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Mr Nahid Mahmud  
Infrastructure Assessments  
Planning and Assessment Group  
Department of Planning, Industry and Environment  
4 Parramatta Square, 12 Darcy Street  
PARRAMATTA NSW 2150

Dear Mr Mahmud

**Subject: EES comments on Environmental Impact Statement for Pymble Ladies College – Grey House Precinct – SSD-17424905 – 20 Avon Road Pymble**

Thank you for your email of 5 November 2021 requesting advice on the Environmental Impact Statement (EIS) for this State significant development.

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

EES asks that it not been assigned a consultation role in the conditions of consent for this project unless EES agrees to the role.

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](mailto:janne.grose@environment.nsw.gov.au)

Yours sincerely

A handwritten signature in black ink that reads 'S. Harrison'.

01/12/21

Susan Harrison

**Senior Team Leader Planning  
Greater Sydney Branch  
Biodiversity and Conservation**

**Subject: EES comments on Environmental Impact Statement for Pymble Ladies College – Grey House Precinct – SSD-17424905 – 20 Avon Road Pymble**

The Environment, Energy and Science Group (EES) has reviewed the following reports for this SSD:

- Environmental Impact Statement – October 2021
- Appendix 1 – SEARs – 17 May 2021
- Appendix 12 - Landscape drawings
- Appendix 12 – Landscape Design Report
- Appendix 24 – BDAR – September 2021
- Appendix 24 Koala Impact Assessment
- Appendix 25 – Arboricultural Impact Assessment (AIA) – 12 October 2021

and provides the following comments.

**Biodiversity**

***BDAR Waiver request***

The EIS notes a Biodiversity Assessment has been prepared “to support a BDAR waiver” (Section 7.4, page 112). It includes as a Specific Environmental Commitment for Flora and Fauna that “the requirement for a BDAR under the BC Act should be waived” (page 118). A BDAR waiver request has already been reviewed by EES, and in its submission of 17 August 2021, EES advised the request to waive the requirement for a BDAR is not supported and a BDAR is required. As a BDAR has been prepared to accompany the EIS for this SSD, it is not clear why Sections 7.4 and Part I of the EIS are referring to the requirement for a BDAR to be waived.

***Number of trees to be removed***

The RtS needs to clarify the number of trees that are proposed to be removed as the EIS, BDAR, AIA and Appendix 12 provide differing information in relation to this, for example:

- Section 7.1.1 of the Arboricultural Impact Assessment states “thirty (30) trees would require removal” (page 9)
- the BDAR indicates a mix of 29 native and exotic trees require removal to facilitate the proposed development including two (2) trees with high retention value, 13 moderate value retention trees and 14 low retention value trees (section 6.1.1 of BDAR)
- Section 4.7 of the EIS states “29 trees would require removal to facilitate the proposed development” (page 45)
- Section 6.4 of the EIS states “in total 29 trees would require removal to facilitate the proposed development, including two (2) high retention value trees, 13 moderate value retention trees and 15 low retention value trees”. This equates to 30 trees
- the Tree Planting Plan in the Landscape drawings (Appendix 12) indicates 27 trees are to be removed.

***Sydney Turpentine-Ironbark Forest***

The EIS states “the site comprises a mix of Plant Community Types (PCTs) including two (2) Endangered Ecological Communities (EECs); PCT 1281 - Sydney Turpentine-Ironbark Forest (STIF) and PCT 1237 - Blue Gum High Forest in the Sydney Basin Bioregion (BGHF). Remnant canopy trees of STIF and BGHF are present around the perimeters of the school grounds” (section 6.11, page 98). The Executive Summary of the BDAR notes the proposed development will have an approximate impact area of 0.06ha on STIF (page ii) but the Conclusions to the BDAR states the proposed development will have an approximate impact area of 0.02ha on STIF EEC (Section 11, page 47). Based on Section 6.1.1 of the BDAR it appears the building footprint will impact a total of 0.04 ha (page 38) and the accessway will impact 0.02 ha (page 39) which means a total of 0.06 ha will be impacted. The RtS needs to clarify the total impact area.

The Executive Summary and Table 3.1 in the BDAR and Section 6.11 of the EIS indicate STIF is an endangered ecological community (EEC) under the NSW *Biodiversity Conservation Act 2016* (BC Act). However, STIF is listed as a critically endangered ecological community (CEEC). The NSW Threatened Species Scientific Committee opinion is that it is facing an extremely high risk of extinction in Australia in the immediate future.

The Executive Summary of the BDAR states that the “Vegetation onsite has been significantly altered such that the site does not reflect the natural structural attributes of the STIF” and that “Vegetation is structurally and functionally poor due to previous clearing onsite. Thus, the proposed development assessed in this BDAR is not expected to significantly contribute to loss of STIF”. It also states the “majority of vegetation on site is regrowth” or “has been planted by the school” and that “there is little to no remnant vegetation left within the site” (page ii). The RtS needs to clarify if the regrowth is from remnant local native vegetation. Remnant vegetation need not just be remnant trees but can include groundcover and shrub species associated with the plant community and trees that have grown from remnant seedstock.

The Arboricultural Impact Assessment indicates 15 of the subject trees to be removed are native to Australia with eight being endemic to the local area (section 5.3.4) while the EIS notes the proposed development requires the removal of “11 native canopy trees” (Table 6, page 56). This needs to be clarified.

The EIS notes that the proposed development area contains canopy species typical of STIF, and four (4) trees typical of STIF canopy will require removal as part of the development and that “accordingly, a five (5)-part test has been undertaken for STIF” (section 6.11, page 98). A five-part test has not been provided. Nevertheless, it is noted a five-part test is not required as part of the BDAR.

The EIS indicates an Arboricultural Impact Assessment (Appendix 25) has been prepared with respect to the 30 trees located within or adjacent to the development area and it notes that “all trees assessed were considered to be planted, not remnant, specimens” (Section 6.4, page 83). This statement is not consistent with the BDAR which considers that “due to the age and structure some individuals within Vegetation Zone 2 (accessway) are expected to be remnant and form part of the original vegetation community (Section 1.2, page 3 of BDAR). The RtS needs to address this inconsistency.

#### *Management of STIF*

In relation to STIF, the BDAR states “the mid stratum is primarily absent within site boundaries” and the “ground stratum has been highly disturbed, with much of the site dominated by exotic turf grasses and ‘High Threat Exotic’ (HTE) species” (section 3.1.1, page 13). It also indicates that “current management practices are preventing the recovery of the original plant Community” (Section 1.2, page 3) and that “vegetation adjacent to the access path is displaying signs of natural regeneration although this is being hindered by current land use practices (Section 3.1.1, page 13) and “exotic species are dominant across the site and are preventing the recruitment of the original vegetation community” (Section 8.1.2, page 42). EES encourages the removal of exotic species from the school site over time, especially HTE species and replacement with local native provenance species, including groundcover and shrub species and that management practices are modified to assist natural regeneration.

EES notes that the school has already been undertaking bush regeneration in the areas of BGHF and STIF and this does not include the proposed development area as this is not bushland (section 3.3.3, page 17 of BDAR). EES encourages bush regeneration of BGHF and STIF on the school site.

#### Detailed comments on the BDAR:

- The requirements for a streamlined assessment - small area BDAR are outlined in Appendix C and Table 27 of BAM (2020).
- The BAM-C calculations were not submitted to the consent authority. As such, EES has not been able to view the calculations as part of this BDAR review.
- The BDAR and BAM-C report say the BOS entry trigger is clearing of vegetation on the Biodiversity Values Map. This is incorrect. The BOS entry threshold does not apply to SSDs.
- The BDAR describes how it has applied Stage 3 of the BAM, but this stage has not been applied to this BDAR. Stage 3 of the BAM is only relevant for applications for biodiversity stewardship sites.
- It is not clear from Figure 2.1 what native vegetation has been included in the count of 25% cover as there's no legend to the map. RtS needs to clarify if both dark green and aqua vegetation been included and why has a map been provided with the vegetation marked as different colours.
- No digital shapefiles have been provided.
- Section 3.1.1 states that "whilst canopy species in the proposed development footprint are associated with PCT 1281, the lack of remnant ground species and historical development results in this vegetation not being assessed as a part of the STIF EEC in the BAM-C." However, the Scientific Committee's final determination for STIF includes that a stand of remnant STIF trees can meet the definition of STIF.
- The map showing vegetation zones should be provided with other information on the native vegetation present (i.e. in section 3 of the report) rather than in the impact section.
- There are no details provided on the composition, structure and function condition scores for the plots.
- Section 4.2 states that "several candidate species generated species credit species due to the impact on foraging habitat". However, only one species generated species credit species.
- The Regent Honeyeater and Swift Parrot have been assessed as being unlikely to occur, however the BDAR should have referred to the Important Habitat Map for these species.
- The BDAR states the structures on site are unlikely to be potential habitat for Large Bent-wing Bat because they are in use and well maintained. However, this species does not roost only in uninhabited structures.
- the BDAR has not identified the sensitivity to gain class of each ecosystem credit species.
- There is no demonstration of efforts to avoid and minimise impacts on biodiversity values.
- The discussion in Chapter 9 titled 'Avoid and minimise impacts' discusses potential impacts on 'features that threatened species depend on', and then lists the prescribed impacts under the BAM. This suggests the assessor does not understand what prescribed impacts are, and why they need to be assessed separately.
- Four trees will be removed for the accessway. The impacts have been calculated at a loss of 5% canopy cover. No justification is provided for the figure of 5%. EES considers this impact value is likely insufficient given the loss of four trees and the trimming that is required.
- There is no discussion of the timing, frequency or responsibility of mitigation measures. There is no table of mitigation measures.
- The BDAR has not addressed the matters in section 9.1.1 of the BAM in relation to serious and irreversible impacts (SAII). Instead, it has incorrectly referred to the Guidance to assist a decision-maker to determine a serious and irreversible impact which is not relevant.
- The BDAR states that Chapter 8 of the BDAR addresses section 10.2 of the BAM (SAII). This suggests the assessor has applied the incorrect version of the BAM, as it is section 10.2 of the previous version of the BAM (2017) that deals with SAII. The assessor should be applying BAM 2020.

- There is no map of SAI threatened ecological communities, impacts requiring offset, impacts not requiring offset, not requiring assessment.

## Mitigation Measures

### ***Pre-clearing of vegetation***

#### *Seed collection from local native plants to be removed*

The BDAR recommends that any native trees or shrubs being removed for the construction works should be checked for seeds during removal works and if seeds are present, they should be collected and used (section 10.1.7, page 47). EES agrees that native seed should be collected and recommends the following condition of consent is included:

***Prior to the removal of any STIF vegetation from the site seed from native trees and shrubs approved for removal is collected and it is propagated by a suitably qualified bush regenerator and used in the site plantings.***

#### *Translocation of juvenile native plants*

EES recommends any juvenile local native plants that are proposed to be removed by this SSD should be replanted in the landscaped planting areas. The juvenile plants must be translocated prior to any earthworks and clearing of native vegetation commencing. The plants should be relocated by a suitably qualified bush regenerator when plant growth conditions are ideal to give the native plants the best possible opportunity to survive and should be maintained until established. EES recommends a condition of consent is included to this effect.

#### *Pre-clearance fauna surveys and Relocation of native fauna*

The BDAR recommends an ecologist should be present onsite during vegetation clearing to ensure no fauna are harmed as a result of clearing (Section 10.1.4, page 46). EES recommends a condition of consent is included that a suitably qualified and experienced ecologist needs to be engaged by the proponent to undertake pre-clearance surveys:

***Prior to removing any vegetation or other habitat that has been approved for removal, the applicant must engage a qualified and experienced ecologist to:***

- ***undertake a pre-clearing survey to delineate, map, and mark habitat-bearing trees and shrubs to be retained/removed and other fauna habitat features and determine the presence of any resident native fauna using nests, dreys, hollows, logs etc***
- ***supervise the clearance of trees and shrubs (native and exotic) and other habitat to capture, treat and/or relocate any displaced native fauna to an appropriate nearby location***
- ***remove sections of a tree containing a hollow or habitat prior to clearing and felling the tree.***

#### *Replacement nest boxes*

The EIS notes observation of trees from the ground did not indicate the presence of hollows or deep fissures but these may still be present and an ecologist is to be on-site during any tree removal works (section 6.11, page 99). The EIS recommends installing four micro-bat boxes in the trees being retained in this area (page 99) while the BDAR recommends installing three microbat nest boxes within the site boundaries to increase roosting opportunities in the area (sections 8.1.3 and 10.1.8). The number of microbat boxes proposed to be installed on the site needs to be clarified. The number of microbat nest boxes to be installed may need to be more than four depending on the findings of the pre-clearing survey

EES recommends a condition of consent is included as follows:

- ***Where hollow dependent native fauna are found using existing hollows, compensatory tree hollows should be provided prior to removing the tree hollows and prior to the release of the hollow dependent fauna unless the removed tree hollows can be relocated and installed on the same day they are removed.***

- **The applicant should:**
  - **provide details on the size, type, number, and location of nest boxes required – this would be based on the results of the pre-clearing survey**
  - **install a minimum of 4 microbat boxes in the trees being retained**
  - **install replacement nest boxes prior to any vegetation removal (preferably one month prior), to provide alternate habitat for hollow-dependent fauna displaced during clearing**
  - **salvage and relocate the tree hollows approved for removal to appropriate locations on the same day the tree hollows are removed and prior to the release of any native fauna found using the tree hollows.**
  - **install other habitat features such as logs (see below) and bee hotels.**

## Clearing of native vegetation

### *Reuse and removed trees and hollows*

The EIS includes “the relocation of logs” as a Specific Environmental Commitment for flora and fauna (page 118). EES recommends the project salvages and reuses any existing logs on the ground and also native trees that are to be removed including hollows and tree trunks (greater than approximately 25-30cm in diameter and 2-3m in length) and root balls are placed on the ground within the areas on-site that are to be replanted with local native species. Please note the diameter of the log (greater than 25-30cm in diameter) is important because it impacts thermal qualities and longevity of the material.

If the SSD project is not able to reuse all removed native trees, EES recommends a condition of consent is included that the proponent consults with the local community restoration/rehabilitation groups, Landcare groups, and relevant public authorities including local councils, and Greater Sydney Local Land Services prior to any clearing commencing to determine if the removed trees can be re-used by others in habitat enhancement and rehabilitation work. This detail including consultation with the community groups and their responses should be documented.

EES recommends the project includes the following condition:

- **The Proponent must where it is practicable reuse any of the native trees that are to be removed as part of this project, including tree hollows, tree trunks (greater than 25-30 centimetres in diameter and 2-3 metres in length), and root balls to enhance habitat:**
  - **Any hollow sections of wood removed should be salvaged and re-located to appropriate locations to provide natural nest boxes prior to the release of any native fauna found using the tree hollows.**
  - **If removed native trees are not able to be entirely re-used by the project, the proponent should consult with local community restoration/rehabilitation groups, Landcare groups, and relevant public authorities, local councils, and Greater Sydney Local Land Services prior to removing any native trees to determine if the removed trees can be reused in habitat enhancement and rehabilitation work. This detail including consultation with the community groups and their responses must be documented.**

## Revegetation and Landscaping

Section 3.6 of the EIS notes canopy trees would be planted adjacent to the site boundary, to compensate for the trees requiring removal and adjacent to the building facades and outdoor learning areas (page 37). It also indicates that “bush regeneration programs and management zones (refer Figure 23), have already been commenced by the College in the areas of BGHF and STIF (this does not include the Grey House Precinct as it is not bushland) and that the ongoing rehabilitation of BGHF and STIF in other appropriate locations across the site in accordance with the draft Vegetation Management Plan (VMP), would mitigate the tree removal (11 native canopy trees)” (Section 6.11, page 100). EES has not received the draft VMP for review to determine if the draft VMP does mitigate the tree removal.

### *Tree replacement ratio*

The EIS recommends offset planting is undertaken which corresponds with the number of trees removed (section 6.4). The Tree Planting Plan in Appendix 12, however proposes to plant 37 trees for the 27 trees to be removed. The RtS needs to clarify the proposed number of trees to be removed and the proposed number of replacement trees.

EES recommends any trees removed are replaced at a ratio greater than 1:1 (for trees not covered by a biodiversity offset strategy) and considers that a tree replacement ratio of 2:1 is preferable to 1:1 to mitigate the urban heat island effect and enhance habitat.

### *Use of local native provenance species*

The BDAR recommends “native species landscaping across the site to increase potential habitat area for the Large eared pied bat (*Chalinolobus dwyeri*)” (section 8.1.3, page 43) and that post construction bush regeneration management is undertaken to ensure recovery of 0.02 ha of STIF and to improve the surrounding STIF vegetation (section 8.1.4, page 43). Further details are required on the proposed STIF bush regeneration as the Landscape Drawings - Proposed Plant Schedule proposes to plant 37 trees, and of these 14 are identified as BGHF species while the remaining trees are non-local native species such as Lemon Scented Myrtle (*Corymbia citriodora*) and exotic species such as Indian Bean Tree, Jacaranda, Tulip Tree and Japanese Elm.

EES recommends the landscape planting schedule is revised by a qualified bush regenerator and the planting schedule uses a diversity of local provenance native species from the relevant native vegetation community (or communities) that occur, or once occurred on the site (rather than use exotic species or non-local native species).

If the SSD is approved, EES recommends the following conditions of consent are included:

- ***Any planting/ landscaping, rehabilitation associated with the project shall use a diversity of local provenance native trees, shrubs and groundcover species (rather than exotic species or non-local native species) from the relevant native vegetation community (or communities) that occur or once occurred along the rail alignment / local area where agricultural plantings are not required.***
- ***Tree planting shall use advanced and established local native trees 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.***
- ***Enough area/space is provided to allow the trees to grow to maturity.***
- ***A Landscape Plan is to be prepared and implemented by an appropriately qualified bush regenerator and include details on:***
  - a. seed collection – the location of all native seed sources should be identified***
  - b. the type, species, size, quantity, and location of replacement trees***
  - c. the species, quantity and location of shrubs and groundcover plantings***
  - d. the plan demonstrates replacement trees plantings will deliver a net increase in trees for trees that are not covered by a biodiversity offset strategy***
  - e. the native vegetation community (or communities) that once occurred in this area are to be planted and the plan demonstrates that the plant species consist of local provenance***
  - f. a list of local provenance species to be used***
  - g. the quantity and location of plantings***
  - h. the pot size of the trees to be planted***
  - i. the area/space required to allow the planted trees to grow to maturity***
  - j. plant maintenance regime. The planted vegetation must be regularly maintained and watered for 12 months following planting. Should any plant loss occur during the maintenance period the plants should be replaced by the same plant species.***

End of Submission