Planning, Industry & Environment

Our ref: DOC19/913151
Senders ref: SSD-9472

Ms Prity Cleary
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Cleary

Subject: EES comments on the Environmental Impact Statement for Sikh Grammar School – SSD-9472 - 151-161 Tallawong Road, Rouse Hill

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

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 at this time. 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 Sikh Grammar School – SSD-9472 - 151-161 Tallawong Road, Rouse Hill

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

- Environmental Impact Statement (EIS) for Masterplan and built form - September 2019
- SEARs – 6 August 2019
- Aquatic and Terrestrial Ecology Assessment Report (ATEAR) - June 2019
- Landscape Design Report
- Bushfire Assessment report (BAR) – 27 June 2019
- Design Report
- Concept Stormwater Management Plan and Preliminary Flood Study
- Civil Engineering Drawings
- Tailout Civil Engineering
- ESD report – 1 May 2019
- Architectural Plans
- Environmental Risk Assessment
- Blacktown City Council Growth Centres DCP – May 2018

and provides the following comments.

The EIS notes the site forms part of the Sydney Region Growth Centres, located within the North West Growth Centre, Riverstone East Precinct and that the site is situated within an 'existing Certified Area' for which no further offsets are required for the removal of native vegetation (section 4.2.3, page 47). EES would like to clarify that the location of the site in a biodiversity certified area means that the proposed development is not likely to significantly affect any threatened species, population or ecological community, or its habitat and therefore a threatened species assessment is not required. Offsets can still be required by the consent authority.

Riparian Planting

The EIS notes planting will enhance the environmental quality of the riparian corridor in the site (section 5.1.3, page 95). Figure 3 in the EIS shows a first order watercourse currently flows through the site but it is unclear where the riparian corridor is proposed to be planted. If a riparian corridor is to be planted on the site, it is recommended the proponent provides a scaled plan which shows:

- the site boundary
- the development footprint
- the location of the watercourse and stream order
- the top of highest bank along the watercourse
- the riparian corridor width (measured from the top of the highest bank).

Site landscaping

The EIS notes Cumberland Plain Woodland - Plant Community Type (PCT) 849 – Grey Box – Forest Red Gum grassy woodland on flats of the Cumberland Woodland Plain, Sydney Basin Bioregion was considered to occur on the site (page 197). It indicates the site landscaping proposes to use a mix of evergreen and deciduous trees; Cumberland Plain Woodland Plant Community Type (PCT) for tall canopy trees with an open 'midstorey' and expansive low growing understorey; and *Corymbia maculate* and *Angophora costata* for street trees. It also notes "proven exotic species" are also proposed (section 3.2.4, page 32 of EIS).

EES recommends that the plant species list used for tree planting should use species that are characteristic of Cumberland Plain Woodland, and that (according to the ATEAR) were found on site. This would include Narrow-leaved Ironbark (*Eucalyptus crebra*), Forest Red Gum (*E. tereticornis*), Rough-barked Apple (*Angophora floribunda*) and Grey Box (*E. moluccana*).

EES supports the inclusion of the Rough-barked Apple as a species to be used in planting, in reference to the Darug word 'dalawong' (as mentioned in section 3.2.4 of the EIS) but it should be noted that the Rough-barked Apple is *Angophora floribunda* not *A. costata* (Smooth-barked Apple) EES notes the Landscape Design report also proposes to use *A. costata* (Smooth-barked Apple) (pages 2 and 14). The Smooth-barked Apple is found in sandstone environments, and so it is not suitable for the site. It is recommended *Angophora costata* (Smooth-barked Apple) is removed from the species list.

EES recommends the indicative plant schedule is amended to use a diversity of local provenance species (trees, shrubs and groundcovers) from the native vegetation community that occurred on the site rather than use non-endemic native species and exotic species.

The Landscape Design Report appears to show that the 'village green' area on the site is proposed to consist of 'integrated permeable synthetic lawn' (see pages 8 and 9). It is recommended the Department considers potential issues associated with using synthetic lawn as opposed to using natural non-invasive lawn including:

- natural grass provides a cooler surface than artificial turf surfaces which get much hotter and absorb radiant heat (sunlight) and potentially add to the urban heat island effect by radiating the heat back into the air
- natural grass surfaces (as opposed to synthetic grass) provide some habitat value for certain native fauna.

Urban Tree Canopy Cover

The EIS notes the site is highly modified and cleared of all native vegetation except for two remnant trees (section 7.8.1, page 197) and the proposed development will result in the removal of two remnant native trees (section 7.8.1, page 198) which are identified as *Eucalyptus crebra* and *Angophora floribunda* (see page 58 of ATEAR).

As the site occurs within an area covered by the Central City District Plan (CCDP) it is recommended the development of the site is consistent with Planning Priority N16 - increasing urban tree canopy cover and delivering Green Grid connections. Objective 30 of this planning priority is that urban tree canopy cover is increased. Planning Priority N16 outlines that the NSW Government has set a target to increase tree canopy cover across Greater Sydney to 40 per cent.

The numerous benefits of urban tree canopy cover are noted in the CCDP including green cover assists to:

- mitigate the urban heat island effect
- support cleaner air
- provide local habitat
- slow and store stormwater and improve water quality and filter pollution before it reaches the District's waterways.

The EIS indicates extensive planting throughout the site would improve biodiversity and tree canopy of the site and refers to riparian planting and green roof spaces (section 3.2.4, page 31). It is recommended the Concept Landscape Masterplan for the site is amended to include additional planting of local native trees (see Landscape Design Report, page 10)

The ATEAR notes remnant and regrowth vegetation occurs around the edges of the site (section 4.2 and 4.7 pages 1 and 7). One way to achieve urban tree canopy cover at the site is for the development to avoid removing remnant and regrowth native vegetation.

Farm Dam

The EIS notes the development proposes to dewater the existing farm dam on the site by pumping approximately 1 ML of water out onto the ground downslope. While the ATEAR indicates no turtles were observed surfacing in the dam or within the area surrounding the dams and no eels were observed during dipnetting (section 4.6.1, page 7), it is recommended a Fauna Relocation Plan is

prepared to address the transfer of any native aquatic fauna and the acclimatisation of aquatic fauna to different water conditions. If it is determined to grant approval, it is recommended the following condition is included:

1. A Fauna Relocation Plan must be prepared by a suitably qualified and experienced ecologist prior to any dewatering of the dam commencing. The Plan must include details on, but not be limited to, the following:
   - the native fauna species known to inhabit and/or use the dam which require transfer from the dam
   - the methodology proposed to transfer the fauna
   - the location and suitability of the proposed relocation sites
   - any potential impacts of relocating the fauna to the relocation sites
   - details of oversight of the Plan's implementation by an ecologist.

Sustainability and Building Design

The Landscape Design report indicates the development proposes to include a green roof, rooftop gardens and green walls (page 8) and the EIS indicates the rooftops on slab will utilise above ground planters and mounding for small tree planting (section 7.2.9, page 133). The EIS also notes the rooftops will contribute to a cooler microclimate using light coloured roof materials to reduce the 'heat island effect' (page 231 of EIS). EES supports the development incorporating green roofs, green walls and light-coloured roof materials into the design.

Flood

- The concept stormwater management plan and preliminary flood study (martens consulting engineers, July 2019) provides a brief summary of flood modelling results for the 1% AEP existing condition and the 1% AEP, 1% AEP plus climate change and the probable maximum flood (PMF) proposed condition.
- Figures 3 to 5 of the report shows the site is significantly impacted by the 1% AEP in existing condition. Figure 6 to 11 shows no impact by the 1% AEP in the proposed condition due to the proposed drainage system.
- The report does not provide information whether the project results in any adverse impacts on adjacent and neighbouring properties. These impacts should be addressed and documented.
- The project is impacted by the PMF as shown in Figure 12. The northern proposed road and footpath access to the school will be cut off by flood water.
- EES recommends that, an emergency response plan is prepared, including safety signs, along the proposed road and footpath, at the access to underground parking to the north and at the carpark at the north east corner of the site. The preparation and implementation of an emergency response plan will help ensure the safety of students, teachers, parents, carers and other members of the school community.

Recommended conditions of consent

EES recommends that if the SSD is approved the following conditions are included:

1. Trees removed by the development shall be replaced by a diversity of local native species at a ratio greater than 1:1.
2. Enough area/space is provided on site to allow the trees to grow to maturity.
3. The Landscape Plan for the site shall use a diversity of local native provenance trees, shrubs and groundcover species (rather than exotic species or non-local native species) from the native vegetation community which once occurred in this locality.
4. 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.

5. Native trees to be removed are salvaged and used on the site (including the riparian corridor) to enhance habitat including tree hollows and tree trunks (greater than approximately 25-30cm in diameter and 3m in length).
6. Tree planting at the site 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.

End of Submission