



Office of
Environment
& Heritage

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SSD-9393

Ms Annie Leung
Key Sites Assessments
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Mr Russell Hand

Dear Ms Leung

Waterloo Office of Environment and Heritage comments - Metro Quarter Over Station Development - land bound by Raglan Street, Cope Street, Wellington Street and Botany Road Waterloo (SSD 9393) – Concept proposal - Environmental Impact Statement

Thank you for your letter of 22 November 2018 requesting comments from the Office of Environment and Heritage (OEH) on the Environmental Impact Statement (EIS) for the above State Significant Development.

OEH has reviewed the relevant documents and provides recommendations and comment in Attachment A.

If you have any queries regarding this matter, please contact Janne Grose on 8837 6017 or janne.grose@environment.nsw.gov.au

Yours sincerely

S. Harrison 28/02/19

SUSAN HARRISON
Senior Team Leader Planning
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Attachment A

Office of Environment and Heritage comments - Metro Quarter Over Station Development - land bound by Raglan Street, Cope Street, Wellington Street and Botany Road Waterloo (SSD 9393) – Concept proposal - Environmental Impact Statement

Office of Environment and Heritage (OEH) has reviewed the following documents:

- Environmental Impact Statement (EIS) – 14 November 2018
- Water Quality, Flooding and Stormwater Report – 31 October 2018
- Urban Design and Public Domain Report (UD&PDR)
- Preliminary Construction Environmental Management Statement – 22 October 2018
- Heritage Impact Assessment (HIA) – 12 November 2018

and provides the following comments.

Reference is also made to the OEH submission of 11 February 2019 on the Waterloo Quarter State Significant Precinct Study (WMQSSPS) – State Significant Precinct Study and draft planning controls. A copy of this submission is attached. OEH considers issues raised in this submission are also relevant to the concept SSD-9393 and has reiterated those issues below.

Publicly Accessible Open Space

The WMQSSPS indicates there are currently no public open space areas located in the Waterloo Metro Quarter (Metro Quarter) but there are several existing public open space areas located in proximity to the site (page 39-41), including existing regional open space such as Moore Park and Centennial Parklands (page 41). The Eastern City District Plan (ECDP) includes Planning Priority E18 for delivering high quality open space and its objective is that “Public open space is accessible, protected and enhanced” (page 112). The ECDP notes urban renewal, such as the Metro Quarter, creates opportunities to increase the quantity of open space and that planning for urban renewal needs to consider opportunities to deliver new, improved and accessible open spaces (page 112).

The Metro Quarter concept proposal will provide for approximately 700 new dwellings (WMQSSPS, page 81) which has the potential to increase the local population by at least 1400 people. OEH considers it is important that adequate open space is provided on the site to avoid placing pressure on existing open space areas such as the Centennial Parklands and the biodiversity values of these areas. The Centennial Parklands for instance provide habitat for rare and threatened species and contain remnants of an endangered ecological community, Eastern Suburbs Banksia Scrub (ESBS).

The WMQSSPS proposes to provide 1980m² of new publicly accessible open space in the form of Cope Street and the Raglan Street Plazas (pages 113 and 149). OEH queries whether the proposed plazas provide adequate publicly accessible open space and how these areas are consistent with the Metro Quarter’s urban design principle for open space and environment to “promote a sense of well-being and connection to nature” (WMQSSPS page 100). The proposed plazas appear to predominantly be hard paved areas with some planted trees and it is unclear how the plazas provide a connection to nature (see Figures 33 and 34 in the WMQSSPS, pages 82-83).

The concept proposal provides an opportunity to significantly increase the total area of publicly accessible open space on the site and contribute to increasing urban tree canopy cover, the Green Grid and biodiversity by planting local native trees, shrubs and groundcover species. OEH recommends the indicative concept proposal is amended to provide additional open space on site which enhances the natural environment to be consistent with:

- the Metro Quarter’s urban design principle for open space and environment to “promote a sense of well-being and connection to nature”
- the vision for the Waterloo State Significant Precinct which is “Waterloo Urban Village is a place that increases community cohesion and well-being by providing high quality and sustainable open spaces that are safe, welcoming, accessible and connect people to nature” (WMQSSPS page 77).

The EIS refers to the large size of the site which allows for a significant sized development (page 324). The large size of the site should also allow the concept proposal to significantly contribute to the provision publicly accessible open space on the site.

Landscaping

Provision of additional planted open space

The ECDP includes Planning Priority E17 (increasing urban tree canopy cover and delivering green grid connections). It notes the NSW Government has set a target to increase tree canopy cover across Greater Sydney to 40 per cent and that urban renewal and transformation projects, such as the Metro Quarter, will be critical to increasing urban tree canopy cover (page 107). The renewal of the Metro Quarter provides a great opportunity to significantly increase urban tree canopy cover, deliver Green Grid connection and improve biodiversity by planting local native trees, shrubs and groundcover species.

While it is noted there are no existing trees within the Metro Quarter and there are only 45 existing street trees and it is proposed to plant an additional 90 trees (WMQSSPS page 77, p164), OEH recommends additional open space areas are provided on the site that are planted with local native species to further increase the urban tree canopy, promote a connection to nature and to provide a resilient, healthy and diverse urban forest.

Use of local native plant species

The FFS notes the ESBS vegetation community was prevalent in the area pre-1788. The WMQSSPS notes that tree plant selection includes species of the threatened ESBS but street tree species include native, exotic, deciduous and evergreen trees (see pages 166-167). It notes minimum capacity exists for extensive use of endemic species as they are potentially unsuitable for urban spaces in fully paved environment (page 169). It is unclear why areas of natural soil can't be provided instead of the proposed areas of hard paving. Further justification needs to be provided for not using local native plant species. The WMQSSPS also indicates that minimal capacity exists for extensive use of larger trees in the precinct (page 169). As recommended above, OEH suggests additional open space area is provided for planted open space rather than paved areas. This would assist to accommodate larger trees.

OEH recommends the landscaping for the Metro Quarter and street tree planting uses a diversity of native trees, shrubs and groundcover species from the relevant native vegetation communities that once occurred in this location rather than plant exotic species and non-local native species to improve biodiversity. As noted in the WMQSSPS and the FFS the Metro Quarter is located adjacent to a 'biodiversity corridor' and integrating native species into the concept plan would benefit native birds within the region (see page 171 of WMQSSPS and FFS, pages 22-23).

The WMQSSPS indicates tree species proposed to be planted (see page 167) include:

- *Jacaranda mimosifolia*. - this species is native to south-central South America
- *Robinia pseudoacacia* (Frisia)
- *Lophostemon confertus* (brush box). The natural range of this species is north-east NSW and coastal Queensland

The Urban Forest Study also suggests using Leopardwood (*Libidibia ferrea* formerly *Caesalpinia ferrea*) which is native to Brazil and Bolivia (page 42).

It is recommended the Department considers information relating to *Robinia pseudoacacia*, available on the NSW Department of Primary Industries website (see NSW Weedwise link at: <http://weeds.dpi.nsw.gov.au/Weeds/Details/306>) which indicates this species produces a large amount of root suckers to form dense thickets that exclude native vegetation and that this plant should not to be sold in all or parts of NSW.

The Greater Sydney Regional Strategic Weed Management Plan 2017 – 2022 published by Greater Sydney Local Land Services and developed in partnership with the Greater Sydney Regional Weed Committee lists *Robinia pseudoacacia* under Appendix 2 (other weeds of regional concern) as it poses a potential risk to biodiversity.

It is recommended the cultivar *Robinia pseudoacacia* (Frisia) is not used unless it can be demonstrated that "Frisia" is not capable of spreading and producing root suckers.

It is also recommended advanced and established local native tree species are planted to improve habitat, provide shade, reduce the urban heat island effect etc. This is consistent with the UFS, page 59).

Building Design

The WMQSSPS notes the concept proposal embeds green roofs on the open podium areas and it includes green walls into the design (pages 176- 177). OEH supports the inclusion of green roofs (roof surfaces that are partially or fully vegetated) and green walls into the design. The benefits of Green Roofs and green walls are outlined in the OEH (2015) Urban Green Cover in NSW Technical Guidelines which can be found at the following link:

<http://climatechange.environment.nsw.gov.au//Adapting-to-climate-change/Green-Cover>

Green roofs can have a strong regulating effect on the temperature of roofs and building interiors, reducing the energy needed for cooling and the impact of the Urban Heat Island Effect. The provision of green roofs would increase habitat and biodiversity at the site, particularly if local native plant species are used from the relevant native vegetation community. The WMQSSPS notes the green roofs will provide high quality native vegetation (page 176) and the green walls will improve microclimate conditions and provide ecosystem services such as air quality improvements and noise dampening (page 177).

Aboriginal Cultural Heritage

The HIA indicates it is known that natural sand profiles are present within the Metro Quarter and that these profiles have the potential to be artefact bearing and there remains potential for Aboriginal archaeological material to be present in less disturbed areas and at depth below later development. It notes this was assessed by Artefact in 2016 (page 69). The HIA recommends maintaining the conclusions and recommendations of the below reports for the western section of the Metro Quarter, unless contradicted by the post-excavation reporting and findings currently in preparation for the western section of the Metro Quarter by AMBS:

- Artefact 2016, Sydney Metro City & Southwest, Chatswood to Sydenham: Aboriginal Cultural Heritage Assessment
- Artefact 2016, Sydney Metro City & Southwest, Chatswood to Sydenham: Aboriginal Heritage – Archaeological Assessment.

If the concept proposal is approved, OEH agrees within the HIA recommendation to maintain the recommendations and conclusion from the above reports.

It is also recommended that the Registered Aboriginal Parties from the Artefact 2016 assessment are updated on what is proposed.

Conditions of consent should include protocols for dealing with Aboriginal objects or suspected objects, discovered during construction and for on-site employees and/or contractors to be made aware of the statutory obligations that apply to the discovery of Aboriginal objects (see recommended conditions of consent below).

Flood

The relevant SEARS have been satisfied for the concept level proposal with detailed design development-related investigations identified in the report where appropriate. Flood risk at the Metro Quarter can be mitigated using appropriate flood planning levels, setbacks and emergency response frameworks.

Investigation of probable maximum flood (PMF)-free basement vehicular access will need to be ensured at the detailed design stages of the Proposal, as well as all other flood risk management issues.

Recommended Conditions of Consent

If the Concept proposal is approved OEH recommends the following conditions are included as conditions of consent:

Landscaping

- 1) Landscaping shall use a diversity of local provenance species (trees, shrubs and groundcovers) from the native vegetation community (or communities) that once occurred on the site to improve biodiversity (rather than use exotic plant species or non-endemic native species). A Landscape Plan should be prepared for the site and include details on:
 - the native vegetation community (or communities) that once occurred on the site
 - a list of local provenance tree, shrub and groundcovers to be used in the landscaping, the quantity and location
 - the pot size of the local native trees to be planted.

- 2) Tree planting at the site shall use advanced and established local native trees preferably with a minimum plant container pot size of 200 litres, or greater.

[Note the inclusion of this condition is consistent with the minimum requirement for street tree planting recommended in the UFS, page 59]

Biodiversity

- (1) Existing native street trees shall be retained and protected where possible to support native fauna species
- (2) At least 90 new local native trees are to be planted at the Metro Quarter site
- (3) Habitat features such as nest boxes and bee hotels shall be installed at the site to benefit urban biodiversity

[Note the inclusion of this condition to install habitat features is consistent with the FFS, pages 7 and 37]

Green Roofs and Cool Roofs

- 1) The concept proposal shall incorporate green roofs, green walls and/or cool roofs into the design.

Aboriginal Cultural Heritage

- 1) On-site employees or contractors involved in ground surface disturbance must be made aware of the statutory obligations that apply to the discovery of Aboriginal objects prior to the commencement of any works.
- 2) If an Aboriginal object or a suspected object is discovered during construction, works must cease in the vicinity of the find and a fully qualified archaeologist must inspect the site to assess the object. If it is confirmed that it is an Aboriginal object and further material or in situ deposit could be present an appropriate management strategy should be prepared. This can include conservation in situ or salvage excavation if warranted. The management strategy must be designed in consultation with the Registered Aboriginal Parties. If the item is found to not be an Aboriginal object, works may continue.
- 3) If human remains are found all work must cease, the site must be secured, and the NSW Police and the NSW Coroner's Office must be notified. If the remains are found to be Aboriginal, OEH and the Local Aboriginal Land Council must be contacted to assist in determining appropriate management.

- 4) Further archaeological assessment is required if the proposal activity extends beyond the area of the current investigation. This would include consultation with the Registered Aboriginal Parties for the project and may include further field survey.
- 5) Archaeological test excavation (and salvage when required) is required where intact natural soil profiles are identified, or where Aboriginal objects are identified as an unexpected find.
- 6) An Archaeological Method Statement (AMS) must be prepared where test excavation and salvage are required for each activity or site-specific work stage.
- 7) Continued consultation with the Registered Aboriginal Parties (RAPs) for the project must be undertaken if there are any major changes in project design or scope, further investigations or finds.
- 8) Further consultation with RAPs is required to determine the preferred long-term care and management of any retrieved Aboriginal artefacts.
- 9) A Construction Heritage Management Plan should be prepared for the project. The plan should include an unexpected finds procedure, details of RAPs and circumstances where additional consultation would be required.

(END OF SUBMISSION)