GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 10831/1
Permit Holder:	Vertiv (Australia) Pty Ltd
Duration of Permit:	From 24 May 2025 to 24 May 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 construction and operation of high-speed optic fibre cable and associated works.

2. Land on which clearing is to be done

Marble Bar Road reserve (PIN 11734467), Newman
Lot 1547 on Deposited Plan 74347, Newman

3. Clearing authorised

The permit holder must not clear more than 0.73 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

4. Period during which clearing is authorised

The permit holder must not clear any *native vegetation* after 24 May 2030

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 conduct clearing activities in a slow, progressive manner from west to east to allow fauna to move into adjacent *native vegetation* ahead of the clearing activity.

8. Erosion management

The permit holder must:

(a) commence the proposed works no later than three (3) months after undertaking the authorised clearing activities to reduce the potential for wind erosion.

(b) only undertake clearing during dry weather conditions to reduce the potential for water erosion and potential for flooding.

PART III - RECORD KEEPING AND REPORTING

9. 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; (b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (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); and (e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing

No.	Relevant matter	Specifications
		in accordance with condition 5; (f) actions taken to minimise the risk of the introduction and spread of *weeds* in accordance with condition 6; (g) actions taken in accordance with condition 7; and (h) actions taken in accordance with condition 8.

10. Reporting

The permit holder must provide to the *CEO* the records required under condition 9 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 *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.
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.
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.
weeds	means any plant – (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.

END OF CONDITIONS

Ryan Mincham
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

1 May 2025

Schedule 1

Plan 10831/1

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

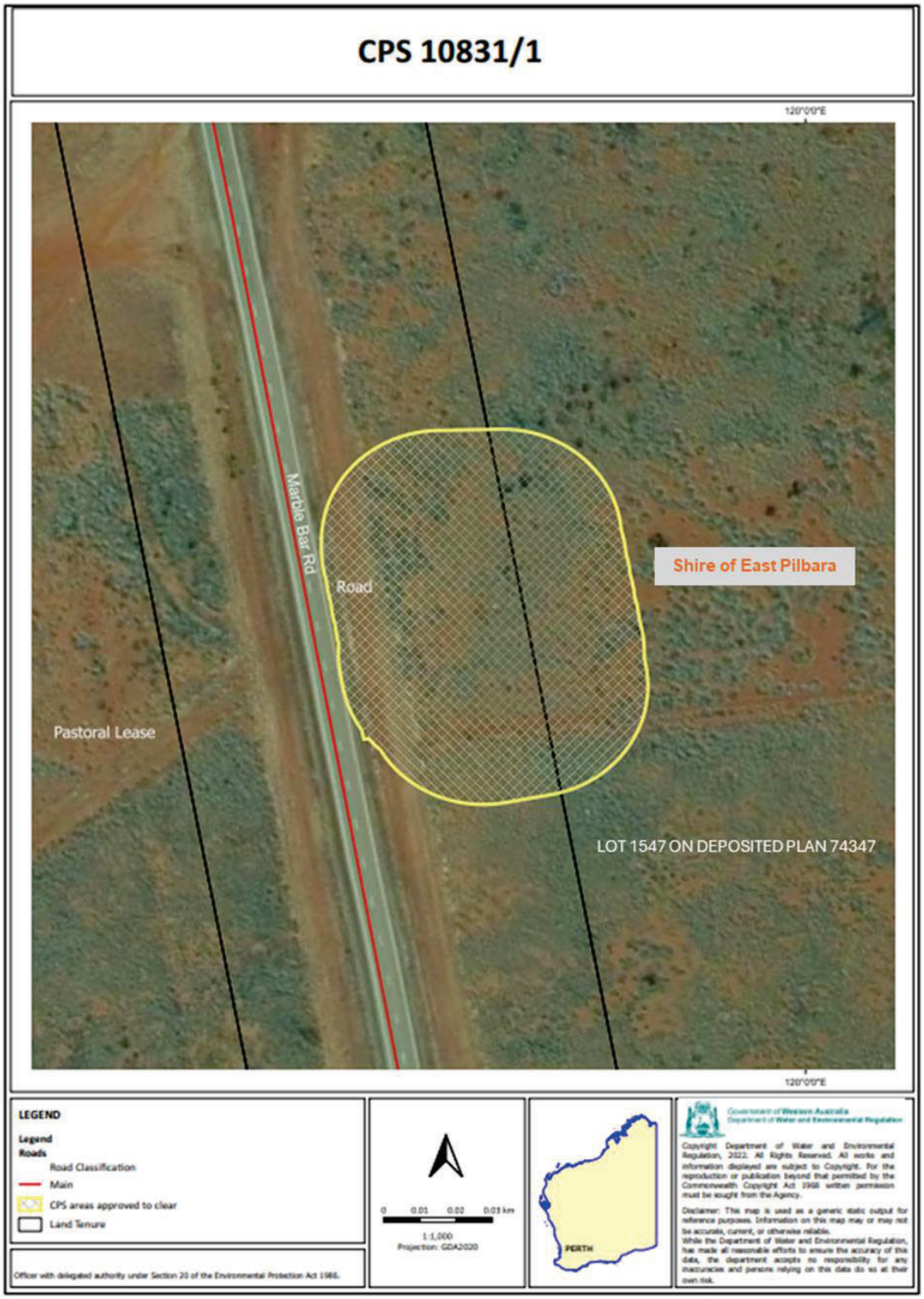

Figure 1: Map of the boundary of the area within which clearing may occur

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 10831/1
Permit type:	Purpose permit
Applicant name:	Vertiv (Australia) Pty Ltd
Application received:	8 November 2024
Application area:	0.73 hectares of native vegetation
Purpose of clearing:	Construction and operation of high-speed optic fibre cable and associated works
Method of clearing:	Mechanical
Property:	Marble Bar Road reserve (PIN 11734467) Lot 1547 on Deposited Plan 74347
Location (LGA area/s):	Shire of East Pilbara
Localities (suburb/s):	Newman

1.2. Description of clearing activities

The vegetation proposed to be cleared is contained within a single contiguous area (see Figure 1, Section 1.5). The proposed clearing is to facilitate the construction and operation of a high-speed optic fibre cable constructed parallel to Great Northern Highway.

The proposed works include the earthworks (including access tracks), site preparation, installation, and commissioning of a Controlled Environment Vault (CEV) building, complete with, a battery hut and a five kilowatt (kW) solar array, supported by a self - contained, emergency diesel powered generator set on its own separate footing. The site will be completed with a full-scale galvanised security fence surrounding the buildings and equipment. Construction of the development includes the placement of temporary site huts, delivery via semi-trailer and on site craneage into position of the CEV and the Emergency Generator. The temporary site huts will be located within areas which are required to remain clear of vegetation for bushfire mitigation purposes.

1.3. Decision on application

Decision:	Granted
Decision date:	1 May 2025
Decision area:	0.73 hectares 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 findings of a biological survey (see Appendix D), 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 assessment identified that the proposed clearing will 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; and
- potential land degradation in the form of wind erosion. Erosion management measures conditioned on the permit are expected to mitigate these impacts.

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 to appreciable land degradation, and 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, minimise to reduce the impacts and extent of clearing
- take hygiene steps to minimise the risk of the introduction and spread of weeds
- staged clearing to minimise wind erosion
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity

1.5. Site map

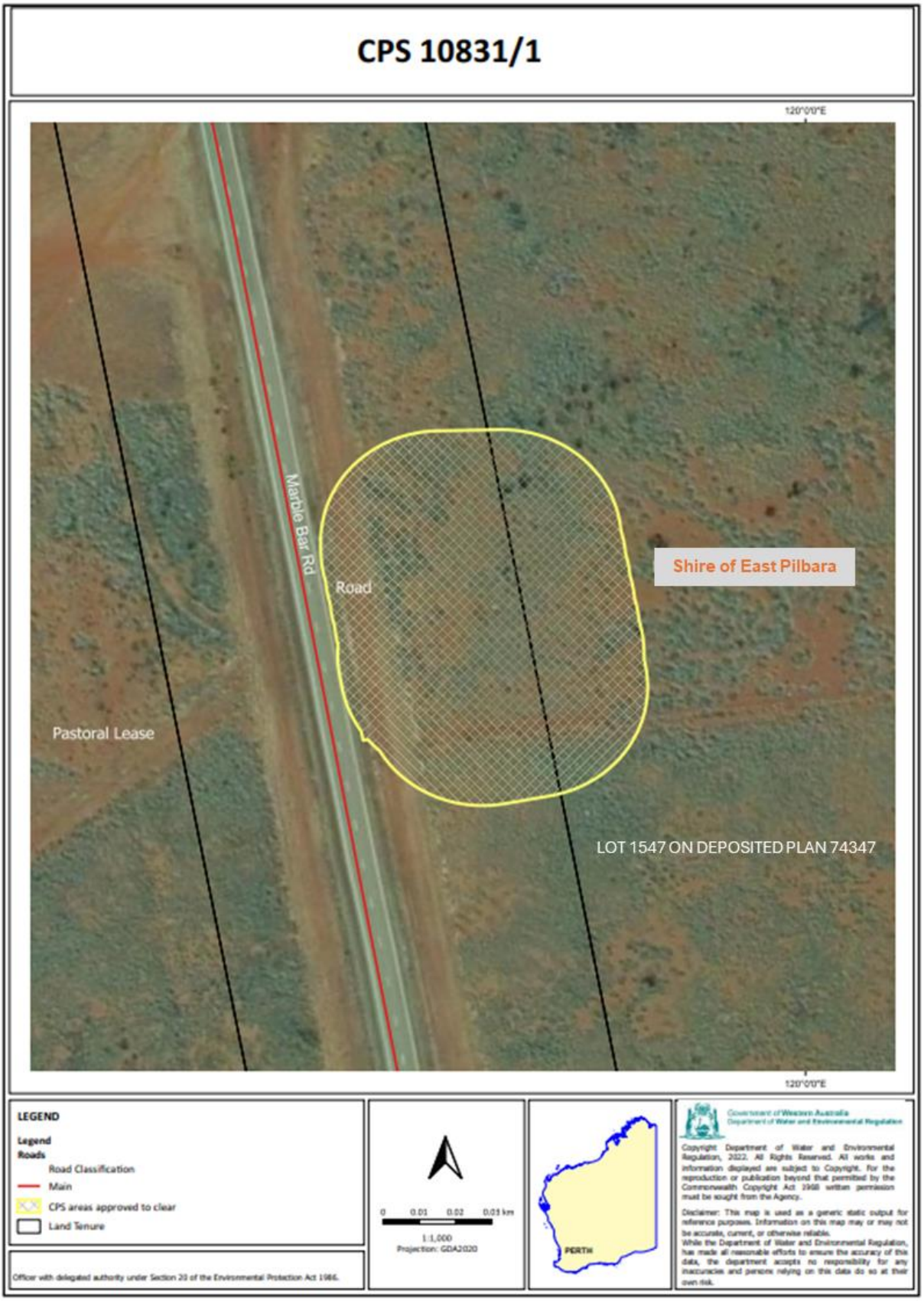

Figure 1 Map of the application area

The area cross-hatched yellow indicates the area 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 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 applicant has committed to develop a Construction Environment Management Plan (CEMP) to minimise the risk of environmental impacts during construction of the project. The applicant has made the following commitments (Vertiv, 2024):

- a CEMP will be developed by the contractor engaged to construct the CEV, under the advice of an experienced environmental practitioner.
- a contractor shall be responsible for implementing the CEMP, including the delegation of specific actions to appropriate personnel.
- a suitably qualified Environmental Supervisor will be present throughout clearing activities.

A series of mitigation measures proposed by the applicant are shown in the table below:

Risk	Activity	Risk	Mitigation
Fauna death or injury	Direct interaction by mobile plant or vehicles	Low	If a distressed or injured animal is encountered the Site Supervisor will contact a suitably qualified fauna handler or the Wildcare helpline on (08) 9474 9055. Trenches and excavations should be checked in the morning prior to commencing activities and trapped fauna extracted by a licenced fauna handler. Where possible any stockpiled debris should be removed before night to prevent fauna from roosting in the debris.
Unauthorised Clearing	Clearing, rolling, pruning or damage to native vegetation not authorised by this clearing permit.	Med	Clearing cannot commence at sites without required State approvals. Where clearing is permitted under exemption, the contract should demarcate areas of vegetation to be retained using flagging tape. No debris or cut/fill material will be stockpiled in the vicinity of native vegetation to be retained. Clearing will be managed in accordance with the CEMP to be developed by the contractor.
Wind / Air dispersal (e.g. noise, dust)	Plant and vehicle movements, desilting of assets. Clearing activities Desilting/ excavation in drier periods	Low	Works will be carried out in accordance with environmental noise practices set out in Section 4 of AS 2436-2010 '*Guide to Noise and Vibration control on construction, maintenance and demolition sites.*' All works will be undertaken in accordance with the Local Government Authority Noise ordinance. Weather conditions at the nearest Bureau of Meteorology monitoring site will be monitored and standard dust suppression measures implemented as required.
Spills causing water and soil contamination	Plant equipment and vehicle storage and movements	Med	Plant and equipment will be inspected daily for leaks and spills. A spill kit will be available at all times onsite during works. Plant and equipment will be stored on hardstand overnight.

Soil and water contamination	Disturbance of Potential or Actual acid sulphate soils	Low	Excavation depths are not more than 700mm bgl, and no occurrences of PASS or ASS were identified on or near the proposed site.
Spread of soil pathogens and weeds	Introduction or spread of soil pathogens and declared weeds.	Low	The site is highly modified and degraded to completely degraded. Standard management processes will be implemented. All plant and equipment will be inspected and cleaned prior to site entry.
Dewatering	Drawdown impacts on surrounding vegetation	Low	Excavation depths will not be more than 700 mm bgl, therefore dewatering is not expected to be necessary.
Inappropriate waste management	Incorrect storage and/or disposal of waste resulting in contamination or amenity impacts	Med	Contractor will dispose of all waste and retain records of disposal. The site will be tidied, waste removed, and the site reinstated at the completion of works.

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) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see Appendix B) identified the impacts of the proposed clearing are limited and able to be managed to be environmentally acceptable with standard avoid and minimise, hygiene, directional clearing and erosion management conditions.

3.3. Relevant planning instruments and other matters

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	The area proposed to be cleared is a 0.73-hectare patch of native vegetation in the extensive land use zone of Western Australia. It is located parallel to the Great Northern Highway in Newman. Aerial imagery indicates the local area (50-kilometre radius from the centre of the area proposed to be cleared) retains approximately 99 per cent of the original native vegetation cover.
Ecological linkage	The proposed clearing areas are not mapped within any formal ecological linkages.
Conservation areas	There are no conservation areas within the 25-kilometre vicinity of the application area.
Vegetation description	A vegetation survey (RFF, 2024) indicates the vegetation within the proposed clearing area consists of: • Open Low Woodland and Sparse Woodland; Mulga described as '*cacia aneura, Acacia victoriae* and *Hakes rhombales* over *Senna artemesiodies* subsp. *oligophylla, Senna artemesiodies* subsp. helmsii and *Eremophila forrestii* over *Triodia basedowii, Pilots exaltatus* and *Enneapogon polyphyllus'* • Spinifex Grasslands, Shrub Steppe described as '*Acacia inaequilatera, Hakes rhombales* and *Grevillea stenobotrya* over *Eremophila forrestii* over *Triodia basedowii, Senna notabilis* and *Ptilotus exaltatus'* Representative photos are available in Appendix D. This is consistent with the mapped vegetation type(s): • Fortescue Valley_29, which is described as low woodland, open low woodland or sparse woodland comprising of Mulga *Acacia aneura* and associated species. The mapped vegetation type retains approximately 99 per cent of the original extent (Government of Western Australia, 2019).
Vegetation condition	The vegetation survey (RFF, 2024) and aerial imagery indicate the vegetation is generally in Very Good condition, with some areas deteriorating to Good condition closer to the road. The area closest to the road displays obvious signs of disturbance such as vehicle tracks, cleared tracks and construction damage from past road construction and associated drainage works. Overall, the vegetation within the proposed clearing area ranges from Very Good to Good (Trudgen, 1991) condition, described as: • Very Good: Some relatively slight signs of damage caused by human activities since European settlement. • Good: More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation

Characteristic	Details
	structure such as that caused by low levels of grazing or slightly aggressive weeds. The full Trudgen (1991) condition rating scale is provided in Appendix C. The full survey descriptions and mapping are available in Appendix D.
Climate and landform	Landform: Depositional surfaces; level to gently undulating sandplain with occasional linear dunes and plains with thin sand cover, very little organised drainage but some tracts receiving run-on from adjacent more elevated systems, these tracts mostly unchanneled. Climate: The climate of the study area is arid, with hot daytime temperatures and patchy and generally unreliable rainfall, with the potential for significant daily rainfall totals during the wet season (over the summer months).
Soil description	The soil is mapped as the Divide System (284Dv), described as 'Gently undulating sandplains with minor dunes, supporting hard spinifex hummock grasslands with numerous shrubs.'
Land degradation risk	The Divide land system may be susceptible to wind and water erosion immediately following the removal of vegetation cover as this land system comprises of plains with thin sand cover, very little organised drainage but some tracts which receive run-on from adjacent more elevated systems (Van Vreeswyk et al., 2004).
Waterbodies	The desktop assessment and aerial imagery indicated that no watercourses transect the area proposed to be cleared.
Hydrogeography	The proposed clearing is mapped within the Pilbara Surface Water Area and Pilbara Groundwater Area.
Flora	There are records of 29 conservation significant flora species within the local area, two of which, *Eremophila pilosa* (Priority 1) and *Eucalyptus rowleyi* (Priority 3), are found on the same soil and vegetation type as the application area. The vegetation survey (RFF, 2024) did not detect conservation significant flora species within the application area.
Ecological communities	The vegetation survey identified that the application area does not represent suitable habitat for a Threatened Ecological community (TEC) or a Priority Ecological Community (PEC) (RFF, 2024).
Fauna	There are records of 25 fauna species of conservation significance within the local area with the closest record of a brush-tailed mulgara, approximately 7.8 kilometres away from the application area. The biological survey did not identify evidence of conservation significant fauna utilising the application area.

Appendix B. 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."* Assessment: The area proposed to be cleared does not contain regionally significant flora, fauna, habitats or assemblages of plants.	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
The vegetation is generally in Very Good condition, deteriorating in areas closer to the road (RFF, 2024). The vegetation in the application area is representative of vegetation types that are extensive throughout the Divide subregion. There are no TECs or PECs located within close proximity of the study area. Based on the size, condition, and habitat present within the site, none are expected to occur (RFF, 2024). The site is mapped as the Fortescue (29) vegetation association which is well-represented at the state, regional and local scales, with over 99% of the pre-European extent remaining at each scale. No conservation significant flora or fauna species were identified during the survey.		
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."* Assessment: The area proposed to be cleared does not contain significant habitat for conservation significant fauna. Measures to minimise impacts to fauna and faunal habitats, including pre-construction surveys for fauna at the CEV location, will be implemented through a CEMP. The permit will be conditioned to mitigate any potential impacts to fauna species present at the time of clearing.	Not likely to be at variance	No
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: The survey (RFF, 2024) and the desktop assessment did not identify threatened flora species within the local area. The area proposed to be cleared is unlikely to contain critical habitat for flora species listed as threatened under the BC Act.	Not likely to be at variance	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."* Assessment: The area proposed to be cleared does not contain species indicative of a threatened ecological community.	Not likely to be at variance	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."* Assessment: The extent of the mapped vegetation type 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.	Not likely to be at variance	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."* Assessment:	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.		
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."* Assessment: Given no watercourses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact on- or off-site hydrology and water quality.	Not at variance	No
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The mapped soils are highly susceptible to wind and water erosion. Noting the extent of the clearing and the condition of the vegetation, the proposed clearing is not likely to have an appreciable impact on land degradation. It is noted that the CEMP will include actions to ensure that works are not completed if high winds or significant rain events are expected during or a short time after construction takes place. The permit will be conditioned to avoid any impacts of wind and water erosion.	May be at variance	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."* Assessment: No watercourses and wetlands are recorded within the application area and it is noted that the geotechnical investigations did not detect groundwater at the location (Vertiv, 2024). The proposed clearing is unlikely to impact surface or groundwater quality.	Not at variance	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."* Assessment: The mapped soils and topographic contours in the surrounding area indicate the proposed clearing may contribute to surface sheet flows. Given the small size of clearing area and the distribution of intact vegetation, it is unlikely that the proposed clearing will significantly increase the incidence or intensity of natural flooding events. The permit will be conditioned to manage any potential incidents of flooding. Given no watercourses or wetlands are recorded within application area, the proposed clearing is unlikely to contribute to waterlogging.	May 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.
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. Biological survey information excerpts

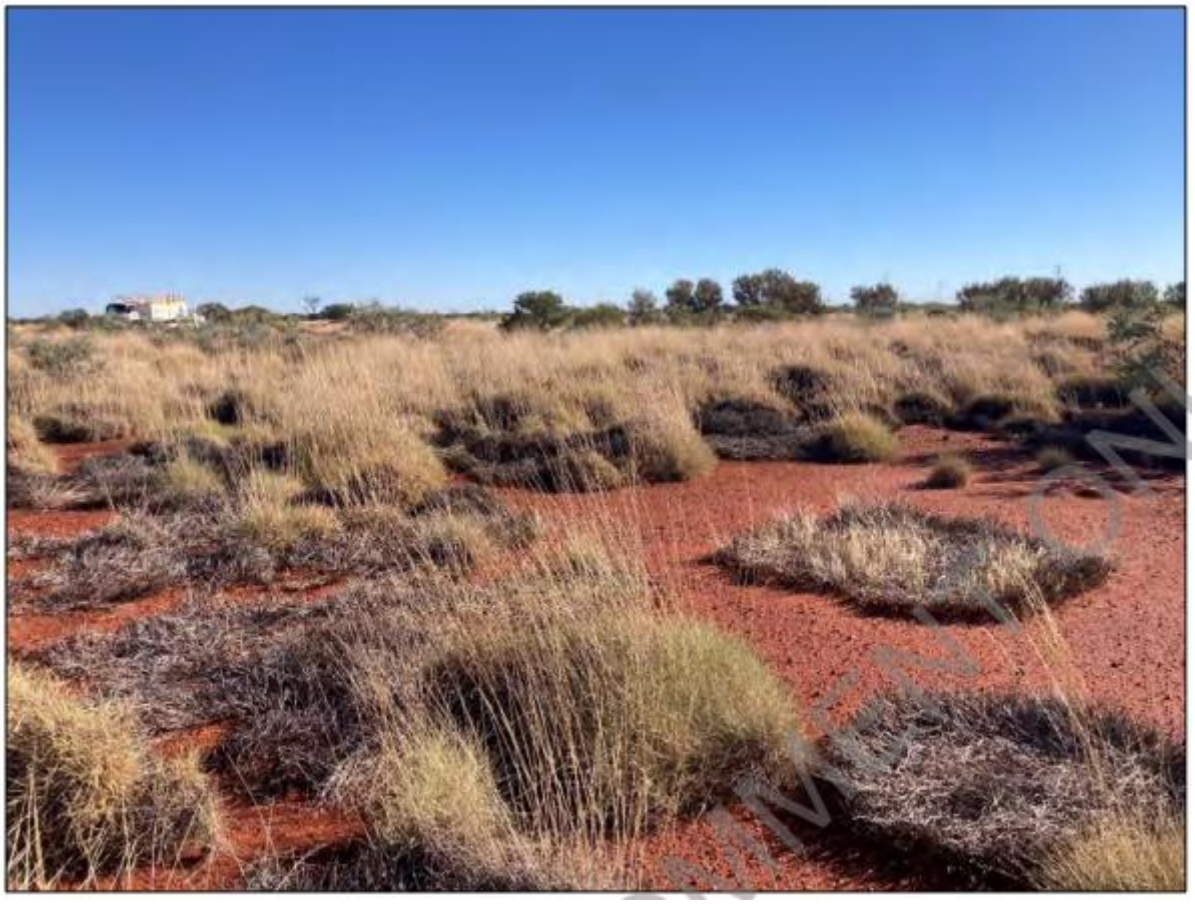

Figure 2: Vegetation representative of 'Spinifex Grasslands, Shrub Steppe'

Figure 3: Vegetation representative of 'Open Low Woodland and Sparse Woodland'

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)
- Offsets Register – Offsets (DWER-078)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- 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
- 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)

E.2. References

Commonwealth of Australia (2001) *National Objectives and Targets for Biodiversity Conservation 2001-2005*, Canberra.

Department of Environment Regulation (DER) (2013). *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf.

Department of Water and Environmental Regulation (DWER) (2019). *Procedure: Native vegetation clearing permits*. Joondalup. Available from: https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.PDF.

Environmental Protection Authority (EPA) (2016). *Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment*. Available from: http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf.

Environmental Protection Authority (EPA) (2016). *Technical Guidance – Terrestrial Fauna Surveys.* Available from: https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Tech%20guidance-%20Terrestrial%20Fauna%20Surveys-Dec-2016.pdf.

Government of Western Australia. (2019) *2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019.* WA Department of Biodiversity, Conservation and Attractions. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics

Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) *South West Regional Ecological Linkages Technical Report*, Western Australian Local Government Association and Department of Environment and Conservation, Perth.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68) *Atlas of Australian Soils*, Sheets 1 to 10, with explanatory data. CSIRO and Melbourne University Press: Melbourne.

RFF Australia (2024) *Vegetation and Flora Reconnaissance Survey – supporting information for CPS 10831,* received 7 November 2024 (DWER Ref: DWERDT1066740).

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

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) *Native Vegetation in Western Australia, Extent, Type and Status*. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

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.

Van Vreeswyk, A.M.E., Payne, A.L., Hennig, P., and Leighton, K.A. (2004) An Inventory and Condition Survey of the Pilbara Region, Western Australia. Department of Agriculture, Western Australia.

Vertiv (Australia) Pty Ltd (2024) *Clearing permit application CPS 10831/1*, received 8 November 2024 (DWER Ref: DWERDT1033432).

Western Australian Herbarium (1998-). *FloraBase - the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions, Western Australia. https://florabase.dpaw.wa.gov.au/ (Accessed 14 April 2025)