



## Additional Information Request



ADDITIONAL INFORMATION REQUIRED	SECTION ADDRESSING	
Relevant matters of national environmental significance·		
From the information provided to date, the Department considers that the protected matters that may be significantly impacted by the proposed action include, but are not limited to:		
Listed threatened species and communities		
Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community –     Endangered		
Clay Pans of the Swan Coastal Plain Threatened Ecological Community – Critically Endangered		
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain     Threatened Ecological Community – Critically Endangered		
• Forest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso) – Vulnerable		
Baudin's Cockatoo ( <i>Calyptorhynchus baudinii</i> ) – Endangered		
Carnaby's Cockatoo ( <i>Calyptorhynchus latirostris</i> ) – Endangered		
Western Ringtail Possum (Pseudocheirus occidentalis) – Critically Endangered		
Balston's Pygmy Perch (Nannatherina balstom) – Vulnerable		
Black-stripe Minnow (Galaxiella nigrostriata) – Endangered		
Carter's Freshwater Mussel (Westralunio carteri) – Vulnerable		
King Spider-orchid (Caladenia huegelii) – Endangered		
Tall Donkey Orchid (Diuris drummondii) – Vulnerable		
Dwarf Bee-orchid (Diuris micrantha) – Vulnerable		
Glossy-leafed Hammer Orchid ( <i>Drakaea elastica</i> ) – Endangered		
Dwarf Hammer-orchid (Drakaea micrantha) – Vulnerable		
Keighery's Eleocharis (Eleocharis keigheryi) – Vulnerable		
1 - Description of the action		
The preliminary documentation must provide a description of the proposed action, including:		
A summary of all components, including pre-construction, construction and operation of the proposed action	1.3.2	
A description of the activities associated with the proposed action	1.3.3	
<ul> <li>The location, boundaries and size (in hectares) of the proposed action area, any discrete disturbance areas, and any adjoining areas which may be directly or indirectly impacted by the proposed action (include mapping)</li> </ul>	1.3.3	



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A layout plan for the proposed action area, including the location and type of land use, key infrastructure, etc.	1.3.1
<ul> <li>The anticipated timing and duration (including start and completion dates) for both construction and operational components and associated impacts</li> </ul>	1.3.4
<ul> <li>A description and likely timing of any rehabilitation activities associated with the proposed action</li> </ul>	1.3.5
<ul> <li>A discussion and details of any feasible alternatives to the proposed action that were considered</li> </ul>	1.3.6
2 – Description of the environment and matters of national environmental significance	
The preliminary documentation must provide a general description of the environment of the action area, as well as surrounding areas, that may be impacted by the proposed action both long term. Specific matters this section must address include, but are not limited to:	· ·
<ul> <li>A description of any protected matters (including, but not limited to those listed above) that are, or have the potential to be, in the proposed action area and surrounds</li> </ul>	2.1
<ul> <li>A description of the current land use, topography, surface and groundwater bodies, waterways and vegetation communities within the proposed action area and surrounds</li> </ul>	2.2
• For listed threatened species and communities that are known, or have the potential, to be present within the proposed action area and surrounds and are likely to, or may, be significantly impacted by the proposed action, a minimum of:	
<ul> <li>Information on the abundance, distribution, ecology and habitat preferences</li> </ul>	2.4
for each listed species or community	2.5
	2.6
Quantification of the extent of habitat and the number of individuals likely to	0
be impacted, or historical patterns of use by those species, within the proposed action area and surrounds (including mapping identifying known	3.2
and/or potential habitat)	3.3
Assessment of the quality and importance of known or potential habitat for	2.4
the relevant listed species or community within the proposed action and surrounds	2.5
	2.6
Information detailing known populations or records of individuals within at	2.4
least 2 km of the proposed action narea and the size of these populations, if available	2.5
	2.6



AD	DITIONAL INFORMATION REQUIRED	SECTION ADDRESSING
	An assessment of the adequacy of any surveys undertaken (including survey)	2.4
effort and timing). In particular, the extent to which these surveys were appropriate for the listed species or community and undertaken in accordance		2.5
	with relevant Departmental survey guidelines	2.6
•	Information about the methods, data and scientific literature used to identify and	
	assess the environmental values within the proposed action area and surrounds, including survey data and historical records. Survey data relating to the proposed action area must be provided for the relevant listed species and/or communities, be as recent as possible and must not have been collected more than three years before the	2.4
		2.5
	recent as possible and must not have been collected more than three years before the date the draft preliminary documentation is submitted to the Department.	2.6
Spe	ecies and communities specific information	
Ваі	nksia Woodlands of the Swan Coastal Plan TEC	
•	The floristic community types and quality of each area of Banksia Woodlands TEC	2.4.1
	which will either be directly or indirectly impacted by the proposed action	3.1.1
•	The total area (in hectares) of TEC which will be directly impacted by the proposed	2.4.1
	action	3.1.1
action	2.4.1	
	action	3.1.1
•	The total size of any large contiguous patches which may be fragmented or reduced by	2.4.1
	the proposed action and any details on the percentage by which they will be reduced, particularly if the reduction in extent will mean that the remaining vegetation no longer meets listing threshold	3.1.1
Clay Pans of the Swan Coastal Plain TEC		
•	The FCT, quality and extent (in hectares) of the TEC which will either be directly or indirectly impacted by the proposed action	2.4.2
•	The total size of any larger contigous patches which may be fragmented or reduced by the proposed action and details on the percentage by which they will be reduced	2.4.2
•	A discussion on the potential and scope of impacts to the TEC from temporary changes to surface water or groundwater levels during construction	3.1.2
Forest Red-tailed Black Cockatoo, Baudin's Cockatoo and Carnaby's Cockatoo		
•	The total amount (in hectares) of habitat of each quality (low/degraded to very high) which will be cleared as part of the proposed action	2.5.1
•	The location and extent of any roosting habitat within the development envelope, or, if no such habitat is present, the location of any known night roosting habitat within a 10 km radius of the proposed action area	2.5.1
We	estern Ringtail Possum	



ADDITIONAL INFORMATION REQUIRED	SECTION ADDRESSING	
<ul> <li>Proposed timing of clearing of habitat (including in relation to possum breeding season)</li> </ul>	4.2.2	
<ul> <li>A discussion on the impacts of construction and operation of the road on the movement and dispersal of the species across the landscape</li> </ul>	3.2.2	
<ul> <li>A discussion on the likely impacts of the contraction of a larger population into a smaller areas</li> </ul>	3.2.2	
Any translocation proposals	2.5.2	
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain TEC		
<ul> <li>Details regarding the presence/absence of the Tuart TEC taking into account the diagnostic criteria and survey requirements included in the conservation advice</li> </ul>	2.4.4	
• If the TEC is present, the total area (in hectares) of TEC which will be directly impacted by the proposed action and the total area which may be indirectly impacted. Include information on the total size of any larger contiguous patches which may be fragmented or reduced by the proposed action and details on the percentage by which they will be reduced	2.4.4	
<ul> <li>The condition of any TEC which may be directly or indirectly impacted by the proposed action</li> </ul>	2.4.4	
Balston's Pygmy Perch		
<ul> <li>The department notes that this species is historically known from the Collie River.</li> <li>Please provide a discussion regarding the likelihood of the species occurring within the proposed action area, and if there is a chance it occurs, information regarding potential impacts from construction or changes in water quality including from siltation or eutrophication</li> </ul>	2.5.3 3.2.3	
Black-stripe Minnow		
<ul> <li>The total amount of habitat that will be directly impacted (including by clearing of habitat), or may be indirectly impacted (such as through hydrological changes), by the proposed action</li> </ul>	2.5.4 3.2.4	
Carter's Freshwater Mussel		
<ul> <li>An estimated population size for the mussel within the proposed action area and immediately adjacent areas</li> </ul>	2.5.5	
<ul> <li>Information about the timing of the proposed action in regards to spawning season and the impacts of disturbance of substrate and increased turbidity on the breeding cycle of the population</li> </ul>	2.5.5	
Details of mitigation activities, including any translocation proposals	4.2.5	
King Spider-Orchid, Tall Donkey Orchid, Dwarf Bee-Orchid, Glossy-leafed Hammer Orchid and Dwarf Hammer-Orchid		



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The Department notes that surveys have been undertaken for these orchid species, but also that they may not flower every year and that the site disturbance history may influence whether or not these species flower	2.6 y
Undertake follow up surveys, or provide sufficient evidence that they are not necessary, for <i>Caladenia huegelii</i> , <i>Diuris micrantha</i> and <i>Drakaea micrantha</i>	2.6
<ul> <li>If follow up surveys detect the species, provide information about population size and the number of individuals which may be directly or indirectly impacted by the proposed action as well as habitat quality</li> </ul>	2.6
• Provide a discussion regarding the disturbance history, particularly fire history, of the site in regards to the likely detectability of <i>Diuris drummondii</i>	2.6
Confirm that previous survey effort has adequately covered all areas of suitable habitat for each orchid species across the project area	2.6
Keighery's Eleocharis	
<ul> <li>The Department notes that Keighery's Eleocharis is known from a location along St Helena Road, east of the central area of the development envelope and approximatel 600 m north east from the easternmost extent of the Harris Road development area.</li> <li>Please provide information regarding the presence, quality and amount of suitable habitat for Keighery's Eleocharis</li> </ul>	2.6.6 y
<ul> <li>If suitable habitat is available, undertake surveys to confirm whether or not the species is present, and if so, provide information regarding the amount of habitat and number of individuals which may or are likely to be directly or indirectly impacted by the proposed action.</li> </ul>	2.6.6
Habitat Quality	
<ul> <li>A methodology suitable for each individual listed species or community must be used to assess habitat or vegetation quality, noting that the same scoring system must be used at both impact and offset sites, where relevant.</li> </ul>	<ul><li>2.4</li><li>2.5</li><li>2.6</li></ul>

## 3 - Assessment of impacts

The preliminary documentation must include an assessment of the potential direct and indirect impacts on protected matters that are likely to be present within the proposed action area and surrounds (impact assessment). The impacts of the proposed action should be considered at the broadest scope and all components of the proposed action should be considered, including any associated supporting infrastructure. The Department considers the proposed action may result in, but not be limited to, the following impacts:

- vegetation clearing;
- fragmentation of habitat or construction of barriers which impede fauna movement; and
- habitat degrading processes such as weed invasion and Phytophthora cinnamomi dieback;
- hydrological changes including changes in ground and surface water flow, increased turbidity, changes in water quality, and increased siltation or sedimentation;
- increased risk of vehicle strike.



ADDITION	SECTION ADDRESSING		
	<ul> <li>The impact assessment should identify and take into account the scale, duration and intensity of the proposed action</li> </ul>		
0	For each listed species and/or community, identify the quantum and quality of	0	
	habitat or vegetation likely to be impacted	3.2	
		3.3	
0	Identify the number of affected individuals and/or habitat features relevant to	2.4	
	each listed species	2.5	
		2.6	
0	Characterise the nature of impacts, including timing and whether the impact is	0	
	temporary or permanent	3.2	
		3.3	
0	Include an assessment of the likely direct, indirect and consequential on each	0	
	protected matter at a local and regional scale, with reference to the proposed action's potential impacts in the context of current and future development in	3.2	
	the locality and region	3.3	
0	Include a risk assessment of the potential impacts of the proposed action,	0	
	including whether the nature and/or scale of the potential impacts are unknown, unpredictable or irreversible, and what confidence is placed on the	3.2	
	predictions or relevant impacts	3.3	
0	Include details of any relevant policy guidelines, studies, surveys or	2.4	
	consultations with subject-matter experts which were not included in the original referral	2.5	
		2.6	
4 - Avoidar	nce and mitigation measures		
impacts to	While the original referral proposes a number of measures to avoid and mitigate potential impacts to protected matters, the Department considers further details are required: The preliminary documentation must include the following information:		
	olidated list of impact avoidance and mitigation measures, including any	3	
	additional to those proposed in the original referral, which will be implemented to reduce impacts on protected matters		
	<ul> <li>Justification of why the quantum of impact determined under Section 3 cannot be avoided or reduced</li> </ul>		
	of pre-clearance and clearance procedures to ensure that protected matters equately detected and managed to minimise impacts	4	



ADDITIONAL INFORMATION REQUIRED	SECTION ADDRESSING
<ul> <li>A description (including maps and imagery) of the location, boundaries and size of any proposed buffer areas and/or exclusion zones, and details on how these areas will be protected and maintained</li> </ul>	3 4 Appendix A
<ul> <li>Details of any rehabilitation measures to be implemented, including objectives, target species, timing of relevant stages, methodology, maintenance and monitoring</li> </ul>	4
<ul> <li>For each proposed mitigation measure, include:         <ul> <li>Performance and completion criteria</li> <li>Monitoring and reporting arrangements</li> <li>Potential risks/threats, including residual risks, and any measures that would be implemented to mitigate against these risks, and any proposed monitoring to confirm the effectiveness of these measures</li> </ul> </li> </ul>	4
Evidence of the effectiveness of avoidance and mitigation measures as discussed above, noting that the effectiveness of a particular measures is a reflection of the confidence in the ability of the measure to reduce the risk or threat, including examples of measures demonstrated success to achieve the desired avoidance or mitigation measures	
Proposed avoidance and mitigation measures must be discussed in terms of their expected effectiveness and cost.	
5 - Offsets In the event that there are significant impacts that cannot be avoided or mitigated, an offset for any predicted or potential residual significant impacts must be provided for each relevan matter. The preliminary documentation must demonstrate how any offset proposal:	
<ul> <li>meets the principals of the EPBC Act Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy (2012)</li> </ul>	5
<ul> <li>directly contributes to the ongoing viability of the relevant protected matter and will deliver an overall conservation outcome that improves or maintains the viability of the protected matter in the region, as compared to what is likely to have occurred under the status quo, i.e. if neither the proposed action nor the offset were to take place</li> </ul>	5
<ul> <li>compensates for the proposed impact over the entire duration of the impact (i.e. should impacts be in perpetuity, the offsets must also be delivered in perpetuity).</li> </ul>	5
6 - Economic and social matters	
The preliminary documentation must provide information about the expected economic and the proposed action (both positive and negative). This should include, but not necessarily be following:	•

• an indication of the financial investment the project represents

6.1



ADDIT	IONAL INFORMATION REQUIRED	SECTION ADDRESSING
•	<ul> <li>consideration of costs (e.g. disruption to existing community infrastructure or environmental features) and benefits (e.g. increased housing or employment) of the proposed action, including the basis of any estimations of costs and/or benefits</li> </ul>	6.2
•	details of any public and/or Indigenous stakeholder consultation activities, including the outcomes of those consultations	6.3
•	consideration of different scales of economic and/or social impacts where relevant (e.g. local versus national).	6.4
7 - Ecologically sustainable development		
•	The preliminary documentation should include a discussion of how the proposed action meets the principals of ecologically sustainable development, as defined under s 3A of the EPBC Act	7
8 - Env	rironmental record of the person proposing to take the action	
•	The preliminary documentation must include details of any proceedings under the Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against the person proposing to take the action. If the person proposing to take the action is a corporation, this extends to the executive officers of the corporation as well and details of the corporation's environmental policy and planning framework must be included	8
9 - Oth	ner approvals and conditions	
	eliminary documentation must include information on any other requirements for applions that apply, or that are likely to apply, to the proposed action. This must include:	proval or
•	a description of any approval that has been obtained or is require to be obtained from a State, Territory or Commonwealth agency or authority (other than an approval under the EPBC Act), including any conditions that apply (or are reasonably expected to apply) to the action	9
•	The preliminary documentation must include a description of the monitoring, enforcement and review procedures that apply, or are proposed to apply, to the action	9
Inform	nation requirements for EPBC Act Offset Proposals	
•	oposed offset package must include, but not be limited to, the following: Details of th package, including:	e proposed dire
•	a description of the proposed offset site(s) including location, size, condition and relevant ecological/species habitat features, landscape context and cadastre boundaries of the offset site(s) (supported by mapping).	
•	evidence of the presence of, or usage by, relevant protected matter(s) on, or adjacent to the offset site(s), and the presence and quality of habitat for protected matter(s) on the offset site.	



ADDITIONAL INFORMATION REQUIRED	SECTION ADDRESSING
<ul> <li>these details should be based on recent site surveys or analysis of available contemporary site data, reference to research, studies or other publications relevant to the protected matter(s) and include reference to the site survey and habitat assessment methodology used.</li> </ul>	
<ul> <li>current and likely future tenure of the proposed offset site and details ofhow the offset site will be legally secured for the full duration of the impact.</li> </ul>	
Details and justification demonstrating how the proposed direct offset package will maintain or improve the viability of the protected matter(s) consistent with the EPBC Environmental Offsets Policy and EPBC Act Offsets Assessment Guide. This includes:	
<ul> <li>offset completion criteria (i.e. environmental outcomes) to be achieved, and reasoning for these in reference to relevant statutory recovery plans, conservation advices, and threat abatement plans (e.g. within 15 years of commencement of the action, 85% of the offset site contains x density of habitat trees).</li> </ul>	
<ul> <li>milestones to demonstrate adequate progress towards achieving the offset completion criteria (e.g. within 10 years of commencement of the action the proponent must increase, by at least 20 per cent, the number of available habitat trees at the offset site).</li> </ul>	
<ul> <li>specific environmental management activities and mitigation measures that will attain and maintain the completion criteria, including the management of threats to relevant species and the timing of actions. (e.g. complete the planting, and ensure a survival rate of 90%, of at least 15,000 sapling or tube stock (or equivalent) food tree species within 5 years following commencement of the action; reduce the invasive weed coverage on the offset site to 5% within 5 years following commencement of the action; implement an annual non-native feral pest control program over a 10 year period).</li> </ul>	
<ul> <li>baseline survey information to determine the presence of relevant protected matters and the extent and quality of the respective habitat(s) at the offset site(s) in accordance with the Department's survey guidelines, or using a scientifically robust and repeatable methodology.</li> <li>a monitoring and corrective action program to measure the success of the environmental outcomes, which must include performance indicators, milestone outcomes, monitoring requirements, trigger values, corrective measures, and identified roles and responsibilities in accordance with the requirements in section 3 of the Department's Environmental Management Plan Guidelines:</li> <li><a href="https://www.environment.gov.au/epbc/publications/environmental-management-plan-guidelines">https://www.environment.gov.au/epbc/publications/environmental-management-plan-guidelines</a>.</li> </ul>	
<ul> <li>evidence of how the proposed offset completion criteria for the proposed offset will be achieved and maintained over the duration of the impact.</li> </ul>	



ADDITIONAL I	NFORMATION REQUIRED	SECTION ADDRESSING
-	cation of how the proposed offset package meets the requirements of PBC Act Offsets Assessment Guide, in particular:	
0	evidence of the likely effectiveness of any proposed management actions (i.e. rehabilitation/restoration/re-creation of habitat) to support quality improvement and/or maintenance of the proposed offset site(s) for the relevant protected matter(s).	
0	the time over which management actions will deliver the proposed improvement or maintenance of habitat quality for the relevant protected matter(s).	
0	the risk of damage, degradation or destruction to any proposed offset site(s), in the absence of any formal protection and/or management, over a foreseeable time period (20 years). This information is important in determining the comparative benefit of a proposed offset.	
0	evidence to support 'confidence in results' for averted loss and quality scores.	
proponent to details of site	Note: where increases in habitat quality of the offset site are being proposed by the proponent to meet the direct offset requirements, the Department will require specific details of site condition, site context or stocking rate measures to be implemented commensurate to the expected level of habitat improvement	
Indirect offset	5	
significant imp	es where direct offsets cannot compensate for 100 per cent of a residual act, please consult the EPBC Environmental Offsets Policy and engage with at your earliest convenience.	