

APPENDIX H: LIKELIHOOD OF OCCURRENCE ASSESSMENT

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APPENDIX H: SIGNIFICANT FAUNA SPECIES LIKELIHOOD OF OCCURRENCE ASSESSMENT FOR POSSIBLE AND UNLIKELY SPECIES OCCURRENCE (WITHIN 50 KM OF THE PROPOSAL AREA)

Common Name	Scientific Name	Conservation Status			Literature	Sources		Habitat Preference	LoO Within Proposal Area (50 km buffer)
		BC Act	EPBC Act	Rapallo (2012)	Western Wildlife (2020)	Rapallo (2022)	Phoenix (2022)		
Mammals									
Greater Bilby	Macrotis lagotis	Vu	Vu	-	✓	-	-	In WA, populations are largely restricted to the Gibson, Little Sandy and Great Sandy deserts, and parts of the Pilbara and Kimberley regions. Occurs in a range of vegetation types, including <i>Acacia</i> woodlands and hummock grasslands, open tussock grassland, and Mulga woodland / shrubland.	
Brush-tailed Mulgara	Dasycercus blythi	P4	-	-	✓	-	-	The Brush-tailed Mulgara has a wide distribution across central and inland Australia, with a population that fluctuates in response to seasonal conditions. This species is solitary, nocturnal and typically inhabit spinifex grasslands with medium to dense cover, within the arid zone.	Unlikely The Terrestrial Fauna Survey Area occurs within the species' known distribution and may contain suitable habitat; however, the species has not been recorded immediately adjacent to the Proposal Area.
Northern Short-tailed Mouse	Leggadina lakedownensis	P4		-	√	*	-	The Northern Short-tailed Mouse is found across northern Australia where it occupies a range of habitats from monsoon tropical coasts to semi-arid areas containing spinifex and tussock grasslands, samphire and sedge lands, <i>Acacia</i> shrublands, tropical <i>Eucalyptus</i> and <i>Melaleuca</i> woodlands, and stony ranges, often on seasonally inundated red or white sandy-clay soils. They shelter in burrows during the day.	Possible The Terrestrial Fauna Survey Area occurs within the species' known distribution (although this is discontinuous), may contain suitable habitat, and the species has been recorded adjacent to the Proposal Area.
Long-tailed Dunnart	Sminthopsis longicaudata	P4	-	-	√	-	-	This species occupies exposed rock and stony soils with spinifex hummocks and sparse shrubs on or around flat-topped hills, lateritic plateaus, sandstone ranges and breakaways. It is found within the Gibson Desert, southern Carnarvon Basin, Rangelands and Pilbara in WA.	The Terrestrial Fauna Survey Area occurs within the species' known distribution, contains suitable habitat;
Reptiles									
Spotted Ctenotus (northeast)	Ctenotus uber johnstonei	P2	-	-	✓	-	-	Data deficient and known from only a few locations and/or specimens.	Possible While the species' distribution is not confirmed, specimens are known from records adjacent to the Proposal Area and suitable habitat is likely to occur.
Unpatterned Robust Slider (Robertson Range)	Lerista macropisthopus remota	P2	-	-	~	-	-	Data deficient and known from only a few locations and/or specimens. This species occurs in arid and semi-arid environments and occupies woodlands and shrublands where it uses leaf litter for cover.	Possible The Terrestrial Fauna Survey Area occurs within the species' known distribution (although it may be discontinuous), and contains small areas of suitable habitat; however, the nearest records are more than 30 km away from the Proposal Area.
Birds									



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		BC Act	EPBC Act	Rapallo (2012)	Western Wildlife (2020)	Rapallo (2022)	Phoenix (2022)		
Curlew Sandpiper	Calidris ferruginea	Cr	Cr / Mi	-	<	-	-	This species occurs Australia-wide along coastal regions and within parts of inland WA along intertidal mudflats, freshwater swamps and saltwater lakes.	Unlikely The Terrestrial Fauna Survey Area occurs within the species' known distribution; however, permanent water is unlikely to occur within the Proposal Area, and areas immediately adjacent, and the area is also unlikely to hold surface water for a sufficient time period to promote feeding and breeding, following rainfall.
Night Parrot	Pezoporus occidentalis	Cr	En	√	✓	√	-	This species is nocturnal, primarily ground-feeding and inhabit remote arid and semi-arid Australia within open areas (scattered or no shrubs/trees), comprising <i>Triodia</i> grasslands, chenopod shrublands/associations, and ephemeral seasonally inundated areas, particularly supporting diverse seeding vegetation. They roost in in clumps of dense vegetation, primarily long un-burnt Triodia hummocks.	The Terrestrial Fauna Survey Area occurs within the species' known distribution and may contain suitable habitat; however, the species has not been recorded within, or adjacent to, the
Australian Painted Snipe	Rostratula australis	En	En / Ma	-	<	-	-	This species inhabits well-vegetated shallows and margins of terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans.	The Terrestrial Fauna Survey Area
Barking Owl	Ninox connivens subsp. connivens	P3	-	-	✓	-	-	Southwest of WA.	Unlikely Inclusion in database search is likely erroneous.
Letter-winged Kite	Elanus scriptus	P4	-	-	√	√	-	This species often nests and roosts colonially and is largely nocturnal, spending the day roosting in trees that occur along dry, timbered watercourses and sparsely vegetated grasslands of channel country and wetlands.	Possible The Terrestrial Fauna Survey Area may contain suitable habitat and the species has been recorded adjacent to the Proposal Area (likely as a vagrant); however, it is not within the species' known distribution.
Southern Giant Petrel	Macronectes giganteus	Mi	En / Mi	-	~	-	-	This species is primarily a marine species and it breeds on numerous oceanic islands; this record is likely of a vagrant individual.	Unlikely Species is primarily marine and this record was likely of a vagrant individual. There is no suitable habitat located in the Terrestrial Fauna Survey Area.
Common Sandpiper	Actitis hypoleucos	Mi	Mi / Ma	-	√	-	-	This species occurs Australia-wide within all coastal regions and parts of inland WA along sandy coasts, riverbanks and inland salt lakes.	Unlikely The Terrestrial Fauna Survey Area occurs within the species' known distribution; however, permanent water is unlikely to occur within the Proposal Area, and areas immediately adjacent, and the area is also unlikely to hold

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									surface water for a sufficient time period to promote feeding and breeding, following rainfall.
Sharp-tailed Sandpiper	Calidris acuminata	Mi	Mi / Ma	-	✓	-	-	This species occurs Australia-wide along all coastal regions and within parts of inland WA on intertidal mudflats, freshwater swamps, and saltwater lakes.	Unlikely The Terrestrial Fauna Survey Area occurs within the species' known distribution; however, permanent water is unlikely to occur within the Proposal Area, and areas immediately adjacent, and the area is also unlikely to hold surface water for a sufficient time period to promote feeding and breeding, following rainfall.
Pectoral Sandpiper	Calidris melanotos	Mi	Mi / Ma	-	√	-	-	This species occurs Australia-wide with patchy records across most coastal regions and inland areas in swamps, floodplains and coastal areas.	Unlikely The Terrestrial Fauna Survey Area occurs within the species' known distribution; however, permanent water is unlikely to occur within the Proposal Area, and areas immediately adjacent, and the area is also unlikely to hold surface water for a sufficient time period to promote feeding and breeding, following rainfall.
Gull-billed Tern	Gelochelidon nilotica	Mi	Mi / Ma	-	*	-	-	This species occurs on all continents except Antarctica. Habitats include beaches, mudflats, fresh and brackish wetlands and salt lakes, including those far inland, freshwater swamps, grasslands, crops and ploughed fields, throughout much of Australia.	Unlikely The Terrestrial Fauna Survey Area occurs within the species' known distribution and may contains suitable habitat; however, the species has not been recorded immediately adjacent to the Proposal Area.
Barn Swallow	Hirundo rustica	Mi	Mi / Ma	-	√	-	-	Barn Swallows tend to inhabit coastal lowlands, particularly near towns, cities and particularly near water. They are insectivorous and will also forage over open habitats, particularly areas with a high density of insects such as wetlands. The species feeds by aerial pursuit, or by flying low over the ground or water, gleaning or skimming insects from plants or the water surface. The species does not breed in Australia.	Unlikely The Terrestrial Fauna Survey Area may contain suitable habitat; however, the Proposal Area does not occur within the species' known distribution, and the species has not been recorded within the Proposal Area.
Grey Wagtail	Motacilla cinerea	Mi	Mi / Ma	-	√	-	-	This species is a rare vagrant to the Australian continent from the north. They inhabit areas associated with water including fast running water/streams, sewage ponds, swamp margins and saltmarshes and lawns, ploughed fields, paddocks, and airfields. They forage on the ground and feed on insects. The species does not breed in Australia.	Unlikely The Proposal Area does not occur within the species' known distribution, the Terrestrial Fauna Survey Area is unlikely to contain suitable habitat, and the species has not been recorded within the Proposal Area.
Yellow Wagtail	Motacilla flava	Mi	Mi / Ma	-	√	-	-	This species is a rare vagrant to the Australian continent from the north. They inhabit areas associated with water including fast running water/streams, sewage ponds, swamp margins and	The Proposal Area does not occur within the species' known distribution, the

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								saltmarshes and lawns, ploughed fields, paddocks, and airfields. They forage on the ground and feed on insects. The species does not breed in Australia.	to contain suitable habitat, and the species has not been recorded within the Proposal Area.
Oriental Plover	Charadrius veredus	Mi	Mi	ü	✓	-	-	This species occurs Australian-wide, predominantly in coastal regions and within parts of inland WA, preferring grasslands, salt fields and coastal areas within arid and semi-arid zones. Habitats are often characterised by flat inland plains, sparsely vegetated short grass with hard bare ground including claypans, playing fields, lawns and cattle camps. Often found a great distance from water.	The Terrestrial Fauna Survey Area occurs within the species' known distribution and the area may contain suitable habitat; however, the species has not been recorded immediately
Common Greenshank	Tringa nebularia	Mi	Mi	-	√	-	-	This species occurs Australia-wide within all coastal regions and parts of inland WA along coastal environments (mudflats, saltmarshes, river estuaries, deltas, lagoons) and inland wetlands.	Unlikely The Terrestrial Fauna Survey Area occurs within the species' known distribution; however, permanent water is unlikely to occur within the Proposal Area, and areas immediately adjacent, and the area is also unlikely to hold surface water for a sufficient time period to promote feeding and breeding, following rainfall.