



Office of
Environment
& Heritage

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SSD 8865

Andrew Beattie
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Department of Planning & Environment
GPO Box 39
Sydney NSW 2001

Attention: Aditi Coomar

Dear Mr Beattie, *Andrew*

Notice of Exhibition – Concept Proposal for Redevelopment of St Anthony of Padua Catholic School (SSD 8865)

I refer your letter to the Office of Environment and Heritage (OEH) received 19 November 2018 regarding the exhibition of the above proposal (SSD 8865) at 125 -165 Tenth Avenue and 140 -170 Eleventh Avenue, Austral.

OEH has reviewed the documentation provided and provides comments on biodiversity, floodplain risk management and sustainability at Attachment 1.

If you have any queries regarding this matter, please contact Dana Alderson on 8837 6304 or by email at Dana.Alderson@environment.nsw.gov.au.

Yours sincerely

S. Harrison 11/01/19

SUSAN HARRISON
Senior Team Leader - Planning
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Attachment 1 – OEH comments on Concept Proposal for Redevelopment of St Anthony of Padua Catholic School (SSD 8865)

1. Biodiversity

OEH notes that the site is identified as biodiversity certified land pursuant to Schedule 7 of the *Threatened Species Conservation Act 1995*, and therefore an assessment of the impacts of the proposal on biodiversity is not required. However, the proposal includes the retention of Cumberland Plain Woodland vegetation in the western part of the site.

Consistent with Appendix K (Eco Logical Australia, 12 June 2018), OEH recommends that species selected for landscaping and revegetation include the use of a diversity of local native provenance plant species (trees, shrubs and groundcovers). Refer to the OEH website for a list of Cumberland Plain Woodland species, available at:

<https://www.environment.nsw.gov.au/determinations/cumberlandwoodlandsFD.htm>

2. Floodplain Risk Management

OEH has reviewed Appendix G and Appendix R in relation to flooding and provides the following comments:

- The flood maps (grc Hydro, July 2018) included in Appendix R (Part 2) appear to have inconsistencies between the existing conditions and the proposed development conditions. Figure 4 for the existing conditions shows minor flood affectation in the 1% AEP at the southern end of the development site (i.e. Tenth Avenue), while Figure 5 shows widespread flooding across the site particularly across the south west and southern areas. Also, the flood maps under developed scenarios do not show any flood affectation at these locations. These inconsistencies need to be checked, corrected and updated in the report in order to have sound understanding of flood behaviour within the site for the proposed development.
- Appendix G (Civil Plans) outlines the proposed drainage network and detention basins within the development site. The adopted design standard for the drainage network should be shown. Also, it should be clarified whether the flood models include these details.

3. Sustainability

OEH notes that the EIS (Urbis, undated) and Architectural Design Report (Munns Sly Moore Architects, July 2018) briefly discuss ecologically sustainable development, including that the design strategy for the proposal includes installation of solar PV to help meet the energy needs of the school, landscaping to reduce the impacts of the Urban Heat Island effect and maximising the opportunities for natural lighting and ventilation in the building design.

It is recommended that the NSW and ACT Governments Regional Climate Modelling (NARClIM) climate change projections developed for the Sydney Metropolitan area are used to inform the building design and asset life of the project. These include over 100 climate variables, including temperature, rainfall, hot days and cold nights, severe Forest Fire Danger Index (FFDI) and are publicly available online and at fine resolution (10km and hourly intervals) for 20-year time periods: 2020–2039 near future and long-term 2060–2079. Further, sustainable design measures such as green roofs should be incorporated into the project design to maximise the long-term ecologically sustainable development outcomes of the proposal. The climate change projections for the Sydney Metropolitan area are found at the following link:
<https://climatechange.environment.nsw.gov.au/Climate-projections-for-NSW/Climate-projections-for-your-region/Metro-Sydney-Climate-Change-Downloads>

OEH further recommends that green roofs, cool roofs and/or green walls be incorporated into the detailed design of the proposal. The benefits of Green Roofs, Cool 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 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 Walls are vegetated systems that are grown on the vertical façade of the building envelope

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. Green Walls can reduce heating and air-conditioning requirements. The provision of an Intensive Green roof or Green Wall would increase habitat and biodiversity at the site, particularly if local provenance plant species are used from the relevant native vegetation community.

(END OF SUBMISSION)

