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12 August 2019

Mr Andrew Beattie
Director, Social and Infrastructure Assessments
Department of Planning, Industry and Environment
GPO Box 39 Sydney NSW 2001

Dear Andrew,

SSD_10352 - MORIAH COLLEGE REDEVELOPMENT: WAIVER REQUEST FOR BIODIVERSITY DEVELOPMENT ASSESSMENT REPORT

We write on behalf of Moriah War Memorial College Association (the applicant) to seek a waiver for the requirement for a Biodiversity Development Assessment Report (BDAR) for State Significant Development SSD_10352. A BDAR Waiver letter prepared by Cumberland Ecology accompanies this covering letter at **Attachment A**.

As identified in the request for Secretary's Environmental Assessment Requirements (SEARs), dated 20 June 2019, SSD_10352 will seek approval for the redevelopment of the Moriah College Queens Park Campus at Queens Park Road (legally described as Lot 22 DP 879582; Lot 1 DP 701512; Lot 3 DP 701512) (the site).

The proposal will involve the redevelopment of various out of date elements and buildings throughout the Campus. The proposal is still subject to design development. The development works will be limited to the lots: 3 Queens Park Road and 101 York Road. There are no proposed works within 1 Queens Park Road. Proposed works include:

- The demolition of selected buildings on the existing school site to facilitate the construction of a new 4 storey with basement Science Technology Engineering Arts and Maths Building and a new 3 storey Early Learning Centre and College teaching rooms.
- The application will seek an increase of up to 20% or 340 students over the next 10-15 years, in order to meet the future needs of a growing population. Staff numbers will also need to increase proportionally over time.
- Consolidating staff and visitor parking to the southern end of the site, utilising the existing access / egress point at Gate 4 on York Road.
- Creating a new 'front door' on Baronga Avenue where students, staff, parents and visitors will access the campus.

The SEARs issued by the Department of Planning Industry and Environment on 15 July 2019 include the requirement to provide an assessment of the proposal's biodiversity impacts in accordance with the requirements of the Biodiversity Conservation Act 2016 (BC Act), including the preparation of a Biodiversity Development Assessment Report (BDAR) where required under the BC Act.

Cumberland Ecology have undertaken an assessment of the proposal against the relevant provisions of the Biodiversity Conservation Act 2016 and Biodiversity Conservation Regulation 2017 (see **Attachment A**) and are of the opinion that the proposal is unlikely to have a significant impact on the eight biodiversity values (as defined in Section 1.5 of the Biodiversity Conservation Act 2016 and Clause 1.4 of the Biodiversity Conservation Regulation 2017). In summary:

- The proposal is highly unlikely to have significant impacts on defined biodiversity values.
- The proposal is anticipated to impact approximately 0.33-hectare area of urban exotic /native planted vegetation that does not conform to any recognised plant community types.
- As the vegetation on the site is identified as urban exotic/native with the subject land comprising of a combination of exotic and native species of planted origin situated within a highly artificial context, it is not considered to conform to any Threatened Ecological Communities listed under either the BC Act or the *Environment Protection and Biodiversity Conservation Act 1999* known from the locality.
- A conservation area containing an intact stand of Eastern Suburbs Banksia Scrub exists adjacent to the subject site. This area will not be impacted by the proposal.
- Whilst a small area of Eastern Suburbs Banksia Scrub vegetation overhangs the impact area, no direct or indirect impacts to vegetation within this area is anticipated as a result of the project.
- The proposal may result in a small reduction of marginal foraging habitat for highly mobile, aerial threatened species. When assessing impacts likely from the proposal in its current form, there is very little likelihood of significant impacts to threatened species.

Having regard to the above and the detailed assessment provided at **Attachment A** we respectfully request that the requirement for a BDAR is waived in this instance

We trust this assessment provides sufficient evidence to determine that the proposal will not have a significant impact on the biodiversity values defined under the BC Act and Regulation and therefore that a BDAR is not necessary to accompany the future application for SSD_10352.

Please do not hesitate to contact the undersigned should you require any further information.

Yours sincerely,

A handwritten signature in black ink, appearing to read "John Wynne".

John Wynne
Group Director



ATTACHMENT A – BDAR WAIVER LETTER PREPARED BY CUMBERLAND ECOLOGY

9 August 2019

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MORIAH COLLEGE REDEVELOPMENT BIODIVERSITY OFFSETS SCHEME WAIVER REQUEST

Dear Kate,

The purpose of this letter is to assess the need for formal biodiversity assessments utilising the Biodiversity Assessment Method (BAM) to support the proposed infill State Significant Development (SSD) application for Moriah College Queens Park Campus (hereafter referred to as the 'project'). This assessment considers the entire land area covered by the campus (Lot 22 DP 879582, Lot 1 DP 701512, Lot 3 DP 701512), hereafter referred to as the 'subject land' with particular reference to the areas to be impacted by the project (see **Figure 1**).

On 15 July 2019, the Secretary's Environmental Assessment Requirements (SEARs) (SSD 10352) for the project were received from the NSW Department of Planning, Industry and Environment (DPIE).

The SEARs required the biodiversity impacts to be assessed in accordance with the Biodiversity Assessment Method ('BAM'; OEH 2017) and documented in a Biodiversity Development Assessment Report (BDAR). Biodiversity assessment required for an SSD is described in Section 7.9 of the BC Act. Clause 2 of Section 7.9 indicates that an application for development consent for an SSD:

"...is to be accompanied by a biodiversity development assessment report [BDAR] unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values".

This letter has been prepared to provide information for the Planning Agency Head and the Environment Agency Head to assist them in determining whether the development is likely to have any significant impact on biodiversity values and whether a BDAR is required for the proposed development.

Our assessment is set out below, with the BAM Waiver Request provided in **Appendix A**, flora species lists are provided in **Appendix B**, threatened species records and likelihood of occurrence are summarised in **Appendix C** and Figures shown in **Appendix D**. Based on our assessment of biodiversity at Moriah College, we recommend that a waiver for the preparation of a Biodiversity Development Assessment Report (BDAR) be sought from DPIE.

Yours sincerely



David Robertson

Director

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APPENDIX A :

BAM Waiver Request

A.1. Background

A.1.1. Site Description

Moriah College is an independent Jewish School established in 1943. The school has operated from the Queens Park campus since 1994 and currently accommodates students across Preschool, Primary and High School educational levels. The Moriah College campus is bound by Queens Park Road to the north, Baronga Avenue to the east, and York Road to the south and west. Moriah College Queens Park Campus includes the following addresses (See **Figure 1**):

- 101 York Road, Queens Park/Lot 22 DP 879582 - approximate area of 4,830m². The lot contains the ELC buildings and car parking.
- 1 Queens Park Road, Queens Park/Lot 1 DP 701512 - approximate area of 1.45 hectares. The lot comprises the junior school campus
- 3 Queens Park Road, Queens Park/Lot 3 DP 701512 - approximate area of 2.6 hectares. The lot comprises the senior school campus.

Additionally, a conservation area exists adjacent to the subject site. This area contains an intact stand of Eastern Suburbs Banksia Scrub that will not be impacted by the Project.

A.1.2. The Proposed Development

Below is a description of the proposed development and is shown on **Figure 2**.

A.1.2.1. Stage 1

Stage 1 of the Project involves the construction of a new STEAM (Science, Technology, Engineering, Art and Maths) building and include new teaching rooms for technology and applied sciences (TAS), food technology, science and art. The uses will be contained in a 4-storey building plus basement and will be facilitated by the demolition of Buildings and A and B and the reconfiguration of adjacent landscaping vegetation.

A.1.2.2. Stage 2

Stage 2 of the Project involves the construction of a new three storey building containing early learning centre, flexible teaching spaces and school administration offices. Buildings C & D and adjacent vegetation are to be demolished to enable the construction. Additional at grade and basement parking will be included in Stage 2.

A.1.3. Assessment Requirements for State Significant Development

The project is classified as Stage Significant Development under Clause 15 of Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011, as the Capital Investment Value (CIV) exceeds \$20 million for the purpose of alterations or additions to an existing school.

Section 7.9 of the NSW *Biodiversity Conservation Act 2016* (BC Act), requires all development applications for State Significant Development to be accompanied by a Biodiversity Development Assessment Report (BDAR) unless both the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.

The main steps in the biodiversity assessment process for State Significant Development are as follows:

1. The Planning Agency Head and the Environment Agency Head determines if the Biodiversity Offsets Scheme applies to the State Significant Development and specifies the environmental assessment requirements;
2. The proponent engages an accredited person to assess the development site using the Biodiversity Assessment Method (BAM) and a BDAR is prepared;
3. The approval authority considers any serious and irreversible impacts and determines whether there are additional and appropriate measures to minimise impacts;
4. The approval authority sets an offset obligation as part of the Conditions of Approval; and
5. The proponent meets their offset obligation and begins their development.

The Biodiversity Assessment Method (BAM) sets out clear and repeatable methods to conduct assessment of direct and indirect impacts. The BAM is supported by the BAM Calculator, which is a web-based tool that quantifies direct impacts using 'biodiversity credits'. Two types of credits are generated by the BAM Calculator, ecosystem credits and species credits. Ecosystem credits are calculated based on variables including landscape features, native vegetation and ecosystem credit species (species that are reliably predicted by habitat surrogates). Species credits are calculated based on the number of individuals (flora) or the area of habitat (fauna) of species credit species (species that are not reliably predicted by habitat surrogates).

The BAM includes a requirement to prepare a BDAR for the development site. The BDAR must be prepared by an accredited assessor. A proponent is required to submit the BDAR as part of an Environmental Impact Statement for a State Significant Development.

A.1.4. Waiver of requirement to prepare a Biodiversity Development Assessment Report

Section 7.9 of the BC Act indicates that there are some circumstances in which the Planning Agency Head and the Environment Agency Head will determine that a proposed development is not likely to have a significant impact on biodiversity values and as such, a BDAR is not required to be prepared. Biodiversity values are defined under the BC Act and the *Biodiversity Conservation Regulation 2017* (BC Regulation), and include:

- Vegetation integrity—being the 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;
- Habitat suitability—being the degree to which the habitat needs of threatened species are present at a particular site;
- Threatened species abundance—being the occurrence and abundance of threatened species or threatened ecological communities, or their habitat, at a particular site;
- Vegetation abundance—being the occurrence and abundance of vegetation at a particular site;

- Habitat connectivity—being the degree to which a particular site connects different areas of habitat of threatened species to facilitate the movement of those species across their range;
- Threatened species movement—being the degree to which a particular site contributes to the movement of threatened species to maintain their lifecycle;
- Flight path integrity—being the degree to which the flight paths of protected animals over a particular site are free from interference;
- Water sustainability—being the degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site.

For a waiver to be applied for future development at the subject site, it needs to be demonstrated that the above listed biodiversity values will not be significantly impacted.

A.2. Methods

1.1.1. Site Inspection

Botanist Bryan Furchert and Ecologist Cecilia Eriksson of Cumberland Ecology visited the subject land on Thursday, 25 July 2019. The subject land was inspected by traversing the landscape around Moriah College to verify existing vegetation mapping with reference to Plant Community Types (PCTs) known to occur within the locality.

1.1.1.1. Random Meander Surveys

Four random meander surveys were undertaken within the subject land, where occurring flora species were recorded. Notes and photographs were taken documenting vegetation and habitat features throughout the subject land as shown in **Figure 3**.

1.1.1.2. BAM Plot Survey

Sampling of BAM plots included the establishment of one 20 m x 50 m plot within which data was collected to assess the vegetation integrity and habitat suitability of the vegetation zone in question as shown in **Figure 3**. This survey included collection of the following data:

- Composition for each growth form group by counting the number of native plant species recorded for each growth form group within a 20 m x 20 m plot;
- Structure of each growth form group as the sum of all the individual projected foliage cover estimates of all native plant species recorded within each growth form group within a 20 m x 20m plot;
- Cover of High Threat Exotic weed species;
- Assessment of function attributes within a 20 m x 50 m plot, including:
 - Count of number of large trees;
 - Tree stem size classes, measured as 'diameter at breast height over bark' (DBH);

- Regeneration based on the presence of living trees with stems <5cm DBH; and
- The total length in metres of fallen logs over 10 cm in diameter.
- Assessment of litter cover within five 1 m x 1 m plots evenly spread within the 20 m x 50 m plot; and
- Number of trees with hollows that are visible from the ground within the 20 m x 50 m plot.

1.1.2. Fauna Habitat Assessment

A fauna habitat assessment was conducted within the subject land, which included consideration of important indicators of habitat condition and complexity including the occurrence of microhabitats such as tree hollows, human-made structures and the nature and extent of the understorey, ground stratum and canopy of vegetation. Any incidental vertebrate fauna species that were heard calling or were observed during the surveys were recorded and listed in the total species list for the subject land.

1.2. Database Analysis

Database searches were conducted to identify threatened species, populations, that occur within the locality (5 km) using the NSW Office of Environment and Heritage (OEH) BioNet Atlas database (OEH 2019a). The BioNet Atlas search facility was used to generate records of threatened flora and fauna species and populations listed under the BC Act within the search area. The number, age, and location of such records were considered to provide an indication of the species that could have the potential to occur on or around the subject land.

1.3. GIS Mapping

A desktop analysis was completed to identify whether any vegetation communities were present on or nearby the subject land. To do this, the subject land was plotted against the broad scale mapping compiled by the OEH for the Sydney Metropolitan area (OEH 2016). A vegetation map of the subject land was then produced based upon observations of vegetation during the site inspection.

The results from the OEH BioNet Atlas search were downloaded and plotted onto an aerial image (Nearmap; dated 01/07/2019) corresponding to the subject land. This subsequently displayed any threatened species within the locality to determine the potential for the species to be present within the subject land.

A.3. Key findings

A.3.1. Vegetation of the subject land

The vegetation within the subject land is likely to have been planted after 1943 as determined from review of historical imagery, as shown in **Figure 4**. Generally, the composition, structure and function of vegetation within the subject land and the surrounding landscape have been altered significantly and do not resemble any naturally occurring PCTs. The subject land is predominantly an artificial landscape with planted garden beds and isolated trees situated throughout the campus. Subsequently, the woody vegetation within the subject land predominately forms a single mapping unit of 'Urban Native/Exotic vegetation' as described below and as shown in **Figure 4**. A small area of Eastern Suburbs Banksia Scrub also extends on the subject land from the adjacent conservation area.

A.3.1.1. Eastern Suburbs Banksia Scrub

The vegetation within the conservation area is comprised of a patch of Eastern Suburbs Banksia Scrub that is likely to be of either of regrowth or planted origin, established since 1943 as shown between **Figure 4** and **Figure 5**, with a photograph of this community provided below in **Photograph 1**. Small trees and shrubs present within this patch of vegetation include *Acacia longifolia* subsp. *sophorae* (Coastal Wattle), *Banksia aemula* (Wallum Banksia), *Banksia integrifolia* (Coastal Banksia), *Kunzea ambigua* (Tick Bush) and *Monotoca elliptica* (Tree Broom-heath). The ground layer of this patch of vegetation is comprised of *Dianella caerulea* var. *producta* (Blueberry Lily), *Dianella revoluta* (Blueberry Lily), *Ficinia nodosa* (Knobby Club-rush) and *Lomandra longifolia* (Spiny-head Mat-rush).

Photograph 1 Eastern Suburbs Banksia Scrub within the conservation area



A.3.1.2. Urban Exotic/Native

The Urban Exotic/Native vegetation within the subject land is comprised of garden beds and rows of trees of primarily planted origin. Common native canopy tree species planted throughout the areas mapped as Urban Exotic/Native vegetation include *Eucalyptus robusta* (Swamp Mahogany), *Eucalyptus scoparia* (Wallangara White Gum), *Ficus rubiginosa* (Port Jackson Fig), *Melaleuca quinquenervia* (Broad-leaved Paperbark), *Melia azedarach* (White Cedar), and *Tristaniaopsis laurina* (Water Gum). Native shrubs and small trees present

throughout this area of vegetation include *Acacia longifolia* (Golden Wattle), *Acacia suaveolens* (Sweet Wattle), *Banksia ericifolia* (Heath-leaved Banksia), *Pittosporum undulatum* (Sweet Pittosporum) and *Westringia fruticosa* (Coastal Rosemary). Native groundcover species present within this area of vegetation include *Cynodon dactylon* (Common Couch), *Lomandra hystrix* (Green Mat-rush) and *Lomandra longifolia* (Spiny-head Mat-rush).

Planted exotics species feature heavily throughout these plantings with trees such as *Olea europea* (Common Olive), *Pinus radiata* (Monterey Pine), *Ficus benjamina* (Weeping Fig), *Fraxinus* spp. (Ash), *Jacaranda mimosifolia* (Jacaranda), *Platanus x acerifolia* (London Planetree) and *Schinus mole* var. *areira* (Pepper Tree). Common exotic shrubs and shrubby weeds throughout this area of vegetation include *Murraya paniculata* (False Orange) hedges, *Rhododendron* spp. (Azaleas), *Lantana camara* (Lantana) and *Cestrum parqui* (Green Cestrum). Common ground layer planted exotic species and weeds include *Agapanthus praecox* subsp. *orientalis* (Agapanthus), *Asparagus aethiopicus* (Asparagus Fern), *Bidens pilosa* (Cobbler's Pegs), *Buxus microphylla* (Japanese Boxwood), *Conyza sumatriensis* (Tall Fleabane), *Ehrharta erecta* (Panic Veldtgrass), *Lolium perenne* (Perennial Ryegrass), *Ophiopogon japonicus* (Dwarf Lilyturf), *Lysimachia arvensis* (Scarlet Pimpernel), *Poa annua* (Winter Grass), *Acetosa sagittata* (Turkey Rhubarb) and *Romulea rosea* (Onion Weed). Representative photographs of planted exotic species are provided as **Photograph 2** and **Photograph 3** below.

Photograph 2 Large *Ficus benjamina* (Weeping Fig) within Urban Exotic/Native Vegetation



Photograph 3 *Pinus radiata* (Monterey Pine) within Urban Exotic/Native Vegetation



A.3.2. Fauna Habitat

The primary habitat for native fauna within the subject land is the native and exotic plantings throughout the campus. This vegetation may fall within the foraging range of a range of native fauna species including threatened species. The foraging resources of the subject land would be expected to be utilised occasionally and opportunistically by birds, Microchiropteran bats and arboreal mammals. Nectivorous and frugivorous species may utilise the native and exotic vegetation within the subject land to feed on blooms and fruit whilst insectivorous species such as Microchiropteran bats may forage for insects throughout the canopy layer. No hollow-bearing trees were observed within the subject land, ruling out the possibility of breeding habitat for hollow nesting and roosting species.

A.3.3. Threatened Communities and Species

A.3.3.1. Threatened Ecological Communities

As the vegetation identified as Urban Exotic/Native within the subject land comprised of a combination of exotic and native species of planted origin situated within a highly artificial context, it is not considered to conform to any Threatened Ecological Communities listed under either the BC Act or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) known from the locality.

The vegetation within the conservation area is floristically consistent with Eastern Suburbs Banksia Scrub in the Sydney Basin Bioregion which is listed as a Critically Endangered Ecological Community under the BC Act and as Endangered under the EPBC Act. Despite its likely planted or regrowth origin, this area of vegetation is conservatively considered to conform to the Eastern Suburbs Banksia Scrub threatened ecological community. However, while very small areas of vegetation overhang the impact area, no direct or indirect impacts to vegetation within this area is anticipated as a result of the project.

A.3.3.2. Threatened Flora

No existing records of threatened flora species are present on the subject land, other than a single *Eucalyptus scoparia* (Wallangara White Gum) of planted origin. *E. scoparia* is not endemic to the Sydney region and is occasionally planted as a landscape specimen. This species is endemic to the Tenterfield region in northern NSW and is listed as Endangered under the BC Act and as Vulnerable under the EPBC Act.

Threatened flora species are known to occur within the locality (see **Appendix C**). Due to the lack of nearby records and the highly developed and artificial nature of the subject land, it is considered unlikely that any threatened flora species would occur within the subject land.

A.3.3.3. Threatened Fauna

A limited number of threatened fauna species are known to occur within the locality of the subject land (see **Appendix C**). A review of the BioNet Atlas records of threatened fauna species within 5 km of the subject land includes a single Grey-headed Flying Fox (*Pteropus poliocephalus*) record within the conservation area. Threatened fauna that would be expected to utilise the foraging resources within the subject land and immediate surrounds include highly mobile, aerial species such as The Grey-headed Flying-fox (*Pteropus poliocephalus*), the Powerful Owl (*Ninox strenua*) and Microchiropteran bats. The Grey-headed Flying Fox is listed as Vulnerable under the BC Act and the EPBC Act whilst the Powerful Owl is listed as Vulnerable under the BC Act.

There are many records of Grey Headed Flying Fox near within the locality as there is a number of breeding camps located within 20 km of the subject land which is considered to be the foraging range of the species. The closest camp occurs in Centennial Park, located within 1 km west of the subject land. Other camps within foraging range of the subject land include the Wolli Creek camp located approximate 9 km west of the subject land and the Gladesville camp located approximately 12 km northwest of the subject land (Department of the Environment and Energy 2015). Grey Headed Flying Foxes from these camps are likely to fly over the subject land in search of foraging resources such as nectar and pollen (OEH 2018a). Whilst Grey-headed Flying Foxes are likely to forage within the subject land, it does not contain a roosting camp.

The Powerful Owl occupies a territory of up to 4000 ha and may occasionally and opportunistically hunt for arboreal mammal prey species such as the Common Ringtail Possum (*Pseudocheirus peregrinus*) within the subject land as part of a larger foraging range (OEH 2018b); however the Urban Exotic/Native vegetation within the subject land would not be expected to support an abundance of prey species. Nonetheless, the Powerful Owl may utilise the limited foraging values within the subject land to hunt for prey such as Ring-tailed Possums (*Pseudocheirus peregrinus*) which may have the potential to occur.

Microchiropteran bats are also known to forage for insects in urban areas and would be expected to occasionally and opportunistically access the foraging resources within the subject land. Species anticipated to frequent the subject land include but are not limited to the Southern Myotis (*Myotis Macropus*) and the Large Bent-winged Bat (*Miniopterus orianae oceanensis*). Both of these species are listed as Vulnerable under the BC Act. The subject land does not contain suitable breeding or refuge habitat for either species which are known to utilise tree hollows and caves respectively (OEH 2019c, b).

A.4. Impact Assessment

A.4.1. Impacts to Vegetation and Habitat

The approximate area of impact relating to the Project is shown on **Figure 6**. Stage 1 and Stage 2 of the project is anticipated to result in impacts to a ~0.33 ha of Urban Native/Exotic planted vegetation, comprising a combination of native and exotic trees and shrubs. Exotic trees to be impacted include a large *Ficus benjamina* (Benjamina Fig), four *Platanus x acerifolia* (London Planetree) and three *Pinus radiata* (Monterey Pines). Native trees to be impacted by the project include three *Tristaniopsis laurina* (Water Gum). Areas of exotic shrubs are likely to be impacted including *Murraya paniculata* (False Orange) and *Buxus microphylla* (Japanese Boxwood).

Whilst a ~0.03 ha area of Eastern Suburbs Banksia is mapped as occurring in the impact area as shown in **Figure 6**, it should be noted that this area comprises canopy overhang from within the conservation area and is not anticipated to be directly or indirectly impacted by the project.

Table 1 Areas of vegetation and land to be impacted within the subject land

Vegetation Community	Total Area (ha)	Subject Land (ha)	Conservation Area (ha)	Impact Area (ha)
Eastern Suburbs Banksia Scrub	1.22	0.15	1.06	0.03
Urban Native/Exotic Vegetation	0.51	0.51	0.00	0.33
Cleared	3.90	3.90	0.00	1.92

A.4.2. Biodiversity Values Assessment

The BC Act and the BC Regulation list a suite of biodiversity values that are relevant to assessments that must take place under the BC Act. To demonstrate that the project at Moriah College will not impact upon biodiversity, **Table 1** systematically comments upon the relevance of each value.

Table 2 Biodiversity values assessment

Biodiversity Value	Assessment within subject land
BC Act - Part 1 Section 1.5 (2)	
(a) vegetation integrity—the degree to which the composition, structure and	Based upon analysis of historic aerial photography, it is evident that the vegetation within the subject land has been planted or is regrowth since 1943. Based upon the results of floristic surveys, it has been

Biodiversity Value	Assessment within subject land
function of vegetation at a particular site and the surrounding landscape has been altered from a near natural state,	<p>concluded that the existing vegetation of the subject land is largely comprised of planted Urban Native/Exotic Vegetation within garden beds and in rows.</p> <p>The composition, structure and function of vegetation within the subject land and the surrounding landscape are considered to have been altered significantly from a natural state and do not resemble any naturally occurring PCTs known from the locality.</p>
(b) habitat suitability—being the degree to which the habitat needs of threatened species are present at a particular site,	<p>As discussed above, Moriah College has little potential to provide habitat for threatened species other than highly mobile, aerial species. Threatened species with the highest likelihood to utilise the subject land include the Grey Headed Flying Fox, the Powerful Owl and Microchiropteran bats. These highly mobile species may occasionally and opportunistically utilise the limited foraging resources of the subject land as part of a larger foraging range.</p>
(c) biodiversity values, or biodiversity-related values, prescribed by the regulations.	See below.
BC Regulation - Part 1 Clause 1.4	
(a) threatened species abundance—being the occurrence and abundance of threatened species or threatened ecological communities, or their habitat, at a particular site,	<p>No threatened species were observed during the site inspection. Only highly mobile, aerial threatened species would be expected to utilise the foraging resources of the subject land occasionally and opportunistically.</p>
(b) vegetation abundance—being the occurrence and abundance of vegetation at a particular site,	<p>As described above, the subject land is predominantly cleared and contains scattered plantings consisting of exotic and native species.</p> <p>The project is expected to result in the clearing of garden bed plantings and rows of planted trees comprised of eight exotic trees and three native trees.</p>
(c) habitat connectivity—being the degree to which a particular site connects different areas of habitat of threatened species to facilitate the movement of those species across their range,	<p>Moriah College may marginally contribute to habitat connectivity throughout the largely cleared and artificial landscape that dominates the locality. Trees within the subject land and its immediate surroundings may function as stepping stone habitat for highly mobile fauna, providing a degree of habitat connectivity between the small parks and reserves of such as Centennial Park, Queens Park, Cooper Park and Waverley Park.</p>
(d) threatened species movement—being the degree to which a particular site contributes to the movement of threatened species to maintain their lifecycle,	<p>As above, the subject land does not contribute to the movement of threatened species other than highly mobile, aerial species. Impacts associated with the project would not be expected to have any impact on the lifecycle of such species,</p>
(e) flight path integrity—being the degree to which the flight paths of	<p>Moriah College will be changed externally with two infill developments and associated landscaping. The infill developments are not</p>

Biodiversity Value	Assessment within subject land
protected animals over a particular site are free from interference,	anticipated to exceed the height of existing structures throughout the subject land. Subsequently the project is not expected to impact upon free-flying animals (threatened or otherwise) by interfering with flight paths.
(f) water sustainability—being the degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site.	Moriah College is located approximately 100 m north of an unnamed ephemeral watercourse associated with Musgrave pond south of the subject land. This highly modified watercourse flows into a pipe under Queens Park. A system of ornamental constructed ponds also occurs west of the subject land within Centennial Park. The project is unlikely to result in impacts to water bodies or hydrological processes assuming that adequate sediment control measures are followed.

A.5. Conclusion

The redevelopment of Moriah College is highly unlikely to have significant impacts upon defined biodiversity values as a result of the proposed project involving infill developments and associated landscaping. The Project is anticipated to impact a ~0.33 ha area of Urban Exotic /Native planted vegetation that does not conform to any recognised PCT. This area of vegetation may comprise potential and marginal foraging habitat within the broad habitat ranges of highly mobile native fauna including threatened species such as the Grey-headed Flying Fox, Microchiropteran bats and the Powerful Owl.

When assessing impacts to potentially occurring threatened species from the project at Moriah College, there is limited justification for considering impacts to threatened species with the detail required under the BAM. The project may result in a small reduction of marginal foraging habitat for highly mobile, aerial threatened species. When assessing impacts likely from the project in its current form, there is very little likelihood of significant impacts to threatened species.

On the basis of our investigations, we believe that the preparation of a BDAR is not necessary due to the low likelihood of impacts to biodiversity. Therefore, we recommend that a waiver for the preparation of a BDAR be sought from DPIE for the proposed project at Moriah College, constituting State Significant Development.

A.6. References

- Department of the Environment and Energy. 2015. National Flying-fox Monitoring Viewer. Canaberra, ACT.
- OEH. 2016. The Native Vegetation of the Sydney Metropolitan Area - VIS_ID 4489. Office of Environment and Heritage, Sydney.
- OEH. 2018a. Grey-headed Flying-fox - profile. NSW Office of Environment and Heritage., Hurstville.
- OEH. 2018b. Powerful Owl - profile. Office of Environment and Heritage, Hurstville.
- OEH. 2019a. BioNet Atlas. Office of Environment and Heritage.
- OEH. 2019b. Eastern Bentwing-bat - profile. Office of Environment and Heritage, Hurstville.
- OEH. 2019c. Southern Myotis - Profile. NSW Office of the Environment and Heritage, Hurtsville.

APPENDIX B :

Flora Species List

Table 3 Flora species list

Family	Exotic	Scientific Name	Common Name	NSW Status	Comm. Status	High Threat Weed	Q1 Cover	Q1 Abundance	RMS1	RMS2	RMS3	RMS4
Agavaceae	*	<i>Yucca aloifolia</i>	Spanish Bayonet							X		
Alliaceae	*	<i>Agapanthus praecox</i> subsp. <i>orientalis</i>								X		
Apiaceae	*	<i>Apium graveolens</i>	Celery						X			
Apiaceae	*	<i>Cyclospermum leptophyllum</i>	Slender Celery				0.1	20				
Arecaceae	*	<i>Phoenix canariensis</i>	Canary Island Date Palm			YES				X		
Asparagaceae	*	<i>Asparagus aethiopicus</i>	Asparagus Fern			YES				X		
Asteraceae	*	<i>Bidens pilosa</i>	Cobbler's Pegs			YES				X		
Asteraceae	*	<i>Bidens pilosa</i>	Cobbler's Pegs			YES						X
Asteraceae	*	<i>Conyza sumatrensis</i>	Tall fleabane						X			
Asteraceae	*	<i>Gamochaeta pensylvanica</i>	Cudweed							X		
Asteraceae	*	<i>Hypochaeris radicata</i>	Catsear				0.1	50				X
Asteraceae	*	<i>Soliva sessilis</i>	Bindyi				0.25	500				
Asteraceae	*	<i>Sonchus</i> spp.	Sowthistle						X			
Asteraceae	*	<i>Sonchus asper</i>	Prickly Sowthistle							X		
Asteraceae	*	<i>Taraxacum officinale</i>	Dandelion						X			
Bignoniaceae	*	<i>Jacaranda mimosifolia</i>	Jacaranda							X		
Brassicaceae	*	<i>Cardamine hirsuta</i>	Common Bittercress							X		
Buxaceae	*	<i>Buxus microphylla</i>								X		
Caryophyllaceae	*	<i>Cerastium glomeratum</i>	Mouse-ear Chickweed				0.1	50				
Caryophyllaceae	*	<i>Paronychia brasiliانا</i>	Chilean Whitlow Wort, Brazilian Whitlow				0.1	100				
Caryophyllaceae	*	<i>Stellaria media</i>	Common Chickweed				0.2	200				
Convallariaceae	*	<i>Ophiopogon japonicus</i>	Dwarf lilyturf							X		
Cyperaceae		<i>Ficinia nodosa</i>	Knobby Club-rush								X	
Ericaceae		<i>Monotoca elliptica</i>	Tree Broom-heath								X	
Fabaceae (Faboideae)	*	<i>Erythrina x sykesii</i>	Coral tree									x
Fabaceae (Faboideae)	*	<i>Medicago polymorpha</i>	Burr Medic						X			
Fabaceae (Faboideae)	*	<i>Trifolium repens</i>	White Clover						X			
Fabaceae (Mimosoideae)		<i>Acacia longifolia</i>								X		
Fabaceae (Mimosoideae)		<i>Acacia longifolia</i> subsp. <i>sophorae</i>	Coastal Wattle								X	
Fabaceae (Mimosoideae)		<i>Acacia suaveolens</i>	Sweet Wattle									x
Lamiaceae		<i>Westringia fruticosa</i>	Coastal Rosemary							X		
Lauraceae	*	<i>Cinnamomum camphora</i>	Camphor Laurel			YES						x
Lomandraceae		<i>Lomandra hystrix</i>								X		x

Family	Exotic	Scientific Name	Common Name	NSW Status	Comm. Status	High Threat Weed	Q1 Cover	Q1 Abundance	RMS1	RMS2	RMS3	RMS4
Lomandraceae		<i>Lomandra longifolia</i>	Spiny-headed Mat-rush						X		x	x
Lythraceae	*	<i>Cuphea hyssopifolia</i>								X		
Meliaceae		<i>Melia azedarach</i>	White Cedar									x
Moraceae	*	<i>Ficus benjamina</i>	Weeping Fig				1	20	X			
Moraceae		<i>Ficus rubiginosa</i>	Port Jackson Fig									x
Myrsinaceae	*	<i>Lysimachia arvensis</i>	Scarlet Pimpernel						X			x
Myrtaceae		<i>Eucalyptus robusta</i>	Swamp Mahogany				1	4	X			x
Myrtaceae		<i>Eucalyptus scoparia</i>	Wallangarra White Gum	E,P	V					X		
Myrtaceae		<i>Kunzea ambigua</i>	Tick Bush	P							X	
Myrtaceae		<i>Leptospermum laevigatum</i>	Coast Teatree								X	x
Myrtaceae		<i>Melaleuca quinquenervia</i>	Broad-leaved Paperbark							X		
Myrtaceae		<i>Melaleuca styphelioides</i>	Prickly-leaved Tea Tree							X		
Myrtaceae		<i>Tristaniopsis laurina</i>	Kanooka						X			
Oleaceae	*	<i>Fraxinus spp.</i>								X		
Oleaceae	*	<i>Olea europaea</i>	Common Olive			YES			x			x
Oxalidaceae	*	<i>Oxalis corniculata</i>	Creeping Oxalis						X			
Passifloraceae	*	<i>Passiflora edulis</i>	Common Passionfruit						X			
Phormiaceae		<i>Dianella revoluta</i>	Blueberry Lily								X	
Pinaceae	*	<i>Pinus radiata</i>	Radiata Pine						X			
Pittosporaceae		<i>Pittosporum undulatum</i>	Sweet Pittosporum									x
Plumbaginaceae	*	<i>Plumbago auriculata</i>	Cape leadwot							X		
Poaceae	*	<i>Bromus catharticus</i>	Praire Grass				1	100				
Poaceae	*	<i>Cenchrus clandestinus</i>	Kikuyu Grass									x
Poaceae		<i>Cynodon dactylon</i>	Common Couch				20	1000				
Poaceae	*	<i>Ehrharta erecta</i>	Panic Veldtgrass			YES	5	500	X			
Poaceae	*	<i>Eragrostis tenuifolia</i>	Elastic Grass						X			
Poaceae	*	<i>Lolium perenne</i>	Perennial Ryegrass									x
Poaceae	*	<i>Poa annua</i>	Winter Grass				10	2000	X			x
Poaceae	*	<i>Sporobolus africanus</i>	Parramatta Grass				N/A	N/A	X			
Poaceae	*	<i>Stenotaphrum secundatum</i>	Buffalo Grass			YES			x			
Proteaceae		<i>Banksia aemula</i>	Wallum Banksia								X	
Proteaceae		<i>Banksia ericifolia</i>	Heath-leaved Banksia							X		
Proteaceae		<i>Banksia integrifolia</i>	Coast Banksia							X	X	
Sapindaceae		<i>Cupaniopsis anacardioides</i>	Tuckeroo								X	x
Solanaceae	*	<i>Cestrum parqui</i>	Green Cestrum			YES						x

Family	Exotic	Scientific Name	Common Name	NSW Status	Comm. Status	High Threat Weed	Q1 Cover	Q1 Abundance	RMS1	RMS2	RMS3	RMS4
Strelitziaceae	*	<i>Strelitzia reginae</i>							X			
Urticaceae	*	<i>Parietaria judaica</i>	Pellitory									x
Verbenaceae	*	<i>Lantana camara</i>	Lantana			YES				X		
Polygonaceae	*	<i>Acetosa sagittata</i>	Turkey Rhubarb			YES	0.1	10	X			x
Brassicaceae	*	<i>Brassica rapa</i> subsp. <i>chinensis</i>	Bok Choy						X			
Solanaceae	*	<i>Capsicum</i> sp.	Capsicum						X			
Casuarinaceae		<i>Casuarina cunninghamiana</i>	River Oak							X		
Poaceae	*	<i>Cenchrus setaceus</i>	Fountain Grass			YES			X			x
Cupressaceae	*	<i>Cuppressus</i> sp.	Cypress							X		
Phormiaceae		<i>Dianella caerulea</i> var. <i>producta</i>	Blueberry Lily								X	
Asteraceae	*	<i>Gamochaeta americana</i>	Cudweed				0.1	20	X			
Proteaceae		<i>Grevillea "Robyn Gordon"</i>	Robyn Gordon Grevillea							X		
Rutaceae	*	<i>Murraya paniculata</i>	False Orange						x			
Iridaceae	*	<i>Dietes grandiflora</i>	Fairy Iris						X			
Platanaceae	*	<i>Platanus x acerifolia</i>	London Planetree						X			
Ericaceae	*	<i>Rhododendron</i> sp.	Azalea						X			
Iridaceae	*	<i>Romulea rosea</i>	Onion Weed			YES			X			
Anacardiaceae	*	<i>Schinus molle</i> var. <i>areira</i>	Pepper Tree							X		
Fabaceae	*	<i>Lathyrus odoratus</i>	Sweet Pea						X			

Key: E = Endangered, V = Vulnerable, P = Protected

APPENDIX C :

Threatened Species Likelihood of Occurrence Tables




Table 4 Threatened flora likelihood of occurrence

Family	Scientific Name	Common Name	No. of Records	BC Act Status	EPBC Act Status	Likelihood of Occurrence	Likelihood/Nature of Impacts from DA
Casuarinaceae	<i>Allocasuarina portuensis</i>	Nielsen Park She-oak	1	E	E	Nil - not encountered within the subject land.	No impacts anticipated as it does not occur within the subject land.
Doryanthaceae	<i>Doryanthes palmeri</i>	Giant Spear Lily	2	V		Nil - not encountered within the subject land.	No impacts anticipated as it does not occur within the subject land.
Fabaceae (Mimosoideae)	<i>Acacia terminalis</i> subsp. <i>terminalis</i>	Sunshine Wattle	31	E	E	Nil - not encountered within the subject land.	No impacts anticipated as it does not occur within the subject land.
Myrtaceae	<i>Eucalyptus nicholii</i>	Narrow-leaved Black Peppermint	1	V	V	Nil - not encountered within the subject land. Commonly planted species that is not endemic to the Sydney region.	No impacts anticipated as it does not occur within the subject land.
Myrtaceae	<i>Eucalyptus scoparia</i>	Wallangarra Gum	3	E	V	One planted individual occurs within the subject land.	Whilst it does occur within the subject land, the individual in question is not indicated to be removed.
Myrtaceae	<i>Syzygium paniculatum</i>	Magenta Lilly Pilly	55	E	V	Nil - not encountered within the subject land. Commonly planted species.	No impacts anticipated as it does not occur within the subject land.

Family	Scientific Name	Common Name	No. of Records	BC Act Status	EPBC Act Status	Likelihood of Occurrence	Likelihood/Nature of Impacts from DA	of
Orchidaceae	<i>Diuris arenaria</i>	Sand Doubletail	1	E		Nil - not encountered within the subject land.	No impacts anticipated as it does not occur within the subject land.	

Key: E = Endangered, V = Vulnerable

Table 5 Threatened fauna likelihood of occurrence

Scientific Name	Common Name	No. of Records	BC Act Status	EPBC Act Status	Likelihood of Occurrence	Likelihood/Nature of Impacts from DA
Amphibia						
<i>Litoria aurea</i>	Green and Golden Bell Frog	6	E	V	Nil - suitable habitat not present.	Nil
Aves						
<i>Anseranas semipalmata</i>	Magpie Goose	9	V		Nil - suitable habitat not present.	Nil
<i>Ardea ibis</i>	Cattle Egret	4		M	Nil - suitable habitat not present.	Nil
<i>Ardenna grisea</i>	Sooty Shearwater	1		M	Nil - suitable habitat not present.	Nil
<i>Ardenna pacificus</i>	Wedge-tailed Shearwater	4		M	Nil - suitable habitat not present.	Nil
<i>Ardenna tenuirostris</i>	Short-tailed Shearwater	8		M	Nil - suitable habitat not present.	Nil
<i>Artamus cyanopterus cyanopterus</i>	Dusky Woodswallow	1	V		Unlikely - limited records within 5 km radius of subject land.	Nil

Scientific Name	Common Name	No. of Records	BC Act Status	EPBC Act Status	Likelihood of Occurrence	Likelihood/Nature of Impacts from DA
<i>Burhinus grallarius</i>	Bush Stone-curlew	1	E		Nil - suitable habitat not present.	Nil
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	2		M	Nil - suitable habitat not present.	Nil
<i>Calidris melanotos</i>	Pectoral Sandpiper	1		M	Nil - suitable habitat not present.	Nil
<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	1	V		Unlikely - limited records within 5 km radius of subject land.	Nil
<i>Calyptorhynchus lathamii</i>	Glossy Black-Cockatoo	3	V		Unlikely - limited records within 5 km radius of subject land.	Nil
<i>Gallinago hardwickii</i>	Latham's Snipe	5		M	Nil - suitable habitat not present.	Nil
<i>Glossopsitta pusilla</i>	Little Lorikeet	2	V		Nil - suitable habitat not present.	Nil
<i>Haematopus fuliginosus</i>	Sooty Oystercatcher	1	V		Nil - suitable habitat not present.	Nil
<i>Haematopus longirostris</i>	Pied Oystercatcher	1	E		Nil - suitable habitat not present.	Nil
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	4	V	M	Nil - suitable habitat not present.	Nil
<i>Limosa lapponica</i>	Bar-tailed Godwit	1		M	Nil - suitable habitat not present.	Nil

Scientific Name	Common Name	No. of Records	BC Act Status	EPBC Act Status	Likelihood of Occurrence	Likelihood/Nature of Impacts from DA
<i>Merops ornatus</i>	Rainbow eater	2	P	M	Nil - suitable habitat not present.	Nil
<i>Ninox strenua</i>	Powerful Owl	50	V		Likely to occur throughout the locality as part of a large foraging habitat range. The subject land may contain marginal foraging habitat that may be used occasionally and opportunistically by the species. The subject land does not contain suitable breeding habitat features.	The project may result in a minor reduction of marginal foraging habitat.
<i>Pandion cristatus</i>	Eastern Osprey	1	V		Nil - suitable habitat not present.	Nil
<i>Petroica boodang</i>	Scarlet Robin	1	V		Nil - suitable habitat not present.	Nil
<i>Phaethon lepturus</i>	White-tailed Tropicbird	1		M	Nil - suitable habitat not present.	Nil
<i>Pluvialis squatarola</i>	Grey Plover	3		M	Nil - suitable habitat not present.	Nil
<i>Ptilinopus superbus</i>	Superb Fruit-Dove	2	V		Unlikely - limited records within 5 km radius of subject land.	Nil
<i>Stercorarius pomarinus</i>	Pomarine Jaeger	1		M	Nil - suitable habitat not present.	Nil
<i>Sterna hirundo</i>	Common Tern	9		M	Nil - suitable habitat not present.	Nil
<i>Sternula albifrons</i>	Little Tern	3	E	M	Nil - suitable habitat not present.	Nil

Scientific Name	Common Name	No. of Records	BC Act Status	EPBC Act Status	Likelihood of Occurrence	Likelihood/Nature of Impacts from DA
<i>Stictonetta naevosa</i>	Freckled Duck	1	V		Nil - suitable habitat not present.	Nil
<i>Tyto novaehollandiae</i>	Masked Owl	2	V		Unlikely - limited records within 5 km radius of subject land.	Nil
Mammalia						
<i>Arctocephalus forsteri</i>	New Zealand Fur-seal	4	V		Nil - marine species.	Nil
<i>Arctocephalus pusillus doriferus</i>	Australian Fur-seal	7	V		Nil - marine species.	Nil
<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	1	V	E	Nil - suitable habitat not present.	Nil
<i>Dugong dugon</i>	Dugong	1	E		Nil - marine species.	Nil
<i>Eubalaena australis</i>	Southern Right Whale	1	E	E	Nil - marine species.	Nil
<i>Megaptera novaeangliae</i>	Humpback Whale	6	V	V	Nil - marine species.	Nil

Scientific Name	Common Name	No. of Records	BC Act Status	EPBC Act Status	Likelihood of Occurrence	Likelihood/Nature of Impacts from DA
<i>Miniopterus orianae oceanensis</i>	Large Bent-winged Bat	17	V		Likely to occur throughout the locality as part of a large foraging habitat range. The subject land may contain marginal foraging habitat that may be used occasionally and opportunistically by the species. The subject land does not contain suitable breeding habitat features.	The project may result in a minor reduction of marginal foraging habitat.
<i>Myotis macropus</i>	Southern Myotis	471	V		Likely to occur throughout the locality as part of a large foraging habitat range. The subject land may contain marginal foraging habitat that may be used occasionally and opportunistically by the species. The subject land does not contain suitable breeding habitat features.	The project may result in a minor reduction of marginal foraging habitat.
<i>Phascolarctos cinereus</i>	Koala	3	V	V	Nil - suitable habitat not present.	Nil

Scientific Name	Common Name	No. of Records	BC Act Status	EPBC Act Status	Likelihood of Occurrence	Likelihood/Nature of Impacts from DA
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	999	V	V	Likely to occur throughout the locality as part of a large foraging habitat range. The subject land may contain marginal foraging habitat that may be used occasionally and opportunistically by the species. The subject land does not contain a breeding camp.	The project may result in a minor reduction of marginal foraging habitat.
<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	1	V		Unlikely - limited records within 5 km radius of subject land.	Nil
Reptilia						
<i>Caretta caretta</i>	Loggerhead Turtle	1	E	E	Nil - marine species.	Nil
<i>Chelonia mydas</i>	Green Turtle	3	V	V	Nil - marine species.	Nil
<i>Dermochelys coriacea</i>	Leatherback Turtle	1	E	E	Nil - marine species.	Nil

Key: E = Endangered, V = Vulnerable, M = Migratory



Legend

- Subject Land
- Conservation Area
- Lot Boundaries
- Waterbody
- Watercourse

Image Source:
Image © Nearmap (2019)
Dated: 01/07/2019

Data Source:
Spatial Services
NSW Department of Finance and Services

Coordinate System: MGA Zone 56 (GDA 94)

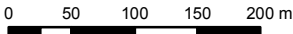


Figure 1. Location of the subject land



Legend

- Subject Land
- Conservation Area
- Impact Area

Image Source:
Image © Nearmap (2019)
Dated: 01/07/2019

Data Source:
Spatial Services
NSW Department of Finance and Services



Coordinate System: MGA Zone 56 (GDA 94)

cumberland
ecology

0 10 20 30 40 m

Figure 2. The proposed development



Legend

- Subject Land
- Conservation Area

Image Source:
Image © Spatial Services (2019)
NSW Department of Finance and Services
Dated: 1943

Data Source:
Spatial Services
NSW Department of Finance and Services



Coordinate System: MGA Zone 56 (GDA 94)

cumberland
ecology

0 50 m

Figure 3. Historical aerial imagery (1943) of the subject land



Legend

- Subject Land
- Conservation Area
- Survey Tracks
- BAM Plot Locations

Image Source:
Image © Nearmap (2019)
Dated: 01/07/2019

Data Source:
Spatial Services
NSW Department of Finance and Services



Coordinate System: MGA Zone 56 (GDA 94)

cumberland
ecology

0 10 20 30 40 m

Figure 4. Survey locations within the subject land



Legend

Subject Land

Conservation Area

Vegetation Community


Eastern Suburbs Banksia Scrub

Urban Native/Exotic Vegetation

Cleared

Image Source:
Image © Nearmap (2019)
Dated: 01/07/2019

Data Source:
Spatial Services
NSW Department of Finance and Services



Coordinate System: MGA Zone 56 (GDA 94)

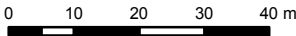
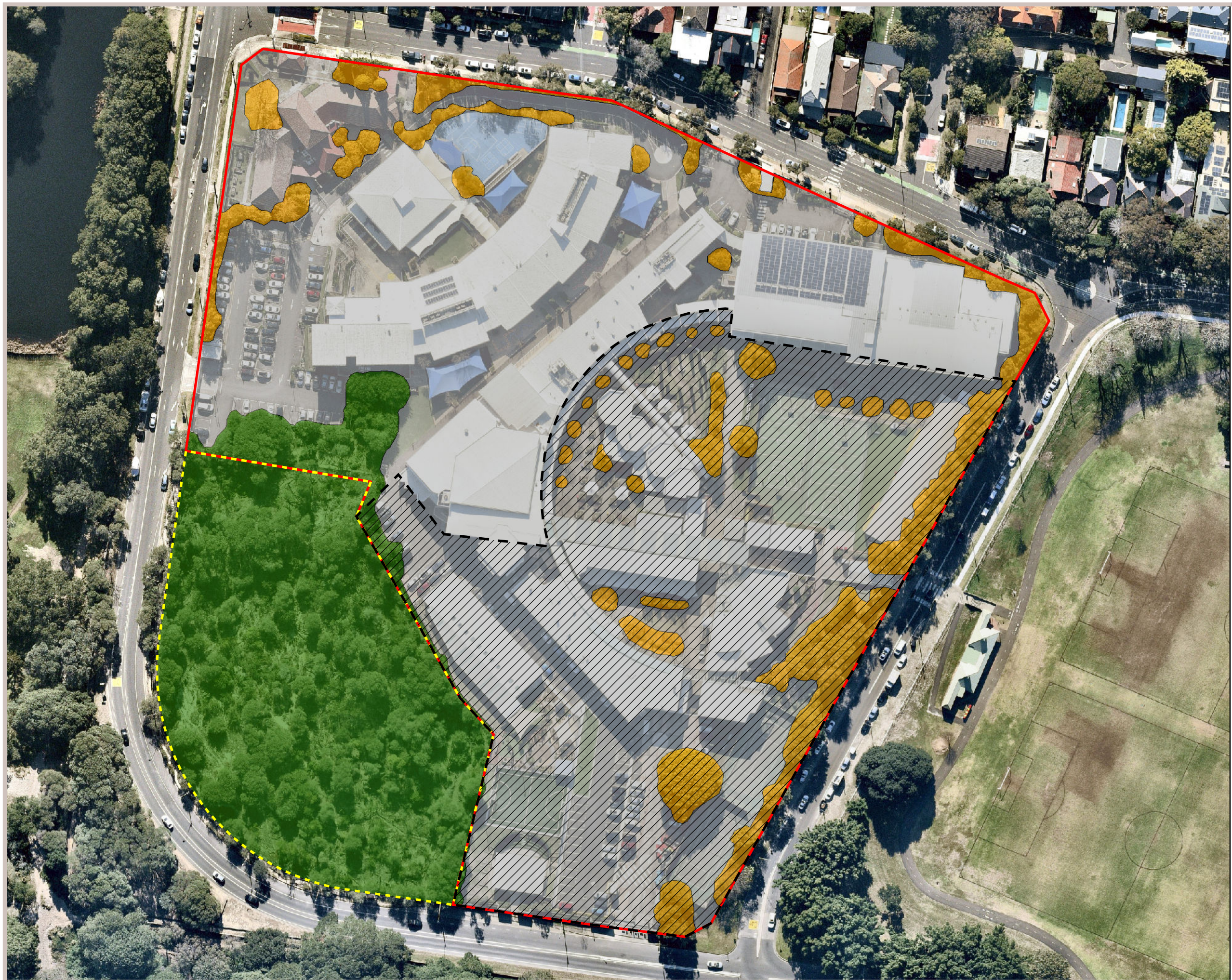


Figure 5. Vegetation communities of the subject land



Legend

- Subject Land
- Conservation Area
- Impact Area

Vegetation Community

- Eastern Suburbs Banksia Scrub
- Urban Native/Exotic Vegetation
- Cleared

Image Source:
Image © Nearmap (2019)
Dated: 01/07/2019

Data Source:
Spatial Services
NSW Department of Finance and Services

Coordinate System: MGA Zone 56 (GDA 94)

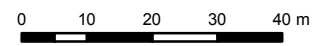


Figure 6. Extent of impacts within the subject land