

ATTACHMENT B

SERIOUS AND IRREVERSIBLE IMPACTS (SII) – BCS ADVICE ON SII ENTITIES

A current list of SII entities is available on the DCCEEW website: <https://www2.environment.nsw.gov.au/topics/animals-and-plants/biodiversity-offsets-scheme/clear-and-develop-land/serious-irreversible-impacts>

1. SII Entity: Maroota Sands Swamp Forest

	Steps	BCS Recommendation
1	Identify relevant entities at risk of SII	Maroota Sands Swamp Forest (MSSF) is listed as an Endangered Ecological Community under the BC Act, refer: https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/nsw-threatened-species-scientific-committee/determinations/final-determinations/1996-1999/maroota-sands-swamp-forest-endangered-ecological-community-listing MSSF is listed as a SII entity under principle 3 in section 6.7 of the Biodiversity Conservation Regulation 2017 (BC Regulation) which states “An impact is to be regarded as serious and irreversible if it is likely to contribute significantly to the risk of a threatened species or ecological community becoming extinct because...(c) it is an impact on the habitat of the species or ecological community that is currently observed, estimated, inferred or reasonably suspected to have a very small population size”. This principle is defined by the SII entity being known from less than or equal to 3 locations. In the case of MSSF, it is only known to occur in this one location. The BDAR has not included sufficient information to determine the extent and nature of SII impacts to MSSF which is an entity at risk of extinction. Refer to Attachment A, Issue 2. Therefore, the extent of the SII entity either within the development footprint or within areas of indirect impacts remains unclear.
2	Evaluation of the current extinction risk of the impacted entities	The <i>Guidance to assist a decision-maker to determine a serious and irreversible impact</i> (DPIE, 2020) (SII Guidance) outlines the criteria to be used to identify potential SII entities in Appendix A. Under Principle 3 it states that “Any impacts on the entities that meet this principle will likely lead to, or greatly increase the risk of, extinction should one or more of the known remaining locations be impacted” and “location, means a geographically or ecologically distinct area in which a single threatening event can rapidly affect all individuals of the taxon present”. The MSSF immediately adjacent to the subject land is the only known location of this vegetation community. The BDAR estimates the extent of the community in existence to be only 1.6 ha. Even though BCS considers this to be an underestimate of the extent of the community on the site, it is still clear that this TEC is of limited extent, only occurs in one location and is at risk of extinction. These characteristics leave the community particularly vulnerable should any of the risk factors resulting from the proposed works be realised. The likely outcome of any impacts occurring is that the TEC would become extinct.

	Steps	BCS Recommendation
		The accredited assessor has not evaluated the current extinction risk for MSSF which could result from the proposal particularly given the assessor has not considered potential impacts to MSSF from changes in the hydrological regime and from changes to abiotic factors. BCS recommends the accredited assessor: • justify the extent of the MSSF mapping • assess any direct and indirect impacts informed by a thorough understanding of groundwater and surface water changes.
3	Detail measures taken to avoid impacts on the entity	The BDAR states that there will be no impacts to this TEC. BCS cannot confirm this given the BDAR does not include adequate detail on how the assessor has identified the community and the extent of its occurrence. The BDAR also does not clearly detail changes to abiotic factors or other concerns including those relating to changes in hydrological processes and existing impacts from dam leakages upstream. BCS is unclear whether there are any avoidance measures that could be imposed on the application that would remove the risk to the MSSF.
4	Evaluate the impacts from the proposal	The BDAR suggests there are no direct impacts proposed to the MSSF. However, BCS does not believe the risks to this community have been adequately assessed. There is the potential for continuing decline in the spatial extent and risks to a variety of environmental qualities appropriate to characteristic biota of the ecological community as described within Principle 3 in Appendix A to the SAI Guidance. Please refer above for the range of issues with the BDAR. Given the information available, BCS considers that this proposal is likely to increase the extinction risk of the MSSF which is the only known location of this TEC. As noted in Attachment A, Issue 2, BCS recommends that the consent authority seeks specialist advice on the impacts to the MSSF.
5	Provide advice on whether the proposal is likely or unlikely to result in SAI	The proposal and any associated impacts is likely to result in SAI for the MSSF as it is the only known location of this ecological community and the proposal would be likely to result in extinction of the TEC. There are no options for additional and appropriate measures given this location is the only known occurrence of this TEC.
Other Recommendations/Comments		
1	BCS advised DPE on 12 December 2022 that: “EHG is concerned whether the project can comply with the requirements of the <i>Biodiversity Conservation Act 2016</i> (BC Act). Unintended or incidental impacts to the groundwater dependant ecosystem (GDE) are considered unlikely to be able to meet the objectives of the BC	

	Steps	BCS Recommendation
	Act nor section 10(3) of the Biodiversity Assessment Method (BAM) which states, “The BAM sets a standard that will result in no net loss of biodiversity values in NSW...”. Any impacts to the only known location of the Maroota Sands Swamp Forest Threatened Ecological Community (TEC) would not be able to be offset in another location.” In this regard, given the proposal is upslope of the MSSF it is unlikely that the proposal will not impacts the MSSF, as stated in the BDAR, and therefore the offsetting requirements of the BAM and the purposes of the BC Act are unlikely to be satisfied if the proposal were approved. In addition, the proposed mitigation measures are likely to trigger impacts to biodiversity values that would not have otherwise occurred under a ‘do nothing’ scenario. The Biodiversity RtS suggests that a Trigger Action Response Plan be provided which would be acted upon if monitoring shows any changes to the MSSF. BCS suggests that monitoring this community is in itself a key threatening process which is likely to introduce pathogens, weeds and general disturbance which would otherwise not occur.	

2. SAI Entity: Broad-headed Snake

	Steps	BCS Recommendation
1	Identify relevant entities at risk of SAI	The Broad-headed Snake (<i>Hoplocephalus bungaroides</i>) is listed as an endangered species under the BC Act (https://threatenedspecies.bionet.nsw.gov.au/profile?id=10413) and listed as a SAI entity under the following principle in section 6.7 of the BC Regulation: • Principle 4 – The impacted species or ecological community is unlikely to respond to measures to improve its habitat and vegetation integrity and therefore its members are not replaceable. While the proponent did not observe the species on the subject land in its surveys, there are habitat features present on the site making it suitable habitat for the species. The development will indirectly affect 22.67 ha and directly remove 21.66 ha of habitat for Broad-headed Snake. The BDAR (p.219) states “it is considered that fragmentation and isolation will occur due to the Broad-headed Snake’s high site fidelity and short dispersal distance”. However, “it is expected that the remainder of land within the subject land...and lands to the west and north contain suitable habitat for the local population of Broad-headed Snake to persist”. Information regarding the impacts of the proposal to the Broad-headed Snake have been included within the BDAR.
2	Evaluation of the current extinction risk of the impacted entities	The proposed development will change the foraging and breeding habitat available to the local population by directly removing vegetation and rocky habitat, and causing indirect impacts as a result of potential habitat disturbance. The total area of direct and indirect impacts is 44.33 ha which includes 22.67 ha of indirect impacts and 21.66 ha of direct impacts.

	Steps	BCS Recommendation
		The BDAR (p.220) states: “In terms of isolation of the population, the area of habitat adjacent to the direct and indirect impact areas will remain connected to the core bushland to the north, north west and west of the development site. Therefore, movement to these core areas will not be impeded or cut off despite the direct removal of 21.66 ha of vegetation. Areas which will become fragmented (to the east and south) are not considered to be favourable habitat for Broad-headed Snake.” This is not correct as the species has a discrete home range and short dispersal distances, which means the remaining habitat within the subject land is considered suitable for occupation of the local population, even once the development has taken place. BCS estimates that approximately 10 home ranges will be affected by the proposal's direct and indirect impacts. For those individuals remaining in the subject land, breeding, foraging, dispersal and movement can still occur as 109.74 ha of suitable rocky habitat will be retained in the subject land and connectivity to large areas of habitat to the west and north of the subject land will be retained. BCS estimates that approximately 30 home ranges will remain in the remaining portions of the subject land.
3	Detail measures taken to avoid impacts on the entity	Section 2.1 of the BDAR (p.167) states “due to the location of the Hawkesbury Sandstone deposit, it has not been feasible to locate the project in an area which wholly avoids impacts to vegetation and habitat (including for the Broad-headed Snake). It is therefore acknowledged that this project has considerable impact on biodiversity values.” The BDAR contains a discussion on the nature of the habitat used by this species. While there are positives to the localised habitat needs for this species as discussed above, the extent of the impacts to this species are still considerable given it is listed as endangered. The proponent has made minimal effort to avoid impacts to this SAI entity and these efforts do not reduce the impacts to a level where they would not be considered significant.
4	Evaluate the impacts from the proposal	The proposal would involve removing approximately 21.66 ha of habitat for Broad-headed Snake within the southern portion of the subject land. It is expected that 109.74ha of habitat and approximately 30 home ranges for Broad-headed Snake would persist in land local on or close to the subject land. While habitat would remain for this species in the locality, the extent of impacts from the proposal are significant given the species is listed as endangered. Removing a significant amount of habitat would contribute to the extinction risk of the species.
5	Provide advice on whether the proposal is likely or unlikely to result in SAI	The BDAR acknowledges that the proposal would result in considerable impacts to biodiversity values. The impacts to biodiversity values includes significant impacts to Broad-headed Snake habitat. The extent of the impacts are likely to contribute to the extinction of the species and result in a SAI.

	Steps	BCS Recommendation
		The proposal should further avoid impacts to the Broad-headed Snake habitat to reduce or remove the likelihood of SAIL. The proposal does not include any proposed additional and appropriate measures.
Other Recommendations/Comments		
1	N/A	

3. SAIL Entity: Shale Sandstone Transition Forest

	Steps	BCS Recommendation
1	Identify relevant entities at risk of SAIL	Shale Sandstone Transition Forest (SSTF) is listed as a critically endangered ecological community under the BC Act (https://threatenedspecies.bionet.nsw.gov.au/profile?id=10755) and is listed as a SAIL entity under the following principles in section 6.7 of the BC Regulation: • Principle 2 – The impact will further reduce the population size of the species or ecological community that is currently observed, estimated, inferred or reasonably suspected to have a very small population size. • Principle 3 – The impact is made on the habitat of the species or ecological community that is currently observed, estimated, inferred or reasonably suspected to have a very limited geographic distribution. The updated BDAR has not responded to BCS's concerns about identification of NSW-listed SSTF on the site. Please refer to discussions at Attachment A, Issue 4. The BDAR does not include the information required under the BAM for impacts to SAIL for this TEC.
2	Evaluation of the current extinction risk of the impacted entities	The accredited assessor has not applied the Guidelines for interpreting listing criteria for species, populations and ecological communities under the NSW Threatened Species Conservation Act correctly to identify SSTF as occurring within the subject land in accordance with the Final Determination under the BC Act. As a result, the accredited assessor has not evaluated the current extinction risk of SSTF which is listed as a SAIL entity.
3	Detail measures taken to avoid impacts on the entity	Section 2.1 of the BDAR (p.167) states “due to the location of the Hawkesbury Sandstone deposit, it has not been feasible to locate the project in an area which wholly avoids impacts to vegetation and habitat. It is therefore acknowledged that this project has considerable impact on biodiversity values.” The proponent has made some small changes to the footprint over time as detailed in Table 34 of the BDAR (pp.168-170) though even after these changes the impacts are still significant.

	Steps	BCS Recommendation
		The avoid and minimise measures the proponent has proposed are not enough to reduce the significance of impacts to this community. The impacts are extensive across the subject land and the local occurrence.
4	Evaluate the impacts from the proposal	The impacts of the proposal to SSTF are extensive across the subject land and the local occurrence, which would further contribute to SAll principles 2 and 3 and so BCS considers the proposal is likely to result in SAll to SSTF.
5	Provide advice on whether the proposal is likely or unlikely to result in SAll	BCS considers the proposal would further contribute to the SAll principles 2 and 3 and is likely to result in SAll to SSTF. BCS recommends the proposal should further avoid the impacts to reduce or remove the likelihood of SAll to SSTF. The proponent has not included any additional and appropriate measures for SSTF as part of the application.
Other Recommendations/Comments		
1	NIL	

ATTACHMENT C

BILATERAL ASSESSMENT

Table 2. Issues relating to Matters of National Environmental Significance (MNES)

Issue 6.	Jacksons Swamp has not been identified as being downstream of the proposal which is vulnerable to increased sedimentation, nutrients, weeds and pathogens as a result of the proposal
Biodiversity RtS – SE-39200859, p.12 Section 1.6, pp.49-51	Section 2.3.5 of the BDAR (pp.192-194) includes information relating to indirect impacts to Jacksons Swamp and mitigation measures have been proposed within the Water Assessment undertaken by EMM (2020). Mitigation measures are not a risk-free strategy for controlling impacts and those related to erosion control often have intermittent failures in functioning. Unless matters are adequately addressed, BCS is concerned that the proposed will have a significant impact on Matters of National Environmental Significance (MNES).
Recommend	A specialist in GDEs be engaged to assess the adequacy of the reporting and interpret any risk of impacts to Jacksons Swamp. Monitoring for erosion control throughout the operation of the development could assist in reducing failure of the mitigation measures but would not completely control the risks.
<i>Recommended Conditions of Approval</i>	Any Conditions of Approval (CoA) must include preparation of an erosion and sedimentation control plan which provides for monitoring of erosion and sedimentation control measures for the life of the development.
Issue 7.	Explore all feasible alternatives and try to avoid and minimise impacts on EPBC Act listed threatened species and communities
Biodiversity RtS SE-39200859, p.14-15	Fourteen Matters of National Environmental Significance (MNES) under the EPBC Act were identified as having potential to be adversely affected by the proposed works. The EIS/BDAR includes relevant information on the identification of all EPBC Act listed threatened species and communities on the site, however significant impacts are expected for a portion of them including SSTF and the Dural Land Snail. A SAIL assessment has not been undertaken for SSTF which is a requirement of the BAM when it has been identified on the subject land. Impacts to matters of MNES are significant and the efforts to avoid and minimise these impacts have not been adequately undertaken nor justified. BCS is concerned that the proposal will have a significant impact on MNES.
Recommend	The BDAR should be updated in accordance with the BAM to include a SAIL assessment for SSTF. The application be amended to avoid and minimise impacts to EPBC Act threatened entities found on the site in accordance with the BAM.

<i>Recommended Conditions of Approval</i>	Not able to be addressed through Conditions of Approval (CoA).
Issue 8.	Direct and indirect impacts to <i>Kunzea rupestris</i>
Biodiversity RtS SE-39200859, p.16 Section 1.11, pp.78-79	0.81 ha of habitat for <i>Kunzea rupestris</i> has been included within areas of direct impact for the proposal. Additional areas have been identified outside of the development footprint due to the potential for indirect impacts to this species. Permanent fencing is proposed to try to mitigate indirect impacts to this species. Unless matters are adequately addressed, BCS is concerned that the proposed will have a significant impact on MNES.
Recommend	The BDAR is required to be updated in accordance with the BAM. The application should be amended to avoid and minimise impacts to threatened entities found on the site in accordance with the BAM.
<i>Recommended Conditions of Approval</i>	N/A

TABLE 1: BCS OFFICER PROJECT ADVICE TO DPHI ON EPBC ACT LISTED THREATENED SPECIES AND COMMUNITIES

Requirement	Information	Reference (BAM/BLA ¹)
Background & Description of Action	Does the EIS/BDAR²: ☐ clearly show how operational and construction footprints, including clearing boundaries, structures to be built and elements of the action are situated with regard to MNES ☒ depict stages and timing of the action that may impact on MNES ☐ provide a map(s) of the subject land boundary showing the final proposal/disturbance footprint with respect to location of MNES, including GIS shape files Include references to where this detail is provided.	BAM Chapters 3, 4, 5 and 8
	Provide advice on the adequacy of the background and action description with respect to MNES and identify any recommended additional information requirements: BCS questions the extent of the direct and indirect impacts including whether additional reports required by other agencies would change the extent of impacts on biodiversity values. BCS considers there is an underestimation in the extent of direct and indirect impacts. The BDAR outlines the initial extraction works including monitoring during and post operations and the proposed grazing activities post mining. BSC considers the impacts to be underestimated. Maps have been provided within the BDAR, however, BCS has concerns regarding the accuracy. Shapefiles have been provided in email and can be forwarded if requested.	
Landscape Context of the MNES	Provide advice on the adequacy of the landscape context information and identify any additional information requirements: Landscape context information within the BDAR was adequate except in the understanding of how the landscape context impacts on the estimation of the credit obligation. For example, the estimation of the extent of indirect impacts could be inaccurate because the justification does not take into consideration the topographic context.	BAM Section 3.1 BLA clause 7.4

¹ Bilateral agreement (BLA) made under section 45 of the EPBC Act, including Amending Agreement No. 1 (2020)

² Or revisions of the BDAR and associated documentation made as a result of previous reviews or project changes post-exhibition.

Requirement	Information	Reference (BAM/BLA ¹)
EPBC Act Listed Threatened Species & Communities	Verify that the EIS/BDAR includes relevant information on the identification of all EPBC Act listed threatened species and communities on the site or in the vicinity³ via: ☐ field based survey effort ☒ published peer reviewed literature ☒ local data ☐ supporting databases (such as the NSW BioNet Vegetation Classification, NSW BioNet Threatened Biodiversity Data Collection, NSW BioNet Atlas, Commonwealth Species Profile and Threats Database search results) ☒ Verify that the EIS/BDAR includes appropriate mapping of all EPBC Act listed threatened species and communities in accordance with the relevant Commonwealth Listing Advice. The EIS/BDAR should include important populations and critical habitat as defined in Approved Listing Advice, Approved Conservation Advice and Recovery Action Plans.	BAM Chapters 4 and 5
	Provide advice on the adequacy of the identification methods and mapping information / any additional information requirements: Adequate	
	Confirm that all EPBC Act listed threatened species and communities that occur on the subject land, or in the vicinity, have been identified in the BDAR/EIS including those that are ecosystem credit species. If any species and communities identified in the referral documentation (provided by DAWE) have been ruled out because they don't occur on or near the site, verify that there is robust analysis and justification for why these species can be ruled out. Provide advice on whether there are any other MNES species or communities that are missing from the assessment based on BCS knowledge and experience.	
	Advise whether there is appropriate justification and supporting evidence for the addition and/or exclusion of any EPBC Act listed threatened species and/or communities from the list (if applicable): Adequate	

³ On land to which impacts may extend

Requirement	Information	Reference (BAM/BLA ¹)
Avoidance, Minimisation, Mitigation & Management	Verify that the EIS/BDAR demonstrates all feasible alternatives and efforts to avoid and minimise impacts on EPBC Act listed threatened species and communities (including direct, indirect and prescribed impacts) including an analysis of alternative: ☐ designs and engineering solutions ☐ modes or technologies ☐ routes and locations of facilities ☐ sites within the subject site ☐ Verify that the EIS/BDAR identifies any other site constraints in determining the location and design of the proposal (such as bushfire protection requirements, flood planning levels, servicing constraints, etc). Verify that the EIS/BDAR provides feasible measures to mitigate and/or manage impacts on EPBC Act listed threatened species and communities (including direct, indirect and prescribed impacts) including: ☐ techniques, timing, frequency and responsibility ☐ identify measures for which there is risk of failure ☐ evaluate the risk and consequence of any residual impacts ☐ any adaptive management strategy proposed to monitor and respond to impacts.	BAM Chapters 6, 7 and 8 BLA clause 7.1
	Provide advice on whether all feasible impact avoidance, minimisation, mitigation and management measures have been considered and are adequately justified: BCS has concerns that all feasible alternatives and efforts to avoid and minimise impacts on EPBC Act listed Threatened species and communities have not been adequately undertaken. There appears to be a serious underestimate of direct and indirect impacts to the surrounding lands from construction, ongoing impacts from surface water flows laden with weeds, pathogens and nutrients, uncertain risks from changes to groundwater and surface water flows, and increased impacts from monitoring of impacts (both vegetation and groundwater monitoring) which will increase human-access to sensitive threatened species and communities and their habitats.	

Requirement	Information	Reference (BAM/BLA ¹)
Impact Assessment	Verify that the EIS/BDAR: ☐ identifies the residual adverse impacts likely to occur to each EPBC Act listed threatened species and/or community after the proposed avoidance and mitigation measures are taken into account ☐ provides adequate justification and evidence for the predicted level of impact, with reference to the: • Commonwealth's Significant Impact Guideline: https://www.environment.gov.au/system/files/resources/42f84df4-720b-4dcf-b262-48679a3aba58/files/nes-guidelines_1.pdf • DPIE Guidance to Assist a Decision-Maker to Determine a Serious and Irreversible Impact (SII): (https://www.environment.gov.au/system/files/resources/42f84df4-720b-4dcf-b262-48679a3aba58/files/nes-guidelines_1.pdf)	BAM Chapters 8 and 9 BLA clauses 6.2(b)(i)-(ii) and 7.1
	Complete the following information for each EPBC Act listed threatened species and/or community (add/remove rows as necessary): • EPBC Act listed threatened species and/or community • nature and consequences of impacts (i.e. direct and indirect) • duration of impact (e.g. construction, operation, life of project) • quantum of impact • consequences of impacts on the species, the population and / or extent of the community at local, state and national scales Confirm the level of predicted impact (cross appropriate): ☒ high risk of impact (requiring offsets)[#] or SII ☐ Low risk of impact (not requiring offsets) [#] For purposes of EPBC approval, as a minimum, significant adverse residual impacts must be offset (significant impact can be evaluated with reference to the significance impact guidelines) Provide advice on whether adequate justification and evidence is provided for species and communities that have been identified as being at low risk of impact.	

Requirement	Information	Reference (BAM/BLA ¹)
	Nine (9) EPBC Act listed species and communities are likely to be directly and indirectly impacted by the project, during construction and operation of the project (refer Table 2 below). The quantum of impacts is set out in section 2.4 of the BDAR, though as stated above BCS considers the impact assessment is likely to be an underestimate. All impacts are planned to be offset with the note that concern is raised regarding the accuracy of the estimation of impacts. The BDAR states that there are no areas within the direct impact area that do not require offsets. BCS understands that Commonwealth DCCEE are particularly concerned about impacts to SSTF and the Dural Land Snail.	
Offsets	Verify that the EIS/BDAR: ☐ identifies any MNES that haven't been offset using the BAM ☒ identifies how impacts requiring offsets correlate to MNES impacts ☐ identifies the plant community types (PCTs) requiring offset and the number and type of ecosystem credits required for impacts to MNES ☐ identifies threatened species requiring offset and the number of species credits required for impacts to MNES ☐ correctly uses the BAM (and BAM calculator) to identify the number and class of biodiversity credits that need to be offset to achieve a standard of 'no net loss' of biodiversity ☐ identifies if ecological rehabilitation and/or biodiversity conservation actions are proposed for offsetting ☐ if known, identifies any other offsetting approach proposed, such as land-based offsets, retiring credits by payment into the Biodiversity Conservation Fund and/or through supplementary measures[#]. [#] In accordance with the BAM there is no longer a requirement to define the offsetting approach at EIS stage. Complete the Impacts and Offsets Summary table below (Table 2)	BAM Chapter 10 BLA clauses 7.1 and 7.2

Requirement	Information	Reference (BAM/BLA ¹)
	Provide advice on the adequacy of the proposed offsets in meeting the requirements of the BAM: The updated BDAR (v8) has incorporated additional MNES in accordance with the list previously provided. The species have either been justified for removal or added to the assessment. PCTs and species included in the BDAR have been provided with an offset estimate, however, given the above concerns with the identification of the direct and indirect impacts, and adequacy of avoid and minimise measures, BCS has concerns that the offsets are inadequate. Rehabilitation and monitoring efforts have been identified within the BDAR. However, as stated above, these efforts are likely to increase the risks to already sensitive threatened species and communities and their habitats from increase in human traffic to these locations. Shale Sandstone Transition Forest has been identified as an EPBC Threatened Ecological Community. The BDAR has not identified it as a NSW BC Act listed TEC. The offsets proposed for the PCT identified as the EPBC listed SSTF have not been identified as a TEC, nor has an assessment of Serious and Irreversible Impacts been undertaken in accordance with the NSW Biodiversity Assessment Method. In this regard, assessments of impacts to Biodiversity Values are incomplete and the type of PCT identified may not be the appropriate type given it is not identified as a TEC.	
Other Considerations	Verify if any relevant Commonwealth guidelines and policy statements are applicable to the action and listed threatened species and/or community, including but not limited to: ☐ International environmental obligations ☒ Recovery Plans ☒ Approved Conservation Advice ☒ Threat Abatement Plans <i>The relevant Commonwealth guidelines and policy statements for each species and community are available at: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl</i>	BLA clauses 6.2(b)(iv), 7.2(c), 7.3 and 7.4
	For each EPBC Act listed threatened species and/or community, provide advice on whether the assessment has been adequately informed by applicable Commonwealth guidelines and/or policy statements. For example, the interaction between the proposed action and important populations or critical habitat identified in policy documents and/or	

Requirement	Information	Reference (BAM/BLA ¹)
	the interaction between the proposed action and threatening processes or recommended conservation actions outlined in Commonwealth policies and plans. The assessment has not been adequately informed by applicable Commonwealth Guidelines and/or policy statements. If the proponent resubmits an adequate assessment, BCS will review the assessment to determine if it has been adequately informed by applicable Commonwealth guidelines and policy statements. As mentioned above, the attempts at avoid and minimise have not successfully conserved significant threatened species, communities and their habitats across the site. In this regard, impacts to MNES including the SSTF and the Dural Land Snail habitats are significant. There is a high likelihood of total loss of SSTF from the subject land once both direct and indirect impacts are considered. This is the loss of the local occurrence of this Threatened Ecological Community. Mapped occurrences of this community are sparse in this locality so its loss may lead to fragmentation and local extinction. The BDAR concludes that there is likely to be a significant impact on this entity due to the fragmentation of the TEC, removal of habitat critical to its survival, destruction of abiotic factors necessary for the ecological community's survival and will interfere with the recovery of the entity. Similarly, the habitat of the Dural Land Snail occurs in those locations where there is a shale influence. The action proposed is likely to result in the death of several individuals of this species despite the pre-clearance survey mitigation measure. The BDAR concludes that there is likely to be a significant impact on this species due to the removal of habitat critical to the survival of the species and will interfere with the recovery of the species. Note that there are direct impacts to <i>Kunzea rupestris</i> including approximately 100 individuals, but that there are also additional plants of this species outside of the direct impact area. Indirect impacts have been underestimated in the assessment and further impacts to the individuals outside of the direct impact area are likely.	
Recommended Conditions	Provide advice on any recommended conditions and reasons for imposing the conditions: No recommended conditions at this stage as further assessment is required.	BLA clause 6.2(c)(iii)

TABLE 2: MNES IMPACT AND OFFSET SUMMARY

Threatened Species / Community listed under EPBC Act	PCTs associated with the ecosystem credit species / ecological community (if applicable)	Area of Impact (ha)	Credits Required	Offsetting Approach	Reference (EIS, BDAR)
<i>Acacia bynoeana</i> Bynoe's Wattle	PCT 1328	1.66	51	Requirement to purchase/retire credits	BDAR, Table 54
<i>Calyptorhynchus lathami</i> Glossy Black Cockatoo	PCT 1081 PCT 1181 PCT 1083 PCT 1328	42.03	1182	Requirement to purchase/retire credits	BDAR, Table 54
<i>Chalinolobus dwyeri</i> Large-eared Pied Bat	PCT 1081 PCT 1083 PCT 1328 PCT 1128	43.60	1830	Requirement to purchase/ retire credits	BDAR, Table 54
<i>Heleioporus australiacus</i> Giant Burrowing Frog	PCT 1081 PCT 1181 PCT 1083 PCT 1328	43.60	915	Requirement to purchase/retire credits	BDAR, Table 54
<i>Hoplocephalus bungaroides</i> Broad-headed Snake	PCT 1181 PCT 1083 PCT 1328	21.66	916	Requirement to purchase/retire credits	BDAR, Table 54
<i>Kunzea rupestris</i>	PCT 1083	0.81	20	Requirement to purchase/retire credits	BDAR, Table 54

<i>Pimelea curviflora</i> var. <i>curviflora</i>	PCT 1081	0.91	25	Requirement to purchase/retire credits	BDAR, Table 54
<i>Pommerhelix</i> <i>duralensis</i> Dural Land Snail	PCT 1081	21.94	609	Requirement to purchase/retire credits	BDAR, Table 54
Shale Sandstone Transition Forest	PCT 1081	21.94 (Direct) 5.13 (Indirect)	458 27	Requirement to purchase/retire credits	BDAR, Table 53

END OF SUBMISSION