Survey Group	Scientific Name	Common Name	BC Act*	EPBC Act**	Minimum Survey Requirement	Level of Survey Conducted
Amphibians	*Heleioporus australiacus*	Giant Burrowing Frog	V	V	Aural-visual surveys or tadpole searches. Aural-visual searches are completed as transects running through areas of native vegetation located within 300 metres of suitable breeding habitat. These are completed within a week of heavy rainfall (e.g. >50 millimetres in 24 hours, >100 millimetres over three days). Tadpole searches are completed within areas of identified suitable breeding waterbodies, surveying at night when tadpoles are most active. Acoustic detection is not likely to be effective due to the very limited and unpredictable calling by males Total effort per 500m transect, 960 minutes over eight nights	Surveys for amphibians were conducted on the nights of the 2nd to 5th October 2023 and the nights of 4th to 7th December 2023. Surveys comprised aural-visual surveys along suitable drainage lines and waterbodies within the Study Area. As per the NSW Survey Guide for Threatened Frogs, this consisted of a combined 500 m transect along drainage lines for the Giant Burrowing Frog, Littlejohn's Tree Frog, Red-crowned Toadlet and Stuttering Frog. Call points were established at every 50m, with the following methodology used at each: A five-minute passive listening period followed by playing of calls of each species for two minutes. A pause of two minutes following each species call was done before playing of the next species' call. This was repeated at each call point with visual searches between each call point of approximately five minutes.
	Litoria aurea	Green and Golden Bell Frog	E1	V	Aural-visual or acoustic recorder surveys can be completed along the edges of suitable breeding habitat or, if feasible, through shallow wetlands. Tadpole surveys can be used to replace up to two of the aural-visual surveys. Tadpole searches should target areas of shallow and open water where the tadpoles are likely to congregate. If the plague minnow (*Gambusia holbrooki*) is present this method is not recommended. The presence of the plague minnow should be recorded. Total effort per 500m transect, 480 minutes over four nights	

	Litoria littlejohni	Littlejohn's Tree Frog	E1	E	Aural-visual surveys or acoustic recorder surveys should be completed along areas of potential breeding habitat, noting that the species prefers dams and pools in some parts of its range and rocky streams in other parts. Tadpole surveys can be used to replace up to two of the aural-visual surveys. Tadpole searches should target areas of open water in potential breeding habitat. Tadpoles are relatively distinctive and should be detectable if present. Total effort per 500m transect, 480 minutes over four nights	This methodology was also followed around two waterbodies assessed as suitable habitat for the Green and Golden Bell Frog on the nights of the 4th to 7th December 2023. See Error! Reference source not found. and Error! Reference source not found. for all amphibian survey locations Rainfall in the week (seven days) preceding each survey period was 28.4mm and 53.6mm, respectively (Weatherzone 2024). With refence to the NSW Survey Guide for Threatened Frogs, conditions were suitable for the Green and Golden Bell Frog, Littlejohn's Tree Frog, Red-crowned Toadlet and Stuttering Frog during both survey periods. However, rainfall in the week preceding both survey periods was below the recommended optimal for the Giant Burrowing Frog (50mm in 24 hours or 100mm over three days) (NSW Department of Climate Change, Energy, the Environment and Water 2020)
Broad-headed Snake	*Hoplocephalus bungaroides*	Broad-headed Snake	E1	V	Conduct habitat surveys in dry weather only, to minimise damage to sandstone and for the safety of surveyors. Surveys involving turning rocks should not be undertaken on hot days when individuals will retreat into deep crevices and hollows for protection. Aug-Sep Undertake spotlight surveys in summer over 4 consecutive nights. In these conditions, the target species may have moved from the rock outcrops into adjacent areas of eucalypts. Conduct surveys along 500 m transects, focusing on large trees with multiple hollows within 500 m of adjacent sandstone outcrops. Observe for foraging snakes on the trunks, in hollows and on the ground. Additional survey effort may be required where rock outcrops are extensive and/or hollow bearing trees numerous. Dec-Feb	Diurnal habitat surveys were undertaken in areas of suitable habitat (rock outcroppings along Mill Creek, see Error! Reference source not found. (Winter) and Error! Reference source not found. (Summer)). These were done by two people for one hour (two person hours) per day on 29th August to 1st September 2023. Nocturnal surveys were conducted within the same area by two people for one hour (two person hours) on the 4th to 7th December 2023

					Total effort per 50ha of habitat, 120 person minutes over four days (Aug-Sep) and nights (Dec-Feb)	
Diurnal birds	*Pandion cristatus*	Eastern Osprey	V	M	Visual survey for stick nests. This species can nest in isolated trees. Nests are distinctive but easiest to identify when birds are in attendance	Surveys for raptor stick nests were undertaken during all diurnal survey works in Aug-Sep and Oct 2023 (10 survey days) within the breeding period of this species
	Callocephalon fimbriatum	Gang-gang Cockatoo	V	E	1. Assessors should look for SIGNS OF BREEDING on site as follows; (a) lone adult males identified during the breeding season (October to January); or (b) an occupied nest. If breeding is presumed present, progress to Step 3. 2. Where signs of breeding on site are present, POTENTIAL NEST TREES should be identified. Potential nest trees are forest and woodland eucalypts containing hollows that are; (i) at least 3 m above the ground and (ii) with hollow diameter of 7 cm or larger. 3. Where potential nest trees are identified on site, monitor for this species during the breeding season (October to January) to confirm the presence of any ACTUAL NEST TREES on site	Surveys for evidence of site use by this species were undertaken during all diurnal survey works in Oct and Dec 2023 (10 survey days) within the breeding period of this species
	Calyptorhynchus lathami	Glossy Black-Cockatoo	V	V	1. Assessors should look for SIGNS OF BREEDING on site as follows; (a) begging birds of any age or sex; or (b) lone adult males identified during the breeding season (April to August); or (c) an occupied nest. 2. Where signs of breeding on site are present, POTENTIAL NEST TREES should be identified. Potential nest trees contain hollows that are; (i) at least 8 m above the ground; and (ii) in stems with a diameter of at least 30 cm; and (iii) hollow diameter is at least 15 cm; and (iv) stem angle is at least 45 degrees, and may be near-vertical or vertical. 3. Where potential nest trees are identified on site, monitor for this species during the breeding season (Apr – Aug) to confirm the presence of any ACTUAL NEST TREES on site	Surveys for evidence of site use by this species were undertaken during all diurnal survey works in Aug-Sep 2023 (five survey days) within the breeding period of this species
	Dasyornis brachypterus	Eastern Bristlebird	E1	E	No specific survey requirements listed in the TBDC. Can be surveyed for between September and May	Surveys through areas of suitable habitat during all diurnal survey works in Oct and Dec 2023 (10 survey

						days) within the listed survey period of this species
Grey-headed Flying Fox	*Pteropus poliocephalus*	Grey-headed Flying Fox	V	V	Breeding camps will need to be identified by survey. The initial search for camps should encompass any recorded camps and roosting habitat likely to occur on the subject land. If a camp is located the survey only needs to take place in the camp (that is the area occupied by the target species) to identify breeding females	Surveys for a camp of the species were undertaken during all diurnal survey works in Dec 2023 (five survey days) within the breeding period of this species
Koala	*Phascolarctos cinereus*	Koala	E1	E	Minimum of two of the following methods, Spot Assessment Technique (SAT), detection dogs, spotlighting, passive acoustic or drones. SAT and spotlighting was applied in the Study Area. SAT, SAT sites with a 150m grid spacing for suitable habitat ≤50ha. 1. Locate and mark the tree of any species closest to the grid intersect coordinates – this is identified as the centre tree. To accommodate floristic variations, selection of the centre tree may vary by 10% of the sampling interval (i.e. 25 m for a 250m grid) 2. Move outwards from the centre tree, identifying the 29 nearest trees of any species to the centre tree within the area of suitable habitat. Where the minimum sampling effort of 30 trees cannot be met, sample the highest number possible before overlapping with the adjacent SAT site 3. Undertake a radial search for koala scat beneath each of the 30 marked trees, within a prescribed search area extending 1 m from the base of each tree. Scat search effort is a minimum of two person-minutes for each tree. For trees with a large DBH, it is expected that additional search time will be required 4. Searches should begin with a brief inspection of the undisturbed litter or grass and grass like growth form cover within the 1 m search area. If no koala scats are detected, a more thorough inspection of the search area, involving disturbance by hand of the litter or grass and grass like growth form cover, is required	Twelve SAT sites were surveyed following the methodology detailed in this table by two staff members on 28th Aug to 1st Sep 2023. These were regularly spaced at 150m in areas of suitable habitat (adjusted as required). A total of 360 trees were examined. See Error! Reference source not found. for the location of all SAT sites. Potential Koala scat was sent to Georgeanna Story of ScatsAbout for definitive identification (ScatsAbout 2024). Spotlighting was conducted by two staff members along six transects of between 260m to 1,600m (total distance 5,000m) on the nights of 28th to 31st Aug 2023 (2.5 hours per night, totalling 10 hours or 20 person hours). Spotlighting was conducted with 1,000 lumen spotlights. See Error! Reference source not found. for the location of spotlight transects. As per Section 3.4 of the Koala (*Phascolarctos cinereus*) Biodiversity Assessment Method Survey Guide, the following relevant meteorological data is detailed below (Australian Government Bureau of Meteorology 2023): • 0.2mm of rain was recorded within 72 hours prior to survey.

					5. The search at each tree is concluded when: a. a koala scat is detected, or b. the search time ends with no koala scat detected. 6. Where the search time ends before a koala scat is detected, the SAT survey must continue at the next nearest tree. Spotlighting, two 200 m transects are required for every 5 ha of suitable habitat. Spotlighting surveys are undertaken on foot, moving at approximately 10 m/min. Consequently, a 1000 m transect will take approximately 100 min, depending on the surveyor and the vegetation density. Where the suitable habitat is characterised by a low tree density, spotlighting surveys may be undertaken from a slow-moving vehicle (speed ≤5 km/h)	• Rainfall during all survey dates: o 28/08/2023, 0.0mm. o 29/08/2023, 0.6mm. o 30/08/2023, 0.0mm. o 31/08/2023, 11.2mm. • Minimum and maximum temperatures for each survey date: o 28/08/2023, 6.6 – 21.7°C. o 29/08/2023, 6.6 – 24.0°C. o 30/08/2023, 7.3 – 26.1°C. o 31/08/2023, 8.1 – 19.8°C. • Relative humidity for each survey date: o 28/08/2023, 79%. o 29/08/2023, 87%. o 30/08/2023, 74%. o 31/08/2023, 76%. • Wind speed for each survey date: o 28/08/2023, 6 km/h N. o 29/08/2023, 9 km/h W o 30/08/2023, 6 km/h W o 31/08/2023, 15 km/h WSW.

Microbats	*Chalinolobus dwyeri*	Large-eared Pied Bat	V	V	Harp trap (or mist net) placed in areas of potential habitat, and potential breeding habitat (if present) on the subject land. The survey may use harp traps or a combination of harp traps and mist nets. Passive acoustic detection may be used; however, this method does not allow for reproductive status to be identified Survey effort per ≤50ha of potential habitat, 16 trap nights over four nights (ie, four traps for four nights or two traps for eight nights)	Three Anabat units were deployed for four nights (4th to 8th December 2023) near to potential roosting habitat (sandstone outcrops, culverts and below ground human-made structures). This amounted to a total of 12 trap nights over four nights. A fourth Anabat unit was deployed for the survey but was faulty and did not record data. Although the survey effort was below the 16 trap nights listed in the survey guidelines, this effort is for areas ≤50ha. The Subject Land has an area of potential habitat of 28.24ha. All three Anabat units were also placed near to all identified potential roost sites in the Subject Land (abandoned concrete structures, overhangs and culverts). Due to this targeted placement and the Subject Land habitat area of half of a standard maximum survey area (50ha), this survey effort is considered adequate. Data was analysed by Luke Foster of Trace Ecology Visual inspection of potential roost structures for evidence of inhabitation (living or dead microbats, guano etc.)
Southern Brown Bandicoot	*Isoodon obesulus obesulus*	Southern Brown Bandicoot	E1	E	Late summer/autumn is the best time to survey, when juveniles are recruited into the population. Combination of multiple survey techniques (camera trapping, spotlighting, Elliot trapping) is most likely to result in detection. Camera traps to be deployed to focus on ground level and deployed for four weeks. One hour of spotlighting per 1km transect up to 200ha of stratification unit, repeated over two nights. Elliot traps to be deployed for 100 trap nights over 3-4 nights (ie, 33 traps deployed for three nights or 25 traps deployed for four nights)	Four infrared cameras in ground locations were deployed for four weeks in August 2023. Each was baited with oat, peanut butter and honey balls. Baits were not replaced during the deployment period. See Error! Reference source not found. for the location of cameras. Spotlighting was conducted by two staff members along six transects of between 260m to 1,600m (total distance 5,000m) on the nights of 28th to 31st Aug (2.5 hours per night, totalling 10 hours or 20 person

						hours). Spotlighting was conducted with 1,000 lumen spotlights. See Error! Reference source not found. for the location of spotlight transects
Spotlighting arboreal mammals	*Petauroides volans*	Greater Glider	E1	E	One hour of spotlighting per 1km transect up to 200ha of stratification unit, repeated over two nights	Spotlighting was conducted by two staff members along six transects of between 260m to 1,600m (total distance 5,000m) on the nights of 28th to 31st Aug (2.5 hours per night, totalling 10 hours or 20 person hours). Spotlighting was conducted with 1,000 lumen spotlights. See Error! Reference source not found. for the location of spotlight transects
Terrestrial gastropods	*Pommerhelix duralensis*	Dural Land Snail	E1	E	Survey effort for the Dural Land Snail from the TBDC, (NSW Department of Climate Change, Energy, the Environment and Water 2024). Survey Effort: Both diurnal and nocturnal surveys must be undertaken for the species. Diurnal surveys are used to locate empty shells and nocturnal surveys to locate live individuals. NOTE: for the purpose of survey, the presence of Dural Land Snail shells equals the presence of this species. Survey effort should comprehensively cover all suitable habitat (associated PCTs) for the species, for both diurnal and nocturnal surveys. Survey Conditions: Diurnal surveys can be undertaken in any conditions. Nocturnal surveys are to be undertaken between dusk and dawn after rainfall at the survey location. Optimal survey conditions include when the topsoil and leaf litter are moist, the humidity is approximately >75%, and temperature is >12 C. High levels of insect activity are also indicative of optimal survey conditions. Diurnal Surveys: Use meandering transects across suitable habitat (associated PCTs) searching for empty shells. Shells for the species are often located within or near	Active diurnal searches for living snails and dead shells done with the August 2023 Koala SAT surveys. 360 tree bases were examined. Potential shells were sent for positive identification by Dr. Frank Koehler of the Australian Museum. Temperature range and relative humidity on all days of survey as below (Australian Government Bureau of Meteorology 2023): • 28/08/2023, 6.6 – 21.7°C and 79%. • 29/08/2023, 6.6 – 24.0°C and 87%. • 30/08/2023, 7.3 – 26.1°C and 74%. • 31/08/2023, 8.1 – 19.8°C and 76%. Nocturnal searches were conducted on the nights of the 4th to the 7th and 11th and 12th of August 2025 by two people for half an hour each night, for a total of six person hours.

					refugia. Refugia for the species includes, but is not limited to, leaf litter, decorticated bark, under coarse woody debris, grass clumps, and sometimes discarded rubbish such as corrugated iron and cardboard. Care must be taken when disturbing leaf litter to not inadvertently injure live individuals. All overturned logs and other refuge should be replaced in its original position. If the identification of empty shells cannot be confirmed in the field, shells should be georeferenced, collected and sent for identification by an expert i.e. the Australian Museum species identification services. Care must be taken to make sure that shells do not contain a live individual. Nocturnal Surveys: Use meandering transects across suitable habitat (associated PCTs) at a very slow walking pace, spotlighting the ground and other low objects for active snails. Survey locations should focus on targeting the habitat features outlined for diurnal survey. Surveys should be dedicated to observing ground-dwelling invertebrates and can be combined with surveys for other similar species. Nocturnal surveys should be undertaken independently from spotlighting surveys for arboreal fauna.	Temperature range and relative humidity on all days of survey as below (Australian Bureau of Meteorology 2025): • 04/08/2025, 9.2 – 17.8ºC and 87%. • 05/08/2025, 7.2 – 21.0ºC and 60%. • 06/08/2025, 6.6 – 18.4ºC and 35%. • 07/08/2025, 7.7 – 16.6ºC and 60%. • 11/08/2025, 6.7 – 16.3ºC and 62%. • 12/08/2025, 5.9 – 17.1ºC and 62%..