

## APPENDIX H - STATE CODE 16 RESPONSE

TABLE 1: CLEARING NATIVE VEGETATION OPERATIONAL WORKS GENERAL

Performance outcomes	Response
<b>General</b>	
<p><b>PO1</b> Clearing of vegetation is consistent with any notice requiring compliance on the land subject to the development application, unless a better environmental outcome can be achieved.</p>	<p><b>PO1 – Complies</b> No notices requiring compliance are relevant to the Project.</p>
<p><b>PO2</b> Clearing of vegetation is consistent with vegetation management requirements for particular regulated areas unless a better environmental outcome can be achieved</p>	<p><b>PO2 - Complies</b> Regulated vegetation within the Study Area consists of:</p> <ul style="list-style-type: none"> <li>• Category B;</li> <li>• Essential habitat;</li> <li>• Intersecting within the defined distance of a watercourse ; and</li> <li>• Wildlife Habitat</li> </ul> <p>The Disturbance Footprint represents the maximum extent of disturbance associated with the Project, with the final location to be confirmed through the detailed design stage. Whilst the Disturbance Footprint may be subject to further refinement, the total area of clearing will not exceed a maximum of 136.82 ha of Regulated Vegetation defined as follows:</p> <ul style="list-style-type: none"> <li>• <u>Category B Regulated Vegetation</u> – 136.82 ha;</li> <li>• <u>Regulated Vegetation – within the defined distance of a watercourse</u> - 0.74 ha;</li> <li>• <u>Regulated Vegetation – Essential Habitat</u> – 135.70 ha; and</li> <li>• <u>Wildlife Habitat</u> – 135.62 ha.</li> </ul> <p>It is to be noted that Wildlife Habitat is comprised of potential denning and foraging dispersal habitat for the Purple-necked rock-wallaby which has been identified as known to occur within the Study Area.</p> <p>No impacts to exchange areas, areas that have been unlawfully cleared, declared areas or mapped category A regulated vegetation will result from the Project.</p> <p>To manage clearing and impact to vegetation, a Preliminary Vegetation and Fauna Management Plan has been developed and will be updated prior to construction and implemented. The Plan has been designed to ensure that clearing is undertaken in accordance with legislative standards and requirements. A copy of the Plan is provided in <b>Appendix O</b> of the Planning Report.</p>

Performance outcomes	Response
	Additionally, a Relevant Purpose Determination has been granted for the Project. A copy of the Relevant Purpose Determination is provided in <b>Appendix I</b> of the Planning Report.
<p><b>PO3</b> Clearing of vegetation in a legally secured offset area:</p> <ul style="list-style-type: none"> <li>• Is consistent with the offset deliver plan; or</li> <li>• Is consistent with an agreement for the offset area on the land subject to the development application; or</li> <li>• Only occurs if an additional offset is provided</li> </ul>	<p><b>PO3 - Not Applicable</b></p> <p>No clearing of vegetation in a legally secured offset area is proposed by the Project.</p>

**TABLE 2: NECESSARY ENVIRONMENTAL CLEARING**

Performance Outcomes	Response
<b>Clearing avoids and minimises impacts</b>	
<p><b>PO4/PO80</b> Clearing of native vegetation and adverse impacts of clearing vegetation do not occur unless the application has demonstrated that the clearing and the adverse impacts of clearing have been:</p> <ul style="list-style-type: none"> <li>• Reasonably avoided; or</li> <li>• Reasonably minimised where it cannot be reasonably avoided</li> </ul>	<p><b>PO4/PO80 - Complies</b></p> <p>The Project is located on the Knapdale Range adjacent to Dugald River Mine (which the Project is directly linked to) and is predominantly used for low-intensity cattle grazing and mining activities.</p> <p>A substantial portion of the Knapdale Range, and consequently, the Study Area is mapped as native vegetation. As a result of the broad scale mapping applied to the Knapdale Range, the Project is unable to avoid clearing of native vegetation.</p> <p>The Project design instead seeks to minimise clearing to areas of regulated vegetation and uses ground-truthed survey findings to avoid areas of known ecological values, particularly for the Purple-necked Rock-Wallaby. The overarching intent of the environmental design philosophy applied when developing the Project was to avoid, minimise and manage impacts where practicable.</p> <p>Through design iterations undertaken through the technical assessment stage, the initial Study Area of 659.6 ha has been reduced to 631.20 ha. Notwithstanding within the Study Area, a maximum of up to 136.82 ha will be disturbed by the Project as shown in the Disturbance Footprint, with construction occurring over two stages.</p> <p>The ground-truthed ecological values reporting for the Study Area confirmed the vegetation present consists of the following regional ecosystems:</p> <ul style="list-style-type: none"> <li>• 1.3.7b <ul style="list-style-type: none"> <li>◦ Stage 1 Disturbance – 0.27 ha</li> </ul> </li> </ul>

Performance Outcomes	Response
	<ul style="list-style-type: none"> <li>◦ Stage 2 Disturbance – 0 ha</li> <li>• RE 1.11.2a <ul style="list-style-type: none"> <li>◦ Stage 1 Disturbance – 67.60 ha</li> <li>◦ Stage 2 Disturbance – 61.17 ha</li> </ul> </li> <li>• RE 1.11.3a <ul style="list-style-type: none"> <li>◦ Stage 1 Disturbance – 5.02 ha</li> <li>◦ Stage 2 Disturbance – 0.48 ha</li> </ul> </li> <li>• RE 1.5.4 <ul style="list-style-type: none"> <li>◦ Stage 1 Disturbance – 0.83 ha</li> <li>◦ Stage 2 Disturbance – 0 ha</li> </ul> </li> <li>• RE 1.7.7b <ul style="list-style-type: none"> <li>◦ Stage 1 Disturbance – 0 ha</li> <li>◦ Stage 2 Disturbance – 0.52 ha</li> </ul> </li> <li>• Remnant Vegetation <ul style="list-style-type: none"> <li>◦ Stage 1 Disturbance – 0.35 ha</li> <li>◦ Stage 2 Disturbance – 0.56 ha</li> </ul> </li> </ul> <p>The ground-truthed ecological values have been used as a basis for the Project’s design and were adapted and amended following a detailed review of the available ecological datasets.</p> <p>Further site-specific avoidance measures will be implemented through construction phases. To support the Project, a Preliminary Cleared Vegetation Management Plan (<b>Appendix E</b>), Preliminary Construction Environment Management Plan (<b>Appendix F</b>) and Preliminary Vegetation and Fauna Management Plan (<b>Appendix O</b>) has been prepared. These reports detail mitigation measures to further minimise impacts to native vegetation.</p> <p>Additional measures, such as opportunity to span without clearing overhead lines and other infrastructure will also be considered with the Principal Contractor through detailed Project design and prior to commencement of construction.</p>
Clearing associated with wetlands	
<p><b>PO5/PO81</b> Clearing of vegetation within a natural wetland and/or within 100 metres of the defining bank of a natural wetland maintains the composition, structure and function of any regional ecosystem associated with any natural wetland to protect all of the following:</p> <ul style="list-style-type: none"> <li>• bank stability by protecting against bank erosion;</li> <li>• water quality by filtering sediments, nutrients and other pollutants;</li> <li>• aquatic habitat;</li> <li>• terrestrial habitat.</li> </ul>	<p><b>PO5/PO81 – Complies with A05.1/A081.1</b></p> <p>The Study Area is not located in or within 100m of a defining bank of any natural wetland.</p>

Performance Outcomes	Response
<p><b>A05.1/A081.1</b> Clearing does not occur in a natural wetland or within 100 metres of the defining bank of any natural wetland.</p> <p>OR</p> <p><b>A05.2/A081.2</b> Clearing to provide necessary access to undertake necessary environmental clearing only occurs where clearing:</p> <ul style="list-style-type: none"> <li>• does not exceed 10 metres in width; and</li> <li>• does not exceed widths in reference table 1 in this code.</li> </ul>	
<p><b>PO6/PO82</b> Where clearing of vegetation in a regional ecosystem associated with a natural wetland does not maintain the composition, structure and function of the regional ecosystem, and cannot be avoided and has been mitigated, the cleared area is rehabilitated.</p>	<p><b>PO6/PO82 - Not Applicable</b> The Disturbance Footprint is not located within a natural wetland.</p>
<p><b>Clearing associated with watercourses and drainage features</b></p>	
<p><b>PO7/PO83</b> Clearing of vegetation within a watercourse and /or drainage feature and/or within the relevant distance (listed in reference table 2) of a watercourse and/or drainage feature, maintains the composition, structure and function of the regional ecosystem associated with the watercourse and/or drainage feature to protect all of the following:</p> <ul style="list-style-type: none"> <li>• bank stability by protecting against bank erosion;</li> <li>• water quality by filtering sediments, nutrients and other pollutants;</li> <li>• aquatic habitat;</li> <li>• terrestrial habitat.</li> </ul> <p><b>A07.1/A083.1</b> Clearing does not occur in any of the following areas:</p> <ul style="list-style-type: none"> <li>• inside the defining bank of a watercourse or drainage feature; and</li> <li>• within the relevant distance of the defining bank of any watercourse or drainage features in reference table 2 of this code.</li> </ul> <p>OR</p> <p><b>A07.2/A083.2</b> Clearing within any watercourse or drainage feature, or within the relevant distance of the defining bank of any watercourse or drainage feature in reference table 2 of this code:</p> <ul style="list-style-type: none"> <li>• does not exceed 0.5 hectares; and</li> <li>• does not occur within 10 metres of the defining bank, unless clearing is required into or across the watercourse or drainage feature.</li> </ul>	<p><b>PO7/PO83 - Complies</b> The Project complies with PO7/PO83 as it is satisfied against the following performance outcomes assessment items:</p> <p><b>1. Bank stability and protecting against bank erosion</b> Six major soil types have been identified within the Study Area:</p> <ul style="list-style-type: none"> <li>• Red plain soil;</li> <li>• Knapdale soil;</li> <li>• Dale soil;</li> <li>• Miners soul;</li> <li>• Prospectors soil; and</li> <li>• Pocket soil.</li> </ul> <p>The predominant soil type throughout the plateau region of the Study Area is the Knapdale Soil, with small areas of Dale Soil present. The Red Plain, Miners, and Pocket Soil management units all occur within the corridor between the Dugald River Mine and the Project.</p> <p>All soil types identified within the region are non-sodic (exchangeable sodium percentage values below 6%), making them non-dispersive and resistant to erosion.</p> <p>The Study Area is located in the headwaters of the Leichhardt and Flinders Basins. Several ephemeral tributaries and overland flow paths are located within the Study Area. The Project avoids placement on infrastructure in these areas, with the exception of required waterway crossings.</p>

Performance Outcomes	Response
	<p>Given the generally rocky characteristics of the soil landscape throughout the Knapdale Range, scale and extent of sediment loss and erosion due to the Project is expected to be minimal.</p> <p>To manage bank stability throughout the Projects life, management objectives have been developed to address drainage control, erosion control and sediment control. A copy of the Stormwater Assessment is provided in <b>Appendix P</b> of the Planning Report. Additionally, the Project is supported by a Preliminary Construction Environmental Management Plan which contains a broad range of control measures relevant to managing and mitigating potential impacts on waters (<b>Appendix F</b>).</p> <p><b>2. Water quality</b> MMG currently implements a receiving environment monitoring program (REMP). The REMP is undertaken in accordance with the <i>Queensland Monitoring and Sampling Manual</i> (DES 2018) with sampling undertake up and downstream along Dugald River and Cabbage Tree Creek.</p> <p>Unmitigated discharge of stormwater from disturbed or cleared areas could result in adverse effects or the transport of pollutants downstream. All surface water quality impacts are likely to be greatest during periods of the year characterised by high rainfall. Accordingly, risk will be lower when activities are undertaken when the rainfall and streamflow are minimal.</p> <p>To protect water quality management and mitigation measures have been developed, including:</p> <ul style="list-style-type: none"> <li>• Where possible avoiding disturbance during high rainfall periods;</li> <li>• Phasing construction to limit number and extent of disturbed areas at any one time; and</li> <li>• Providing stabilised entry/exit points with all-weather access.</li> </ul> <p><b>3. Aquatic habitat</b> Aquatic flora and fauna surveys have been undertaken over the Study Area over several years. Ground-truthed habitat features within the Study Area include REs:</p> <ul style="list-style-type: none"> <li>• 1.3.7b (2.09 ha);</li> <li>• 1.5.4 (6.89 ha);</li> <li>• 1.7.7b (2.51 ha);</li> <li>• 1.11.2a (577.28 ha); and</li> <li>• 1.11.3a (26.08 ha).</li> </ul>

Performance Outcomes	Response
	<p>Only RE 1.3.7b is associated with aquatic riverine environments relevant to the Project. To avoid and minimise impacts on aquatic habitat, interactions with riparian and aquatic environments will be avoided by the proposed development, except when unavoidable for watercourse crossings.</p> <p>During the detailed design and micro-siting project phase, disturbance and impact to aquatic habitats will be further minimised by:</p> <ul style="list-style-type: none"> <li>• Locating watercourse crossings in areas of no or low vegetation where possible; and</li> <li>• Implementing stabilisation requirements for the work in accordance with best practice as identified in IECA 2008 Table I11, as a minimum.</li> </ul> <p><b>4. Terrestrial habitat</b></p> <p>Terrestrial habitat assessments have been undertaken over a number of years. Full habitat spatial analysis is available in Section 2.3 of the Matters of State Environmental Significance Impact Assessment Report, provided as <b>Appendix N</b> of the Planning Report.</p> <p>The primary terrestrial habitat relevant to the Study Area is habitat for the Purple-necked rock-wallaby. At a high-level there is 135.70 ha of mapped essential habitat for the Purple-necked rock-wallaby mapped within the Disturbance Footprint. The Project's Disturbance Footprint utilises 17 years of ground-truthed ecological surveying to refine habitat mapping for the Purple-necked rock-wallaby. The Project Layout avoids Purple-necked rock-wallaby Dens entirely and limits impacts to foraging and dispersal habitat by locating disturbance areas on ridgelines which are non-preferred areas for the Purple-necked rock-wallaby.</p> <p>A SRI assessment has been undertaken in regard to impact on terrestrial habitat and it is possible that offsetting will be required to compensate for the proposed impact.</p> <p>Further detail regarding assessment of the Projects impact on terrestrial habitat is provided in the Matters of State Environmental Significance Ecological Impact Assessment Report (<b>Appendix N</b>).</p>
<p><b>PO8/PO84</b> Where clearing of vegetation in a regional ecosystem associated with a watercourse and/or drainage feature does not maintain the composition, structure and function of the regional ecosystem, and cannot be avoided and has been mitigated, an offset is provided for any acceptable significant residual impact.</p>	<p><b>PO8/PO4 - Complies</b></p> <p>In addition to the avoidance and minimisation actions and information detailed in response to PO7/PO83, SRI assessment have been completed for the below MSES values:</p> <ul style="list-style-type: none"> <li>• Regulated Vegetation intersecting a watercourse</li> <li>• Regulated Vegetation Essential Habitat</li> </ul>

Performance Outcomes	Response
	<ul style="list-style-type: none"> <li>• Australian Painted Snipe (<i>Rostratula australis</i>)</li> <li>• Purple-crowned Fairy-wren (<i>Malurus coronatus</i>)</li> <li>• Curlew Sandpiper (<i>Calidris ferruginea</i>)</li> <li>• Great Knot (<i>Calidris tenuirostris</i>)</li> <li>• Greater Sand Plover (<i>Charadrius leschenaultii</i>)</li> <li>• Red Knot (<i>Calidris canutus</i>)</li> <li>• Lesser Sand Plover (<i>Charadrius mongolus</i>)</li> <li>• Ruddy Turnstone (<i>Arenaria interpres</i>)</li> <li>• Terek Sandpiper (<i>Xenus cinereus</i>)</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>)</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>)</li> <li>• Common Greenshank (<i>Tringa nebularia</i>)</li> <li>• Grey Plover (<i>Pluvialis squatarola</i>)</li> <li>• Latham’s snipe (<i>Gallinago hardwickii</i>)</li> <li>• Sharp-tailed sandpiper (<i>Calidris acuminata</i>)</li> <li>• Purple-necked Rock-wallaby (<i>Petrogale purpureicollis</i>)</li> <li>• Short-beaked Echidna (<i>Tachyglossus aculeatus</i>)</li> <li>• Merten’s Water Monitor (<i>Varanus mertensi</i>)</li> </ul> <p>The results of the SIAs have determined that offsets are potentially applicable for:</p> <ul style="list-style-type: none"> <li>• Regulated vegetation EssentialHabitat; and</li> <li>• Purple-necked rock wallaby.</li> </ul> <p>Please refer to the Matters of State Environmental Significance Ecological Impact Assessment Report (<b>Appendix N</b>) for full detail and SIAs.</p> <p>The assessments undertaken for the Project are considered conservative as they take into account the entirety of the Study Area. However, as detailed in response to PO7/PO83 and in <b>Appendix P</b> and <b>Appendix N</b>, avoidance and mitigation measures will be implemented through detailed design to reduce impacts to MSES values.</p>
Connectivity	
<p><b>PO9/PO85</b> Regional ecosystems on the subject land and any adjacent land retain sufficient vegetation to:</p> <ul style="list-style-type: none"> <li>• maintain ecological processes; and</li> <li>• ensure the regional ecosystem remains in the landscape despite threatening processes.</li> </ul> <p><b>AO9.1/AO85.1</b> Clearing occurs in accordance with reference table 3 of this code.</p>	<p><b>PO9/PO85 Complies with AO9.1/AO85.1</b></p> <p>The bioregion relevant to the Project Area is Mount Isa Inlier (north-west Queensland) which is considered a non-coastal bioregion. To demonstrate compliance with AO9.1 and in accordance with Table 3 of SDAP 16 assessment has been provided below regarding clearing in non-coastal bioregions.</p>

Performance Outcomes	Response
	<p>1. Clearing does not occur in areas of vegetation that are less than 50 ha – <b>Complies</b></p> <p>2. Clearing does not reduce the extent of vegetation to less than 50 ha – <b>Complies</b></p> <p>The Project is proposed to be located across three lots (Lot 92 on SP35339; Lot 36 on AP23793; and Lot 93 on SP35339) located on the Knapdale Range, Queensland. The total area of mapped vegetation available within the three lots is approximately 18,944 ha.</p> <p>Provided the available vegetation within the subject lots, the development does not occur in areas of vegetation less than 50ha and will not result in reducing the area of vegetation to less than 50 ha.</p> <p>3. Clearing does not occur in areas of vegetation less than 200m wide – <b>Complies</b></p> <p>4. Clearing does not reduce the width of vegetation to less than 200m – <b>Complies</b>  Minimum width of any vegetation within the Study Area is approximately 230m at its narrowest point. The only clearing proposed for any narrow area is for the purposes of linear infrastructure and will not impact the width of the patch.  Therefore, no clearing will be undertaken in vegetation less than 200m in width nor will proposed clearing result in a vegetation width of less than 200m.</p> <p>5. Clearing does not occur where the extent of vegetation on the subject lot is reduced to, or less than, 30 percent of the total area of the lot(s) – <b>Complies</b></p> <p>The Study Area contains 631.20 ha of vegetation which represents approximately 3% of the total vegetated area across the three lots subject to the proposed development. The proposed disturbance will occur to a maximum area of 136.82 ha across the three lots. Therefore, post impact, the proposed development will not reduce vegetation on the subject lots to less than 30% of the total area of the lots.</p>
<b>Soil erosion if the local government is not the assessment manager for the development application</b>	
<p><b>PO10/PO86</b> Clearing does not result in accelerated soil erosion within or outside the land the subject of the development application.</p> <p><b>AO10.1/AO86.1</b> Clearing only occurs if an erosion and sediment control plan is developed and implemented to prevent soil erosion and instability resulting from the clearing.</p>	<p><b>AO10.1/AO86.1 - Complies</b>  A Preliminary Construction Environmental Management Plan (<b>Appendix E</b>) has been prepared for the Project and outlines a broad range of mitigation and management measures to avoid impacts associated with the Project on erosion.</p>

Performance Outcomes	Response
	<p>A Stormwater Management Plan and Erosion and Sediment Control Plan will be prepared prior to the commencement of construction activities to manage erosion and sediment risks.</p> <p>A Stormwater Impact Assessment (<b>Appendix P</b>) has been prepared for the Project. The Report assesses the potential for impacts associated with the Project on erosion control. Due to refinement of the detailed design, areas of high to extremely high erosion risk are largely confined to the perimeter of the Study Area, and not generally within the Study Area itself.</p> <p>The Report concludes that where land clearing and ground disturbance is required to support the Project, site-specific control measures will be required in the form of an Erosion and Sediment Control Plan. The Plan will be developed in conjunction with the construction contractor following the detailed design phase of the Project and will be in accordance with the IECA (2008) best practice management measures, as highlighted in Table 5-2 of the Report.</p>
<b>Salinity</b>	
<p><b>PO11/PO87</b> Clearing within 100 metres of a salinity expression area does not contribute to or accelerate land degradation through either of the following:</p> <ol style="list-style-type: none"> <li>1. waterlogging;</li> <li>2. the salinisation of groundwater, surface water or soil.</li> </ol> <p><b>AO11.1/AO87.1</b> Clearing does not occur within 100 metres of a salinity expression area.</p>	<p><b>AO11.1/AO87.1 - Not Applicable</b></p> <p>The Project is not located within a salinity expression area. The ground water conditions of electrical conductivity for the Project are below 1,500 microsiemens per centimetre indicating freshwater to marginally brackish conditions. Additionally, any further clearing is not considered to increase electrical conductivity within groundwater.</p>
<b>Conserving least concern regional ecosystems - Minimising clearing of areas temporarily required to enable construction of the infrastructure</b>	
<p><b>PO12</b> Clearing of vegetation for temporary use areas to construct necessary infrastructure, such as temporary use roads or access tracks, maintains the composition, structure and function of least concern regional ecosystems.</p> <p><b>AO12.1</b> Clearing for temporary use areas to construct necessary infrastructure does not occur in a least concern regional ecosystem. OR <b>AO12.2</b> Total clearing for temporary use areas to construct necessary infrastructure in any regional ecosystem combined does not exceed the widths prescribed in table reference table 1 of this code.</p>	<p><b>PO12 – Complies.</b></p> <p>The Disturbance Footprint includes up to two temporary construction laydown areas which equate to a total of approximately 2.42 ha.</p> <p>Temporary construction laydown areas are proposed for the storage of WTG components when initially delivered to site, assembly of WTG components prior to installation and general materials storage and are necessary to facilitate construction.</p> <p>The location of the proposed temporary has been selected based to ground-truthed ecological values, proximity to existing access tracks and disturbance and appropriateness in regard to construction movements.</p>

Performance Outcomes	Response
<p>OR</p> <p><b>AO12.3</b></p> <p>Total clearing for temporary use areas to construct necessary infrastructure in any regional ecosystem combined does not exceed areas prescribed in table reference table 1 of this code.</p>	<p>The entirety of the Study Area is mapped as containing least concern regional ecosystems making avoidance of impacts impossible.</p> <p>All temporary construction laydown areas are located within an area mapped as regional ecosystem 1.11.2a, a least concern regional ecosystem. Regional ecosystem 1.11.2a is considered to have a Low Open woodland structure with the total area of 577.28 ha within the Study Area. Low open woodland structures are characterised by a sparse tree canopy allowing sunlight through to the understory which is typically comprised of shrubs and grasses.</p> <p>The spatial nature of the regional ecosystem has allowed for the Proponent to strategically locate the proposed temporary construction laydown areas in areas of low tree coverage. It is anticipated that the Project will maintain the composition, structure and function of least concern regional ecosystems.</p>
<p><b>PO13</b></p> <p>Where clearing of vegetation in a regional ecosystem for temporary use areas to construct necessary infrastructure does not maintain the composition, structure and function of the regional ecosystem, and cannot be avoided and has been mitigated, the cleared area is rehabilitated.</p>	<p><b>PO13 – Complies</b></p> <p>The Project will involve clearing of vegetation to facilitate construction and operation of the proposed temporary construction areas. The Disturbance Footprint has a maximum area of up to 136.82 ha and will be located entirely within the proposed Study Area. A Preliminary Cleared Vegetation Management Plan (<b>Appendix E</b>) has been prepared to outline how vegetation cleared as part of the Project will be stored, managed, and reused.</p> <p>Almost the entirety of the Study Area, and the entirety of the Disturbance Footprint is mapped as Category B Regulated Vegetation. As such, MMG has obtained a 'Relevant Purpose Determination' under Section 22A of the Vegetation Management Act 1999 with the Project considered to be for relevant infrastructure activities.</p> <p>The Disturbance Footprint represents the maximum extent of disturbance associated with the Project, with the final location to be confirmed through the detailed design stage. Whilst the Disturbance Footprint may be subject to further refinement, the total area of clearing will not exceed a maximum of 136.82 ha of Regulated Vegetation</p> <p>It is not anticipated that the Projects proposed temporary construction laydown areas will have a significant impact on least concern regional ecosystem composition, structure and function. The rehabilitation</p>

Performance Outcomes	Response
	management to be completed post construction will be comprised of a combination of: <ul style="list-style-type: none"> <li>• Natural regeneration;</li> <li>• Direct seeding; and</li> <li>• Planting.</li> </ul>
<b>Conserving endangered and of concern regional ecosystems</b>	
<p><b>PO14/PO88</b> Clearing of vegetation maintains the composition, structure and function of endangered regional ecosystems and/or of concern regional ecosystems.</p> <p><b>AO14.1/AO8.1</b> Clearing does not occur in an endangered regional ecosystem or an of concern regional.</p> <p>OR</p> <p><b>AO14.2/AO88.2</b> Total clearing of endangered regional ecosystems and of concern regional ecosystems combined does not exceed the widths prescribed in reference table 1 of this code</p> <p>OR</p> <p><b>AO14.3/AO88.3</b> Total clearing of endangered regional ecosystems and of concern regional ecosystems combined does not exceed areas prescribed in reference table 1 of this code.</p>	<p><b>AOs and POs – Not Applicable</b></p> <p>There are no areas of endangered and of concern regional ecosystems within the Study Area.</p>
<p><b>PO15/PO89</b> Where clearing of vegetation in a regional ecosystem or an of concern regional ecosystems does not maintain the composition, structure and function of the regional ecosystem, and cannot be avoided and has been mitigated, the cleared area is rehabilitated. 2.Where the cleared area cannot be rehabilitated, an offset is provided for any acceptable significant residual impact.</p>	<p><b>PO15/PO89 - Not Applicable</b></p> <p>There are no areas of endangered and of concern regional ecosystems within the Disturbance Footprint. All regional ecosystems are least concern.</p>
<b>Acid sulfate soils if the local government is not the assessment manager for the development application</b>	
<p><b>PO18/PO92</b> Clearing does not result in, or accelerate, disturbance of acid sulfate soils or changes to the hydrology of the location that will result in either of the following:</p> <ul style="list-style-type: none"> <li>• aeration of horizons containing iron sulphides;</li> <li>• mobilisation of acid or metals.</li> </ul> <p><b>AO18.1/AO92.1</b> Clearing does not occur in land zone 1, land zone 2 or land zone 3.</p> <p>OR</p> <p><b>AO18.2/AO92.2</b> Clearing in land zone 1, land zone 2 or land zone 3 in areas below the five metre Australian Height Datum only occurs where:</p> <ul style="list-style-type: none"> <li>• mechanical clearing does not disturb the soil to a depth greater than 30 centimetres; and</li> </ul>	<p><b>AO18.1/AO92.2 and AO18.2/AO92.2 – Complies</b></p> <p>The Disturbance Footprint is located in Land Zone 11 on elevations above the five metre Australian Height Datum (AHD) and occurs between 270-310 metres (mAHD), therefore the occurrence of acid sulfate soils is unlikely.</p>

Performance Outcomes	Response
<ul style="list-style-type: none"> <li>acid sulfate soils are managed consistent with the soil management guidelines in the Queensland Acid Sulfate Soil Technical Manual.</li> </ul>	
<b>Essential habitat excluding essential habitat for Phascolarctos cinereus (koalas) if development is assessable under Schedule 10, Part 10 of the Planning Regulation 2017</b>	
<p><b>PO16/PO90</b> Clearing of vegetation in a regional ecosystem that is an area of essential habitat maintains the composition, structure and function of the regional ecosystem for each protected wildlife species individually.</p> <p><b>AO16.1/AO90.1</b> Clearing does not occur in essential habitat. OR</p> <p><b>AO16.2/AO90.3</b> Clearing in essential habitat does not exceed the widths prescribed in reference table 1 of this code. or</p> <p><b>AO16.3/AO90.3</b> Clearing in essential habitat does not exceed the areas prescribed in reference table 1 of this code.</p>	<p><b>AO16.1/AO16.2/AO16.3 – Not Compliant</b> The Knapdale Range (where the Project is located) occupies an area of approximately 6,000 ha and is completely mapped as containing regulated vegetation essential habitat for the Purple-necked Rock Wallaby. Due to the extent of mapping within the Study Area, development type and required engineering and construction clearing requirements, the avoidance of clearing essential habitat or compliance with the clearing widths and limits of Table 1 of State Code 16: Native Vegetation Clearing is not possible. Therefore, the Project is not compliant with AO16.1, AO16.2 or AO16.3 and assessment against the PO is to be undertaken.</p> <p><b>PO16 – Compliant</b> The total area of essential habitat proposed to be impacted to facilitate the Project is 135.70 ha which represents approximately 2.2% of the available ~6,000 ha of essential habitat mapping available on the Knapdale Range. Extensive ecological surveys have been undertaken within the Study Area over the past 17 years which has been utilised to ensure that the Development Footprint avoids known active dens and high value habitat areas. Further avoidance will be undertaken during detailed design and micro-siting after pre-clearance surveys are undertaken.</p> <p>The regional ecosystems that comprise the mapped essential habitat for the Purple-necked Rock Wallaby include 1.11.2a, 1.11.2e, 1.11.3a, 1.11.3, 1.3.6b, 1.3.7b, 1.11.2, and 1.5.4. The Purple-necked Rock Wallaby favours habitat which includes boulder piles, rocky slopes, cliffs and gorges in limestone areas, and sandstone and quartzite outcrops amongst dry Eucalyptus and Acacia woodlands. Although it also inhabits spinifex grasslands in association with the rocky areas. These habitat features generally align with the regional ecosystems that are mapped as containing the essential habitat for the species.</p> <p>The structure categories for the regional ecosystems that comprise the mapped essential habitat are a combination of very sparse and sparse. While clearing of vegetation generally results in a thinning of existing vegetation, due to the sparse nature of the vegetation that comprises the mapped essential habitat, it is not anticipated that the impact to available mapped vegetation will alter the existing habitat composition, structure or function.</p>

Performance Outcomes	Response
	<p>However, as there will be a small overall loss in mapped essential habitat as a result of the Project.</p>
<p><b>PO17/PO91</b> Where clearing of vegetation in a regional ecosystem that is an area of essential habitat does not maintain the composition, structure and function of the regional ecosystem, and cannot be avoided and has been mitigated, an offset is provided for any acceptable significant residual impact for each protected wildlife species individually.</p>	<p><b>PO17/PO91 - Complies</b></p> <p>While the vegetation that comprises the mapped essential habitat for the Purple-necked Rock Wallaby is not likely to change in regard to the existing habitat composition, structure or function as a result of the Project. Overall impacts to the Purple-necked Rock Wallaby cannot be ruled out.</p> <p>The significant residual impact assessment for the Project (refer to <b>Appendix N</b>) has determined that the Project may Lead to a long-term decrease in the size of a local population of the species; Reduce the extent of occurrence of the species; Interfere with the recovery of the species; and Cause disruption to ecologically significant locations (breeding, feeding, nesting, migration or resting sites) of a species. It should be recognised that the SRI assessment findings are associated with impacts to the denning behaviour of the Purple-necked Rock Wallaby, rather than being related to impacts on vegetation mapped in the area. Further detail on this assessment is provided below and in <b>Appendix N</b> of the Planning Report.</p> <p><b>Lead to a long-term decrease in the size of a local population of the species;</b></p> <p>The Project works in the Study Area have the potential to lead to a long-term decrease in the size of a local population of the species. There are 611 records of the Purple-necked Rock Wallaby in proximity to the Study Area recorded over the past 12 years. There are multiple confirmed and multiple speculated dens around the DRM, including several along the Knapdale Range within the Study Area.</p> <p>As the Project may disrupt denning, the Project is deemed to have the potential to reduce the size of the population of the species across the Knapdale Range.</p> <p><b>Reduce the extent of occurrence of the species;</b></p> <p>Project works in the Study Area have the potential to reduce the extent of occurrence of the species. There are 611 records of the Purple-necked Rock Wallaby in proximity to the Study Area recorded over 12 years. There are multiple confirmed and multiple speculated dens around the DRM.</p> <p>As the Project may disrupt denning, the Project is deemed to have the potential to reduce the extent of occurrence of the species across the Knapdale Range.</p>

Performance Outcomes	Response
	<p><b>Interfere with the recovery of the species;</b>  Project works in the site have the potential to interfere with the recovery of the species. There are 611 records of the Purple-necked Rock Wallaby in proximity to the Study Area recorded over 12 years. There are multiple confirmed and multiple speculated dens around the DRM, including several along the Knapdale Range near the Study Area.</p> <p>As the Project may disrupt denning, the Project is deemed to have the potential to interfere with the recovery of the species</p> <p><b>Cause disruption to ecologically significant locations (breeding, feeding, nesting, migration or resting sites) of a species;</b>  Project works have the potential to disrupt denning sites. There are 611 records of the Purple-necked Rock Wallaby in proximity to the Study Area recorded over 12 years. There are multiple confirmed and multiple speculated dens around the DRM, including several along the Knapdale Range near the Study Area. There is unknown potential for these dens to be impacted by both the construction and operation of WTGs in their vicinity through noise and vibrations.</p> <p>Due to the unknown impacts associated with the Project on denning locations, there is potential for the Project to cause disruption to ecologically significant locations.</p> <p>Due to the potential for significant residual impacts to the Purple-necked Rock Wallaby it is anticipated that offsets will be required to compensate for Project related impacts.</p>