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Our ref: SSD 8993

-via email-
aryan@urbis.com.au

Dear Ms Ryan

Subject: SCEGGS Darlinghurst Concept Development Application and Stage 1, 165-215 Forbes Street, Darlinghurst (SSD 8993) – Request to waive the need for a BDAR under the Biodiversity Conservation Act 2016

I refer to your correspondence dated 5 September 2018, regarding the request from SCEGGS Darlinghurst to waive the need for a Biodiversity Development Assessment Report (BDAR) to be submitted as part of the above referenced State significant development (SSD) application.

Under section 7.9(2) of the *Biodiversity Conservation Act 2016* (BCA):

"Any such application is to be accompanied by a biodiversity development assessment report 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."

The authority of the "Planning Agency Head" to determine whether a proposed development is "not likely to have any significant impact on biodiversity values" has been delegated to Directors within the Planning Services Division on 21 December 2017.

I have reviewed the application of the test of significance under sections 1.5 and 7.3 of the BCA and clause 1.4 of the *Biodiversity Conservation Regulation 2017* and determine that the development (as described in the application from ecoplanning dated 15 August 2018) is not likely to have any significant impact on biodiversity values. The application, therefore, does not need to be accompanied by a BDAR. Accordingly, a waiver under section 7.9 is granted for the proposed development (being SCEGGS Darlinghurst, 165-215 Forbes Street, Darlinghurst - SSD 8993).

The delegated *Environment Agency Head* in the Office of Environment and Heritage has also granted a waiver in a letter dated 20 September 2018 and a copy of that letter is attached.

This waiver is issued in respect of the proposed development detailed in a request for Secretary's environmental assessment requirements dated 12 January 2018. Amendments to the development may require a further waiver to be sought and issued.

Should you have any enquiries regarding the above matter, please contact Iona Cameron on 9274 6367 or via email to iona.cameron@planning.nsw.gov.au.

Yours sincerely,

20/9/2018

Karen Harragon
Director, Social and Other Infrastructure Assessments
As delegate of the Secretary



DOC18/662101
SSD17_8993

Iona Cameron
Senior Planner
Social and Other Infrastructure Assessments
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Dear Ms Cameron

RE: Request to waive the need for BDAR application for SCEGGS Darlinghurst 2040 Masterplan, SSD 8993 Darlinghurst

The Office of Environment and Heritage (OEH) has reviewed the request to waive the need for a Biodiversity Development Assessment Report (BDAR) to be submitted with the State Significant Development application SSD 8933.

Under the section 7.9(2) of the *Biodiversity Conservation (BC) Act 2016*:

"Any such application [SSD] is to be accompanied by a biodiversity development assessment report 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."

The power to determine whether an SSD is "*not likely to have any significant impact on biodiversity values*", has been delegated to the OEH Senior Executive on 4 December 2017.

I have reviewed the application of the test of significance under section 7.3 of the BC Act, that was prepared by Eco planning dated 15 August 2018, and agree that there is no need for the SSD application to submit a BDAR as part of the application. Therefore, a waiver under s7.9 is granted for the SCEGGS Darlinghurst 2040 Masterplan, Darlinghurst SSD project.

If you have any questions about this matter, please contact Bronwyn Smith, Senior Project Officer Planning on 9873 8604 or by email at bronwyn.smith@environment.nsw.gov.au.

Yours sincerely

20/09/2018

ALEX GRAHAM
Director- Greater Sydney
Communities & Greater Sydney Division



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Biodiversity Assessment



165-215, 159-163, 217 Forbes Street and 224-226
Bourke Street, Darlinghurst, NSW, 2010

SCEGGS Darlinghurst 2040 Masterplan

Prepared for: Prepared for TKD Architects on behalf of SCEGGS Darlinghurst

15 August 2018

PROJECT NUMBER	2018 – 110	
PROJECT NAME	Biodiversity Assessment – SCEGGS Darlinghurst 2040 Masterplan, Darlinghurst , NSW, 2010	
PROJECT ADDRESS	165-215, 159-163, 217 Forbes Street and 224-226 Bourke Street, Darlinghurst, NSW, 2000	
PREPARED FOR	TKD Architects on behalf of SCEGGS Darlinghurst	
AUTHOR/S	Will Introna	
REVIEW	Brian Towle	
VERSION	Version	Date to client
	1.0 – Draft	10 August 2018
	1.0 – Final	15 August 2018

This report should be cited as: *Ecoplanning (2018). Biodiversity Assessment, SCEGGS Darlinghurst, NSW, 2010*. Prepared for TKD Architects on behalf of SCEGGS Darlinghurst.

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Glossary and abbreviations

Acronym	Description
BAM	Biodiversity Assessment Methodology
BC Act	NSW <i>Biodiversity Conservation Act 2017</i>
BC Reg	<i>Biodiversity Conservation Regulations 2017</i>
BDAR	Biodiversity Development Assessment Report
DPE	NSW Department of Planning and Environment
Subject site	215 Forbes Street, Darlinghurst, NSW, 2010
EPBC Act	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
ha	hectare(s)
IBRA	Interim Bioregionalisation of Australia
km	kilometre
LGA	Local Government Area
masl	Metres above sea level
NSW	New South Wales
OEH	NSW Office of Environment and Heritage
PCT	Plant community type, as defined by OEH
SEARs	Secretary's Environmental Assessment Requirements
SSD	State Significant Development

1. Introduction

1.1 Background

SCEGGS Darlinghurst 2040 Masterplan will be assessed as a State Significant Development (SSD) under the *Environmental Planning and Assessment Act 1979* (EP&A Act). In January 2018, the Secretary's Environmental Assessment Requirements (SEARs) (SSD 8993) (DPE 2018) for the Masterplan was received from the NSW Department of Planning and Environment (DPE).

Biodiversity assessment required for an SSD is described in Section 7.9 of the *Biodiversity Conservation Act 2016* (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 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 report 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.

Biodiversity values are identified in Section 1.5 of the BC Act:

- **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, and
- **Habitat suitability** - being the degree to which the habitat needs of threatened species are present at a particular site.

The BC Act also indicates that additional biodiversity values, or biodiversity-related values are noted in the regulations. Clause 1.4 of the *Biodiversity Conservation Regulation 2017* (BC Reg) identifies the following additional biodiversity values:

- **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, and
- **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.

This report has been prepared by Brian Towle, an Accredited Assessor (BAAS17057) under the NSW *Biodiversity Conservation Regulation 2017*.

1.2 Proposed development

The proposed development in the Masterplan will cover include:

- Wilkinson House redevelopment
- The New Multi-purpose Building including driveway entries and associated landscaping to adjacent areas
- New Administration Building and restoration of the Barham Building including associated landscaping to adjacent areas

Although the Masterplan is focused on 3 main projects the Masterplan is for the whole campus and new works are considered as being integrated and working with the existing campus buildings as well as the landscaped spaces and circulation between the buildings (TKD Architects 2018).

1.3 Location and site identification

The **subject site** is defined as the area ‘directly impacted upon by the proposal’, and includes all vegetation proposed to be removed following approval of the Masterplan. The **study area** is defined as the subject site and all areas that are indirectly impacted upon by the proposal. For the purposes of this report the subject site is synonymous with the study area and will be referred to as such.

This study area for this report includes 165-215, 159-163, 217 Forbes Street and 224-226 Bourke Street, Darlinghurst, NSW, 2010. Hereafter, the address of the study area will be indicated as 215 Forbes Street (**Figure 1.1** and **Figure 1.2**).

The study area is situated in the Sydney City Local Government Area (LGA). It is generally bounded by Forbes Street, Bourke Street, St Peters Street and Thomson Street. Woolloomooloo Bay lies approximately 700 m to the north.

1.4 Methodology

A literature review and site visit were undertaken to identify biodiversity values on the site and to collect data that could be used to determine if the proposal is likely to have a significant impact on biodiversity values or not.

Sources of information reviewed for this report included:

- BioNet Atlas of NSW Wildlife (NSW Office of Environment and Heritage 2018)
- Protected Matters Search Tool (Commonwealth Department of Environment and Energy 2018)
- Native vegetation of the Sydney Metropolitan Catchment Management Authority (OEH 2016)
- Urban Ecology Strategic Action Plan (City of Sydney 2014)
- NSW Planning Viewer (NSW Dept. of Planning and Environment 2018)
- SIX Maps (LPI 2018)

Threatened species, populations and migratory species recorded within 5 km of the study area in a search of the Atlas of NSW Wildlife (OEH 2018) were consolidated and their likelihood of occurrence was assessed by:

- review of location and date of recent (<5 years) and historical (>5-20 years) records
- review of available habitat within the study area and surrounding areas
- review of the scientific literature pertaining to each species and population
- applying expert knowledge of each species

The potential for threatened species, populations and/or migratory species to occur was then considered and the necessity for targeted field surveys was determined. Following field survey and review of available habitat within the study area, the potential for species to utilise the site and to be affected directly or indirectly by the proposal were considered as either:

- “Recent record” = species has been recorded in the study area within the past 5 years
- “High” = species has previously been recorded in the study area (>5 years ago) or in proximity to (for mobile species), and/or habitat is present that is likely to be used by a local population
- “Moderate” = suitable habitat for a species is present onsite but no evidence of a species detected and relatively high number of recent records (5-20 years) in the locality or species is highly mobile
- “Low” = suitable habitat for a species is present onsite but limited or highly degraded, no evidence of a species detected and relatively low number of recent records in the locality
- “Not present” – suitable habitat for the species is not present onsite or adequate survey has determined species does not occur in the study area

A field visit was conducted on 20 July 2018 by Brian Towle for a period of 3.5 hours. During the field inspection the vegetation and threatened species habitat was assessed both within and directly adjacent to the subject site. An assessment was conducted to determine the presence of any Plant Community Types (PCTs) on the subject site and observations were made on the likely habitat available for threatened species (including any significant hollows) and man-made structures that could be suitable for species such as roosting bats.

A plot-based vegetation survey was not required for the project due to the absence of assessable native vegetation within the subject site.

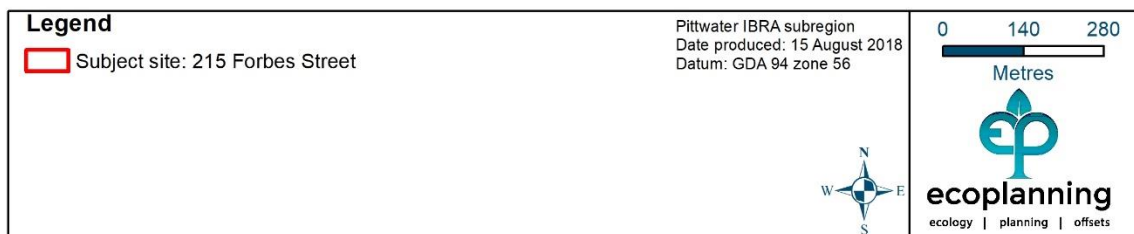
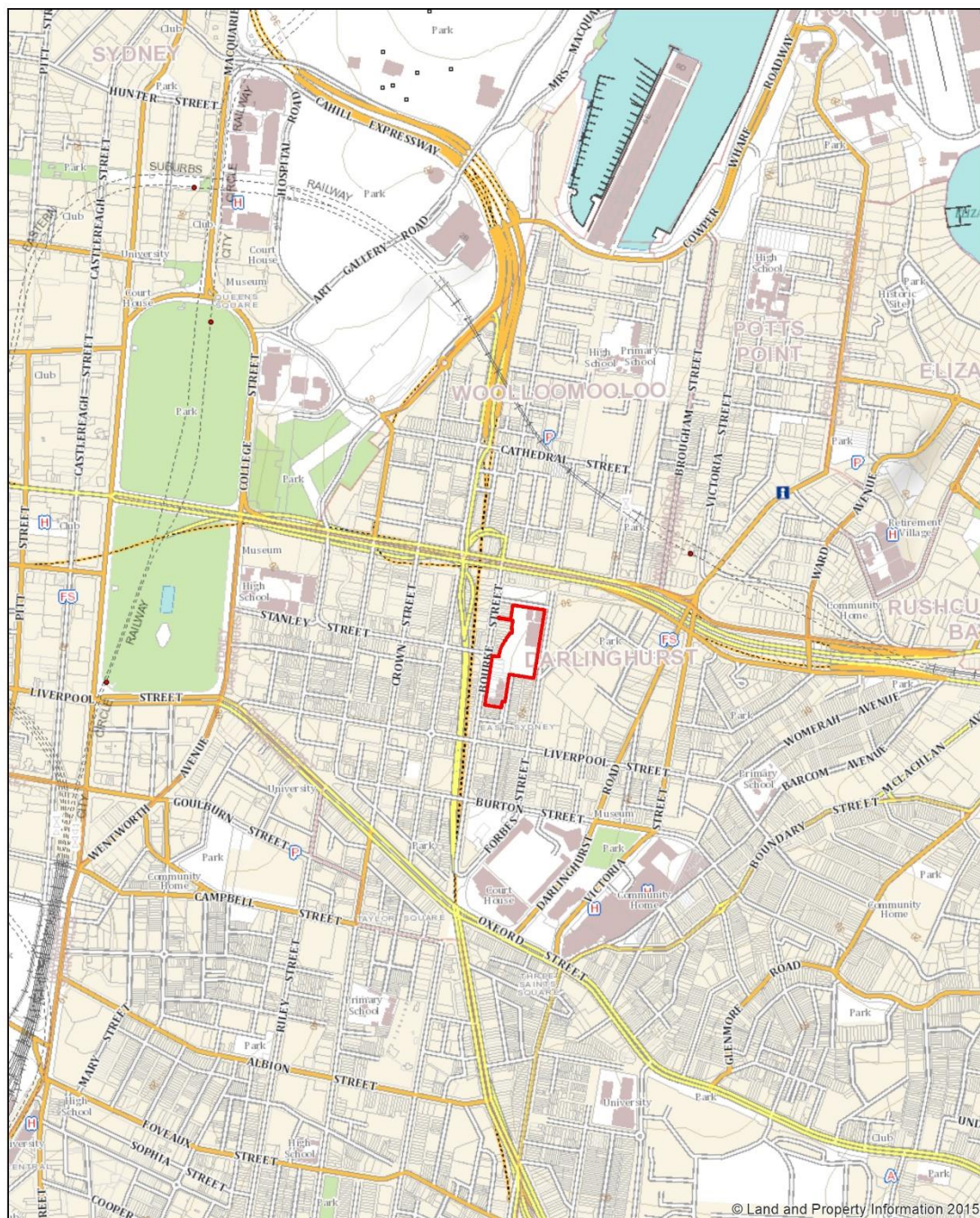


Figure 1.1: Subject site location.

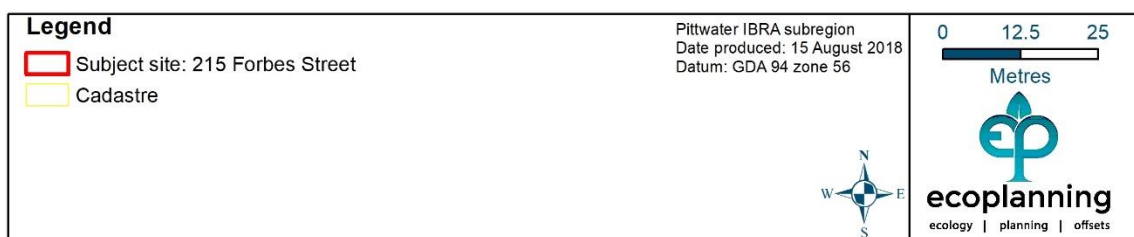


Figure 1.2: Site map.

2. Results

2.1 Literature and database review

2.1.1 IBRA bioregions and IBRA subregions

The subject site is located entirely within the Pittwater subregion (Version 7) and within the NSW Sydney Basin IBRA region (version 7) (**Figure 2.1**).

2.1.2 NSW landscape regions (Mitchell Landscapes)

The subject site occurs across two NSW Mitchell Landscapes, being the *Port Jackson Basin* and the *Ashfield Plains* landscape (Mitchell Landscapes V3) (Mitchell 2002) (**Figure 2.1**).

2.1.3 Other landscape features

Rivers, streams and estuaries

No mapped streams or rivers occur within the subject site or within 1,500 m of the subject site.

No estuaries, or the associated 50 m buffer, occur within the subject site. One estuary (Port Jackson Estuary) and its associated 50 m buffer occurs within the 1,500 m of the subject site (**Figure 2.1**).

The proposed Masterplan will not impact on the Port Jackson Estuary or its associated 50 m buffer.

Local and important wetlands

No local or important wetlands, or the associated buffers lie within the subject site or within 1,500 m of the subject site.

Connectivity of different areas of habitat

No areas providing connectivity lie within the subject site or within 1,500 m of the subject site.

Areas of geological significance and soil hazard features

No areas of geological significance or soil hazard features lie within the subject site or within 1,500 m of the subject site.

Areas of outstanding biodiversity value

No areas of outstanding biodiversity value or soil hazard features lie within the subject site or within 1,500 m of the subject site.



Figure 2.1: Location map.

2.1.4 Vegetation and threatened ecological communities

The extent of native vegetation on the subject site and immediate surrounds was mapped using the Sydney Metropolitan vegetation layer (OEH 2016).

Desktop assessment identified no native vegetation communities within the study area (OEH 2016) (**Figure 2.2 and Table 2.1**). The vegetation identified adjacent to the subject site is mapped as Urban Exotic/Native.

Table 2.1: Vegetation community nomenclature

Vegetation communities (OEH 2016)	Threatened Ecological Communities	TSC Act	EPBC Act
Urban Exotic/Native	-	-	-

2.1.5 Threatened species, populations and migratory species

A search of relevant databases (OEH 2018) identified a list of 75 threatened or migratory species or populations that have been recorded within 5 km of the subject site including 19 threatened flora species and 54 threatened fauna species (40 birds, three microbats, one megabat, one arboreal mammal, one terrestrial mammals, two frogs, one insect and one marine reptile) and one bird population. Most of these records are clustered either in the Royal Botanic Gardens, Centennial Park or in the native vegetation north of the harbour (

Figure 2.3).

A review of the Protected Matters Search Tool identified 7 threatened ecological communities, 76 threatened species and 66 migratory species that “may” occur within 5 km of the subject site (based on large scale modelling). The majority of these species were marine birds and mammals whose potential habitat would include the harbour or the more intact native vegetation to the north of the harbour.

2.2 Site inspection

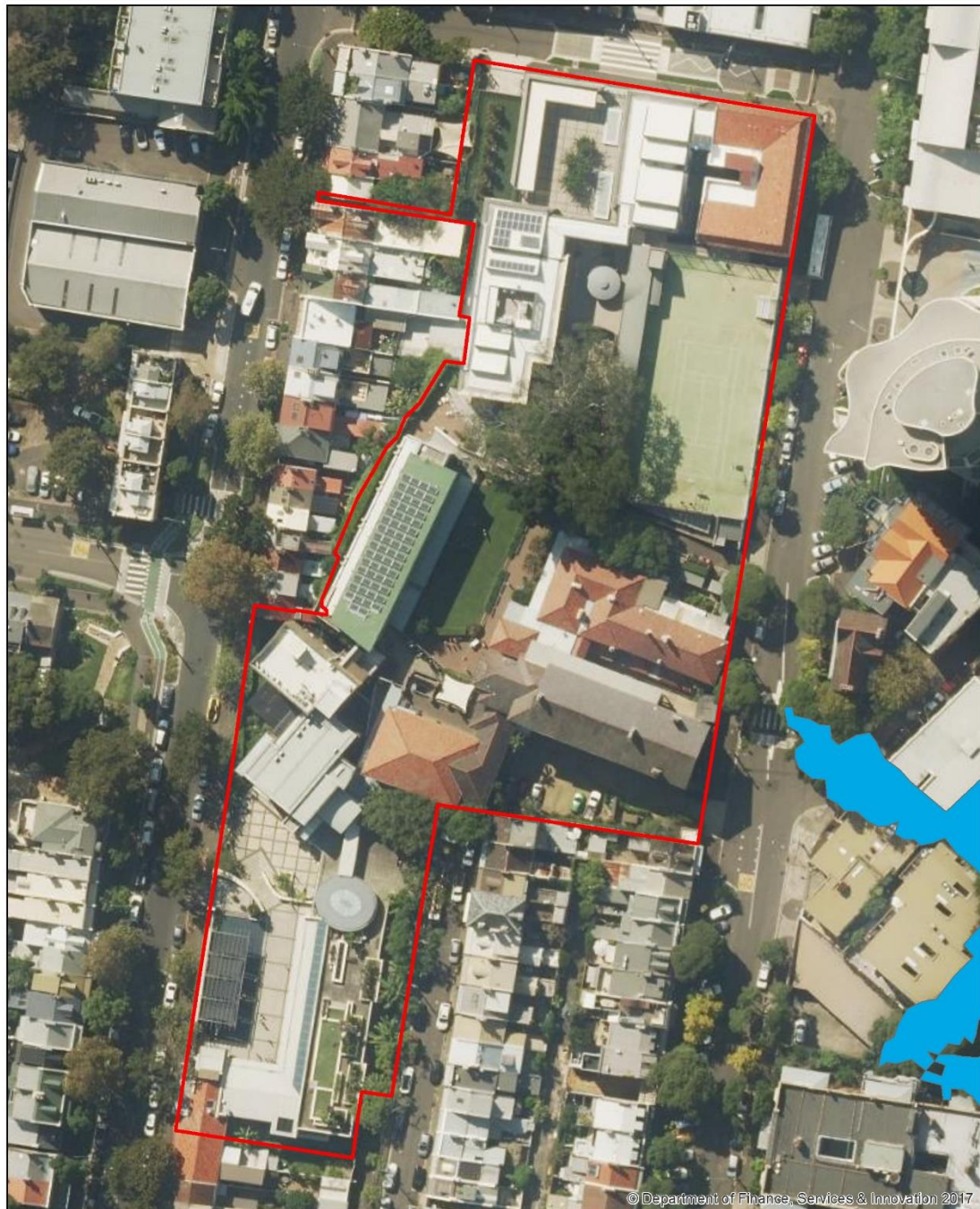
2.2.1 Vegetation and flora species

Field survey confirmed the regional vegetation mapping by OEH (2016) and identified no PCTs within the subject site.

The native trees in the centre of the subject site, which are proposed to be retained for the Masterplan, have been identified as *Ficus macrophylla* (Morten Bay Fig), which are native but not endemic to the Sydney region (**Figure 2.4 and Figure 2.5**). Other native plantings in garden beds include *Cyathea australis* (Black Tree-fern) and *Dicksonia antarctica* (Soft Tree-fern) (**Figure 2.5**).

Other native trees surrounding the subject site include some planted *Casuarina glauca* (Swamp Oak). Other non-indigenous native species, such as *Lophostemon confertus* (Brush Box) have been planted in the surrounding streets (**Figure 2.6**). However, none of the occurrences of plants in or adjacent to the subject site are considered to be a PCT.

The remainder of the vegetation within the subject site consisted of exotic species in garden beds. A full list of species recorded on the site is provided in **Appendix A**.



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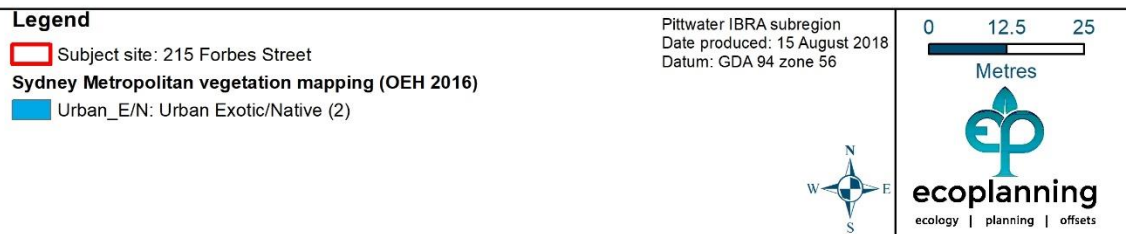


Figure 2.2: Vegetation types (OEH 2016).

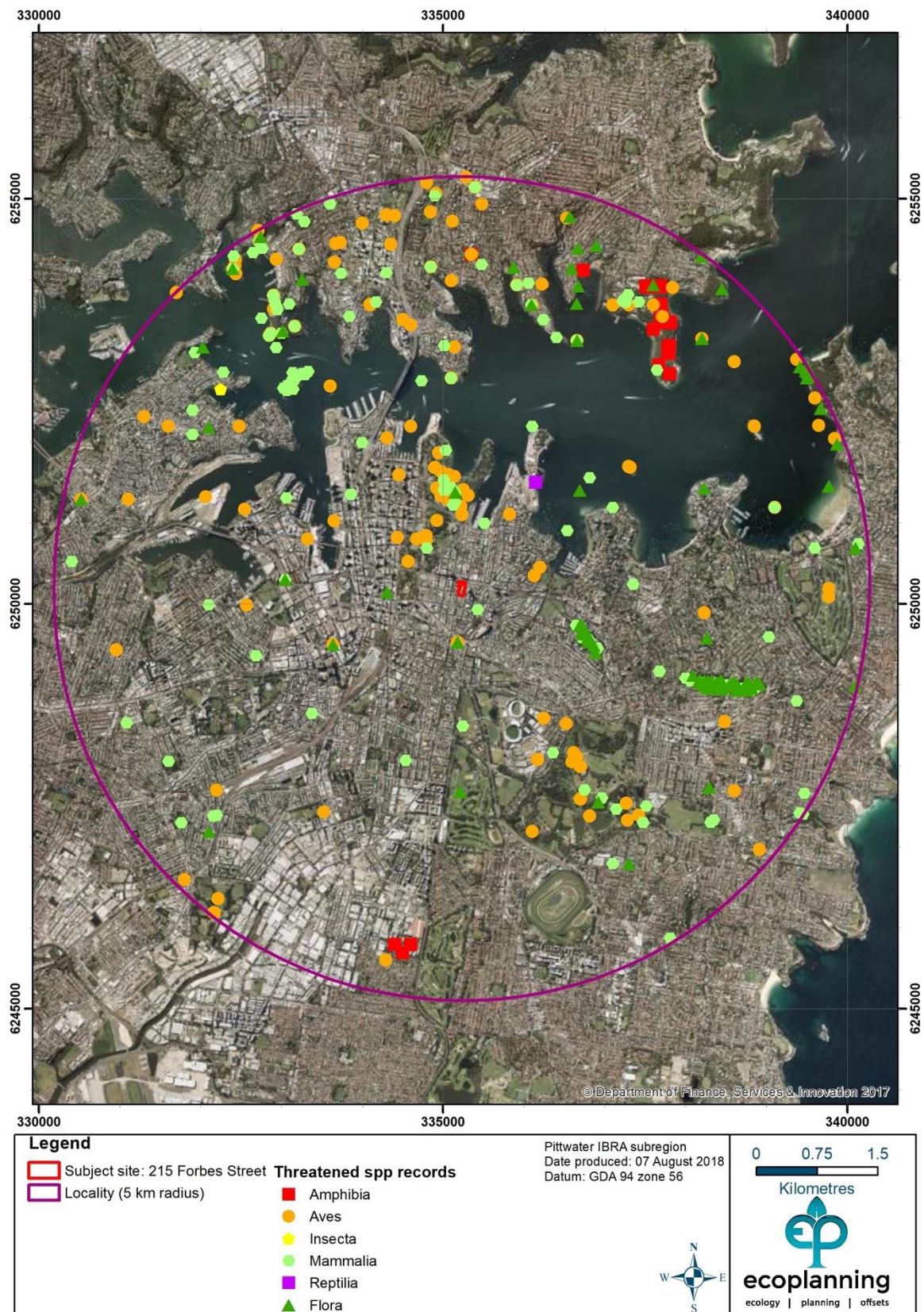


Figure 2.3: Threatened species records (OEH 2018).

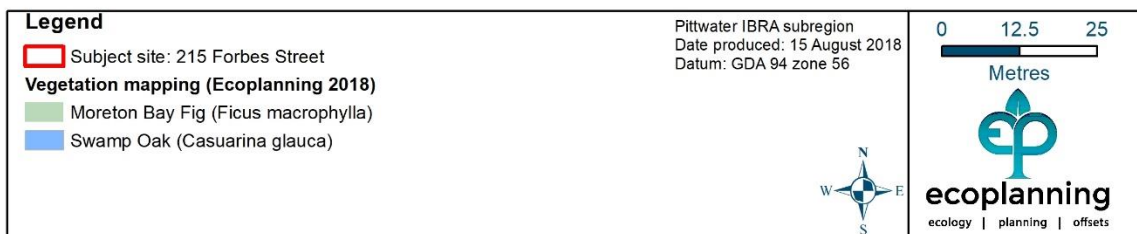


Figure 2.4: Field validated vegetation (Ecoplanning 2018).



Figure 2.5: *Ficus macrophylla* (Moreton Bay Fig) within planted landscaping



Figure 2.6: *Lophostemon confertus* (Brush Box) street trees along Forbes Street

2.2.2 Threatened species and habitat

Following the results of the field assessment and the subsequent analysis of the likelihood of occurrence based on the habitat on the site, the only threatened species that have some potential to use the subject site are:

- Threatened birds
 - *Ninox strenua* (Powerful Owl) (moderate)
- Threatened megabats
 - *Pteropus poliocephalus* (Grey-headed Flying-fox) (moderate)

The Powerful Owl has been recorded approximately 700 m from the subject site in 2017. It has been known to occur in the Royal Botanic Gardens (City of Sydney 2014). The subject site is not breeding habitat for this species as there are no large hollow-bearing trees (HBTs) present. The subject site may provide foraging habitat as the vegetation on the subject site provides potential habitat for prey items of the Powerful Owl, such as *Pseudocheirus peregrinus* (Common Ringtail Possum), common birds such as *Trichoglossus moluccanus* (Rainbow Lorikeets), *Cactua galerita* (Sulphur-crested Cockatoo) and *Gymnorhina tibicen* (Australian Magpie) and the Grey-headed Flying-fox (*Pteropus poliocephalus*) (OEH 2018).

The Grey-headed Flying-fox has been recorded approximately 244 m from the subject site in 2017 and this species had a former camp in the Royal Botanic Gardens (City of Sydney 2014). The subject site is not a breeding site for this species and no camp is present on the subject site. However, the flowering trees on the site, including *F. macrophylla*, provides potential foraging habitat for this species.

2.2.3 Water sustainability

No water bodies occur in the subject site.

3. Biodiversity assessment

This section determines if there is likely to be a significant impact on the biodiversity values as described in the BC Act and BC Reg.

- **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, and
- **Habitat suitability** - being the degree to which the habitat needs of threatened species are present at a particular site.

The BC Act also indicates that additional biodiversity values, or biodiversity-related values are noted in the regulations. Clause 1.4 of the Biodiversity Conservation Regulation 2017 (BC Reg) identifies the following additional biodiversity values:

- **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, and
- **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.

3.1 Vegetation integrity

Vegetation integrity is 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.

The natural vegetation on the subject site has been previously removed as a result of historical clearing and construction. Some native and native non-indigenous species such as *Ficus macrophylla*, *Dicksonia antarctica* and *Cyathea australis* have since been planted in garden beds and landscaped areas. However, the majority of the vegetation on the subject site is composed of exotic and introduced species that have been planted.

The vegetation integrity on the subject site is very low. While there are some planted native vegetation it does not constitute a vegetation community, nor does it reproduce the structure or function of a vegetation community in a natural or near natural state.

The vegetation in the surrounding landscape has been mapped as Urban Exotic Native (OEH 2013). This vegetation is also likely to have been planted and also has very low vegetation integrity.

Therefore, the Masterplan is not likely to have a significant impact on vegetation integrity as the vegetation on the subject site and the surrounds is not a PCT, has very low integrity and is not in a natural or near natural state.

3.2 Habitat suitability

Habitat suitability is the degree to which the habitat needs of threatened species are present at a particular site.

The habitat on the subject site is unsuitable for the majority of threatened species that could occur within the locality. However, it does provide potential foraging habitat for two threatened species, the Powerful Owl and the Grey-headed Flying-fox.

Both of these species may forage on the subject site from time to time. The habitat on the subject site represents only a very small portion of the habitat needs of these species. Both species are wide-ranging and mobile and more suitable habitat occurs in the locality, including planted *Ficus* spp. and planted *Eucalyptus* spp. and other vegetation within the Royal Botanic Gardens and Centennial Park.

The low level of habitat suitability on the subject site may decrease during the construction proposed by the Masterplan, but this impact is not likely to be significant as the Masterplan would not affect breeding habitat and these species can forage in other more suitable habitat within the locality.

3.3 Threatened species abundance

Threatened species abundance is the occurrence and abundance of threatened species or threatened ecological communities, or their habitat, at a particular site,

No threatened communities occur on the subject site. The only two threatened species that have potential to occur on the site are the Powerful Owl and the Grey-headed Flying-fox. However, neither of these species would use the subject site for breeding and there is only a low likelihood that they would use the subject site for foraging from time to time, as other vegetation in the locality (such as street trees, vegetation in the Royal Botanic Gardens and in Centennial Park) provides better quality foraging habitat.

The proposed Masterplan would therefore be unlikely to affect the abundance of either of these species on the subject site.

3.4 Vegetation abundance

Vegetation abundance is the occurrence and abundance of vegetation at a particular site.

The vegetation on the subject site is not in a natural or near-natural state. It consists of exotic, native and non-endemic species that have been planted in garden beds and landscaping areas. No PCT occurs on the subject site.

Therefore, the impact of proposed Masterplan on vegetation abundance is negligible as no PCTs would be affected.

3.5 Habitat connectivity

Habitat connectivity is 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.

The subject site consists of a built environment in the city of Sydney and is also surrounded by built environments. The threatened species that may occur on the subject site from time to time, when they are moving across their range, would include only wide-ranging and highly mobile species such as the Powerful Owl and the Grey-headed Flying-fox.

The ability of these species to move between habitats in the locality, such as between the Royal Botanic Garden and Centennial Park or between other habitats within the locality, is not likely to be significantly affected by the Masterplan.

3.6 Threatened species movement

Threatened species movement is the degree to which a particular site contributes to the movement of threatened species to maintain their lifecycle.

The subject site provides minimal potential foraging habitat for two threatened species, being the Powerful Owl and the Grey-headed Flying-fox. The Masterplan is unlikely to have a significant impact on the life-cycle of these species as no breeding habitat would be affected and the subject site provides minimal foraging habitat, compared to the habitat within the locality.

3.7 Flight path integrity

Flight path integrity is the degree to which the flight paths of protected animals over a particular site are free from interference.

The proposed Masterplan involves demolition and construction of buildings including construction of a six-storey multi-purpose building. The subject site is not significant for the flight paths of these species as they are wide-ranging and they also occur in other built-up areas in the locality.

Therefore, the buildings that would be constructed as a result of the Masterplan would not be likely to significantly impact on the ability of the Powerful Owl or the Grey-headed Flying-fox to move throughout their range.

3.8 Water sustainability

Water sustainability is the degree to which water quality, water bodies and hydrological processes sustain threatened species and threatened ecological communities at a particular site.

There are no water bodies or hydrological processes on the subject site that are important for threatened species.

4. Avoiding and minimising impacts to biodiversity values

No native vegetation communities occur within or adjacent to the subject site and therefore the proposed Masterplan will not cause impacts to these biodiversity values.

Potential impacts to threatened species habitat are minimal and in the worst case scenario includes only the loss of two *Ficus macrophylla* that provide potential foraging habitat for the Grey-headed Flying-fox and Powerful Owl. However, these trees are recommended for retention (UTM 2018) and are unlikely to be removed.

The Masterplan would not have significant impacts on other biodiversity values as the habitat suitability, connectivity for threatened species, flight paths and water quality values on the subject site and in the surrounding areas are not likely to be significantly affected.

It is concluded that there is not likely to be any significant impact on biodiversity values as defined under the BC Act and the BC Reg. Therefore, pursuant to section 1.9 of the BC Act it is considered unnecessary to assess the potential impacts to biodiversity of the Masterplan with a biodiversity development assessment report.

References

City of Sydney (2014) *Urban Ecology Strategic Action Plan*. City of Sydney.

Commonwealth Dept. of the Environment and Energy (DotEE) (2018). Protected Matters Search Tool. Accessed at: <http://www.environment.gov.au/epbc/protected-matters-search-tool>

Mitchell, P. (2002). NSW ecosystems study: Background and Methodology, prepared by Groundtruth Consulting, Gladesville, NSW.

NSW Department of Planning and Environment (DPE) (2018). NSW Planning Viewer Beta. NSW Government. Accessed at: <https://planningportal.nsw.gov.au>

NSW Land and Property Information (LPI) (2018). SIX Maps. Accessed at: <https://maps.six.nsw.gov.au/>

NSW Department of Planning and Environment (DPE) (2018). Secretary's Environmental Assessment Requirements. Section 78a(8A) of the Environmental Planning and Assessment Act 1979. SSD8993. Proposal Name: SCEGGS Darlinghurst Concept Development Application and Stage 1, 215 Forbes Street, Darlinghurst. Issued 12 January 2017.

NSW Office of the Environment (NSW OEH) (2016). The native vegetation of the Sydney Metropolitan Area (Version 3). NSW Office of Environment and Heritage, Sydney.

NSW Office of Environment and Heritage (NSW OEH) (2017). Biodiversity Assessment Method. NSW Office of Environment and Heritage, Sydney.

NSW Office of Environment and Heritage (OEH) (2018). BioNet Atlas of NSW Wildlife. Accessed at: http://www.environment.nsw.gov.au/atlaspublicapp/UI_Modules/ATLAS_/AtlasSearch.aspx

Urban Tree Management (UTM 2018) *Report: Arboricultural Assessment*. Joan Freeman Science & Technology Centre. SCEGGS Darlinghurst, 21 Forbes Street, Darlinghurst.

Appendix A: Species list

Flora species list

Family	Scientific Name	Common name	Native/Exotic	Form
Adoxaceae	<i>Viburnum</i> sp.	Viburnum	Exotic	S
Alingiaceae	<i>Liquidamber styraciflua</i> #	Liquidamber	Exotic	T
Amaryllidaceae	<i>Crinum pedunculatum</i>	Swamp Lily	Native	F
Amaryllidaceae	<i>Clivia</i> spp.	Natal Lily	Exotic	F
Araceae	<i>Philodendron</i> spp.	Philodendron	Exotic	F
Araucariaceae	<i>Agathis robusta</i>	Kauri Pine	Native/non endemic	T
Arecaceae	<i>Howea forsteriana</i>	Kentia palm	Native/non endemic	P
Arecaceae	<i>Dypsis lutescens</i>	Golden Cane Palm	Exotic	P
Asteliaceae	<i>Cordyline</i> spp. cultivars	Cabbage Tree	Exotic	P
Berberidaceae	<i>Nandina domestica</i>	Japanese Sacred Bamboo	Exotic	S
Bignoniaceae	<i>Jacaranda mimosifolia</i> #	Jacaranda #	Exotic	T
Casuarinaceae	<i>Casuarina glauca</i> #	Swamp Oak	Native	T
Cyatheaceae	<i>Cyathea australis</i>	Black Tree-fern	Native	H
Dicksoniaceae	<i>Dicksonia antarctica</i>	Soft Tree-fern	Native	H
Doryanthaceae	<i>Doryanthese excelsa</i>	Gymea Lily	Native	F
Lythraceae	<i>Lagerstroemia</i> spp.	Crape Myrtle	Exotic	S
Magnoliaceae	<i>Magnolia grandiflora</i>	Southern Magnolia	Exotic	T
Moraceae	<i>Ficus macrophylla</i>	Moreton Bay Fig	Native/non endemic	T
Myrtaceae	<i>Acacia smithii</i> var. <i>minor</i> ^	Dwarf Lilly Pilly	Native cultivar	S
Myrtaceae	<i>Lophostemon confertus</i> #	Brush Box #	Native/non endemic	T
Platanaceae	<i>Platanus x acerifolia</i> #	Plane Trees	Exotic	T
Poaceae	<i>Stenotaphrum secundatum</i>	Buffalo Grass	Exotic	G
Rosaceae	<i>Rosa</i> spp.	Rose	Exotic	S
Rutaceae	<i>Murraya paniculata</i>	Mock Orange	Native/non endemic	S
Sapindaceae	<i>Koelreuteria paniculata</i> #	Golden Rain Tree	Exotic	T
Ulmaceae	<i>Ulmus parvifolia</i>	Chinese Elm	Exotic	T
Ulmaceae	<i>Celtis sinensis</i>	Japanese Hackberry	Exotic	T

Form: (T) Tree; (S) Shrub; (G) Grass; (L) Vine/Climber/Scrambler; (V) Sedge; (F) Forb, (P) Palm, (H) fern; # street trees outside of the subject site; ^ identified in the arborist report (UTM 2018).