

DOC18/251554 SSD-8636

> Mr David Gibson Social and Other Infrastructure Assessments NSW Department of Planning and Environment GPO Box 39 SYDNEY NSW 2001

Attention: Teresa Gizzi

Dear Mr Gibson

OEH comments on Notice of Exhibition for Engineering and Technology Precinct Development – University of Sydney (SSD 8636)

Thank you for your letter of 16 April 2018 received by the Office of Environment and Heritage (OEH) requesting comments on Environmental Impact Statement (EIS) for the Engineering and Technology Precinct development.

OEH appreciates the Department providing it with an extension in which to provide its submission.

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

If you have any queries regarding this matter, please contact Janne Grose on ${\bf t}$:8837 6017 or ${\bf e}$: janne.grose@environment.nsw.gov.au

24/05/18

Yours sincerely

SUSAN HARRISION

S. Hanneson

Senior Team Leader Planning

Greater Sydney

Regional Operations

Attachment A

OEH comments on Notice of Exhibition for Engineering and Technology Precinct Development – University of Sydney (SSD 8636)

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

- Environmental Impact Statement April 2018
- Revised SEARs for SSD 8636 29 September 2017
- Arboricultural Impact Assessment Tree Protection Specification 3 April 2018
- Civil Design Report Engineering and Technology Precinct Stage 1 Redevelopment 1 December 2017
- Landscape Design Report 29 March 2018 and provides the following comments in Attachment A.

Biodiversity

The Arboricultural Impact Assessment indicates six trees (trees 634-639) are to be removed as part of the development and that these trees are Bangalow Palms (see section 3.3, page 6). It recommends consideration be given to relocating these trees as part of the proposed landscape treatment (page 6). OEH supports this recommendation to relocate the Bangalow Palms as the fleshy fruits of these palms provide a food resource for the threatened Grey-headed Flying Fox (Department of Environment and Conservation August 2004 Natural Resource Management Advisory Series: Note 5) and Grey-headed Flying Fox are known to occur in the vicinity of Sydney University.

The EIS notes the removal of the six trees will be compensated for with the provision of 40 new trees (section 3.5, page 39). OEH recommends the proposed landscaped areas are planted with a diversity of local provenance species (trees, shrubs and groundcovers) from the native vegetation community (or communities) that once occurred at the site to improve biodiversity. It is noted this is consistent with Condition B8 for Stage 1 Consent SSD 13 6123 which requires the landscape plans to preferably use indigenous species to the area (see page 17 of the EIS) and the Landscape Design report which encourages the return of indigenous flora and fauna (page 2). There are numerous benefits in using a diversity of local native plants including:

- preservation of the biodiversity values of the local area
- provision of the most suitable food and habitat for local native fauna including nectar for pollinators (moths, butterflies, bees etc) which provide a food source for local native birds
- a stepping stone for more mobile native fauna to move across the landscape and
- once established local provenance vegetation would require less maintenance/watering than
 exotic plants. The use of local native vegetation also has added benefits in reducing the need
 for fertiliser application which reduces fertiliser laden runoff entering the local waterways and
 will assist to improve instream health, water quality, reduce algal blooms etc

Aboriginal Cultural Heritage

As the proposed works, include the removal of the existing carpark to construct a new flood storage basin, OEH recommends the development considers Aboriginal cultural heritage for the storage basin.

Building Design

OEH recommends that if possible the new Engineering Buildings incorporate a Green Roof or Cool Roof into the design. The benefits of Green Roofs and Cool Roofs 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 are roof surfaces that are partially or fully vegetated. Cool roofs use reflective material to reflect and emit more solar energy than dark coloured roofs.

Green roofs and cool 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 an Intensive Green roof would increase habitat and biodiversity at the site, particularly if local native plant species are used from the relevant native vegetation community.

Flood

The EIS includes appropriate reporting of flood risk management for the site. It relies on the reports referred to below.

OEH has reviewed the Civil Design Report prepared by Bonnaci which in turn relies on the following four reports:

- WMA Water University of Sydney Flood Risk Management Stage 1 Campus Flood Study Review (September 2013)
- WMA Water University of Sydney Engineering Precinct Flood Mitigation Plan (Draft)
- TTW Civil/Flood Study University of Sydney Engineering Precinct Civil/Flood Study (Draft) Dec 2015 and
- The University of Sydney Engineering and Technology Precinct Redevelopment Volume 7.23: Stormwater and Flooding Design Requirements (Revision B, 25 September 2017).

All relevant drainage/flood management issues have been appropriately addressed in all Reports reviewed. It is further noted that the flood management scheme has been endorsed by Sydney Water, who along with City of Sydney Council is a Consent Authority. There are no further requirements from OEH regarding flood risk management for this Stage 1 redevelopment proposal.

(END OF SUBMISSION)

• •