

REFERRAL RESPONSE – ENVIRONMENT & SUSTAINABILITY

FILE NO: DA477/2019/1
ADDRESS: 30 Alma Street PADDINGTON 2021
PROPOSAL: First stage of the development of White City
FROM: Senior Environment and Sustainability Officer
TO: Mr M Moratelli

1. ISSUES

- The proposed development will be a high use site therefore sustainability issues need to be considered.
- The proposed development site borders Rushcutters Creek which drains directly into Sydney Harbour therefore any proposed works may have an ongoing effect on the waterway's health.
- The proposed development includes the removal of native and non-native vegetation and therefore issues include:
 - Removal of potential habitat trees.
 - Decrease in green cover and localised effects of heat island effect.

2. DOCUMENTATION

I refer to the following documents received for this report:

- Arboricultural Impact Assessment for White City Redevelopment (Stage 2) 30 Alma Street, Paddington, prepared by Tree Wise Men Australia Pty Ltd, dated April 2019.
- Architectural Plans Set 1, White City Redevelopment (Stage 2) 30 Alma Street, Paddington, prepared by Cottee Parker Architects Pty Ltd.
- Architectural Plans Set 2, White City Redevelopment (Stage 2) 30 Alma Street, Paddington, prepared by Quinton Margalit Smuskowitz Architects Pty Ltd, Revision J.
- Construction Management Plan, White City Redevelopment (Stage 2) 30 Alma Street, Paddington, prepared by Richard Cook Constructions dated 5 December 2019.
- ESD Report, White City Redevelopment (Stage 2) 30 Alma Street, Paddington, prepared by Umow Lai dated 28 November 2019.
- Flood Risk Assessment, White City Redevelopment (Stage 2) 30 Alma Street, Paddington, prepared by BG&E Pty Limited dated 21 November 2019.
- Plan of Management, White City Redevelopment (Stage 2) 30 Alma Street, Paddington, prepared by Projects and Infrastructure dated December 2019.
- Civil and Stormwater Drawings, White City Redevelopment (Stage 2) 30 Alma Street, Paddington, prepared by M & G Consulting, Issue 2.
- Statement of Environmental Effects, White City Redevelopment (Stage 2) 30 Alma Street, Paddington, prepared by Southerland & Associates Planning, December 2019.
- Landscape Plan, Revision E, White City Redevelopment (Stage 2) 30 Alma Street, Paddington, prepared by Stuart Nobel Associates.
- Amended Landscape Plans (Issue B) (20/95088)
- Landscape Proposal in Response to Referrals, White City Redevelopment, Stuart Noble, 26/05/2020.
- White City Redevelopment Hakoah Club Limited Response to Submissions to Woollahra Council Draft 3 June 2020.
- White City Redevelopment Hakoah Club Limited Response to Technical Referrals to Woollahra Council Draft 3 June 2020.

3. RESEARCH

The following research was undertaken in the preparation of this assessment:

- Desktop review of the property undertaken on 7 January 2020 for the development at 30 Alma Street, Paddington, using Council's Geocortex Web Mapping and Google Maps Data 2019.
- Review of Amended Landscape Plans (Issue B) (20/95088) and Landscape Proposal in Response to Referrals, White City Redevelopment, Stuart Noble, 26/05/2020.
- Review of White City Redevelopment Hakoah Club Limited Response to Submissions and Response to Technical Referrals to Woollahra Council Draft 3 June 2020.
- Site inspection undertaken in January 2020.
- Review of the Woollahra Biodiversity Conservation Strategy 2015 – 2025.
- Review of relevant legislation:
 - NSW Biodiversity Conservation Act 2016.
 - Commonwealth Environment Protection and Biodiversity Conservation Act 1999.
 - Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005.

4. PROPOSAL SUMMARY

The location of the proposed development is at 30 Alma Street, Paddington with the proposed development site adjacent to Rushcutters Creek which runs along the north eastern border.

The proposal includes:

- Re-development of the site into a community multi-sport centre, including soccer field, grand stand and tennis courts.
- Registered club facilities, including club house, pro shop, learn to swim pool, lap pool, and auxiliary facilities i.e. change rooms.
- The removal of approximately 75 trees.

5. ASSESSMENT

5.1 NSW Biodiversity Conservation Act 2016

5.1.1 NSW Biodiversity Offset Scheme

In regards to the Biodiversity Offset Scheme (BOS) entry requirements as set out under the NSW Biodiversity Conservation Act 2016, the proposed development was evaluated and found to:

- NOT be mapped on the Biodiversity Values Map published by the Environment Agency Head.
- NOT trigger the native vegetation clearing area thresholds.
- MAY significantly affect threatened species.

Although not within the proposed development site, Trumper Park ranges from 100 meters, at its closest point to 700 meters away from the site. Trumper Park provides habitat for the following fauna species listed as 'Threatened' in the NSW Biodiversity Conservation Act 2016¹:

- Large Bent-winged Bat (*Miniopterus orianae oceanensis* formally, *Miniopterus schreibersii oceanensis*).
- Greyheaded Flying Fox (*Pteropus poliocephalus*).

¹ Comprehensive flora and fauna surveys were completed by ecological consultants in 2015 to inform the development of the Woollahra Biodiversity Conservation Strategy.

The above mentioned fauna species can be highly mobile and therefore may be present within the proposed development site. The proposed removal of significant trees along Rushcutters Creek namely trees: 2, 3, 6, 13, 15, 39, 40, 42, 43, 51, 54 and 101 as listed in the Arboriculture Report which may be providing foraging and habitat resources for these listed species.

If for any reason these trees are to be removed, a Test of Significance is required as per Section 7.3 of the Biodiversity Conservation Act 2016 in relation to the Large Bent-winged Bat (*Miniopterus orianae oceanensis*) to determine whether the proposed development or activity is likely to significantly affect threatened species or their habitats. This includes any habitat the site development may be providing.

Completing the Test of Significance provides assurance to both Council and the Applicant that the requirements of the Biodiversity Conservation Act 2016 are being met. In the event that the Test of Significance determines a significant impact, the further requirements of the Biodiversity Conservation Act 2016 will need to be addressed.

5.1.2 Protected Species

Although not within the proposed development site, Trumper Park ranges from 100 meters, at its closest point to 700 meters away from the site and is home to the following listed species:

- *Syzygium paniculatum* (Magenta Cherry), listed as Endangered under the NSW Biodiversity Conservation Act 2016.
- *Acacia terminalis* subsp. *terminalis*, listed as Endangered under the NSW Biodiversity Conservation Act 2016.

Due to the sedentary nature of the above species it is not anticipated that they would be effected by the proposed development activity.

5.1.3 Key Threatening Process

Loss of hollow bearing trees is as a Key Threatening Processes under the Biodiversity Conservation Act 2016.

Tree hollows are cavities formed in the trunk or branches of a living or dead tree. Hollows are usually more characteristic of older, mature to over mature trees. Hollows may develop in the trunk and branches of trees as a result of wind breakage, lightning strikes, fire and/or following the consumption and decay of internal heartwood by fungi and invertebrates, primarily termites. Hollow entrances are more common in larger trunks and branches because damage is less likely to be covered by growth of external sapwood.

NSW Biodiversity Conservation Act 2016, Schedule 4. Loss of Hollow-bearing trees – Key Threatening Process Listing, Gazetted 5th October, 2007.

The proposal has been reviewed to retain trees identified as per the Woollahra Council - Tree Referral, for trees that have suitable form to be retained. Conditions will be placed on any trees being removed to retain and reuse any hollows identified.

5.2 Commonwealth Environment Protection and Biodiversity Conservation Act 1999

Although not within the proposed development site Trumper Park ranges from 100m, at its closest point to 700 meters away from the site. It is home to a range of protect species including:

- *Syzygium paniculatum*, listed as Vulnerable under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

- *Acacia terminalis subsp. terminalis*, listed as Endangered under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.

Council does not regulate the EPBC Act and as such the Department of Agriculture, Water and the Environment (Commonwealth) would need to provide advice on the assessment of the Act and its relation to the proposed development.

5.3 Woollahra Local Environment Plan 2014

The Woollahra LEP 2014 notes the following relevant aims (section 1.2):

- (f) To conserve built and natural environmental heritage.*
- (g) To protect amenity and the natural environment.*
- (h) To minimise and manage stormwater and flooding impacts.*
- (i) To protect and promote public access to and along the foreshores.*

The proposed development has the potential to meet the above aims as set out by the Woollahra LEP 2014. Increased planting as per the Amended Landscape Plans (Issue B) better addresses the above aims. Additionally works must comply with the requirements of the Biodiversity Conservation Act 2016 as listed within this referral.

5.4 Woollahra Development Control Plan 2015

Chapter B3 – General Development Controls

B3.6 On-site parking

Control C13 - Where soil and drainage conditions allow, semi-porous surfaces are used for uncovered car parking and driveway areas to facilitate on-site stormwater infiltration and reduce limit the visual impact of hard-surface areas.

Clarification was provided by the applicant in the document White City Redevelopment Hakoah Club Limited Response to Technical Referrals to Woollahra Council Draft 3 June 2020 regarding the inclusion of permeable paving within suitable areas of the site. Conditions are to be included regarding implementing recommendations.

B3.7 External Areas, B3.7.1 Landscaped areas and private open space

Control C16 - Existing trees and vegetation of landscape value are incorporated into the landscape area and treatment.

Existing mature trees not located within the proposed building footprint have been marked for removal. The justification for this is the potential impact on the building footprint. There is scope to retain some trees proposed for removal that do not fall within the building footprint as well as opportunities to modify the building footprint to retain trees. Retention of trees as per the Woollahra Council - Tree Referral is required and requirements of the Biodiversity Conservation Act 2016 must be addressed (as per section 5.1.1).

Control C17 - Native species are preferred, and landscape designs are encouraged to provide at least 50% of the plants as native species.

Control C17 has been met as 50% of the proposed planting will be native species.

Control C18 - Landscaping provides for a diversity of native species and a complexity of habitat through vertical layering. Note: Vertical layering, by planting a variety of vegetation in different sizes and heights provides more cover and feeding opportunities for wildlife species.

Control C18 has been partially met as the amended planting schedule incorporates a range of native species that will provide some amount of vertical layering. The amended planting along the riparian corridor better achieves ecological function in line with the Amended Landscape Plans (Issue B).

Some modifications are required:

- Remove and replace *Acacia terminalis subsp. terminalis* from the proposed planting list as this species is listed on the Biodiversity Conservation Act 2016 and therefore not recommended for planting where it does not form part of a conservation program as advised by Department of Planning, Infrastructure and Environment (DPIE).

Ongoing management of the plantings will be required to ensure continued ecological function within the landscape.

Control C19 - Landscaping facilitates the linking of open space reserves through wildlife corridors and reduces habitat fragmentation and loss.

The proposed development has the potential to increase habitat fragmentation and loss due to the removal of vegetation along Rushcutters Creek. Increased planting as set out in the Amended Landscape Plans (Issue B) (20/95088) and Landscape Proposal in Response to Referrals, White City Redevelopment, Stuart Noble, 26/05/2020 better addresses the controls so long as they are adequately managed and maintained.

Chapter E1 – Parking and Access:

E1.11- Electric vehicle charging points

Control C4 - All new residential and non-residential development (other than for dwelling houses, semi-detached dwellings or dual occupancies) must provide 1 car parking space or 10% of all car parking spaces – whichever is greater - to have a 'Level 2' electric vehicle charging point installed.

The above amendment was adopted on 2nd January 2020. Due to the proposed usage, large size and intended term of use of this development, the above control is to be enforced for this proposed development.

Chapter E6 – Sustainability

Control C10 - For landscaped garden areas in commercial developments, building design incorporates the following measures to minimise mains water demand and consumption:

- a) Rainwater tanks to supply water for plant watering, toilet flushing, outdoor cleaning and cooling systems for the building;*
- b) Where suitable, roof gardens to reduce stormwater run-off and provide insulation;*
- c) An irrigation system to minimise waste water; and d) water retention within gardens to direct run-off from impervious uses and water tanks to deep soil areas.*

As the provided ESD report does not firmly commit to any sustainability initiatives and notes that *'The White City redevelopment may include the following initiatives,'* assessing the sustainability of the proposed development and therefore its adherence to the Woollahra DCP is difficult.

It is noted in the ESD report that based on the proposed sustainability initiatives the building has capacity to achieve a Green Star – Design & As Built 5 Star rating however the applicant does not intend to apply for the rating. Registering the project with the Green Building Council of Australia and committing to achieving a Green Star – Design & As Built 5 Star rating would satisfactorily meet the requirements of the Woollahra DCP. It would also have the added benefit of, in a time of increasing environmental concern, providing assurance to the community that the applicant is committed to the sustainable development of the Woollahra LGA. Accordingly, it is not unreasonable

to require the development to achieve a Green Star – Design & As Built 5 Star rating when considering the high impact and resource use of both the construction and operation of the proposal and that the facility is intended to be in the best interest of the community.

It is a preference that confirmation of the achievement of the Green Star – Design & As Built 5 Star rating be required before the occupation certificate is granted. If this is not to be enforced, the applicant must commit to the sustainability initiatives listed in the ESD report including but not limited to:

- Inclusion of solar photovoltaic (PV) arrays to supplement energy consumption as depicted on building plans.
- Use of design principals to minimise the need for active mechanical solutions to heat, cool, ventilate and illuminate the development.
- LED lighting or equivalent high efficiency lighting including occupant detection, daylight controls and/or time clock controls in all instances.
- Heat pump and/or solar thermal technology for all hot water services.
- Rainwater, recycled water and/or greywater for use in irrigation including sub-soil drip irrigation or equivalent efficient watering system.
- WELLS rated water efficient fittings and fixtures in all instances.
- A high percentage of timber used in building and construction to be from a reused source or certified by a forest certification scheme (i.e. FSC, PEFC).
- A high proportion of all materials used in the project to meet certain standards in terms of: reused products, recycled content products, environmental product declarations, third-party certification and stewardship programs.

5.5 Woollahra Biodiversity Conservation Strategy

The Woollahra Biodiversity Conservation Strategy 2015-2025 has no direct reference to the proposed development site other than to note the presence of ‘Urban Exotic/ Native’ vegetation located on site and that prior to European settlement the vegetation would have likely been woodland on sandstone.

The Woollahra Biodiversity Conservation Strategy 2015-2025 states the following with regard to the Trumper Park that is located close to the proposed development site:

- Predominate vegetation type listed as Urban Exotic / Native.
- Notes habitat value due to fully structured forest and many native plant species.
- Noted as a habitat corridor between City of Sydney and among Woollahra LGA.

Amendments made to the Landscape Plan (Amended Landscape Plans (Issue B) (20/95088) and Landscape Proposal in Response to Referrals, White City Redevelopment, Stuart Noble, 26/05/2020) allow for better creation of habitat along the riparian corridor. It is acknowledged that not all trees currently present along the riparian corridor can be retained (refer to Tree referral) therefore planting of mature trees and additional tube stock will assist in replacing habitat.

5.6 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

The proposed development site is on land which is included in The Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 Part 1, Section 3. The objectives set out by the Plan are to provide a set of clear planning principles for land within the Sydney Harbour Catchment (Part 2, Section 12(2)).

Part 2 lists the planning principles for land within the Sydney Harbour Catchment. Of the 12 principles listed in the Plan, the three most relevant are:

- (a) Development is to protect and, where practicable, improve the hydrological, ecological and geomorphological processes on which the health of the catchment depends,

- (b) The natural assets of the catchment are to be maintained and, where feasible, restored for their scenic and cultural values and their biodiversity and geodiversity,
- (j) Development is to protect and, if practicable, rehabilitate watercourses, wetlands, riparian corridors, remnant native vegetation and ecological connectivity within the catchment,

The principles outlined in the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 require developments to protect natural features. Amendments regarding the retention of trees and additional planting along the riparian area would satisfy these requirements as per the above controls.

5.7 Eastern City District Plan

The Eastern City District Plan contains the planning priorities and actions for implementing the Greater Sydney Region Plan at a district level and is a bridge between regional and local planning. It is to inform local strategic planning statements and local environmental plans, the assessment of planning proposals as well as community strategic plans and policies.

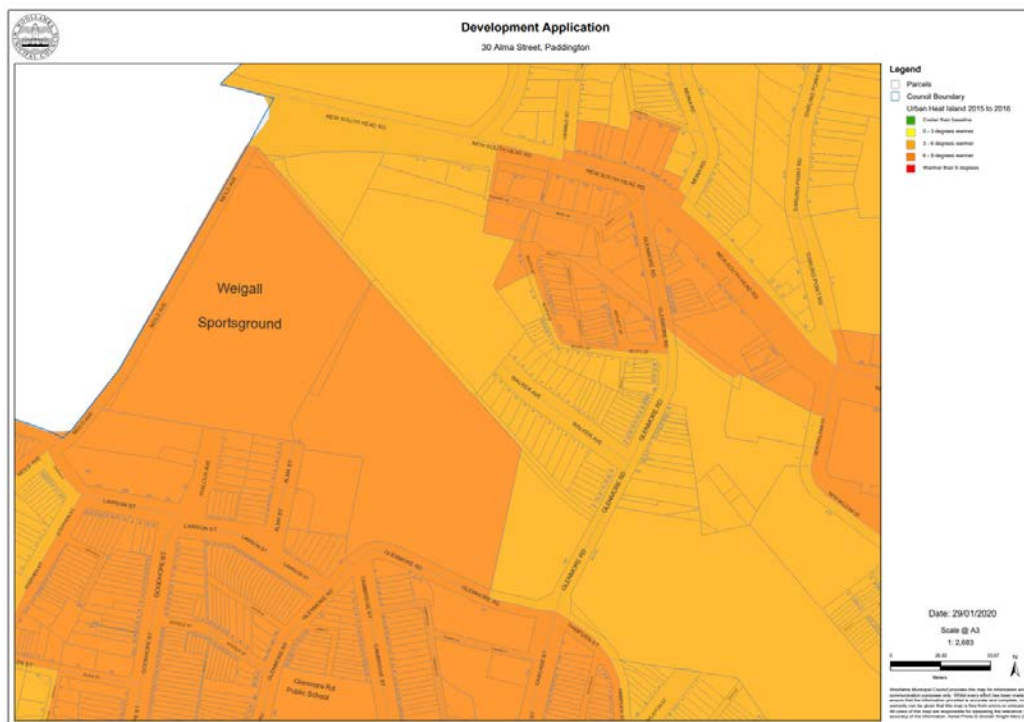
As such the following planning policies have been considered in the review of the proposed development application:

- Planning Priority E17 – Increasing urban tree canopy cover and delivering Green Grid connections.
 - Objective 30 – Urban tree canopy cover is increased.
 - Objective 32 – The Green grid links parks, open spaces, bushland and walking and cycling paths.

Planning Priority E17 has been identified as a Premiers Priority.

Green Grid opportunities have been identified within the proposed development area in Figure 21: Eastern City Green grid opportunities, within the Eastern Suburbs District Plan.

Urban heat island mapping provided by Department of Planning, Infrastructure and Environment (formally OEH) for the subject site indicates temperature is 6 - 9 degrees warmer than baseline.



Planning Priority E17 is better met by the Amended Landscape Plans (Issue B) (20/95088) and Landscape Proposal in Response to Referrals, White City Redevelopment, Stuart Noble, 26/05/2020. The retention of more mature trees and planting of new species along this riparian corridor and within the car park will provide a way to achieve the benefits of both improved recreational space and the Planning Priorities and associated requirements within the Eastern City District Plan. Additional deep soil planting within the proposed car park area as recommended within other referrals will assist in increasing canopy cover and reducing heat island effect.

6. OTHER CONSIDERATIONS

Paddington Greenway

I am aware that on the 11 June 2019 council resolved the Riparian Corridors on Rushcutters Creek (HPE reference 19/78357) Notice of Motion, which includes investigating the establishment of the Paddington Greenway which included the proposed development site. Council staff are in the process of investigating the Paddington Greenway. In my opinion there are significant biodiversity, sustainability and water quality improvements that could be made from a well-designed proposal.

More recently, on the 23 September 2019 council resolved the Climate Emergency (HPE reference 19/147906) Notice of Motion, which publically acknowledges that we are in a state of climate emergency that requires urgent action. Council staff are in the process of reviewing current initiatives to reduce Councils role in addressing climate change. In my opinion there are significant improvements to this proposed development, such as those listed above, that Council can enforce to further assist in addressing climate change.

Additional planting demonstrated in the Amended Landscape Plans (Issue B) (20/95088) and Landscape Proposal in Response to Referrals, White City Redevelopment, Stuart Noble, 26/05/2020 provides an improvement on riparian connections.

Sports playing field:

Currently artificial turf is proposed for the soccer field. A summary of both artificial and natural turf in terms of sustainability has been provided below.

Well maintained and managed natural turf is the preferred option as it can:

- Assist in the reduction of heat island effect.
- Sequester carbon if managed properly.
- Provide an environment that allows for insect and microbial biodiversity within the soil.
- Decrease impervious surfaces in the catchment and assist with water penetration into the soil.

Concerns regarding artificial turf include:

- Rubber granules used as infill and synthetic polymers used as grass moving off-site, increasing the amount of micro plastics within the environment.
- The carbon footprint of manufacture and disposal is considered large, opportunities for repurposing or recycling are extremely limited.
- Various studies have shown artificial turf can substantially increase ambient heat, increasing the heat island effect which is already a concern at this site.
- Depending on the maintenance schedule, significant quantities of water can be used to cool and clean the turf which can be equal to the amount used to irrigate natural turf.
- If not properly managed, chemicals used to clean the turf can end up in stormwater drains and polluting local waterways.
- Concerns over increased run-off due to loss of impervious surface within the hydrological catchment.

6. RECOMMENDATION

Council's Environment and Sustainability Team Leader has determined that the proposal is SATISFACTORY, subject to the following conditions.

Council Strategy/ Legislation		Clause, Section etc.	Condition
Biodiversity Conservation Act 2016 (NSW)	Biodiversity Offset	Section 7.3	<p>A Test of Significance is to be completed to review the proposed developments effects on the Large Bent-winged Bat (<i>Miniopterus orianae oceanensis</i>).</p> <p>If the Test of Significance determines that significant impacts then future action will be required under the Biodiversity Conservation Act 2016.</p> <p>This conditions must be satisfied prior issue of construction certificate and the demolition of any building or construction.</p>
	Key Threatening Processes	Section 4.31 Schedule 4	<p>All trees being removed must be searched for hollows prior to removal. Any hollows identified are to be collected and reused within the landscaped riparian corridor.</p> <p>Any trees to be removed are to be searched for any fauna present before removal. Fauna is to be removed by a trained wildlife carer or ecologist and relocated to a safe location with suitable habitat.</p>

Woollahra Development Control Plan 2015	B3.6 On-site parking <i>Control C13</i>	<p>Semi-porous surfaces are to be implemented as per the advice provided in the White City Redevelopment Hakoah Club Limited Response to Technical Referrals to Woollahra Council Draft 3 June 2020 document.</p> <p>If not they are not to be implemented an adequate justification for their lack of suitability is required.</p>
	B3.7.1 <i>Control C16</i> B3.7.1 <i>Control C18</i> B3.7.1 <i>Control C19</i>	<p>Retention of tress, as per Tree Referral and inclusion of planting as set out in Amended Landscape Plans (Issue B) (20/95088) and Landscape Proposal in Response to Referrals, White City Redevelopment, Stuart Noble, 26/05/2020.</p> <p>Replace <i>Acacia terminalis subsp. terminalis</i> on the planting list as use of this species should be avoided unless part of a DPIE approved plan.</p> <p>Prior to the demolition of any disused building, the structure is to be searched for any fauna present (due to the potential present of Micro-bats). Fauna is to be removed by an adequately trained wildlife carer or ecologist and relocated to a safe location with suitable habitat.</p>
	E1.11 <i>Control C4</i>	<p>Inclusion of EV parking as per the Control C4 is to be enforced for this proposed development asper the below control.</p> <p><i>All new residential and non-residential development (other than for dwelling houses, semi-detached dwellings or dual occupancies) must provide 1 car parking space or 10% of all car parking spaces – whichever is greater - to have a 'Level 2' electric vehicle charging point installed.</i></p>
	Chapter E6 <i>Control C10</i>	<p>It is a preference that confirmation of the achievement of the Green Star – Design & As Built 5 Star rating be required before the occupation certificate is granted.</p> <p>This takes into consideration the high impact and resource use of both the construction and operation of the proposal and that the facility is intended to be in the best interest of the community.</p> <p>If this is not to be enforced, the applicant must commit to the sustainability initiatives listed in the ESD report including but not limited to:</p> <ul style="list-style-type: none"> • Inclusion of solar photovoltaic (PV) arrays to supplement energy consumption as depicted on building plans. • Use of design principals to minimise the need for active mechanical solutions to heat, cool, ventilate and illuminate the development.

		<ul style="list-style-type: none"> • LED lighting or equivalent high efficiency lighting including occupant detection, daylight controls and/or time clock controls in all instances. • Heat pump and/or solar thermal technology for all hot water services. • Rainwater, recycled water and/or greywater for use in irrigation including sub-soil drip irrigation or equivalent efficient watering system. • WELLS rated water efficient fittings and fixtures in all instances. • A high percentage of timber used in building and construction to be from a reused source or certified by a forest certification scheme (i.e. FSC, PEFC). • A high proportion of all materials used in the project to meet certain standards in terms of: reused products, recycled content products, environmental product declarations, third-party certification and stewardship programs.
Woollahra Biodiversity Conservation Strategy 2015-2025	<i>Section 8 Habitat and Wildlife Corridors (8.2)</i>	<p>See comments in Woollahra Development Control Plan 2015 (B3.7.1-Control C16, B3.7.1-Control C18, B3.7.1-Control C19)</p> <p>Adequate erosion and storm water management mechanisms installed and maintained to ensure no construction material (including solid or liquid) enters the creek line.</p>
Eastern City District Plan	<i>Various</i>	Retention of tress, as per Tree Referral and inclusion of planting as set out in Amended Landscape Plans (Issue B) (20/95088) and Landscape Proposal in Response to Referrals, White City Redevelopment, Stuart Noble, 26/05/2020.

Council expects that the following controls in the *Woollahra DCP, Section 6 - Sustainability*, will be complied with throughout the demolition, construction and operational phases of the development, as set out in the Woollahra Council Development Control Plan.

Karen Harper

Senior Environment and Sustainability Officer

Date: 21 April 2020

APPENDIX A – Threatened Flora and Fauna Mapping

