Planning, Industry & Environment

Our ref: DOC19/924192
Senders ref: SSD-9714

Ms Belinda Scott

Planning and Assessment Group
Department of Planning, Industry and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Scott

Subject: Exhibition of the Environmental Impact Statement for Botany Rail Duplication – SSI-9714 between Mascot and Botany

Thank you for your email of 14 October 2019 requesting advice on the Environmental Impact Statement (EIS) for this State significant infrastructure (SSI) project.

The Environment, Energy and Science Group (EES) provides its recommendations and comments at Attachment A.

Please note, in relation to Aboriginal cultural heritage, EES is not able to provide comments currently. This does not represent EES support for the proposal and this matter may still need to be considered by the consent authority.

If you have any queries regarding this matter, please do not hesitate to contact Janne Grose, Senior Conservation Planning Officer on 02 8837 6017 or at janne.grose@environment.nsw.gov.au

Yours sincerely

S. Harrison 13/11/19

Susan Harrison

Senior Team Leader Planning
Greater Sydney Branch
Environment, Energy and Science

Attachment A

Subject: EES comments on the Environmental Impact Statement for Botany Rail Duplication – SSI-9714 – between Mascot and Botany

The Environment, Energy and Science Group (EES) has reviewed the following documents:

- Environmental Impact Statement (EIS) - October 2019
- Surface Water Impact Assessment (SWIA) – 27 September 2019
- Biodiversity Development Assessment Report – BDAR – 27 September 2019
- Technical Report 6 - Flooding Impact Assessment (FIA)– October 2019

and provides the following comments.

Riparian Corridor

The EIS notes the project would remove a small area of native vegetation and the majority of this is riparian vegetation along Mill Stream, Mill Pond and New Pond which would be removed for construction of a new bridge and compound site (page 25-4). EES recommends all attempts are made to first avoid and then to minimise the clearing of native vegetation. This is consistent with the *Biodiversity Conservation Act 2016* (BC Act) and the NSW Government Biodiversity Assessment Method 2017 (BAM) which is established under section 6.7 of the BC Act. BAM includes the guidelines and requirements that apply the avoid, minimise and offset hierarchy for assessing direct and indirect impacts to biodiversity values.

The new rail bridge over Mill Stream, which is in the Botany Wetlands, will cross through a patch of threatened ecological community, Swamp Oak Floodplain Forest (page 2-8) and the EIS indicates it would remove about 0.62 ha of this community immediately adjacent to the bridge (see Tables 11.11 and 11.12, pages 11-27 and 11-28). It is recommended:

- the new bridge is designed to avoid / minimise the clearing/disturbance of native vegetation
- the compound site is relocated to avoid removing native vegetation or the impact footprint is reduced.

The EIS indicates the proposed bridge will be two-span and located alongside the existing bridge (pages 6-2 and 18-23). It is noted the Urban Design and Landscaping Principles for the project include to "*encourage design of creek crossing structures that would enable the linkage of vegetation communities and wildlife access*" (section 6.7.1, page 6-19). To assist maintain or improve riparian connectivity and plant growth under the bridge, EES recommends:

- the bridge design is an elevated structure and it spans the full width of the riparian corridor to avoid, or reduce the need to clear and/or disturb remnant native vegetation along Mill Stream
- the design maximises light and moisture penetration under the structure to encourage native plant growth
- a gap is provided between the new bridge crossing and the existing bridge to assist in allowing light and moisture penetration under the two structures.

Following construction, the EIS indicates that disturbed areas alongside Mill Stream, Mill Pond and New Pond would be stabilised and revegetated with locally endemic species (section 11.3.6, page 11-31). EES supports the rehabilitation of temporarily disturbed riparian areas. EES recommends:

- details are provided on the total area of riparian land that will be temporarily and/or permanently impacted
- where riparian land is permanently impacted, the riparian area that is impacted is offset by planting riparian vegetation elsewhere along the riparian corridor
- a diversity of fully structured local native provenance plant species are used from the relevant native vegetation communities (Swamp Oak swamp forest and coastal freshwater wetlands)
- a Vegetation Management Plan (VMP) is prepared which provides details on how the riparian corridor is to be protected and rehabilitated.

- If the SSI is approved, a condition of consent is included which requires a VMP to be prepared and implemented (see recommended conditions of consent below).

The EIS notes felled trees and vegetation would be either chipped on or offsite depending on location along the alignment (page 7-8). It is recommended any native trees that are required to be cleared are salvaged (for example tree hollows and tree trunks which are greater than approximately 25-30cm in diameter and 3m in length) and placed in the riparian corridor to enhance habitat.

Landscaping
EES recommends the plant species list for any landscaping associated with this SSI uses a diversity of local provenance species (trees, shrubs and groundcovers) from the native vegetation community that occurred in this locality rather than use non-endemic native species and exotic species.

Urban Tree Canopy Cover
The EIS notes the proposed development will require the removal of trees (Tables 18.2 and 18.3). Details are required on the number of trees and the plant species that are proposed to be removed. EES recommends that to assist in mitigating the urban heat island effect and improve the urban tree canopy and local habitat that the development:

- first avoids removing the trees where possible
- replaces any removed trees at a ratio greater than 1:1
- replaces the trees with local provenance native plant species from the native vegetation community which once occurred in this locality to enhance local biodiversity, rather than use non-local native or exotic plants
- uses advanced and established local native trees preferably with a plant container pot size of 100 litres or greater
- provides enough area/space to allow the trees to grow to maturity.

Flood
The FIA identifies the flood risk to the project and the project impacts on existing flooding behaviour, existing development and on the future development potential of the land.

The FIA concludes that, further assessment will be undertaken during the detailed design phase of the project that will build on the flood assessment presented in the FIA and will be based on further design development and flood modelling where required. The consultant indicates that the detailed design phase will be undertaken in consultation with relevant Government agencies and Council.

The FIA also provides a broad outline of measures to be considered for incorporation into the detailed design phase in order to manage the construction and operational related flood risks and impacts.

EES supports the above conclusion and recommends that consultation with impacted residents should also be undertaken in the detailed design phase.

Recommended conditions of consent
EES recommends that if the SSI is approved the following conditions are included:

1. Any trees removed by the development are replaced by a diversity of local native provenance species at a ratio greater than 1:1.
2. Enough area/space shall be provided to allow the trees to grow to maturity.
3. The Landscape Plan shall include details on:
   a) the native vegetation community (or communities) that once occurred in the locality
   b) a list of local provenance tree, shrub and groundcovers to be used in the landscaping
   c) the quantity and location of plantings

d) the pot size of the local native trees to be planted

e) the area/space required to allow the planted trees to grow to maturity.

4. Native trees to be removed are salvaged and used along the riparian corridor to enhance habitat including tree hollows and tree trunks (greater than approximately 25-30cm in diameter and 3m in length).
5. Seed from any native plants to be removed shall be collected and used in the riparian corridor.
6. Tree planting shall use advanced and established local native trees (from the relevant vegetation community that once occurred in the locality), preferably with a minimum plant container pot size of 100 litres, or greater for local native tree species which are commercially available. Other local native tree species which are not commercially available may be sourced as juvenile sized trees or pre-grown from provenance seed.
7. A Vegetation Management Plan shall be prepared to protect and rehabilitate riparian land impacted by the project. The plan should include:
    - a scaled plan which locates:
        - watercourses and wetlands
        - top of highest bank
        - riparian corridor width (measured from the top of the highest bank)
        - the development footprint
        - retained existing native vegetation
        - areas of riparian land temporarily and permanently impacted
    - details on the native vegetation communities and plant species that currently or once occurred along the waterway
    - details on the local native provenance plant species (trees, shrubs and groundcovers) to be planted – a diversity of local native species should be planted
    - details on the location and number of trees and other plants to be planted
    - a maintenance programme to cover the period until rehabilitated riparian area is established.

End of Submission