BDAR waiver recommendation report template

Project Name: Hexham Long Term Train Support Facility (Modification 2): proposed relocation of the depot and construction of long-term wagon storage.

SSI/SSD Application Number: SS1-6090

Proponent: Aurizon

Date request received: 20 May 2022

Biodiversity value	Meaning	Relevant (✓or NA)	Potential impacts	
			Applicant comment/ justification	**EES comment**
Vegetation integrity 1.5(2)(a) BC Act	Degree to which the composition, structure and function of vegetation at a particular site and the surrounding landscape has been altered from a near natural state	NA	• As the native vegetation cannot be assigned to a native PCT, it is not possible to assess vegetation integrity against benchmark scores by undertaking an assessment of the composition, structure or function of the vegetation according to the field methods outlined in Section 5.3 of the BAM. A vegetation integrity score cannot be determined in accordance with Section 5.4 of the BAM as there are no PCTs that will be impacted by the proposed development works. • There would be no loss of vegetation composition, structure, or function (as assessed in accordance with the BAM) due to the proposed development works.	Biodiversity Conservation Division (BCD) has conducted a desktop assessment and concurs that the Hexham Long Term Train Support Facility (LTTSF) site off Anderson Drive in Hexham is predominantly devoid of native vegetation and significantly altered from its natural state, due to historic land clearance and continual deposition of coal and waste material. BCD notes that the site effectively remains unaltered from when it was described in the 2012 as exotic vegetation in the originally project Ecological Assessment report. The proponent indicates that the entire development site has been completely modified from its original state and now exists as a highly disturbed area, with a notable absence of trees, shrubs and native ground layer vegetation. It is dominated by sown pasture grasses, such as *Cenchrus clandestinus* (Kikuyu Grass) to stabilise soil material and prevent erosion. There is some native vegetation (according NSW PlantNET) that has naturally established in the development site, namely *Cynodon dactylon* (Common Couch – a cosmopolitan species that includes the sown non-native variety), and a few individuals of *Juncus usitatus* (Common Rush) and *Eleocharis acutus* where standing water sits in depressions. However, this native vegetation cannot be assigned to a Plant Community Type (PCT) as identified

				in the DPE BioNet Vegetation Classification and is therefore not considered to represent 'native vegetation' as defined by the *Local Land Services Act* 2013 and under the Biodiversity Assessment Method (BAM). Nor can a vegetation integrity score be determined, however, given the dominance of exotic species it would be unlikely to score high if it had a PCT equivalent (i.e., <5). As such BCD concurs with the proponent that there is no impact to composition and function of native vegetation, as the vegetation on site is exotic. There will be minor loss to wetland species that can tolerate extensive disturbance and are considered 'colonizer' species, but these species are few and not considered important habitat. No threatened ecological communities occur on the subject site.
Habitat suitability 1.5(2)(b) BC Act 6.1(1)(a) BC Regulation	Degree to which the habitat needs of threatened species are present at a particular site	NA	• The exotic dominated vegetation in the development site does not provide any suitable habitat for threatened species.	BCD has conducted a desktop assessment and concurs that the site is devoid of significant vegetation and offers nil significant habitat to threatened species. The site may offer very limited foraging habitat to some wetland species, namely the Black-necked Stork that frequents peri-urban areas, including parklands. But given the ample amount of similar habitat in the general locale, combined with the higher quality habitat within the nearby Hunter Wetlands National Park, the loss of this small exotic grassland will be of negligent impact. BCD is satisfied that the proposal will not significantly impact any threatened species that may inhabit the local area. The Powerful Owl has been recorded to the west of the site (about 1 km), but the site offers very limited foraging habitat, and this will likely remain once the development is completed.

Threatened species abundance 1.4(a) and 6.1(1)(f) BC Regulation	Occurrence and abundance of threatened species or threatened ecological communities, or their habitat, at a particular site	NA	• The habitat assessment (refer to Appendix A) identified limited habitat in the development site for threatened species. In addition to this, the field survey identified no high-quality threatened species habitats on the development site. For this reason, no targeted threatened species surveys have been undertaken as part of this assessment. • The proposed development works are unlikely to have an appreciable impact on threatened species abundance.	No threatened ecological communities occur on the subject site. Nor have there been any threatened species recorded on the subject site. The air space above the site may be utilised by some avian and microbat species, but the site itself would offer nil important habitat. Similarly, the site might be part of some of the threatened raptors / owls (e.g., White-bellied Sea Eagle and Eastern Osprey) territories, but again offers limited habitat. BCD is satisfied that the proposal will not significantly impact any threatened species that may inhabit the local area.
Vegetation abundance 1.4(a) BC regulation	Being the occurrence and abundance of vegetation at a particular site	NA	• There is some native vegetation (according to the definition of native vegetation provided in the LLS Act) that has naturally established in the development site, namely *Cynodon dactylon* (Common Couch), and a few individuals of *Juncus usitatus* (Common Rush) and *Eleocharis acutus*. However, this native vegetation is very minimal in extent and cannot be assigned to a PCT as identified in the DPIE BioNet Vegetation Classification. As such, the vegetation cannot be allocated to vegetation zones. The habitat types in the development site and immediate surrounds are best described as miscellaneous ecosystems as identified by the BioNet Vegetation Classification database and threatened species profiles (DPIE 2021c), specifically: Highly disturbed areas with no or limited native vegetation. • Vegetation abundance (as it would apply to a PCT) would not be impacted by removal of vegetation within the development site.	BCD is satisfied that the proposed development will not significantly impact on the occurrence and abundance of vegetation at this site, given the extensive history of anthropogenic disturbance and the dominance of exotic vegetation with no to limited compositional diversity or structure. There is some native vegetation (according NSW PlantNET) that has naturally established in the development site, namely *Cynodon dactylon* (Common Couch – a cosmopolitan species that includes the sown non-native variety), and a few individuals of *Juncus usitatus* (Common Rush) and *Eleocharis acutus* where standing water sits in depressions. However, this native vegetation cannot be assigned to a PCT as identified in the DPIE BioNet Vegetation Classification and is therefore not considered to represent 'native vegetation' as defined by the *Local Land Services Act* 2013 and under the BAM. Nor can a vegetation integrity score be determined, however, given the dominance of exotic species it would be unlikely to score high if it had a PCT equivalent

				(i.e., <5). As such BCD concurs with the proponent that there is no impact to composition and function of native vegetation, as the vegetation on site is exotic. There will be minor loss to wetland species that can tolerate extensive disturbance and are considered 'colonizer' species, but these species are few and not considered important habitat.
Habitat connectivity 1.4(c) and 6.1(1)(f) BC Regulation	Degree to which a particular site connects different areas of habitat of threatened species to facilitate the movement of those species across their range	✓	• The development site is surrounded by highly modified land where natural habitats have been cleared. There is no obvious physical habitat connectivity associated with the development site. However, functional connectivity exists for flying animals such as birds and bats that use the airspace above the development site to move between habitats. The proposed development works are considered unlikely to have a detrimental effect on habitat connectivity for these species.	BCD is satisfied that the proposal will not impact upon habitat connectivity. BCD agree that technically functional connectivity exists for flying animals at the site, but the proposal is unlikely to limit this, nor have a detrimental impact on such species.
Threatened species movement 1.4(d) BC Regulation and 6.1(1)(c) BC Regulation	Degree to which a particular site contributes to the movement of threatened species to maintain their lifecycle	✓	• The development site is unlikely to contribute to the movement of threatened species, apart from flying species, such as Fork-tailed Swift, White-throated Needletail, Eastern Osprey, White-bellied Sea-Eagle, Square-tailed Kite, Wedge-tailed Shearwater, Sharp-tailed Sandpiper, Red-necked Stint, Latham's Snipe, Common Greenshank and Marsh Sandpiper. These species are powerful flyers capable of covering large distances between habitat patches. Their movement would not be impeded as to affect their lifecycles.	BCD concurs with the proponent's appraisal. The site may offer limited movement habitat to highly mobile species, but the proposal is unlikely to have a significant impact on their lifecycles.
Flight path integrity 1.4(e) BC Regulation and 6.1(e) BC Regulation	Degree to which the flight paths of protected animals over a particular site are free from interference	✓	• The development site is located approximately 1-kilometre from the Hunter Wetlands National Park in the south-east, 350 metres from the Hunter Wetlands National Park (Hesham Swamp Nature Reserve) in the west and 750 metres from the Hunter River south channel and Hunter River in the east. These areas are known to contain habitat and species sightings for threatened and migratory birds. Migratory bird species may fly over the development site on occasion, however, considering the current disturbance and absence of	BCD is satisfied that the proposed will not impact upon flight path integrity and concurs with the proponent's appraisal.

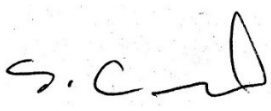
			suitable habitat preferences within the development site, the proposed development works are unlikely to increase the current barrier to flights paths and no new barriers will be introduced.	
Water sustainability 1.4(f) and 6.1(1)(d) BC Regulation	Degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site.	NA	• No threatened species or threatened ecological communities have been identified on the development site that are being sustained by water quality, water bodies and hydrological processes.	BCD is satisfied that the proposal will not adversely affect water sustainability or the water bodies surrounding the subject site. The proposal is not associated with the modification or removal of natural or artificial watercourses, waterbodies or other hydrological processes. No impacts to threatened species or ecological communities area expected.
Impacts of development on threatened species habitat 6.1(a) BC Regulation	Impacts of development on the following habitat of threatened species or ecological communities – (i) Karst, caves, crevices, cliffs and other geological features of significance (ii) Rocks	NA	No comment.	These features are not present at the site and the proposed development does not involve works to any existing buildings. BCD is satisfied that this proposal will not impact on listed habitat features.

	(iii) Human made structures (iv) Non-native vegetation			
Vehicle strikes 6.1(f) BC Regulation	Impacts from vehicle strike	NA	Although the proposed development and previous consents include construction of minor /small roadways pathways, it is likely that speed limits would be low and not at a level that would lead to vehicle strike.	BCD is satisfied that the proposal will not impact upon rates of vehicle strike.

Recommendation

It is recommended that the delegated officer:

- Considers the matters set out in this report; and
- Makes a decision to:
    - Determine that the proposed development is not likely to have any significant impact on biodiversity values and therefore a BDAR is not required



STEVEN CRICK **Date** 3 June 2022
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