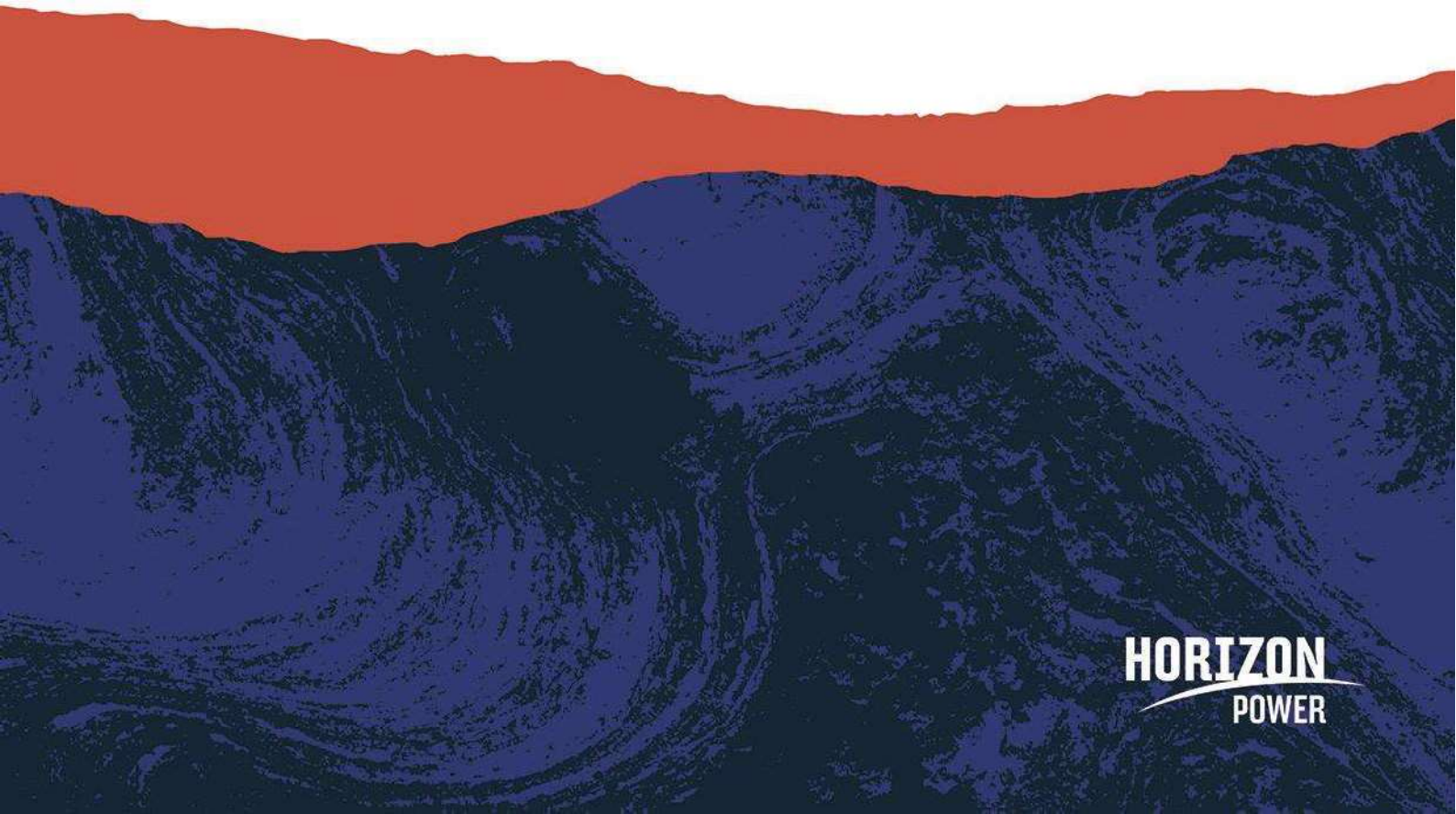
PUBLIC

Midwest Towns Renewable Infrastructure Project - Native Vegetation Clearing Permit

Meekatharra, Yalgoo, Sandstone, Wiluna

Supporting Document

October 2024



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 future energy systems in Meekatharra, Yalgoo, Sandstone and Wiluna in WA (the Project). 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.

At Meekatharra and Yalgoo, the geotechnical surveys will require the clearing of up to 1.5 ha and 3.8 ha of native vegetation, respectively. 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 1 ha at Meekatharra and 1.9 ha at Yalgoo of temporary clearing will be required for stringing and winching of the connection transmission line and a laydown area for construction. Permanent clearing at Meekatharra (12.1 ha) and Yalgoo (9 ha) will be required for connection corridors, access tracks, fire breaks and solar infrastructure.

There will be no temporary clearing at Sandstone and Wiluna, as both sites will be permanently cleared. Sandstone requires 5.9 ha of permanent clearing, and Wiluna requires 7.4 ha of permanent clearing. This will allow for geotechnical surveys, which will be mainly incidental clearing (driving over and parking on native vegetation) for vehicle / machinery access to test sites. Clearing will also be undertaken for stringing and winching of the connection transmission lines, laydown areas, solar infrastructure, the connection corridors and access tracks.

The future energy systems will comprise:

- 80% renewable energy generation - approximately 3.5 megawatts (MW) of solar infrastructure, 1.75 MW BESS (battery energy storage system) inverter and 12.36 MWh of battery capacity at Meekatharra
- 80% renewable energy generation - approximately 0.69 MW of solar infrastructure, 0.04 MW BESS inverter and 1.1 MWh of battery capacity at Yalgoo
- 80% renewable energy generation - approximately 0.21 MW of solar infrastructure, 0.01 MW BESS (batter energy storage system) inverter and 0.30 MWh of battery capacity at Sandstone
- 80% renewable energy generation - approximately 1.22 MW of solar infrastructure, 0.39 MW BESS inverter and 3.6 MWh of batter capacity at Wiluna.

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). Horizon Power met with DWER in early 2023 and identified that the sites can be assessed together under a single clearing permit application.

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, ecological surveys were undertaken by GHD (2023a) and GHD (2023b) (Appendix A and Appendix B). The results of these surveys, 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 C.

2 Description of the Activity

2.1 Project Location

Development Envelopes (DEs) have been identified for each of the sites for this clearing permit application. The DEs are described in Table 1 and shown in Figure 1,

Figure 2, Figure 3 and Figure 4.

Table 1 Development Envelopes for the Project

Site	Size of Development Envelope (ha)	Development Envelope location	Shire	Neighbouring land uses
Meekatharra	26.6	Reserve 15815 - Lot 154 on DP240326, LR3128/624	Shire of Meekatharra	Recreation and sport, residential, road reserve, parks and recreation, school
		Reserve 54360 - Lot 600 on DP424411, LR3176/100		
		Leasehold N498576 - Lot 300 on DP409999, LR3167/604		
		Freehold - Lot 297 on DP33387, CT2223/650		
		Freehold - Lot 298 on DP33387, CT2223/651		
		Dedicated Road - PIN 11725539		
Yalgoo	16.8	Reserve 54361 - Lot 503 on DP424412, LR3176/48	Shire of Yalgoo	Rifle range, water supply, recreation, common land, residential, pastoral
		Reserve 6201 - Lot 502 on DP424412, LR3176/47		
		Reserve 6201 - Lot 501 on DP424412, LR3176/46		
		Dedicated Road - PIN 11743799		
		Reserve 9688 - Lot 256 on DP38688, LR3132/968		
		Dedicated Road - PIN 11665193		
		Dedicated Road - PIN11420514		
		Dedicated Road - PIN 11420505		
		Dedicated Road - Lot 212 on DP33464, LR3129/209		
Sandstone	5.9	Reserve 10898 - Lot 501 on DP427607, LR3176/686	Shire of Sandstone	Aerodrome purposes, golf links, safety zone, recreation, residential
		Reserve 54468 - Lot 500 on DP427607, LR3176/685		
		Reserve 10898 - Lot 502 on DP427607, LR3176/687		
		Reserve 14385 - Lot 900 on DP410009, LR3168/422		
		Reserve 5233 - Lot 282 on DP130519, LR3150/714		
		Dedicated Road - PIN 11426269		

Site	Size of Development Envelope (ha)	Development Envelope location	Shire	Neighbouring land uses
		Dedicated Road - PIN 11426264		
		Dedicated Road - PIN 11426252		
Wiluna	7.4	Reserve 12188 - Lot 700 on DP417113, LR3170/764	Shire of Wiluna	Recreation, residential, gravel
		Unallocated Crown Land - PIN 1010800		
		Dedicated Road - PIN 1194928		
		Dedicated Road - PIN 1194929		
		Dedicated Road - PIN 1194913		

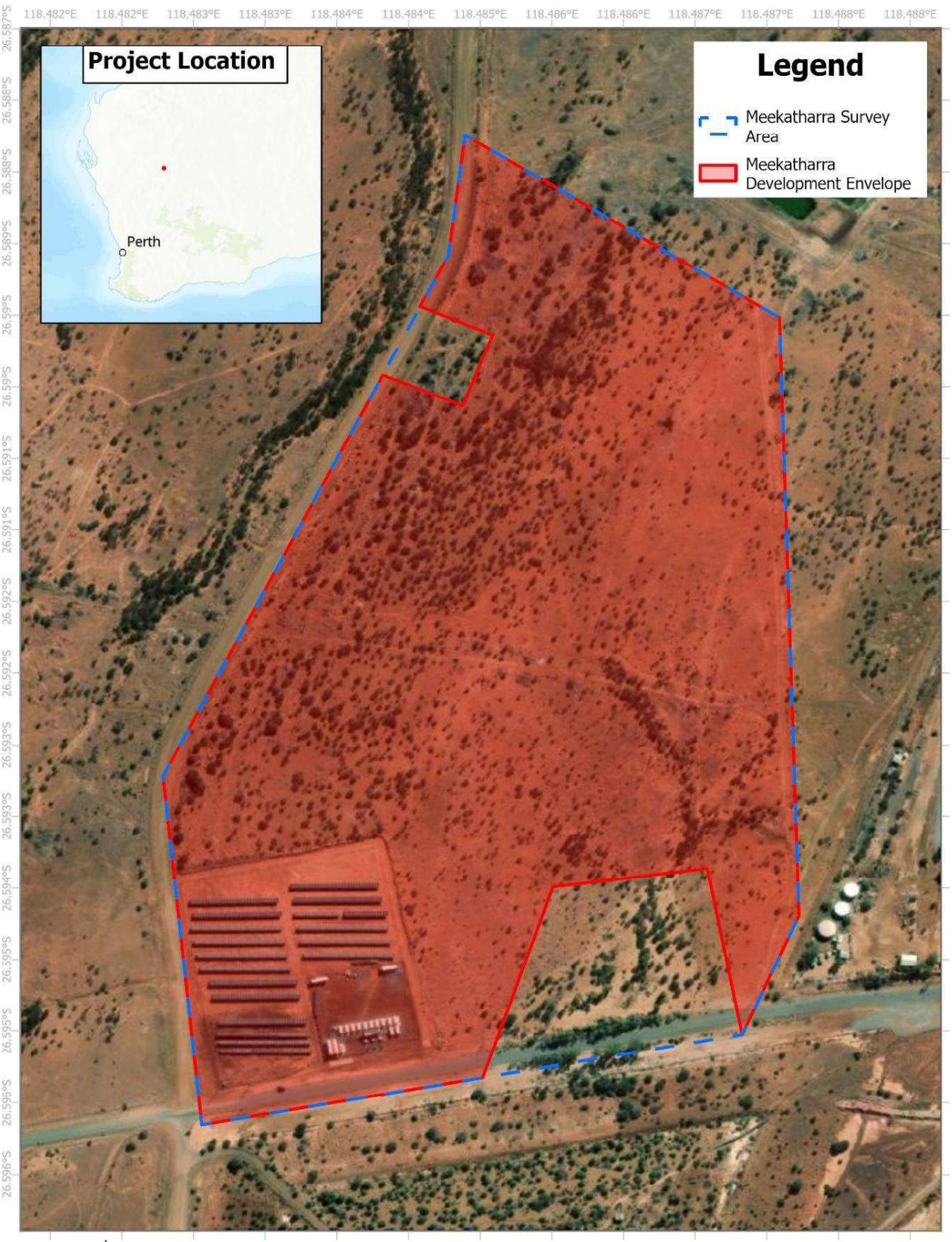


Figure 1 Meekatharra Development Envelope and Survey Area

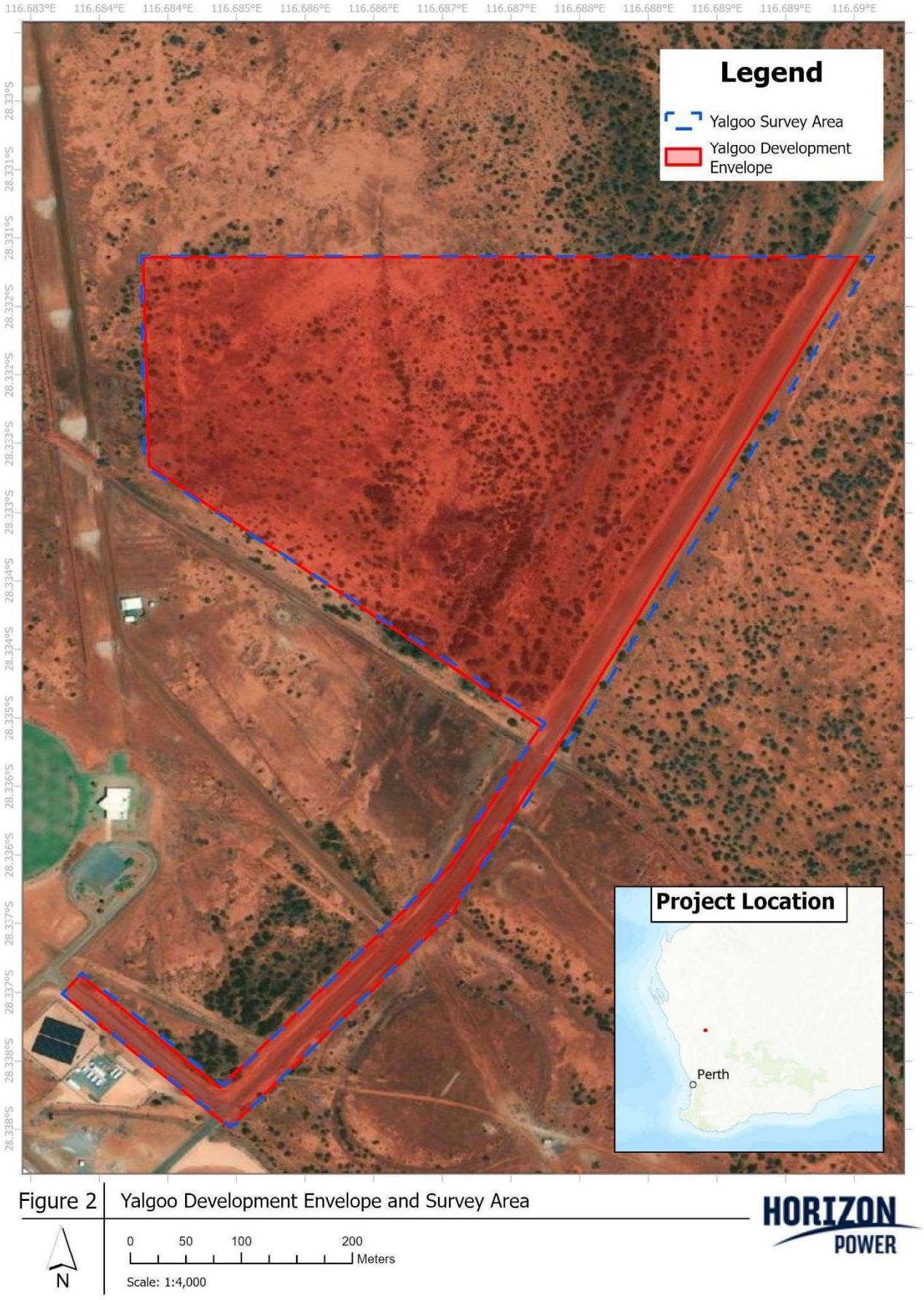


Figure 2 Yalgoo Development Envelope and Survey Area

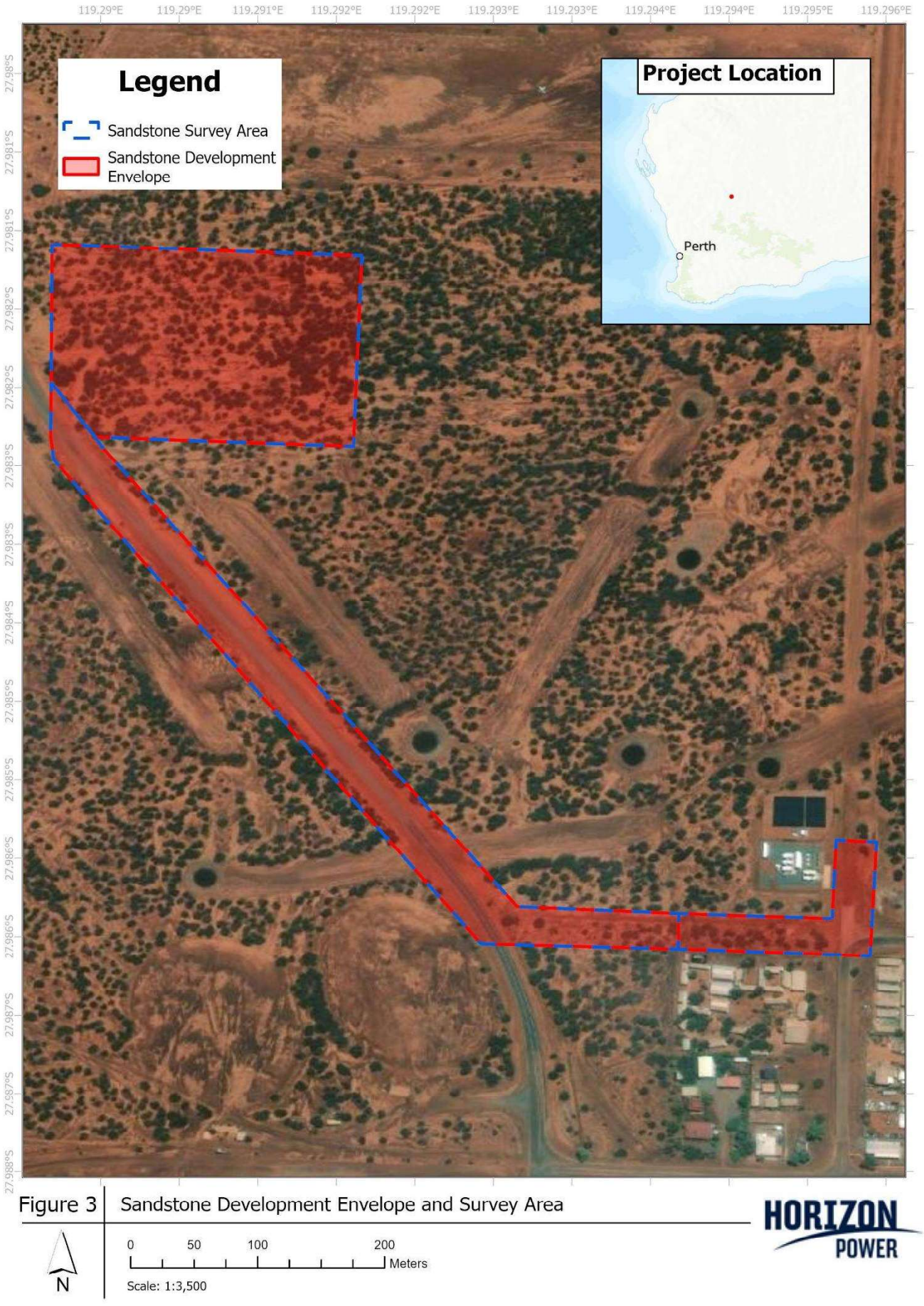


Figure 3 Sandstone Development Envelope and Survey Area

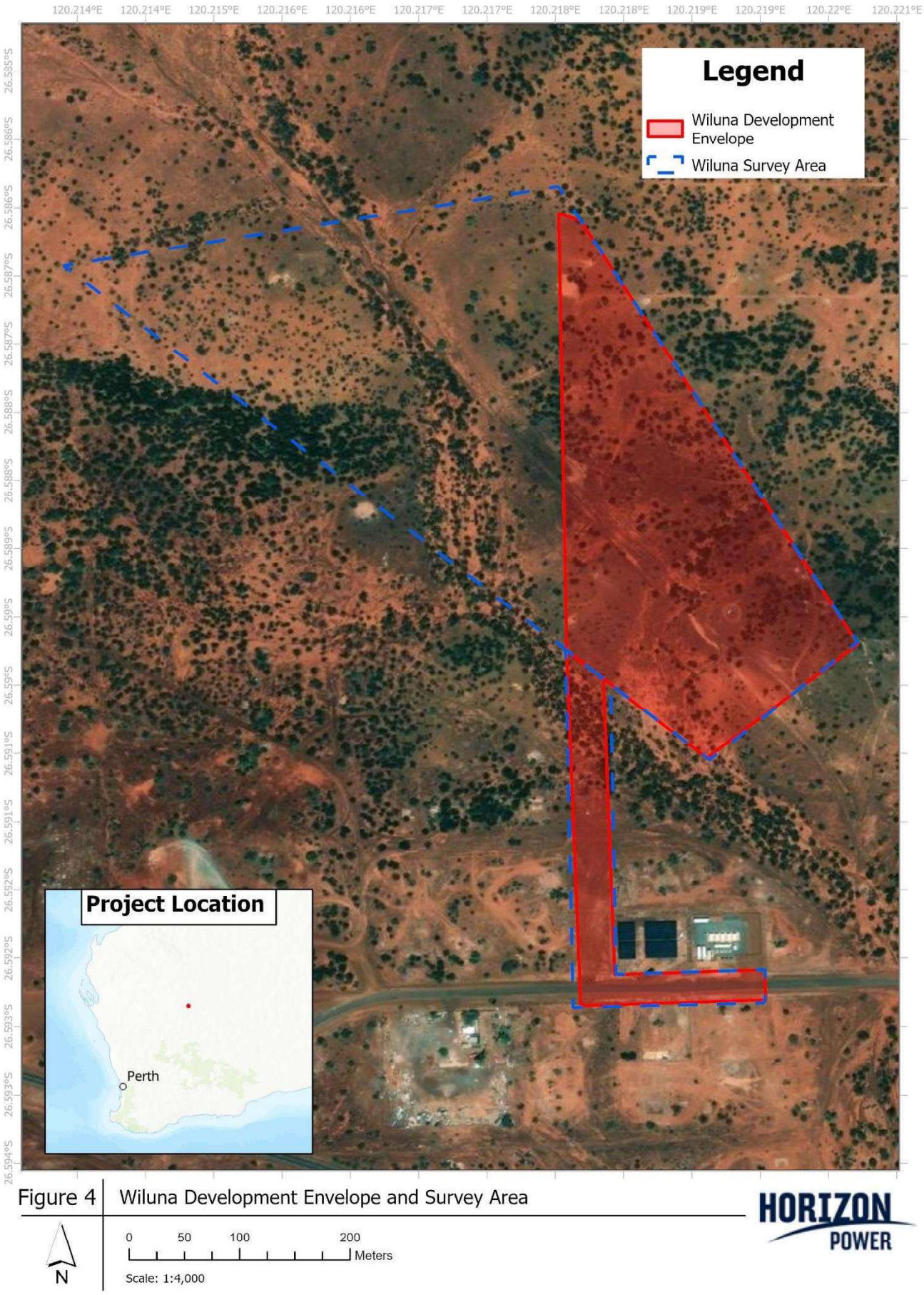


Figure 4 Wiluna Development Envelope and Survey Area

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 several future energy systems including renewable infrastructure generating the following amount of energy from solar arrays:

- 3.5 MW at Meekatharra
- 0.69 MW at Yalgoo
- 0.21 MW at Sandstone
- 1.22 MW at Wiluna.

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 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. The sites are under a Management Order to Horizon Power.

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 DEs, as described in Section 2.1.

Clearing at all sites will be required for geotechnical surveys, which will be mainly incidental clearing (driving over and parking on native vegetation) for vehicle / machinery access to test sites. Clearing will also be undertaken for stringing and winching of the connection transmission lines, laydown areas, solar infrastructure, the connection corridors and access tracks.

There will be temporary and permanent clearing at Meekatharra and Yalgoo, whereas the entire DEs at Sandstone and Wiluna will be permanently cleared. The clearing at each site is shown in Table 2.

The combined area of permanent and temporary clearing of the four DEs is 42.6 ha.

Table 2 Clearing estimated per site

Site	Proposed clearing	Clearing breakdown	Clearing purpose
Meekatharra	14.6 ha	Temporary clearing: 2.5 ha	Geotechnical surveys, stringing and winching of the connection transmission lines and laydown areas
		Permanent clearing: 12.1 ha	Solar infrastructure, the connection corridors and access tracks
Yalgoo	14.7 ha	Temporary clearing: 5.7 ha	Geotechnical surveys, stringing and winching of the connection transmission lines and laydown areas
		Permanent clearing: 9.0 ha	Solar infrastructure, the connection corridors and access tracks
Sandstone	5.9 ha	All permanent clearing	Geotechnical surveys, stringing and winching of the connection transmission lines, laydown areas Solar infrastructure, the connection corridors and access tracks.

Site	Proposed clearing	Clearing breakdown	Clearing purpose
Wiluna	7.4 ha	All permanent clearing	Geotechnical surveys, stringing and winching of the connection transmission lines, laydown areas Solar infrastructure, the connection corridors and access tracks.
TOTAL	**42.6**		

3.2 Proposed Clearing Method

Mechanical removal and driving over vegetation will be required for the geotechnical surveys, stringing and winching of the connection transmission line, laydown areas and infrastructure construction.

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 for each of the sites. The Meekatharra, Sandstone and Wiluna survey was conducted from 28 April to 4 May 2023 by GHD (2023a). A separate survey was undertaken for Yalgoo from 21 September to 22 September 2023 by GHD (2023b) in accordance with EPA guidelines (EPA, 2016 and EPA, 2020). The ecological surveys have been appended to this document (Appendix A and Appendix B) and are summarised in this section.

The survey areas for each site are shown in Figure 1, Figure 2, Figure 3 and Figure 4. Note that there are the following differences between the DEs and survey areas:

- Meekatharra: DE is smaller than survey area to avoid riparian vegetation recorded during the GHD (2023a) survey and a heritage place
- Yalgoo: DE is slightly smaller than the survey area to avoid unnecessary overlap with additional land parcels
- Sandstone: DE is slightly smaller than the survey area to avoid unnecessary overlap with additional land parcels
- Wiluna: DE is smaller than the survey area to avoid riparian vegetation recorded during the GHD (2023) survey.

4.1 Flora and Vegetation

4.1.1 Vegetation Types

Six vegetation types aligning with broad landforms were identified and described in the survey areas, not including cleared tracks. These have been summarised in Table 3 below, with total extent of vegetation in Table 4.

Table 3 Vegetation types in the survey areas

Survey area	Vegetation type
Meekatharra	VT06 -*Acacia incurvaneura* and *Acacia pteraneura* open woodland over, *Eremophila citrina*, *Eremophila latrobei* subsp. *latrobei, Solanum lasiophyllum* and *Maireana planifolia* isolated clumps of shrubs on orange clay-loam on low rocky rises. VT07 -*Eucalyptus victrix* and *Eucalyptus camaldulensis* open woodland over, *Acacia tetragonophylla*, *Acacia victoriae* and *Eremophila longifolia* open shrubland over, **Cenchrus ciliaris* and *Peplidium* sp. isolated clumps of forbs and grasses on brown sandy-clay-loam within drainage areas.
Yalgoo	VT16 - *Acacia tetragonophylla*, *Acacia acuminata* and *Eremophila platycalyx* tall open shrubland to scattered tall shrubs over *Eremophila fraseri*, *Senna* sp. Meekatharra and *Eremophila deserti* scattered shrubs over *Ptilotus* spp., *Sclerolaena eriacantha* and *Maireana* spp. scattered low shrubs on stony plain/broad drainage area.

Survey area	Vegetation type
Sandstone	VT10 - *Acacia aneura, Acacia mulganeura* and *Acacia incurvaneura* mulga woodland over, *Cryptandra connata* and *Eremophila margarethae* isolated shrubs over, Poaceae sp. and Chenopodiaceae sp. isolated clumps of sterile chenopods and grasses on orange clay loam, flat plains.
Wiluna	VT11 - *Acacia pruinocarpa* and *Acacia pteraneura* (± *Acacia aneura* x *Acacia craspedocarpa*) woodland over, *Ptilotus obovatus* and *Lepidium platpetalum* isolated shrubs over, *Dysphania kalpari*, *Sclerolaena eriacantha* and *Dactyloctenium radulans* on orange, sandy-clay-loam within minor drainage lines. VT12 - *Acacia aptaneura*, *Acacia pteraneura* and *Acacia pruinocarpa* (± *Acacia aneura* x *Acacia craspedocarpa*) woodland over *Grevillea sarissa* subsp. *succincta* and *Eremophila margarethae* isolated shrubs on orange clay-loam, rocky rises.

Table 4 Extent of vegetation types in the survey areas

Survey area	Vegetation type	Extent and proportion (ha) of individual survey area
Meekatharra	VT06	23.76 ha (80.95%)
	VT07	1.01 ha (3.44%)
	Cleared	4.58 ha (15.60%)
Total extent		**29.35 ha**
Yalgoo	VT16	14.20 ha (81.61%)
	Cleared	3.20 ha (18.39%)
Total extent		**17.4 ha**
Sandstone	VT10	4.21 ha (71.36%)
	Cleared	1.69 ha (28.64%)
Total extent		**5.90 ha**
Wiluna	VT11	3.45 ha (21.59%)
	VT12	11.61 ha (72.65%)
	Cleared	0.92 ha (5.76%)
Total extent		**15.98 ha**

4.1.2 Vegetation Condition

The condition of the vegetation within the survey areas ranged from Excellent to Good, with the remainder of the area already cleared (Table 5).

Table 5 Extent of vegetation condition in the survey areas

Survey area	Vegetation Condition	Extent in survey area (ha)	% within the survey area
Meekatharra	Good	24.77	84.40
	Cleared	4.58	15.60
	Total	**29.35**	**100.00**
Yalgoo	Very Good	14.20	81.61
	Cleared	3.20	18.39
	Total	**17.40**	**100.00**
Sandstone	Excellent	3.64	61.69
	Very Good	0.56	9.49
	Good	0.01	0.17
	Cleared	1.69	28.64

Survey area	Vegetation Condition	Extent in survey area (ha)	% within the survey area
	Total	**5.90**	**100.00**
Wiluna	Very Good	11.99	75.03
	Good	3.07	19.21
	Cleared	0.92	5.76
	Total	**15.98**	**100.00**

4.1.3 Significant Vegetation Communities

No Threatened Ecological Communities (TEC) listed under the EPBC Act or *Biodiversity Conservation Act 2016* (BC Act) were identified within the survey areas during the field surveys.

The Yalgoo survey area overlaps the boundaries of the Yalgoo Banded Ironstone Formation PEC (Priority 1) and the Wagga Wagga and Yalgoo calcrete groundwater assemblage type on Yalgoo palaeodrainage PEC (Priority 1). The vegetation and landforms present within the Yalgoo survey area were not representative of these PECs. Therefore, no PECs are present in the Yalgoo survey area.

No PECs were recorded at Meekatharra, Sandstone or Wiluna.

4.1.4 Flora

The flora diversity identified for each survey area is provided in Table 6. No EPBC Act listed, BC Act listed or DBCA listed flora were recorded from the survey areas.

Table 6 Flora diversity in the survey areas

Survey area	Flora Diversity
Meekathaarra	45 flora taxa (including subspecies and varieties) representing 20 families and 29 genera were recorded from the Meekatharra survey area. This total comprised 43 native taxa and two introduced flora taxa. Dominant families recorded from the survey area included: – Fabaceae (nine taxa) – Chenopodiaceae (five taxa) – Amaranthaceae (four taxa) – Poaceae (four taxa) – Scrophulariaceae (four taxa).
Yalgoo	62 flora taxa (including subspecies and varieties) representing 16 families and 32 genera were recorded from the Yalgoo survey area. This total comprised of 60 native taxa and two introduced flora taxa. Dominant families recorded from the survey area included: – Fabaceae (12 taxa) – Chenopodiaceae (nine taxa) – Asteraceae (eight taxa) – Scrophulariaceae (six taxa).
Sandstone	13 flora taxa (including subspecies and varieties) representing seven families and eight genera were recorded from the Sandstone survey area. No introduced flora were recorded. Dominant families recorded from the survey area included: – Fabaceae (four taxa) – Chenopodiaceae (three taxa) – Poaceae (two taxa).
Wiluna	30 flora taxa (including subspecies and varieties) representing 12 families and 20 genera were recorded from the Wiluna survey area. This total comprised 29 native taxa and one introduced flora taxon. Dominant families recorded from the survey area included: – Fabaceae (nine taxa) – Poaceae (five taxa) – Chenopodiaceae (four taxa).

4.2 Fauna and Fauna Habitat

Four broad fauna habitat types (excluding cleared and disturbed areas) were identified across the survey areas based on the predominant landforms, soil and vegetation structure in the area. The habitat types identified at each survey area are summarised in Table 7.

Table 7 Fauna habitat types in the survey areas

Survey area	Fauna habitat
Meekatharra	– Mulga Woodland on rocky plains/low rises and broad drainage lines – Eucalyptus open woodland ephemeral drainage line
Yalgoo	– *Acacia* shrubland on stony plain
Sandstone	– Mulga woodland
Wiluna	– Mulga Woodland on rocky plains/low rises and broad drainage lines

No Threatened fauna listed under the EPBC Act or BC Act were recorded during the surveys. Transect searches were undertaken for *Idiosoma clypteatum* (P3) burrows in suitable habitat in both of the survey areas with no burrows recorded.

The fauna diversity and conservation significant species considered likely to occur within each of the survey areas is provided in Table 8. Note, GHD (2023a) listed the Southern Whiteface (*Aphelocephala leucopsis*) as likely to occur within the Meekatharra, Sandstone and Wiluna survey areas, however this species is no longer listed as conservation significant under the BC Act or by DBCA so is not included in Table 8.

Table 8 Fauna diversity and fauna likelihood of occurrence in the survey areas

Survey area	Fauna Diversity	Conservation significant fauna assessed as likely to occur in the survey area
Meekatharra	A total of 32 fauna species were identified in the Meekatharra survey area. This total comprised: – 24 birds – Four mammals – Four reptiles. Three introduced species (dog, cat and rabbits) were recorded and are included in this total.	– Grey Falcon (*Falco hypoleucos*) - Vulnerable – Peregrine Falcon (*Falco peregrinus*) – other specially protected fauna – Long-tailed Dunnart (*Sminthopsis longicaudata*) – Priority 4
Yalgoo	Twenty nine fauna species were identified in the Yalgoo survey area. This total comprised: – 25 birds – Three mammals – One reptile. Two of the mammals are introduced species (Cow and European Rabbit).	– Grey Falcon (*Falco hypoleucos*) - Vulnerable – Peregrine Falcon (*Falco peregrinus*) – other specially protected fauna
Sandstone	A total of ten fauna species were identified in the Sandstone survey area. This total comprised: – Seven birds – Two mammals – One reptile.	– Grey Falcon (*Falco hypoleucos*) - Vulnerable – Peregrine Falcon (*Falco peregrinus*) – other specially protected fauna – Long -tailed Dunnart (*Sminthopsis longicaudata*) – Priority 4 – Princess Parrot (*Polytelis alexandrae*) – Priority 4 – Malleefowl (*Leipoa ocellata*) - Vulnerable
Wiluna	A total of 22 fauna species were identified in the Wiluna survey area. This total comprised: – 14 birds – Five mammals	– Grey Falcon (*Falco hypoleucos*) - Vulnerable – Peregrine Falcon (*Falco peregrinus*) – other specially protected fauna

Survey area	Fauna Diversity	Conservation significant fauna assessed as likely to occur in the survey area
	– Three reptiles. Three species are introduced (dog, cat and cattle).	– Long-tailed Dunnart (*Sminthopsis longicaudata*) – Priority 4 – Malleefowl (*Leipoa ocellata*) - Vulnerable

5 Existing Environment

The existing environment of the DEs are described in Table 9, Table 10, Table 11 and Table 12.

Table 9 Existing environment Meekatharra

<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, with 6.64% within DBCA managed lands on a State level.
<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>18</td><td>State: Western Australia</td><td>19,892,306.47</td><td>19,843,729.06</td><td>99.76</td><td>6.64</td></tr>
<tr><td></td><td>IBRA bioregion: Murchison</td><td>12,403,172.32</td><td>12,363,252.50</td><td>99.68</td><td>4.97</td></tr>
<tr><td></td><td>IBRA sub-region: Western Murchison</td><td>2,133,275.88</td><td>2,128,414.27</td><td>99.77</td><td>4.20</td></tr>
<tr><td></td><td>LGA: Shire of Meekatharra</td><td>3,117,900.46</td><td>3,111,264.68</td><td>99.79</td><td>11.11</td></tr>
</table>
One vegetation type was identified in the DE:
– VT06 - Acacia incurvaneura and Acacia pteraneura open woodland over, Eremophila citrina, Eremophila latrobei subsp. latrobei, Solanum lasiophyllum and Maireana planifolia isolated clumps of shrubs on orange clay-loam on low rocky rises.
Vegetation was recorded in Good condition.</td></tr>
<tr><td>Fauna habitat</td><td>One fauna habitat type was identified in the DE:
– Mulga Woodland on rocky plains/low rises and broad drainage lines.</td></tr>
<tr><td>Significant fauna</td><td>No significant fauna were recorded in the biological surveys. Three fauna species are considered likely to occur within the DE:
– Grey Falcon
– Peregrine Falcon
– Long-tailed Dunnart.
They Grey Falcon and Peregrine Falcon are likely to use the Mulga Woodland on rocky plains/low rises and broad drainage lines habitat within the DE on an opportunistic basis as foraging habitat.
The Long-tailed Dunnart is likely to occur within the DE due to the species known distribution and the presence of suitable habitat (Mulga Woodland on rocky plains/low rises and broad drainage lines habitat).</td></tr>
</table>

Environmental Value	Assessment
Significant ecological linkages	No significant ecological linkages were identified.
Ecological communities	No TECs listed under the EPBC Act or BC Act or PECs listed by DBCA were identified within the DE during the field survey.
Significant flora	No Threatened or Priority flora were recorded within the DE. A likelihood of occurrence assessment (GHD 2023a) identified no 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.
Water resources	The East Murchison Groundwater Area (a Groundwater Area proclaimed under the RIWI Act) is present within the DE. Groundwater in Meekatharra is between 15 to 23 m below ground level (Water and Rivers Commission, 2001). No impacts to groundwater are expected. No PDWSAs are present within the DE. The Meekatharra Water Reserve (UFI:213; Priority 1) is located 7 km 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)	No ESAs occur within the DE or within 20 km of the DE.
Land and soil quality	The DE intersects the Wiluna Land System which is described as 'Low greenstone hills with occasional lateritic breakaways and broad stony slopes, lower saline stony plains and broad drainage tracts; supporting sparse mulga and other *Acacia* shrublands with patches of halophytic shrubs'. A review of Acid Sulphate Soil (ASS) risk mapping (spatial dataset DWER-048; GoWA, 2024) indicates the DE 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	The DE has been modified to avoid a modified tree heritage place. This heritage place will therefore not be impacted by the Project.

Table 10 Existing environment Yalgoo

<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 361. More than 99% of this vegetation association remains, none of which is within 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">361</td><td>State: Western Australia</td><td>87,511.09</td><td>87,484.57</td><td>99.97</td><td>-</td></tr>
<tr><td>IBRA bioregion: Yalgoo</td><td>76,479.74</td><td>76,453.22</td><td>99.97</td><td>-</td></tr>
<tr><td>IBRA Subregion: Tallering</td><td>76,456.96</td><td>76,430.44</td><td>99.97</td><td>-</td></tr>
<tr><td>LGA: Shire of Yalgoo</td><td>77,518.54</td><td>77,492.03</td><td>99.97</td><td>-</td></tr>
</table>
One vegetation type was identified in the DE:
– VT16 - Acacia tetragonophylla, Acacia acuminata and Eremophila platycalyx tall open shrubland to scattered tall shrubs over Eremophila fraseri, Senna sp. Meekatharra and Eremophila deserti scattered shrubs over Ptilotus spp., Sclerolaena eriacantha and Maireana spp. scattered low shrubs on stony plain/broad drainage area.
Vegetation was recorded in Very Good condition.</td></tr>
<tr><td>Fauna habitat</td><td>One fauna habitat type was identified in the DE:
– Acacia shrubland on stony plain.</td></tr>
<tr><td>Significant fauna</td><td>No significant fauna were recorded in the biological surveys. Two fauna species are considered likely to occur within the DE:
– Grey Falcon
– Peregrine Falcon.
They Grey Falcon and Peregrine Falcon are likely to use the Acacia shrubland on stony plain habitat within the DE on an opportunistic basis as foraging habitat.</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 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 recorded within the DE. A likelihood of occurrence assessment (GHD 2023b) identified no Threatened or Priority flora species as likely to occur within the DE.</td></tr>
<tr><td>Wetlands and/or waterways</td><td>There are no rivers or wetlands of significance located within the DE or within 20 km of the DE. VT16 is associated with a broad drainage area and is present within the entire DE, except for the connection corridor (shown in Figure 6).</td></tr>
</table>

Environmental Value	Assessment
Water resources	The Gascoyne Groundwater Area (a Groundwater Area proclaimed under the RIWI Act) is present within the DE. The groundwater depth in Yalgoo ranges between 13 to 21 m below ground level (Department of Water, 2010). No impacts to groundwater are expected. No PDWSAs are present within the DE. The Yalgoo Water Reserve (UFI:1002; Priority 1) is located immediately adjacent to the DE. No Surface Water Areas or Irrigation Districts proclaimed under the RIWI Act are present within the DE. The Greenough River and Tributaries Catchment Area (a proclaimed surface water area) is located approximately 5 km north of the DE.
Conservation reserves	No DBCA managed conservation areas occur within the DE or within 20 km of the DE.
Environmentally Sensitive Areas (ESAs)	No ESAs occur within the DE or within 20 km of the DE.
Land and soil quality	The DE intersects the Violet Land System which is described as 'gently undulating gravelly plains on greenstone, laterite and hardpan, with low stony rises and minor saline plains; supporting groved mulga and bowgada shrublands and occasionally chenopod shrublands'. A review of ASS risk mapping (spatial dataset DWER-048; GoWA, 2024) indicates the DE 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	The DE does not overlap any environmental heritage sites.

Table 11 Existing Environment Sandstone

<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 2121. More than 98% of this vegetation association remains, none of which is within 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>2121</td><td>State: Western Australia</td><td>124,419.03</td><td>123396.04</td><td>97.18</td><td>-</td></tr>
<tr><td></td><td>IBRA bioregion: Murchison</td><td>124,419.03</td><td>123,396.04</td><td>99.18</td><td>-</td></tr>
<tr><td></td><td>IBRA sub-region: Eastern Murchison</td><td>124,419.04</td><td>123,396.04</td><td>99.18</td><td>-</td></tr>
<tr><td></td><td>LGA: Shire of Sandstone</td><td>98,705.38</td><td>97,708.41</td><td>98.99</td><td>-</td></tr>
</table>
One vegetation type was identified in the DE:
– VT10 - Acacia aneura, Acacia mulganeura and Acacia incurvaneura mulga woodland over, Cryptandra connata and Eremophila margarethae isolated shrubs over, Poaceae sp. and Chenopodiaceae sp. isolated clumps of sterile chenopods and grasses on orange clay loam, flat plains.
Vegetation condition varied from Good to Excellent.</td></tr>
<tr><td>Fauna habitat</td><td>One fauna habitat type was identified in the DE:
– Mulga woodland.</td></tr>
<tr><td>Significant fauna</td><td>No significant fauna were recorded in the biological surveys. Five fauna species are considered likely to occur within the DE:
– Grey Falcon
– Peregrine Falcon
– Long-tailed Dunnart
– Princess Parrot
– Malleefowl.
They Grey Falcon and Peregrine Falcon are likely to use the mulga woodland habitat within the DE on an opportunistic basis as foraging habitat.
The mulga woodland habitat within the DE is also potential habitat for the Long-tailed Dunnart and Princess Parrot and may provide dispersal habitat for the Malleefowl.</td></tr>
<tr><td>Significant ecological linkages</td><td>No significant ecological linkages were identified.</td></tr>
</table>

Environmental Value	Assessment
Ecological communities	No TECs listed under the EPBC Act or BC Act or PECs listed by DBCA were identified within the DE during the field survey.
Significant flora	No Threatened or Priority flora were recorded within the DE. A likelihood of occurrence assessment (GHD 2023) identified no 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.
Water resources	The East Murchison Groundwater Area (a Groundwater Area proclaimed under the RIWI Act) is present within the DE. Groundwater in the Sandstone region is approximately 20 m below ground level (Department of Water, 2011). No impacts to groundwater are expected. No PDWSAs are present within the DE. The Sandstone Water Reserve (UFI:919; Priority 1) is located 1 km north 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)	No ESAs occur within the DE or within 20 km of the DE.
Land and soil quality	The DE intersects the Violet Land System which is described as 'Gently undulating gravelly plains on greenstone, laterite and hardpan, with low stony rises and minor saline plains; supporting groved mulga and bowgada shrublands and occasionally chenopod shrublands'. A review of ASS risk mapping (spatial dataset DWER-048; GoWA, 2024) indicates the DE 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	The DE does not overlap any environmental heritage sites.

Table 12 Existing Environment Wiluna

<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 28. More than 66% of this vegetation association remains, none of which is within 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>28</td><td>State: Western Australia</td><td>395,895.08</td><td>392,171.83</td><td>99.06</td><td>-</td></tr>
<tr><td></td><td>IBRA bioregion: Murchison</td><td>224,291.84</td><td>220,583.71</td><td>98.35</td><td>-</td></tr>
<tr><td></td><td>IBRA Subregion: Eastern Murchison</td><td>141,411.25</td><td>137,703.12</td><td>97.38</td><td>-</td></tr>
<tr><td></td><td>LGA: Shire of Wiluna</td><td>4,522.51</td><td>3,022.80</td><td>66.84</td><td>-</td></tr>
</table>
Two vegetation types were identified in the DE:
– VT11 - Acacia pruinocarpa and Acacia pteraneura (± Acacia aneura x Acacia craspedocarpa) woodland over, Ptilotus obovatus and Lepidium platpetalum isolated shrubs over, Dysphania kalpari, Sclerolaena eriacantha and Dactyloctenium radulans on orange, sandy-clay-loam within minor drainage lines.
– VT12 - Acacia aptaneura, Acacia pteraneura and Acacia pruinocarpa (± Acacia aneura x Acacia craspedocarpa) woodland over Grevillea sarissa subsp. succincta and Eremophila margarethae isolated shrubs on orange clay-loam, rocky rises.
Vegetation condition varied from Good to Very Good.</td></tr>
<tr><td>Fauna habitat</td><td>One fauna habitat type was identified in the DE:
– Mulga Woodland on rocky plains/low rises and broad drainage lines.</td></tr>
<tr><td>Significant fauna</td><td>No significant fauna were recorded in the biological surveys. Four fauna species are considered likely to occur within the DE:
– Grey Falcon
– Peregrine Falcon
– Long-tailed Dunnart
– Malleefowl.
They Grey Falcon and Peregrine Falcon are likely to use the mulga woodland on rocky plains/low rises and broad drainage lines habitat within the DE on an opportunistic basis as foraging habitat.
The mulga woodland on rocky plains/low rises and broad drainage lines habitat within the DE is also suitable habitat for the Long-tailed Dunnart and Malleefowl.</td></tr>
<tr><td>Significant ecological linkages</td><td>No significant ecological linkages were identified.</td></tr>
</table>

Environmental Value	Assessment
Ecological communities	No TECs listed under the EPBC Act or BC Act or PECs listed by DBCA were identified within the DE during the field survey.
Significant flora	No Threatened or Priority flora were recorded within the DE. A likelihood of occurrence assessment (GHD 2023) identified no 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. VT11 is associated with minor drainage lines and is present within the connection corridor of the DE (shown in Figure 4).
Water resources	The East Murchison Groundwater Area (a Groundwater Area proclaimed under the RIWI Act) is present within the DE. The groundwater depth in the areas surrounding Wiluna range from 3 m to 21 m below ground level (Department of Water, 2016). The aquifer is deemed to be unconfined. No impacts to groundwater are expected. No PDWSAs are present within the DE. The Wiluna Water Reserve (UFI:249; Priority 1) is located 6.8 km 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)	No ESAs occur within the DE or within 20 km of the DE.
Land and soil quality	The DE intersects the Wiluna Land System which is described as 'low greenstone hills with occasional lateritic breakaways and broad stony slopes, lower saline stony plains and broad drainage tracts; supporting sparse mulga and other *Acacia* shrublands with patches of halophytic shrubs'. A review of ASS risk mapping (spatial dataset DWER-048; GoWA, 2024) indicates the DE 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	The DE does not overlap any environmental heritage sites.

6 Avoidance, Mitigation and Management Measures

6.1 Avoidance

Initial avoidance and minimisation was undertaken during site selection, including placement of the proposed infrastructure adjacent to the existing assets to reduce the clearing associated with additional transmission infrastructure. 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:

- VT07 will be avoided at Meekatharra as it is associated with drainage areas. This vegetation type has been excluded from the Meekatharra DE (as shown in Figure 5).
- Avoid disturbance to a heritage place in the northwest corner of the Meekatharra DE. A 30 m buffer has been placed around this heritage place and it has been excluded from the Meekatharra DE (as shown in Figure 5).

6.2 Mitigation and Management

6.2.1 Geotechnical works

A CEMP has been developed for the project (Appendix C), 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
- 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 site will be limited to management of excavated fill and compaction (where applicable), 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:

- Pole pads in the Wiluna connection corridor will be positioned to avoid VT11 where possible as it is associated with minor drainage lines. If clearing of VT11 is required for the connection corridor this will be limited to 0.11 ha of clearing for one pole pad and a 4 m wide access track.
- 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 42.6 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 for all sites. Additionally, Horizon Power has engaged with CASA and ASA for the Sandstone airport.

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 13. 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 13 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.	**Meekatharra** Up to 14.6 ha of native vegetation is proposed to be cleared for the Project within the Meekatharra DE, of which 2.5 ha is temporary clearing. **Vegetation** The Meekatharra DE is located in the Murchison bioregion and the Western Murchison sub-region as described by IBRA. One vegetation type was identified in the Meekatharra DE during the GHD (2023a) survey (VT06). The vegetation type was representative of the vegetation associations in the region, with a high proportion of pre-European extent remaining. The vegetation within the DE is in Good condition. The majority of the DE has been disturbed and is covered in litter and debris, the occasional presence of more aggressive weeds and grazing evidence. Cleared areas within the survey area are associated with roads and a solar array (GHD, 2023a). No TECs listed under the EPBC Act or BC Act or PECs listed by DBCA were identified within the Meekatharra DE (GHD, 2023a). **Flora** Forty-five (45) flora taxa (including subspecies and varieties) representing 20 families and 29 genera were recorded from the Meekatharra survey area during the field survey (GHD, 2023a). This total comprised 43 native taxa and two introduced flora taxa. No Threatened or Priority flora were recorded within the Meekatharra DE. A likelihood of occurrence assessment (GHD 2023a) identified no Threatened or Priority flora species as likely to occur within the DE. Two introduced flora taxa were recorded in the Meekatharra DE (**Cenchrus ciliaris* and **Rumex vesicarius*). No Declared Pests or WoNS were recorded. **Fauna and fauna habitat** One fauna habitat type was recorded at Meekatharra during the GHD (2023a) survey; Mulga Woodland on rocky plains/low rises and broad drainage lines. This habitat type is considered to have moderate value for fauna species. A total of 32 fauna species were identified in the Meekatharra survey area (GHD, 2023a). This total comprised 24 birds, 4 mammals and 4 reptiles and included three introduced species (dog, cat 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, 2023a): – Grey Falcon – Vulnerable – Peregrine Falcon – other specially protected fauna – Long-tailed Dunnart – Priority 4. **Yalgoo** Up to 14.7 ha of native vegetation is proposed to be cleared for the Project within the Yalgoo DE, of which 5.7 ha is temporary clearing. **Vegetation** The Yalgoo DE is located in the Yalgoo bioregion and the Tallering sub-region as described by IBRA.	Proposed clearing is not likely to be at variance to this Principle.

Principle	Assessment	Outcome
	One vegetation type was identified in the Yalgoo DE during the GHD (2023b) survey (VT16). The vegetation types were representative of the vegetation associations in the region, with a high proportion of pre-European extent remaining. The vegetation within the DE was in Very Good condition with cleared areas (dirt vehicle tracks). The vegetation structure was generally intact however obvious disturbances have impacted on the condition of the vegetation such as previous clearing, vehicle tracks, grazing, and pressure of drought (GHD, 2023b). No TECs listed under the EPBC Act or BC Act or PECs listed by DBCA were identified within the Yalgoo DE (GHD, 2023b). **Flora** Sixty-two (62) flora taxa (including subspecies and varieties) representing 16 families and 32 genera were recorded from the Yalgoo survey area during the field survey (GHD, 2023b). This total comprised 60 native taxa and two introduced flora taxa. No Threatened or Priority flora were recorded within the Yalgoo DE. A likelihood of occurrence assessment (GHD 2023b) identified no Threatened or Priority flora species as likely to occur within the DE. Two introduced flora taxa was recorded in the Yalgoo DE (**Carrichtera annua* and **Rumex vesicarius*). No Declared Pests or WoNS were recorded. **Fauna and fauna habitat** One fauna habitat type was recorded at Yalgoo during the GHD (2023b) survey; *Acacia* shrubland on stony plain. A total of 29 fauna species were identified in the Yalgoo survey area (GHD, 2023b). This total comprised 25 birds, three mammals and one reptile and included two introduced species (cow and European rabbit). No significant fauna species were recorded during the survey. Two conservation significant species are considered likely to occur in the DE due to potentially suitable habitat (GHD, 2023b): – Grey Falcon – Vulnerable – Peregrine Falcon – other specially protected fauna **<u>Sandstone</u>** Up to 5.9 ha of native vegetation is proposed to be cleared for the Project within the Sandstone DE. **Vegetation** The Sandstone DE is located in the Murchison bioregion and the Eastern Murchison sub-region as described by IBRA. One vegetation type was identified in the Sandstone DE during the GHD (2023) survey (VT10). The vegetation type was representative of the vegetation associations in the region, with a high proportion of pre-European extent remaining. The north eastern portion of the DE was in Excellent condition the central and southern areas along the corridor and existing roads were in Very Good condition. Cleared areas were associated with sealed and dirt roads (GHD, 2023). No TECs listed under the EPBC Act or BC Act or PECs listed by DBCA were identified within the Sandstone DE (GHD, 2023). **Flora** Thirteen (13) flora taxa (including subspecies and varieties) representing seven families and eight genera were recorded from the Sandstone survey area during the field survey (GHD, 2023). No introduced flora were recorded.	

Principle	Assessment	Outcome
	No Threatened or Priority flora were recorded within the Sandstone DE. A likelihood of occurrence assessment (GHD 2023) identified no Threatened or Priority flora species as likely to occur within the DE. **Fauna and fauna habitat** One fauna habitat type was recorded at Sandstone during the GHD (2023) survey; Mulga woodland. This habitat type is considered to have moderate value for fauna species. A total of ten fauna species were identified in the Sandstone survey area (GHD, 2023). This total comprised seven birds, two mammals and one reptile. No significant fauna species were recorded during the survey. Five 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 – Long -tailed Dunnart – Priority 4 – Princess Parrot – Priority 4 – Malleefowl – Vulnerable. **<u>Wiluna</u>** Up to 7.4 ha of native vegetation is proposed to be cleared for the Project within the Wiluna DE. **Vegetation** The Wiluna DE is located in the Murchison bioregion and the Eastern Murchison sub-region as described by IBRA. Two vegetation types were identified in the Wiluna DE during the GHD (2023) survey (VT11 and VT12). The vegetation types were representative of the vegetation associations in the region, with a high proportion of pre-European extent remaining. The vegetation within the DE ranged from Good to Very Good, with the majority of the DE in Very Good condition. Areas of Good condition occur along the central drainage line, the north eastern corner and adjacent to dirt tracks. These were associated with more aggressive weeds such as **Rumex vesicarius*. Cleared areas were associated with sealed or dirt roads (GHD, 2023) No TECs listed under the EPBC Act or BC Act or PECs listed by DBCA were identified within the Wiluna DE (GHD, 2023). **Flora** Thirty (30) flora taxa (including subspecies and varieties) representing 12 families and 20 genera were recorded from the Wiluna survey area during the field survey (GHD, 2023). This total comprised 29 native taxa and one introduced flora taxon. No Threatened or Priority flora were recorded within the Wiluna DE. A likelihood of occurrence assessment (GHD 2023) identified no Threatened or Priority flora species as likely to occur within the DE. One introduced flora taxa was recorded in the Wiluna DE (**Rumex vesicarius*). No Declared Pests or WoNS were recorded. **Fauna and fauna habitat** One fauna habitat type was recorded at Wiluna during the GHD (2023) survey; Mulga Woodland on rocky plains/low rises and broad drainage lines. This habitat type is considered to have moderate value for fauna species.	

Principle	Assessment	Outcome
	A total of 22 fauna species were identified in the Wiluna survey area (GHD, 2023). This total comprised 14 birds, five mammals and three reptiles and included three introduced species (dog, cat and cattle). No significant fauna species were recorded during the survey. Four 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 – Long-tailed Dunnart – Priority 4 – Malleefowl – Vulnerable. Overall, the flora, vegetation and fauna values of the DEs are highly represented outside the DEs and surrounding vegetation typically has similar or better condition vegetation. The native vegetation within the DEs 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 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.	**Meekatharra** One fauna habitat type was identified in the DE by GHD (2023a): – Mulga Woodland on rocky plains/low rises and broad drainage lines: Stony/rocky plains and low rises supporting Mulga (mixed *Acacia* spp.) woodlands to open woodlands over a very sparse understorey of isolated shrubs, grasses and herbs (22.3 ha). The EPBC Act PMST, DBCA database and NatureMap identified the presence/potential presence of 18 significant fauna species within a 20 km buffer of the survey area (GHD, 2023a). This total comprised 16 birds, one reptile and one mammal. A total of 32 terrestrial vertebrate species were recorded within the Meekatharra survey are during the GHD (2023a) field survey, including 29 native species and three introduced species. No Threatened fauna listed under the EPBC Act or BC Act was recorded during the GHD (2023a) 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 (*Falco hypoleucos*) (VU) – Peregrine Falcon (*Falco peregrinus*) (OS) – Long-tailed Dunnart (*Sminthopsis longicaudata*) – Priority 4 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 Mulga Woodland on rocky plains/low rises and broad drainage lines habitat within the DE for foraging (GHD 2023a). This species is therefore likely to occur at least on an occasional/opportunistic basis.	Proposed clearing is not likely to be at variance to this Principle.

Principle	Assessment	Outcome
	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 14.6 ha within the DE, represents approximately 0.04% 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 the Mulga Woodland on rocky plains/low rises and broad drainage lines habitat within the DE on an opportunistic basis as foraging habitat. This species has previously been recorded at the sewage ponds immediately adjacent (north) of the DE (GHD, 2023a). 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 Peregrine Falcon is widespread within a 10 km radius of the DE. Clearing of up to 14.6 ha within the DE, represents approximately 0.04% of potential habitat available within 10 km of the DE. **Long-tailed Dunnart** The Long-tailed Dunnart occurs throughout the Murchison region. Its habitat includes rugged, rocky areas with hummock grasses, shrubs and tall open shrublands and woodlands. The Mulga Woodland on rocky plains/low rises and broad drainage lines habitat within the DE is suitable habitat for the Long-tailed Dunnart. 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 Long-tailed Dunnart is widespread within a 10 km radius of the DE. Clearing of up to 14.6 ha within the DE, represents approximately 0.04% of potential habitat available within 10 km of the DE. <u>**Yalgoo**</u> One fauna habitat type was identified in the DE by GHD (2023b): – *Acacia* shrubland on stony plain: *Acacia* tall open shrubland to scattered tall shrubs over stony plain and broad drainage area (14.1 ha). The EPBC Act PMST, DBCA database and NatureMap identified the presence/potential presence of 17 significant fauna species within 20 km of the survey area (GHD, 2023b). This total comprised 15 birds, one reptile and a one terrestrial invertebrate spider. A total of 29 terrestrial vertebrate species were recorded within the Yalgoo survey are during the GHD (2023b) field survey. No Threatened fauna listed under the EPBC Act or BC Act was recorded during the GHD (2023b) survey. The DE supports habitat for two significant fauna species (that were identified as likely to occur post-survey), in the form of 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 two species are: – Grey Falcon (*Falco hypoleucos*) - Vulnerable – Peregrine Falcon (*Falco peregrinus*) – other specially protected fauna.	

Principle	Assessment	Outcome
	The conservation significant species are described below. **Grey Falcon** The habitat preferences of the Grey Falcon are described above in the Meekatharra section. It is likely this species will use the *Acacia* shrubland on stony plain habitat within DE for foraging (GHD 2023b). This species is therefore likely to occur at least on an occasional/opportunistic basis. 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 14.7 ha within the DE, represents approximately 0.04% of potential habitat available within 10 km of the DE. **Peregrine Falcon** The habitat preferences of the Peregrine Falcon are described above in the Meekatharra section. It is likely this species will use the *Acacia* shrubland on stony plain habitat within DE for foraging (GHD 2023b). This species is therefore likely to occur at least on an occasional/opportunistic basis. 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 Peregrine Falcon is widespread within a 10 km radius of the DE. Clearing of up to 14.7 ha within the DE, represents approximately 0.04% of potential habitat available within 10 km of the DE. **<u>Sandstone</u>** One fauna habitat type was identified in the DE by GHD (2023): – Mulga woodland: Hardpan plains supporting Mulga woodlands (*Acacia* species) over a very sparse understorey of *Eremophila* and halophytic shrubs and grasses (4.2 ha). The EPBC Act PMST, DBCA database and NatureMap identified the presence/potential presence of 15 significant fauna species within 20 km of the survey area (GHD, 2023). This total comprised 13 birds and two mammals. A total of ten terrestrial vertebrate species were recorded within the Sandstone 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. The DE supports habitat for five 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 five species are: – Grey Falcon (*Falco hypoleucos*) - Vulnerable – Peregrine Falcon (*Falco peregrinus*) – other specially protected fauna – Long -tailed Dunnart (*Sminthopsis longicaudata*) – Priority 4 – Princess Parrot (*Polytelis alexandrae*) – Priority 4 – Malleefowl (*Leipoa ocellata*) – Vulnerable. The conservation significant species are described below. **Grey Falcon**	

Principle	Assessment	Outcome
	The habitat preferences of the Grey Falcon are described above in the Meekatharra section.. It is likely this species will use the Mulga woodland 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 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 5.9 ha within the DE, represents approximately 0.02% of potential habitat available within 10 km of the DE. **Peregrine Falcon** The habitat preferences of the Peregrine Falcon are described above in the Meekatharra section. It is likely this species will use the Mulga woodland 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 Soil Landscape Mapping (spatial dataset DPIRD-027, 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 5.9 ha within the DE, represents approximately 0.02% of potential habitat available within 10 km of the DE. **Long-tailed Dunnart** The habitat preferences of the Long-tailed Dunnart are described above in the Meekatharra section. The Mulga woodland habitat within the DE is suitable habitat for the Long-tailed Dunnart however it lacks suitable ground cover and rocky crevices. 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 Long-tailed Dunnart is widespread within a 10 km radius of the DE. Clearing of up to 5.9 ha within the DE, represents approximately 0.02% of potential habitat available within 10 km of the DE. **Princess Parrot** The Princess Parrot inhabits sand dunes and sand flats in the arid zone of western and central Australia. It occurs in open savanna woodlands and shrublands that usually consist of scattered stands of Eucalyptus, *Casuarina* or *Allocasuarina* trees; an understorey of shrubs such as *Acacia*, *Eremophila*, *Grevillea*, *Hakea* and *Senna*; and a ground cover dominated by *Triodia* species (Allen 1987; Baxter & Henderson 2000). It also frequents *Eucalyptus* or *Allocasuarina* trees in riverine or littoral areas (Carter 1993). The Mulga woodland habitat within the DE is potentially suitable habitat for the Princess Parrot and it is within the known distribution for this species however the DE is not considered favourable habitat. Therefore the Princess Parrot may occur as an irregular/ opportunistic visitor to the area. 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 Princess Parrot is widespread within a 10 km radius of the DE. Clearing of up to 5.9 ha within the DE, represents approximately 0.02% of potential habitat available within 10 km of the DE. **Malleefowl** The Malleefowl generally occurs in shrublands and low woodlands that are dominated by mallee vegetation, as well as native pine Callitris woodlands, *Acacia* shrublands, paperbark, skheoak, Broombush *Melaleuca uncinata* vegetation, eucalypt woodlands, or coastal heathlands. They are mostly found in areas of sandy or gravel soils and their next comprises a large mound of sand or soil and organic matter (Jones and Goth 2008; Morcombe 2004; Nevill 2013). The Mulga woodland habitat within the DE lacks sandier soils and organic matter suitable for mound building and is likely to used opportunistically or for dispersal by the Malleefowl.	

Principle	Assessment	Outcome
	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 Malleefowl is widespread within a 10 km radius of the DE. Clearing of up to 5.9 ha within the DE, represents approximately 0.02% of potential habitat available within 10 km of the DE. **Wiluna** One fauna habitat type was identified in the DE by GHD (2023): – Mulga Woodland on rocky plains/low rises and broad drainage lines: Stony/rocky plains and low rises supporting Mulga (mixed *Acacia* spp.) woodlands to open woodlands over a very sparse understorey of isolated shrubs, grasses and herbs (6.5 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 and three mammals and one reptile. A total of 22 terrestrial vertebrate species were recorded within the Wiluna survey are during the GHD (2023) field survey, including 19 native species and three 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 four 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 four species are: – Grey Falcon (*Falco hypoleucos*) - Vulnerable – Peregrine Falcon (*Falco peregrinus*) – other specially protected fauna – Long-tailed Dunnart (*Sminthopsis longicaudata*) – Priority 4 – Malleefowl (*Leipoa ocellata*) - Vulnerable The conservation significant species are described below. **Grey Falcon** The habitat preferences of the Grey Falcon are described above in the Meekatharra section. It is likely this species will use the Mulga Woodland on rocky plains/low rises and broad drainage lines 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 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 7.4 ha within the DE, represents approximately 0.03% of potential habitat available within 10 km of the DE. **Peregrine Falcon** The habitat preferences of the Peregrine Falcon are described above in the Meekatharra section. It is likely this species will use the Mulga Woodland on rocky plains/low rises and broad drainage lines 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 Soil Landscape Mapping (spatial dataset DPIRD-027, 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 7.4 ha within the DE, represents approximately 0.03% of potential habitat available within 10 km of the DE.	

Principle	Assessment	Outcome
	Long-tailed Dunnart The habitat preferences of the Long-tailed Dunnart are described above in the Meekatharra section. The Mulga Woodland on rocky plains/low rises and broad drainage lines habitat within the DE is suitable habitat for the Long-tailed Dunnart. 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 Long-tailed Dunnart is widespread within a 10 km radius of the DE. Clearing of up to 7.4 ha within the DE, represents approximately 0.03% of potential habitat available within 10 km of the DE. **Malleefowl** The habitat preferences of the Malleefowl are described above in the Sandstone section. The Mulga Woodland on rocky plains/low rises and broad drainage habitat within the DE is suitable habitat for the Malleefowl where the Mulga shrubs are denser and have greater canopy cover and leaf litter below. The GHD (2023) survey did not record evidence (mounds) for the presence of Malleefowl. 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 Malleefowl is widespread within a 10 km radius of the DE. Clearing of up to 7.4 ha within the DE, represents approximately 0.02% of potential habitat available within 10 km of the DE. Overall, the fauna values of the DEs are highly represented on a local and regional scale (GHD, 2023a and GHD, 2023b) and clearing of up to 42.6 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.	
(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.	No flora species listed as Threatened under the BC Act or EPBC Act were recorded in DEs during the GHD (2023a) and GHD (2023b) surveys. Additionally, no Threatened flora are considered likely to occur within any of the DEs. 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
(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.	No TECs listed under the EPBC Act or BC Act were identified within the DEs during the GHD (2023a) and GHD (2023b) field surveys. As no vegetation within the survey area 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 variance to this Principle.
(e) Native vegetation should not be cleared if it is significant as a remnant of native	**Meekatharra** One vegetation type was identified in the DE during the GHD (2023a) survey:	Proposed clearing is not likely to be at

Principle	Assessment	Outcome
vegetation in an area that has been extensively cleared.	– VT06 - *Acacia incurvaneura* and *Acacia pteraneura* open woodland over, *Eremophila citrina*, *Eremophila latrobei* subsp. *latrobei*, *Solanum lasiophyllum* and *Maireana planifolia* isolated clumps of shrubs on orange clay-loam on low rocky rises. 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). **Yalgoo** One vegetation type was identified in the DE during the GHD (2023b) survey: – VT16 - *Acacia tetragonophylla*, *Acacia acuminata* and *Eremophila platycalyx* tall open shrubland to scattered tall shrubs over *Eremophila fraseri*, *Senna* sp. Meekatharra and *Eremophila deserti* scattered shrubs over *Ptilotus* spp., *Sclerolaena eriacantha* and *Maireana* spp. scattered low shrubs on stony plain/broad drainage area. Broad scale (1:250,000) pre-European vegetation mapping of the area was completed by Beard (1976) at an association level. Vegetation association 361 is present within the DE and is described as: Scrub with open woodland or scattered trees (*Acacia* spp. with *Eucalyptus loxophleba*, *Allocasuarina* spp. *Acacia aneura*). The current extents remaining at the State, IBRA bioregion, IBRA subregion and LGA levels are greater than 99% of their calculated pre-European extents (GoWA, 2014). **Sandstone** One vegetation type was identified in the DE during the GHD (2023) survey: – VT10 - *Acacia aneura*, *Acacia mulganeura* and *Acacia incurvaneura* mulga woodland over, *Cryptandra connata* and *Eremophila margarethae* isolated shrubs over, *Poaceae* sp. and *Chenopodiaceae* sp. isolated clumps of sterile chenopods and grasses on orange clay loam, flat plains. Broad scale (1:250,000) pre-European vegetation mapping of the area was completed by Beard (1976) at an association level. Vegetation association 2121 is present within the DE and is described as: Mosaic: Open low woodland; mulga / Succulent steppe; saltbush & bluebush on greenstone. The current extents remaining at the State, IBRA bioregion, IBRA subregion and LGA levels are greater than 97% of their calculated pre European extents (GoWA, 2014). **Wiluna** Two vegetation types were identified in the DE during the GHD (2023) survey: – VT11 - *Acacia pruinocarpa* and *Acacia pteraneura* (± *Acacia aneura* x *Acacia craspedocarpa*) woodland over, *Ptilotus obovatus* and *Lepidium platpetalum* isolated shrubs over, *Dysphania kalpari*, *Sclerolaena eriacantha* and *Dactyloctenium radulans* on orange, sandy-clay-loam within minor drainage lines. – VT12 - *Acacia aptaneura*, *Acacia pteraneura* and *Acacia pruinocarpa* (± *Acacia aneura* x *Acacia craspedocarpa*) woodland over *Grevillea sarissa* subsp. *succincta* and *Eremophila margarethae* isolated shrubs on orange clay-loam, rocky rises.	variance to this Principle.

Principle	Assessment	Outcome
	Broad scale (1:250,000) pre-European vegetation mapping of the area was completed by Beard (1976) at an association level. Vegetation association 28 is present within the DE and is described as: Mosaic: Open low woodland; mulga. The current extents remaining at the State, IBRA bioregion, IBRA subregion and LGA levels are greater than 66% of their calculated pre-European extents (GoWA, 2014). The DEs are not considered to be within areas that has been extensively cleared given they have more than 66% of pre-European extent remaining. The vegetation within the DEs form part of a large continuous tract of vegetation and have a high degree of connectivity with surrounding region, which have similar or better condition vegetation (GHD, 2023a and GHD, 2023b). The vegetation types identified during the surveys are not confined to the DEs and are considered well represented at the local and regional scale.	
(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 the DEs. No wetlands or major watercourses were identified within the DEs during the GHD (2023a) or GHD (2023b) surveys. The following minor drainage lines / areas were identified: **Meekatharra** VT07 is associated with drainage areas and was recorded in the GHD (2023a) survey area, however it has been excluded from the DE and will not be impacted by the Project (as shown in Figure 5). Based on this, proposed clearing is not at variance with this Principle. **Yalgoo** VT16 - *Acacia tetragonophylla*, *Acacia acuminata* and *Eremophila platycalyx* tall open shrubland to scattered tall shrubs over *Eremophila fraseri*, *Senna* sp. Meekatharra and *Eremophila deserti* scattered shrubs over *Ptilotus* spp., *Sclerolaena eriacantha* and *Maireana* spp. scattered low shrubs on stony plain/broad drainage area. VT16 covers the majority of the Yalgoo DE as shown in Figure 6 and up to 14.1 ha of the vegetation type will be cleared for the Project. Based on this, proposed clearing may be at variance with this Principle, however the impact is minor and not considered significant. **Sandstone** None identified **Wiluna** VT11 - *Acacia pruinocarpa* and *Acacia pteraneura* (± *Acacia aneura* x *Acacia craspedocarpa*) woodland over, *Ptilotus obovatus* and *Lepidium platypetalum* isolated shrubs over, *Dysphania kalpari, Sclerolaena eriacantha* and *Dactyloctenium radulans* on orange, sandy-clay-loam within minor drainage lines (0.36 ha within the DE). VT11 occurs within the connection corridor of the Wiluna DE (as shown in Figure 7). Pole pads will be positioned to avoid this vegetation type where possible. If clearing of VT11 is required for the connection corridor this will be limited to 0.11 ha of clearing for one pole pad and a 4 m wide access track. Based on this, proposed clearing may be at variance with this Principle, however the impact is minor and not considered significant.	Proposed clearing at Yalgoo and Wiluna may be at variance to this Principle. Proposed clearing at Meekatharra and Sandstone is not likely to be at variance to this Principle.

Principle	Assessment	Outcome
	Therefore, as described above, proposed clearing at Wiluna may be at variance with this Principle, however the impact is minor and not considered significant.	
(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	Information regarding land capability and susceptibility to erosion for soil and landform types within each land system of the survey area was obtained from the Department of Primary Industries and Regional Development inventory and condition surveys. The potential for land degradation at each survey area is summarised below: **Meekatharra** *Wiluna Land System* Due to its stony nature, much of this system is not generally susceptible to erosion, however disturbance of the stony mantle, especially on sloping areas can result in erosion (Payne et al., 1998). The slopes of low rocky rises (VT06) within the Meekatharra study area are likely to be susceptible to erosion if the rocky mantle is disturbed. The soil landscape land quality mapping (spatial dataset DPIRD-017, GoWA 2024) indicates that the DE is within the Upper Murchison Zone, which is described as hardpan wash plains (with stony plains, sandplains, hills and mesas) on granite and gneiss of the Yilgarn Craton with Red-brown hardpan shallow loams, red shallow loams, red loamy earths and red sands. A review of ASS risk mapping (spatial dataset DWER-048; GoWA, 2024) indicates the DE 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 will be 14.6 ha in total, 2.5 ha of temporary clearing which will be revegetated and 12.1 ha of permanent clearing. Permanent clearing will not be bare earth but will be kept slashed for effective operation of the solar arrays. **Yalgoo** Abundant mantles provide effective protection again soil erosion across most of this land system, except where the soil surface has been disturbed, in such circumstances it becomes moderately susceptible to water erosion. Narrow drainage tracts are mildly susceptible to water erosion (Payne et al., 1998). Tall open shrublands (VT16) are likely to be moderately susceptible to water erosion if surface is disturbed. The soil landscape land quality mapping (spatial dataset DPIRD-017, GoWA 2024) indicates that the DE is within the Karrara Hills, Plains and Lakes Zone, which is described as hills and ranges, sandy plains, hardpan wash plains, stony plains and salt lakes on greenstone and granitic rocks of the Yilgarn Craton with red shallow loams, red loamy earths, red deep sands and salt lake soils. A review of ASS risk mapping (spatial dataset DWER-048; GoWA, 2024) indicates the DE 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 will be 14.7 ha in total, 5.7 ha of temporary clearing which will be revegetated and 9 ha of permanent clearing. Permanent clearing will not be bare earth but will be kept slashed for effective operation of the solar arrays. **Sandstone** *Violet Land System* Abundant mantles provide effective protection again soil erosion across most of this land system, except where the soil surface has been disturbed, in such circumstances it becomes moderately susceptible to water erosion. Narrow drainage tracts are mildly susceptible to water	Proposed clearing is not likely to be at variance to this Principle.

Principle	Assessment	Outcome
	erosion (Payne et al., 1998). Flat plains of mulga which lack a protective mantle (VT10) are likely to be moderately susceptible to water erosion if surface is disturbed. The soil landscape land quality mapping (spatial dataset DPIRD-017, GoWA 2024) indicates that the DE is within the Salinaland Plans Zone, which is described as sandplains (with hardpan wash plains and some mesas, stony plains and salt lakes) on granitic rocks of the Yilgard Craton with red sandy earths, red deep sands, red shallow loams (sometimes with hardpans) and red loamy earths. A review of ASS risk mapping (spatial dataset DWER-048; GoWA, 2024) indicates the DE 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 will be 5.9 ha in total. Permanent clearing will not be bare earth but will be kept slashed for effective operation of the solar arrays. **<u>Wiluna</u>** *Wiluna Land System* Due to its stony nature, much of this system is not generally susceptible to erosion, however disturbance of the stony mantle, especially on sloping areas can result in erosion (Payne et al., 1998). Minor drainage lines (VT11) and clay-loam rocky rises (VT12) may be susceptible to erosion if the rocky mantle is disturbed. The soil landscape land quality mapping (spatial dataset DPIRD-017, GoWA 2024) indicates that the DE is within the Salinaland Plans Zone, which is described as sandplains (with hardpan wash plains and some mesas, stony plains and salt lakes) on granitic rocks of the Yilgard Craton with red sandy earths, red deep sands, red shallow loams (sometimes with hardpans) and red loamy earths. A review of ASS risk mapping (spatial dataset DWER-048; GoWA, 2024) indicates the DE 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 will be 7.4 ha in total. Permanent clearing will not be bare earth but will be kept slashed for effective operation of the solar arrays. The DEs contain 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 DEs are located in an area which have previous disturbance, for example roads, tracks and existing facilities. 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 C). Any dust produced during construction will also be managed through the implementation of a CEMP. Given the small area to be cleared for the solar farms and the linear nature of the connection corridors, it is not likely that the clearing will cause appreciable land degradation that will affect the present or future use of the land. 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	No DBCA managed conservation areas were identified within the DEs or within 20 km of the DEs. The proposed clearing is not at variance to this principle.	Proposed clearing is not likely to be at

Principle	Assessment	Outcome
vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.		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.	**Meekatharra** The East Murchison Groundwater Area (a Groundwater Area proclaimed under the RIWI Act) is present within the DE. No PDWSAs, Surface Water Areas or Irrigation Districts proclaimed under the RIWI Act are present within the DE. The Meekatharra Water Reserve (UFI:213; Priority 1) is located 7 km east of the DE. **Yalgoo** The Gascoyne Groundwater Area (a Groundwater Area proclaimed under the RIWI Act) is present within the DE. No PDWSAs, Surface Water Areas or Irrigation Districts proclaimed under the RIWI Act are present within the DE. The Yalgoo Water Reserve (UFI:1002; Priority 1) is located immediately adjacent to the DE and the Greenough River and Tributaries Catchment Area (a proclaimed surface water area) is located approximately 5 km north of the DE. **Sandstone** The East Murchison Groundwater Area (a Groundwater Area proclaimed under the RIWI Act) is present within the DE. No PDWSAs, Surface Water Areas or Irrigation Districts proclaimed under the RIWI Act are present within the DE are present within the DE. The Sandstone Water Reserve (UFI:919; Priority 1) is located 1 km north of the DE. **Wiluna** The East Murchison Groundwater Area (a Groundwater Area proclaimed under the RIWI Act) is present within the DE. No PDWSAs, Surface Water Areas or Irrigation Districts proclaimed under the RIWI Act are present within the DE. The Wiluna Water Reserve (UFI:249; Priority 1) is located 6.8 km east of the DE. It is not expected that the Project will require dewatering or groundwater abstraction within the DEs. Potential impacts to surface water quality from erosion / sedimentation / hydrocarbons will be managed. Clearing within the DEs 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.	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	**Meekatharra** The nearest Bureau of Meteorology (BoM) weather station with comprehensive data collection and recent historic climate data is Meekatharra Post Office (no. 007046). Median annual rainfall is 211.4 mm with March recording the highest monthly median (22.3 mm) (BoM, 2024).	Proposed clearing is not likely to be at variance to this Principle.

Principle	Assessment	Outcome
cause, or exacerbate, the intensity of flooding.	**Yalgoo** The nearest BoM weather station with comprehensive data collection and recent historic climate data is Yalgoo (no. 007091). Median annual rainfall is 239.9 mm with June recording the highest monthly median (35.6 mm) (BoM, 2024). **Sandstone** The nearest BoM weather station with comprehensive data collection and recent historic climate data is Sandstone (no. 012072). Median annual rainfall is 227.5 mm with May recording the highest monthly median (22.0 mm) (BoM, 2024). **Wiluna** The nearest BoM weather station with comprehensive data collection and recent historic climate data is Wiluna (no. 013012). Median annual rainfall is 228.6 mm with February recording the highest monthly median (22.1 mm) (BoM, 2024). The scale of the DEs and clearing required is not likely to have an impact on the flood regimes or increase intensity of flooding in the regions. The DEs are located on a variety of different landforms including rocky plains, stony plains, low rises and minor drainage lines (GHD, 2023a and GHD, 2023b). 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 66% 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.	

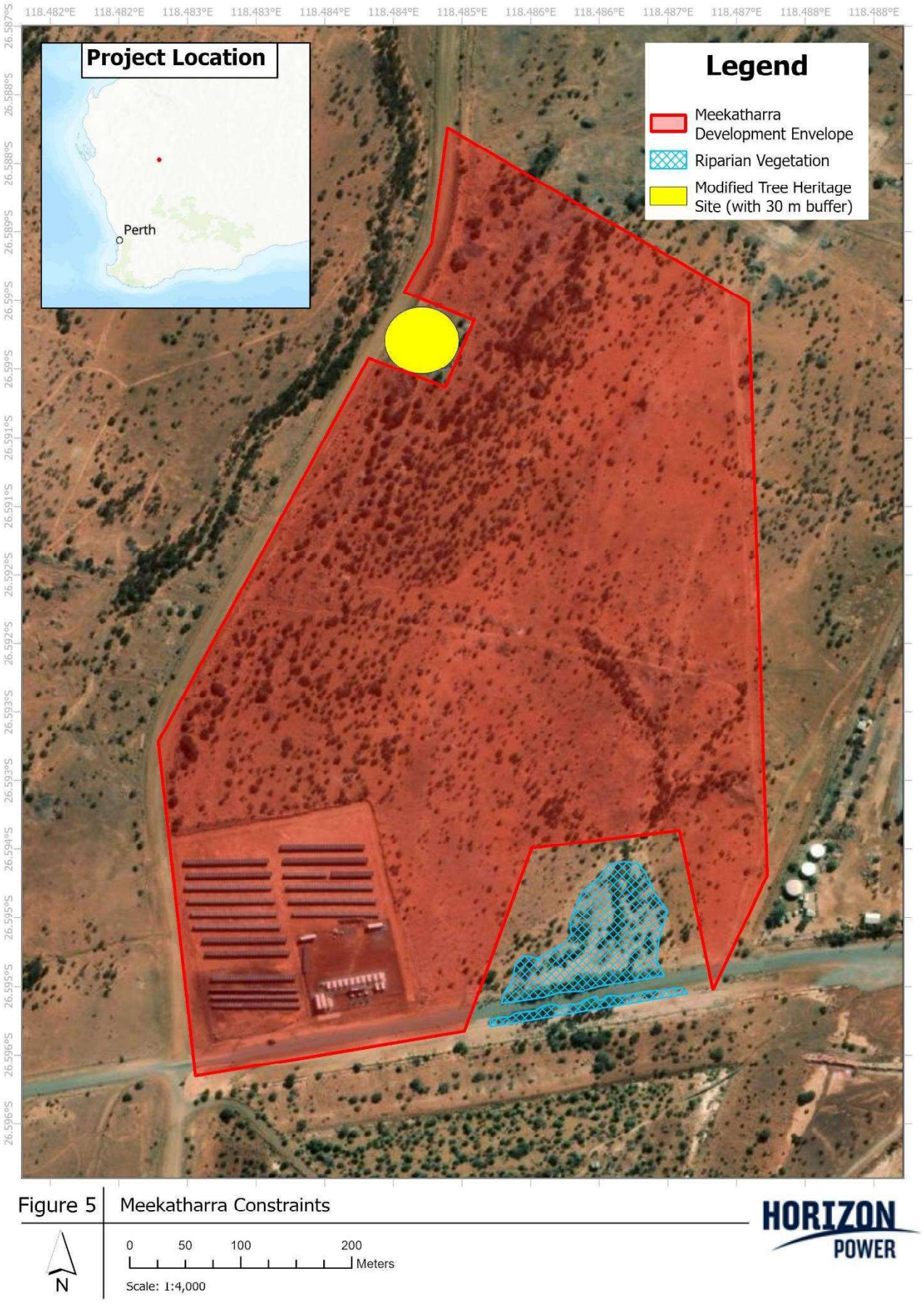


Figure 5 Meekatharra Environmental Constraints

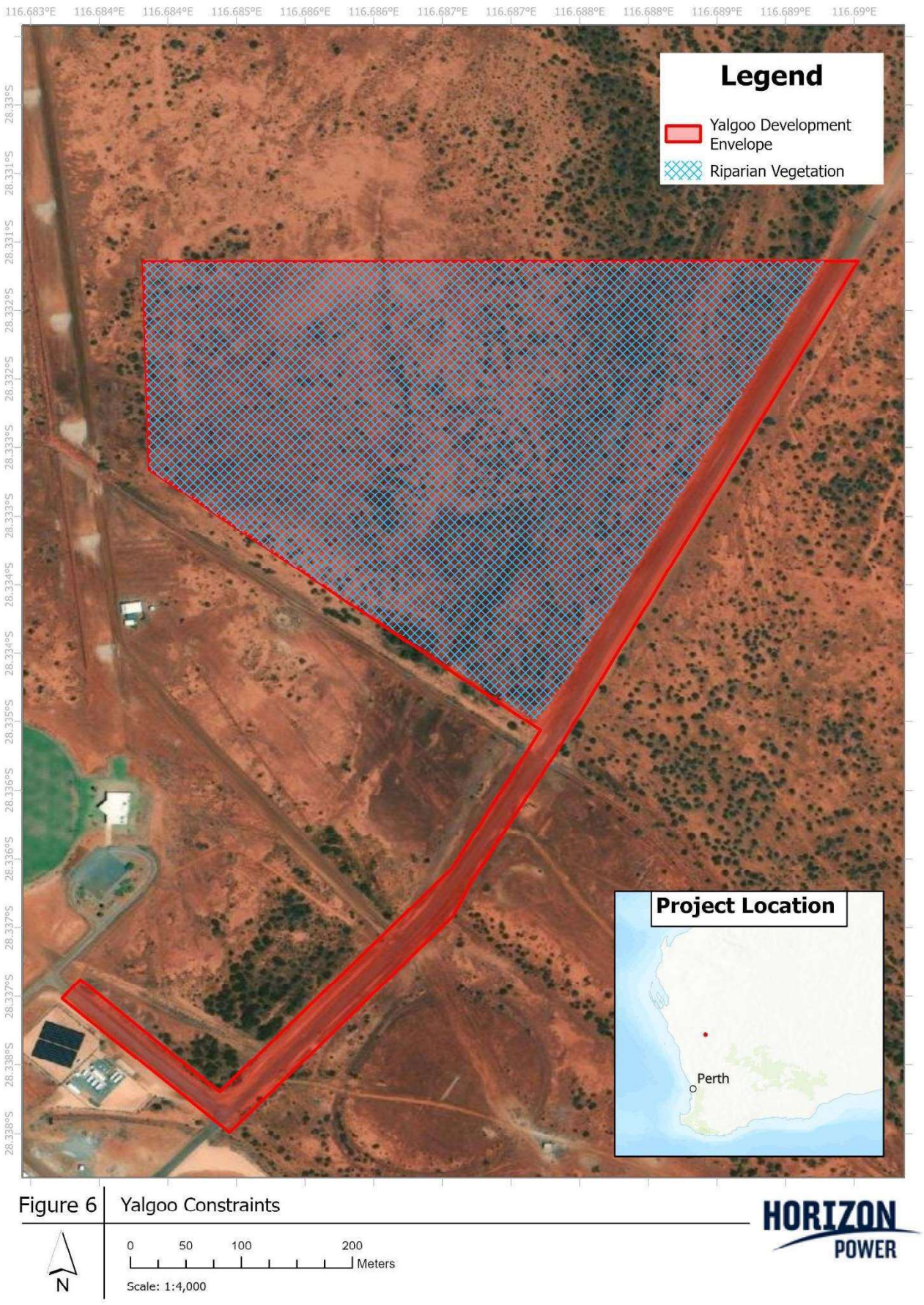


Figure 6 Yalgoo Environmental Constraints

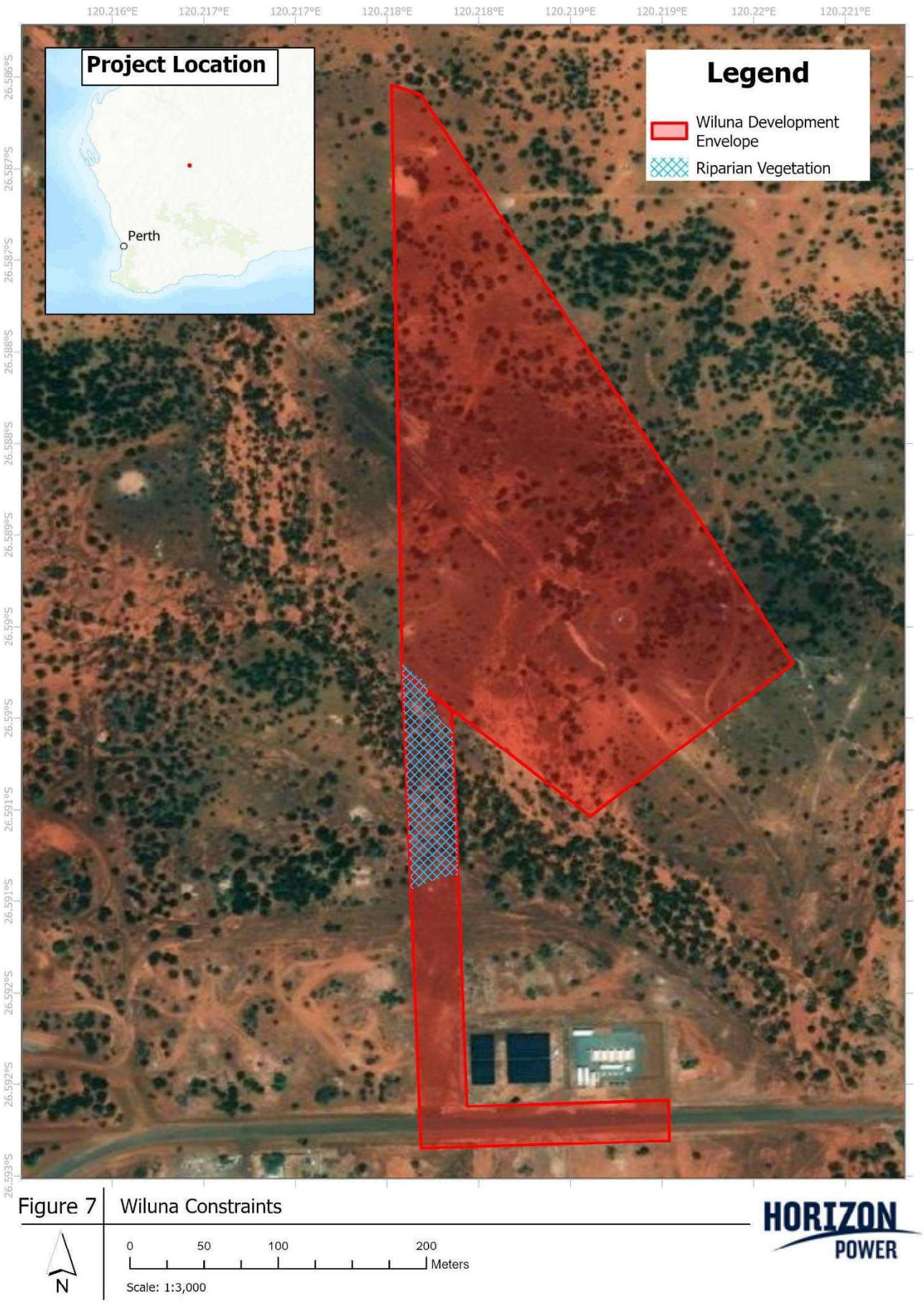


Figure 7 Wiluna Environmental Constraints

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 Authorities in the selection of the DEs.

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 14.

Table 14 Other approvals

Other approvals	Assessment
Referral to Environmental Protection Authority	Due to the small scale of the Project in remote locations, 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*** *Meekatharra* No TECs were recorded in the Meekatharra DE. Six Threatened fauna species were identified within 20 km of the Meekatharra DE. Habitat for the Grey Falcon and Southern Whiteface is present in the DE. *Yalgoo* No TECs were recorded in the Yalgoo DE. Ten Threatened fauna species were identified within 20 km of the Yalgoo DE. Habitat for the Grey Falcon is present in the DE. *Sandstone* No TECs were recorded in the Sandstone DE. Five Threatened fauna species were identified within 20 km of the Sandstone DE. Habitat for the Grey Falcon, Malleefowl and Southern Whiteface is present in the DE. One Threatened flora species was identified within 20 km of the Sandstone DE; *Ricinocarpos brevis*. This species is unlikely to occur within the Sandstone DE (GHD, 2023). *Wiluna* No TECs were recorded in the Wiluna DE. Eight Threatened fauna species were identified within 20 km of the Wiluna DE. Habitat for the Grey Falcon, Malleefowl and Southern Whiteface 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 Threatened fauna is widespread within a 10 km radius of the DEs. Overall, the fauna values of the DE are highly represented on a local and regional scale (GHD, 2023) and clearing of fauna habitat for the Project is not considered significant for biodiversity of any specific species.

Other approvals	Assessment
	Given the abundance of alternative habitat, no significant impacts are expected to Threatened fauna, and referral to DCCEEW is not considered to be required. ***Migratory fauna*** *Meekatharra* Eight Migratory species were recorded within 20 km of the Meekatharra DE. No significant habitat for these species is likely to be removed. *Yalgoo* Seven Migratory species were recorded within 20 km of the Yalgoo DE. No significant habitat for these species is likely to be removed. *Sandstone* Six Migratory species were recorded within 20 km of the Sandstone DE. No significant habitat for these species is likely to be removed. *Wiluna* Six Migratory species were recorded within 20 km of the Wiluna DE. No significant habitat for these species is likely to be removed. ***National heritage*** The DEs do not overlap any National Heritage Areas. All DEs are subject to Aboriginal heritage survey and ongoing consultation is being undertaken with the Aboriginal people. 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 DEs do not overlap any wetlands of national importance.
Works Approval or Licence under EP Act	No works approvals or licences are required for this project.
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	No State or municipal heritage sites are within the DEs (spatial dataset DPLH-006; DPLH-008, GoWA 2024, inHerit database).
Native title	*Meekatharra* The Meekatharra DE overlaps the Wajarri Yamatji Part A and the Yugunga-Nya People Part A Native Title Areas. The Meekatharra DE does not overlap any ILUAs. *Yalgoo* The Yalgoo DE overlaps the Yamatji Nation Native Title Area and the Yamatji Nation Agreement ILUA. *Sandstone* The Sandstone DE does not overlap any Native Title Areas of ILUAs. *Wiluna* The Wiluna DE overlaps the Tarlka Matuwa Piarku (Aboriginal Corporation) RNTBC and the Wiluna (combined) Native Title Areas. The Wiluna DE does not overlap any ILUAs.

Other approvals	Assessment
Aboriginal Sites of Significance under the *Aboriginal Heritage Act 1972*	*Meekatharra* There are no National or World Heritage Areas mapped as overlapping the DE The DE does not overlap with any registered or historic Aboriginal Cultural Heritage places. A search of the Aboriginal Cultural Heritage Inquiry System (ACHIS) database shows a lodged 'Burial' Aboriginal Cultural Heritage place overlaps the DE. A heritage survey conducted by Archaeological Excavations (2023) identified that this Aboriginal place is located outside of the DE and will therefore not be impacted by the Project. A modified tree heritage place has been excluded from the DE and will not be impacted by the Project (as shown in Figure 5). *Yalgoo* There are no National or World Heritage Areas mapped as overlapping the DE. The DE does not overlap with any registered, lodged or historic Aboriginal Cultural Heritage places. *Sandstone* There are no National or World Heritage Areas mapped as overlapping the DE. The DE does not overlap with any registered, lodged or historic Aboriginal Cultural Heritage places. *Wiluna* There are no National or World Heritage Areas mapped as overlapping the DE. The DE does not overlap with any lodged or historic Aboriginal Cultural Heritage places. The DE is within the Tjanapi registered Aboriginal Cultural Heritage place. Horizon Power has an external Aboriginal Cultural Heritage Management Policy, that details our commitment to *avoid impacting on Aboriginal Cultural Heritage whenever and wherever possible*. An Aboriginal 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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Appendix A: Midwest and Remote Towns Biological Survey (GHD 2023a)

Appendix B: Midwest and Remote Towns – Yalgoo Biological assessment (GHD 2023b)

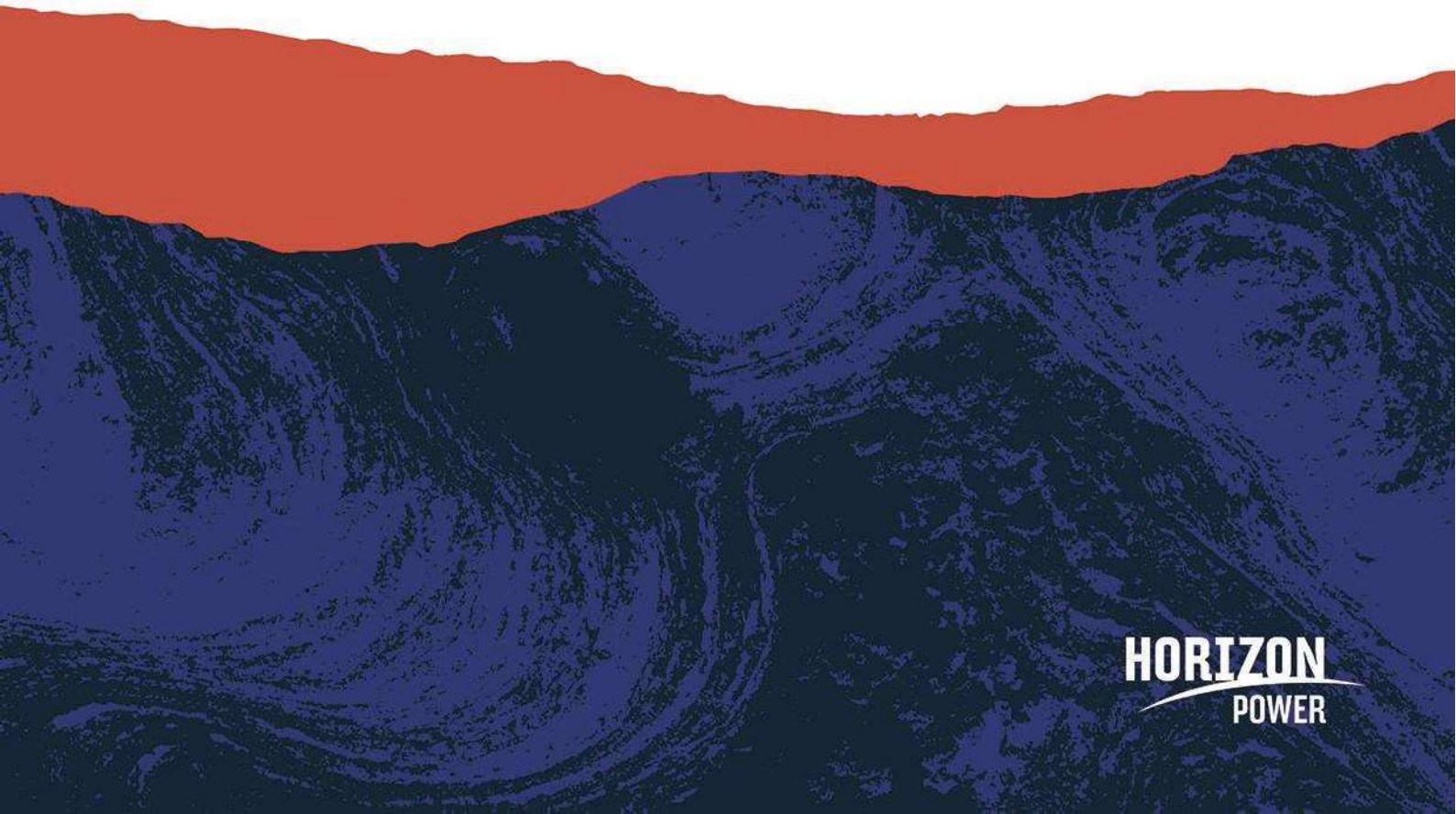
Appendix C: Construction Environmental Management Plan

PUBLIC

Midwest Towns Renewable Infrastructure Project – Meekatharra, Yalgoo, Sandstone and Wiluna

Construction Environmental Management Plan

October 2024



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 future energy systems in Meekatharra, Yalgoo, Sandstone and Wiluna (the Project). The location of the Project is shown within the four Development Envelopes (DEs), shown in Figure 1, Figure 2, Figure 3 and Figure 4.

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.

At Meekatharra and Yalgoo, the geotechnical surveys will require the clearing of up to 1.5 ha and 3.8 ha of native vegetation, respectively. 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 1 ha at Meekatharra and 1.9 ha at Yalgoo of temporary clearing will be required for stringing and winching of the connection transmission line and a laydown area for construction. Permanent clearing at Meekatharra (12.1 ha) and Yalgoo (9 ha) will be required for connection corridors, access tracks, fire breaks and solar infrastructure.

There will be no temporary clearing at Sandstone and Wiluna, as both sites will be permanently cleared. Sandstone requires 5.9 ha of permanent clearing, and Wiluna requires 7.4 ha of permanent clearing. This will allow for geotechnical surveys, which will be mainly incidental clearing (driving over and parking on native vegetation) for vehicle / machinery access to test sites. Clearing will also be undertaken for stringing and winching of the connection transmission lines, laydown areas, solar infrastructure, the connection corridors and access tracks.

The future energy systems will comprise:

- 80% renewable energy generation - approximately 3.5 megawatts (MW) of solar infrastructure, 1.75 MW BESS (battery energy storage system) inverter and 12.36 MWh of battery capacity at Meekatharra
- 80% renewable energy generation - approximately 0.69 MW of solar infrastructure, 0.04 MW BESS inverter and 1.1 MWh of battery capacity at Yalgoo
- 80% renewable energy generation - approximately 0.21 MW of solar infrastructure, 0.01 MW BESS (batter energy storage system) inverter and 0.30 MWh of battery capacity at Sandstone
- 80% renewable energy generation - approximately 1.22 MW of solar infrastructure, 0.39 MW BESS inverter and 3.6 MWh of batter capacity at Wiluna.

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.

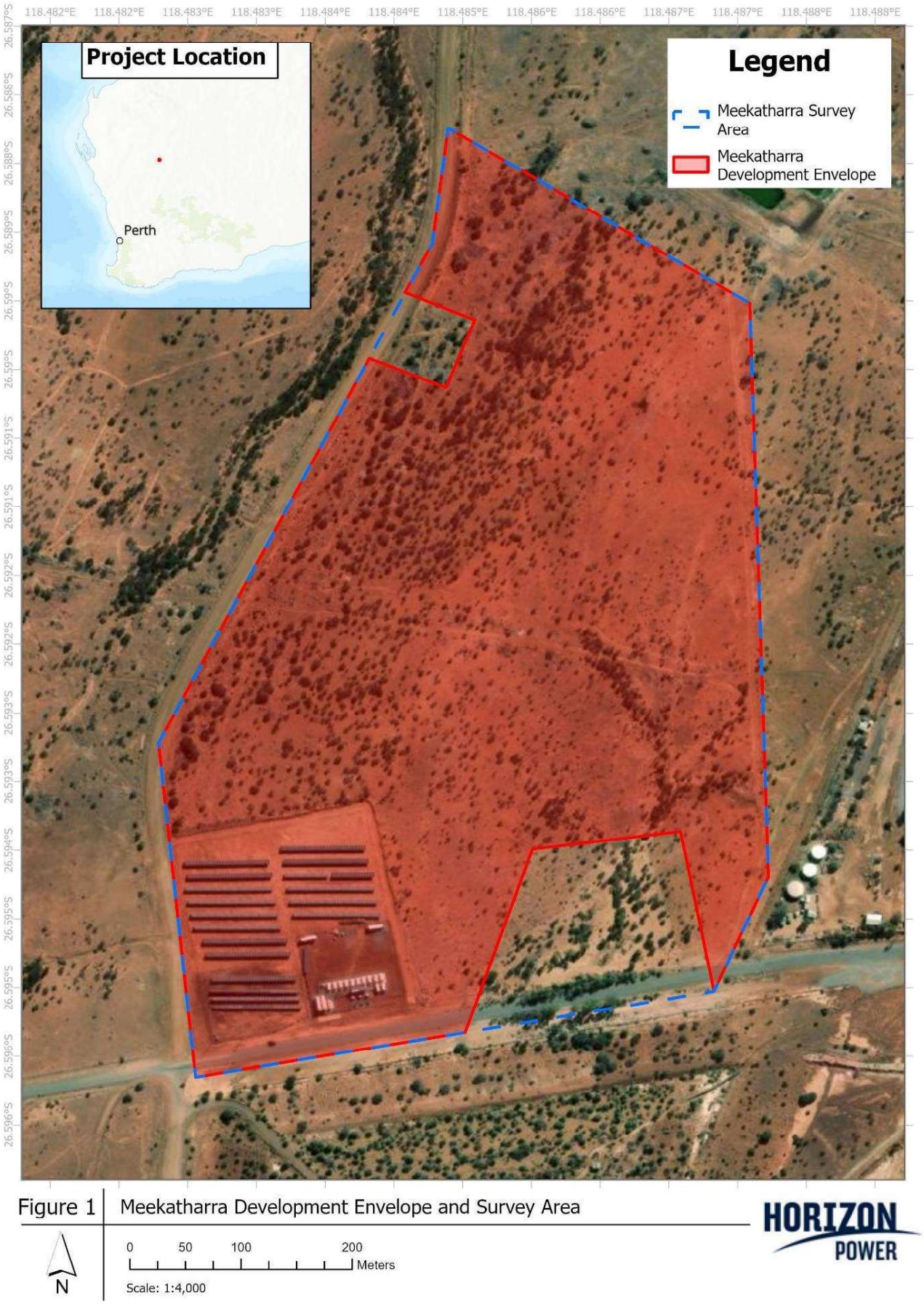


Figure 1 Meekatharra Development Envelope and Survey Area

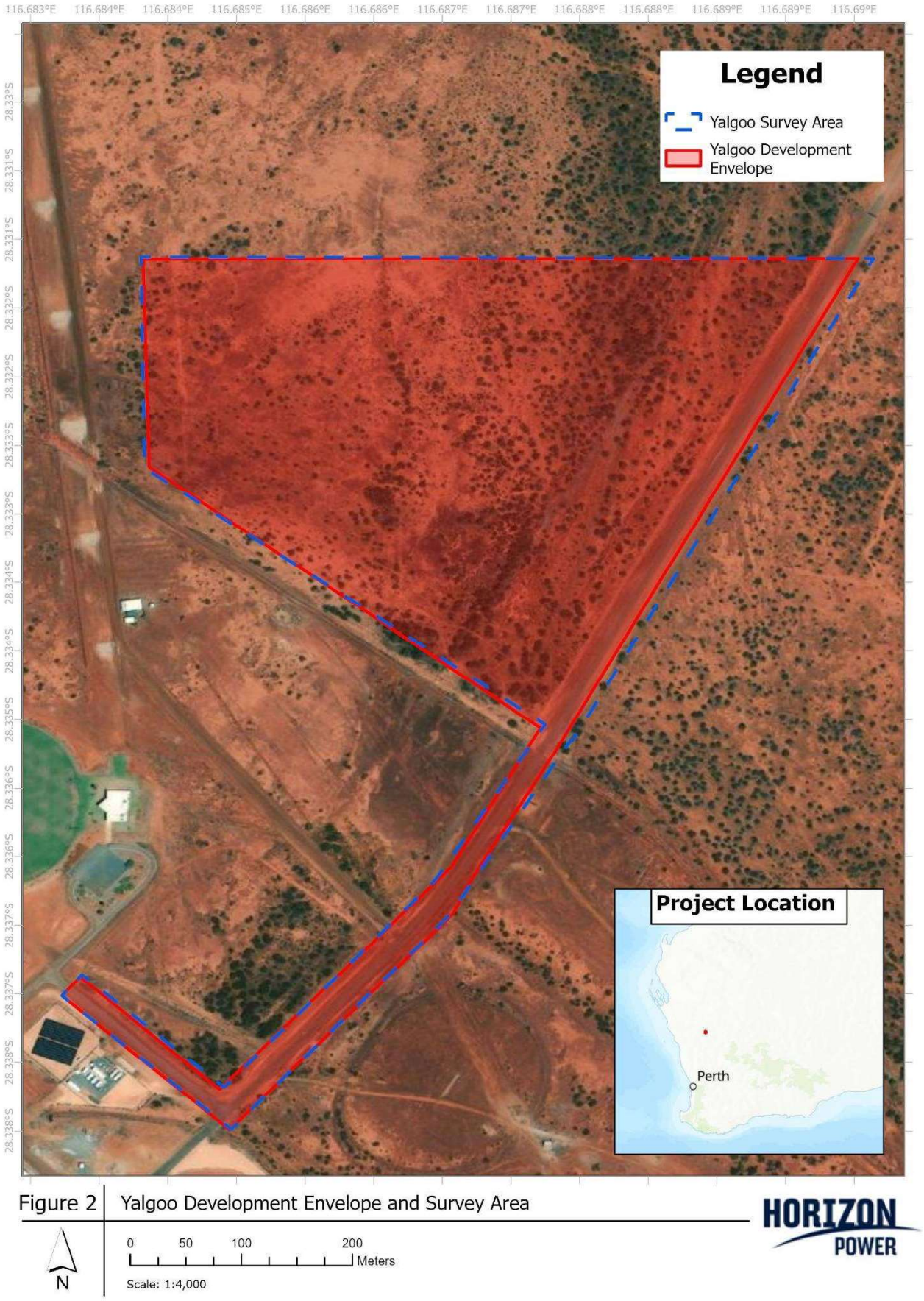


Figure 2 Yalgoo Development Envelope and Survey Area

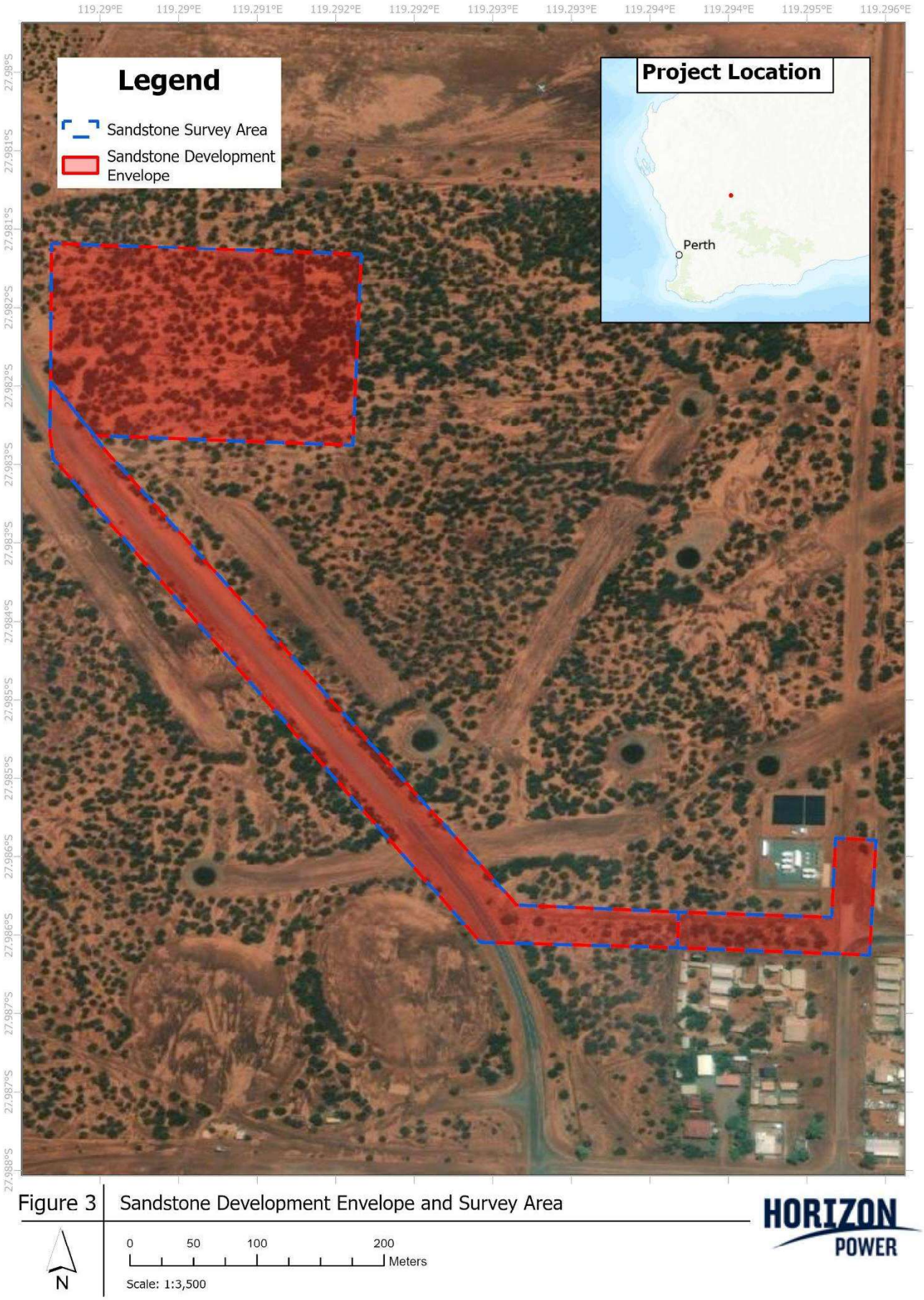


Figure 3 Sandstone Development Envelope and Survey Area

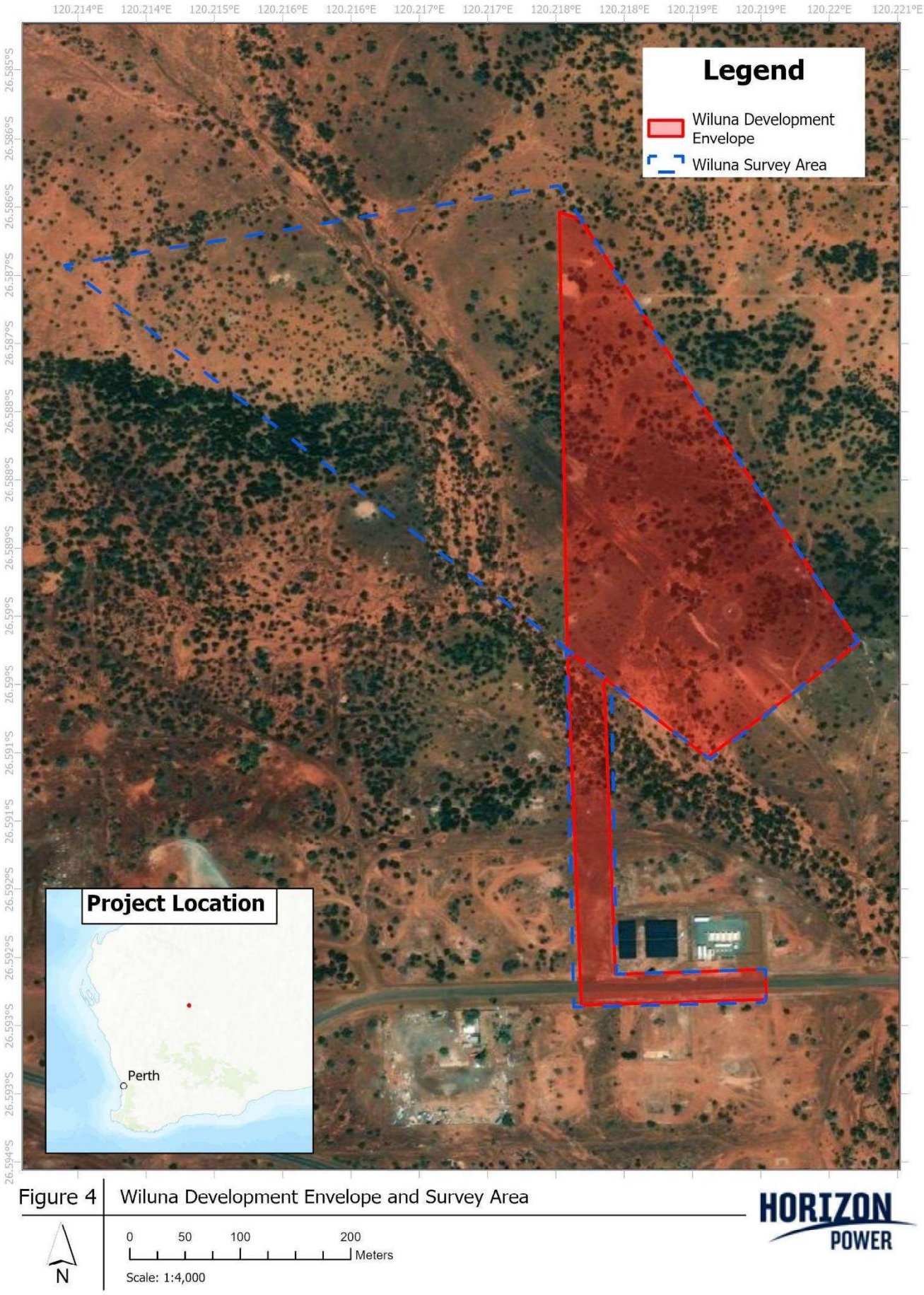


Figure 4 Wiluna Development Envelope and Survey Area

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 several future energy systems including renewable infrastructure generating the following amount of energy from solar arrays:

- 3.5 MW at Meekatharra
- 0.69 MW at Yalgoo
- 0.21 MW at Sandstone
- 1.22 MW at Wiluna.

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.

2.2 Clearing of Native Vegetation

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 DEs (Figure 1, Figure 2, Figure 3 and Figure 4).

Clearing at all sites will be required for geotechnical surveys, which will be mainly incidental clearing (driving over and parking on native vegetation) for vehicle / machinery access to test sites. Clearing will also be undertaken for stringing and winching of the connection transmission lines, laydown areas, solar infrastructure, the connection corridors and access tracks.

There will be temporary and permanent clearing at Meekatharra and Yalgoo, whereas the entire DEs at Sandstone and Wiluna will be permanently cleared. The clearing at each site is shown in Table 1.

The combined area of permanent and temporary clearing of the four DEs is 42.6 ha.

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.

Table 1 Clearing estimated per site

Site	Proposed clearing	Clearing breakdown	Clearing purpose
Meekatharra	14.6 ha	Temporary clearing: 2.5 ha	Geotechnical surveys, stringing and winching of the connection transmission lines and laydown areas
		Permanent clearing: 12.1 ha	Solar infrastructure, the connection corridors and access tracks
Yalgoo	14.7 ha	Temporary clearing: 5.7 ha	Geotechnical surveys, stringing and winching of the connection transmission lines and laydown areas
		Permanent clearing: 9.0 ha	Solar infrastructure, the connection corridors and access tracks
Sandstone	5.9 ha	All permanent clearing	Geotechnical surveys, stringing and winching of the connection transmission lines, laydown areas Solar infrastructure, the connection corridors and access tracks.

Site	Proposed clearing	Clearing breakdown	Clearing purpose
Wiluna	7.4 ha	All permanent clearing	Geotechnical surveys, stringing and winching of the connection transmission lines, laydown areas Solar infrastructure, the connection corridors and access tracks.
TOTAL	**42.6**		

3 Avoidance Measures

Initial avoidance and minimisation was undertaken during site selection, including placement of the proposed infrastructure adjacent to the existing assets to reduce the clearing associated with additional transmission infrastructure. 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 clearing of VT07 at Meekatharra as it is associated with drainage areas. This vegetation type has been excluded from the Meekatharra DE.
- Avoid disturbance to the modified tree heritage place in the northwest corner of the Meekatharra DE. A 30 m buffer has been placed around this heritage place and it has been excluded from the Meekatharra DE.

4 Management Measures

The management measures listed in Table 2 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 2 Management Measures to be Implemented During Geotechnical Investigations and Construction

Aspect	Management Measure
Geotechnical works	
Extent of Clearing	– No clearing is permitted outside the DEs (Figure 1, Figure 2, Figure 3 and Figure 4) – Where possible, pre-existing access tracks will be used and vehicles and machinery will exit the DE along the same route used for access. – Areas of degraded, sparsely vegetated and/or previously cleared areas will be preferentially selected for the location of test pit and laydown areas. – 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. – No more than 9.7 ha of clearing will be undertaken for the geotechnical surveys. – 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.
Flora and vegetation	– Areas that are degraded, sparsely vegetated and/or previously cleared will be used preferentially for laydown and access tracks. – Mechanically cleared areas 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.

Aspect	Management Measure
	• 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. – 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	– 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 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. – 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 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.
Construction	
Extent of Clearing	– No clearing is permitted outside the DEs (Figure 1, Figure 2, Figure 3 and Figure 4). – 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 42.6 ha of clearing is undertaken for the Project.

Aspect	Management Measure
	– A pre-clearing toolbox will be held so all staff are aware of their responsibilities under the permit.
Flora and vegetation	– Pole pads in the Wiluna connection corridor will be positioned to avoid VT11 where possible as it is associated with minor drainage lines. If clearing of VT11 is required for the connection corridor this will be limited to 0.11 ha of clearing for one pole pad and a 4 m wide access track. – 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. – Acid sulphate soils will be managed in accordance with the ASSMP (if required pending geotechnical investigations, in accordance with the *Treatment and management of soils and water in acid sulfate soil landscapes* (DER, 2015b[1]).
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.
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 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.

[1] Department of Environment Regulation 2015b, Treatment and management of soils and water in acid sulfate soil landscapes, May 2015, Perth, Western Australia