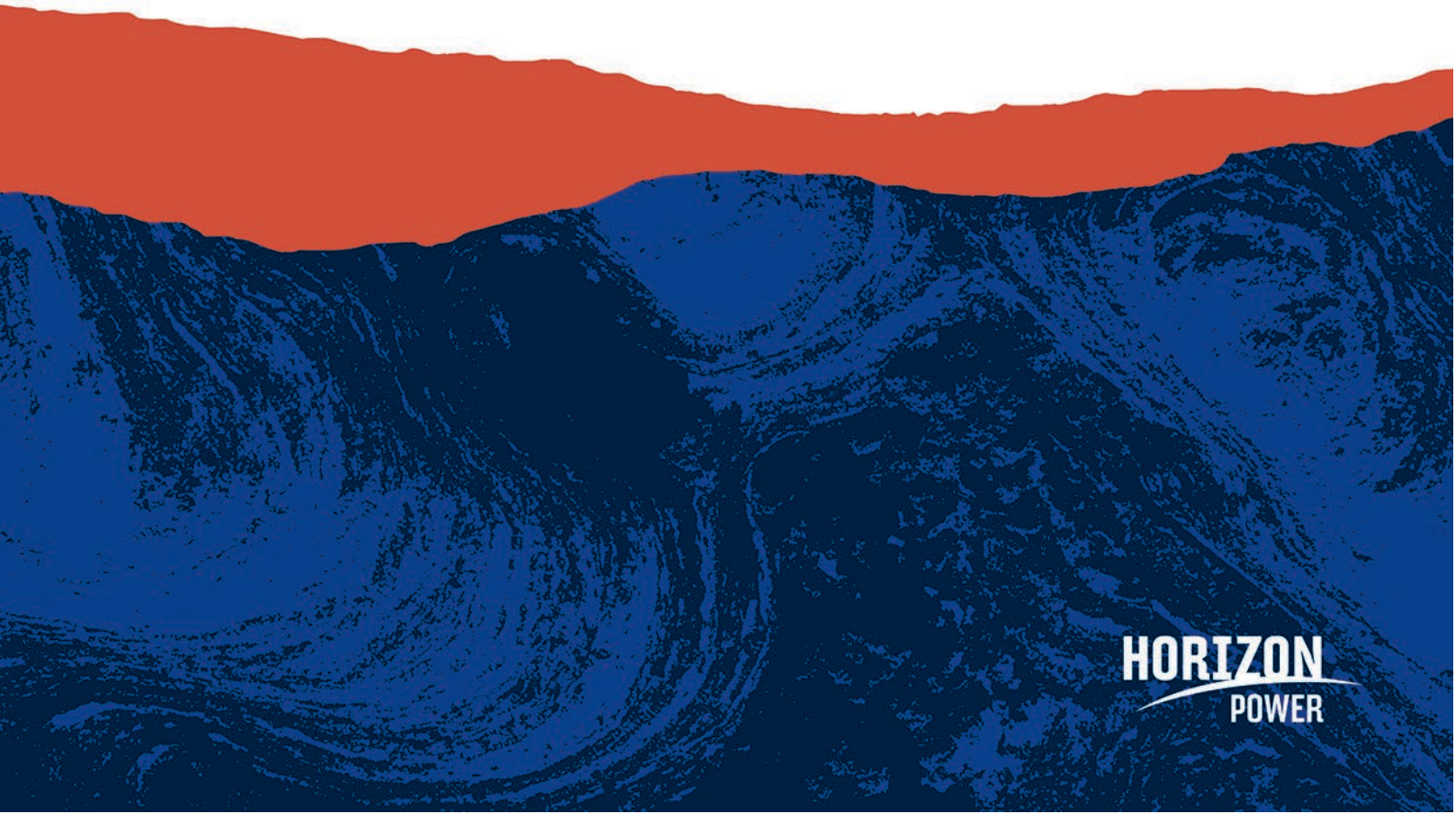
Midwest Towns Renewable Infrastructure Project

Laverton

Native Vegetation Clearing Permit Supporting Document

February 2025



Contents

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.

Horizon Power is proposing to develop a future energy system in Laverton in WA (the Project) as part of a program to transition mid-west and remote towns to renewable energy. The final design and footprint required for the Project will be determined once geotechnical surveys are undertaken. Up to 15.25 ha of clearing is proposed within the Development Envelope (DE). This will allow for generation of approximately 2.54 megawatts (MW) of solar, a connection corridor to existing power station, access tracks and fire breaks, and geotechnical investigations if required. 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 the environmental approvals for the Project, an ecological survey was undertaken by GHD (2023) (IBSA-2023-0510). 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 A.

2 Description of the Activity

2.1 Project Location

The DE identified for the Project is described in Table 1 and shown in Figure 1. The certificates of title are attached and land parcel details are included below.

Table 1 Development Envelope for the Project

Site	Size of Development Envelope (ha)	Development Envelope location	Shire	Neighbouring land uses
Laverton	24.55 ha	Dedicated Road - PIN 11404675	Shire of Laverton	• Three privately held freehold parcels (light industry). • Isolated parcel of Unallocated Crown Land. • Reserve 6884 – Managed by Shire of Laverton for the purpose of '*Common*'. • Pastoral station.
		Dedicated Road – PIN 11713640		
		Dedicated Road – LR3156/782, Lot 300 on DP50582		
		Dedicated Road – PIN 11713469		
		Dedicated Road – PIN 1158885		
		Reserve 7943 – LR3058/716, Lot 22 on DP214651		

Site	Size of Development Envelope (ha)	Development Envelope location	Shire	Neighbouring land uses
		Managed by Shire of Laverton for the purpose of: "*Aerial landing ground, solar power generation, geoscientific and geophysical research*"		• Reserve 9507 – Managed by Shire of Laverton for the purpose of 'Water supply'.

Figure 1 | Development Envelope and Survey Area Laverton

N

0 175 350 700 Meters

Scale: 1:20,000

HORIZON POWER

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 geotechnical test sites.

The Project will consist of the construction of renewable infrastructure generating approximately 2.54MW of energy from solar arrays.

The geotechnical survey works are currently proposed for 2026, with construction of the renewable energy infrastructure 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. A lease is being negotiated for the proposed solar farm, 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. Up to 15.25 ha of native vegetation will be cleared within a 24.55 ha DE, for:

- Geotechnical surveys including incidental clearing (driving over and parking on native vegetation) for vehicle / machinery access to test sites for the geotechnical survey works.
- Connection transmission line
- Laydown area
- Solar infrastructure
- Access tracks.

3.2 Proposed Clearing Method

Mechanical removal will be undertaken for the infrastructure construction within the permanent clearing footprint. Geotechnical survey will require driving on native vegetation.

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 2. Note that the survey area covers a marginally larger area than the DE, as the DE has been amended to avoid environmental constraints identified by the survey, and heritage constraints identified within the DE. The survey area is shown in Figure 1.

Table 2 Summary of ecological surveys relevant to the DE

Survey	Vegetation type
Midwest and Remote Towns Biological Assessment (GHD, 2023) IBSA Number: IBSA-2023-0510	**Survey date:** 24 to 26 June 2023 **Survey area:** Approximately 25.08 ha and covers the entirety of the DE. **Flora / Vegetation findings:** – Sixty-five (65) flora taxa (including subspecies and varieties) representing 24 families and 45 genera were recorded from the Laverton survey areas during the field survey. This total comprised 61 native taxa and five introduced flora taxa. – Five introduced flora taxon was recorded in the Laverton survey area: • **Cenchrus ciliaris* • **Opuntia stricta* (Declared Pest, Weed of National Significance (WoNS)) • **Sisymbrium orientale* • **Sonchus oleraceus* • **Rumex vesicarius* – One Declared Pest under the *Biosecurity and Agriculture Management Act 2007* (BAM Act), and WoNS, was recorded in the survey area: • Prickly Pear (**Opuntia stricta*) – No Threatened or Priority flora were identified in the survey. One taxon is considered possible (*Vittadinia cervicularis* var. *oldfieldii* (Priority 1)) to occur and all other taxa are considered unlikely to occur. – One range extension was recorded from the Laverton survey area; the common *Arivela viscosa*. This record represents a range extension of approximately 400 km south (WAH 1998-). – Two vegetation types were recorded within the survey area: • VT14 - *Acacia aneura*, *Acacia ramulosa* and *Acacia ayersiana* open woodland to isolated trees over *Acacia tetragonophylla*, *Acacia craspedocarpa* and Senna *artemisioides* subsp. *×artemisioides* open shrubland over *Salsola australis*, *Sclerolaena eurotioides* and *Maireana thesioides* open chenopod over mixed annual herbs on shrubland on brown loam clay on plain. • VT15 - *Eucalyptus camaldulensis* open woodland to isolated trees on drainage line – The vegetation within the survey area ranged from Good to Completely Degraded: • Good: 2.58 ha (10.29%) • Poor: 1.98 ha (7.88%) • Degraded: 11.06 ha (44.11%) • Completely Degraded: 0.15 ha (0.58%) • Cleared: 9.31 ha (37.14%). – No Threatened Ecological Communities (TEC) or Priority Ecological Communities (PEC) listed under the EPBC Act or *Biodiversity Conservation Act 2016* (BC Act) were identified within the survey area during the field survey.

	Fauna / Fauna habitat findings: – Two fauna habitat types were recorded within the survey area: • Mulga woodland on open clay plain • Eucalyptus-lined minor drainage line. – A total of 23 fauna species were recorded in the Laverton survey area. This total comprised: • 18 birds • Four mammals • One reptile. – Three of the mammals are introduced (dog, cow and rabbit). – No Threatened fauna listed under the EPBC Act or BC Act were recorded during the survey. Transect searches were undertaken for Northern Shield-back trapdoor spider *(Idiosoma clypteatum)* (Priority 3) burrows in suitable habitat and identified one potential burrow. The confirmation of this burrow would not be possible without specimen collection. – Conservation significant fauna assessed as likely to occur in the survey area are: • Princess Parrot (*Polytelis alexandrae*) (Priority 4 (P4)/Vulnerable (VU)) • Peregrine Falcon (*Falco peregrinus*) (Other Specially Protected (OS))

5 Existing Environment

The existing environment of the DE is described in Table 3.

Table 3 Existing environment in the Laverton DE

<table>
<tr><th>Environmental value</th><th>Assessment</th></tr>
<tr><td>Vegetation associations, types and condition</td><td>The project is located within Pre-European Vegetation Association 18. More than 99% of this vegetation association remains, approximately 5-6% of which is within Department of Biodiversity, Conservation and Attractions (DBCA) managed lands.
<table>
<tr><th>Vegetation association</th><th>Scale</th><th>Pre-European extent (ha)</th><th>Current extent (ha)</th><th>% Remaining</th><th>% of current extent in all DBCA managed land (proportion of current extent)</th></tr>
<tr><td rowspan="4">18</td><td>State: Western Australia</td><td>19,892,306.46</td><td>18,843,148.07</td><td>99.75</td><td>6.64</td></tr>
<tr><td>IBRA bioregion: Murchison</td><td>12,403,172.30</td><td>12,363,252.47</td><td>99.68</td><td>4.97</td></tr>
<tr><td>IBRA Subregion: Eastern Murchison</td><td>10,269,896.44</td><td>12,363,252.47</td><td>99.66</td><td>5.14</td></tr>
<tr><td>LGA: Shire of Laverton</td><td>2,878,673.28</td><td>2,867,359.23</td><td>99.61</td><td>6.50</td></tr>
</table>
Two vegetation types were recorded within the DE:
– VT14 - Acacia aneura, Acacia ramulosa and Acacia ayersiana open woodland to isolated trees over Acacia tetragonophylla, Acacia craspedocarpa and Senna artemisioides subsp. ×artemisioides open shrubland over Salsola australis, Sclerolaena eurotioides and Maireana thesioides open chenopod over mixed annual herbs on shrubland on brown loam clay on plain (14.99 ha ha).
– VT15 - Eucalyptus camaldulensis open woodland to isolated trees on drainage line (0.26 ha).
Vegetation condition varied from Good to Completely Degraded.</td></tr>
<tr><td>Fauna habitat</td><td>Two fauna habitat types were identified in the DE:
– Mulga woodland on open clay plain (14.99 ha)
– Eucalyptus-lined minor drainage line (0.26 ha)</td></tr>
<tr><td>Significant fauna</td><td>No significant fauna were recorded in the biological surveys. Transect searches were undertaken for Northern Shield-back trapdoor spider (Idiosoma clypteatum) (Priority 3) burrows in suitable habitat and identified one potential burrow. The confirmation of this burrow would not be possible without specimen collection.
Two fauna species are considered likely to occur within the DE:
• Princess Parrot (Polytelis alexandrae) (P4/VU)
• Peregrine Falcon (Falco peregrinus) (OS)
Princess Parrot is likely to use Mulga woodland on open clay pan habitat for dispersal, but there is limited foraging opportunity (lacking spinifex or grassy understorey). The Peregrine Falcon is likely to use Mulga woodland on open clay pan habitat type on an opportunistic basis as foraging habitat.
The Eucalyptus-lined minor drainage line provides suitable foraging and potentially breeding habitat for the Peregrine Falcon. The Princess Parrot may utilise this habitat for dispersal and breeding as well in the form of tall hollow Eucalypts.</td></tr>
<tr><td>Significant ecological linkages</td><td>No significant ecological linkages were identified.</td></tr>
<tr><td>Ecological communities</td><td>No TECs or PECs listed under the EPBC Act or BC Act were identified within the DE during the field survey.</td></tr>
<tr><td>Significant flora</td><td>No Threatened or Priority flora were identified in the survey. One taxon is considered possible, Vittadinia cervicularis var. oldfieldii (Priority 1). Vittadinia cervicularis var. oldfieldii is an annual herb that prefers alluvium soils. The closest record is 1 km south of the survey area.</td></tr>
</table>

Environmental value	Assessment
Wetlands and/or waterways and water resources	There are no wetlands of significance located within or in close vicinity to the DE. The closest significant wetland and Ramsar Wetland is Lake Gore over 500 km south. The DE is within the Goldfields Groundwater Area, proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act). No groundwater extraction is expected to be required, with nearby bores recording depth to water of 14-17m (Bureau of Meteorology, 2024). The nearest Public Drinking Water Source Area is 2.5 km north. The habitat type 'Eucalyptus-lined minor drainage line' is present in the DE in the connection corridor, in the area associated with Skull Creek. No Surface Water Areas or Irrigation Districts proclaimed under the *Rights in Water and Irrigation Act 1914* (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 or within 20 km of the DE.
Land and soil quality	The DE area occurs within the Salinaland Plains Zone. This zone is characterised by sandplains on granitic rocks of the Yilgarn Craton with red deep sands/ shallow loams and some hardpan areas (Tille 2006). The project area is located in the Murchison bioregion and the Eastern Murchison sub-region as described by Interim Biogeographic Regionalisation for Australia (IBRA). The Murchison bioregion is characterised by low hills and mesas separated by flat colluvium and alluvial plains. Vegetation is predominantly low mulga woodlands (Bastin G and the ACRIS Management Committee 2008). The subregion comprises the northern parts of the Yilgarn Craton. Characterised by internal drainage, extensive areas of elevated red desert sandplains with minimal dune development, salt lake systems and broad plains of red-brown soils. Vegetation is dominated by mulga woodlands often rich in ephemerals, hummock grasslands, saltbush shrublands and Tecticornia shrublands (Cowan 2001). A review of the Australian Soil Resource Information System (ASRIS, 2024) and Acid Sulphate Soil (ASS) risk mapping (spatial dataset DWER-048; GoWA, 2024) indicates the soil under the nearby surveyed area has an extremely low risk of ASS occurrence. The project will connect to the Laverton power station on Lot 579 on the corner of Hill Street and Alderstone Street. The old power station at this location was decommissioned in 2007 and a new power station was constructed on the same lot. The Site was classified as "potentially contaminated – investigation required" in February 2008. The Detailed Site Investigation identified shallow hydrocarbon contaminated soils on the site in 2007, with additional investigations undertake in 2010 to determine potential groundwater contamination. The site was reclassified as "Contaminated – restricted use" in 2012.
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.

Transect searches were undertaken for *Idiosoma clypteatum* (Priority 3) burrows in suitable habitat and identified one potential burrow. The confirmation of this burrow would not be possible without specimen collection and the nearest known record is 230 km northwest. The precautionary principle has been applied and it is assumed that the burrow is Northern Shield-back trapdoor spider. The DE has been modified to remove this burrow from the proposed impact area.

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:

- 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 pits.
- Works will be undertaken systematically to minimise re-run and compaction of access tracks.
- Standard weed and hygiene management practices will be applied to these works.
- Mechanical clearing will be undertaken slowly and in a one-way direction to allow fauna to move offsite.

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

Clearing of vegetation type '*Eucalyptus camaldulensis* open woodland to isolated trees on drainage line' will be avoided where possible, however cant be entirely avoided due to the requirement to connect the renewables infrastructure to the power station. The clearing of this vegetation type has been minimised to the smallest possible (0.26 ha).

Key management measures detailed in the CEMP for the project construction include the following:

- Avoid clearing of riparian vegetation "Eucalyptus camaldulensis open woodland to isolated trees on drainage line" where possible and limit clearing to 0.26 ha maximum.
- No clearing will be undertaken outside the DE.
- The clearing locations will be demarcated prior to clearing activities.
- Clearing areas are to be checked by an Environmental Specialist or Site Supervisor prior to clearing to ensure no more than 15.25 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
- 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.
- A Health and Safety Management Plan will be developed to ensure no impacts to personnel or the environment resulting from disturbance of potential contamination while connecting the infrastructure to the existing power station at Lot 579.

7 Stakeholder Engagement

Horizon Power has engaged with the Traditional Owners, local community, local Shire 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 4. The assessment found that the Project may be at variance to Principle f), due to the small amount of riparian vegetation to be cleared for the connection infrastructure. The project is unlikely to be at variance with any of the remaining clearing principles.

Table 4 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 15.25 ha of native vegetation is proposed to be cleared for the Project within the Laverton DE. **Vegetation** The Laverton DE is located in the Murchison bioregion and the Eastern Murchison sub-region as described by IBRA. Two vegetation types were identified in the Laverton DE during the GHD (2023) survey (VT14 and VT15). The vegetation types were representative of the vegetation associations in the region, with a high proportion of pre-European extent remaining (over 99%). The majority of vegetation within the DE is in Degraded condition, with large areas of cleared vegetation for existing tracks. The survey area had been subject to grazing with the vegetation structure and cover reduced through grazing pressure. There were also signs of canopy decline in the overstorey in the northern section of the survey area potentially caused by either drought and/or inappropriate fire regimes. The survey area also has edge effects from established roads and signs of rubbish. There were a number of introduced weeds across the survey area. No TECs or PECs listed under the EPBC Act or BC Act were identified within the Laverton DE (GHD, 2023). **Flora** Sixty-five flora taxa (including subspecies and varieties) representing 24 families and 45 genera were recorded from the Laverton survey area during the field survey (GHD, 2023). This total comprised 61 native taxa and five introduced flora taxon. No Threatened or Priority flora were identified in the survey. One taxon is considered possible (*Vittadinia cervicularis* var. *oldfieldii* (Priority 1)) to occur and all other taxa are considered unlikely to occur. GHD (2023) identified that suitable search effort was undertaken to identify *Vittadinia cervicularis* var. which is possibly occurring, with the nearest record 1 km from the project. Five introduced flora taxon were recorded in the Laverton DE, and one Declared Pest and WoNS was recorded in the survey area (Pricky pear, *Opuntia stricta)*. **Fauna and fauna habitat** Two fauna habitat types were recorded at Laverton during the GHD (2023) survey; Mulga woodland on open clay plain (14.99 ha), and Eucalyptus-lined minor drainage line (0.26 ha). A total of 23 fauna species were identified in the Laverton survey area (GHD, 2023). This total comprised 18 birds, 4 mammals and one reptile and included three introduced species. No Threatened fauna listed under the EPBC Act or BC Act were recorded during the survey. Two species are considered likely to occur in the DE due to potentially suitable habitat (GHD, 2023): – Princess Parrot (*Polytelis alexandrae*) (Priority 4 (P4)/Vulnerable (VU)) – Peregrine Falcon (*Falco peregrinus*) (Other Specially Protected (OS)) Transect searches were undertaken for Northern Shield-back trapdoor spider *(Idiosoma clypteatum)* (Priority 3) burrows in suitable habitat and identified one potential burrow. The confirmation of this burrow would not be possible without specimen collection, however this is considered unlikely to be a Northern Shield-back trapdoor spider burrow as discussed below in Principle b). 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.	Proposed clearing is not likely to be at variance to this Principle.

Principle	Assessment	Outcome
(b) Native vegetation should not be cleared if it comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous Western Australia.	Two fauna habitat types were identified in the DE by GHD (2023): – Mulga woodland on open clay plain (14.99 ha) – Eucalyptus-lined minor drainage line (0.26 ha) The EPBC Act PMST, DBCA database and NatureMap identified the presence/potential presence of 24 significant fauna species within the survey area (GHD, 2023). This total comprised 18 birds, one reptile, five mammals. A total of 23 terrestrial vertebrate species were recorded within the Laverton survey are during the GHD (2023) field survey. No Threatened fauna listed under the EPBC Act or BC Act was recorded during the GHD (2023) survey. Transect searches were undertaken for Northern Shield-back trapdoor spider (*Idiosoma clypteatum)* (Priority 3) burrows in suitable habitat and one potential burrow was identified. The confirmation of this burrow would not be possible without specimen collection and the nearest known record is 230 km northwest. There is potential for *Idiosoma clypteatum* to occur at the Laverton site, but it is not considered likely as there is limited available data for this species in the region, and no previous records of *Idiosoma clypteatum* in the area. In accordance with the Precautionary Principle, the DE has been modified to remove this burrow from the proposed impact area. Two fauna species are considered likely to occur within the DE: • Princess Parrot (*Polytelis alexandrae*) (P4/VU) • Peregrine Falcon (*Falco peregrinus*) (OS) Princess Parrot is likely to use Mulga woodland on open clay pan habitat for dispersal, but there is limited foraging opportunity (lacking spinifex or grassy understorey). The Peregrine Falcon is likely to use Mulga woodland on open clay pan habitat type on an opportunistic basis as foraging habitat. The majority of this DE consists of this vegetation type, and up to 14.99 ha will be cleared. The Eucalyptus-lined minor drainage line provides suitable foraging and potentially breeding habitat for the Peregrine Falcon. The Princess Parrot may utilise this habitat for dispersal and breeding as well in the form of tall hollow Eucalypts. It is expected that this vegetation type can be avoided by the transmission infrastructure, and no more than 0.26 ha. The fauna values of the DE are highly represented on a local and regional scale (GHD, 2023) and clearing of up to 15.25 ha of fauna habitat is not considered significant for the maintenance of or significant habitat for fauna indigenous Western Australia. The Project is therefore unlikely to be at variance with this principle.	Proposed clearing is not likely to be at variance to this Principle.
(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.	No Threatened flora were identified in the survey or are considered likely to occur. The proposed clearing of native vegetation for the Project is therefore not at variance with this principle.	Proposed clearing is not at variance to this 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	No TEC's 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 at variance to this Principle.	Proposed clearing is not at variance to this Principle

Principle	Assessment	Outcome
threatened ecological community.		
(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.	Two vegetation types were identified in the DE during the GHD (2023) survey: – VT14 - *Acacia aneura*, *Acacia ramulosa* and *Acacia ayersiana* open woodland to isolated trees over *Acacia tetragonophylla*, *Acacia craspedocarpa and Senna artemisioides* subsp. *×artemisioides* open shrubland over *Salsola australis*, *Sclerolaena eurotioides* and *Maireana thesioides* open chenopod over mixed annual herbs on shrubland on brown loam clay on plain. – VT15 - *Eucalyptus camaldulensis* open woodland to isolated trees on drainage line. Broad scale (1:250,000) pre-European vegetation mapping of the area was completed by Beard (1976) at an association level. Vegetation Association 18 is present within the DE and is described as: Low woodland; mulga (*Acacia aneura*). The current extents remaining at the State, IBRA bioregion, IBRA subregion and Local Government Area (LGA) levels are greater than 99% of their calculated pre-European extents (GoWA, 2014). The DE is not considered to be within an area that has been extensively cleared, given it has more than 99% of pre-European extent remaining. The vegetation types identified during the survey are not confined to the DE and are considered well represented at the local and regional scale.	Proposed clearing is not 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. One vegetation type (VT15) was recorded in the connection corridors and represents a minor drainage line associated with Skull Creek (GHD, 2023). It is expected that this vegetation type can be avoided by the transmission infrastructure, however if clearing is required it would be no more than 0.26 ha. 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 is likely to cause appreciable land degradation.	The DE intersects the Violet and Mindura land systems, characterised as undulating gravelly plains and low hills, ridges and outcrops of granite, respectively. The DE area occurs within the Salinaland Plains Zone. This zone is characterised by sandplains on granitic rocks of the Yilgarn Craton with red deep sands/ shallow loams and some hardpan areas (Tille 2006). Vegetation type VT15 '*Eucalyptus camaldulensis* open woodland to isolated trees on drainage line' may be prone to erosion. It is expected that this vegetation type can be avoided by the transmission infrastructure. If clearing of VT05 is required for the connection corridor this will be limited to less than 0.26 ha. A review of the Australian Soil Resource Information System (ASRIS, 2024) and Acid Sulphate Soil (ASS) risk mapping (spatial dataset DWER-048; GoWA, 2024) indicates the soil under the nearby surveyed area has an extremely low risk of ASS occurrence. The project will connect to the Laverton power station on Lot 579 on the corner of Hill Street and Alderstone Street. The old power station at this location was decommissioned in 2007 and a new power station was constructed on the same lot. The Site was classified as "potentially contaminated – investigation required" in February 2008. The Detailed Site Investigation identified shallow hydrocarbon contaminated soils on the site in 2007, with additional investigations undertake in 2010 to determine potential groundwater contamination. The site was reclassified as "Contaminated – restricted use" in 2012. Management of potential disturbance to contamination will be undertaken as per the CEMP. The clearing proposed in the DE will be 15.25 ha in total. Any dust produced during construction will be managed through the implementation of a CEMP, and the solar farm will be kept slashed to ensure effective operation of the asset. The clearing is not expected to cause appreciable	Proposed clearing is not likely to be at variance to this Principle.

Principle	Assessment	Outcome
	land degradation and based on the above, the proposed clearing of native vegetation for the Project is not likely 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 at variance to this 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.	The DE occurs within the Goldfields Groundwater Area. The nearest Public Drinking Water Source Area is 2.5 km north. It is not expected that the project will require dewatering or groundwater abstraction within the DE. The nearest groundwater bores to the DE have recorded water depths of 15 to 17m (Bureau of Meteorology, 2024). Potential impacts to surface water quality from erosion / sedimentation / hydrocarbons will be managed as detailed in the CEMP. Clearing within the DE is unlikely to cause deterioration in the quality of surface or underground water, therefore the proposal is not likely to be at variance to this principle.	Proposed clearing is not likely to be at 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 Murchison is characterised by an arid climate, with mainly Winter rainfall (Cowan 2001). The closest BoM weather station to Laverton is Laverton Aero (012305). Rainfall data shows the mean annual rainfall in the area as 275.9 mm (BoM 2023). It is expected that the hydrological regimes will be maintained through design and flooding is unlikely to occur. Additionally, given the abundance of vegetation within the surrounding region, with over 99% 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 likely to be at variance with this principle.	Proposed clearing is not likely to be at variance to this Principle.

Figure 2 Laverton Constraints

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0 175 350 700 Meters

Scale: 1:20,000

HORIZON POWER

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 51O 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 5.

Table 5 Other approvals

Other approvals	Assessment
Referral to Environmental Protection Authority	Due to the small scale of the project and 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 Laverton DE. The Princess Parrot (Vulnerable) was considered likely to occur within the DE. The nearest record for this species is 2 km south of the survey area. Princess Parrot is likely to use Mulga woodland on open clay pan habitat for dispersal, but there is limited foraging opportunity (lacking spinifex or grassy understorey). The Princess Parrot may utilise Eucalyptus-lined minor drainage line habitat for dispersal and breeding as well in the form of tall hollow Eucalypts. The Eucalyptus-lined minor drainage line habitat type will not be cleared for the project. Up to 14.99 ha of mulga woodland habitat and 0.26 ha of drainage line habitat may be cleared for the project. The Peregrine Falcon is also likely to use Mulga woodland on open clay pan habitat type on an opportunistic basis as foraging habitat. The Eucalyptus-lined minor drainage line provides suitable foraging and potentially breeding habitat for the Peregrine Falcon, and clearing of this vegetation type is expected to be avoided as the poles can span this vegetation type, with no more than 0.26 ha of clearing expected. An assessment of impacts was undertaken utilising the Matters of National Environmental Significance (MNES) *Significant Impact Guidelines 1.1* (DoE, 2013), this concluded that referral to DCCEEW was not required. *Migratory fauna* Eight Migratory species were recorded within 20 km of the Laverton DE. No significant habitat for these species is likely to be removed. *National heritage* The Laverton DE does not overlap any National Heritage Areas. No impacts to national heritage values are expected from the proposed works. *Wetlands of international importance* The Laverton 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 *Soil and Land Conservation Act 1945*	Not Applicable.
State and municipal heritage	The Laverton DE does not overlap any municipal or State heritage sites.
Native title	The DE is located within the boundaries of the Nyalpa Pirniku native title determination. Tribunal Number: WCD2023/002 Federal Court Number: WAD91/2019. Some parts of the DE are subject to non exclusive native title rights and interests.
Aboriginal Sites of Significance under the *Aboriginal Heritage Act 1972*	Part of the DE is located within the dithered boundaries of registered heritage site (place 16081 ACHIS). A small portion of the DE boarders on the edge of a lodged site (27276). An Aboriginal heritage survey was undertaken for the project. The survey report made recommendations regarding avoiding site 27276 and other risk mitigation recommendations regarding when monitors are required etc. A heritage protection plan will be developed in consultation with the knowledge holders to ensure all recommendations from the survey report are implemented. As appropriate, management measures will be implemented during activities, such as the engagement of cultural heritage monitors during ground disturbing works. Horizon Power has an Aboriginal Cultural Heritage Management Policy, that details our commitment to *avoid impacting on Aboriginal Cultural Heritage whenever and wherever possible*.

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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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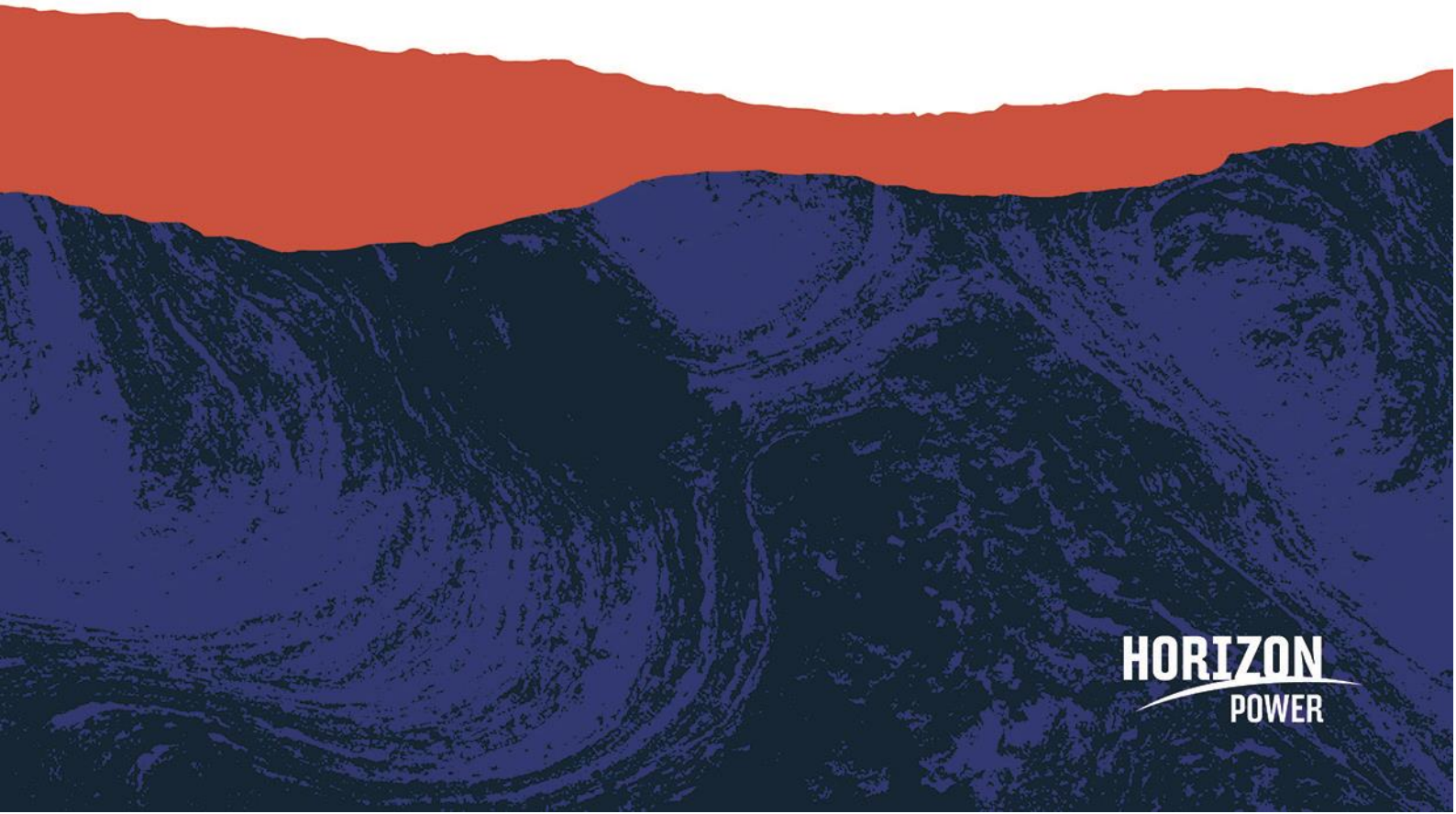
Appendix A: Construction Environmental Management Plan

Midwest Towns Renewable Infrastructure Project

Laverton

Construction Environmental Management Plan



Contents

1 Introduction

1.1 Project Context and Scope

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.

Horizon Power is proposing to develop a future energy system in Laverton in WA (the Project) as part of a program to transition mid-west and remote towns to renewable energy. The final design and footprint required for the Project will be determined once geotechnical surveys are undertaken. Up to 15.25 ha of clearing is proposed within the Development Envelope (DE). This will allow for generation of approximately 2.54 megawatts (MW) of solar, a connection corridor to existing power station, access tracks and fire breaks, and geotechnical investigations if required. Specific detail of the proposed clearing is provided in Section 2.2 of this document. Specific detail of the proposed clearing is provided in Section 2.2 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 Construction Environmental Management Plan (CEMP) has been developed to outline environmental management measures to be implemented by Horizon Power and its contractors during the construction of the Project. This includes, but is not limited to, measures to manage dust, erosion and spread of weeds during clearing of native vegetation.

Figure 1 | Development Envelope and Survey Area Laverton

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Scale: 1:20,000

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2 Description of the Activity

2.1 Activity Overview

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 2.54 MW of energy from solar arrays.

2.2 Clearing of Native Vegetation

The proposed clearing will occur within the DE (Figure 1) which is 24.55 ha in size. No more than 15.25 ha of clearing is proposed.

Clearing of native vegetation within the DE will only be undertaken as specified by the Clearing Permit, including the extent and method of clearing to be undertaken and any specific management measures outlined in the permit conditions.

3 Avoidance Measures

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.

Transect searches were undertaken for Northern Shield-back trapdoor spider (*Idiosoma clypteatum*) (Priority 3) burrows in suitable habitat and identified one potential burrow. The confirmation of this burrow would not be possible without specimen collection and the nearest known record is 230 km northwest. The precautionary principle has been applied and it is assumed that the burrow is Northern Shield-back trapdoor spider. The DE has been modified to remove this burrow from the proposed impact area.

4 Management Measures

The management measures listed in Table 1 will be implemented during geotechnical investigations and construction of this Project. Clearing of native vegetation will occur as per the conditions in the NVCP issued by DWER.

Table 1 Management Measures to be Implemented During Geotechnical Investigations and Construction

Aspect	Management Measure
Geotechnical works	
Extent of Clearing	– No clearing is permitted outside the DE (Figure 1) – Where possible, pre-existing access tracks will be used and vehicles and machinery will exit the DE along the same route used for access. – Clearing will be minimised where possible through placement of geotechnical tests in existing cleared locations where possible. – Mechanical clearing for the development of formal access tracks is not proposed during geotechnical works. – Works will be undertaken systematically to minimise re-run and compaction of access tracks. – The clearing locations are to be demarcated with flagging tape, GPS or similar prior to clearing activities. – A pre-clearing toolbox will be held so all staff are aware of their responsibilities under the permit. – Clearing areas are to be checked by an Environmental Specialist or Site Supervisor prior to clearing.

Aspect	Management Measure
Flora and vegetation	– Areas that are degraded, sparsely vegetated and/or previously cleared will be used preferentially for laydown and access tracks. – Temporary cleared areas for geotechnical investigations will be restored, 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. – The clearing area allows for driving over vegetation to access geotechnical sites. Driving on vegetation will be kept to the minimum required to perform the works. – Movement of vehicles and machinery will be in convoy along access tracks/ routes and will not go into adjacent vegetation.
Fauna	– 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. – Personnel will not touch, feed or otherwise directly interact with fauna. – Vehicle and machinery speeds within the DE will be restricted to reduce the likelihood of fauna strike.
Weeds	– All vehicles and machinery will arrive clean on site. – Movement of vehicles and machinery will be restricted to the DE or established tracks and roads.
Soils and erosion	– Standard measures regarding erosion and sediment control will be implemented during construction works. – Designated access tracks will be applied to prevent additional disturbance.
Dust	– Standard dust control and mitigation measures will be implemented during clearing. – Ground disturbance and clearing of vegetation will be restricted during high winds if dust cannot be adequately controlled. – Reduced vehicle speed limits will be applied in areas of unconsolidated soil. – Use of defined routes for machinery/ vehicles travelling on unsealed roads.
Noise	– The contractor will comply with the Environmental Protection (Noise) Regulations 1997 – Complaints regarding noise will be recorded and investigated by Horizon Power.
Waste	– Rubbish will be disposed of in appropriate containers and all waste will be removed from the site.
Contamination	– Works are to immediately cease if hydrocarbons affected soil are seen or smelled, or if suspected asbestos containing materials are uncovered during works. – Works may recommence once the contamination status has been determined and the contamination is addressed.
Hydrocarbons and chemicals	– Hydrocarbons and chemicals will be appropriately managed on site to prevent spills, including maintaining equipment in good working order in accordance with manufacturers specifications. – No refuelling will be undertaken within 50 m of a waterway, drain or drainage line. – Hydrocarbons will be appropriately stored at least 50 m away from drainage lines and stored in an appropriate bunded container. – Refuelling will be undertaken on hardstand or using catch trays only. Uncontrolled refuelling is not permitted. – Chemicals will be appropriately stored.
Heritage	– Should aboriginal cultural heritage materials be uncovered during geotechnical works, works are to stop immediately within 20 m of the find. The Contractor is to contact the Horizon Project Manager and an incident will be raised. The area will be cordoned off and no access permitted to the area by people until the incident is investigated and resolved.
Construction	
Extent of Clearing	– No clearing is permitted outside the DE (Figure 1)

Aspect	Management Measure
	– Clearing will be minimised where possible through placement of assets and access tracks in existing cleared locations where possible. – The clearing locations are to be demarcated prior to clearing activities. – Clearing areas are to be checked by an Environmental Specialist or Site Supervisor prior to clearing to ensure no more than 15.25 ha of clearing is undertaken for the Project. – A pre-clearing toolbox will be held so all staff are aware of their responsibilities under the permit.
Flora and vegetation	– If the connection corridor that contains VT05 (riparian vegetation; shown in Figure 2) is selected, pole pads will be positioned to avoid this vegetation type where possible. – Areas that are degraded, sparsely vegetated and/or previously cleared will be used preferentially for laydown and access tracks. – Trees and tall shrubs will be avoided in the selection of access routes and laydown areas, where possible.
Fauna	– 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. – Construction personnel will not touch, feed or otherwise directly interact with fauna. – Vehicle and machinery speeds within the DE will be restricted to reduce the likelihood of fauna strike.
Weeds	– The Contractor will ensure that no weed-affected soil, mulch, fill or other material is brought into the DE. – Vehicles and machinery will arrive clean, and weed control will be undertaken at the site post-construction as required. – Movement of vehicles and machinery will be restricted to the DE or established tracks and roads.
Erosion and soils	– Standard construction measures regarding erosion and sediment control will be implemented during construction works. – Designated access tracks will be applied to prevent additional disturbance.
Dust	– Standard construction dust control and mitigation measures will be implemented during clearing. This may include the use of a water trucks, or similar. – Ground disturbance and clearing of vegetation will be restricted during high winds if dust cannot be adequately controlled. – Reduced vehicle speed limits will be applied in areas of unconsolidated soil.
Noise	– The contractor will comply with the Environmental Protection (Noise) Regulations 1997 – Complaints regarding noise will be recorded and investigated by Horizon Power.
Waste	– Rubbish will be disposed of in appropriate containers and all waste will be removed from the site.
Contamination	– A Health and Safety Management Plan will be developed to ensure no impacts to personnel or the environment resulting from disturbance of potential contamination while connecting the infrastructure to the existing power station at Lot 579. – Works are to immediately cease if hydrocarbons affected soil are seen or smelled, or if suspected asbestos containing materials are uncovered during works. – Works may recommence once the contamination status has been determined and the contamination is addressed.
Hydrocarbons and chemicals	– Hydrocarbons and chemicals will be appropriately managed on site to prevent spills, including maintaining equipment in good working order in accordance with manufacturers specifications. – No refuelling will be undertaken within 50 m of a waterway, drain or drainage line. – Hydrocarbons will be appropriately stored at least 50 m away from drainage lines and stored in an appropriate bunded container. – Refuelling will be undertaken on hardstand or using catch trays only. Uncontrolled refuelling is not permitted. – Chemicals will be appropriately stored.

Aspect	Management Measure
Heritage	– Should aboriginal cultural heritage materials be uncovered during construction works, works are to stop immediately within 20 m of the find. The Contractor is to contact the Horizon Project Manager and an incident will be raised. The area will be cordoned off and no access permitted to the area by people until the incident is investigated and resolved.

Figure 2 Laverton Constraints

N

0 175 350 700 Meters

Scale: 1:20,000

HORIZON POWER