Relevant tables to support the Heatley HVA EPBC referral.

Table 1: Species occurrence within the project area

Common Name	Scientific Name	EPBC Act Status	Potential to Occur	Likelihood of Occurrence
Bare-rumped Sheathtail Bat	*Saccolaimus saccolaimus nudicluniatus*	Vulnerable	Foraging, feeding or roosting behaviour may occur in the area	**Known**. Echolocation call detection confirmed the presence of individuals of this species in the project area and analysis of the call data suggest the area is being utilised by foraging individuals rather than roosting populations.
Black-throated Finch	*Poephila cincta*	Endangered	Species habitat may occur in the area	**Unlikely**. Suitable habitat within the project area is lacking and no BTF individuals have been recorded in the project area.

Table 2: Vegetation communities within the project area

RE	VM Act Status	*Environmental Protection Act 1994* Status	Short Description	Disturbance Area (ha)*
11.3.30	Least Concern	No Concern at Present	*Eucalyptus crebra*, *Corymbia dallachiana* woodland on alluvial plains	116
11.3.35	Least Concern	No Concern at Present	*Eucalyptus platyphylla*, *Corymbia clarksoniana* woodland on alluvial plains	116

*Based on each RE comprising on average 50% of the clearing area.

Table 3. Black-throated Finch - Assessment of Significant Impact

Will the proposed works	Response
Lead to a long term decrease in the size of an important population	There is no known important population within the project area and there are no available records of the species in the region. There is potential for a very minor loss of potential foraging habitat; however, this habitat is considered of low quality due to the lack perennial grass species the BTF is known to feed on. This proposed activity will not lead to a long term decrease in the size of an important population of the species.
Reduce the area of occupancy of an important population?	There is no known important population of the BTF within the area and there are no available records of the species in the region. Key habitats will be unaffected and the area of occupancy of any population that may occur in the area will not be reduced.
Fragment an existing important population into two or more populations?	There is no known important population of the BTF within the area and there are no available records of the species in the region. The species naturally occurs as a very sparsely distributed population.
Adversely affect habitat critical to the survival of a species?	There is no known important population of the BTF within the area and there are no available records of the species in the region. The proposed activity does not include any habitat areas that can be considered critical to the survival of the BTF.
Disrupt the breeding cycle of an important population?	There is no known important population of the BTF within the area and there are no available records of the species in the region. The proposed clearing area does not contain habitat that is critical to the breeding cycle of an important population.
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to be in decline?	There is no known important population of the BTF within the area and there are no available records of the species in the region. The proposed Project is not considered to contain key habitat for the species such that its modification, destruction, removal or isolation, or a decrease in its availability or quality would result in overall species decline. The Project area is surrounded by largely connected habitat.
Result in invasive species that are harmful to a vulnerable species being established in the vulnerable species habitat?	The proposed development is not likely to result in the introduction of invasive species that could lead to a decrease in habitat availability. Application of weed and pest management measures that are currently implemented on Byrne Valley Station will reduce the possibility of weed and pest invasion.

Will the proposed works	Response
Introduce disease that may cause the species to decline?	The proposed development is not likely to increase the risk of disease to the species. Application of current farming practices and general biosecurity management measures would effectively avoid introduction and spread of disease.
Interfere substantially with the recovery of the species?	There is no known important population of the BTF within the area and there are no available records of the species in the region. The proposed clearing area is not considered to contain habitat important enough for the species such that its modification, destruction, removal or isolation, or a decrease in its availability or quality would result in interference with the recovery of the species. The species is not expected to be impacted during operation of the project and be influenced in its foraging behaviour should it occur within the area. The project is therefore considered highly unlikely to interfere with the recovery of the species.

Table 4. Bare-rumped Sheathtailed Bat - Assessment of Significant Impact

Will the proposed works	Response
Lead to a long term decrease in the size of an important population	There is no known important population of BRSB within or surrounding the project area. Although BRSB were recorded as being present within the proposed clearing area, the call sequences indicate the presence of individuals that are most likely foraging within the area and not the presence of a population. Whilst the clearing may result in a reduction in roosting habitat, there are large vegetated areas to the south and west of the subject site as well as other parts of Byrne Valley Station. Hence, it is very unlikely the species is restricted to the project area or dependent on it for its persistence in the local landscape. The proposed development will not lead to a long term decrease in the size of an important population of the species.
Reduce the area of occupancy of an important population?	There is no known important population of BRSB within or surrounding the project area. It is noted that the BRSB records on Byrne Valley Station and surrounds are at the most southerly known distributional limit of the species range. Whilst the clearing may result in a reduction in the species distributional range due to the potential reduction in roosting habitat at its most southerly known extent, there are large vegetated areas to the south and west of the subject site as well as other parts of Byrne Valley Station around the flanks of Mount Louisa and along Alligator Creek. As such, the proposed activity is not expected to reduce the area of occupancy of an important population.
Fragment an existing important population into two or more populations?	There is no known important population of BRSB within or surrounding the project area. Large areas of similar and continuous habitat occurs within Byrne Valley Station and within the wider Burdekin area. Within Byrne Valley alone there is just under 10,000ha of similar habitat that will remain untouched and the surrounding area has over 500,000ha of similar habitat which can be equally utilised by the species. It is unlikely the movement of the species would be reduced by the Project and therefore, any important population would not be fragmented into two or more populations.

Will the proposed works	Response
Adversely affect habitat critical to the survival of a species?	There is no known important population of BRSB within or surrounding the project area. Ecological surveys indicated that the area does contain hollows that could potentially be used for roosting behaviour and individual BRSB have been recorded within the area and were assumed to be foraging. However, there is abundant foraging and roosting habitat that will remain untouched within Byrne Valley Station and the wider area. Although this proposed activity will clear 232ha of potential forging and roosting habitat, the vastness of similar habitat within the immediate and wider area indicates that this proposed clearing activity is not likely to adversely affect habitat critical to the survival of a species.
Disrupt the breeding cycle of an important population?	There is no known important population of BRSB within or surrounding the project area. Whilst BRSB have been identified as occurring within the project area, call analysis indicates their presence is likely due to foraging in and around the area. is not likely to disrupt the breeding cycle of an important population. There is abundant foraging and roosting habitat that will remain untouched within Byrne Valley Station and the wider area. The vastness of similar habitat within the immediate and wider area indicates that this proposed clearing activity is unlikely to impact on breeding activities of the BRSB Moreover, reproduction in the species is known to vary between geographic regions, but in Queensland it is known that females give birth to single young between late December and early January, and lactate during the wet season. The current farming practices contain activities within the wet season. As such, the proposed activity is unlikely to impact on breeding activities of the BRSB should they be undertaking such activities within Byrne Valley Station.

Will the proposed works	Response
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to be in decline?	There is no known important population of BRSB within or surrounding the project area. Although this proposed activity will clear 232ha of potential forging and roosting habitat (assuming all the trees within the clearing area have the potential to provide both foraging and roosting habitat), there are vast tracks of suitable habitat within Byrne Valley Station itself and within 20km of the disturbance area. Hence, the disturbance associated with the clearing activity is not likely to modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to be in decline.
Result in invasive species that are harmful to a vulnerable species being established in the vulnerable species habitat?	The proposed development is not likely to result in the introduction of invasive species that could lead to a decrease in habitat availability. Application of weed and pest management measures that are currently implemented on Byrne Valley Station will reduce the possibility of weed and pest invasion.
Introduce disease that may cause the species to decline	The proposed development is not likely to increase the risk of disease to the species. Application of current farming practices and general biosecurity management measures would effectively avoid introduction and spread of disease.
Interfere substantially with the recovery of the species?	The recovery plan for the BRSB does not identify any populations that are currently known to be under threat nor are any specific conservation measures aimed at the species. There is no important population known in the area and due to the extensive similar habitat available within the immediate and wider surrounds, this project is therefore considered highly unlikely to interfere with the recovery of the species.