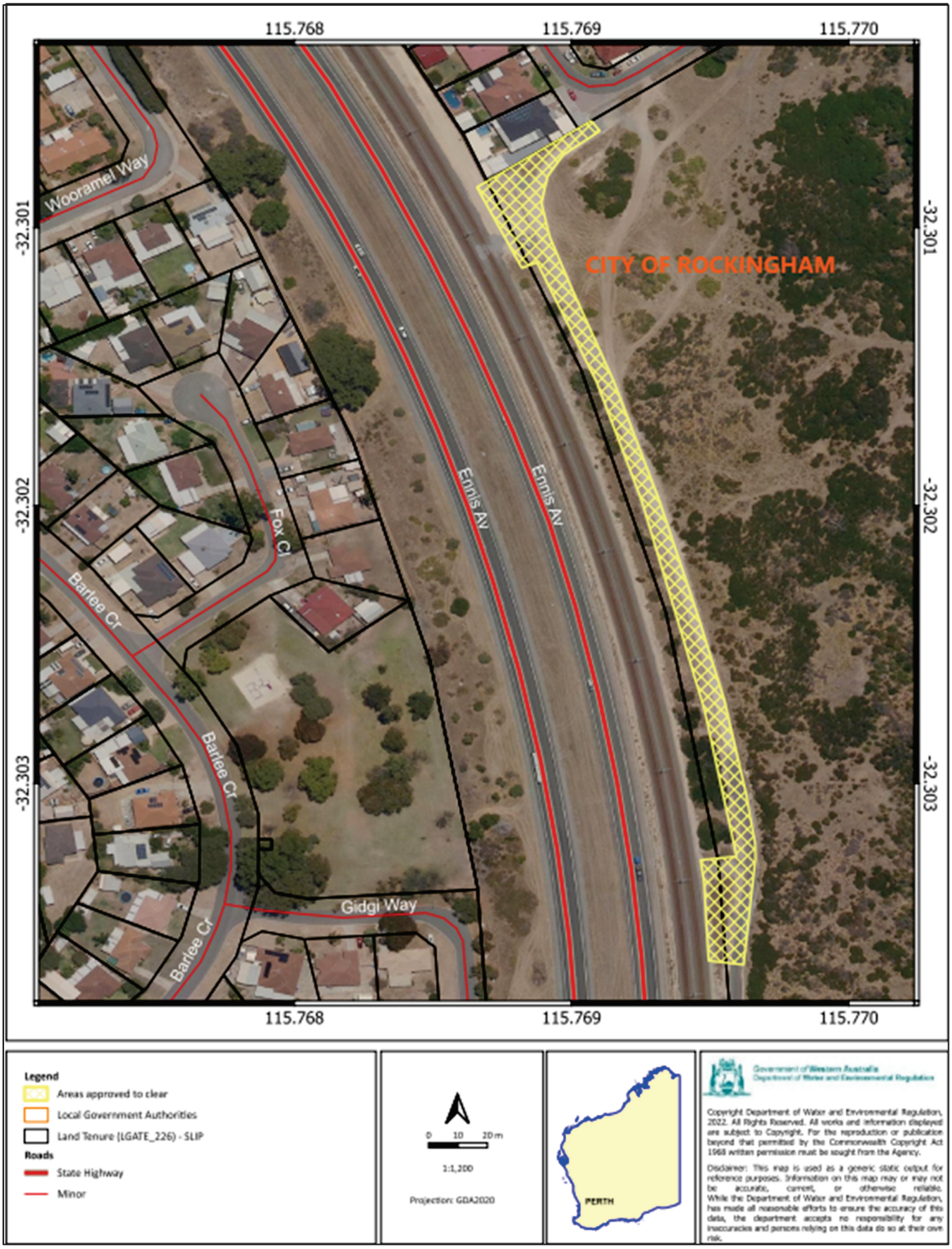


**Figure 9: Map of the boundary of the area within which clearing may occur (site J)**

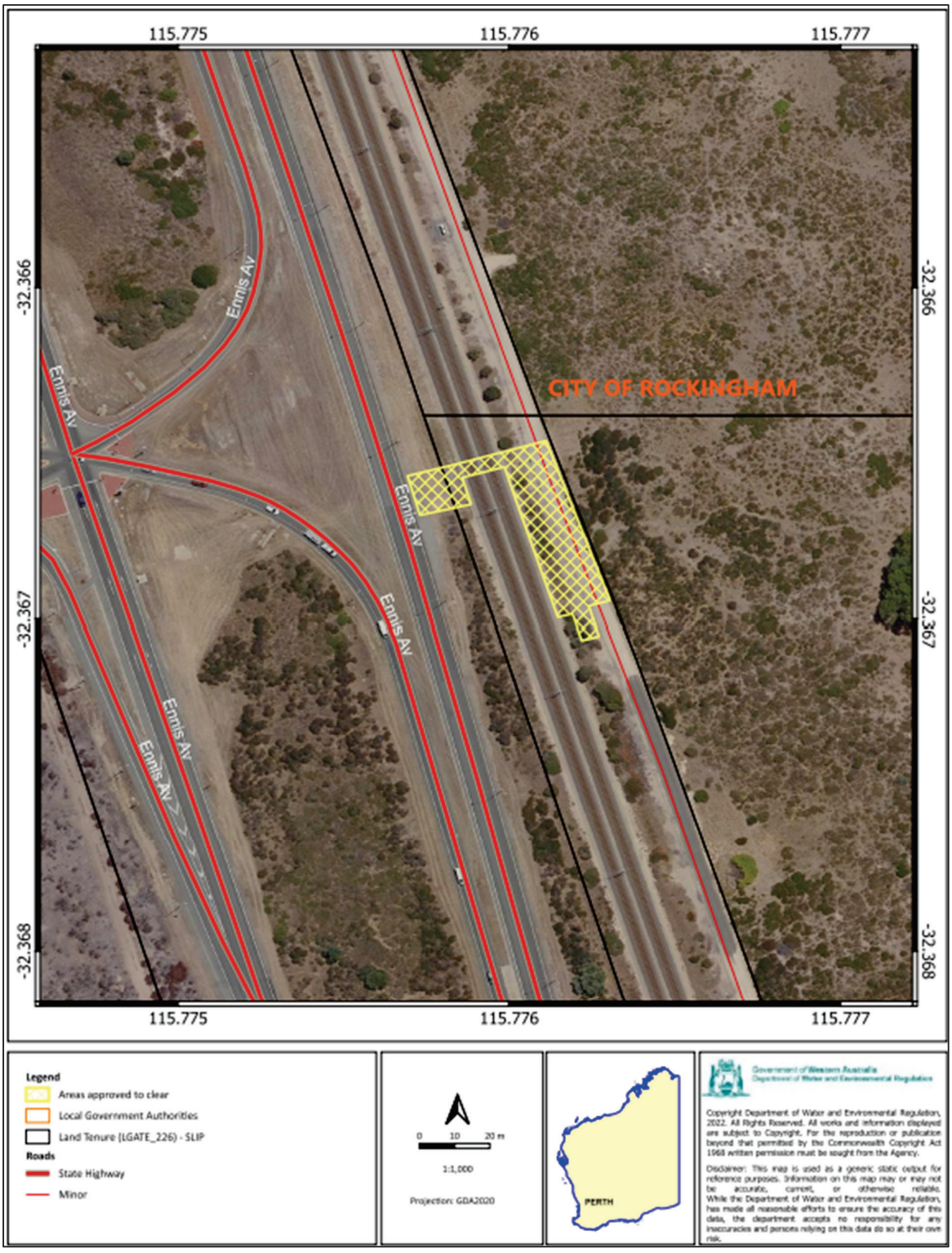


**Figure 10: Map of the boundary of the area within which clearing may occur (site K)**

# Schedule 2

The boundary of the areas where conditions apply is shown in the map (Figure 1) below.

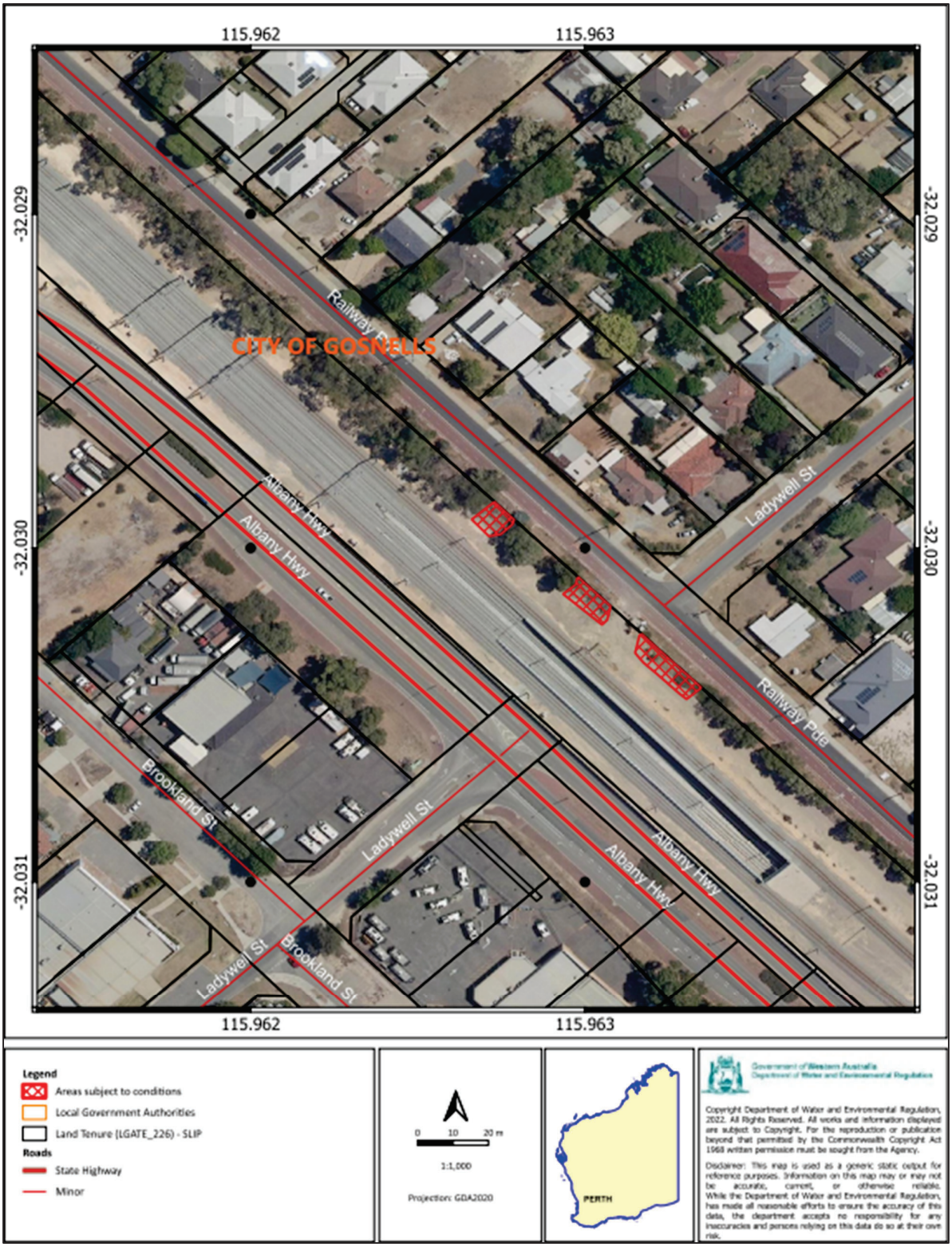


**Figure 1. Map of the boundary of the area within which specific revegetation and rehabilitation under condition 8 apply**

Government of Western Australia
Department of Water and Environmental Regulation

# Clearing Permit Decision Report

## 1 Application details and outcome

### 1.1. Permit application details

| | |
|---|---|
| **Permit number:** | CPS 10433/2 |
| **Permit type:** | Purpose permit |
| **Applicant name:** | UGL Engineering Pty Ltd and Public Transport Authority |
| **Application received:** | 22 November 2024 |
| **Application area:** | 1.24 hectares (as revised) of native vegetation within 2.17-hectare footprint area |
| **Purpose of clearing:** | Upgrading the radio system for the Perth rail network |
| **Method of clearing:** | Mechanical |
| **Property:** | Lot 601 on Diagram 97196 (Public Road PIN 1274968)<br>Lot 100 on Plan 19570 (Hodges Drive PIN 1097666)<br>Sundew Rise Road Reserve (PIN 12097849)<br>Lot 8001 on Deposited Plan 69102<br>Lot 8601 on Deposited Plan 69102<br>Lot 8010 on Plan 69110 (Crown Reserve 33581)<br>Lot 8060 on Deposited Plan 69127<br>Lot 169 on Deposited Plan 69127<br>Lot 167 on Deposited Plan 69126<br>Mandurah Road reserve (PIN 11750647)<br>Unnamed Road reserve (PIN 11571912)<br>Lot 3323 on Deposited Plan 219820 (Crown Reserve 27575)<br>Lot 14043 on Deposited Plan 221400 (Road Reserve PIN 1352254)<br>Lot 320 on Deposited Plan 61379 (Crown Reserve 51572)<br>Railway Parade Road Reserve (PIN 11870267)<br>Lot 2730 on Deposited Plan 215879 (Crown Reserve R 38812)<br>Ennis Avenue Road Reserve (PIN 11760186)<br>Lot 8046 on Deposited Plan 69121<br>Ennis Avenue Road Reserve (PIN 11753947) |
| **Location (LGA area/s):** | Joondalup, Bertram, Leda, Karnup, Como, Neerabup, Beckenham, Cooloogup and Port Kennedy. |
| **Localities (suburb/s):** | City of Joondalup<br>City of Kwinana<br>City of Rockingham |

| | |
|---|---|
| | City of South Perth<br>City of Gosnells<br>City of Wanneroo |

## 1.2. Description of clearing activities

The clearing permit CPS 10433/1 was issued on 19 August 2024 to authorize the clearing of 0.57 hectares of native vegetation across five (5) separate sites to facilitate the Public Transport Authority's (PTA) Radio Systems Replacements (RSR) Project which is for the upgrade of the radio system of Perth's rail network. The project involves the replacement the existing analogue system with a digital one to help deliver high-capacity signalling and provide increased reliability and flexibility of the train system (UGL, 2023). The permit holder has informed that approximately 0.24 hectares have been cleared under CPS 10433/1, including 0.21 hectares at site F – Secret Harbor and 0.03 hectares at site G – Canning Bridge (UGL, 2025f).

The permit holder proposed to amend clearing permit CPS 10433/1 to include four additional sites and amend the clearing area at two sites (site B and site G) already approved under CPS 10433/1 (see Table 1) (UGL, 2024a, 2024b, 2025a and 2025b). The reasons to amend the clearing area at site B and Site G are due to significant constructability and interface issues within another Main Roads Western Australia (MRWA) infrastructure project (site G); and to accommodate a new Wester Power connection which is essential to service the RSR (site B) (UGL, 2025c). The original proposed amended clearing area is 1.62 hectares within 2.51-hectare footprint across nine (9) sites.

During the assessment of the amendment, the permit holder proposed to reduce the clearing extent to 1.24 hectares within 2.17-hectare footprint across 9 sites (UGL, 2025c and 2025d). Summary on the proposed amendment is presented in Table 1.

**Table 1.** Information of proposed amendment for CPS 10433/1

| Site | Site name | Location | Footprint area (hectare) | Clearing area (hectare) | Proposed amendment |
|---|---|---|---|---|---|
| Site B | Joondalup tunnel 2 | Joondalup | 0.35 | 0.32 | Increase the clearing footprint from clearing area from 0.12 hectares under CPS 10433/1 to 0.32 hectares |
| Site C | Kwinana station | Bertram | 0.09 | 0.06 | None |
| Site E | Rockingham East | Leda | 0.27 | 0.06 | None |
| Site F | Secret Harbour | Karnup | 0.24 | 0.21 | None |
| Site G | Canning Bridge | Como | 0.27 | 0.18 | Increase the clearing area from 0.12 hectares under CPS 10433/1 to 0.18 hectares |
| Site H | Tamala Park | Neerabup | 0.45 | 0.27 | Newly added into the permit |
| Site I | Kenwick Tunnel | Beckenham | 0.07 | 0.03 | |
| Site J | Cooloongup | Cooloogup | 0.31 | 0.07 | |
| Site K | Lake Walyungup | Port Kennedy | 0.12 | 0.04 | |
| **Total area (hectare)** | | | **2.17** | **1.24** | |

As the current permit holder, UGL is a contractor of PTA to undertake the RSR project and some conditions in the granted permit will be fulfilled by PTA, UGL proposed to include PTA as a joint permit holder of this clearing permit, as part of this amendment (UGL, 2025g).

## 1.3. Decision on application

| | |
|---|---|
| **Decision:** | Granted |
| **Decision date:** | 6 August 2025 |
| **Decision area:** | 1.24 hectares of native vegetation within 2.17-hectare footprint areas, as depicted in Section 1.5, below. |

## 1.4. Reasons for decision

This clearing permit amendment application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 21 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix B), relevant datasets (see Appendix F.1), the findings of vegetation surveys (see Appendix E), the clearing principles set out in Schedule 5 of the EP Act (see 0), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). The Delegated Officer also took into consideration that the purpose of the proposed clearing is for public works, to assist in the safe and efficient operation of the Perth rail network.

The assessment against the clearing principles has not changed significantly since the assessment for CPS 10433/1, except in the case of principles (b), (e) and (h). The assessment identified that the proposed additional clearing will result in:

- the clearing of two marri trees (*Corymbia calophylla*) which provide foraging and roosting habitat for black cockatoos at site I.
- the loss of vegetation within Bush Forever sites 383 and 356 (site H, J and K).
- the potential introduction and spread of weeds and dieback into adjacent vegetation, which could impact on the quality of the adjacent vegetation, including that with conservation areas, and its habitat values.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined that the loss of two marri trees can be counterbalanced by the planting of five marri trees in the same railway/road reserves. The impacts of clearing at site H, J and K to Bush Forever sites and adjacent regional and national parks are considered not significant due to the separation between the proposed clearing areas, and the main Bush Forever reserves, the small clearing extent, the degraded condition of vegetation proposed to be cleared and the proposed revegetation and rehabilitation of temporarily clearing areas. The Delegated Officer determined that the impacts of proposed additional clearing at site B, G, H, I, J and K can be managed through permit conditions, and the proposed clearing is not likely to lead to an unacceptable risk to environmental values.

The Delegated Officer decided to grant a clearing permit amendment subject to conditions to:

- Avoid, minimise to reduce the impacts and extent of clearing.
- Take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback.
- Undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity.
- Planting of five marri trees within Lot 320 on Deposited Plan 61379 (Crown Reserve 51572).
- Revegetation of all areas cleared for temporary works.

## 1.5. Site maps

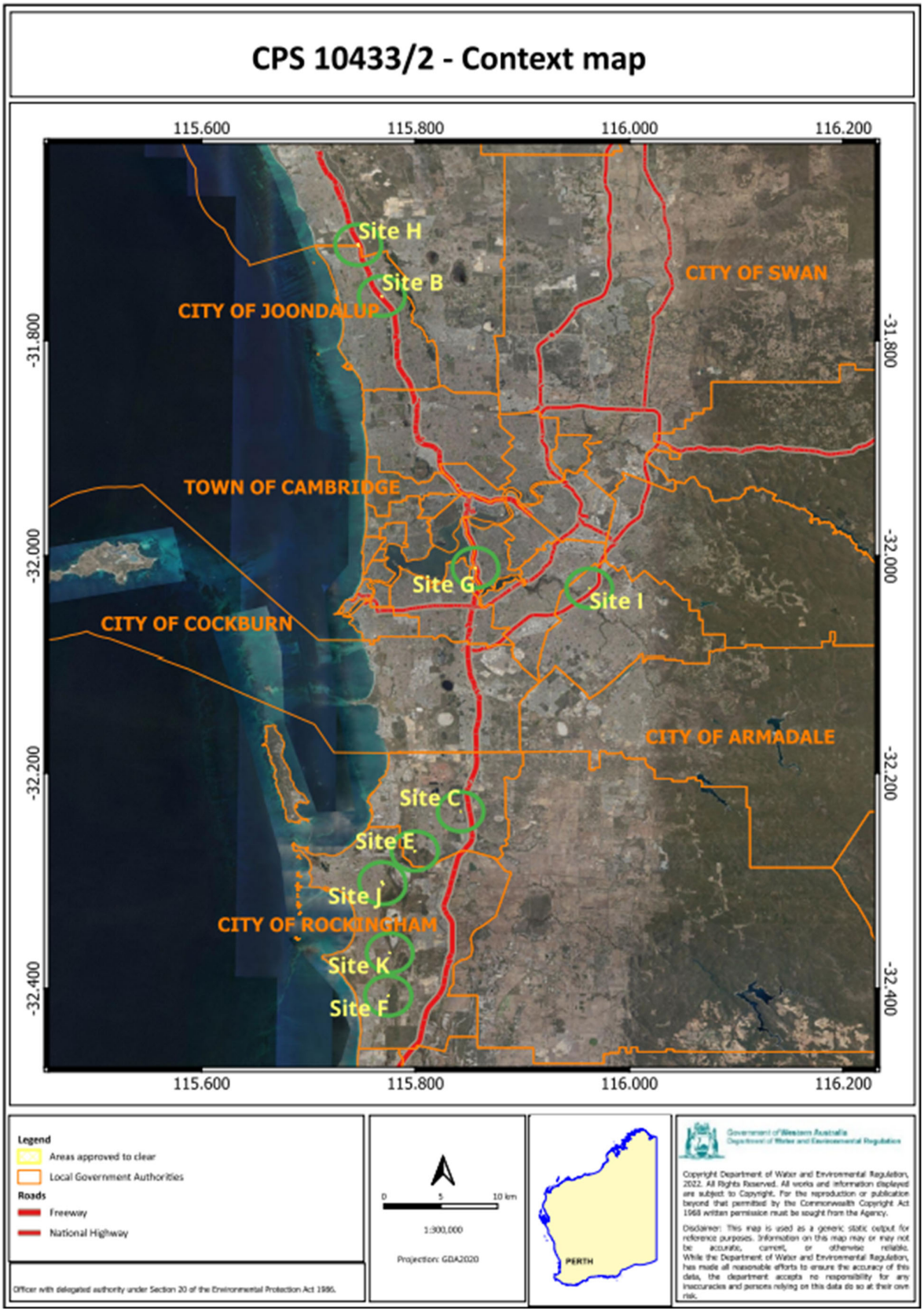


Figure 1. Context map of the application area (including nine separate sites)

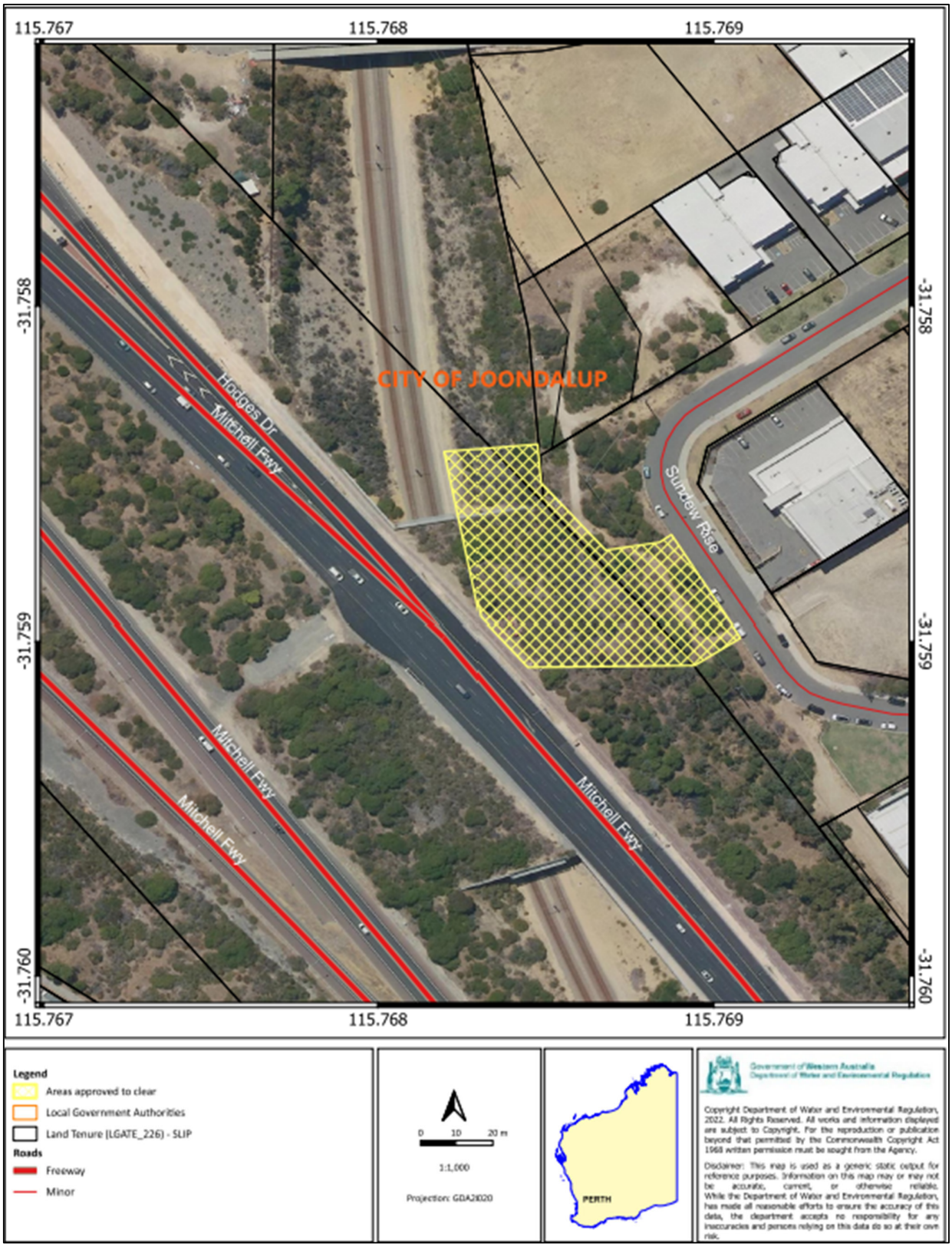


Figure 2. Map of clearing area at site B.

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.


Figure 3. Map of clearing area at site C.

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.


Figure 4. Map of clearing area at site E.

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.


Figure 5. Map of clearing area at site F.

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

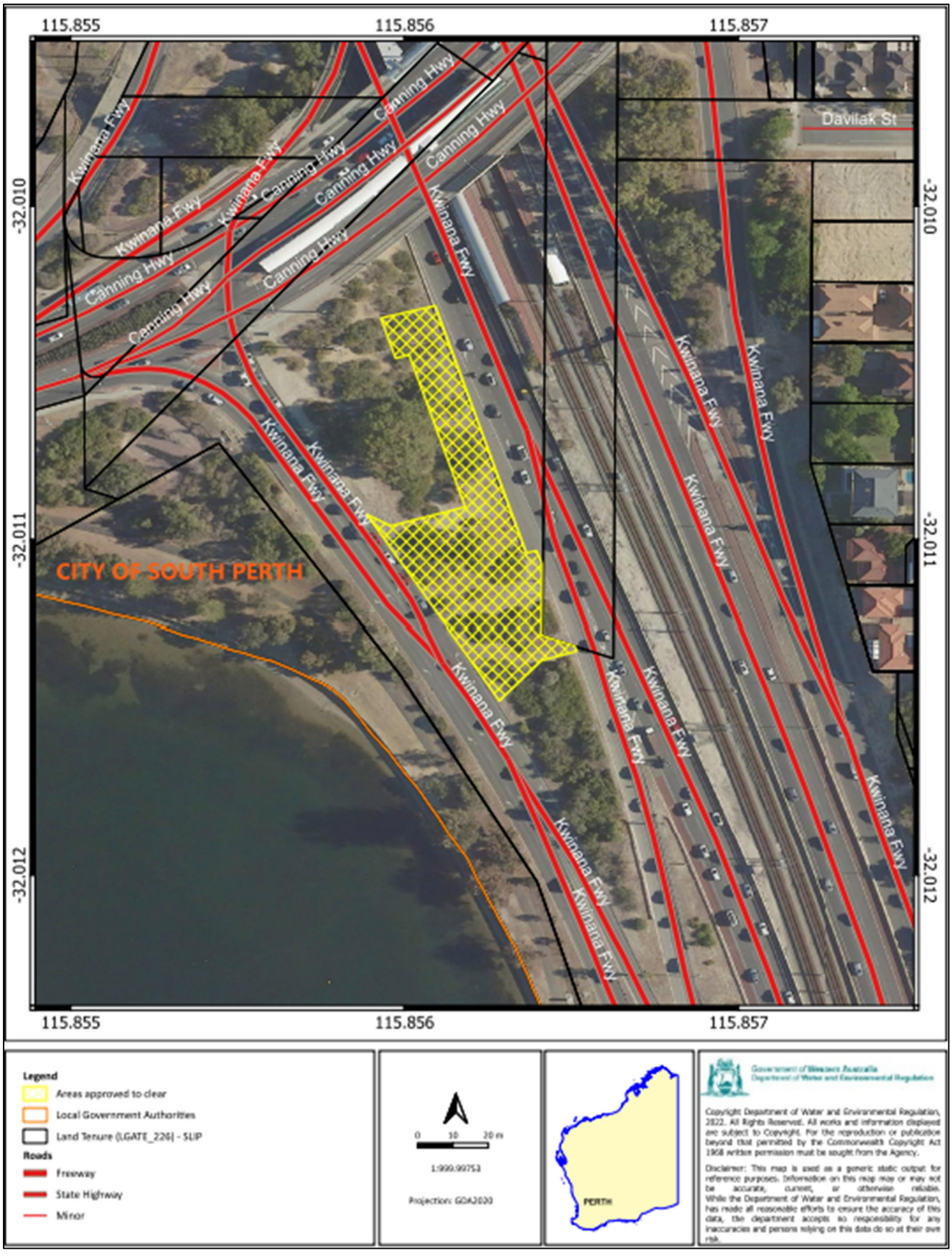


Figure 6. Map of clearing area at site G.

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.


Figure 7. Map of clearing area at site H.

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

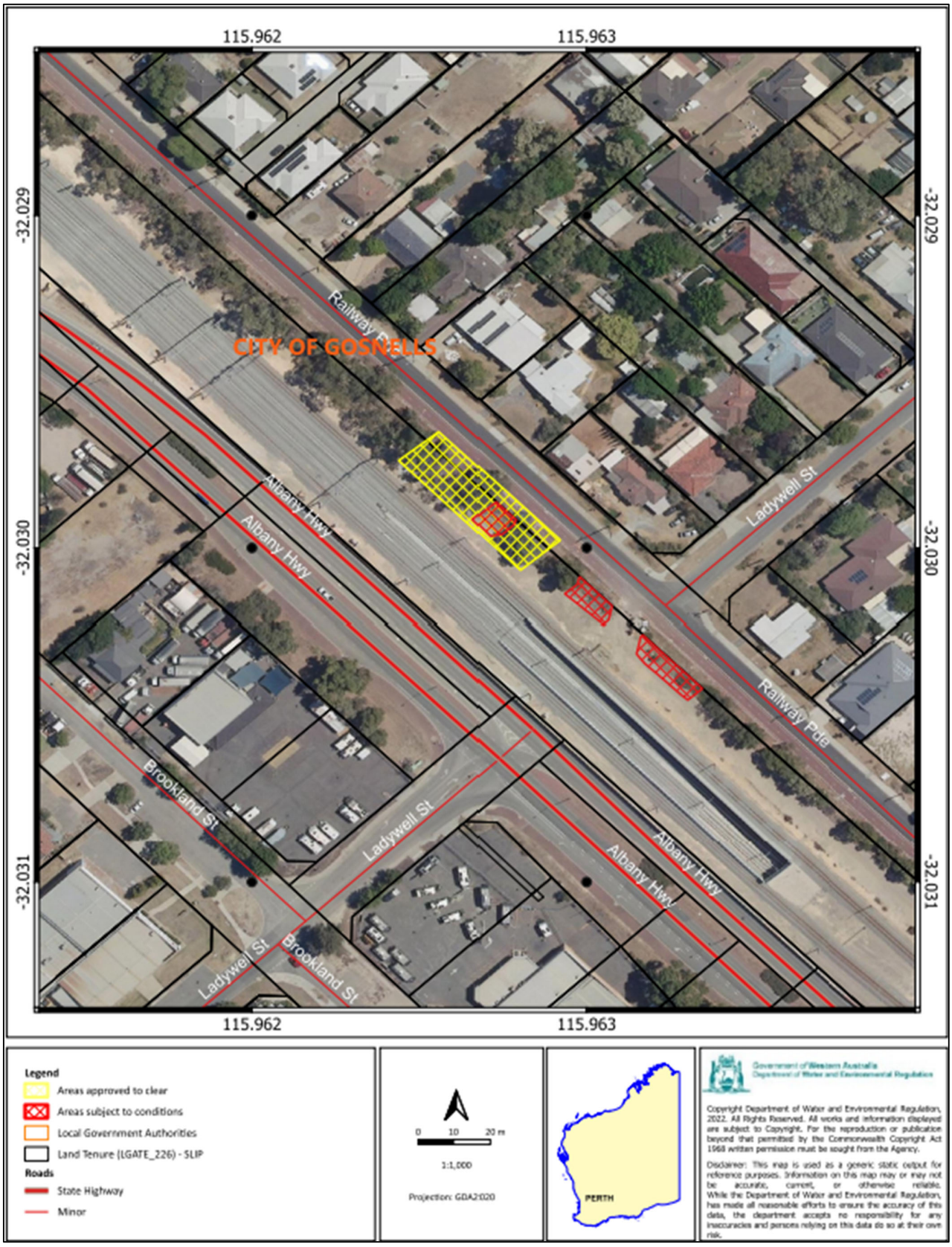


Figure 8. Map of clearing area at site I.

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit. The areas cross-hatched red indicates areas within which specific conditions apply.

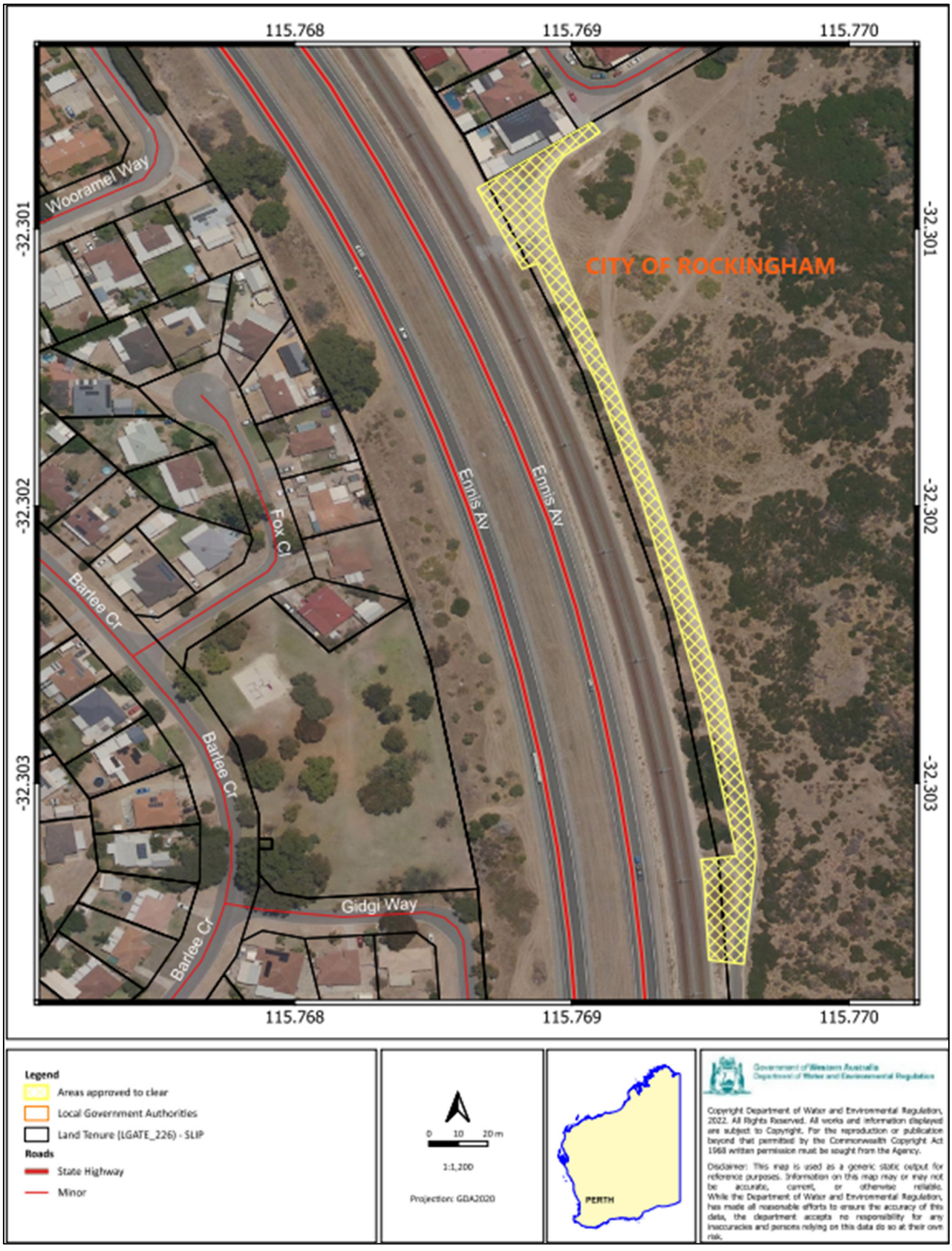


Figure 9. Map of clearing area at site J.

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

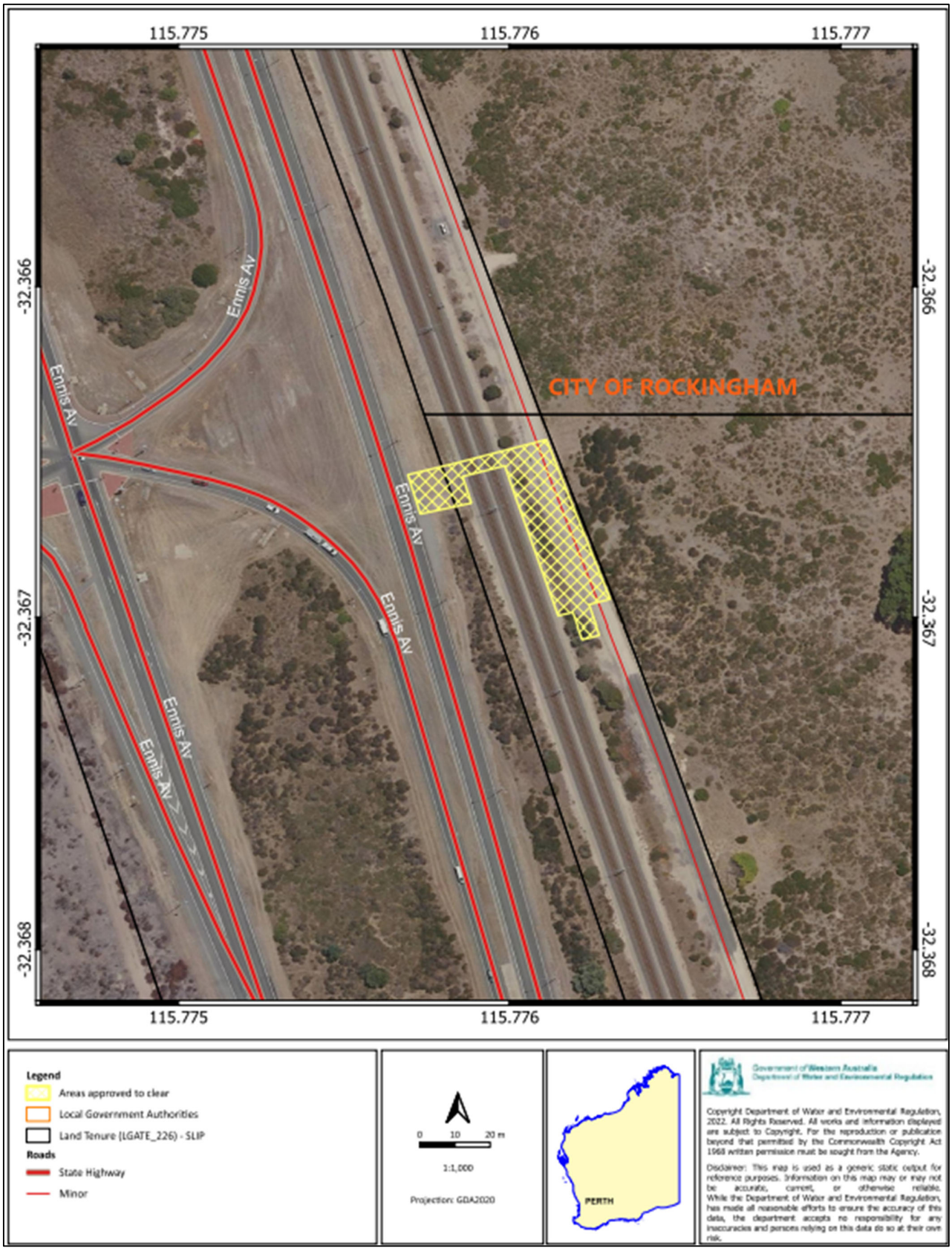


Figure 10. Map of clearing area at site K.

The areas crosshatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

# 2 Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the polluter pays principle
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Planning and Development Act 2005 (WA) (P&D Act)*
- *Rights in Water and Irrigation Act 1914* (RiWI Act)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)

# 3 Detailed assessment of application

## 3.1. Avoidance and mitigation measures

In addition to the avoidance and mitigation measures outlined in the Clearing Permit Decision Report CPS 10433/1, the following measures has been undertaken/committed to undertake for additional sites:

- The design at site H was amended to avoid clearing vegetation type VT03 which was identified as a potential patch within the 30-metre buffer of the adjacent occurrence of the threatened ecological community Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain (Tuart woodlands TEC) in Good (Keighery, 1994) condition and comprises the Priority 1 flora species *Baeckea* sp. Limestone (Western Environmental, 2025b).
- The clearing footprint and extent at sites B, H, J and K has been revised during the amendment application assessment to reduce the impacts of the proposed clearing to remnant vegetation, including Bush Forever sites (UGL, 2025c). The proposed clearing area has been reduced from 1.62 hectares to 1.24 hectares.
- The permit holder has committed to plant five marri trees within the road/railway reserves at site I to mitigate the impacts to black cockatoo habitat (UGL, 2025c). This commitment has been enforced as a permit condition.

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

## 3.2. Assessment of impacts on environmental values

A review of current environmental information (Appendix C) reveals that the assessment against the clearing principles for sites that has been approved under the Permit CPS 10433/1 has not changed significantly from the Clearing Permit Decision Report CPS 10433/1.

However, the assessment against the clearing principles (see **Error! Reference source not found.**) identified that the impacts of the proposed clearing at additional sites present additional risk to biological value (fauna), significant remnant vegetation and conservation areas. The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

### *3.2.1. Biological value (fauna) - Clearing Principle (a) and (b)*

Assessment

Some sites within the application area including site B, C, H and G contains vegetation that provide suitable habitat for conservation significant fauna species such as black cockatoos, quenda, etc. However, considering that all these sites are within transport corridors in which vegetation has been disturbed and fragmented, the small areas proposed to be cleared, and better-quality remnant vegetation exists within the application sites' proximity, the area proposed to be cleared at these sites is not likely to be considered as significant habitat for conservation significant fauna.

Vegetation proposed to be cleared at site I – Kenwick Tunnel includes two marri (*Corymbia calophylla*) trees with diameter at breast height (DBH) of more than 500 millimetres. These trees have been considered as providing high value foraging habitat for threatened black cockatoo (BC) species (SW Environmental, 2024b). Based on known distribution and habitat preference of BC recorded, all three threatened BC species most likely occur over the application area at this site. Within the local area (10-kilometre radius from the site), there are 1,726 records of Carnaby's cockatoo (*Zanda latirostris*), 36 records of Baudin's cockatoo (*Zanda baudinii*) and 162 records of forest-tailed black cockatoos (*Calyptorhynchus banksii naso*) with the closest distance of approximately 0.8, 4.6, and 0.8 kilometres, respectively, from the site. The site is located within the mapped distribution areas of all three black cockatoo species.

There are three key components of black cockatoo habitat: foraging habitat; roosting habitat; and breeding habitat. The quality of BC foraging habitat to support populations at breeding sites or night roosting sites varies depending upon how BC utilise the habitat in that particular location. Any tall trees, generally close to riparian environment, can be potential roosting habitat of BC (Commonwealth of Australia, 2022). A tree suitable for a black cockatoo breeding is defined as a tree with a DBH of 50 centimetres or greater. BC generally forage within six kilometres of a night roost site and, while nesting, within a 12 kilometres radius of their nest site (Commonwealth of Australia, 2022).

According to available databases, 14 BC roost sites are recorded within six kilometres of site I, making it likely that the marri trees proposed to be cleared at this site support foraging by local roosting populations. Therefore, the proposed clearing will lead to the loss of foraging and roosting habitat for BC. Based on a calculation consistent with the WA Environmental Offsets Metric, the permit holder has been requested to plant at least five marri trees within the same road/railway reserves to counterbalance the impacts to BC habitat caused by the proposed clearing at site I. The permit holder has committed to undertake the revegetation of five marri trees within Lot 320 on Deposited Plan 61379 (Crown Reserve 51572) (UGL, 2025c and 2025e). This commitment has been enforced as a permit condition.

Conclusion

The proposed clearing will result in the loss of two marri trees that provide suitable foraging and roosting habitat for BC at site I.

Conditions

To address the above impacts, the following management measure will be required as a condition on the clearing permit:

- Plant at least five marri trees within Lot 320 on Deposited Plan 61379 (Crown Reserve 51572).

### *3.2.2. Environmental value: Conservation areas - Clearing Principle (h)*

**Conservation areas**

***Bush Forever sites***

A portion of proposed footprint areas at site H (0.43 hectares) and site J (0.002 hectares), and entire footprint area at site K (0.12 hectares) are mapped within Bush Forever sites 356 and 383. Advice from the Department of Planning, Lands and Heritage's (DPLH's) Bush Forever office has been sought during the assessment of the amendment application. DPLH has advised that that an offset in accordance with Appendix 4 of State Planning Policy 2.8 - Bushland policy for the Perth Metropolitan Region (SPP 2.8) may be required to counterbalance the residual impacts to Bush Forever (DPLH, 2025).

However, noting that the proposed clearing footprints are located separately from the main Bush Forever reserves and within existing road/railway corridors which vegetation has been affected by transport activities, the vegetation is in Degraded to Completely Degraded (Keighery, 1994) conditions, and the clearing area for temporary works will be revegetated, it is considered that proposed clearing will have minimum impact on the values of Bush Forever sites. Given this, and in accordance with Appendix 1 and 2 of SPP 2.8, an offset is not required for the proposed clearing within these sites.

To mitigate the impacts of the proposed clearing and subsequent construction activities to Bush Forever sites 356 and 383, the permit holder has committed to undertake following measures as requested by the DPLH (UGL, 2025c):

- Prior to the commencement of works, a temporary fence should be constructed between the boundary of the Bush Forever site and the development site.
- No construction materials, vegetation, earth spoil, drainage, or other debris to be disposed of within the vegetated portions of Bush Forever sites 356 and 383.

***National and Regional Parks***

The application area is partially mapped within the Neerabup National Park (Site H) and Rockingham Lakes Regional Park (Site J and K) which are under management of the Department of Biodiversity, Conservation and Attractions (DBCA). DBCA has advised that the proposed clearing at these sites is supported, provided that the revegetation

and rehabilitation of areas for temporary works will be undertaken when the construction and installation complete (DBCA, 2025a and 2025b).

The proposed clearing may increase the risk of weeds and dieback spread which may impact the environmental values of these conservation areas.

**Ecological linkages**

Site H is mapped on the edge of Gnangara Ecological Linkages, site K is mapped within the Perth Regional Ecological Linkages and site B is likely a part of an informal ecological linkage in the local area (City of Joondalup, 2025). However, noting that these sites are within existing transport corridors with fences, the vegetation has been previously disturbed, and the small extents are proposed to be cleared, the proposed clearing can be considered unlikely to impact the ecological linkages any further than what is already being impacted by the existing transport corridors.

Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- Weed and dieback management.
- Revegetation and rehabilitation of temporarily clearing area.

## 3.3. Relevant planning instruments and other matters

Relevant local government agencies of where the proposed clearing sites located at were invited to provide comments on the application. The City of Joondalup advised that they did not have any comments that related to the City's planning policies or schemes and no further planning approvals are required (City of Joondalup, 2025). The City of Wanneroo advised that approval from the City is not required and had no further comments (City of Wanneroo, 2025). The City of Rockingham commented that three laydown areas at site J were not included in the relevant development approval (City of Rockingham, 2025). The permit holder has revised the proposed clearing area at this site to remove three laydown areas (UGL, 2025c).

For three sites H, J and K which are (partially) mapped within Bush Forever sites, relevant development approvals have been issued by the Western Australian Planning Commission (WAPC) (City of Rockingham, 2025; UGL, 2025c).

As the proposed clearing at Site H – Tamala Park is located within and adjacent to Neerabup National Park (Crown Reserve 27575), DBCA has advised that a Regulation 4 Authority may be required to access the land and undertake the proposed activities. Additionally, an application through DBCA's Disturbance Approvals System may be necessary (DBCA, 2025b). The permit holder is encouraged to liaise directly with DBCA at least 4 weeks prior to the planned commencement of works at site H ensure land access requirements are addressed (DBCA, 2025b). The permit holder has confirmed that relevant Regulation 4 Authority from DBCA has been obtained since 18th February 2025 (UGL, 2025d).

Except for a small part of clearing footprint at site G which is mapped within the registered Aboriginal Cultural Heritage named Foreshore Camping Ground (ID 3705), the application area at additional sites is not mapped within any register Aboriginal Cultural Heritage. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

**End**

# Appendix A. Additional information provided by applicant

During the assessment, the applicant responded to requests for information on the following (see below).

| Summary of additional information | Consideration of provided additional information |
|---|---|
| The necessity of extending clearing areas at site B - Joondalup tunnel 2 and site G - Canning Bridge. | The information is presented in section 1.2. |
| Information on areas cleared under CPS 10433/1. | The information is presented in section 1.2. |
| DA issued by WAPC for site H. | The information is presented in Section 3.3. |
| Commitment of planting five marri trees at site I and relevant shapefiles of revegetation area. | The information is presented in Section 3.2.2, and the commitment has been enforced as a permit condition. |
| Revision of clearing footprint and extent at site B, H, J and K to minimize the impacts to remnant vegetation. | The information is presented in Sections 1.2 and 3.1. |
| Commitments regarding temporary fence and construction materials and waste disposal at sites located within/adjacent to Bush Forever sites. | The information is presented in Section 3.2.2. |

# Appendix B. Site characteristics

## B.1. Site characteristics

In addition to the site characteristics of five approved sites (Sites B, C, E, F and G) that have been presented in the Decision Report of CPS 10433/1, the below table provides the information describing the key characteristics of four additional sites (Sites H, I, J and K) and additional information (if any) of two approved sites that have been proposed to amend the clearing area (Sites B and G). This information is based on the best information available to DWER at the time of this assessment and was used to inform the assessment of the clearing against the Clearing Principles, contained in Appendix C.

| Characteristic | Details |
|---|---|
| Local context | The application area includes nine separate sites, located within Perth Metropolitan Area.<br>Aerial imagery indicates the local areas (10-kilometre radius from the centre of the areas proposed to be cleared – excluding the ocean) retains approximately 24 per cent of the original native vegetation cover. |
| Ecological linkage | • Site H: mapped on the edge of Gnangara Ecological Linkages.<br>• Site I: not located on any formal ecological linkages, the closest one is approximately 130 metres to the south.<br>• Site J: not located on any formal ecological linkages, the closest one is approximately 1.5 kilometres to the west.<br>• Site K: mapped within to the Perth Regional Ecological Linkages. |
| Conservation areas | • Site H: partially mapped within Neerabup National Park and Bush Forever Area 383.<br>• Site I: not located within any conservation areas, the closest one is the Bush Forever Area 387, approximately 530 metres to the southwest.<br>• Site J: partially mapped within Rockingham Lakes Regional Park, Bush Forever Area 356.<br>• Site K: mapped within Rockingham Lakes Regional Park, Bush Forever Area 356. |
| Vegetation description | Environmental site assessments (Western Environmental; 2024b, 2024c, 2025a, 2025b and 2025c) indicate the vegetation within the proposed clearing area consists of:<br>• Site B: Vegetation appears to be a mixture of landscaping/revegetation. Acacia shrubland: *Acacia* sp. and *Acacia saligna* shrubland over weeds. Ground stratum covered by 25-50% weeds. Scattered young *Eucalyptus* sp. present. Scattered *Banksia sessilis*.<br>• Site H: Vegetation appears to be a mixture of landscaping/revegetation, including two vegetation types:<br>o VT01: *Acacia rostellifera*, *Chamelaucium uncinatum* and *Melaleuca huegelii* over native and non-native shrubs. The ground stratum is covered by weeds (0.3 hectares). |

| Characteristic | Details |
|---|---|
| | ○ VT02: Open shrubland dominated by *Chamelaucium uncinatum* over weedy understorey. Scattered *Banksia sessilis* (0.05 hectares with two *B. sessilis*).<br>• Site I: Two marri (*Corymbia calophylla*) trees over weeds.<br>• Site J: including two vegetation types:<br>○ VT01: Acacia woodland characterised by *Acacia rostellifera*, *Acacia cyclops* and *Hakea prostrata* over *Acanthocarpus preissii*, *Lomandra maritima* and **Asphodelus fistulosus* (0.05 hectares).<br>○ Revegetation species mix and regrowth: *Acacia rostellifera*, *Grevillea preissii*, **Eragrostis curvula* and weedy grass understory (0.14 hectares).<br>• Site K: including two vegetation types:<br>○ VT01: Revegetation and potential natural recruitment species mix. East of railway line: *Acacia rostellifera, Melaleuca huegelii, Spyridium globulosum, Grevillea preissii, Templetonia retusa, Clematis pubesences* and *Melaleuca systena* over weeds. West of railway line: mainly consists of weeds with one small *Acacia* sp. and *Jacksonia furcellata* (0.049 hectares)<br>○ VT02: Acacia shrubland dominated by *Acacia cochlearis* and *Acacia rostellifera* with some *Hakea prostrata* and *Spyridium globulosum* over *Acanthocarpus preissii, Clematis linearifolia* and *Lomandra maritima* in the understory (0.019 hectares).<br>Representative photos are available in Appendix E.<br><br>This is partially consistent with the Heddle et al. (1980) mapped vegetation types:<br>• Cottesloe Complex-Central and South, which is described as mosaic of woodland of *Eucalyptus gomphocephala* (Tuart) and open forest of *Eucalyptus gomphocephala* (Tuart) - *Eucalyptus marginata* (Jarrah) - *Corymbia calophylla* (Marri); closed heath on the Limestone outcrops (Site H).<br>• Guildford Complex, which is described 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) - *Melaleuca rhaphiophylla* (Swamp Paperbark) (Site I).<br>• Quindalup Complex, which is 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) forest of Geographe Bay (Sites J and K).<br><br>The mapped vegetation types retain approximately 32.2, 5.1 and 60.5 per cent of the original extents, respectively (Government of Western Australia, 2019b). |
| Vegetation condition | Environmental site assessments (Western Environmental; 2024b, 2024c, 2025b and 2025c) indicate the vegetation within the proposed clearing area is in Good to Completely degraded (Keighery, 1994) condition, specifically:<br>• Site H: Degraded.<br>• Site I: Completely Degraded.<br>• Site J: Good and Completely Degraded.<br>• Site K: Good to Completely Degraded<br>The full Keighery (1994) condition rating scale is provided in Appendix D. Representative photos are available in Appendix E. |
| Climate | **Climate**<br>Annual mean maximum temperature is 24.9 degrees Celsius.<br>Annual mean minimum annual temperature is 13.0 degrees Celsius.<br>Rainfall: Mean annual rainfall is 717.4 millimetres.<br>(Data taken from Perth Metro) (BOM, 2025). |
| Soil and landform description | The soils are mapped as: |

<table>
<tr><th>Characteristic</th><th>Details</th></tr>
<tr><td></td><td>
<table>
<tr><th>Site</th><th>Code</th><th>Name</th><th>Soil type</th></tr>
<tr><td>H</td><td>211Sp__Kls</td><td>Karrakatta shallow soils Phase</td><td>Low hills and ridges. Bare limestone or shallow siliceous or calcareous sand over limestone.</td></tr>
<tr><td>I</td><td>213Pj__S10</td><td>EnvGeol S10 Phase</td><td>SAND - as S8 as relatively thin veneer over sandy clay to clayey sand. Of eolian origin.</td></tr>
<tr><td>J</td><td>211Qu__Qf3</td><td>Quindalup South Qf3 Phase</td><td>Relict foredunes forming a plain which is topographically lower than Qf2 with prominent ridges and swales. Swamps frequently occupy the swales. Deep calcareous sands with variable organic matter.</td></tr>
<tr><td>K</td><td>211Qu__Qf2a</td><td>Quindalup South Qf2a Phase</td><td>More prominent relict foredune ridges which occur within unit Qf2, with deep uniform calcareous sands.</td></tr>
</table>
(DPIRD, 2022)
</td></tr>
<tr><td>Land degradation risk</td><td>Most of the sites have low to medium land degradation risks, except for site H with high risk of wind erosion and site I with high risks of subsurface acidification and water logging (See details in Appendix B.3).</td></tr>
<tr><td>Waterbodies</td><td>The desktop assessment and aerial imagery indicated that no watercourses transect the sites proposed to be cleared. The distance of the closest waterbody of each site ranges from approximately 110 to 530 metres.</td></tr>
<tr><td>Hydrogeography</td><td>Sites H and I are within the Perth Groundwater Area, and sites J and K is within the Rockingham Groundwater Area proclaimed under the RiWI Act.<br>Sites H is mapped within the Perth Coastal and Gwelup Underground Water Pollution Control Area.<br>All sites are mapped with salinity of 500-1000 milligrams per litre total dissolved solids.</td></tr>
<tr><td>Flora</td><td>There are records of 236 threatened and priority flora species in the combined local area (combined 10-kilometre radius buffers of nine sites), including two species presumed extinct, 60 species listed as threatened, and 174 priority species.</td></tr>
<tr><td>Ecological communities</td><td>All four additional sites are not mapped within any threatened or priority ecological communities. The distance from each site to its closest threatened or priority ecological communities ranges from approximately 130 to 520 metres.</td></tr>
<tr><td>Fauna</td><td>The desktop assessment identified that a total of 112 threatened or priority fauna species have been recorded within the combined local area, including 45 threatened species, 30 priority fauna species, and 37 specially protected fauna species. Black cockatoo records are mapped within the local area (10-kilometre radius) of all sites with the nearest records ranging from approximately 90 metres to 1.2 kilometres from the sites.</td></tr>
</table>

## B.2. Vegetation extent

| | Pre-European extent (ha) | Current extent (ha) | Extent remaining (%) | Current extent in all DBCA managed land (ha) | Current proportion (%) of pre-European extent in all DBCA managed land |
|---|---|---|---|---|---|
| IBRA bioregion* | | | | | |
| Swan Coastal Plain | 1,501,221.93 | 579,813.47 | 38.62 | 222,916.97 | 14.85 |
| Vegetation complex | | | | | |

| | Pre-European extent (ha) | Current extent (ha) | Extent remaining (%) | Current extent in all DBCA managed land (ha) | Current proportion (%) of pre-European extent in all DBCA managed land |
|---|---|---|---|---|---|
| Cottesloe Complex-Central and South** | 45,299.61 | 14,567.87 | 32.16 | 6,606.12 | 14.58 |
| Guildford Complex ** | 90,513.13 | 4,607.91 | 5.09 | 287.49 | 0.32 |
| Quindalup Complex ** | 54,573.87 | 33,011.64 | 60.49 | 5,994.64 | 10.98 |

*Government of Western Australia (2019a)

**Government of Western Australia (2019b)

### B.3. Land degradation risk table

| Risk categories | Site H | Site I | Site J | Site K |
|---|---|---|---|---|
| Wind erosion | H1 | M2 | M1 | M2 |
| Water erosion | L1 | M1 | L1 | L2 |
| Salinity | L1 | M1 | L1 | L1 |
| Subsurface Acidification | L2 | H2 | L1 | L1 |
| Flood risk | L1 | L2 | L1 | L1 |
| Water logging | L1 | H1 | L2 | L1 |
| Phosphorus export risk | L2 | M2 | L2 | M2 |

*Note:*

L1 <3% of map unit has a moderate/high to high/extreme (or is presently acid/saline for the risk of subsurface acidification/salinity)

L2 3-10% of map unit has a moderate/high to high/extreme (or is presently acid/saline for the risk of subsurface acidification/salinity)

M1 10-30% of map unit has a moderate/high to high/extreme (or is presently acid/saline for the risk of subsurface acidification/salinity)

M2 30-50% of map unit has a moderate/high to high/extreme (or is presently acid/saline for the risk of subsurface acidification/salinity)

H1 50-70% of map unit has a moderate/high to high/extreme (or is presently acid/saline for the risk of subsurface acidification/salinity)

H2 >70% of map unit has a moderate/high to high/extreme (or is presently acid/saline for the risk of subsurface acidification/salinity)

## Appendix C. Assessment against the clearing principles

| Assessment against the clearing principles | Variance level | Is further consideration required? |
|---|---|---|
| **Environmental value: biological values** | | |
| Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."*<br>Assessment:<br>The additional area proposed to be cleared does not contain significant flora, fauna, habitats, assemblages of plants. | Not likely to be at variance<br>(as per CPS 10433/1) | Yes<br>*Refer to Section 3.2.1, above.* |

| Assessment against the clearing principles | Variance level | Is further consideration required? |
|---|---|---|
| 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."*<br>Assessment:<br>Some sites of the application area comprise vegetation that can provide suitable habitat for conservation significant fauna species such as black cockatoos. | May be at variance<br>(changed from CPS 10433/1) | Yes<br>*Refer to Section 3.2.1, above.* |
| Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."*<br>Assessment:<br>The area proposed to be cleared is unlikely to contain habitat for threatened flora species. | Not likely to be at variance<br>(as per CPS 10433/1) | No |
| 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."*<br>Assessment:<br>In addition to site F and G mapped within the Tuart woodland TEC and Banksia woodland TEC which have been discussed in the Clearing Permit Decision Report CPS 10433/1, the additional sites are not mapped within any TEC. | May be at variance<br>(as per CPS 10433/1) | No |
| **Environmental value: significant remnant vegetation and conservation areas** | | |
| 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."*<br>Assessment:<br>Site I is mapped as vegetation complex of Guildford (site I) which only has 5.1 per cent of pre-European extent remaining. However, given the completely degraded condition of the vegetation at Site I, the vegetation is not considered to represent this highly cleared vegetation complex. | Not likely to be at variance<br>(as per CPS 10433/1) | No |
| 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."*<br>Assessment:<br>Site H, J and K is entirely or partially mapped within Bush Forever sites. In addition, a portion of site H is mapped within Neerabup National Park; while portions of sites J and K are mapped within Rockingham Lakes Regional Park. Given this, the proposed clearing is likely to have impacts to the environmental values of conservation areas. | At variance<br>(changed from CPS 10433/1) | Yes<br>*Refer to Section 3.2.2, above.* |
| **Environmental value: land and water resources** | | |
| 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."*<br>Assessment:<br>Given no water courses or wetlands are recorded within the application sites, the proposed clearing is not within an environment associated with a watercourse or wetland. | Not at variance<br>(as per CPS 10433/1) | No |

| Assessment against the clearing principles | Variance level | Is further consideration required? |
|---|---|---|
| Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."*<br>Assessment:<br>The mapped soils are highly susceptible to wind erosion, subsurface acidification and phosphorus export. However, noting the clearing extent and the condition of the vegetation proposed to be cleared, the proposed clearing is not likely to have an appreciable impact on land degradation. | Not likely to be at variance<br>(as per CPS 10433/1) | No |
| 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."*<br>Assessment:<br>Given no water courses are recorded within the application sites, the proposed clearing is unlikely to impact surface or ground water quality. | Not at variance<br>(as per CPS 10433/1) | No |
| Principle (j): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."*<br>Assessment:<br>The mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding.<br>Given no water courses are recorded within the application sites, the proposed clearing is unlikely to contribute to waterlogging. | Not likely to be at variance<br>(as per CPS 10433/1) | No |

## Appendix D. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

**Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)**

| Condition | Description |
|---|---|
| Pristine | Pristine or nearly so, no obvious signs of disturbance. |
| Excellent | Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species. |
| Very good | Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing. |
| Good | Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing. |

| Condition | Description |
|---|---|
| Degraded | Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing. |
| Completely degraded | The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as ‘parkland cleared’ with the flora comprising weed or crop species with isolated native trees or shrubs. |

## Appendix E. Photographs of vegetation and biological survey information excerpts

Representative photos of the vegetation proposed to be cleared at additional sites (Western Environmental, (Western Environmental; 2024a, 2024c, 2025a, 2025b and 2025c).

**Site B**

| Photo 1 | | Date: 18 October 2024 |
|---|---|---|

**Description:** Vegetation within VT01 Acacia shrubland within clearing footprint, Degraded

| Photo 2 | | Date: 18 October 2024 |
|---|---|---|

**Description:** Vegetation within VT01 Acacia shrubland within clearing footprint, Degraded

**Site H**

| Photo 2 | | Date: 18 October 2024 |
|---|---|---|

**Description:** Vegetation within VT01 Acacia shrubland, within clearing extent, west of cycle path, Degraded

| Photo 3 | | Date: 18 October 2024 |
|---|---|---|

**Description:** Vegetation within VT02, Acacia shrubland, Degraded

**Site I**

| Photo 1 | | Date: 18 October 2024 |
|---|---|---|

**Description:** Vegetation present within the Site

**Site J**

| Photo 4 | | Date: 17 July 2023 |
|---|---|---|
| Description: Vegetation where the proposed new Western Power supply is located | | |

| Photo 5 | | Date: 17 July 2023 |
|---|---|---|
| Description: Vegetation within proposed monopole fold direction | | |

**Site K**

| Photo 1 | | Date: 18 October 2024 |
|---|---|---|

Description: Vegetation within VT01, west of the railway, Completely Degraded

| Photo 2 | | Date: 18 October 2024 |
|---|---|---|

Description: Vegetation within VT01, east of the railway, Degraded


Figure E.1. Mapping of vegetation types at site B (Western Environmental, 2025a & UGL, 2025c)

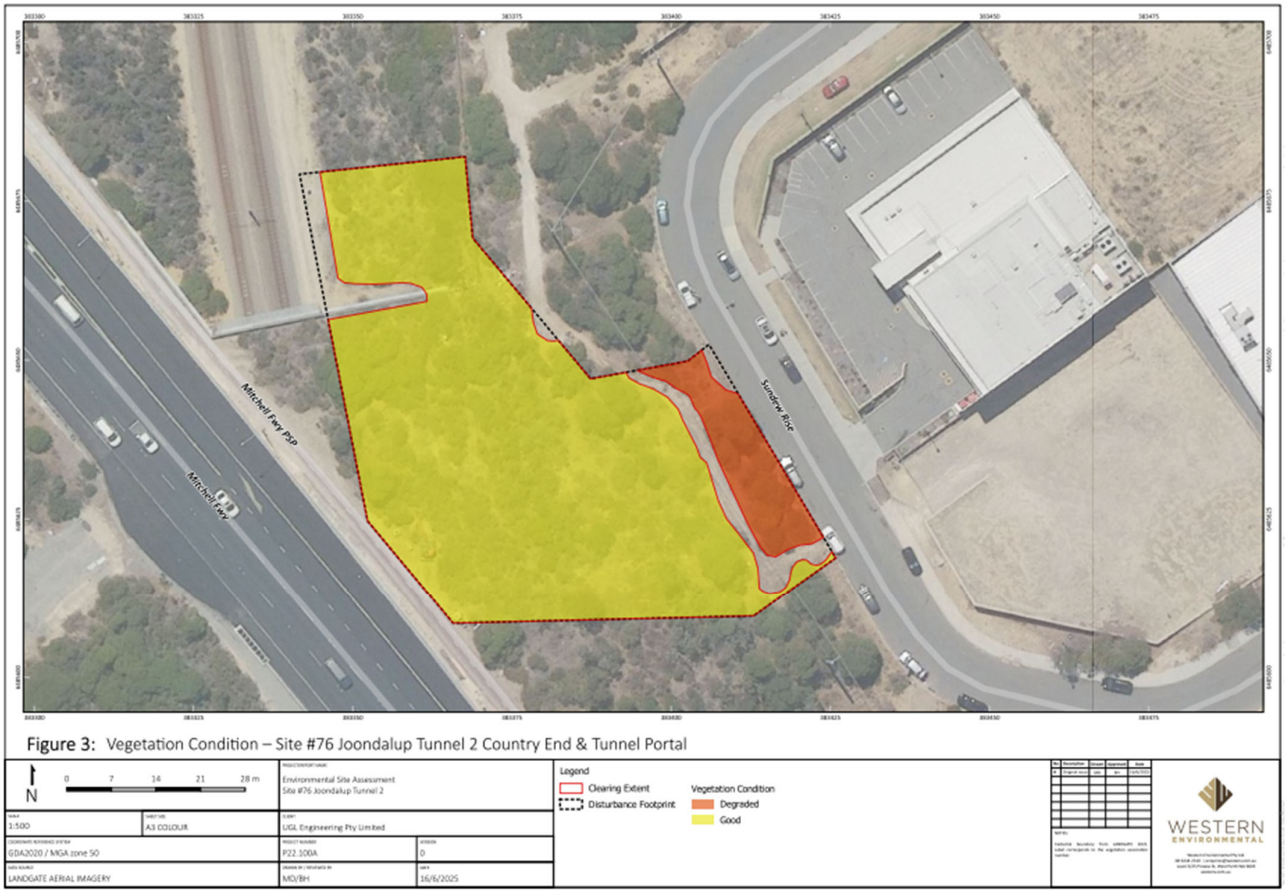


Figure E.2. Mapping of vegetation conditions at site B (Western Environmental, 2025a & UGL, 2025c)

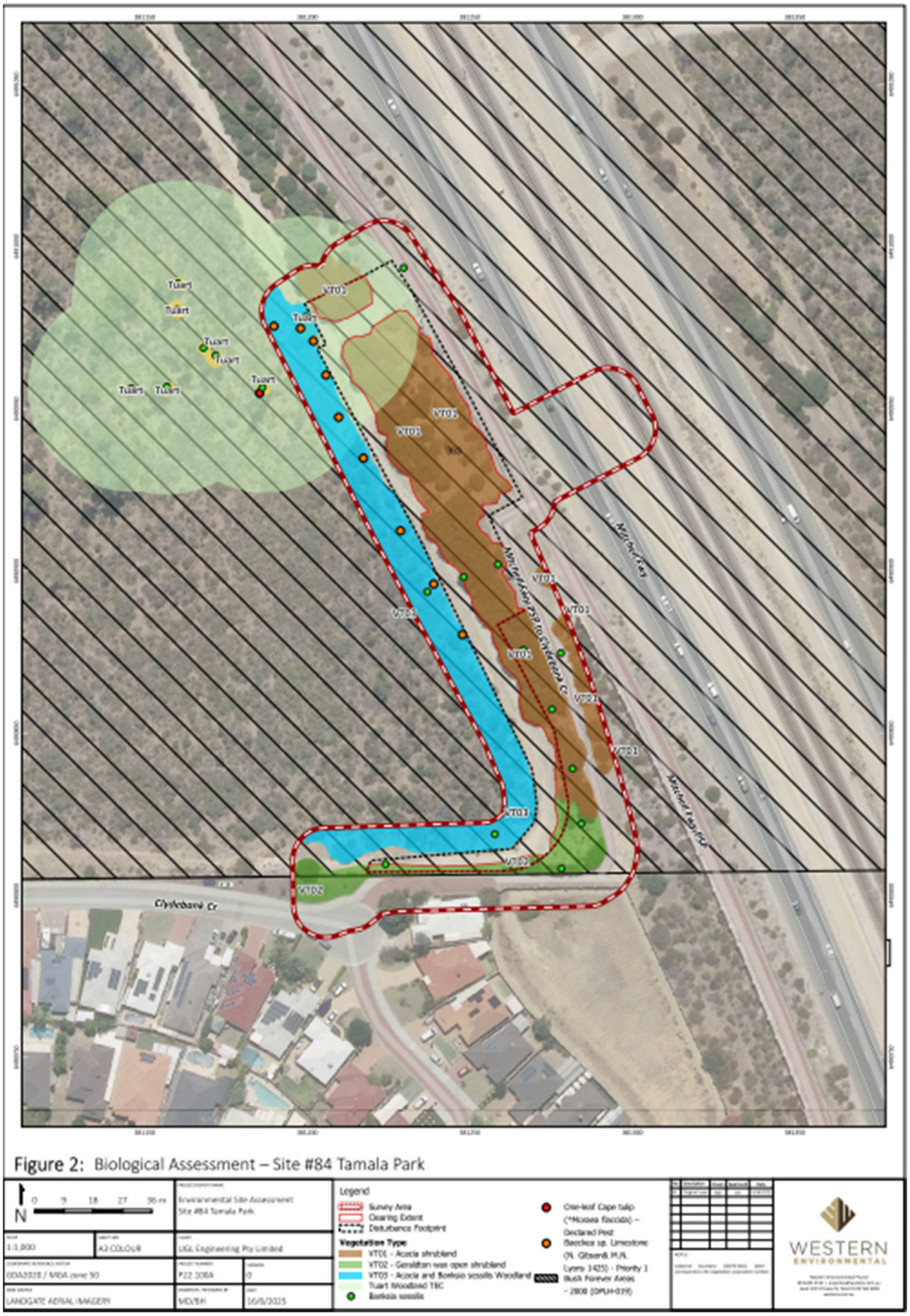


Figure E.3. Mapping of vegetation types at site H (Western Environmental, 2025b & UGL, 2025c)

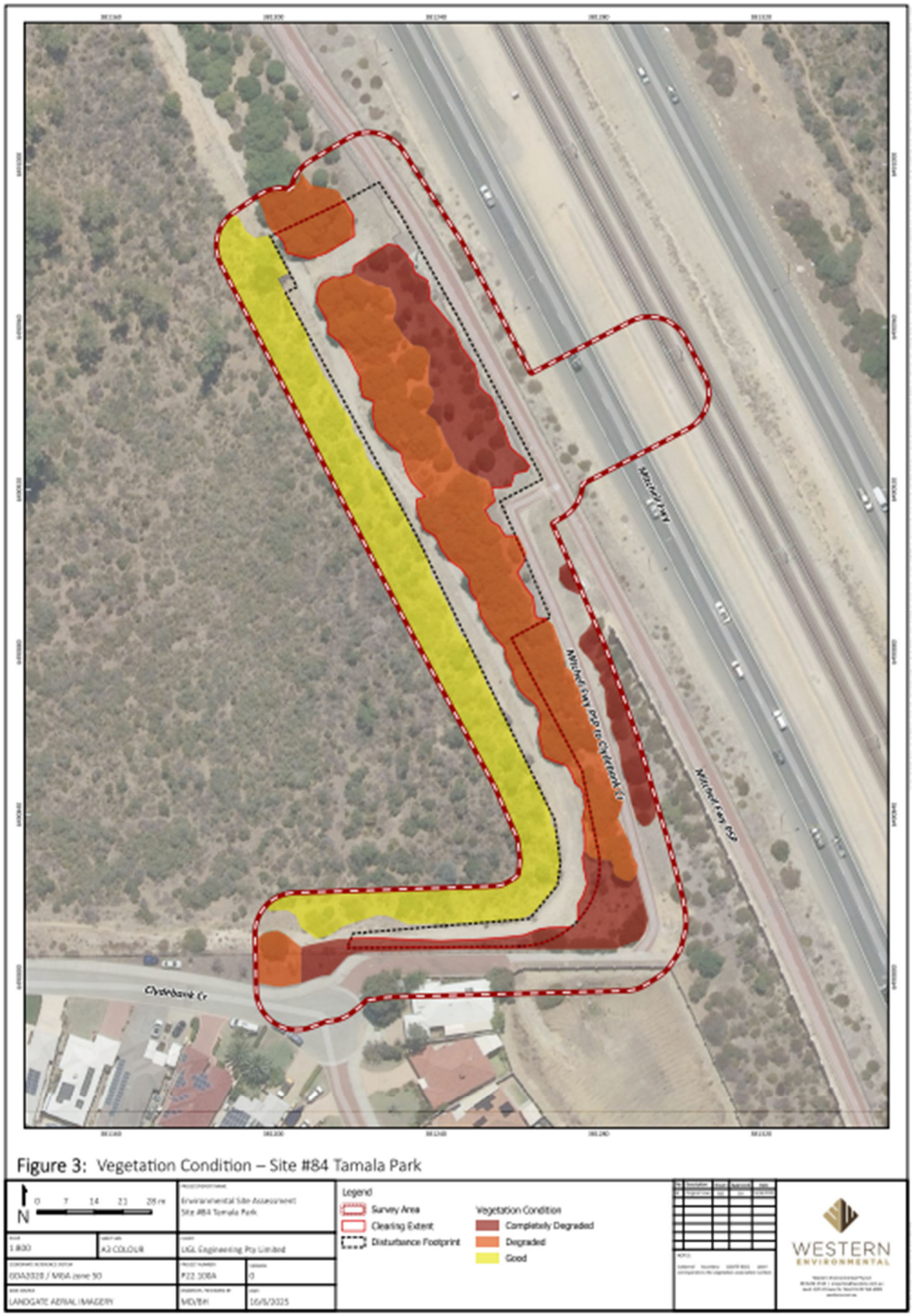


Figure E.4. Mapping of vegetation conditions at site H (Western Environmental, 2025b & UGL, 2025c)

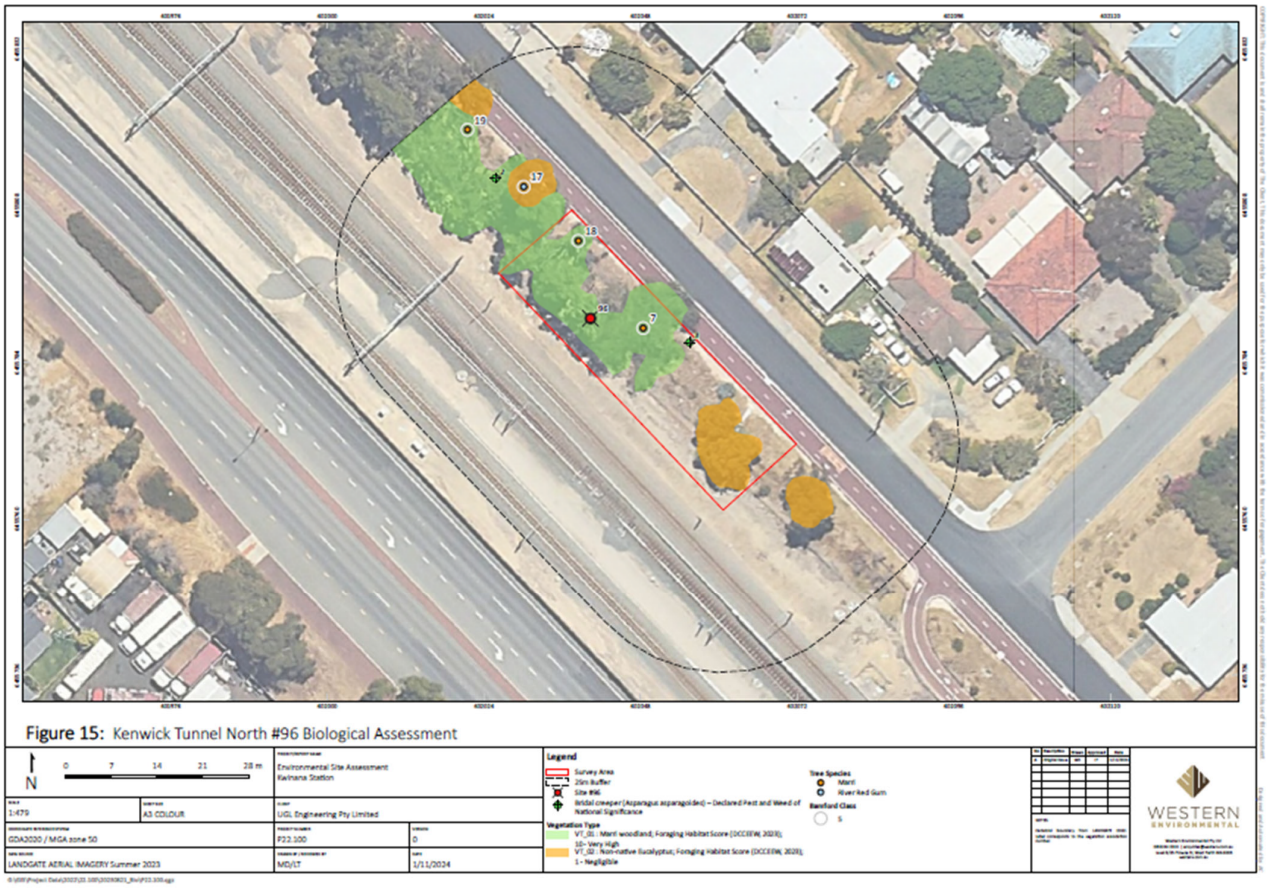


Figure E.5. Mapping of vegetation types at site I (Western Environmental, 2024b)

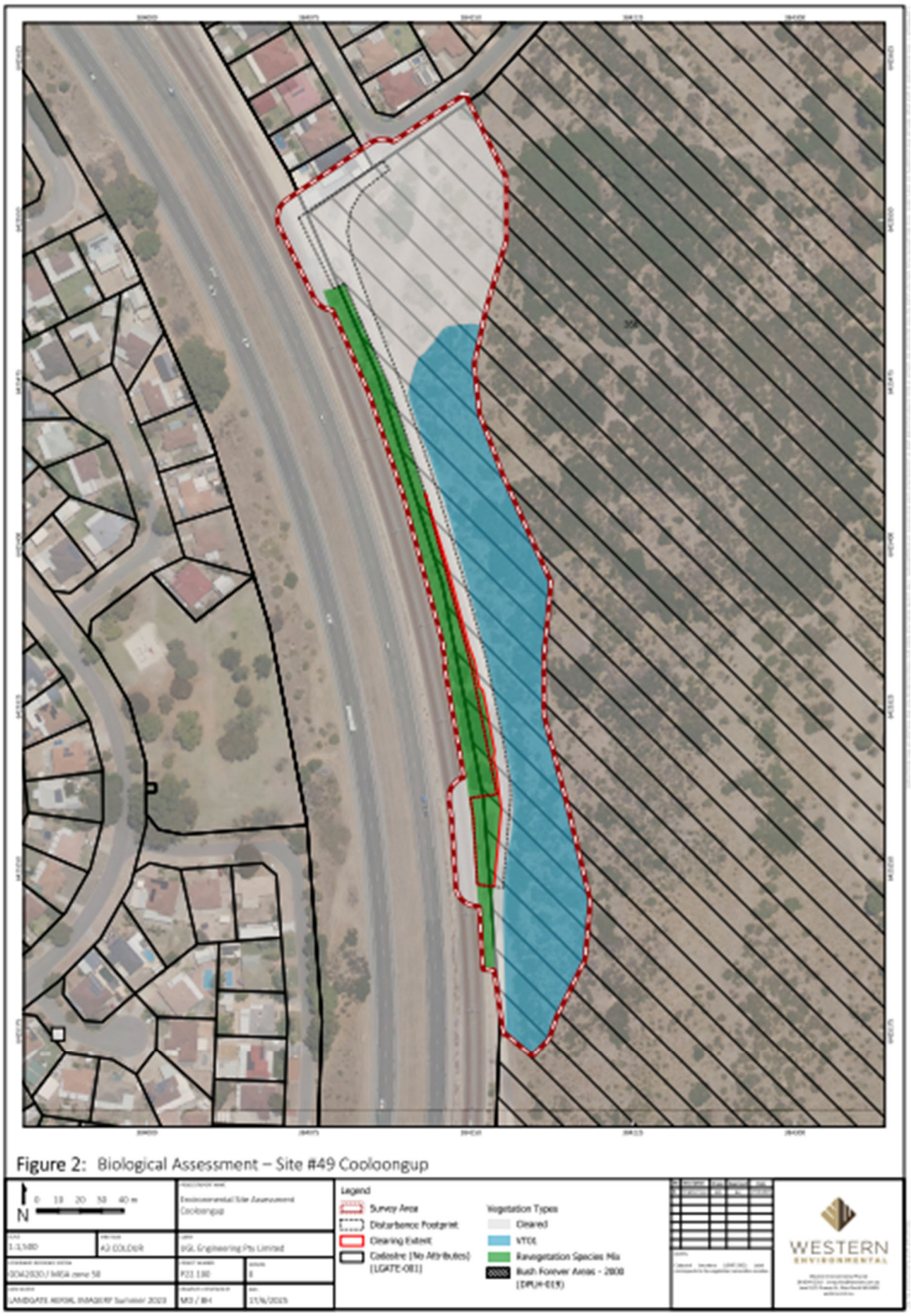


Figure E.6. Mapping of vegetation types at site J (Western Environmental, 2024c & UGL, 2025c)

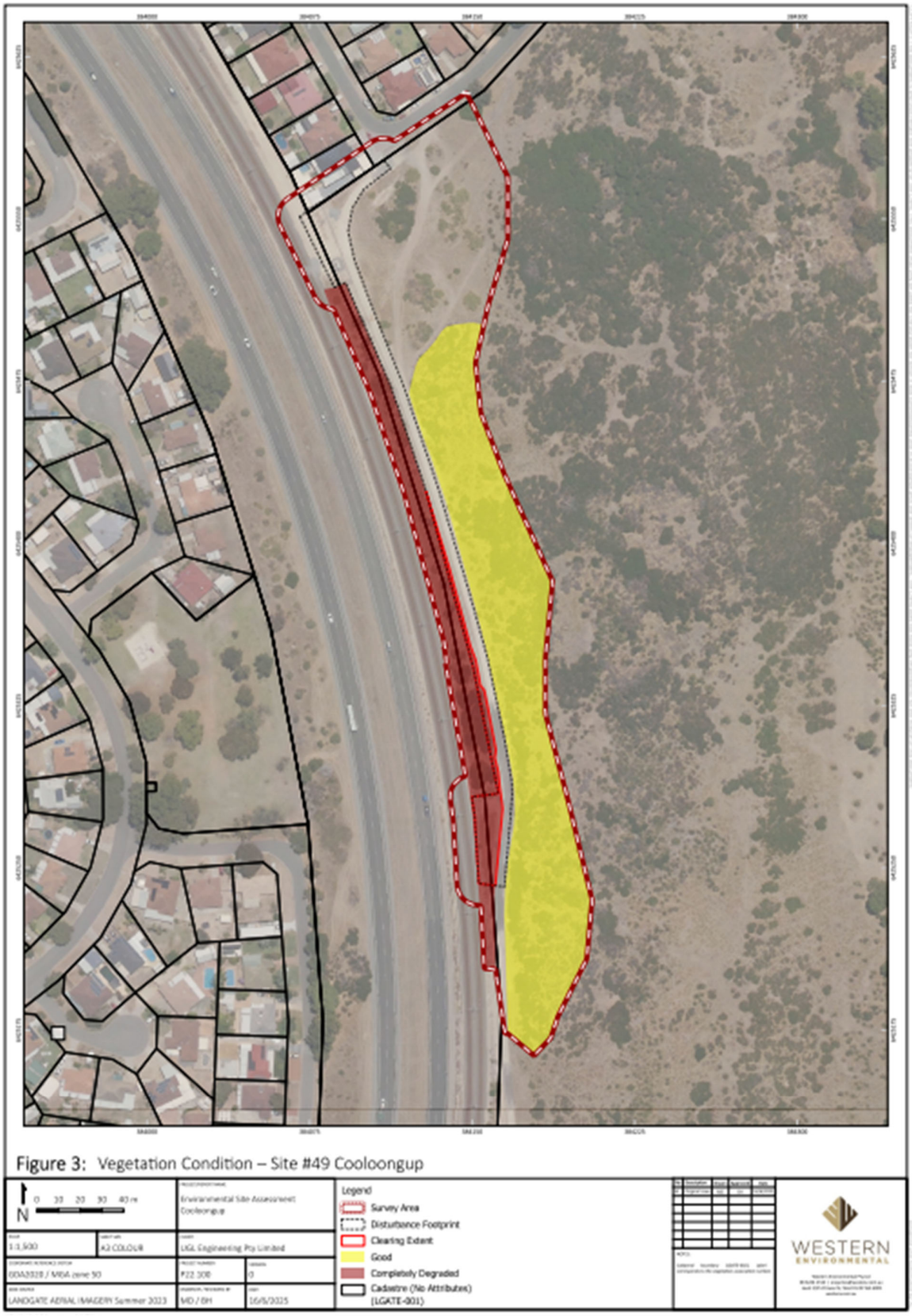


Figure E.7. Mapping of vegetation conditions at site J (Western Environmental, 2024c & UGL, 2025c)


Figure E.8. Mapping of vegetation types at site K (Western Environmental, 2025c & UGL, 2025c)

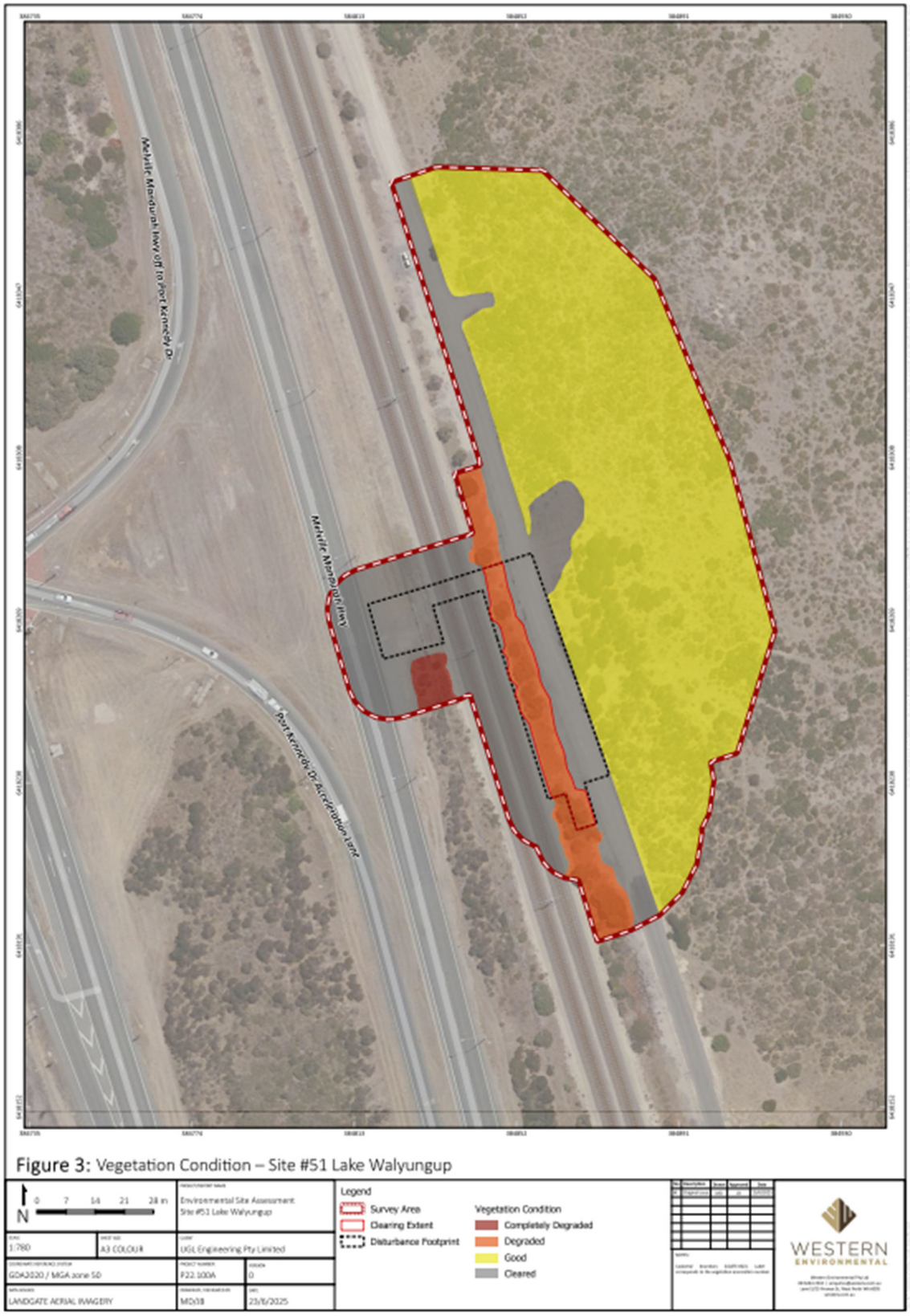


Figure E.9. Mapping of vegetation condition at site K (Western Environmental, 2025c & UGL, 2025c)

# Appendix F. Sources of information

## F.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Contours (DPIRD-073)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- IBRA Vegetation Statistics
- Imagery
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Best Available

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) – Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities

## F.2. References

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City of Wanneroo (2025) *Comments on the clearing permit amendment application CPS 10433/2*, received 14 May 2025 (DWER Ref: DWERDT1119202).

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