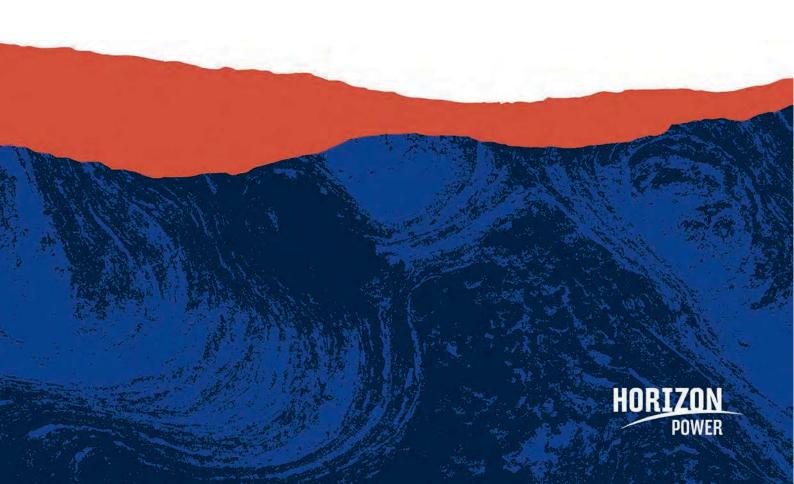
Midwest Towns Renewable Infrastructure Project - Native Vegetation Clearing Permit

Cue

Supporting Document

July 2024



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1 Introduction

1.1 Project Context

Regional Power Corporation, trading as (T/A) Horizon Power, is a Western Australian (WA) Government Trading Enterprise (GTE) and the state's regional and remote energy provider. Horizon Power operates under the *Electricity Corporations Act 2005* and is governed by a Board of Directors accountable to the Minister for Energy.

The Western Australian State Government is committed to reduce carbon emissions by 80% by 2030. Horizon Power is proposing to develop a future energy system (FES) in Cue, WA as part of a project to transition several Midwest and remote towns systems to higher levels of renewable energy penetration. Cue is one of seven towns supplied via an Independent Power Producer (IPP) under a Power Purchase Agreement (PPA); an upcoming PPA decision point is an opportunity for Horizon Power to consider how it supplies power to the towns. The generation mix currently recommended for Cue's FES is the construction of additional solar PV and Energy Storage Solutions (ESS). The final design and footprint required for the FES will be determined once geotechnical surveys are undertaken.

The geotechnical surveys will require the clearing of up to 3.65 ha of native vegetation. This will allow for geotechnical testing, including incidental clearing (driving over and parking on native vegetation) for vehicle / machinery access to test sites. An additional 2.75 ha of temporary clearing will be required for stringing and winching of the connection transmission line and a laydown area for construction.

The construction of the Project will require the permanent clearing of up to 16.3 ha in total. This will allow for generation of approximately 1.44 megawatts (MW) of solar, a connection corridor to existing power station, access tracks and fire breaks. Specific detail of the proposed clearing is provided in Section 3 of this document.

A Native Vegetation Clearing Permit (NVCP) will be required from the Department of Water and Environmental Regulation (DWER).

1.2 Scope and Purpose

This document has been prepared to support a NVCP application for the Project. Specifically, this document provides further detail regarding the proposed activities (Section 2) and related clearing (Section 3).

To support environmental approvals for the Project, an ecological survey was undertaken by GHD (2023) (Appendix A). The results of this survey, as relevant to the proposed clearing, are summarised in Section 4 of this document and have been taken into account when avoiding and mitigating Project environmental impacts (Section 6).

An assessment of the 10 Clearing Principles as outlined in 'A guide to the assessment of applications to clear native vegetation' (DER 2014) has also been undertaken and is presented Section 8.

A Construction Environment Management Plan (CEMP) has also been prepared in support of the NVCP Application and is provided in Appendix B.

2 Description of the Activity

2.1 Project Location

A Development Envelope (DE) has been identified for the Project and is described in Table 1 and shown in Figure 1. The DE includes three connection corridor options due to land acquisition constraints at the time of preparation of this NVCP Supporting Document, including ongoing discussions with Department of Planning, Lands and Heritage (DPLH) regarding the cadastral boundary of the road reserve. One corridor will be selected once land acquisition has progressed further.

Table 1 Development Envelope for the Project

Site	Size of Development Envelope (ha)	Development Envelope location	Shire	Neighbouring land uses					
Cue	38.92	Reserve 4590 - Lot 2 on DP256623, LR3008/138	Shire of Cue	Roads, crown land, residential and					
		Dedicated Road - PIN 11707476		freehold land					
	Reserve 7273 - Lot 304 on DP65923, LR3165/607								
		Dedicated Road - PIN 11726191							
		Dedicated Road - PIN 11707477							
		Dedicated Road - PIN 11726195			-				
		Dedicated Road - PIN 11430588							
		Dedicated Road - PIN 11430589							
		Dedicated Road - PIN 11430586							
		Dedicated Road - PIN 11430579							

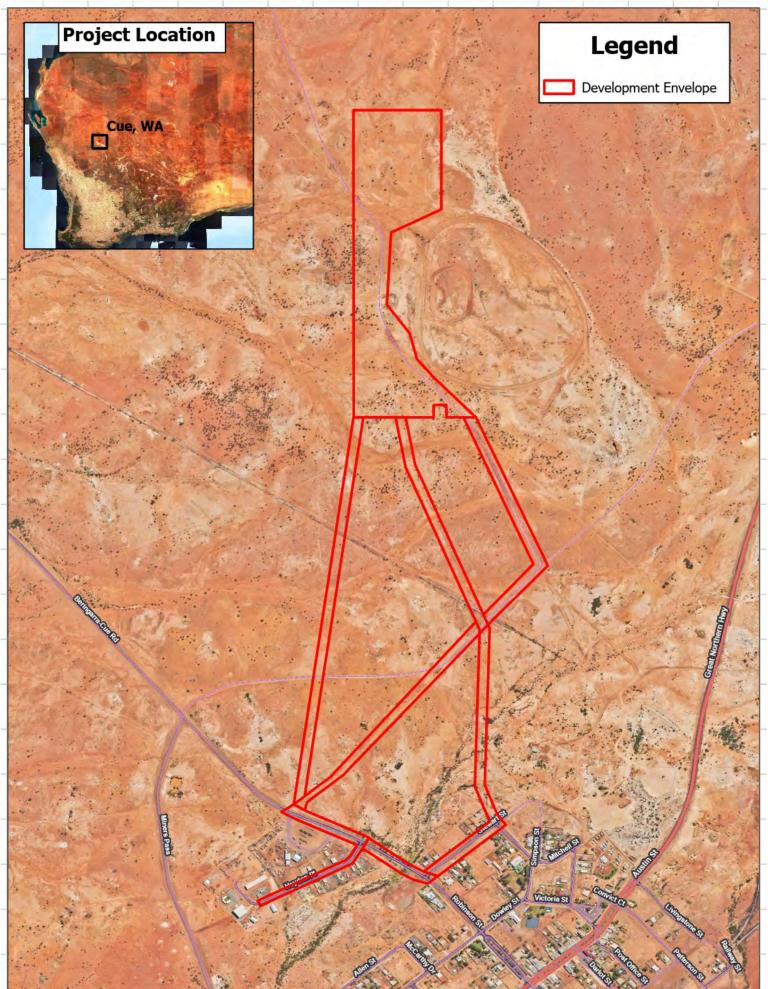


Figure 1 Development Envelope



27,424°S 27,422°S 27,419°S 27,419°S 27,418°S 27,417°S 27,414°S 27,414°S 27,413°S 27,411°S 27,419°S

0 125 250 500 Meters
Scale: 1:13,000



2.2 Activity Overview and Timelines

Geotechnical survey works will be required for the Project and will consist of mainly incidental clearing (driving over and parking on native vegetation) for vehicle / machinery access to test sites.

The Project will consist of the construction of renewable infrastructure generating approximately 1.44 MW of energy from solar arrays.

The geotechnical survey works and construction are proposed for 2025, with commissioning to follow. A five-year clearing permit is requested to accommodate supplier readiness, procurement of batteries and renewables technology with clearing undertaken within 3 months of construction.

2.3 Land Access

Horizon Power will utilise the access conferred by Sections 46 and 49 of the *Energy Operators (Powers) Act* 1979 (the Act) for geotechnical investigations and connection infrastructure. Tenure for the proposed solar location is undergoing negotiation, and construction activities for the Project will not commence until the appropriate legal arrangements for tenure are executed.

3 Description of Proposed Clearing

3.1 Proposed Clearing Area

The final design and footprint required for the Project will be determined once geotechnical survey works are undertaken. All clearing will be undertaken within the DE, as described in Section 2.1. The DE includes three connection corridor options due to land access constraints at the time of preparation of this NVCP Supporting Document. One corridor will be selected once land access investigations have progressed further.

The geotechnical surveys will require the temporary clearing of up to 3.65 ha of native vegetation (Table 2). The proposed clearing will be mainly incidental clearing (driving over and parking on native vegetation) for vehicle / machinery access to test sites for the geotechnical survey works. An additional 2.75 ha of temporary clearing will be required for stringing and winching of the connection transmission line and a laydown area.

The construction of the Project will require the permanent clearing of up to 16.3 ha for solar infrastructure, the connection corridor and access tracks (Table 2). This will occur within the permanent clearing footprints.

Table 2 Clearing estimated within the DE

Site	Proposed clearing	Clearing breakdown
Cue	22.7 ha	Temporary clearing: 6.4 ha
		 Permanent clearing: 16.3 ha

3.2 Proposed Clearing Method

Temporary clearing is proposed for the geotechnical survey, stringing and winching of the connection transmission line and a laydown area. This will include mechanical removal and driving over vegetation.

Mechanical removal will be undertaken for infrastructure construction within the permanent clearing footprint.

4 Ecological Survey

To inform the Project, a post-wet single season Detailed and Targeted flora and vegetation survey and Basic and Targeted fauna survey was undertaken from 28 April to 4 May 2023 by GHD Pty Ltd (2023). The ecological survey has been appended to this document (Appendix A) and is summarised in Table 3.

Note that the survey area is different to the DE as the DE has been amended to avoid Threatened and Priority flora and heritage constraints. Avoidance of a heritage constraint (shown in Figure 3) involved the DE being expanded to allow room for a connection corridor to the east of the heritage constraint. This has resulted in a

small portion in the northern area of the DE that has not been surveyed. The discrepancies between the DE and the survey area are shown in Figure 2.

Table 3 Summary of ecological surveys relevant to the DE

Survey	Vegetation type
Midwest and Remote Towns	Survey date: 28 April to 4 May 2023
Biological Assessment (GHD,	Survey area: Approximately 45.79 ha
2023)	Flora / Vegetation findings:
IBSA Number: IBSA-2023- 0510	 54 flora taxa (including subspecies and varieties) representing 17 families and 34 genera were recorded from the Cue survey area. This total comprised 53 native taxa and one introduced flora taxon.
	- One EPBC Act and BC Act listed flora taxon, and two DBCA priority listed flora taxa were recorded in the Cue survey area:
	Eremophila Rostrata subsp. rostrata (Threatened - BC Act, Critically Endangered - EPBC Act)
	Maireana prosthecochaeta (Priority 3 - DBCA)
	• Ptilotus sp. Cue (P. Armstrong PA 16/362) (Priority 1 - DBCA)
	Four vegetation types were recorded within the survey area:
	 VT02 - Acacia grasbyi and Acacia aptaneura isolated clumps of shrubs over Maireana georgei, Maireana glomerifolia, Sclerolaena eriacantha and Ptilotus obovatus sparse chenopod and mixed shrubland over Aristida holathera var. holathera and Enneapogon polyphyllus isolated clumps of grasses on orange, sandy-loam on flat plains with sparse quartz pebble scatter (27.20 ha (59.41%)).
	 VT03 - Acacia incurvaneura open woodland over Eremophila latrobei subsp. latrobei and Psydrax suaveolens sparse shrubland over, Tripogonella loliiformis, Cheilanthes sieberi susp. sieberi and Erodium sp. isolated clumps of forbs on orange sandy clay loam on rocky granitic hills (0.86 ha (1.87%)).
	- VT04 - Acacia kalgoorliensis, Acacia pteraneura and Eremophila pantonii isolated clumps of shrubs over, Maireana glomerifolia, Ptilotus polakii and Sclerolaena eriacantha sparse shrubland on orange sandy loam on low rises with quartz stone scatter (11.39 ha (24.88%)).
	- VT05 - Eucalyptus victrix isolated clumps of trees over, Acacia tetragonophylla, Sida sp. and Eremophila longifolia sparse shrubland over, Enteropogon ramosus and *Cenchrus ciliaris grassland on orange clay within minor drainage lines (0.92 ha (2.02%)).
	- Cleared (5.42 ha (11.84%)).
	The vegetation condition in the survey area varied from Excellent to Good:
	- Excellent: 0.86 ha (1.87%)
	 Very Good: 37.89 ha (82.74%)
	- Good: 1.62 ha (3.55%)
	— Cleared: 5.42 ha (11.84%).
	No Threatened Ecological Communities (TEC) listed under the EPBC Act or <i>Biodiversity Conservation Act 2016</i> (BC Act) were identified within the survey area during the field survey.
	One Priority Ecological Community (PEC) was identified as occurring within the Cue survey area, the Austin Land System (Priority 3). The Austin Land System PEC is described as saline stony plains with low rises and drainage foci supporting low halophytic shrublands with scattered mulga; occurs mainly adjacent to lakes Austin and Annean below greenstone hill systems. Vegetation types VT02, VT04 and VT05 were representative of this PEC.
	Fauna / Fauna habitat findings:

Three fauna habitat types were recorded within the survey area:

- Saline stony/rocky plains and low rises: 38.59 ha (84.29%)
- Rocky granite hills: 0.86 ha (1.87%)
- Minor Drainage line: 0.92 ha (2.02%)
- Cleared: 5.42 ha (11.84%)

A total of 31 fauna species were identified in the Cue survey area. This total comprised:

- 20 birds
- Seven mammals
- Four reptiles.

Four introduced species (dog, cat, house mouse and rabbits) were recorded and are included in this total.

No Threatened fauna listed under the EPBC Act or BC Act were recorded during the survey. Transect searches were undertaken for *Idiosoma clypteatum* (Priority 3) burrows in suitable habitat in all of the DEs with no burrows recorded. Conservation significant fauna assessed as likely to occur in the survey area are:

- Grey Falcon (Falco hypoleucos) Vulnerable
- Peregrine Falcon (Falco peregrinus) other specially protected fauna
- West Coast Mulga Slider (Lerista eupoda) Priority 1

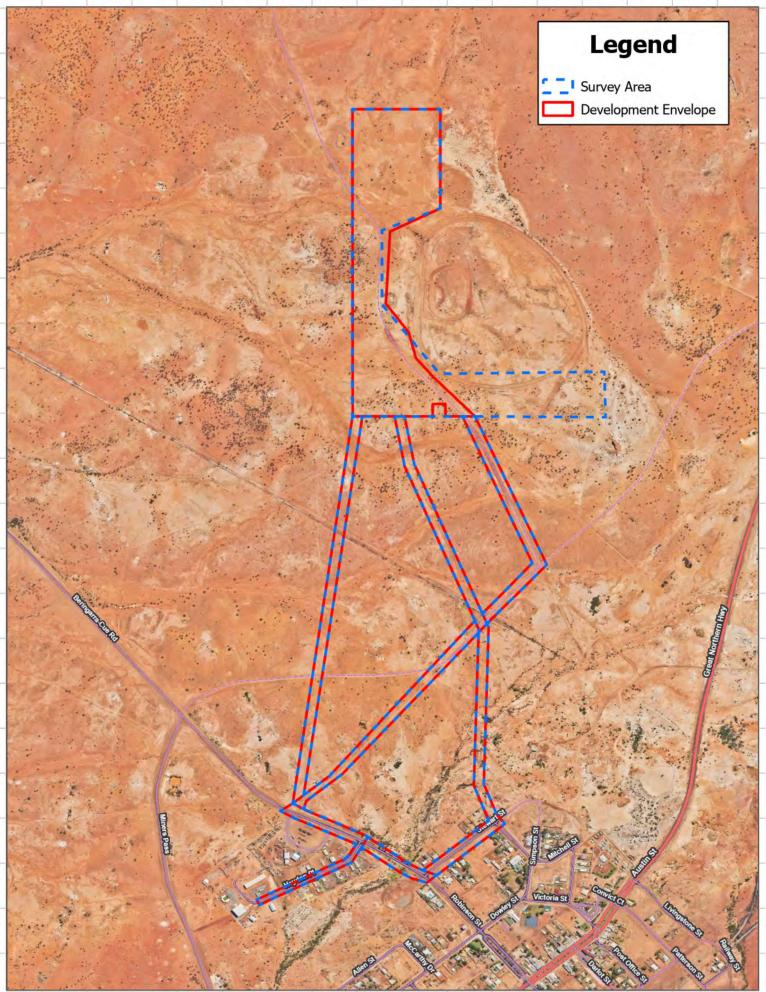


Figure 2 Development Envelope and Survey Area



27.408°S 27.407°S 27.406°S 27.404°S 27.403°S 27.401°S

0 125 250 500 L L L L Meters Scale: 1:13,000



5 Existing Environment

The existing environment of the DE is described in Table 4.

It is noted that there is a small portion of the DE that has not been surveyed due to the avoidance of a heritage constraint (shown in Figure 3) in the northern portion of the DE. This resulted in the DE being expanded to allow room for a connection corridor to the east of the heritage constraint. The discrepancies between the DE and the survey area are shown in Figure 2. Based on aerial imagery, the existing environment of the unsurveyed area is expected to be commensurate with the surveyed area of the DE, as described in Table 4.

Table 4 Existing environment in the Cue DE.

Environmental value	Assess	ment				
Vegetation associations, types and	The project is located within Pre-European Vegetation Association 313. More than 93% of this vegetation association remains, none of which is within Department of Biodiversity, Conservation and Attractions (DBCA) managed lands.					
condition	Vegetation association	Scale	Pre-European extent (ha)	Current extent (ha)	% Remaining	% of current extent in all DScA managed land (proportion of current extent)
	313	State: Western Australia	68,843.52	65,261.44	94.80	-
		IBRA bioregion: Murchison	68,843.52	65,261.44	94.80	-
		IBRA Subregion: Eastern Murchison	68,843.52	65,261.44	94.80	-
		LGA: Shire of Cue	40,806.58	37,979.08	93.07	-
	VTI shronVTI Eregra	odium sp. isolated clu 04 - Acacia kalgoorlie cubs over, Maireana g orange sandy loam o 05 - Eucalyptus victrix emophila longifolia sp assland on orange cla-	ensis, Acacia ptera glomerifolia, Ptilot on low rises with q x isolated clumps o parse shrubland ov y within minor dra	neura and Eremophi cus polakii and Sclero uartz stone scatter. of trees over, Acacia ver, Enteropogon ran kinage lines.	la pantonii isola laena eriacanth tetragonophylla	ted clumps of a sparse shrubland a, Sida sp. and
Fauna habitat	– Sal– Ro– MiBased	fauna habitat types wine stony/rocky plain cky granite hills nor Drainage line. on aerial imagery, it ind low rises habitat.	s and low rises		of the DE will be	saline stony/rocky
Significant fauna	likely to — Gre — Per	nificant fauna were re o occur within the DE ey Falcon regrine Falcon est Coast Mulga Slide	i:	logical surveys. Thre	e fauna species :	are considered

Environmental value	Assessment
	The Grey Falcon is likely to use the saline stony/rocky plains and low rises habitat and the minor drainage line habitat within the DE on an opportunistic basis as foraging habitat.
	The Peregrine Falcon is likely to use all habitat types within the DE (saline stony/rocky plains and low rises habitat, rocky granite hills habitat and minor drainage line habitat) on an opportunistic basis as foraging habitat.
	The West Coast Mulga Slider is likely to occur within the DE due to the species known distribution and the presence of suitable habitat (saline stony/rocky plains and low rises habitat and minor drainage line habitat).
Significant ecological linkages	No significant ecological linkages were identified.
Ecological	No TECs listed under the EPBC Act or BC Act were identified within the DE during the field survey.
communities	One Priority Ecological Community (PEC) was identified as occurring within the Cue DE, the Austin Land System (Priority 3). The Austin Land System PEC is described as saline stony plains with low rises and drainage foci supporting low halophytic shrublands with scattered mulga; occurs mainly adjacent to lakes Austin and Annean below greenstone hill systems. Vegetation types VT02, VT04 and VT05 were representative of this PEC. Based on aerial imagery, it is expected that the unsurveyed area of the DE will be part of this PEC.
Significant flora	The below conservation significant flora that were recorded in the Cue survey area have been excluded from the Cue DE with a minimum of a 20 m buffer:
	 Eremophila Rostrata subsp. rostrata (Threatened - BC Act, Critically Endangered - EPBC Act)
	 Ptilotus sp. Cue (P. Armstrong PA 16/362) (Priority 1 - DBCA)
	 Maireana prosthecochaeta (Priority 3 - DBCA)
	A likelihood of occurrence assessment (GHD 2023a) identified no other Threatened or Priority flora species as likely to occur within the DE.
Wetlands and/or waterways	There are no rivers or wetlands of significance located within the DE or within 20 km of the DE. The habitat type 'minor drainage line' is present in the southern extent of the DE in one of the connection corridors. This is shown as riparian vegetation in Figure 3.
Water resources	The East Murchison Groundwater Area (Proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act)) is present within the DE.
	No Public Drinking Water Source Areas (PDWSAs) are present within the DE. The Cue Water Reserve (UFI:167; Priority 1) is located 3.3 km east of the DE and the Cue Water Reserve (UFI:166; Priority 3) is located 6.2 km north east of the DE.
	No Surface Water Areas or Irrigation Districts proclaimed under the RIWI Act are present within the DE.
Conservation Reserves	No DBCA managed conservation areas occur within the DE or within 20 km of the DE.
Environmentally Sensitive Areas (ESAs)	There are no ESAs within the DE and five ESAs are located within 1 km of the DE. These ESAs are all associated with the location of Threatened flora <i>Eremophila rostrata</i> subsp. <i>Rostrata</i> , which was also recorded in the survey area. No other ESAs are located within 20 km of the DE.
Land and soil quality	The DE intersects the Austin and Sherwood Land Systems. The Austin Land System is described as 'saline stony plains with low rises and drainage foci supporting low halophytic shrublands with scattered mulga and snakewood'. The Sherwood Land System is described as 'breakaways, kaolinized foot slopes and extensive gently sloping plains on granite supporting mulga shrublands and minor halophytic shrublands'.
	A review of Acid Sulphate Soil (ASS) risk mapping (spatial dataset DWER-048; GoWA, 2024) indicates the soil under the nearby surveyed area has a low risk of ASS occurrence.
	The DE does not intersect any contaminated sites (spatial dataset DWER-059; GoWA, 2024). No known contaminated sites are recorded within 20 km of the DE.
Environmental heritage	There are no National or World Heritage Areas mapped as overlapping the DE.

6 Avoidance, Mitigation and Management Measures

6.1 Avoidance

Initial avoidance and minimisation was undertaken during site selection, including placement of the proposed infrastructure close to the existing assets to reduce the clearing associated with a longer transmission line. A large area was surveyed to allow for further refinement during site selection, to remove environmental constraints from the DE.

The following avoidance measures have also been applied:

- Avoid impacts to known records of *Eremophila rostrata* subsp. *rostrata* (Threatened BC Act listed and Critically Endangered - EPBC Act) and associated ESA through revision of the DE to exclude *Eremophila rostrata* subsp. *rostrata*.
- Avoid impacts to known records of Maireana prosthecochaeta (Priority 3) and Ptilotus sp. Cue (P. Armstrong PA 16/362) (Priority 1) through revision of the DE to exclude these species.

6.2 Mitigation and Management

6.2.1 Geotechnical works

A CEMP has been developed for the project (Appendix B), this lists the specific mitigation and management measures to be applied. Key management measures include:

- Avoidance areas will be clearly demarcated prior to geotechnical investigations commencing and no more than
 3.65 ha of clearing will be undertaken for geotechnical investigations
- Where possible, pre-existing access tracks will be used and vehicles and machinery will exit the DE along the same route used for access.
- Mechanical clearing for the development of formal access tracks is not proposed during geotechnical works.
- Areas of degraded, sparsely vegetated and/or previously cleared areas will be preferentially selected for the location of test pit and laydown areas.
- Works will be undertaken systematically to minimise re-run and compaction of access tracks.
- Standard weed and hygiene management practices which will be applied to these works.
- Mechanical clearing will be undertaken slowly and in a one-way direction to allow fauna to move offsite if present.

6.2.1.1 Restoration of Cleared Areas

Restoration of the DE following geotechnical testing will be undertaken, as follows:

- Topsoil will be stockpiled separately to other excavated materials.
- On completion of test pit works, excavated materials will be placed back into the test pits. Topsoil from the test pit will then be respread over the surface.
- Recontouring of soil within the test pit and laydown areas will be undertaken to prevent compaction.

6.2.2 Project infrastructure

Key management measures detailed in the CEMP for the Project include the following:

- If the connection corridor that contains VT05 (riparian vegetation; shown in Figure 3) is selected, pole pads will be positioned to avoid this vegetation type where possible. If clearing of VT05 is required for the connection corridor this will be limited to 0.05 ha of clearing for one pole pad.
- No clearing is permitted outside the DE
- Clearing areas are to be checked by an Environmental Specialist or Site Supervisor prior to clearing to ensure no more than 22.7 ha of clearing is undertaken for the Project
- Clearing will be minimised through placement of assets and access tracks in existing cleared locations where possible
- The clearing locations are to be demarcated prior to clearing activities

- A pre-clearing toolbox will be held so all staff are aware of their responsibilities under the permit
- Clearing of native vegetation will be undertaken in a slow, progressive manner in one direction to allow fauna to move away from the clearing area
- Vehicles and equipment will remain on designated vehicle tracks where possible and avoid driving over, or parking on native vegetation
- Vehicles and machinery will arrive clean, and weed control will be undertaken at the site post-construction as required.

7 Stakeholder Engagement

Horizon Power has engaged with the Traditional Owners, local community, local Shires and Department of Planning, Lands and Heritage to date.

8 Assessment Against the 10 Clearing Principles

An assessment against the 10 Clearing Principles has been undertaken to support the NVCP application for the Project, as presented in Table 5. The assessment found that the Project may be at variance with clearing principle f and is unlikely to be at variance with any of the other clearing principles.

Table 5 Assessment Against the 10 Clearing Principles

Principle	Assessment	Outcome
(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.	Up to 22.7 ha of native vegetation is proposed to be cleared for the Project within the Cue DE, of which 6.4 ha is temporary clearing. Vegetation The Cue DE is located in the Murchison bioregion and the Eastern Murchison sub-region as described by IBRA. Four vegetation types were identified in the Cue DE during the GHD (2023) survey (VT02, VT03, VT04 and VT05). Based on aerial imagery, it is expected that the unsurveyed area of the DE will be VT02. The vegetation types were representative of the vegetation associations in the region, with a high proportion of pre-European extent remaining.	Proposed clearing is not likely to be at variance to this Principle.
	The majority of vegetation within the DE is in Very Good condition (79.73%) and a small proportion of vegetation was in Excellent condition (2.15%). Based on aerial imagery, it is expected that the unsurveyed area of the DE is in Very Good condition. The main disturbance and cleared areas with the DE are associated with vehicle tracks (13.85%). Areas associated with and adjacent to creek lines were in Good condition (4.09%) due to the presence of weeds such as *Cenchrus ciliaris forming a large component of the understorey.	
	No TECs listed under the EPBC Act or BC Act were identified within the Cue DE (GHD, 2023). One PEC was identified as occurring within the Cue DE, the Austin Land System (Priority 3). The Austin Land System PEC is described as saline stony plains with low rises and drainage foci supporting low halophytic shrublands with scattered mulga; occurs mainly adjacent to lakes Austin and Annean below greenstone hill systems. Approximately 23.9 ha of this PEC has been mapped within the DE (this includes the unsurveyed area of the DE which is expected to be part of the PEC). Vegetation types VT02, VT04 and VT05 were representative of this PEC (61.45% of the vegetation within the DE). Clearing of the PEC for the Project will be avoided where possible, however up to 22.7 ha may be cleared, representing 0.10% of the PEC within WA. This is not considered to be a significant impact as the PEC is highly represented outside the DE and surrounding vegetation typically has similar or better condition vegetation.	
	Flora Fifth four (E4) flows toys (including subanceins and varieties) representing 17 families and 24 general ware recorded from the Cus survey area.	
	Fifty-four (54) flora taxa (including subspecies and varieties) representing 17 families and 34 genera were recorded from the Cue survey area during the field survey (GHD, 2023). This total comprised 53 native taxa and one introduced flora taxon.	
	The below conservation significant flora that were recorded in the Cue survey area have been excluded from the Cue DE with a minimum of a 20 m buffer to avoid impacts from the Project:	
	 Eremophila Rostrata subsp. rostrata (Threatened - BC Act, Critically Endangered - EPBC Act) 	
	- Ptilotus sp. Cue (P. Armstrong PA 16/362) (Priority 1 - DBCA)	
	 Maireana prosthecochaeta (Priority 3 - DBCA). 	
	No additional Threatened or Priority flora are considered likely to occur within the Cue DE.	
	One introduced flora taxon was recorded in the Cue DE (*Cenchrus ciliaris). No Declared Pests or WoNS were recorded.	
	Fauna and fauna habitat	
	Three fauna habitat types were recorded at Cue during the GHD (2023) survey; Saline stony/rocky plains and low rises, Rocky granite hills and Minor Drainage line. Based on aerial imagery, it is expected that the unsurveyed area of the DE will be saline stony/rocky plans and low rises habitat. These habitat types are considered to have moderate value for fauna species.	

Principle	Assessment	Outcome
	A total of 31 fauna species were identified in the Cue survey area (GHD, 2023). This total comprised 20 birds, 7 mammals and 4 reptiles and included four introduced species (dog, cat, house mouse and rabbits). No significant fauna species were recorded during the survey. Three conservation significant species are considered likely to occur in the DE due to potentially suitable habitat (GHD, 2023):	
	 Grey Falcon – Vulnerable 	
	 Peregrine Falcon – other specially protected fauna 	
	 West Coast Mulga Slider – Priority 1. 	
	Overall, the flora, vegetation and fauna values of the DE are highly represented outside the DE and surrounding vegetation typically has similar or better condition vegetation. The native vegetation within the DE is not considered to comprise high levels of biological diversity compared to the surrounding region, and as such, the proposed clearing is not considered to be at variance with this principle.	
(b) Native vegetation sho	Three fauna habitat types were identified in the DE by GHD (2023):	Proposed
not be cleared if it comprises the whole c part of, or is necessary	scattered grasses on stony/rocky samuy day loam open plants, broad drainage areas and low quartz rises. Dased on aerial imagery, it is	clearing is not likely to be at variance to this
the maintenance of, a significant habitat for fauna indigenous Wes	 Rocky granite hills: Low rocky hills and granite outcrops supporting a sparse to open Mulga woodland over a sparse understorey of scattered low shrubs and forbs (4.33 ha). 	Principle.
Australia.	- Minor Drainage line: Minor drainage lined with <i>Eucalyptus victrix</i> isolated trees over a mixed shrubland and grassland on sandy clay (1.59 ha).	
	The EPBC Act PMST, DBCA database and NatureMap identified the presence/potential presence of 26 significant fauna species within 20 km of the survey area (GHD, 2023). This total comprised 22 birds, two reptiles, one invertebrate and one mammal. A total of 31 terrestrial vertebrate species were recorded within the Cue survey are during the GHD (2023) field survey, including 27 native species and four introduced species.	
	No Threatened fauna listed under the EPBC Act or BC Act was recorded during the GHD (2023) survey. The DE supports habitat for three significant fauna species (that were identified as likely to occur post-survey), in the form of mostly dispersal and foraging habitat. The assessment was based on species biology, habitat requirements, the quality and availability of suitable habitat (based on vegetation types present within the DE) and previous records of species in the DE. The three species are:	
	— Grey Falcon (<i>Falco hypoleucos</i>) (VU)	
	 Peregrine Falcon (Falco peregrinus) (OS) 	
	West Coast Mulga Slider (<i>Lerista eupoda</i>) (P1)	
	The conservation significant species are described below.	
	Grey Falcon	
	The Grey Falcon is an Australian endemic, usually confined to the arid inland. It inhabits Triodia grassland, Acacia shrubland, and lightly timbered arid woodland especially stony, inland plains, gibber deserts, sandridges, pastoral lands, and timbered watercourses, but seldom in driest deserts (Morcombe, 2004). This species is known to occupy a wide range of habitats. It is likely this species will use the saline	

Principl	le	Assessment	Outcome
		stony/rocky plains and low rises and minor drainage line habitat within DE for foraging (GHD 2023). This species is therefore likely to occur at least on an occasional/opportunistic basis.	
		Based on aerial imagery and the Native Vegetation Extent (spatial dataset DPIRD-005, GoWA 2022) and Pre-European Vegetation (spatial dataset DPIRD-006, GoWA 2022) datasets, habitat for the Grey Falcon is widespread within a 10 km radius of the DE. Clearing of up to 22.7 ha within the DE, represents approximately 0.0011% of potential habitat available within 10 km of the DE.	
		Peregrine Falcon	
		The Peregrine Falcon is found on and near cliffs, gorges, timbered watercourses, riverine environments, wetlands, plains, open woodlands, and pylons and spires of buildings, though less frequently in desert regions (Morcombe 2004; Pizzey & Knight 2012). They are not common but can be found almost anywhere throughout WA.	
		The Peregrine Falcon is likely to use all habitat types within the DE (saline stony/rocky plains and low rises habitat, rocky granite hills habitat and minor drainage line habitat) on an opportunistic basis as foraging habitat.	
		Based on aerial imagery and the Native Vegetation Extent (spatial dataset DPIRD-005, GoWA 2022) and Pre-European Vegetation (spatial dataset DPIRD-006, GoWA 2022) datasets, habitat for the Peregrine Falcon is widespread within a 10 km radius of the DE. Clearing of up to 22.7 ha within the DE, represents approximately 0.0011% of potential habitat available within 10 km of the DE.	
		West Coast Mulga Slider	
		The West Coast Mulga Slider is found in the arid interior of southern WA. It inhabits open mulga on red loams and sandy loams (Cogger 2014).	
		The West Coast Mulga Slider is likely to occur within the DE due to the species known distribution and the presence of suitable habitat (saline stony/rocky plains and low rises habitat and minor drainage line habitat).	
		Based on aerial imagery and the Native Vegetation Extent (spatial dataset DPIRD-005, GoWA 2022) and Pre-European Vegetation (spatial dataset DPIRD-006, GoWA 2022) datasets, habitat for the West Coast Mulga Slider is widespread within a 10 km radius of the DE. Clearing of up to 22.7 ha within the DE, represents approximately 0.0011% of potential habitat available within 10 km of the DE.	
		Overall, the fauna values of the DE are highly represented on a local and regional scale (GHD, 2023) and clearing of up to 22.7 ha of fauna habitat is not considered significant for biodiversity of any specific species. The Project is therefore unlikely to be at variance with this principle.	
no inc for	ative vegetation should of be cleared if it cludes, or is necessary r the continued distence of, rare flora.	Eremophila Rostrata subsp. rostrata (Threatened - BC Act, Critically Endangered - EPBC Act) was recorded in the Cue survey area during the GHD (2023) survey and has been excluded from the Cue DE to avoid impacts from the Project. The closest recording is approximately 80 m east of the DE. No additional Threatened flora are considered likely to occur within the Cue DE. The proposed clearing of native vegetation for the Project is therefore unlikely to be at variance with this principle.	Proposed clearing is not likely to be at variance to this Principle
no co pa	ative vegetation should of be cleared if it omprises the whole or a ort of, or is necessary for e maintenance of, a	No TECs listed under the EPBC Act or BC Act were identified within the DE during the GHD (2023) survey or by the desktop assessment. As no vegetation within the DE is representative of any TEC, the proposed clearing is not likely to be at variance to this Principle.	Proposed clearing is not likely to be at

Prir	nciple	Assessment	Outcome
	threatened ecological community.		variance to this 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.	Four vegetation types were identified in the DE during the GHD (2023) survey: - VT02 - Acacia grasbyi and Acacia aptaneura isolated clumps of shrubs over Maireana georgei, Maireana glomerifolia, Sclerolaena eriacantha and Ptilotus obovatus sparse chenopod and mixed shrubland over Aristida holathera var. holathera and Enneapogon polyphyllus isolated clumps of grasses on orange, sandy-loam on flat plains with sparse quartz pebble scatter. Based on aerial imagery, it is expected that the unsurveyed area of the DE will be VT02. - VT03 - Acacia incurvaneura open woodland over Eremophila latrobei subsp. latrobei and Psydrax suaveolens sparse shrubland over, Tripogonella loliiformis, Cheilanthes sieberi susp. sieberi and Erodium sp. isolated clumps of forbs on orange sandy clay loam on rocky granitic hills. - VT04 - Acacia kalgoorliensis, Acacia pteraneura and Eremophila pantonii isolated clumps of shrubs over, Maireana glomerifolia, Ptilotus polakii and Sclerolaena eriacantha sparse shrubland on orange sandy loam on low rises with quartz stone scatter. - VT05 - Eucalyptus victrix isolated clumps of trees over, Acacia tetragonophylla, Sida sp. and Eremophila longifolia sparse shrubland over, Enteropogon ramasus and *Cenchrus ciliaris grassland on orange clay within minor drainage lines. Broad scale (1:250,000) pre-European vegetation mapping of the area was completed by Beard (1976) at an association level. Vegetation association 313 is present within the DE and is described as: Mulga, other wattle Atriplex spp, Maireana spp. with Acacia aneura and other Acacia spp. The current extents remaining at the State, IBRA bioregion, IBRA subregion and Local Government Area (LGA) levels are greater than 93% of their calculated pre European extents (GoWA, 2024). The DE is not considered to be within an area that has been extensively cleared given is has more than 93% of pre-European extent remaining. The vegetation within the DE forms part of a large continuous tract of vegetation and have a high degree of connectivity wi	Proposed clearing is not likely to be at variance to this Principle.
(f)	Native vegetation should not be cleared if it is growing in or in association with a watercourse or wetland.	No wetlands of International Importance (Ramsar Wetlands) or of national significance were identified within DE. No wetlands or major watercourses were identified within the DE during the GHD (2023) survey. A vegetation type (VT05) was recorded in the southern extent of the DE in one of the connection corridors and represents a minor drainage line (GHD, 2023; shown in Figure 3 as riparian vegetation). VT05 is characterised as <i>Eucalyptus victrix</i> isolated clumps of trees over, <i>Acacia tetragonophylla</i> , <i>Sida</i> sp. and <i>Eremophila longifolia</i> sparse shrubland over, <i>Enteropogon ramosus</i> and * <i>Cenchrus ciliaris</i> grassland on orange clay within minor drainage lines (0.92 ha / 2.4%). These drainage lines and areas are subject to episodic flow and contain species which are known to be ground water dependent such as <i>Eucalyptus victrix</i> , <i>E. camaldulensis</i> and mulga species. If the connection corridor that contains VT05 is selected, pole pads will be positioned to avoid this vegetation type where possible. If clearing of VT05 is required for the connection corridor this will be limited to 0.05 ha of clearing for one pole pad. Based on this, proposed clearing may be at variance with this Principle, however the impact is minor and not considered significant.	Proposed clearing may be at variance to this Principle.
(g)	Native vegetation should not be cleared if the clearing of the vegetation	The DE intersects the Austin Land System. The Austin Land System is described as 'saline stony plains with low rises and drainage foci supporting low halophytic shrublands with scattered mulga and snakewood'. Impacts to vegetation along drainage tracts in the soils of the	Proposed clearing is not likely to be at

Principle	Assessment	Outcome
is likely to cause appreciable land	Austin System can lead to increased erosion (Payne et al. 1997). The sandy loam flats (VT02) low rises (VT04) and minor drainage line (VT06) mapped within the Cue DE may be moderately susceptible to land erosion and degradation.	variance to this Principle.
degradation.	The DE also intersects the Sherwood Land System. The Sherwood Land System is described as 'breakaways, kaolinized foot slopes and extensive gently sloping plains on granite supporting mulga shrublands and minor halophytic shrublands'. Lower footslopes, alluvial plains and drainage tracts generally have fragile soils which are highly susceptible to water erosion (Payne et al. 1997). The footslopes mapped within VT03 in the Cue DE are likely to be susceptible to erosion.	
	The soil landscape land quality mapping (spatial dataset DPIRD-017, GoWA 2024) indicates that the DE is within the Yalgoo Plains Zone, which is described as hardpan wash plains on granitic rocks of the Yilgarn Craton with red loamy earths, red shallow loams (often with hardpans), red deep sands and red shallow sands.	
	A review of Acid Sulphate Soil (ASS) risk mapping (spatial dataset DWER-048; GoWA, 2024) indicates the soil under the nearby surveyed area has a low risk of ASS occurrence. The DE does not intersect any contaminated sites (spatial dataset DWER-059; GoWA, 2024). No known contaminated sites are recorded within 20 km of the DE.	
	The clearing proposed in the DE will be 22.7 ha in total, 6.4 ha of temporary clearing which will be revegetated and 16.3 ha of permanent clearing. Permanent clearing will not be bare earth but will be kept slashed for effective operation of the solar arrays.	
	Any dust produced during construction will be managed through the implementation of a CEMP. Given the small area to be cleared for the solar farm and the linear nature of the connection corridor, it is not likely that the clearing will cause appreciable land degradation that will affect the present or future use of the land.	
	The DE contains soils which may be moderately susceptible to erosion. It is expected that hydrological regimes will be maintained through design and that standard management practices will be implemented to prevent erosion / sedimentation. Rehabilitation post construction will be undertaken to stabilise areas that are temporarily cleared, especially if there are slopes and exposed soil that increase the risk of erosion. Additionally, the DE is located in an area which has previous disturbance adjacent to an established town, for example roads, tracks, airports, existing facilities and mining operations. The Project will incorporate standard construction management measures to reduce the risk of soil erosion and sedimentation as a result of ground disturbance and clearing (Attachment B). The clearing is not expected to cause appreciable land degradation and based on the above, the proposed clearing of native vegetation for the Project is not considered to be at variance with this 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.	No DBCA managed conservation areas were identified within the DE or within 20 km of the DE (GHD, 2023). The proposed clearing is not at variance to this principle.	Proposed clearing is not likely to be at variance to this Principle.
(i) Native vegetation should not be cleared if the	The DE occurs within the East Murchison Groundwater Area. The Cue Water Reserve (Priority 1 PDWSA) is located 3.3 km east of the DE and Cue Water Reserve (Priority 3 PDWSA) is located 6.2 km northeast of the DE (GoWA, 2024).	Proposed clearing is not
clearing of the vegetation is likely to cause	It is not expected that the Project will require dewatering or groundwater abstraction within the DE. The nearest groundwater bore to the DE has been drilled to a depth of 51 m. Potential impacts to surface water quality from erosion / sedimentation / hydrocarbons will be managed.	likely to be at

Principle	Assessment	Outcome
deterioration in the quality of surface or underground water.	Clearing within the DE is unlikely to cause deterioration in the quality of surface or underground water, therefore the proposal is unlikely to be at variance to this principle.	variance to this Principle.
(j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the intensity of flooding.	The nearest Bureau of Meteorology (BoM) weather station with comprehensive data collection and recent historic climate data is Cue (no. 007017). Median annual rainfall is 216.8 mm with June recording the highest monthly median (21.4 mm) (BoM, 2024). The scale of the DE and clearing required is not likely to have an impact on the flood regimes or increase intensity of flooding in the region. The DE is located on a variety of different landforms including saline stony plains, rocky plains, low rises, rocky granite hills and minor drainage lines (GHD, 2023). It is expected that the hydrological regimes of these landforms will be maintained through design and therefore unlikely to incur flooding. Additionally, given the abundance of vegetation within the surrounding region, with over 93% pre-European vegetation remaining, the proposed clearing is not expected to increase the risk of flooding. Standard management measures for construction will be in place to mitigate against / manage erosion and associated environmental aspects. Therefore, the proposed clearing of native vegetation for the Project is not considered to be at variance with this principle.	Proposed clearing is not likely to be at variance to this Principle.

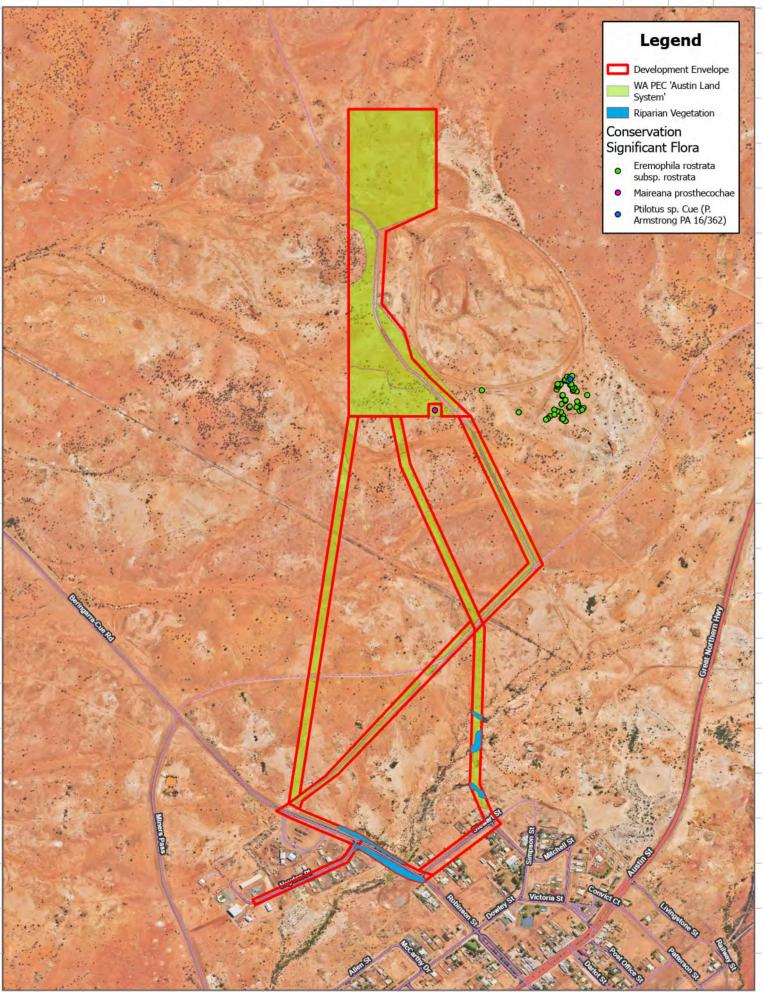


Figure 3 | Environmental Constraints



27.408°S 27.407°S 27.406°S 27.404°S 27.403°S 27.401°S

27,422°S 27,421°S 27,419°S 27,418°S 27,417°S 27,415°S 27,414°S 27,413°S 27,411°S

0 125 250 500 L L L L Meters Scale: 1:13,000



9 Other matters

9.1 Land Planning

9.1.1 Approvals required under the *Planning and Development Act 2005*

The project will be considered Public Works and is expected to be exempt from development approval under Section 6 of the *Planning and Development Act 2005*, however, due regard is required with respect to:

- The purpose and intent of any planning scheme that has effect in the locality where, and at the time when, the right is exercised;
- The orderly and proper planning, and the preservation of the amenity, of that locality at that time; and
- Any advice provided by the responsible authority in the course of the consultation required.

Horizon Power has engaged with the Local Government Authority in the selection of the site.

9.2 Other approvals

In considering a clearing matter under section 510 of the *Environmental Protection Act 1986* (EP Act), the DWER CEO shall have regard to any planning instrument and other relevant matters when making decisions as to clearing permits. 'Other matters' are not defined in the EP Act, and consequently are any matters the CEO considers relevant. Other matters are generally environmental issues not directly within the scope of the clearing principles, but within the object and principles of the Act. Other approvals that may apply to this Project are detailed in Table 6.

Table 6 Other approvals

Other approvals	Assessment
Referral to Environmental Protection Authority	Due to the small scale of the project in a remote location, it is considered that all environmental impacts can be managed under Part V of the EP Act and referral to the EPA is not considered necessary.
Referral to Department of Climate Change, Energy, the Environment and Water (DCCEEW)	Threatened flora, fauna and ecological communities
	No TECs were recorded in the Cue DE.
	Nine Threatened fauna species were identified within 20 km of the Cue DE. Habitat for the Grey Falcon is present in the DE. Based on aerial imagery and the Soil Landscape Mapping (spatial dataset DPIRD-027, GoWA 2022) and Pre-European Vegetation (spatial dataset DPIRD-006, GoWA 2022) datasets, habitat for the Grey Falcon is widespread within a 10 km radius of the DE. Clearing of up to 22.7 ha within the DE, represents approximately 0.0011% of potential habitat available within 10 km of the DE. Overall, the fauna values of the DE are highly represented on a local and regional scale (GHD, 2023) and clearing of up to 22.7 ha of fauna habitat is not considered significant for biodiversity of any specific species.
	Two Threatened flora species were identified within 20 km of the Cue DE; <i>Eremophila rostrata</i> and <i>Minuria tridens</i> . Clearing of any individuals of <i>Eremophila rostrata</i> will be avoided and <i>Minuria tridens</i> is unlikely to occur within the DE (GHD, 2023a).
	Migratory fauna
	Eight Migratory species were recorded within 20 km of the Cue DE. No significant habitat for these species is likely to be removed.
	National heritage
	The Cue DE does not overlap any National Heritage Areas.
	An Aboriginal heritage survey was undertaken for the project, and heritage sites identified are being avoided. Heritage monitors may be required during ground disturbing works.
	No impacts to national heritage values are expected from the proposed works.
	Wetlands of international importance
	The Cue DE does not overlap any wetlands of national importance.
Works Approval or Licence under EP Act	No works approvals or licences are required for this project.

Other approvals	Assessment
Groundwater or surface water licence under the Rights in Water and Irrigation Act 1914	Horizon Power is permitted to access water under Section 42 and 49 of the Energy Operator (Powers) Act 1979. Any licences required for construction water will be acquired by the construction contractor.
Notice of Intent to Clear system under the <i>Soil and</i> <i>Land Conservation Act 1945</i>	Not Applicable.
State and municipal heritage	The Cue DE overlaps the Racecourse (fmr) and Jockey Rooms which is on the Municipal Inventory. The buffer for this site is large, and no impacts to the racecourse or jockey rooms is anticipated.
Native title	The Cue DE intersects the Wajarri Yamatji Part A and Yugunga-Nya People Part A Native Title Areas and the Yugunga-Nya People and Sandfire International Land Use Agreement (ILUA).
Aboriginal Sites of Significance under the Aboriginal Heritage Act 1972	The DE does not overlap with any Registered Aboriginal Cultural Heritage places or any places on the State Register of Heritage Places. The DE does overlap two Lodged Aboriginal Cultural Heritage places:
	 Seven Sisters Dreaming' Site – Cue (ACH ID 19797): a restricted women's site that lies just outside of Cue near the Big Bell Mine access road
	 Seven Sisters Male Stone Arrangement (ACH ID 21575): a restricted place encompassing a man-made structure.
	A heritage survey was conducted by Snappy Gum Heritage Services Pty Ltd (2023) and considers that tangible values of these two Lodged Aboriginal Cultural Heritage places will not be impacted by the Project.
	A heritage survey conducted by Snappy Gum Heritage Services Pty Ltd (2023) within the DE identified two Aboriginal Cultural Heritage places:
	CUE-23-001: Artefact Scatter; Reduction Area
	- CUE-23-002: Restricted.
	The Project will avoid these Aboriginal Cultural Heritage places to prevent impacts to heritage values.
	Horizon Power has an external <u>Aboriginal Cultural Heritage Management Policy</u> , that details our commitment to avoid impacting on Aboriginal Cultural Heritage whenever and wherever possible.
	A heritage protection plan will be developed if required, in consultation with the knowledge holders.
	As appropriate, management measures will be implemented during activities, such as the engagement of cultural heritage monitors during ground disturbing works.

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Contaminated Sites Database (DWER-059)

DBCA Statewide Vegetation Statistics

RIWI Act, Groundwater Areas (DWER-034)

Public Drinking Water Source Areas (DWER-033)

RIWI Act, Rivers (DWER-036)

RIWI Act Surface Water and Irrigation District (DWER-037)

DBCA Legislated Lands and Waters (DBCA-011)

Aboriginal Heritage Places (DPLH-001)

Heritage Council WA - State Register (DPLH-006)

Heritage Council WA - Local Heritage Survey (DPLH-008)

Acid Sulfate Soil Risk Map 100K (DWER-048)

Soil landscape land quality - Zones (DPIRD-017)

Pre-European Vegetation (DPIRD-006)

Soil Landscape Mapping - Best Available (DPIRD-027)

Soil landscape land quality - Zones (DPIRD-017)

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