



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 10667/1
Permit Holder:	City of Kalgoorlie- Boulder
Duration of Permit:	From 1 December 2024 to 1 December 2034

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 road construction, maintenance and hazard reduction.

2. Land on which clearing is to be done

Unallocated Crown Land (PIN 11796049), Plumridge Lakes and Rawlinna

3. Clearing authorised

The permit holder must not clear more than 120 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1 (Maps A-P).

4. Period during which clearing is authorised

The permit holder must not clear any *native vegetation* after 1 December 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 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*:

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

7. Directional clearing

The permit holder must:

- (a) conduct clearing activities in a slow, progressive manner towards adjacent 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. Wind erosion management

The permit holder must commence road construction and maintenance activities no later than three (3) months after undertaking authorised clearing to reduce the potential for wind erosion.

9. Limitation of clearing – road material sourcing

With regards to clearing for road material sourcing, the permit holder must:

- (a) not clear native vegetation from more than one (1) site within the areas cross-hatched yellow in Figure 1 at any given time;
- (b) road material extraction activities must occur within two (2) months of undertaking any clearing for that purpose under this permit;
- (c) not clear more than two (2) hectares at any given time within the area cleared in accordance with condition 9(a);
- (d) 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;
- (e) construct drainage around the cleared area and topsoil stockpiles.

10. Rehabilitation and revegetation of temporary clearing areas

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) construct drainage around topsoil stockpiles;
- (c) at an optimal time within 12 months following completion of temporary clearing, revegetate the areas not required for the authorised purpose for which they were cleared under this permit, by:
 - (i) ripping the ground on the contour to remove soil compaction; and
 - (ii) laying the vegetative material and topsoil retained under condition 10(a) on the cleared area(s).
- (d) within 24 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 10(c) of this permit:
 - (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
 - (ii) engage an *environmental specialist* to make a determination as to whether the composition, structure and density determined under condition 10(d)(i) of this permit will, without further *revegetation*, result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area.
- (e) if the determination made by the environmental specialist under condition 10(d)(ii) is that the species composition, structure, and density determined under condition 10(d)(i) will not, without further revegetation, result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, the permit holder must *revegetate* the area by deliberately planting and/or direct seeding native vegetation seeds 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
- (f) where additional planting or direct seeding of native vegetation is undertaken in accordance with condition 10(e), the permit holder must repeat the activities required by condition 10(d) and 10(e) within 24 months of undertaking the additional planting or *direct seeding* of native vegetation.
- (g) where a determination is made by an *environmental specialist* under condition 10(d)(ii) 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, that determination shall be submitted to the CEO within three months of the determination being made by the *environmental specialist*.

PART III - RECORD KEEPING AND REPORTING

11. 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	<ul style="list-style-type: none"> (a) the species composition, structure, and density of the cleared area; (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; (c) the date that the area was cleared; (d) the size of the area cleared (in hectares); (e) the direction that clearing was undertaken; (f) the date that clearing ceased; (g) the date that material extraction from within each material sourcing site ceased in accordance with condition 9(b); (h) the date that material extraction from within each material sourcing site began in accordance with condition 9(b); (i) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 5; and (j) actions taken to minimise the risk of the introduction and spread of <i>weeds</i> in accordance with condition 6
2.	In relation to rehabilitation and revegetation of areas pursuant to condition 10 of the permit	<ul style="list-style-type: none"> (a) actions taken to retain vegetative material and topsoil; (b) actions taken to construct drainage; (c) the size of the area revegetated; (d) the date(s) on which the area revegetation was undertaken; (e) the revegetation activities undertaken; (f) the date(s) where additional planting or direct seeding of native vegetation was undertaken; and (g) the boundaries of the area revegetated (recorded digitally as a shapefile).

12. Reporting

The permit holder must provide to the *CEO* the records required under condition 11 of this permit when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table 2 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 <i>Environmental Protection Act 1986</i> .
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.
department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (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
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	<i>Environmental Protection Act 1986</i> (WA)
fill	means material used to increase the ground level, or to fill a depression.
local provenance	means native vegetation seeds and propagating material from natural sources within 25 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the area cleared;
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.
planting	planting means a method of re-establishing vegetation through the use of
revegetation, revegetate, revegetated	means the re-establishment of a cover of native vegetation in an area such that the species composition, structure and density is similar to pre-clearing vegetation types in that area, and can involve regeneration, direct seeding and/or planting;
weeds	means any plant – <ul style="list-style-type: none"> (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i>; 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.

END OF CONDITIONS



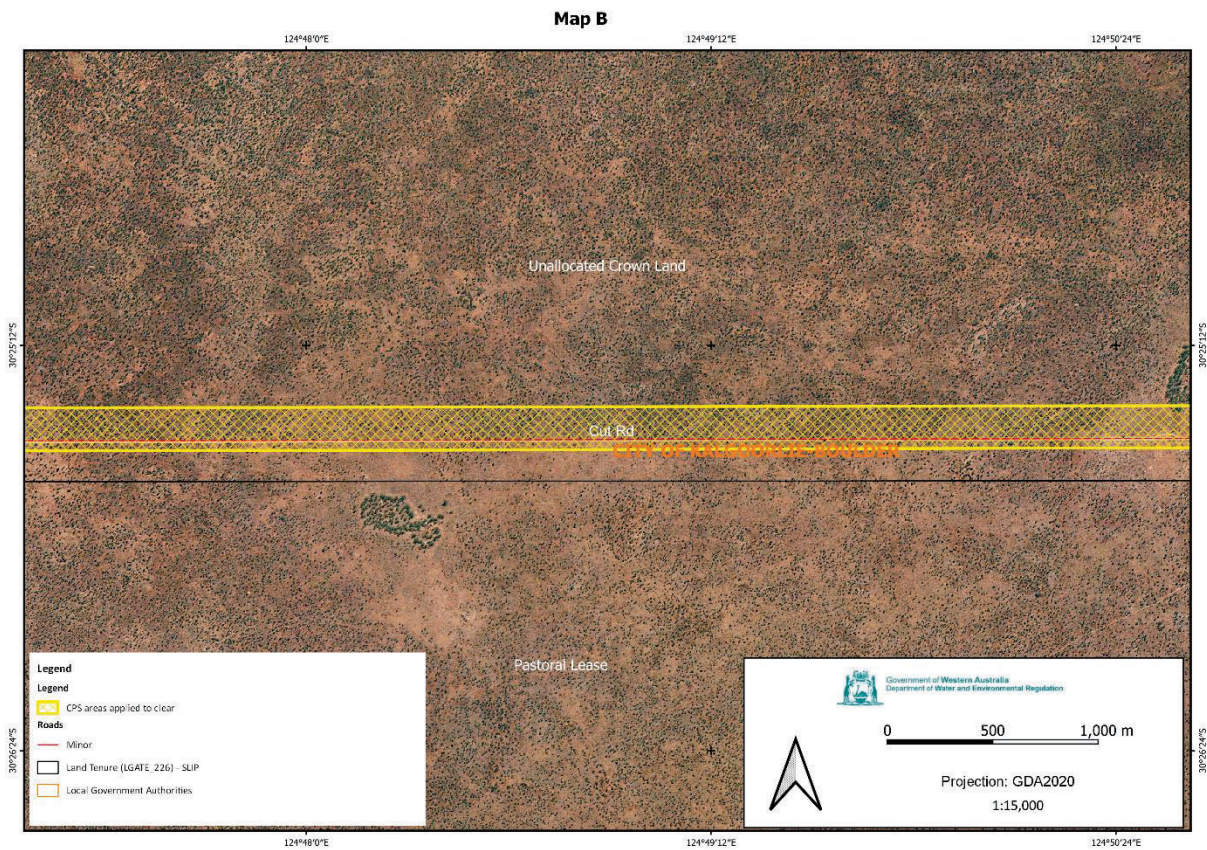
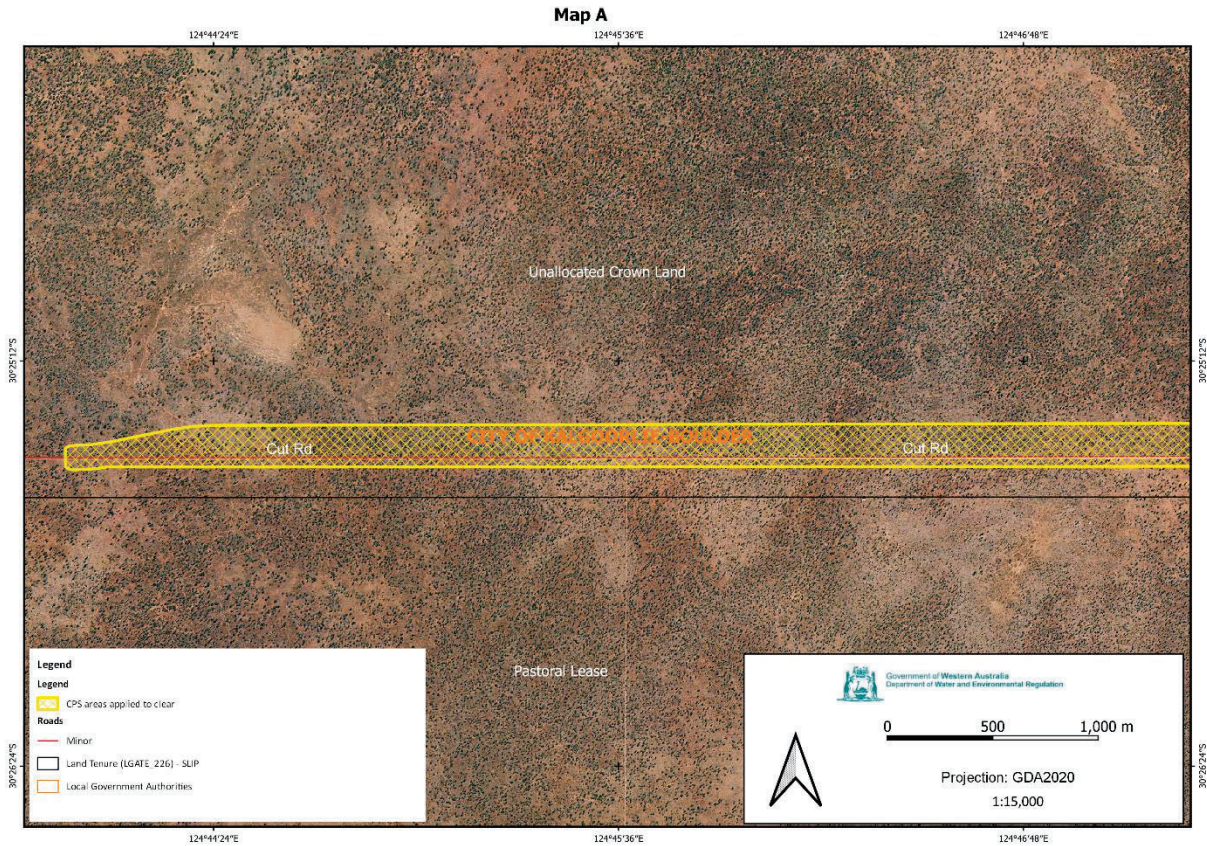
Ryan Mincham
MANAGER
NATIVE VEGETATION REGULATION

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

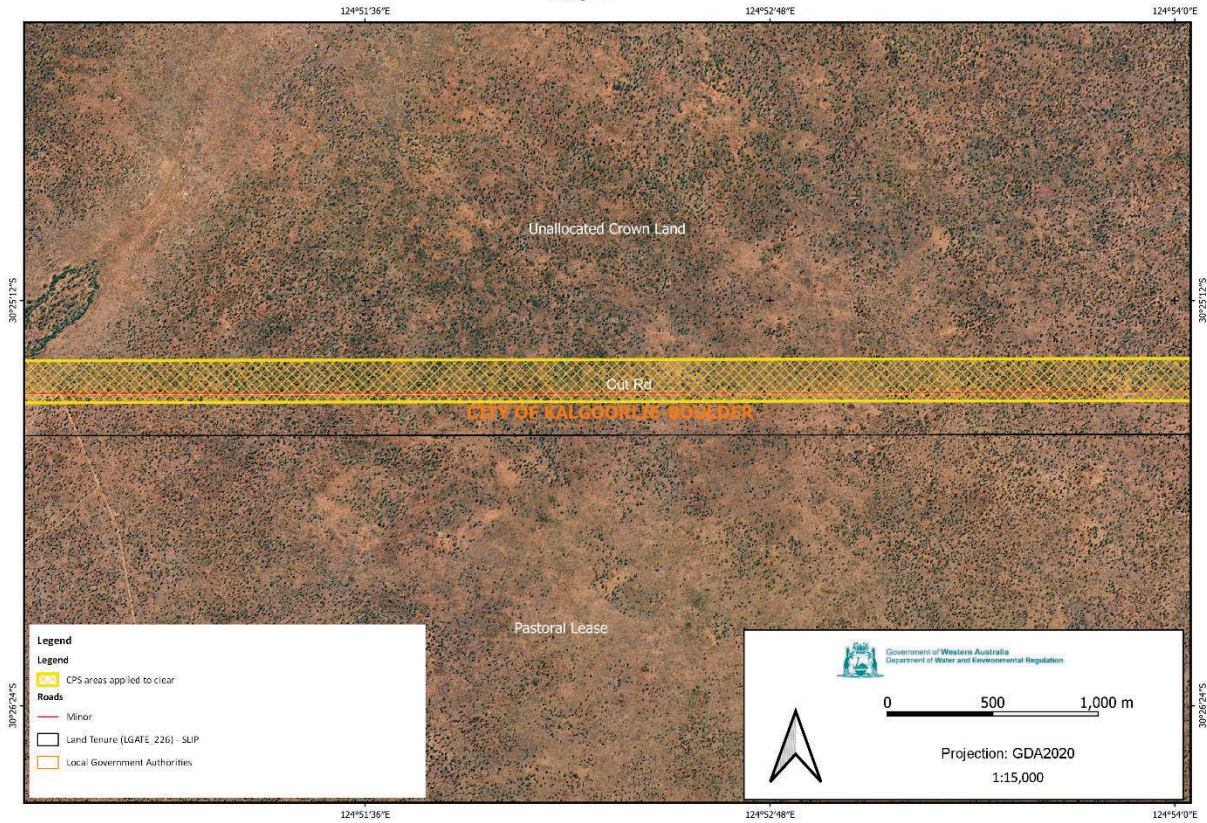
8 November 2024

Schedule 1

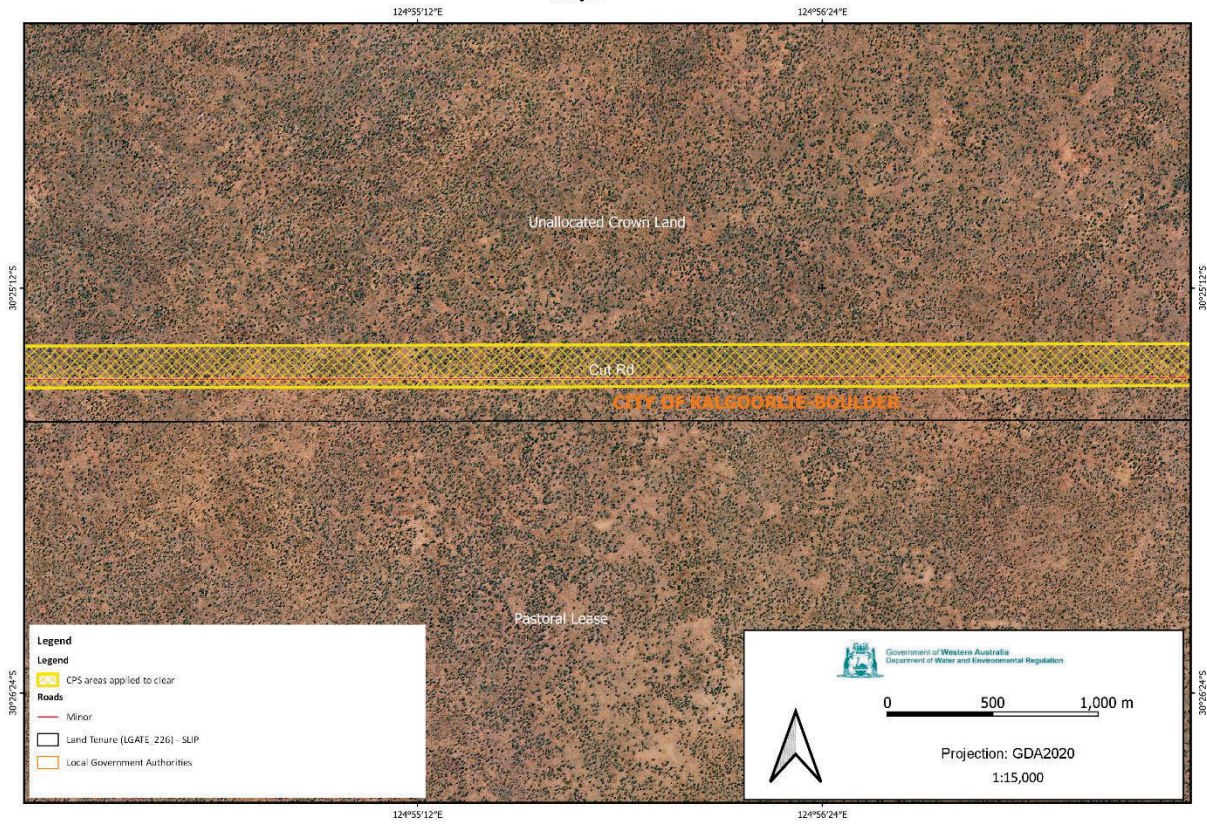
The boundary of the area authorised to be cleared is shown in the maps below (Figure 1).



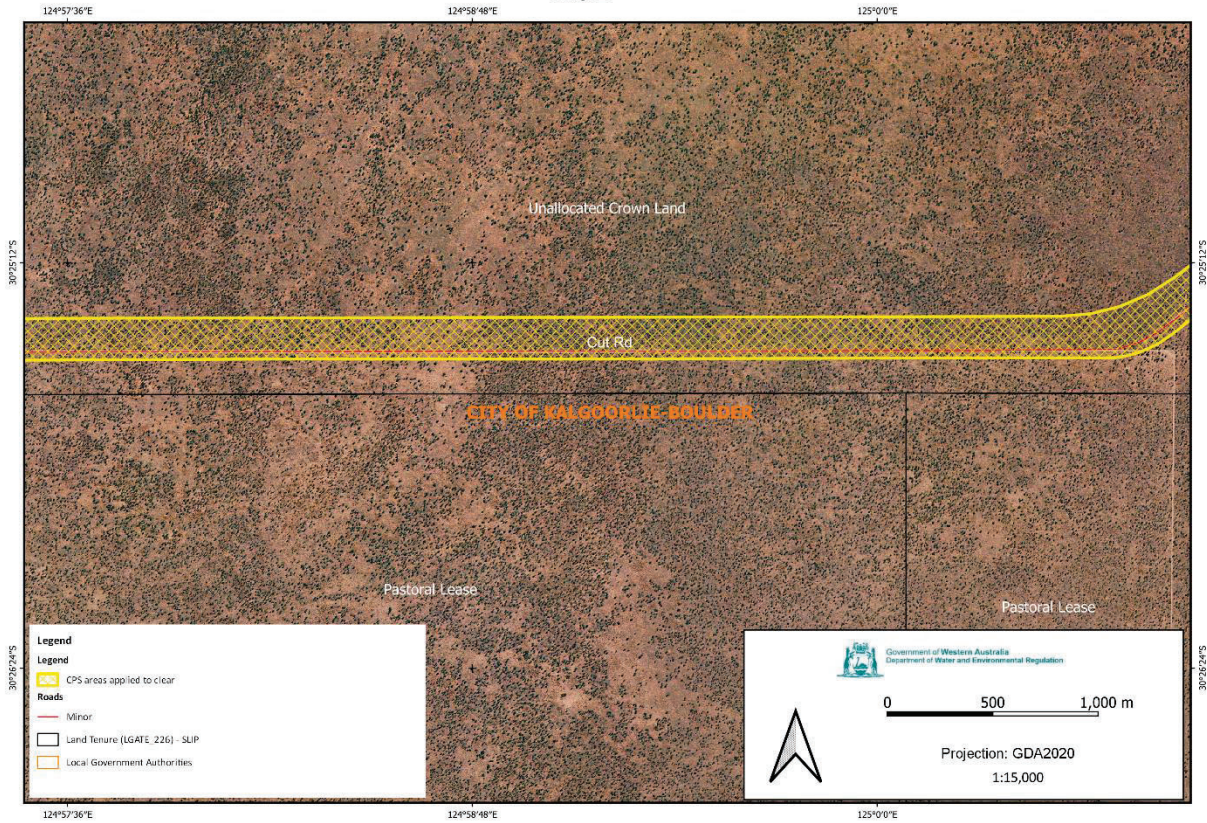
Map C



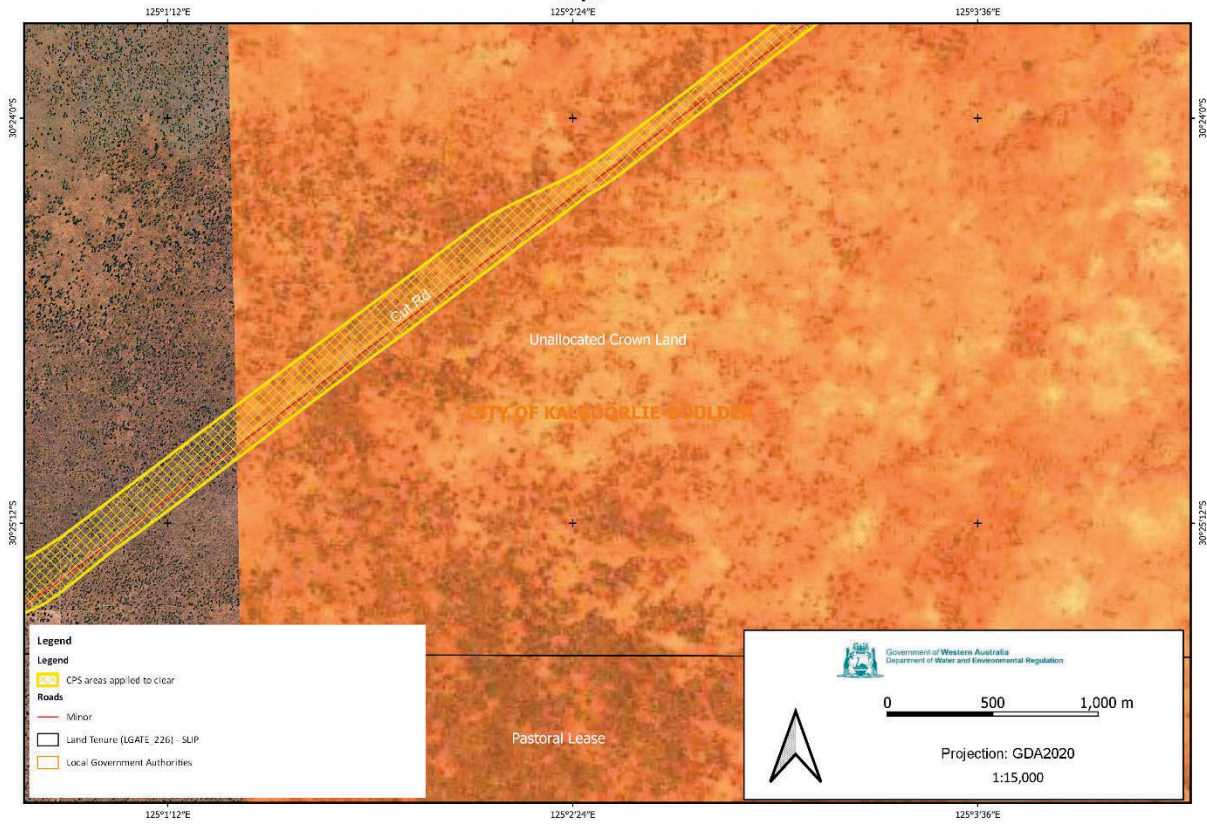
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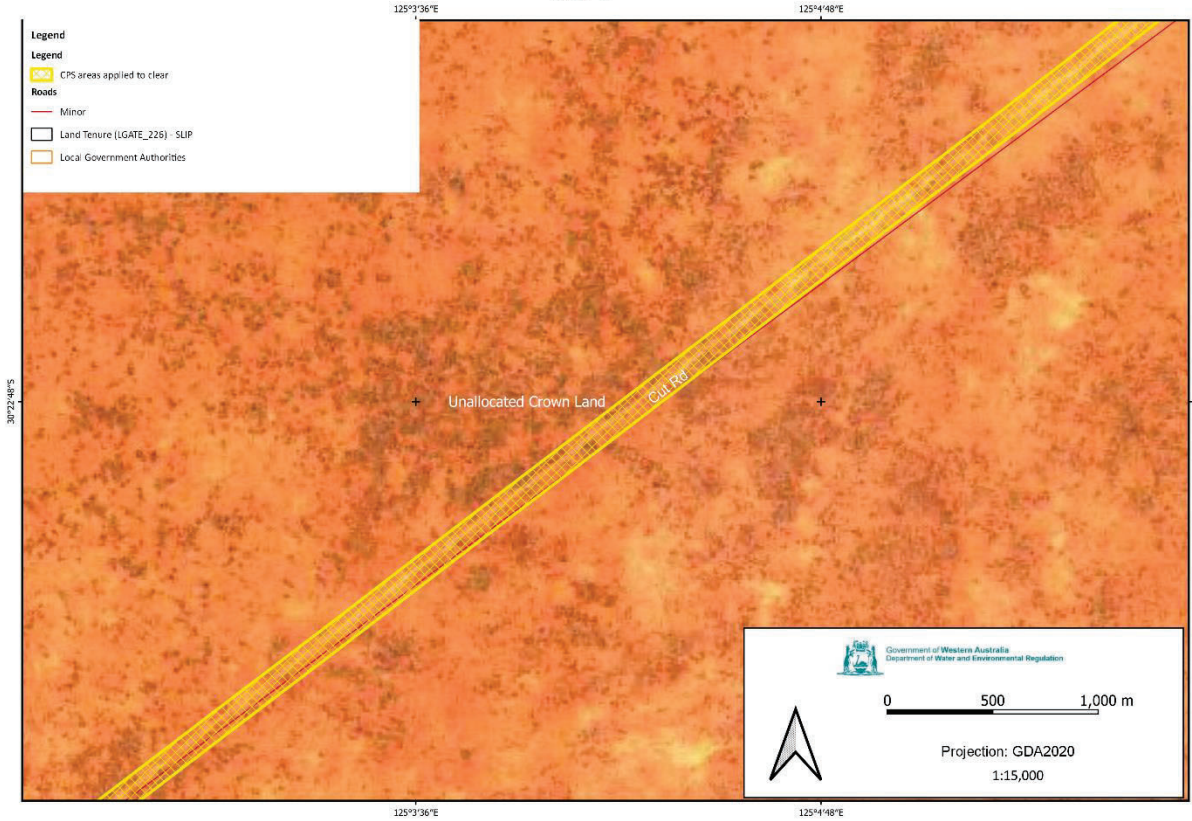
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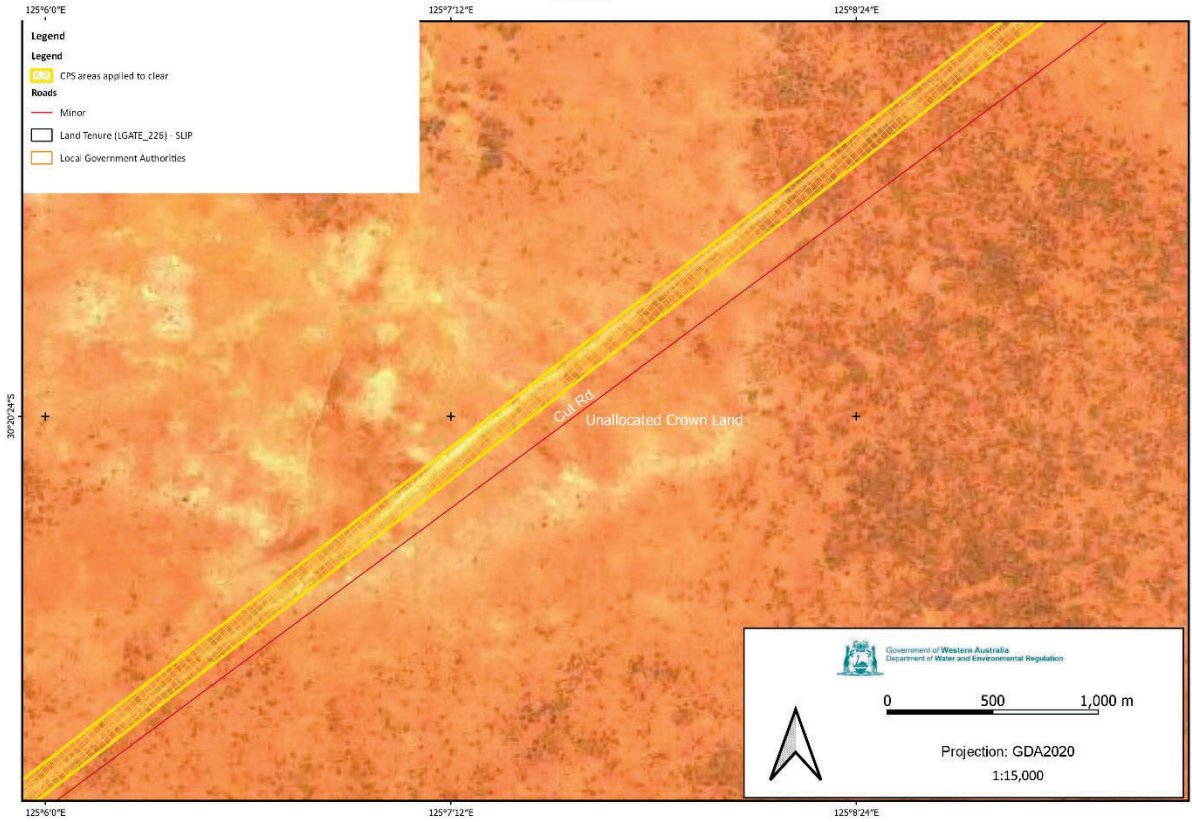
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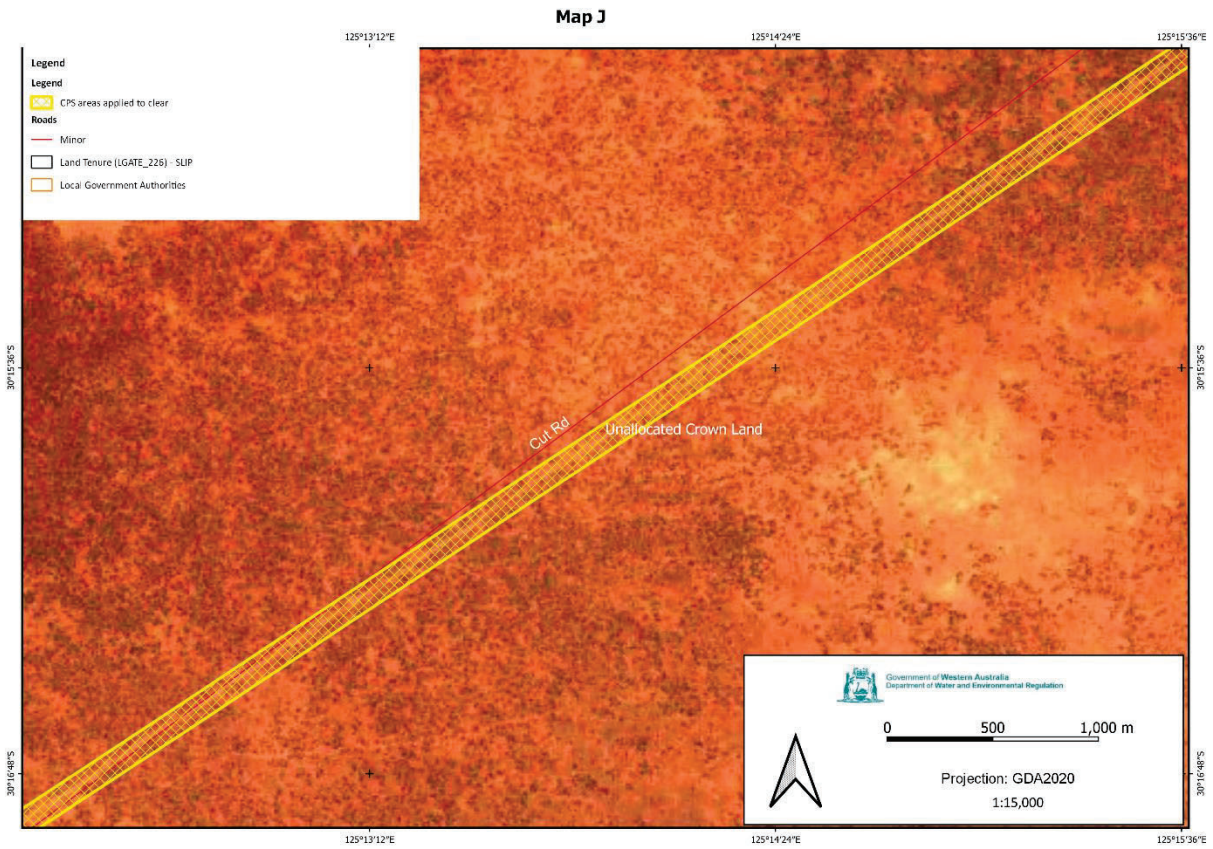
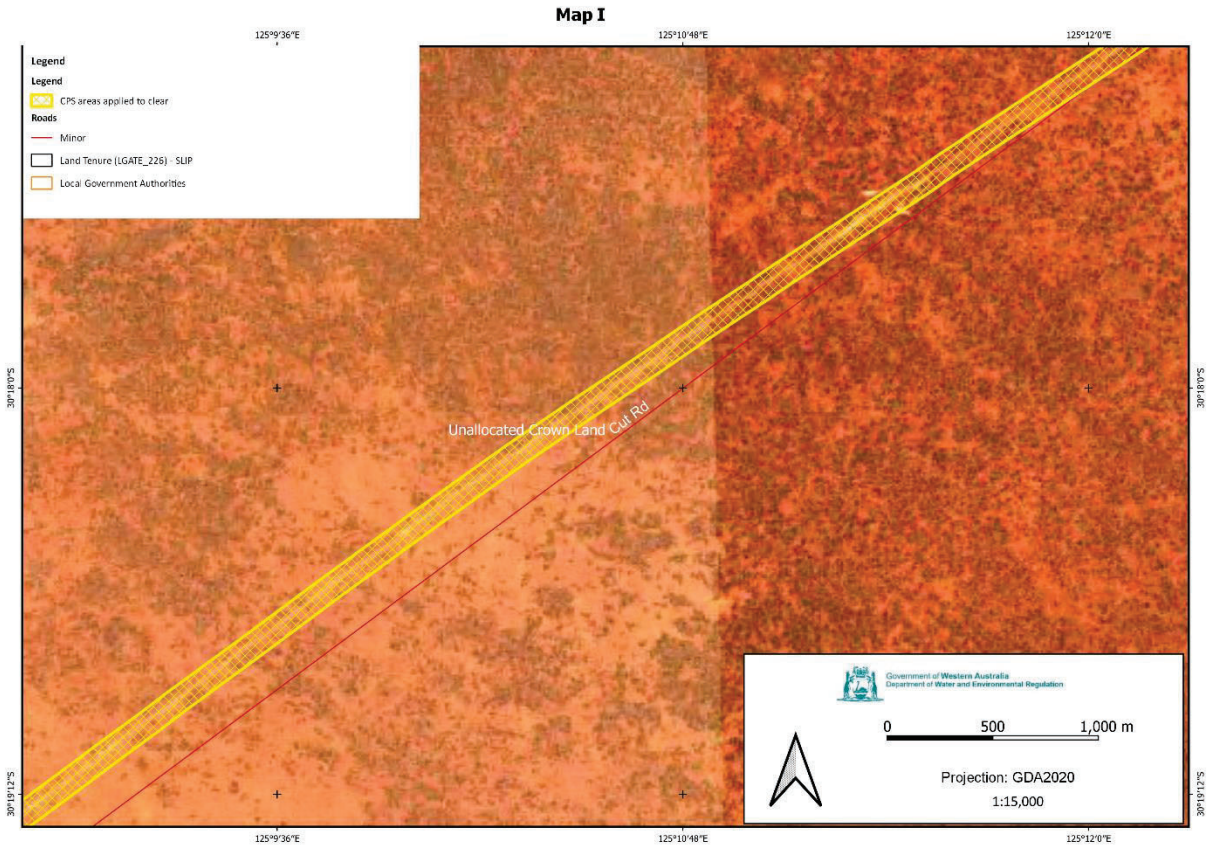


Map G

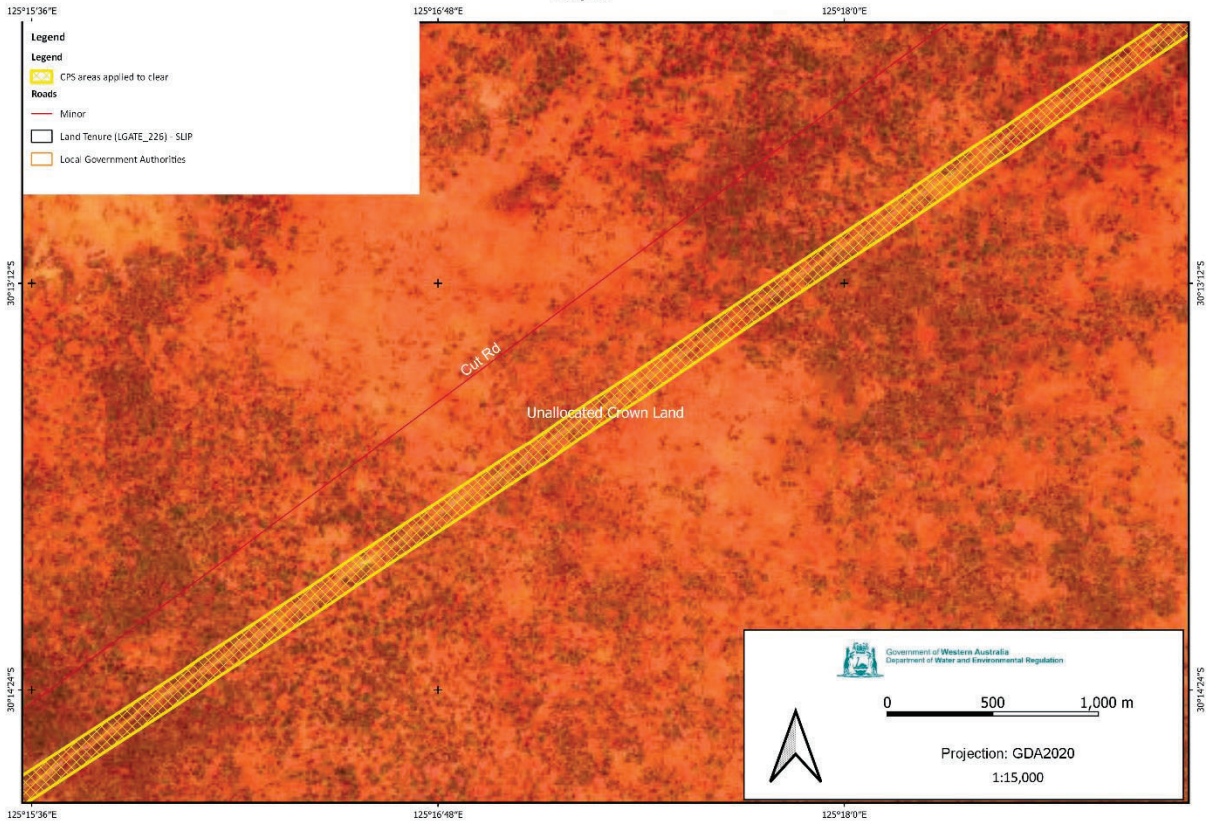


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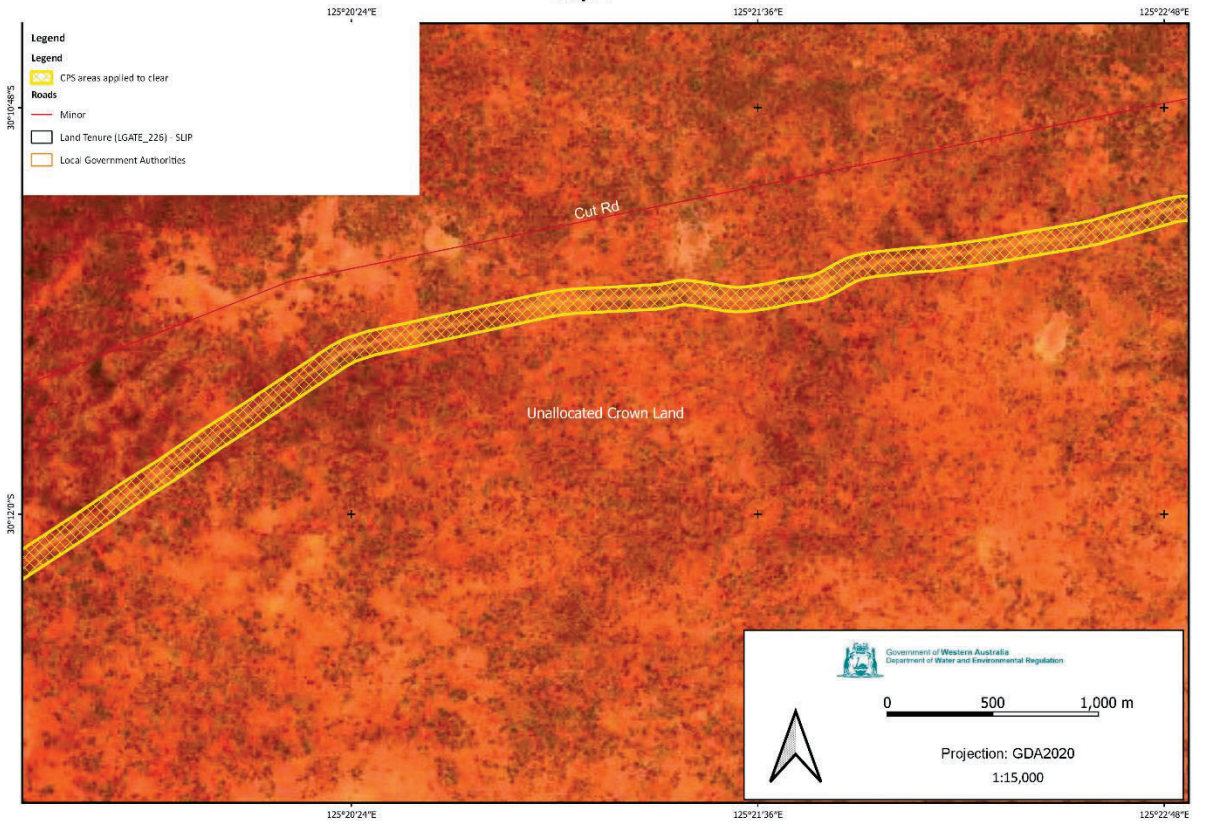




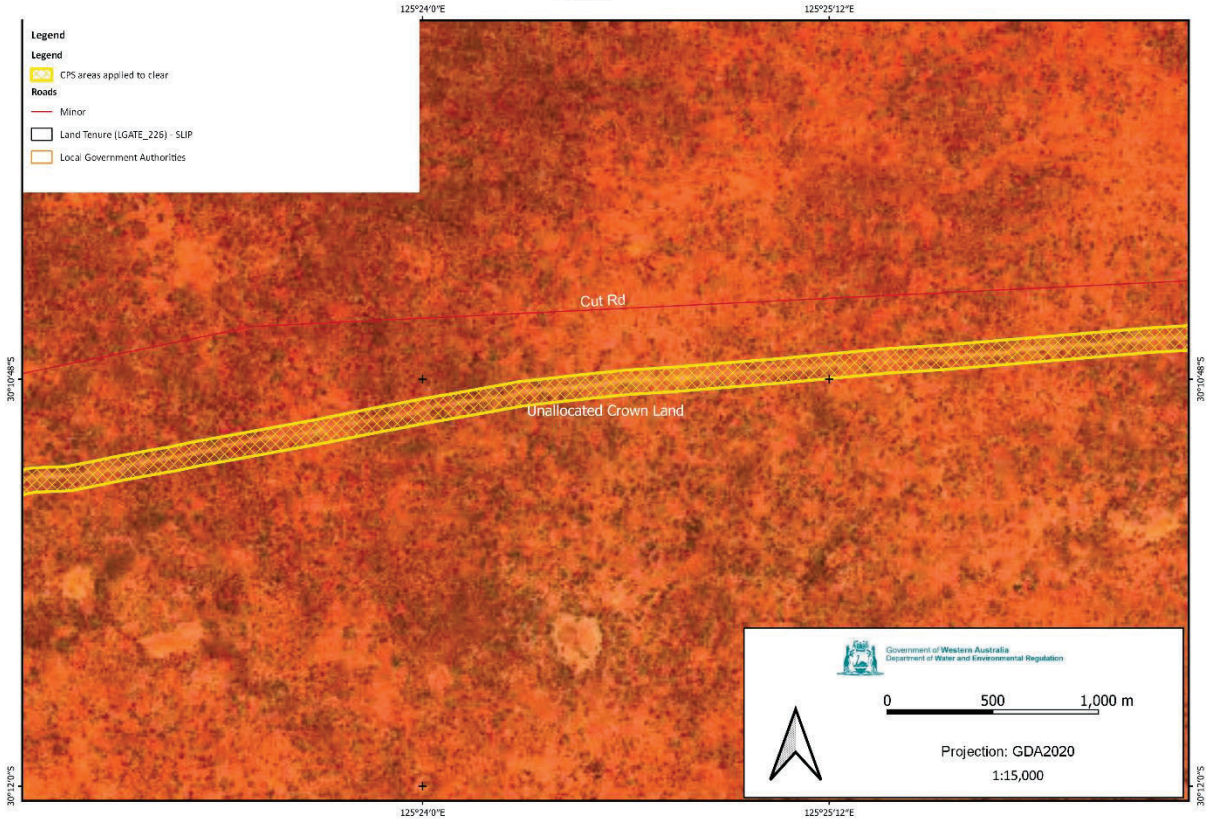
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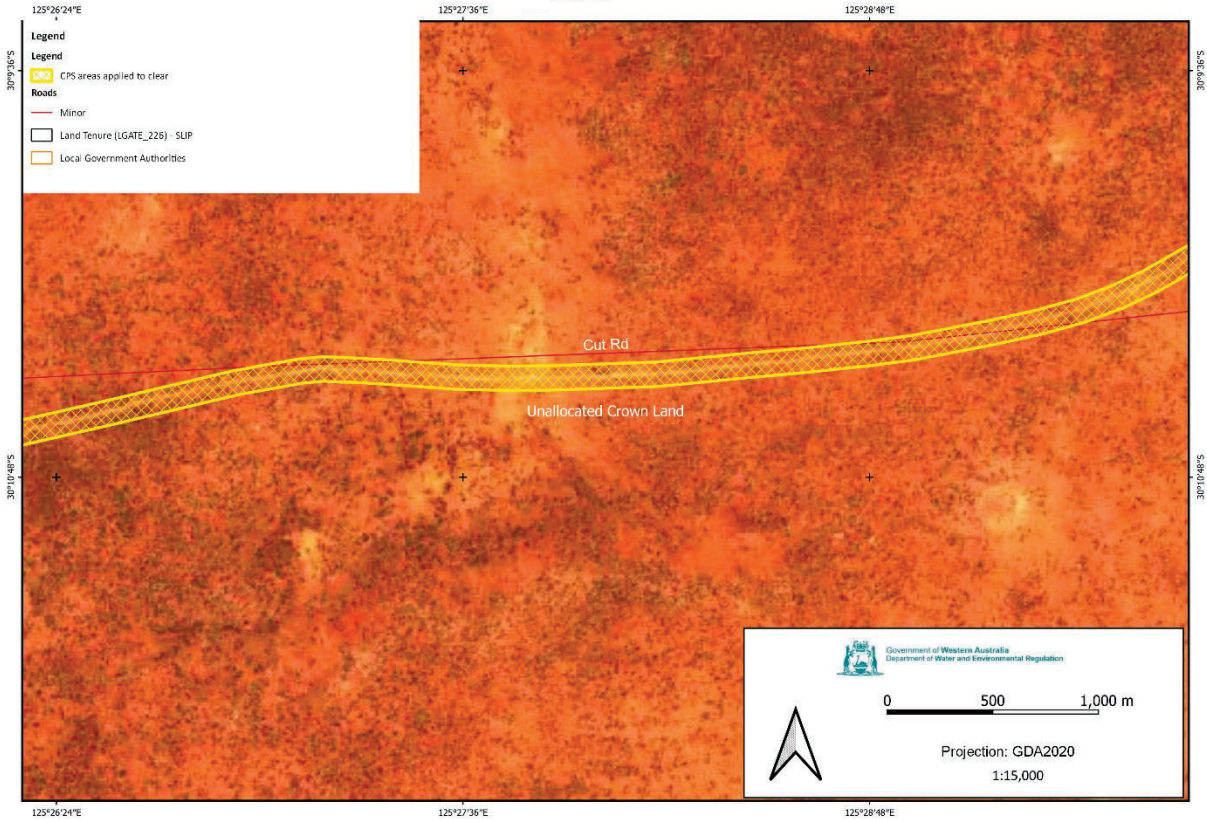
Map L



Map M



Map N



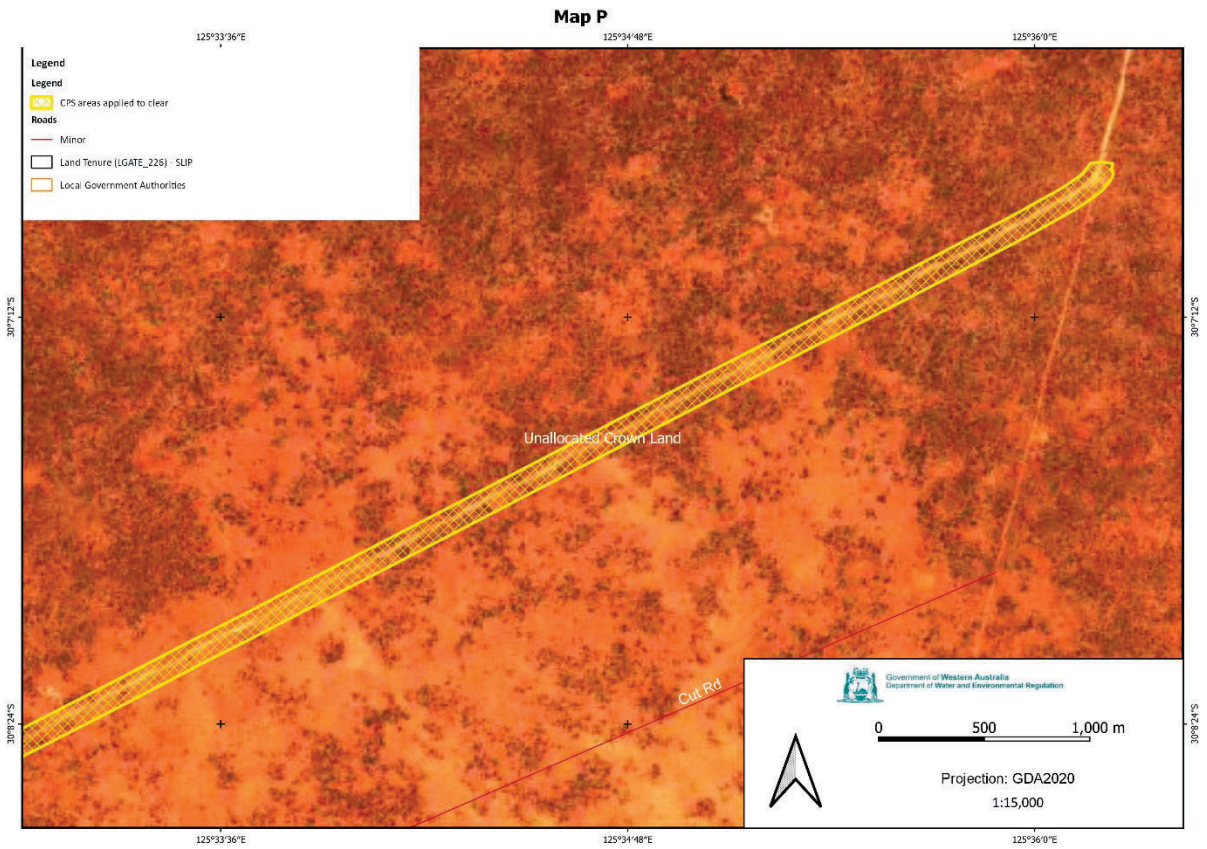
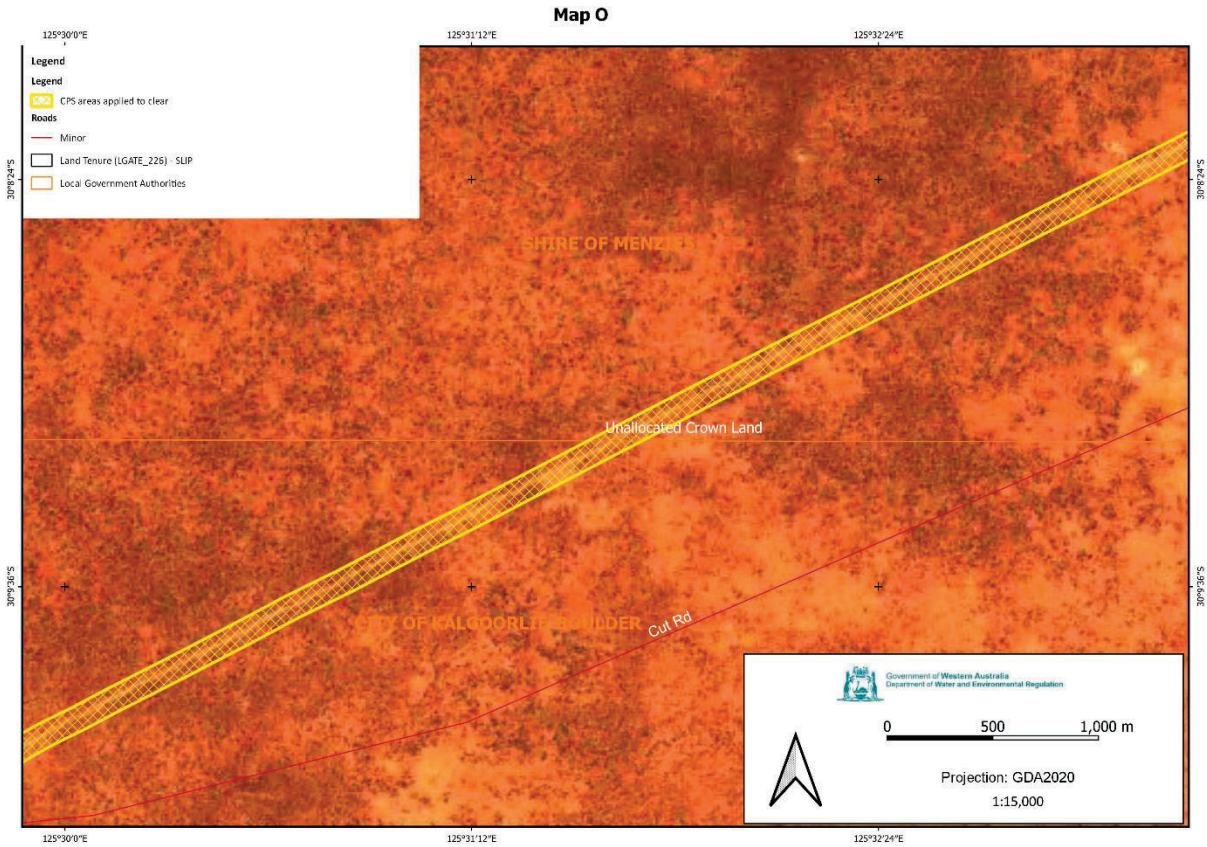


Figure 1: Maps A-P of the boundary of the area within which clearing may occur



Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 10667/1
Permit type:	Purpose permit
Applicant name:	City of Kalgoorlie-Boulder
Application received:	1 July 2024
Application area:	120 hectares (ha) of native vegetation
Purpose of clearing:	Road construction, maintenance and hazard reduction
Method of clearing:	Mechanical
Property:	Unallocated Crown Land (PIN 11796049)
Location (LGA area/s):	City of Kalgoorlie- Boulder Shire of Menzies
Localities (suburb/s):	Plumridge Lakes Rawlinna

1.2. Description of clearing activities

The applicant proposes to clear 120 ha of native vegetation, across a length of approximately 95 kilometres along Cut Road in the City of Kalgoorlie-Boulder (see Figure 1, Section 1.5). Cut Road is primarily used to access a remote Aboriginal community, and the native vegetation is to be cleared for the purpose of road construction, maintenance and hazard reduction.

This section of road has been identified by the City of Kalgoorlie-Boulder and the Shire of Menzies as a hazard to public road users and requires an upgrade to mitigate the potential for road accidents. Clearing will allow for the proper construction of the existing road to a nominal width of 12 metres (currently 6 metres) and realignment of approximately 30 kilometres of the road to offset the road from a pastoral fence line (City of Kalgoorlie-Boulder, 2024). Additional clearing beyond the 12-metre road corridor may be required for drainage and gravel pits but will remain within the clearing footprint. There is 144 ha of existing disturbance within the proposed clearing footprint of 1,532 ha. The proposed clearing of 120 ha is predominately within existing areas of disturbance, except for the 30-kilometre section of realignment.

1.3. Decision on application

Decision:	Granted
Decision date:	8 November 2024
Decision area:	120 ha of native vegetation, as depicted in Section 1.5, below.

1.4. Reasons for decision

This clearing permit 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 A), relevant datasets (see Appendix E.1), the clearing principles set out in Schedule 5 of the EP Act (see Appendix B), 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 application is to upgrade and realign Cut Road to mitigate the potential for road accidents and to provide better access to the remote Aboriginal community.

The assessment identified that the proposed clearing would result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values
- potential impacts to fauna if present during clearing activities
- potential wind erosion

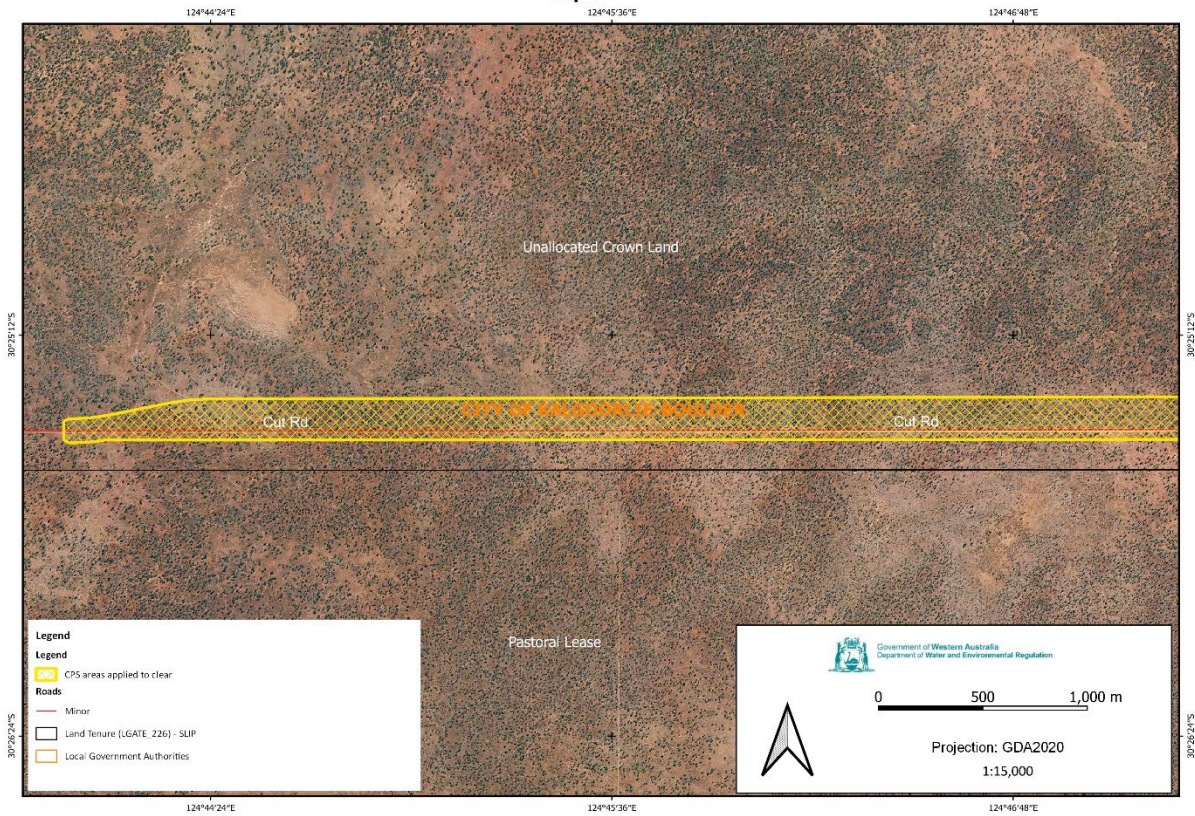
After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing is unlikely to lead long-term adverse impacts on environmental values can be minimised and managed to unlikely lead to an unacceptable risk to environmental values.

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

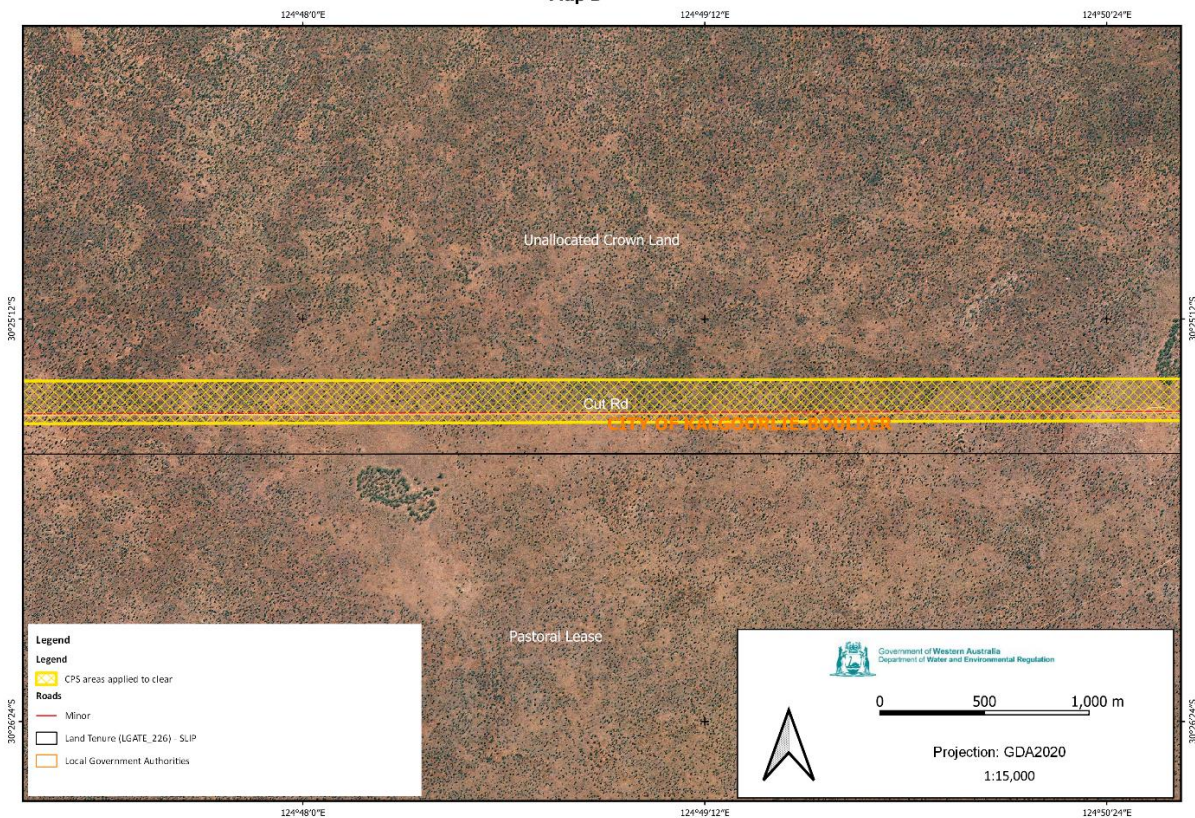
- avoid and minimise to reduce the impacts and extent of clearing
- take hygiene steps to minimise the risk of the introduction and spread of weeds
- commence construction and approved activities within three months of authorised clearing being conducted.
- undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity
- use existing gravel pits available outside of the proposed clearing area for material sourcing, where possible
- retain cleared vegetation and topsoil for rehabilitation of material sourcing areas.

1.5. Site maps

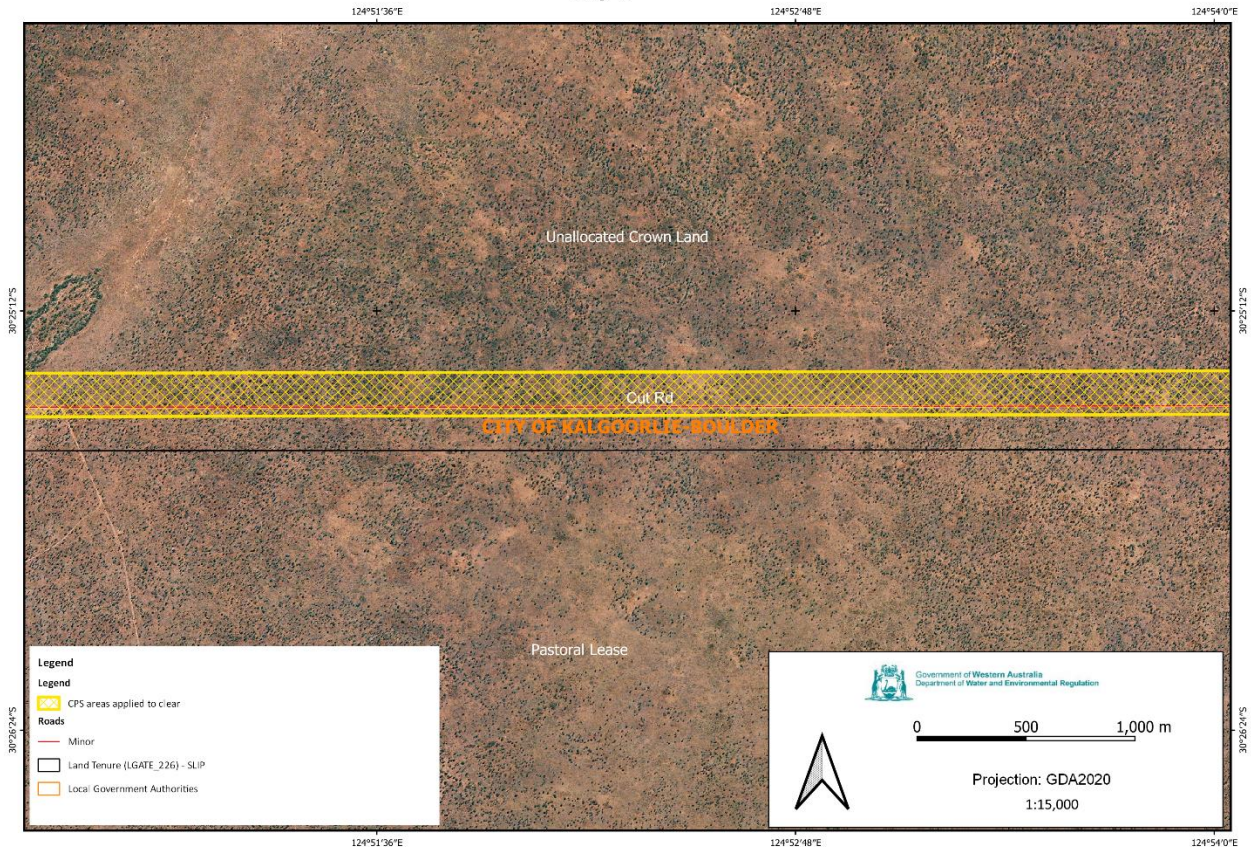
Map A



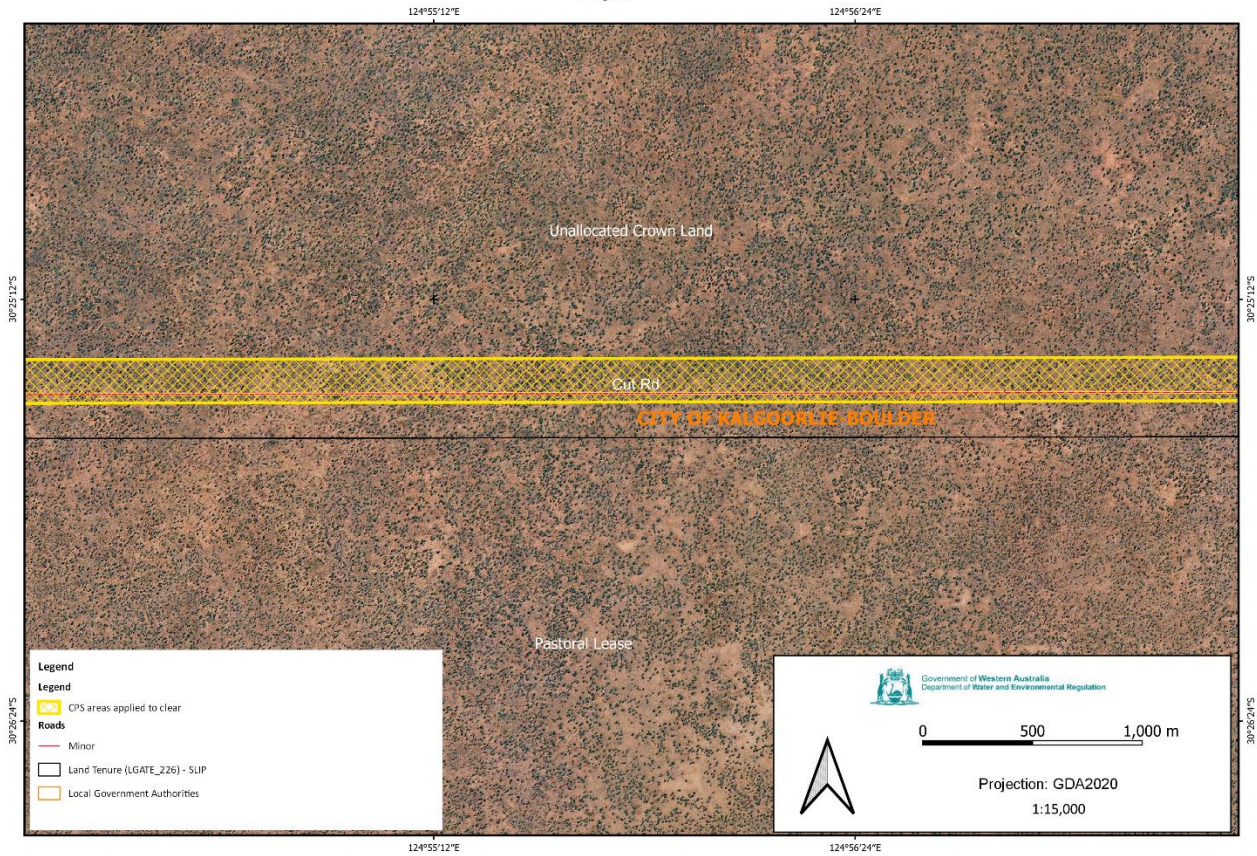
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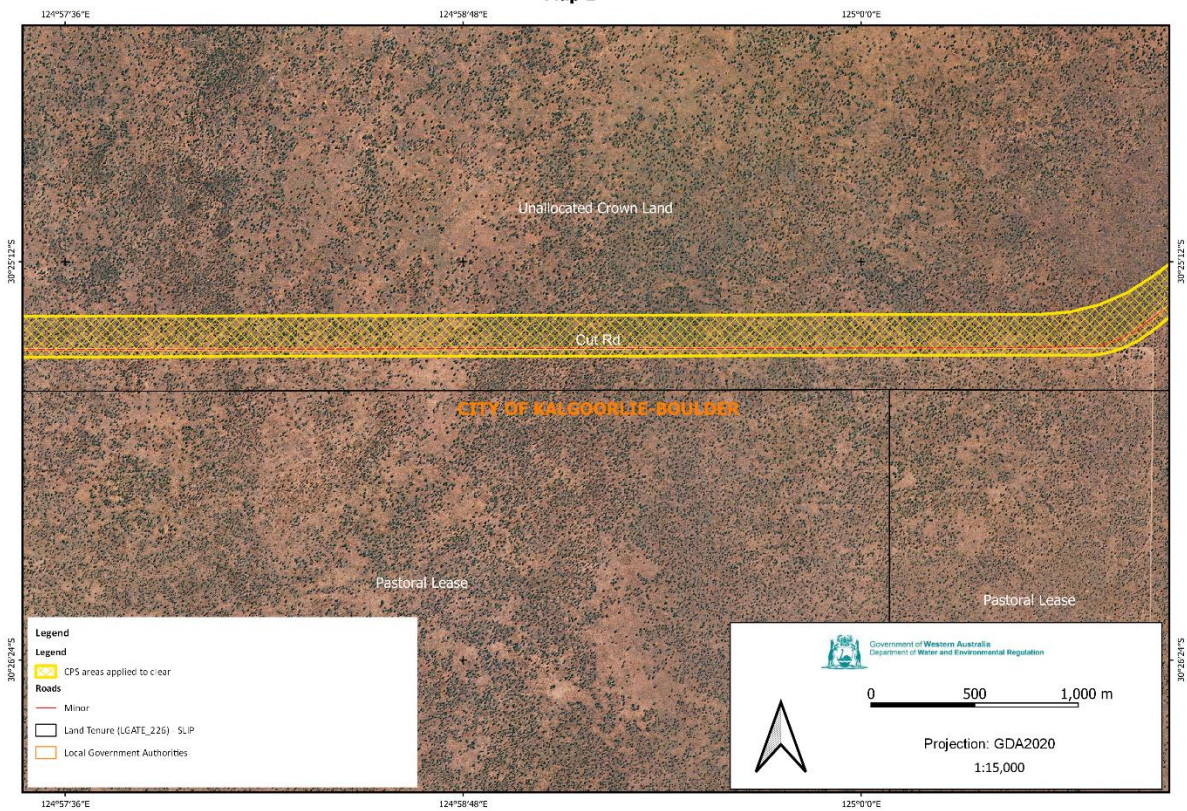
Map C



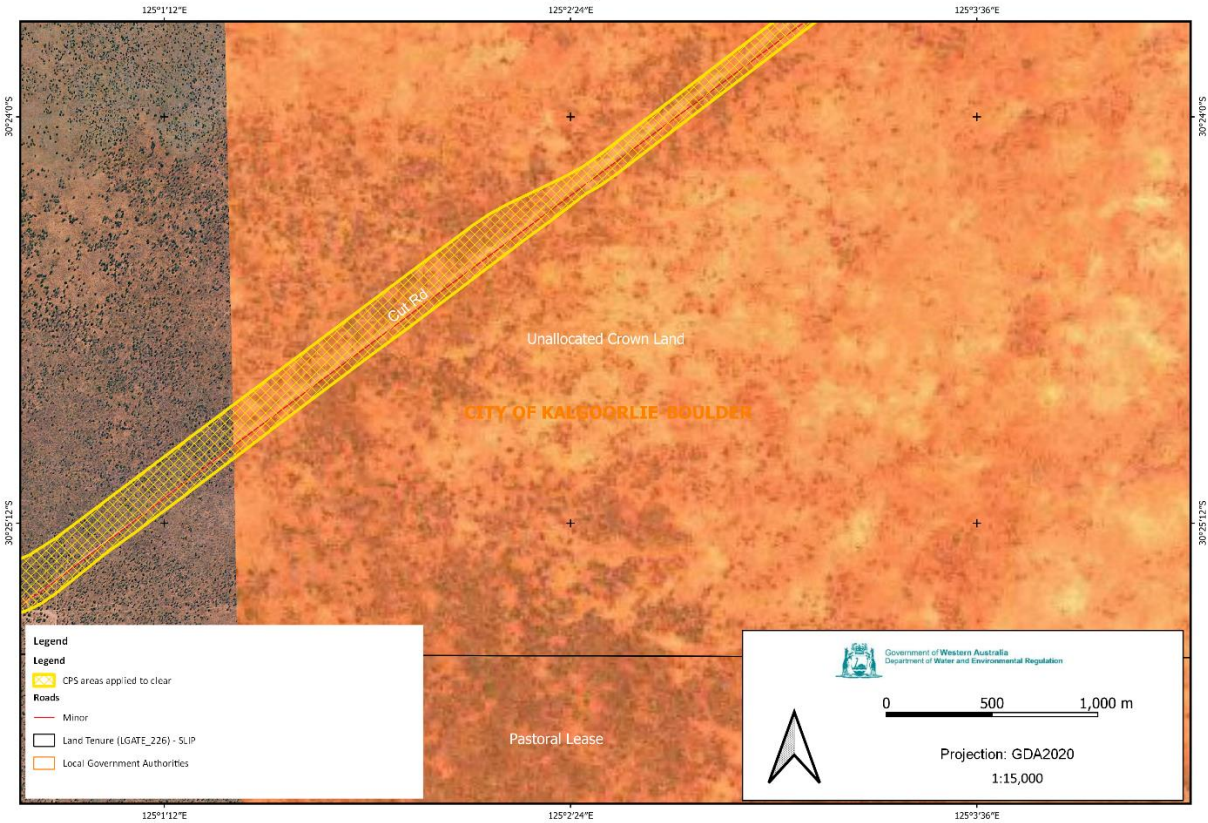
Map D



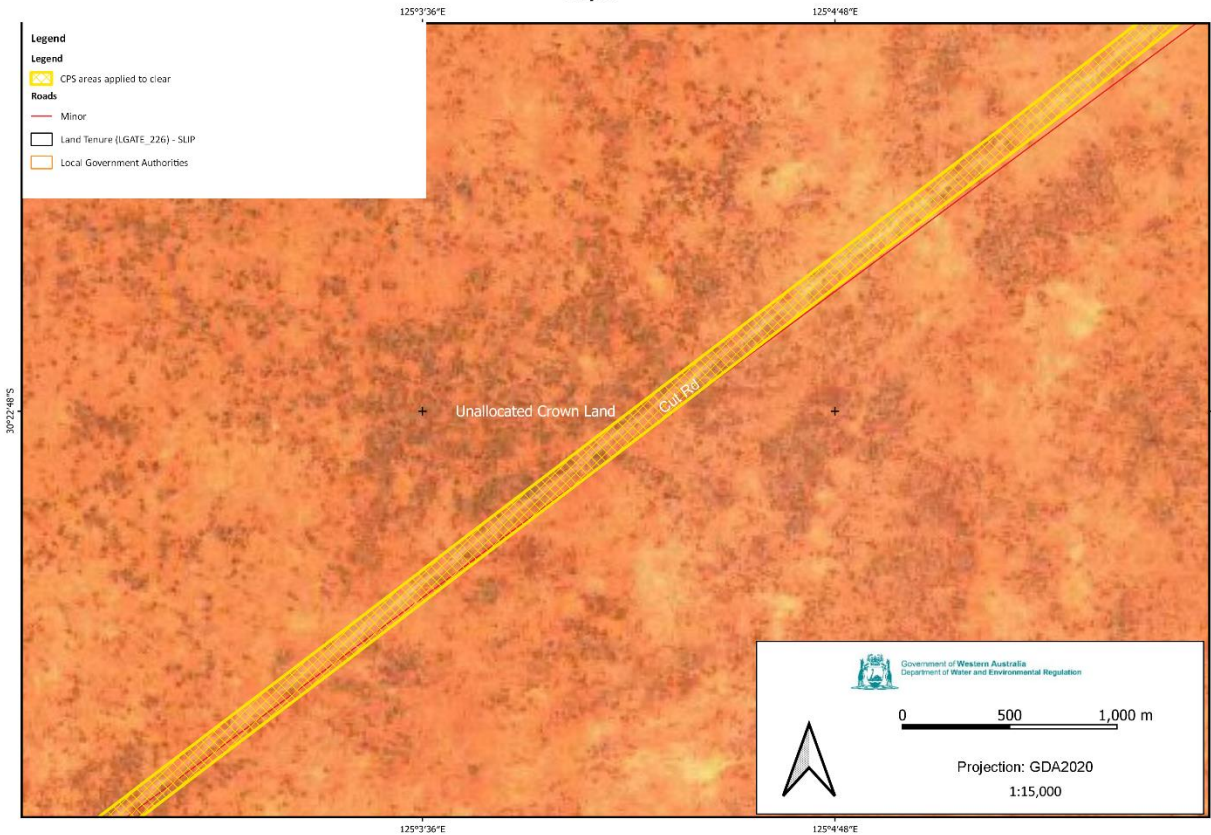
Map E



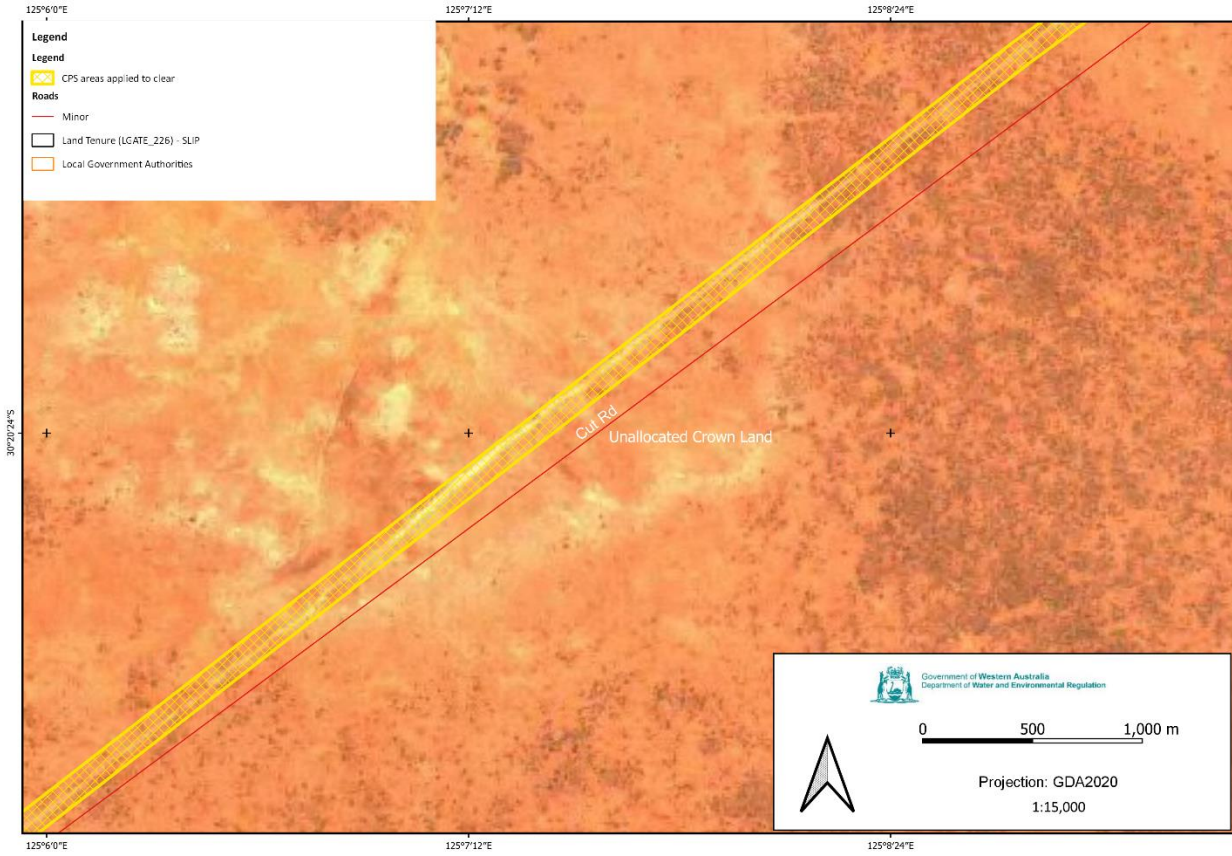
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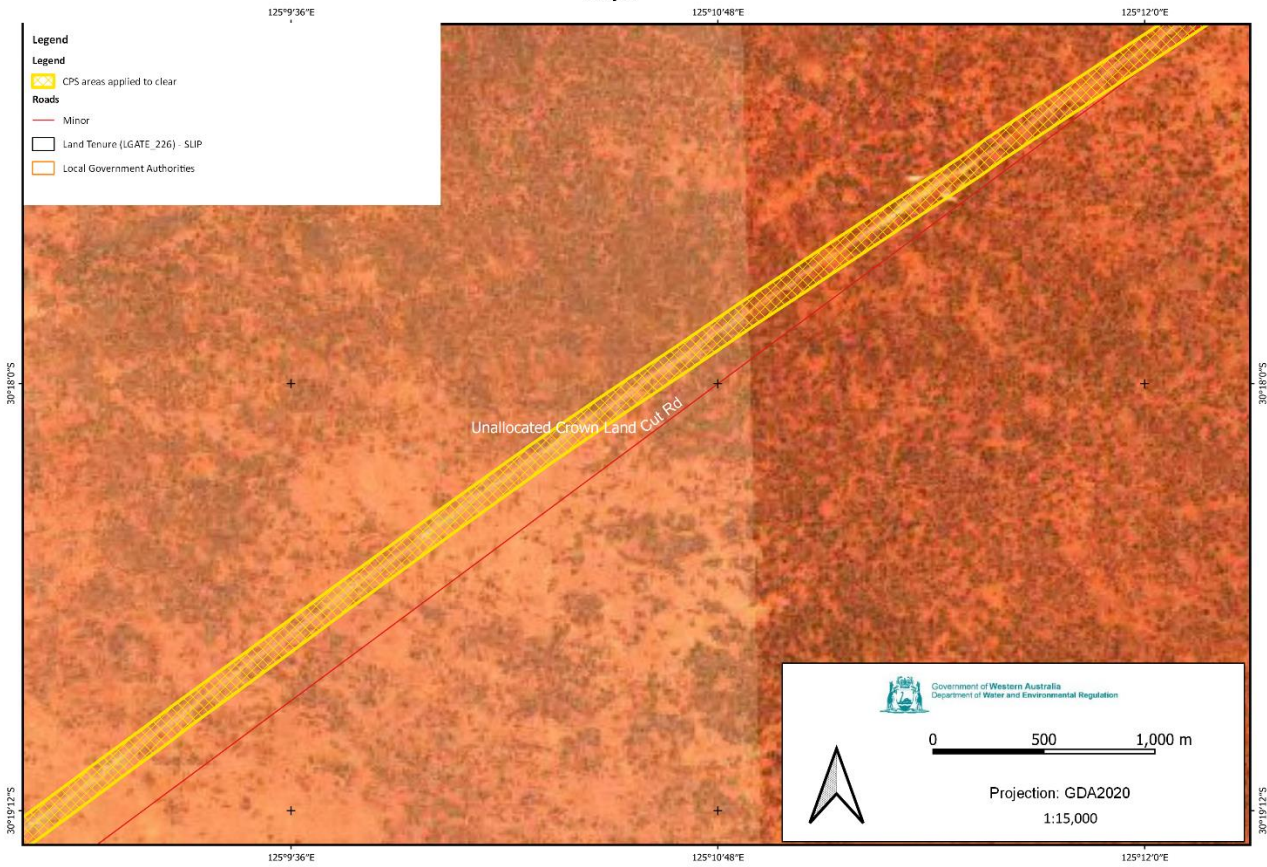
Map G



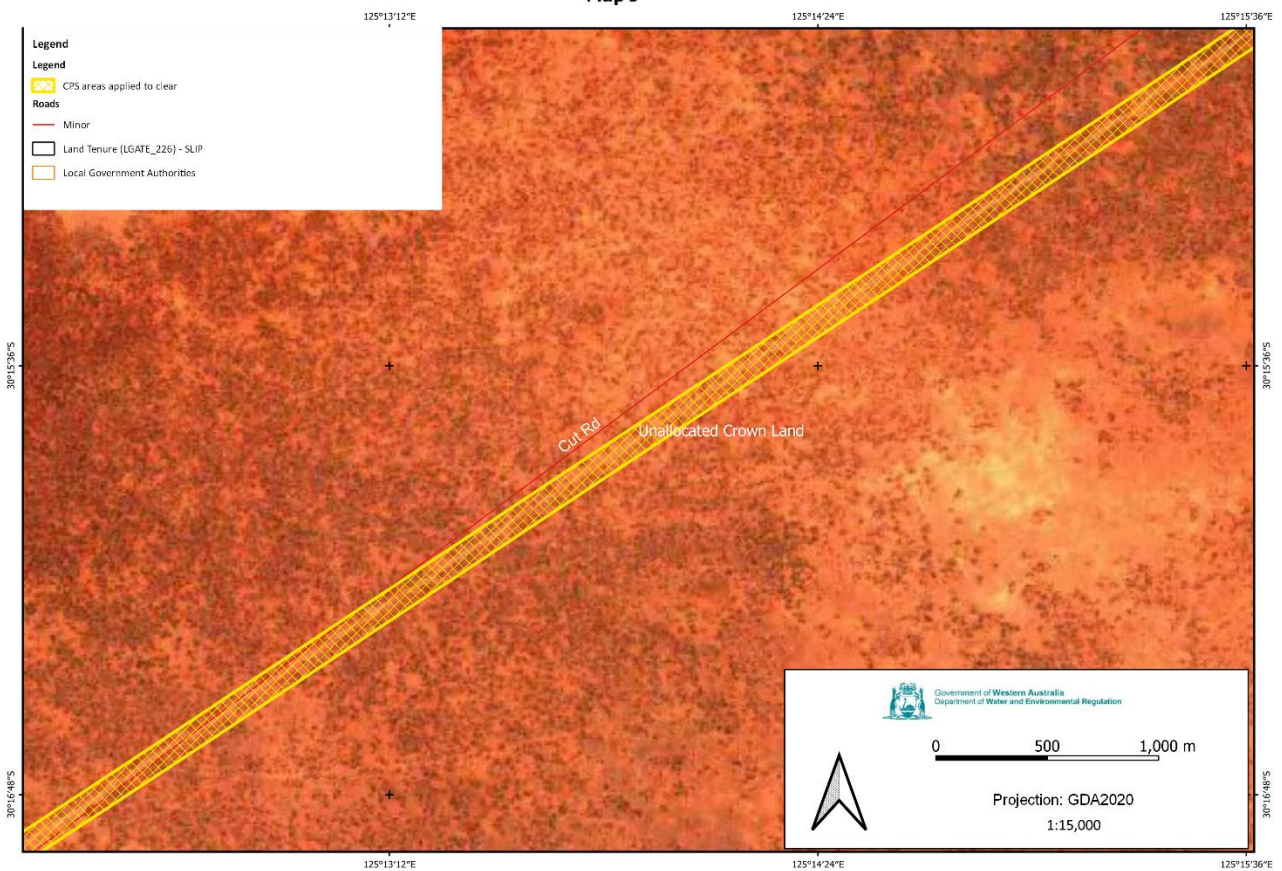
Map H



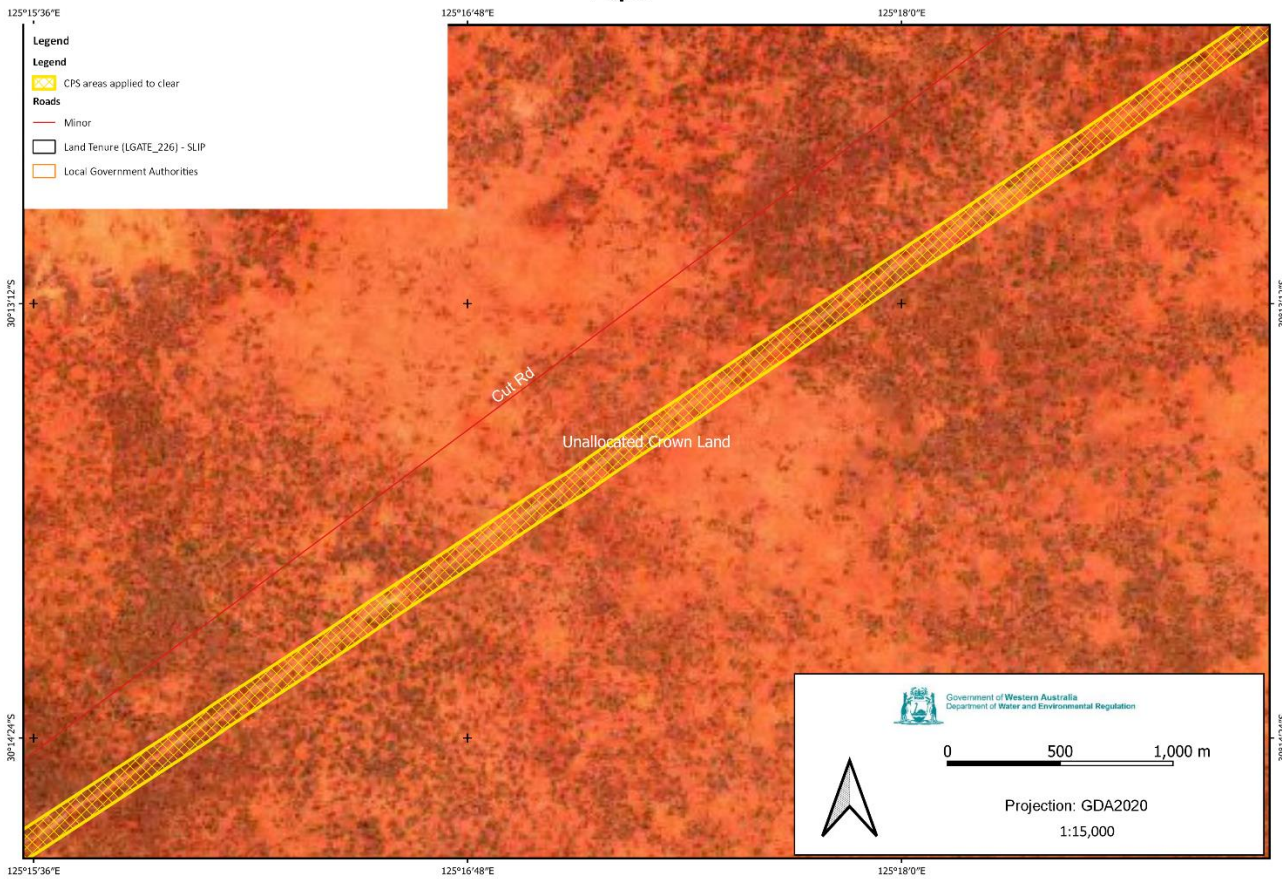
Map I



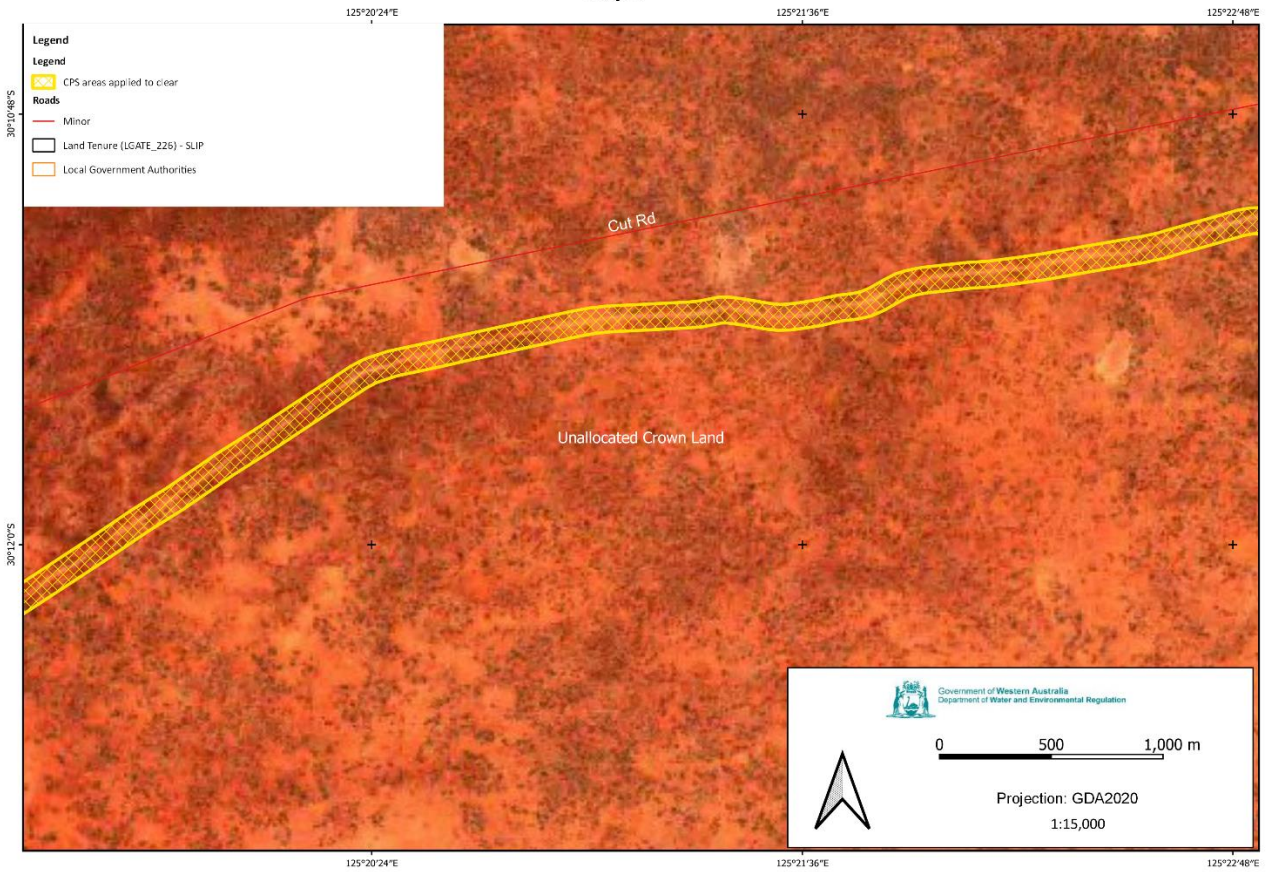
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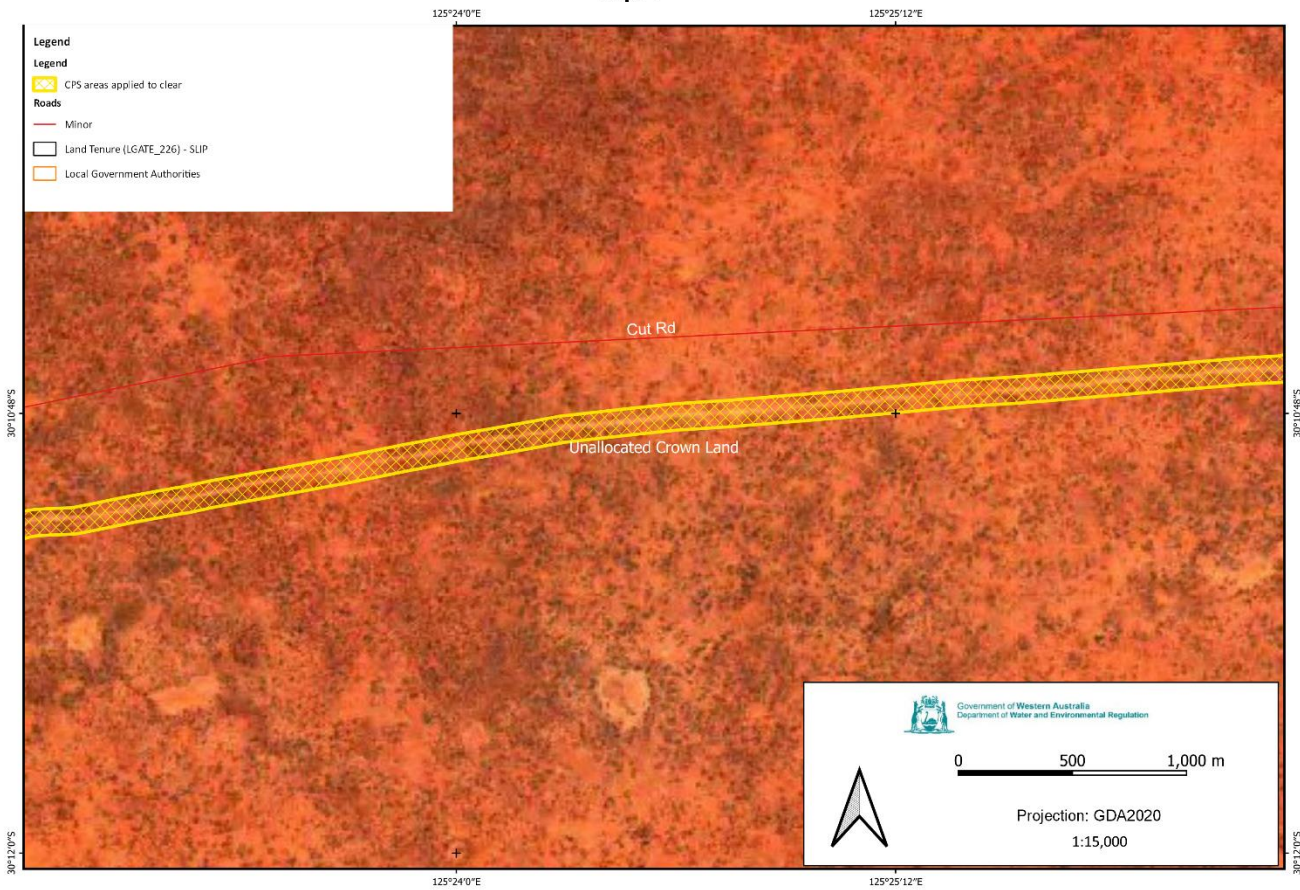
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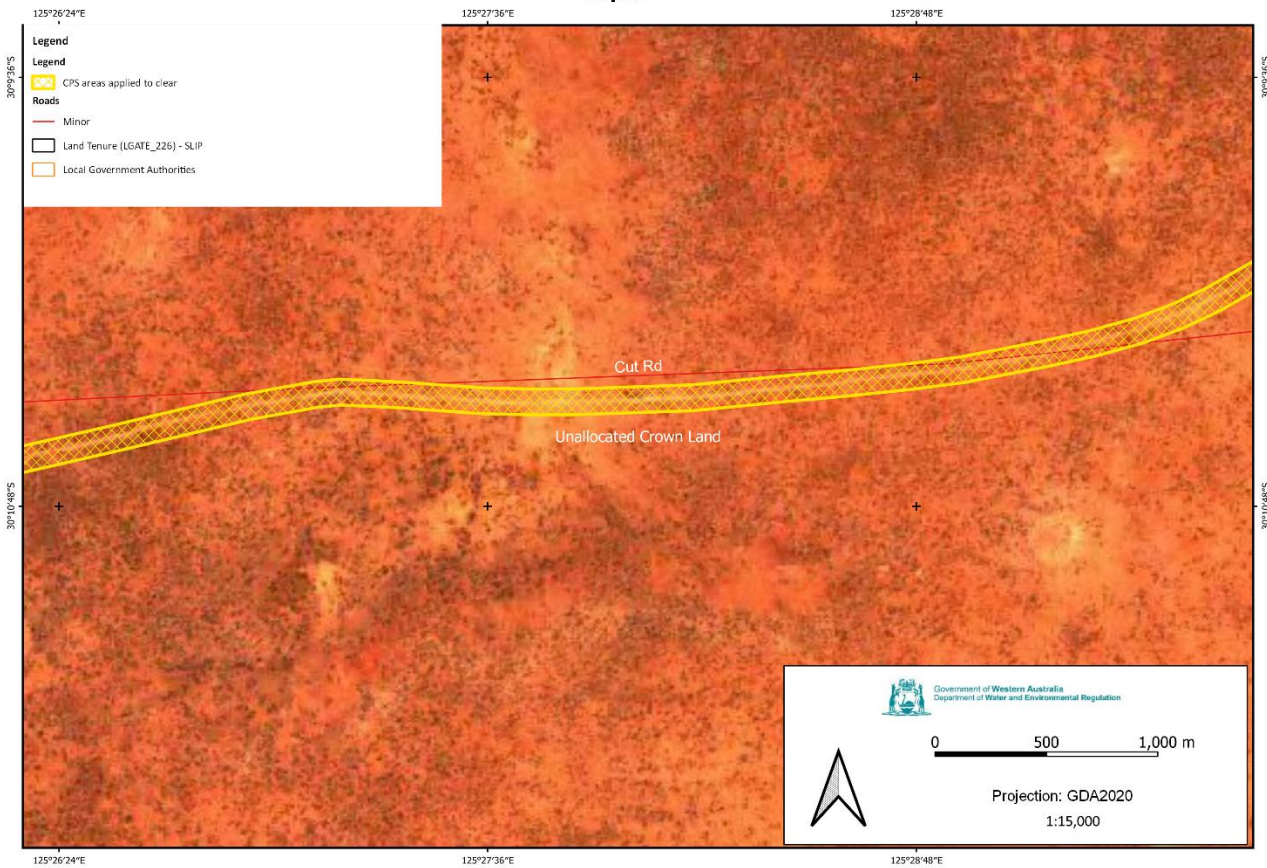
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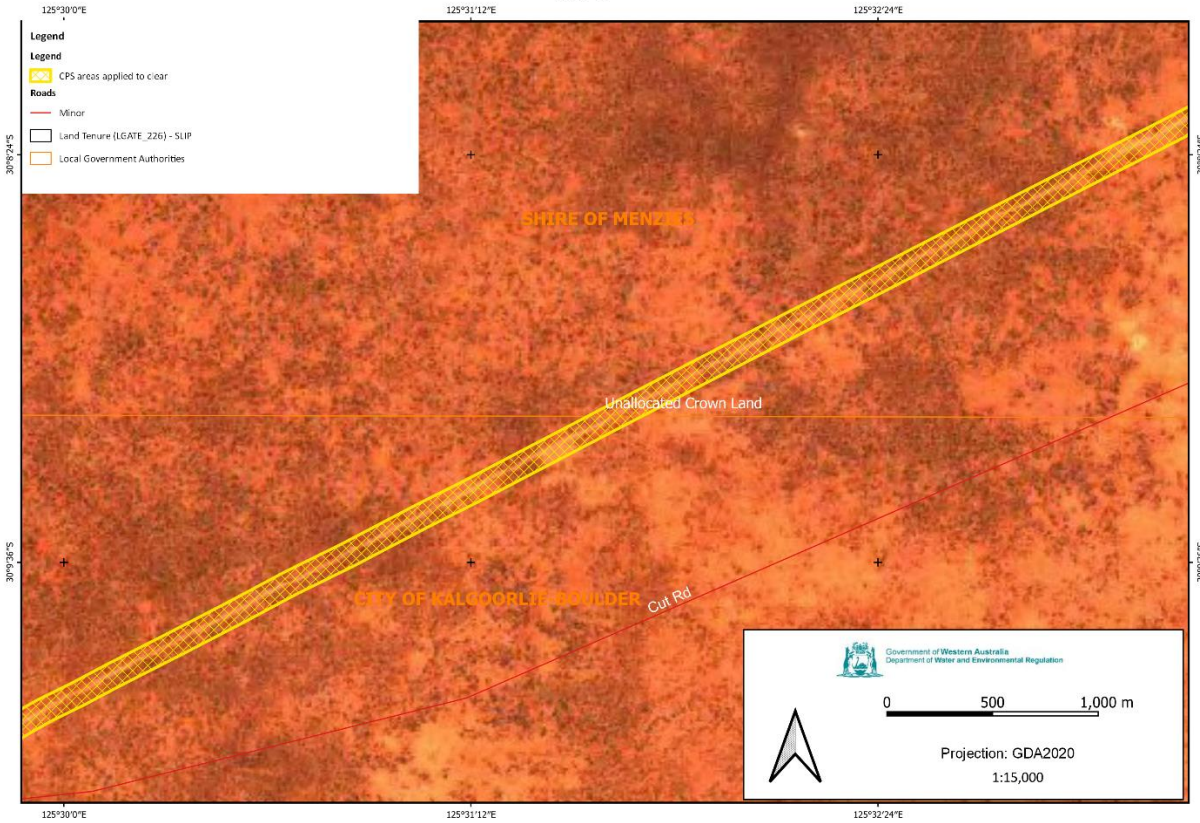
Map M



Map N



Map O



Map P

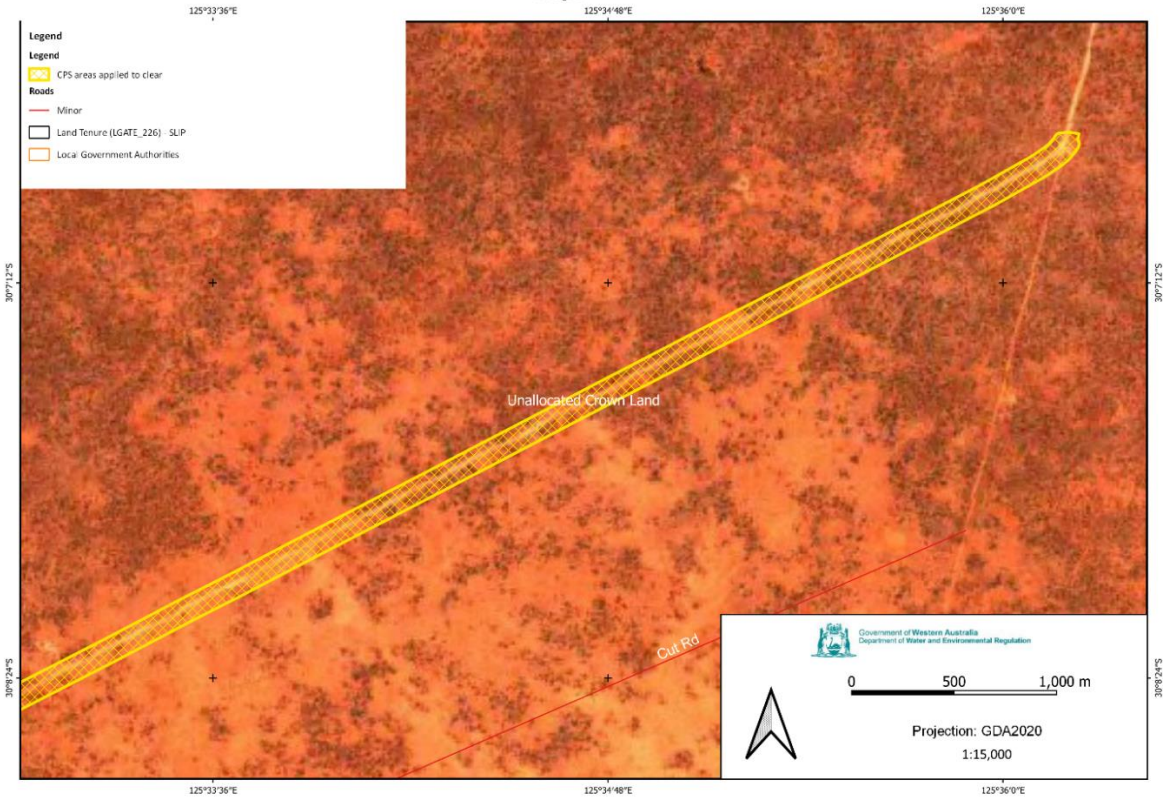


Figure 1: Maps A-P of the application area. The area cross-hatched yellow indicates the area within which clearing is authorised under the granted clearing permit.

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 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)
- *Rights in Water and Irrigation Act* (WA) (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)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2016)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The proposed design and the road alignment were selected to avoid and minimise the extent of clearing and impacts to environmental values. The measures include the following:

- the applicant notes that there is 144 ha of existing disturbance within the proposed clearing footprint of 1,532 ha. The applicant has planned the proposed clearing area of 120 ha to be contained within the existing areas of disturbance, except for the 30 kilometres of realignment. The clearing will allow for the proper construction of the existing road to the required width and the realignment of 30 kilometres of the road.
- the applicant has committed to the use of existing gravel pits outside of the proposed clearing area for material sourcing, where possible (City of Kalgoorlie-Boulder, 2024).

The representative maps of the proposed road widening and alignment works are in Appendix D.

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

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A), details of the survey conducted by the Botanica Consulting Pty Ltd (Botanica Consulting) in October 2023, and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

Botanica Consulting conducted a reconnaissance flora and vegetation survey, and a basic fauna assessment in October 2023 within the proposed clearing footprint of 1,532 ha along Cut Road. No Threatened flora or Threatened Ecological Communities as listed under the Western Australian *Biodiversity Conservation Act 2016* (BC Act) or Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) were identified within the survey area, while no Priority flora taxa or Priority Ecological Communities were identified within the survey area. Two fauna habitats have been identified within the proposed clearing area (see site characteristics table). Given that the mapped vegetation retains approximately 100 per cent of the original extent in the local area, it is unlikely that the proposed clearing of 120 ha in the already disturbed area will have an impact on significant habitat values for flora and fauna.

The assessment against the clearing principles (see Appendix B) identified that the impacts of the proposed clearing are limited and able to be managed to be environmentally acceptable subject to conditions to avoid and minimise clearing, weed management, erosion management, directional clearing and rehabilitation of material sourcing areas.

3.3. Relevant planning instruments and other matters

On 26 July 2024, the application was advertised on the DWER website for a 21-day public comment period. No public submissions were received in relation to this application.

On 26 July 2024, DWER requested comments from the Shire of Menzies regarding the proposed clearing and whether it was consistent with the Shire's local planning scheme or required any additional approvals. No comments were received from the Shire in relation to this application.

The eastern end of the application area marginally intersects the Goldfields groundwater area which is proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act).

The Department of Planning, Lands and Heritage (DPLH) is the registered proprietor of the Unallocated Crown Land, being portion PIN 11796049 over which the proposed roadworks exist. DPLH had no objection to the proposed works over the existing tracks (City of Kalgoorlie- Boulder, 2024).

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

A.1. Site characteristics

Characteristic	Details
Local context	<p>The area proposed to be cleared is located within a 95 km section of Cut Road which is used primarily to access a remote Aboriginal community. The application area is located approximately 315 km east of Kalgoorlie-Boulder within the extensive land use zone of Western Australia.</p> <p>The local area (20-kilometre radius from the centre of the area proposed to be cleared) retains approximately 100 per cent vegetation cover.</p>
Ecological linkage	The application area is not within a formally mapped ecological linkage.
Conservation areas	The application area is not located within a conservation area. The nearest conservation area is Plumridge Nature Reserve, which is located approximately 54 kilometres north of the application area.
Vegetation description	<p>The reconnaissance flora and vegetation survey (Botanica Consulting, 2024) indicates that the vegetation within the proposed clearing area consists of two vegetation types:</p> <ul style="list-style-type: none"> Acacia Open Woodlands (SCLP-AOW1)) - Low open woodland of <i>Acacia papyrocarpa</i> over mid open shrubland of <i>Senna artemisioides</i> subsp. <i>filifolia</i> over low chenopod shrubland of <i>Maireana sedifolia</i> on sandy clay loam plain Chenopod Shrublands (CLP-CS1) – Mid open shrubland of <i>Senna artemisioides</i> subsp. <i>filifolia</i> and <i>Eremophila scoparia</i> over low chenopod shrubland of <i>Maireana sedifolia</i> on clay loam plain <p>Excerpts of the survey descriptions and maps are available in Appendix D.</p> <p>This is consistent with the mapped vegetation types:</p> <ul style="list-style-type: none"> Nyanga Plain 461 - described as succulent steppe with open low woodland; <i>Acaia papyrocarpa</i> over bluebush Great Victoria Desert 85 - described as hummock grasslands, open low tree & mallee steppe; marble gum and mallee (<i>Eucalyptus youngiana</i>) over hard spinifex on sandplain

Characteristic	Details
	<ul style="list-style-type: none"> Nyanga Plain 441 - described as succulent steppe with open low woodland; mulga and sheoak over bluebush <p>The mapped vegetation types retain approximately 100 per cent of the original extent (Government of Western Australia, 2019).</p>
Vegetation condition	<p>The reconnaissance flora and vegetation survey (Botanica Consulting, 2024) indicates that the vegetation within the proposed clearing area is in 'Good' (Trudgen, 1991) condition, with cleared areas considered to be in 'Completely degraded' (Trudgen, 1991) condition.</p> <p>The full Trudgen (1991) condition rating scale is provided in appendix C.</p> <p>Vegetation condition rating descriptions are available in Appendix D.</p>
Climate and landform	<p>The climate of the Nullarbor bioregion is characterised as arid, with average rainfall of 150-200 millimetres (Botanica Consulting, 2024). The Nullarbor bioregion extends over most of the onshore part of the Eucla Basin, with landforms consisting of salt lakes and major valley floors with lake derived dunes. The Nullarbor Plain is a vast and remarkably flat treeless plain determined by the combination of aridity and the calcareous soils (McKenzie et al. 2002). The proposed clearing area predominately lies in the Nullarbor bioregion (Botanica Consulting, 2024).</p> <p>The climate in the Shield subregion of the Great Victoria Desert bioregion is described as arid, with summer and winter rainfall of approximately 190mm per year (Botanica Consulting, 2024). The proposed clearing area is slightly mapped with this region (Botanica Consulting, 2024).</p>
Soil description and Land degradation risk	<p>The soil of the application area is broadly mapped as the following soil types:</p> <ul style="list-style-type: none"> 555DD34: DD34. Very gently to gently undulating plains with broad flats and low broad rises, the former being the prominent feature 555Ny: Nyanga System. Level loamy calcrete plains supporting myall or casuarina woodland over chenopod understorey. 581DD34: DD34. Very gently to gently undulating plains with broad flats and low broad rises, the former being the prominent feature. <p>This is consistent with the mapped soil zones within the survey area. Botanica Consulting stated that application area is mapped with two soil landscape zones. They are Nyanga zone (555) and Carlisle Plain zone (581). The proposed clearing predominately lies within the Nyanga zone. The landscape is calcrete plains with residual clay on Oligocene marine limestone of the Eucla Basin. Soils are calcareous shallow earths and calcareous shallow loams with some calcareous stony soils. Vegetation communities consist of bluebush shrublands with some mulga, acacia, eucalypts and spinifex (Botanica Consulting, 2024).</p> <p>Survey details related to mapped soil zones are available in Appendix D.</p> <p>Low land degradation risk across the application area as the application area and the surrounding region is not extensively cleared.</p>
Waterbodies and Hydrogeography	<p>The desktop assessment and the survey details (Botanica Consulting, 2024) indicated that application area does not intersect any wetlands and watercourses, except minor waterlines and water polygons.</p> <p>A small portion of the application area is mapped within the Goldfields Groundwater Area proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act).</p>

Characteristic	Details
	Groundwater salinity within the application area is mapped at 14,000 to 35,000 milligrams per litre total dissolved solids.
Flora	<p>The desktop assessment identified two priority flora species which have been recorded within the local area, with <i>Eremophila decussata</i> (Priority 1) previously recorded within the application area in 2010. The other record within the local area is the Priority 2 species, <i>Eremophila</i> sp. Great Victoria Desert (R. Davis 10621) which has been previously recorded in 2005 approximately 14.8 kilometres west from the application area (Western Australian Herbarium, 1998-).</p> <p>Both of these historical records occur along Cut Road, which has been disturbed through edge effects from the road in situ and patrol land use (Botanica Consulting, 2024). The reconnaissance flora/ vegetation and basic fauna survey from Botanica Consulting Pty Ltd conducted in October 2023 indicates that no threatened or priority flora species within the survey area, which included the application area (Botanica Consulting, 2024).</p> <p>With consideration for the site characteristics set out above, relevant datasets (see Appendix E.1), habitat preferences, and the biological survey information, the application area is unlikely to impact habitat which is necessary for the persistence of conservation significant flora species.</p>
Ecological communities	No conservation significant ecological communities or buffers are mapped over the application area. There are no Threatened or Priority Ecological Communities within the local area.
Fauna	<p>The desktop assessment and the survey details indicated that a total of three conservation significant fauna species have been recorded within the local area. These comprise the Naretha blue bonnet (<i>Northiella narethae</i> – Priority 4), and two vulnerable species; <i>Leipoa ocellata</i> Malleefowl (<i>Leipoa ocellata</i>) and Southern Whiteface (<i>Aphelocephala leucopsis</i>).</p> <p>The Naretha blue bonnet and Malleefowl have both been previously recorded within the application area in 2000 and 1964 respectively and can be considered as historical records. Botanica Consulting (2024) state that the majority of habitat for Malleefowl within the survey area appears unsuitable for breeding due to the moderately low density of the vegetation and sparse amounts of leaf litter observed. Further, it is unlikely to present critical habitat for Malleefowl considering that they mainly dominate in some shrublands dominated by Acacia and occasionally in woodlands dominated by Eucalypts such as wandoo (<i>E. wandoo</i>), marri (<i>Corymbia calophylla</i>) and mallet (<i>E. astringens</i>) with an understory of hard spinifex (<i>Triodia basedowii</i>) or other <i>Triodia</i> species, and shrub thickets on the ridges where umbrella bush (<i>A. ligulata</i>) and other seed-bearing shrubs are often common (DCCEE, 2024b).</p> <p>The Southern Whiteface was recorded within the survey area, however, the application area is unlikely to present critical habitat for this species (Botanica Consulting, 2024).</p> <p>Habitat critical to the survival of the Southern Whiteface includes:</p> <ul style="list-style-type: none"> • areas of relatively undisturbed open woodlands and shrublands with an understorey of grasses or shrubs, or both; • habitat with low tree densities and an herbaceous understorey litter cover which provides essential foraging habitat; • living and dead trees with hollows and crevices which are essential for roosting and nesting (DCCEE, 2024a).

Characteristic	Details
	<p>Given that the proposed clearing area comprises predominantly disturbed vegetation along Cut Road, it is unlikely to represent critical habitat for the Southern Whiteface.</p> <p>With consideration for the site characteristics set out above, relevant datasets (see Appendix E.1), the habitat preferences of these species and the time of the records, the application is unlikely to provide significant habitat for any conservation significant fauna species.</p>

A.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*					
Great Victoria Desert	8,587.04	8,587.04	100	-	-
Nullarbor	61.82	61.82	100	-	-
Vegetation complex					
Nyanga Plain_461	2,642,073.96	2,641,498.90	99.98	651,891.74	24.67
Great Victoria Desert_85	6351,699.56	6,349,770.63	99.97	910,577.52	14.34
Nyanga Plain_441	2,335,777.30	2,335,777.30	100	393,410.94	16.84

*Government of Western Australia (2019a)

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p>Principle (a): <i>“Native vegetation should not be cleared if it comprises a high level of biodiversity.”</i></p> <p>Assessment: The area proposed to be cleared does not contain regionally significant flora, fauna, habitats or assemblages of plants. The application predominantly involves the clearing of native vegetation within already disturbed areas which are not likely to comprise a high level of biodiversity.</p>	Not likely to be at variance	No
<p>Principle (b): <i>“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.”</i></p> <p>Assessment: The area proposed to be cleared does not contain significant habitat for conservation significant fauna species.</p>	Not likely to be at variance	No
<p>Principle (c): <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p>Assessment: The area proposed to be cleared is unlikely to contain habitat for threatened flora species listed under the BC Act. No threatened flora have been recorded within the local area, with no threatened flora identified during the flora survey.</p>	Not likely to be at variance	No
<p>Principle (d): <i>“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.”</i></p> <p>Assessment: The area proposed to be cleared does not contain species that are representative of a threatened ecological community.</p>	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
<p>Principle (e): <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p>Assessment: The extent of the mapped vegetation in the local area is consistent with the national objectives and targets for biodiversity conservation in Australia. The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.</p>	Not likely to be at variance	No
<p>Principle (h): <i>“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.”</i></p> <p>Assessment: Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of a conservation area.</p>	Not at variance	No
Environmental value: land and water resources		
<p>Principle (f): <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Assessment:</u> Given no watercourses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact on watercourse or wetland.</p>		
<p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u> The mapped soils are moderately susceptible to groundwater salinity. Noting the location of the application area, the condition of the vegetation and the purpose of clearing is to upgrade an existing road to the required width by clearing a linear strip of vegetation, the proposed clearing is not likely to have an appreciable impact on land degradation.</p>	Not likely to be at variance	No
<p><u>Principle (i):</u> <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.”</i></p> <p><u>Assessment:</u> Botanica Consulting states that there are no surface waterbodies and minor ephemeral drainage lines within the survey area (Botanica Consulting, 2024). Given that no watercourses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact surface water quality.</p> <p>A small section of the eastern end of the clearing footprint is mapped with the Goldfields groundwater area. Considering the condition of the vegetation and the linear clearing nature for road upgrades, it is unlikely to have impacts on the groundwater quality of the area.</p>	Not likely to be at variance	No
<p><u>Principle (j):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</i></p> <p><u>Assessment:</u> 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. Further survey details state that with the average rainfall of 150-200mm, it is unlikely to result in localised flooding (Botanica Consulting, 2024).</p>	Not likely to be at variance	No

Appendix C. 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 Trudgen, M.E. (1991) *Vegetation condition scale* in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.

Measuring vegetation condition for the Eremaean and Northern Botanical Provinces (Trudgen, 1991)

Condition	Description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.

Condition	Description
Very good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Very poor	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely degraded	Areas that are completely or almost completely without native species in the structure of their vegetation, i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

Appendix D. Flora and Vegetation Survey excerpts and road widening maps

The flora and vegetation survey (Botanica, 2024) indicates the application area consists of two vegetation types, described as:



Landform	NVIS Vegetation Group	Veg Code	Vegetation Type	Area (ha)	Area (%)	Image
Plain	Acacia open woodlands (MVG 13)	SCLP-AOW1	Low open woodland of <i>Acacia papyrocarpa</i> over mid open shrubland of <i>Senna artemisioides</i> subsp. <i>filifolia</i> over low chenopod shrubland of <i>Maireana sedifolia</i> on sandy clay loam plain.	1313	86	
Plain	Chenopod Shrublands (MVG 22)	CLP-CS1	Mid open shrubland of <i>Senna artemisioides</i> subsp. <i>filifolia</i> and <i>Eremophila scoparia</i> over low chenopod shrubland of <i>Maireana sedifolia</i> on clay loam plain.	75	5	
Cleared areas				144	9	

Table 1: Description of representative flora vegetation types identified in the survey area

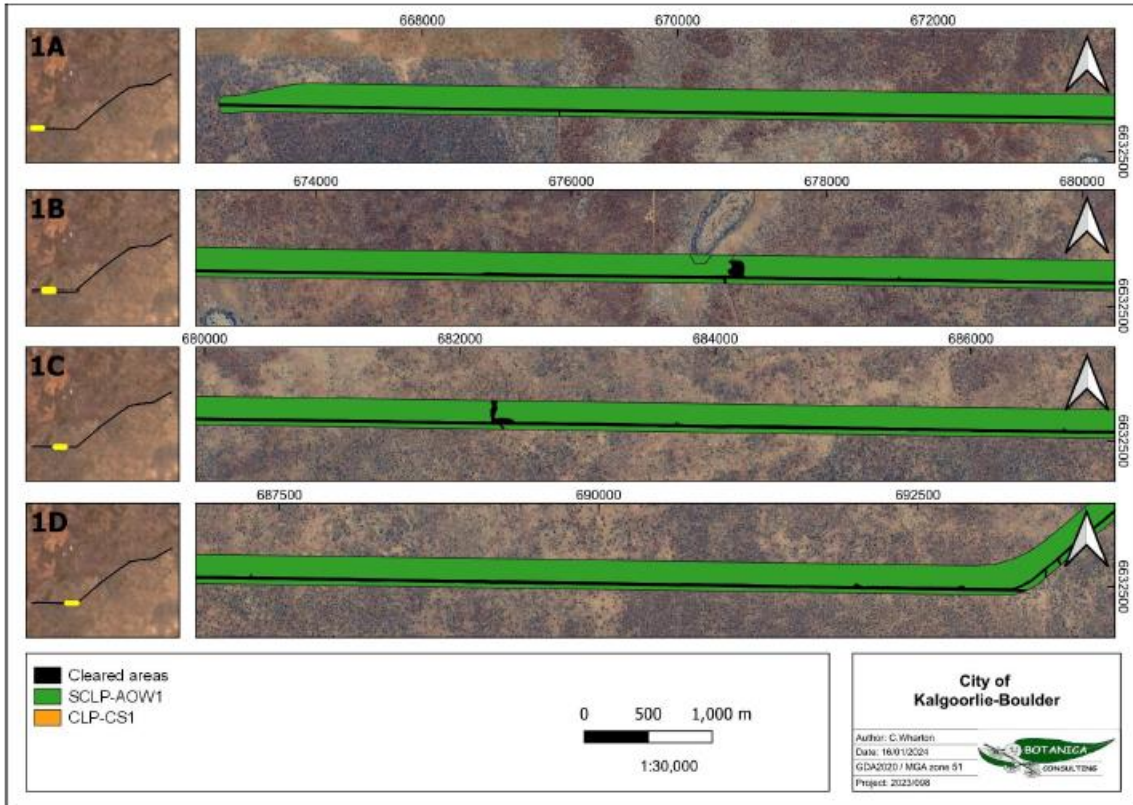


Figure 2.1: Vegetation types within the survey area (Map 1 of 4)

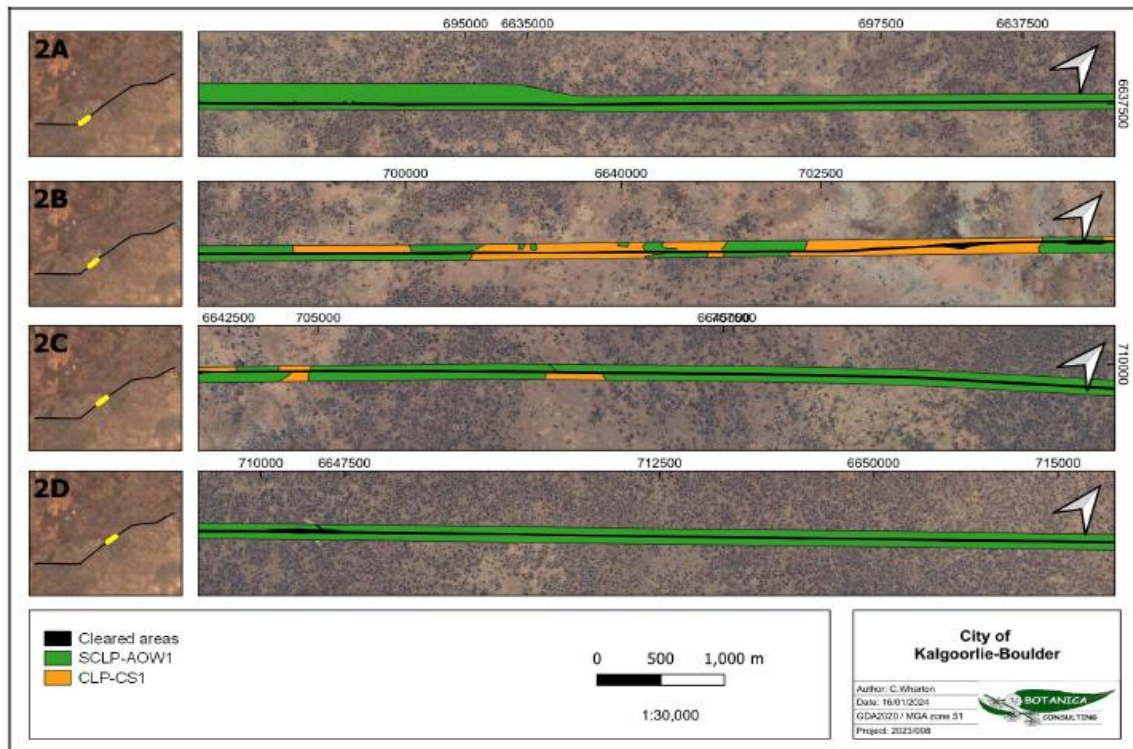


Figure 2.2: Vegetation types within the survey area (Map 2 of 4)



Figure 2.3: Vegetation types within the survey area (Map 3 of 4)

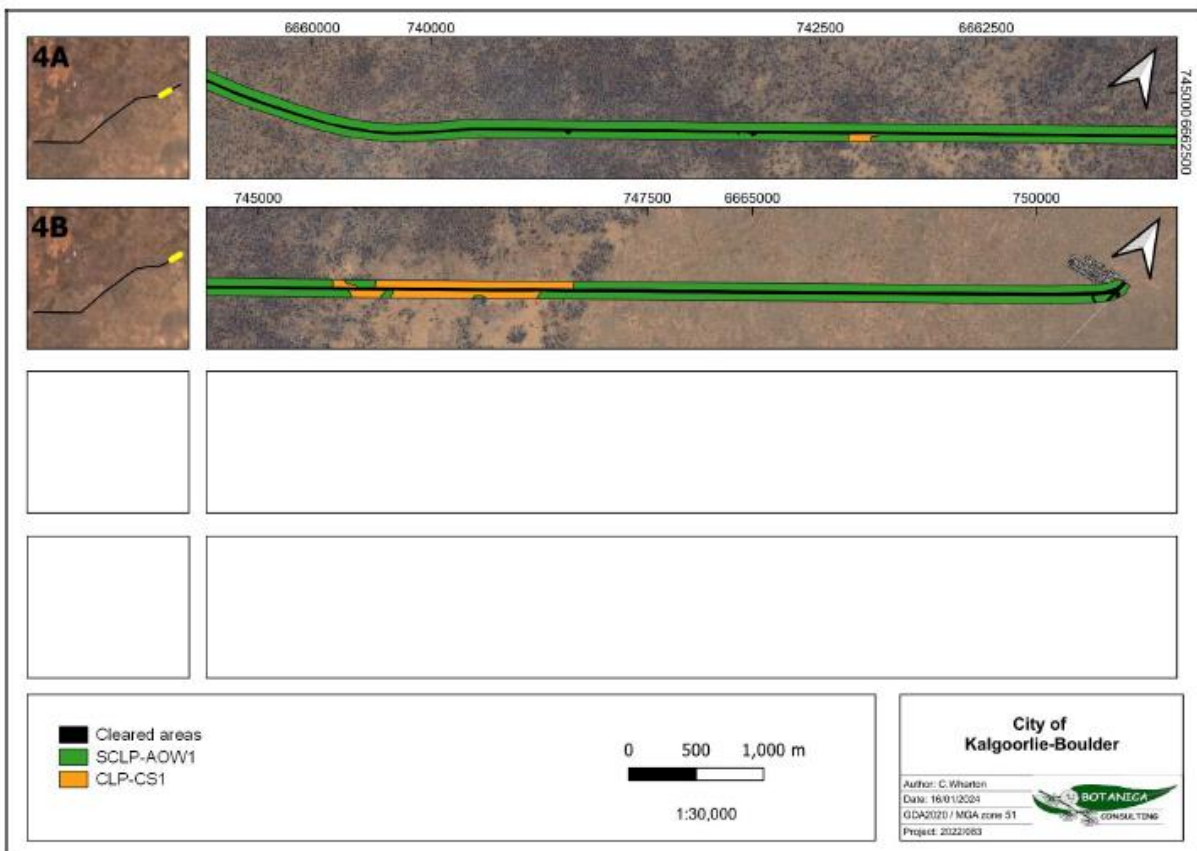


Figure 2.4: Vegetation types within the survey area (Map 4 of 4)

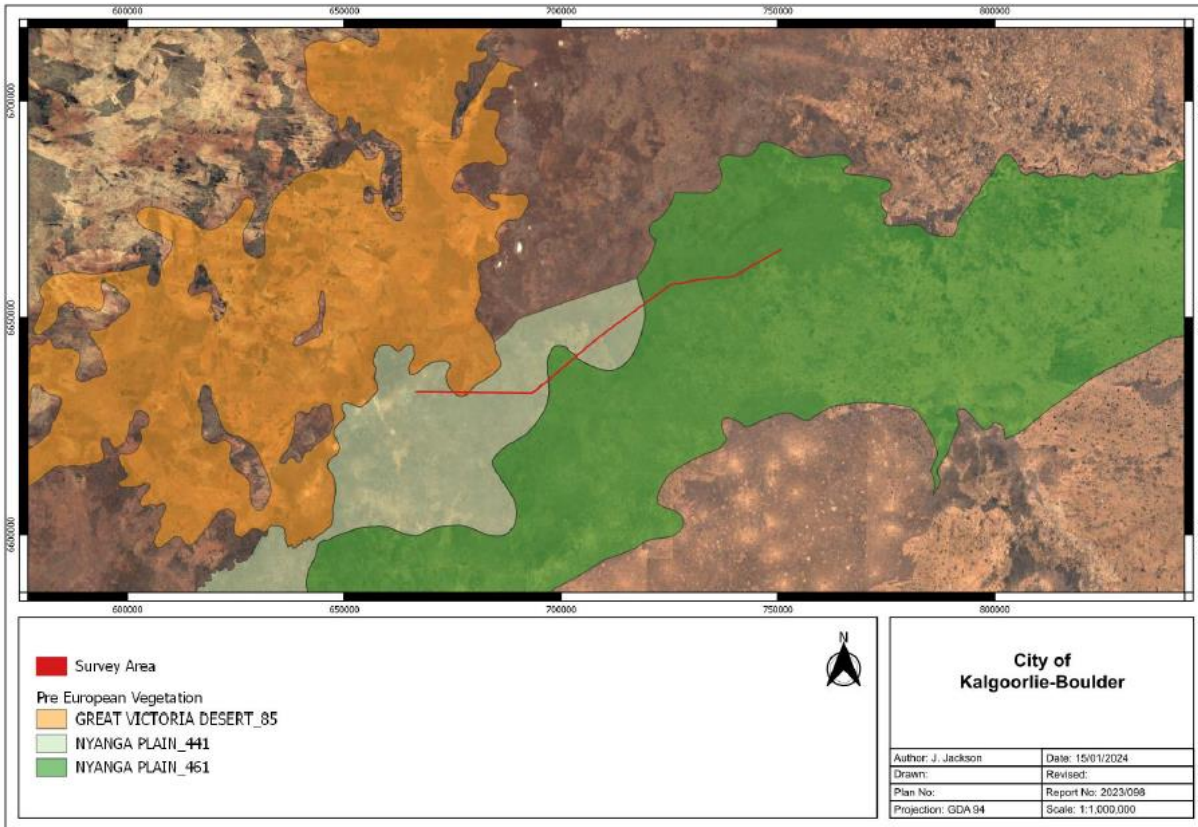


Figure 3: Pre-European vegetation within the survey area

Condition rating	Description (EPA, 2016a)	Area (ha)	Area (%)
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impacts on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.	1,392	91
Completely Degraded	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e., areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.	144	9

Table 2: Vegetation condition rating within the survey area

Soil Landscape System	Description	Extent within Survey Area (%)
555DD34	Very gently to gently undulating plains with broad flats and low broad rises, the former being the prominent feature.	41
581DD34	Very gently to gently undulating plains with broad flats and low broad rises, the former being the prominent feature.	7
581Ny - Nyanga	Level loamy calcrete plains supporting myall or casuarina woodland over chenopod understorey.	52

Table 3: Mapped soil extent within the survey area

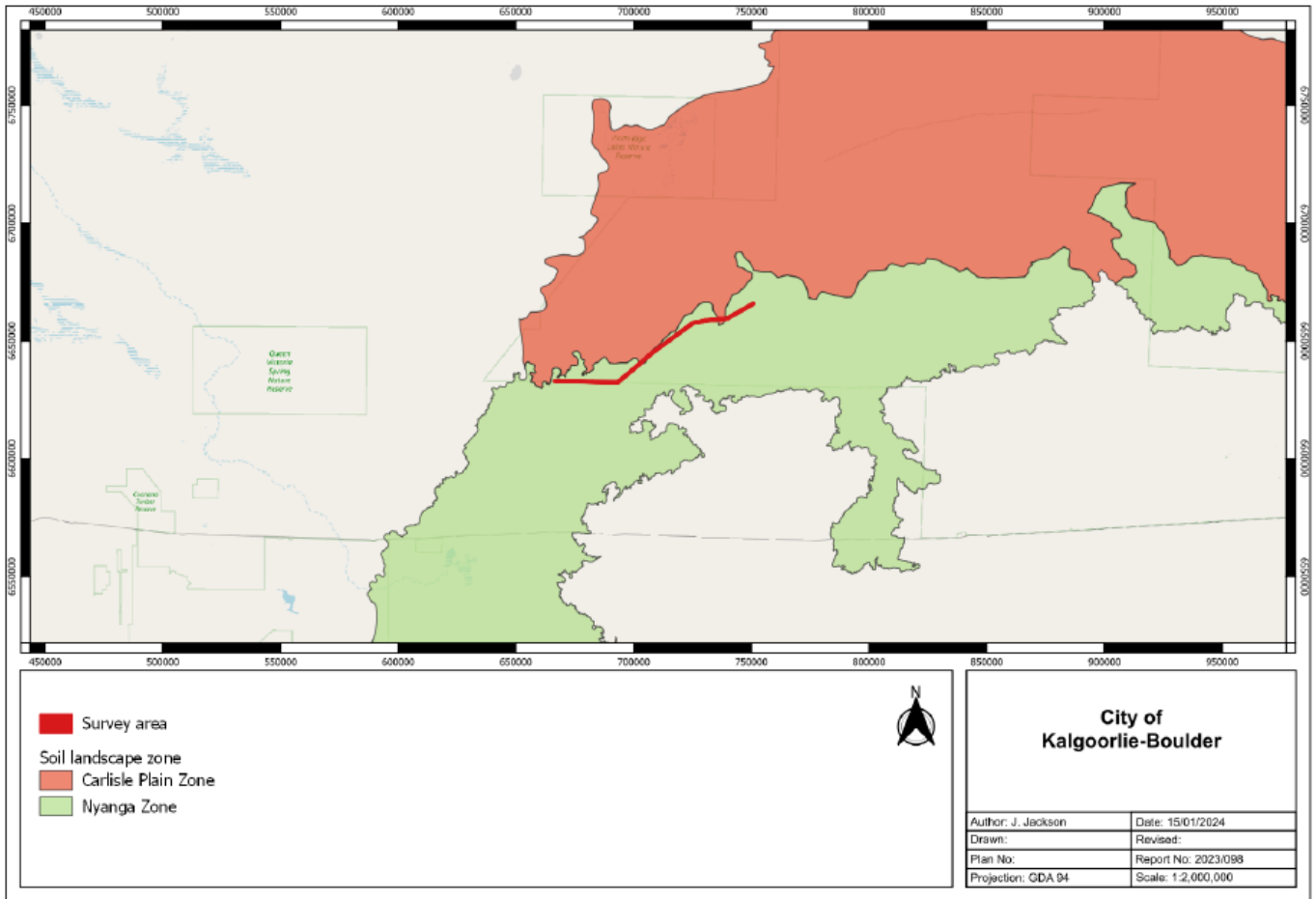


Figure 4: Mapped soil zones within the survey area

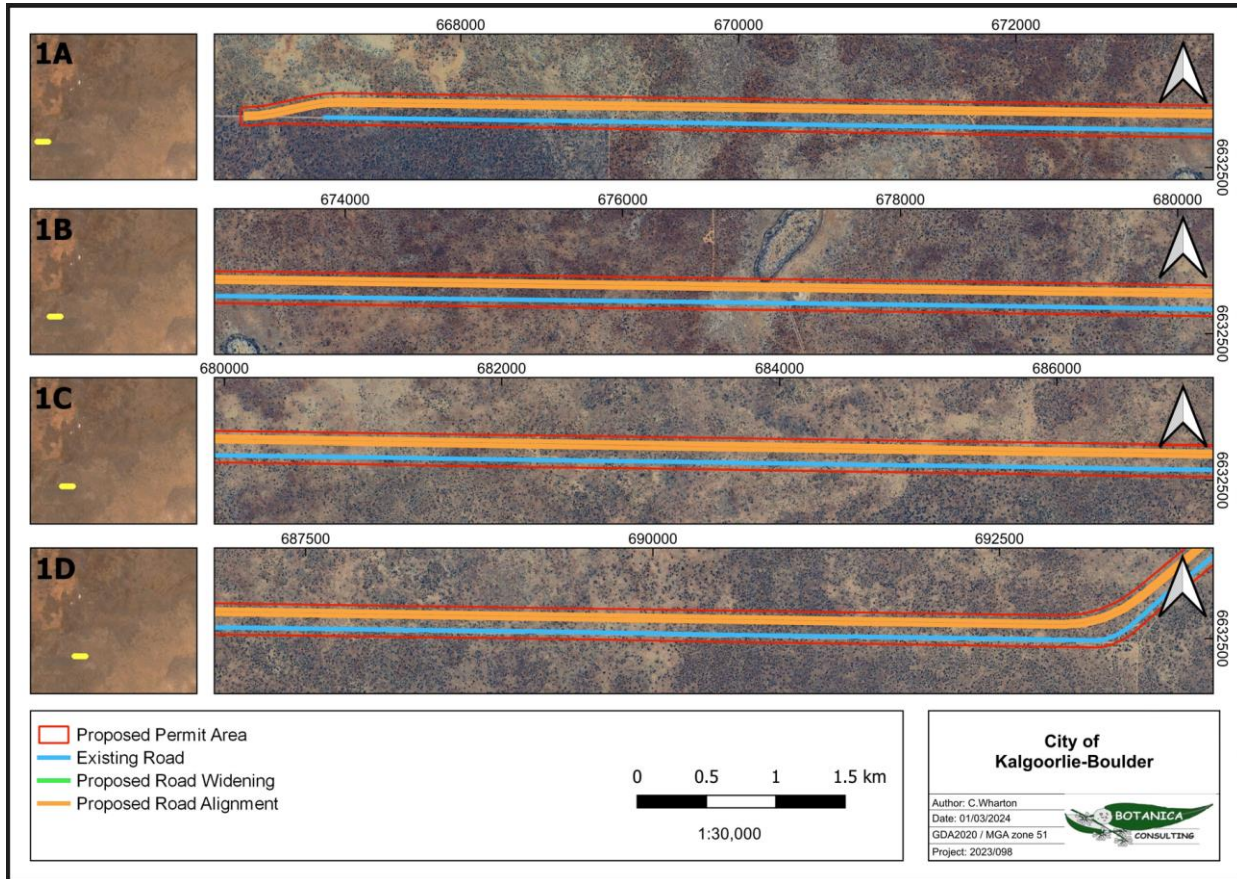


Figure 5.1: Proposed road widening, and alignment works within the application area (Map 1 of 4)

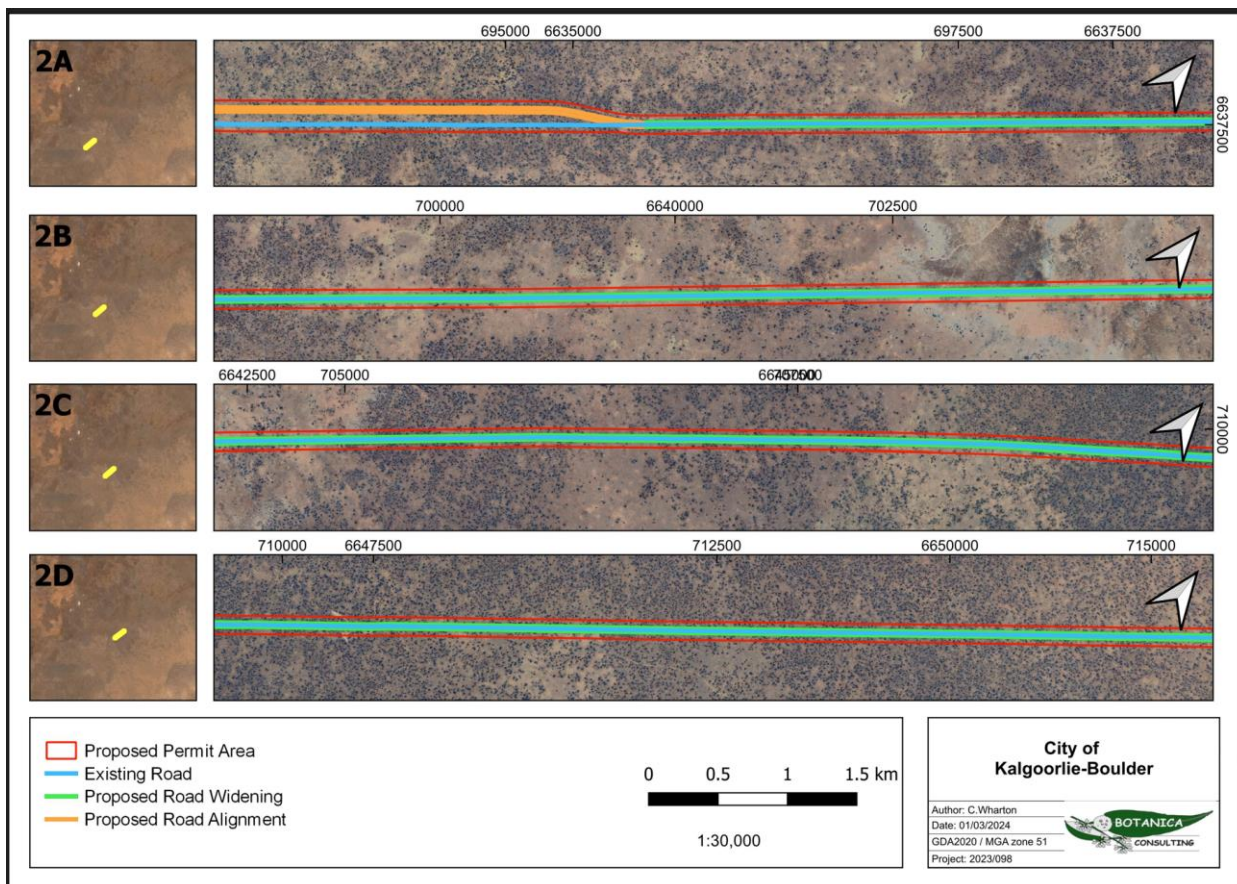


Figure 5.2: Proposed Road widening, and alignment works within the application area (Map 2 of 4)

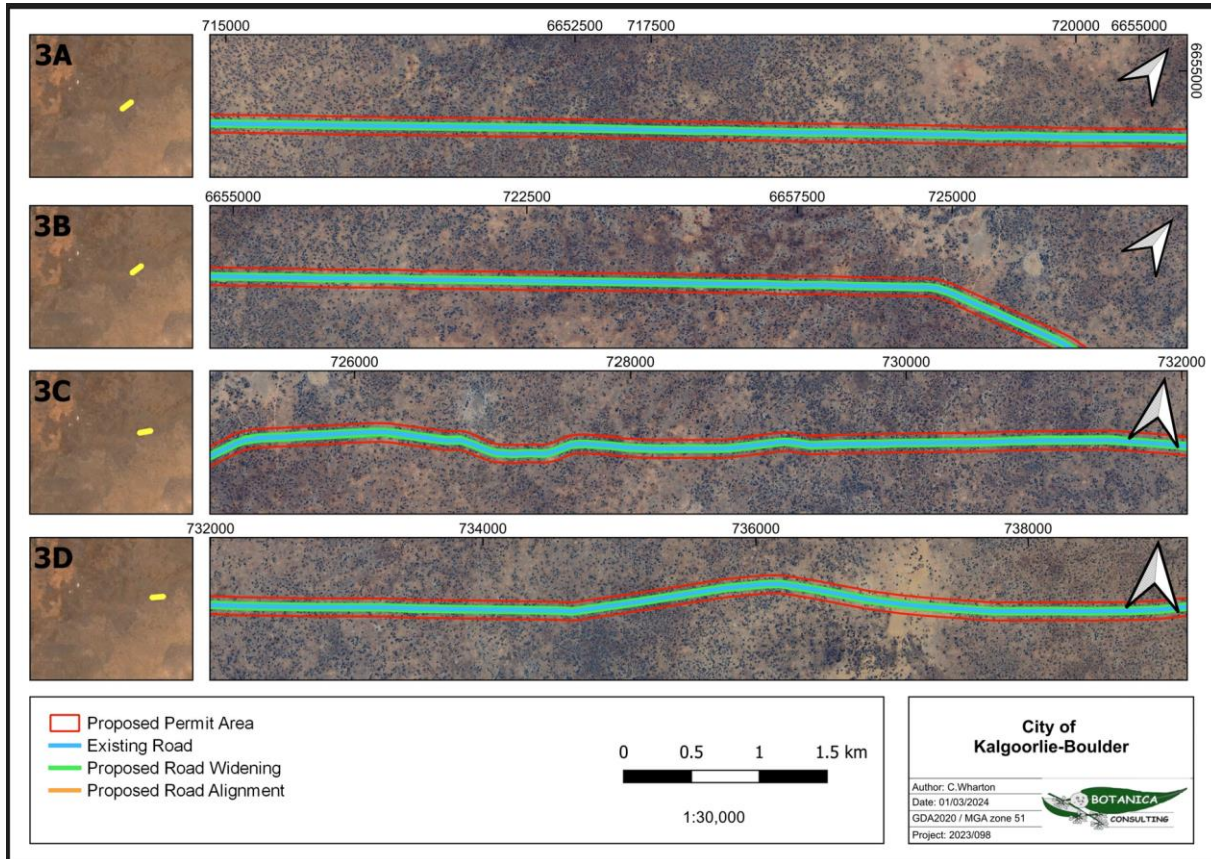


Figure 5.3: Proposed road widening, and alignment works within the application area (Map 3 of 4)

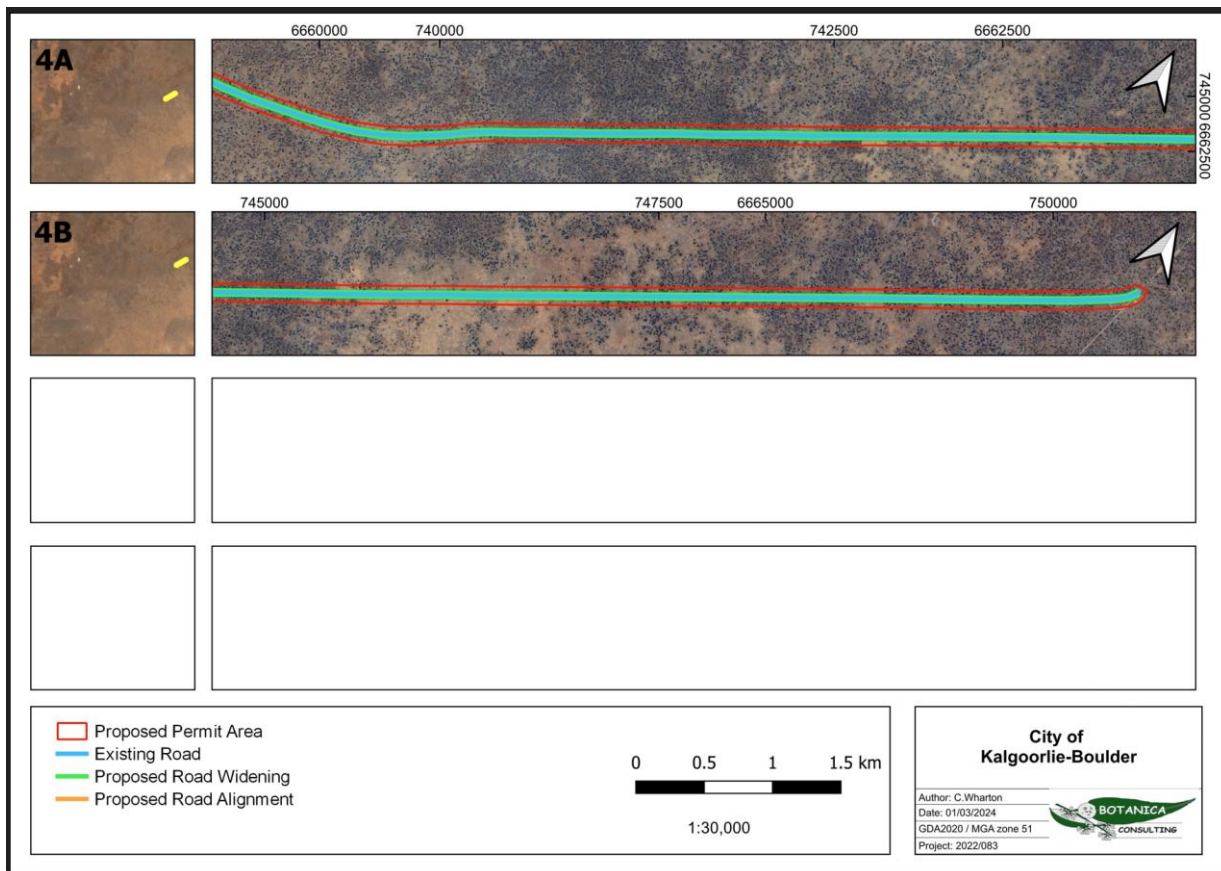


Figure 5.4: Proposed Road widening, and alignment works within the application area (Map 4 of 4)

Appendix E. Sources of information

E.1. GIS databases

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

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- Soil Landscape Mapping – Best Available
- Soil Landscape Mapping – Systems

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
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

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