Assets & Works Group



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5-part test – proposed grassy	y platform – Sho	oalhaven Indoor	Sports Complex	
02/08/2018				
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Description of the Proposed Activity

The proposed activity is to extend an existing Indoor Sports Complex to include a grassy platform. The proposed site is located within an urban environment at Lot 2 Cambewarra Rd, Bomaderry, approximately 0.64 ha in size.

Existing Environment

The area subject of the proposed activity is a public reserve managed by Council. The vegetation surrounding the site could be described in part as Red Bloodwood/Grey Gums/Black She-oaks shrubby open forest (photo 1). This community does not represent any threatened ecological communities listed in the schedules of the *NSW Biodiversity Conservation Act 2016*.

The scope of impact is limited to the removal of moderately degraded habitat, approximately 0.25 ha of native vegetation (photo 2 & 3). Apart from those trees listed, other species identified during an on-site inspection (02/08/18) include Lantana (weed), Asparagus Fern (weed), Camphor Laurel (weed), Tick Bush and Kangaroo Grass.

In the context of this 5-part (significance) test, the area to be affected by the proposed activity:

- does not adjoin land reserved under the NSW National Parks and Wildlife Act 1974
- does not contain any recorded Aboriginal heritage sites
- is not known to contain any threatened flora, fauna or ecological communities listed under the NSW *Biodiversity Conservation Act 2016* or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*
- does not contain hollow bearing trees (HBT)
- does not contain signs of Gliders or feeding evidence of Glossy Black Cockatoo (approximately 12 Allocasuarina littoralis identified)

- is mapped on the Biodiversity Value Map which identifies land with high biodiversity value as defined by the *Biodiversity Conservation Regulation 2017*
- is not an Aboriginal Place in the context of the NSW National Parks and Wildlife Act 1974.
- is not mapped as contaminated or potentially contaminated
- is not mapped as constituting coastal hazards
- in not mapped as having the potential for acid sulfate soils
- is not in an area mapped within *State Environment Planning Policy (Coastal Management)* 2018.



Photo 1: Vegetation within the south-east corner of the proposed activity (corner of West Birriley Street & North Tarawal Street)



Photo 2 & 3: Proposed vegetation removal works at site of the proposed activity



Photo 4: Existing site of the proposed activity

Environmental safeguards and measures to minimise impacts

- Any additional trees that require removal (*i.e.* additional to those shown on the plans) shall be the subject of an additional environmental assessment.
- Erosion and sediment controls in accordance with the 'Blue Book' (Landcom 2004) shall be installed and maintained to prevent the entry of sediment into the waterway *i.e.* water diversion, minimising disturbance, erosion control and rapid re-establishment. Erosion and sediment controls shall be maintained in good working order for the duration of the works and subsequently until the site has been stabilised and the risk of erosion is minimal.).
- Vegetation clearing should be minimised as much as practically possible.
- There shall be like-for-like compensatory planting to replace the number of plants (and species) removed due to the proposed activity. Additional plants should be planted between the platform and outdoor sports field oval.
- Staff working at the site will be instructed to stop work immediately on identification of any suspected heritage artefact. If any objects are found, the Office of Environment and Heritage (ph:131555) and Jerrinja Local Aboriginal Land Council (LALC) shall be contacted.

Assessment of Likely Environmental Impacts

Section 1.7 of the *Environmental Planning and Assessment Act* 1979 (EP&A Act) applies the provisions of Part 7 of the NSW *Biodiversity Conservation Act* 2016 that relate to the operation of the Act in connection with the terrestrial environment.

Section 7.3 of the *Biodiversity Conservation Act* 2016 provides a 'five-part' test to determine whether a proposed development or activity is likely to significantly affect threatened species or ecological communities, or their habitats.

Based on the table of threatened species and populations occurring within 10 kilometres of the proposed activity (table 1), there is likely to be no species and/or populations negatively impacted as a result of the proposed activity.

The impacts assessed took into consideration the type, degree, and range of the impact as well as the extent, magnitude and severity. The proposed activity, which includes the implementation of the environmental safeguards specified above, is unlikely to have a significant impact on the environment for the following reasons:

- All identified potential negligible or low adverse impacts are considered acceptable considering the need for the activity.
- There are a number of impact mitigation measures that would be in place to reduce any adverse environmental effects
- All impacts to flora and fauna (removal of vegetation) is assessed as having a low potential adverse impact.

The evaluation of 'not significant' determines that an environmental impact statement and/or species impact statement or Biodiversity Assessment Report (BDAR) is not required.

 Table 1. List of species and endangered populations occurring within 10 kilometres of the proposed activity (NSW BioNet accessed 03/08/2018) and Assessment (likelihood and need for assessment)

Species / EECs	Number	Likelihood of Occurrence & need for Assessment
	of Records	
Aves		
White-bellied Sea- Eagle	9	Unlikely to occur (possibly passing over)
Haliaeetus leucogaster		Habitats are characterised by the presence of large areas of open water including larger rivers, swamps, lakes, and the sea. There is no such habitat on the proposed development site. As a result, there is no need for further assessment
Regent Honeyeater	1	Possible to occur.
		The species has been recorded within ten kilometres of the proposed development and the site comprises suitable habitat. However there is no need for further assessment as:
		• there are no actual populations known to occur at the site; there is only potential low quality habitat
		 the area does not represent a known breeding location (e.g. Capetree Valley, Bundarra-Barraba region, Warrumbungle National Park, Pilliga forests, Mudgee-Wollar region, and the Hunter and Clarence Valleys)
		 the area that would be affected by the proposal is insignificant to the area of available habitat in the immediate vicinity of the site.
		 the species is capable of dispersing more than 530 kilometres and therefore are highly mobile and not sensitive to relatively minor disturbances.
		The proposed activity would have no effect individuals in a population and further assessment is not warranted.
Eastern Curlew	2	Unlikely to occur.
madagascariensis		The species generally occupies coastal lakes, inlets, tidal zones, bays and estuarine habitats; all of which are not present on the proposed site.
Australasian Bittern	1	Unlikely to occur.
		The species generally favours permanent freshwater wetlands with tall, dense vegetation (particularly bullrushes and spikerushes); all of which are not present on the proposed site.

Hooded Plover	1	Unlikely to occur.
		The species generally occupies sandy ocean beaches, tidal bays and estuaries, rock platforms and rocky or sand-covered reefs near sandy beaches, and small beaches in lines of cliffs. They regularly use near-coastal saline and freshwater lakes and lagoons, often with saltmarsh. These habitats do not exist at the proposed site.
Bush Stone-curlew	2	Unlikely to occur.
Burninas grananas		The species generally inhabits open forests and woodlands with a sparse grassy ground layer and fallen timber; not present in proposed site. No nests were sited during site inspection/survey. There are no actual populations known to occur at the site; there is only potential low quality habitat.
Freckled Duck	3	Unlikely to occur.
Sicionella naevosa		The species generally occupies permanent freshwater swamps and creeks with heavy growth of Cumbungi, Lignum or Tea-tree; all of which are not present on site.
Black Bittern	4	Unlikely to occur.
		The species generally inhabits both terrestrial and estuarine wetlands, generally in areas of permanent water and dense vegetation/grassland. These habitats do not exist at the proposed site.
Spotted Harrier	1	Unlikely.
		The Spotted Harrier is widely, but sparsely, distributed in NSW; it does not occur in densly forested or wooded habitats of the coast. However there is no need for further assessment as:
		• there are no actual populations known to occur at the site; there is only potential low quality habitat
		 the species was not detected during site surveys undertaken as part of this REF.
		 the loss of the specified trees would be inconsequential to the species use of the area
		 there appeared to be no birds' nests in any of trees that are likely to be affected
		 the area that would be affected by the proposal is insignificant to the area of available habitat in the immediate vicinity of the site.
		The proposed activity would have no effect on individuals in a population and further assessment is not warranted.
Little Eagle	1	Possible to occur.
morphnoides		The species has been recorded within ten kilometres of the proposed development and the site comprises

		suitable habitat. However there is no need for further assessment as:
		• there are no actual populations known to occur at the site; there is only potential low quality habitat
		• The area that would be affected by the proposal is insignificant to the area of available habitat in the immediate vicinity of the site.
		 the species is highly mobile and would leave the site in the unlikely event of the species being present in the area.
		 no trees that would represent a roosting site would be affected by the activity
		The proposed activity would have no effect on lifecycle of individuals in a population
Black Falcon	1	Unlikely.
Talco subrilger		The Black Falcon is widely, but sparsely, distributed in NSW, mostly occurring in the inland regions. Most reports of 'Black Falcons' on the coast of NSW are likely to be referable to the Brown Falcon. The Black Falcon inhabits woodland, shrubland and grassland in the arid and semi-arid zones, especially wooded watercourses and agricultural land with scattered remnant trees. There is no such habitat on the proposed activity site. No further assessment is necessary.
Little Lorikeet	2	Possible to occur.
Giossopsilla pusilla		The species has been recorded within ten kilometres of the proposed development and the site comprises suitable habitat. However there is no need for further assessment as:
		• there are no actual populations known to occur at the site; there is only potential low quality habitat
		• The area that would be affected by the proposal is insignificant to the area of available habitat in the immediate vicinity of the site.
		there appeared to be no birds' nests or hollow bearing trees that are likely to be affected
		• Usually require large old <i>Eucalyptus</i> trees for foraging; not present on the relatively degraded site.
		The proposed activity would have no effect individuals in a population and further assessment is not warranted.
White-fronted Chat	3	Unlikely to occur.
		The species generally occupies wetland areas which is not present within the proposed site.
Varied Sittella	8	Possible to occur.
chrysoptera		The species has been recorded within ten kilometres of the proposed development and the site comprises

		suitable habitat. However there is no need for further assessment as:
		there are no actual populations known to occur at the site; there is only potential low quality habitat
		 the species was not detected during site surveys undertaken as part of this REF.
		the loss of the specified trees would be inconsequential to the species use of the area
		 there appeared to be no birds' nests in any of trees that are likely to be affected
		• the area that would be affected by the proposal is insignificant to the area of available habitat in the immediate vicinity of the site.
		The proposed activity would have no effect on individuals in a population and further assessment is not warranted.
Dusky Woodswallow	2	Possible to occur
cyanopterus		The species has been recorded within ten kilometres of the proposed development and the site comprises suitable habitat. However there is no need for further assessment as:
		there are no actual populations known to occur at the site; there is only potential low quality habitat
		 the species was not detected during site surveys undertaken as part of this REF.
		 the loss of the specified trees and roadside vegetation would be inconsequential to the species use of the area
		 there appeared to be no birds' nests in any of trees that are likely to be affected
		 the area that would be affected by the proposal is insignificant to the area of available habitat in the immediate vicinity of the site.
		The proposed activity would have no effect on individuals in a population and further assessment is not warranted.
Scarlet Robin Petroica boodang	1	Unlikely to occur.
		The species typically lives in dry eucalypt forests and woodlands with open and grassy understorey with few scattered shrubs. There is no such habitat at the proposed activity site or in the vicinity of the proposed activity. As a result, there is no need for further assessment.
Glossy Black-Cockatoo Calyptorhynchus	221	Possible occurrence.

lathami		The species inhabits open forest and woodlands of the coast and the Great Dividing Range where stands of Sheoak occur including Black Sheoak <i>Allocasuarina littoralis.</i> The species feeds almost exclusively on the seeds of sheoak shredding the cones within its massive bill and depositing chewed cones underneath the feeding tree. There is no need for further assessment as:
		• there are no actual populations known to occur at the site; there is only potential low quality habitat
		there are no hollow-bearing trees that could provide a nest to be affected by the activity
		 the site contains a small number of Sheoak trees (~12). No trees showed signs of feeding by the species.
		 The species is highly mobile and would leave the site in the unlikely event of the species being present in the area.
		The proposed activity would have no effect on individuals in a population and further assessment is not warranted
Square-tailed Kite	23	Possible occurrence but unlikely to be affected by the proposal for the following reasons:
		 the areas that would be affected by the proposed activity does not contain a nest that could be used by the species
		 The species is highly mobile and has a large home range. The loss of less that 350m2 would be insignificant to the species survival needs.
		• The area does not contain resources critical for the species for food, shelter, or breeding.
		• The proposed platform would not impact the species' ability to forage for food, hunt and breed.
		• The amount of disturbance is considered insignificant in comparison to the amount of potential habitat available in the immediate vicinity of the site.
		The presence of this species at the proposed activity site is possible from time to time. The site, however, is not considered useful or important or critical to the survival of the species and, because of the lack of suitable trees, are unlikely to be present during construction works.
		As a result of the above assessment, no further assessment is required.
Eastern Osprey Pandion cristatus	2	Possible to occur.
		The species has been recorded within ten kilometres of the proposed development and the site comprises suitable habitat. However there is no need for further assessment as:

		there are no actual populations known to occur at the site; there is only potential low quality habitat
		• The area that would be affected by the proposal is insignificant to the area of available habitat in the immediate vicinity of the site.
		 the species is highly mobile and would leave the site in the unlikely event of the species being present in the area.
		 no trees that would represent a nesting site would be affected by the activity
		The proposed activity would have no effect on the lifecycle of individuals in a population
Gang-gang Cockatoo	11	Possible to occur
fimbriatum		The species has been recorded within ten kilometres of the proposed development and the site comprises suitable habitat. However there is no need for further assessment as:
		There are no actual populations known to occur at the site
		There are no hollow-bearing trees that could provide a nest to be affected by the activity
		 The species is highly mobile and would leave the site in the unlikely event of the species being present in the area.
		The proposed activity would have no effect on the individuals in a population and further assessment is not warranted.
Powerful Owl	16	Possible to occur.
NINOX SUCIUA		The species has been recorded within ten kilometres of the proposed development and the site comprises suitable habitat. However there is no need for further assessment as:
		• there are no actual populations known to occur at the site; there is only potential low quality habitat
		there are no hollow-bearing trees that could provide a nest to be affected by the activity
		• The area that would be affected by the proposal is insignificant to the area of available habitat in the immediate vicinity of the site.
		 the species is highly mobile and would leave the site in the unlikely event of the species being present in the area.
		 no trees that would represent a roosting site would be affected by the activity
		The proposed activity would have no effect on the lifecycle of individuals in a population

Masked Owl	2	Possible to occur.
Tyto novaenoliandiae		The species has been recorded within ten kilometres of the proposed development and the site comprises suitable habitat. However there is no need for further assessment as:
		• there are no actual populations known to occur at the site; there is only potential low quality habitat
		there are no hollow-bearing trees that could provide a nest to be affected by the activity
		 The area that would be affected by the proposal is insignificant to the area of available habitat in the immediate vicinity of the site.
		 the species is highly mobile (often having a home-range of 500 to 1000 hectares) and would leave the site in the unlikely event of the species being present in the area.
		 no trees that would represent a roosting site would be affected by the activity
		The proposed activity would have no effect on the lifecycle of individuals in a population
Sooty Owl	2	Possible to occur.
Tylo lenebricosa		The species has been recorded within ten kilometres of the proposed development and the site comprises suitable habitat. However there is no need for further assessment as:
		• there are no actual populations known to occur at the site; there is only potential low quality habitat
		 there are no hollow-bearing trees that could provide a nest to be affected by the activity
		 The area that would be affected by the proposal is insignificant to the area of available habitat in the immediate vicinity of the site.
		 the species is highly mobile and would leave the site in the unlikely event of the species being present in the area.
		 no trees that would represent a roosting site would be affected by the activity
		The proposed activity would have no effect on the lifecycle of individuals in a population
Amphibians		
Green and Golden Bell	68	Possible to occur.
Litoria aurea		The species has been recorded within ten kilometres of the proposed development and the site comprises

		suitable habitat. However there is no need for further assessment as:
		 there are no actual populations known to occur at the site; the nearest known population (Crookhaven River Floodplain) is approximately 10 km from the proposed site. there is no suitable habitat occurring on site; marshes, dams and stream-sides or waterbodies.
		 Although they are known to inhabit disturbed areas, the area that would be affected by the proposal is relatively small and is unlikely to be utilised by the Green and Golden Bell frog.
		The proposed activity would have no effect on the lifecycle of individuals in a population.
Giant Burrowing Frog	3	Unlikely to occur.
Heleloporus australiacus		The species typically is found in heath, woodland and open dry sclerophyll forest. They are usually found in close proximity to creek banks or streams, both of which are not present within the site proposal. As a result, there is no need for further assessment.
Mammals		
Spotted-tailed Quoll	3	Unlikely to occur.
Dasyurus maculatus		The species make their dens in rock shelters, small caves, hollow logs and tree hollows. None of these habitat features are present at the proposed site. The species is highly mobile and would leave the site in the unlikely event of the species being present in the area.
Brush-tailed Rock-	1	Unlikely to occur.
Petrogale penicillata		The species occupies rocky escarpments, outcrops and cliffs with a preference for complex structures with fissures, caves and ledges. None of these habitat features are present at the proposed site. The species is highly mobile and would leave the site in the unlikely event of the species being present in the area
Greater Glider	1	Unlikely to occur.
retauroides volaris		The species is largely restricted to eucalypt forests and woodlands in areas where abundant hollows are present. There are no hollow bearing trees within the proposed site. The proposed activity would likely have no effect on the lifecycle of individuals in a population.
Koala Dhaqaalarataa airaarawa	2	Unlikely to occur.
Phascolarctos cinereus		The species has a home range of around 2 ha to several thousand hectares. The proposed site is not likely to provide habitat for the Koala due to the small scale and moderate degradation of vegetation present and the degree of which the landscape is fragmented. The proposed activity would have no effect on the lifecycle of individuals in a population.

Grey-headed Flying-	39	Unlikely to occur.
Pteropus poliocephalus		There are no actual populations known to occur at the site; the nearest known population Brinawarr Street, Bomaderry. There are also no camps currently or historically recorded in the area. This species has a very large home range and in the unlikely event of its presence, would leave the area. The proposed activity would likely have no effect on the lifecycle of individuals in a population.
Large-eared Pied Bat Chalinolobus dwyeri	9	Unlikely. The species roosts in caves, crevices in cliffs, old mine workings and in the disused, bottle-shaped mud nests of the Fairy Martin and found in well-timbered areas containing gullies. These types of habitat and features do not occur at the site of the proposed works.
Eastern Pygmy-	8	Unlikely.
Cercartetus nanus		The species prefers heathy woodlands and heath, feeding largely on nectar and pollen collected from banksias, eucalypts and bottlebrushes. It shelters in tree hollows, rotten stumps, holes in the ground, abandoned birds' nests and possum dreys within thickets of vegetation. This habitat does not occur at the site of the proposed activity and further assessment is not required.
Yellow-bellied Glider Petaurus australis	237	Unlikely.
		The species prefers heathy, tall and mature Eucalpyt forest and require hollows for breeding and roosting. This habitat does not occur at the site of the proposed activity and the amount of disturbance is considered insignificant due to the species being highly mobile and having a large home range $(20 - 85 ha)$. As a result, no further assessment is not required.
Squirrel Glider Petaurus norfolcensis	2	Unlikely.
		The species occupies mature or old growth Box, Box-Ironbark woodlands and River Red Gum forest west of the Great Dividing Range and Blackbutt-Bloodwood forest with heath understorey in coastal areas. This habitat does not occur at the site of the proposed activity and further assessment is not required.
Parma Wallaby <i>Macropus parma</i>	1	Unlikely.
		The species occupies moist eucalypt forest with thick, shrubby understorey, often with nearby grassy areas, rainforest margins and occasionally drier eucalypt forest. This habitat does not occur at the site of the proposed activity and further assessment is not required.
Yellow-bellied Sheathtail-bat	2	Possible occurrence but unlikely to be affected by the proposal for the following reasons:

Saccolaimus flaviventris		No hollow-bearing trees or caves that could provide roosting sites or camp or maternity sites would be removed
Eastern Freetail-bat <i>Mormopterus</i> <i>norfolkensis</i> Eastern False Pipistrelle	6 16	 All specified bat species have been recorded over a wide area throughout the Kangaroo Valley and Fitzroy Falls area. The impact resulting from the loss of a small amount of vegetation is unlikely to have a significant impact to these mobile species. The amount of disturbance is considered insignificant in comparison to the amount of potential
Falsistrellus		habitat available in the immediate vicinity of the site.
tasmaniensis		The new platform would not impact on the species' ability to forage for food, hunt, and breed
		The presence of these species at the proposed activity site is possible from time to time. The site, however, is not considered useful or important or critical to the survival of the species and, because of the lack of suitable roosting trees, are unlikely to be present during construction works. As a result of the above assessment, no further assessment is required.
Southern Myotis	6	Unlikely.
Myous macropus		The species generally roost in groups of $10 - 15$ close to water. They forage over streams and pools catching insects. This type of habitat does not occur at the site.
Greater Broad-nosed	8	Unlikely.
Scoteanax rueppellii		The species is most commonly found in tall wet forest and roosts in tree hollows. They forage over creek and river corridors. This type of habitat does not occur at the site.
Australian Fur-seal	1	Unlikely.
doriferus		This is a marine species and this type of habitat does not occur at the site.
Flora		
Pterostylis vernalis	21	Unlikely.
		There are five known populations of <i>Pterostylis vernalis</i> ; none of which occur at the site of the proposed works. This species inhabits open sites around moss gardens in shallow soil over sandstone sheets or moss gardens on heavy laterite associated soils, in heath and dry heathy forest/woodland. This type of community does not occur at the site and no further assessment is required.
Nowra Heath Myrtle	292	Unlikely.
		There are five known populations of Nowra Heath Myrtle; none of which occur at the site of the proposed

		works. This species occurs in gently sloping sandstone shelves or along creek lines. This type of habitat does not occur at the site and no further assessment is required.
Bomaderry Zieria	117	Unlikely.
Zieria baeuerienii		This species occurs on rocky plateau amongst sandstone boulders in either shrubby open forest, shrubby woodland or closed scrub. This type of habitat does not occur at the site and no further assessment is required.
Bauer's Midge Orchid	21	Unlikely.
		This species inhabits dry sclerophyll forest and moss gardens over sandstone. This type of habitat does not occur at the site and no further assessment is required.
Albatross Mallee	10	Unlikely.
Eucaryplus langleyi		This species inhabits mallee shrubland on poorly-drained, shallow, sandy soils on sandstone. This type of habitat does not occur at the site and no further assessment is required.
Warty Zieria	4	Unlikely.
		This species inhabits heath amongst rocky outcrops on rain forest edges and in tall forest and shrubland. This type of habitat does not occur at the site and no further assessment is required.
Leafless Tongue	3	Unlikely.
Cryptostylis hunteriana		Larger populations typically occur in woodland dominated by Scribbly Gum <i>Eucalyptus sclerophylla</i> , Silvertop Ash <i>E.sieberi</i> , Red Bloodwood <i>Corymbia gummifera</i> , and Black Sheoak <i>Allocasuarina littoralis</i> . Although a small number of Black Sheoaks occur at the subject site, the area is moderately disturbed and not suitable due to the lack of understorey vegetation and density of existing vegetation. This species prefers open habitat amongst an established understory of sedgelands and Spear Grass-tree. The listed communities do not occur in the area subject to the platform works. As a result of the above assessment, no further assessment is required.
Hibbertia stricta subsp.	21	Unlikely.
		This species inhabits dry sclerophyll forest or woodland associations in sandy soils over sandstone. This community does not occur in the area subject to the platform works, therefore no further assessment is required.
Solanum celatum	2	Unlikely.
		This species inhabits wet sclerophyll forests and rainforest clearings. This type of habitat does not occur at the site and no further assessment is required.

References

OEH (Office of Environment and Heritage, NSW) 2018 Leafless Tongue Orchid Cryptostylis hunteriana Profile https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10187

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