



Our ref: DOC20/130830-8

Your ref: SSD-10159

Ms Louise Starkey

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Dear Louise

**Northside Private Hospital, West Gosford (SSD-10159) – Review of Environmental Impact Statement**

I refer to your email dated 18 February 2020 in which Planning and Assessments Group (P&A) of the Department of Planning, Industry and Environment (the Department) invited Biodiversity and Conservation Division (BCD) of the Department for advice in relation to the Northside Private Hospital at West Gosford (SSD 9536), located at the corner of Faunce Street West and Racecourse Road, West Gosford (Lot 2 Deposited Plan 1226923).

BCD has reviewed the '*Environmental Impact Statement - Northside Private Hospital, Faunce Street West, West Gosford, Lot 2 DP1226923*' (prepared by Willowtree Planning Pty Ltd on behalf of AA Crown Holdings Pty Ltd and dated September 2019), including relevant appendices, annexures and attachments in relation to impacts on biodiversity, Aboriginal Cultural Heritage and flooding.

BCD's recommendations are provided in **Attachment A** and detailed comments are provided in **Attachment B**. If you require any further information regarding this matter, please contact Steven Cox, Senior Team Leader Planning, on 4927 3140 or via email at [rog.hcc@environment.nsw.gov.au](mailto:rog.hcc@environment.nsw.gov.au)

Yours sincerely

**LUCAS GRENADIER**  
**Acting Director Hunter Central Coast Branch**  
**Biodiversity and Conservation Division**

**Date: 24 March 2020**

Enclosure:      Attachments A and B

## BCD's recommendations

### Northside Private Hospital, West Gosford (SSD-10159) – Review of Environmental Impact Statement

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#### Biodiversity

1. BCD recommends the BAM accredited assessor provides adequate justification as to why the floristic plot is representative of the vegetation on site, given the absence of key diagnostic canopy species used to justify the PCT, or resample the vegetation so that the floristic plot includes the diagnostic canopy species.
2. BCD recommends the BAM accredited assessor to submit the credit calculator via the NSW Biodiversity Accredited Assessor System.

#### Aboriginal Cultural Heritage

3. BCD recommends that an Aboriginal cultural heritage assessment report should be prepared in consultation with all interested Aboriginal parties of the Gosford Local Government area in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (DECCW 2011)*.
4. BCD recommends that Aboriginal community consultation is undertaken in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)*.

#### Flooding

5. The impact of overland flows shown in the Gosford CBD Local Overland Flow Study should be assessed to determine how the development needs to be protected from surface water ingress. The impact of the development on flooding of adjacent properties or public areas should also be assessed. Diversion of overland flows is likely to be required to protect the development.
6. Methods of preventing groundwater and surface water ingress into the proposed basement require further investigation. Emergency management requirements for alarming and evacuating the basement in the event of water ingress would also need to be addressed.
7. The proponent should prepare a groundwater impact assessment and assess any impacts associated with drawdown of groundwater and discharge of intercepted groundwater to the environment.
8. The proponent should verify if contaminated groundwater or soils are present at the site or may be affected by the proposal. If the proposal has the potential to disturb contaminated groundwater, the proponent should assess any impacts and develop a remediation action plan to detail how to deal with this.
9. The proponent should investigate the capacity of Council's existing stormwater system to receive discharge from the on-site detention system. Alternatively, use of several, smaller on-site detention devices may result in the proposed system being more compatible with the receiving drainage system, and be useful for mitigating overland flow of larger storm events.

10. The Drains modelling used for the Stormwater assessment should be also be revised to reflect the manner of discharge as well as rate of discharge with further detail provided regarding model parameters and treatment of rainwater tank credits.
11. The proponent should provide more details of the suitability of the proposed operational water quality treatment method, including details of whether the proposed treatment cells will operate properly when fully inundated and details of the cells servicing requirements.

The proponent should consider alternative water quality treatment options, including water sensitive urban design features such as bioretention ponds.

12. The stormwater management and construction environmental management plans should be revised to reflect site specific conditions, construction methods including bulk excavation and rock breaking, and other relevant environmental impacts identified for the project.

## BCD's detailed comments

### Northside Private Hospital, West Gosford (SSD-10159) – Review of Environmental Impact Statement

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#### Biodiversity

1. The floristic plot needs to sample a representative area of the subject site

The single floristic plot sampled in Plant Community Type (PCT) 684 does not include a key diagnostic canopy species suggesting the plot was not positioned in a representative area of the PCT. The Biodiversity Development Assessment Report (BDAR) indicates that the sole Plant Community Type (PCT) identified for the subject site is *PCT 684 - Blackbutt - Narrow-leaved White Mahogany shrubby tall open forest of coastal ranges, northern Sydney Basin Bioregion*. Section 1.5.2.1 (PCT selection justification) of the BDAR indicates that PCT 684 was determined through the analysis of mapped soil landscapes, elevation and the presence of key diagnostic canopy species namely; *Eucalyptus pilularis* (Blackbutt). Only one floristic plot was sampled.

Analysis of the plot data (contained in Appendix B – Vegetation plot data) for the subject site indicates the absence of Blackbutt. As Blackbutt is a key diagnostic canopy species used for the identification and justification of the PCT chosen, it should be present in the representative floristic plot. BCD notes that Blackbutt was recorded on the subject site, but not as a dominant canopy species in the floristic plot. The absence of this species could change the site integrity score and therefore the number of ecosystem species generated for PCT 684.

#### Recommendation 1

BCD recommends the BAM accredited assessor provides adequate justification as to why the floristic plot is representative of the vegetation on site, given the absence of key diagnostic canopy species, or resample the vegetation so that the floristic plot includes the diagnostic canopy species.

2. The Accredited Assessor should submit the credit calculator via the NSW BAAS.

The credit calculator used in the BDAR to determine the credit requirements (both ecosystem and species) has not been submitted via the NSW Biodiversity Accredited Assessor System (BAAS). This is required to finalise BCD's assessment of the BDAR.

BCD reviews an accredited assessors credit calculator files to determine if the BAM has been applied correctly, that the BDAR and calculator use the same data and selected parameters (i.e. 'drop down menus'), and that the biodiversity credit requirements (both ecosystem and species) are consistent between the BDAR and the credit calculator.

#### Recommendation 2

BCD recommends the BAM accredited assessor submits the credit calculator via the NSW Biodiversity Accredited Assessor System.

## Aboriginal cultural heritage

### 3. An Aboriginal Cultural Heritage Assessment Report should be prepared

The Secretary's Environmental Assessment Requirements (SEARs) have not been met. BCD recommends that an ACHAR should be prepared in accordance with the SEARs issued on 29 March 2019 (DOC19/231000-1) in consultation with the registered Aboriginal parties.

The proponent provided a draft Aboriginal heritage impact assessment, the *Northside Private Hospital, Gosford - Aboriginal Heritage Impact Assessment* which was prepared by Artefact and dated July 2019. Aboriginal cultural values for the project were not considered or documented in the report. Consultation was not undertaken with the registered Aboriginal parties of the Gosford Local Government Area but was restricted to a representative of the Darkinjung Local Aboriginal Land Council (Darkinjung LALC).

The ACHAR should be prepared in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (DECCW 2011)* in consultation with all interested Aboriginal parties.

#### Recommendation 3

BCD recommends that an Aboriginal cultural heritage assessment report should be prepared in consultation with all interested Aboriginal parties of the Gosford Local Government area in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (DECCW 2011)*.

### 4. Aboriginal community consultation requirements for the project area should be fulfilled

Aboriginal community consultation has not been undertaken with the registered Aboriginal parties of the Gosford Local Government area. Instead consultation was restricted to a representative of the Darkinjung Local Aboriginal Land Council (Darkinjung LALC) attending a site inspection.

Aboriginal community consultation requirements have not been met. BCD recommends that Aboriginal community consultation be undertaken in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010). All registered Aboriginal parties should be given the opportunity to provide Aboriginal cultural values information for the project area.

#### Recommendation 4

BCD recommends that Aboriginal community consultation is undertaken in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010).

## Flooding and flood risk

### 5. Flood impacts have not been adequately assessed

The EIS has not considered the Gosford CBD Local Overland Flow Flood Study (Sept 2018) prepared by Cardno Lawson Trelaor.

An overland flow of up to 500mm through the site is identified in that study. The proponent has not considered how this flooding will affect the proposed development or how the development could change flooding patterns and affect adjoining areas. The flood impact assessment should also address how flooding to the proposed below ground carpark will be managed.

The site's 149 certificate also indicates that the site is affected by flood related development controls. The EIS simply states that this is incorrect, which conflicts with the current flooding study.

#### Recommendation 5

The impact of overland flows shown in the Gosford CBD Local Overland Flow Study should be assessed to determine how the development needs to be protected from surface water ingress. The impact of the development on flooding of adjacent properties or public areas should also be assessed. Diversion of overland flows is likely to be required to protect the development.

### 6. Emergency management of flooding

The EIS has not determined if the proposal needs to incorporate any specific measures to manage risk to life from floodwater or groundwater ingress. The proposed basement car parking contains two levels of parking located below natural ground and below any potential surface discharge points. There is a high risk of surface and groundwater entering the basement and how this will be managed has not been addressed.

#### Recommendation 6

Methods of preventing groundwater and surface water ingress into the proposed basement require further investigation. Emergency management requirements for alarming and evacuating the basement in the event of water ingress would also need to be addressed.

### 7. Groundwater impacts have not been adequately assessed

Appendix 19 of the EIS (Preliminary Geotechnical Report prepared by Douglas Partners) indicates that groundwater was found at depths at the proposal site ranging from 2 metres to 4.5 metres below the natural ground surface. The report indicated that the groundwater was expected to be a permanent water table. The proposed development involves excavation up to 11 metres in depth and therefore it will directly impact the groundwater table.

Additionally, the two-level basement of the development will likely require ongoing dewatering and discharge to the local environment. These impacts have not been assessed.

The geotechnical report also notes that interception and removal of groundwater may result in drawdown of aquifers in the adjoining areas that contain acid sulphate soils. This could lead to acidification of these areas and acidity impacts to nearby waterways.

The EIS includes mapping that shows the proposal is located in close proximity to Narara Creek and to a mapped Coastal Wetland. Groundwater drawdown also has the potential to impact these areas.

#### Recommendation 7

The proponent should prepare a groundwater impact assessment and assess any impacts associated with drawdown of groundwater and discharge of intercepted groundwater to the environment.

### 8. Contamination issues have not been adequately assessed

Appendix 17 of the EIS (Preliminary Contamination Assessment) identifies the potential for groundwater below and adjacent to the site to be contaminated due to previous land uses. The potential for groundwater contamination has not been verified by testing.

The site was previously used as a service depot for Ausgrid vehicles and included diesel and petrol tanks and other potential sources of contaminants. The contamination assessment notes the site has a low to medium risk of contamination.

#### Recommendation 8

The proponent should verify if contaminated groundwater or soils are present at the site or may be affected by the proposal. If the proposal has the potential to disturb contaminated groundwater, the proponent should assess any impacts and develop a remediation action plan to detail how to deal with this.

### **9. Existing stormwater system does not have capacity to receive flows from the site**

The stormwater management plan proposes to reduce post development stormwater flow rates from the site to predevelopment levels in accordance with Central Coast Councils requirements. This is proposed to be achieved by piping all stormwater via a large on-site detention tank towards the Racecourse Road boundary of the site and piping the outflow from the tank to Council's stormwater inlet pit in the kerb of Racecourse road. Figure 66 of the EIS shows existing pits and pipes are only 375mm diameter and 450mm diameter in the Council roadway.

The proposed onsite detention discharges via a 450mm diameter pipe. The receiving system does not have the capacity to receive this concentrated flow. Upgrading of Council's existing drainage system will be required if this arrangement is used.

#### Recommendation 9

The proponent should investigate the capacity of Council's existing stormwater system to receive discharge from the on-site detention system. Alternatively, use of several, smaller on-site detention devices may result in the proposed system being more compatible with the receiving drainage system, and be useful for mitigating overland flow of larger storm events.

### **10. On-site detention system has not been modelled using best practice methods**

Proprietary software "Drains" has been used to model the performance of the on-site detention system, however; the inputs and outputs of this modelling have not been reported in detail.

Additionally, rainwater tank credits have been discounted from Council's on-site detention requirement. Best practice modelling for allowable rainwater tank credit applies the credited volume below the level of the orifice outlet. This allows the volume to be taken up once only in a rainfall event. Subtracting a rainwater tank credit from the required detention may lead to insufficient on-site detention.

#### Recommendation 10

The Drains modelling used for the Stormwater assessment should be also be revised to reflect the manner of discharge as well as rate of discharge with further detail provided regarding model parameters and treatment of rainwater tank credits.

### **11. Operational stormwater quality management poses a number of risks**

Stormwater quality management after construction is proposed to be managed through the use of proprietary treatment cells that will be located in the base of the on-site detention tank. It is not clear if the placement of these cells in the bottom of the tank is feasible as the inserts may not perform properly in a fully submerged environment as they are designed to work in a flow-through environment and generally best placed offline so they receive low flows only.



Resuspension or undertreatment of nutrients is likely. The location at the base of the tank also poses a safety risk to staff servicing them.

Landscaping designs included in the EIS indicate that sufficient garden areas are available for bioretention or other water quality treatment methods that could be used as an alternative to treatment cells in the on-site detention tank.

#### Recommendation 11

The proponent should provide more details of the suitability of the proposed operational water quality treatment method, including details of whether the proposed treatment cells will operate properly when fully inundated and details of the cells servicing requirements.

The proponent should consider alternative water quality treatment options, including water sensitive urban design features such as bioretention ponds.

### 12. Construction management plans are inadequate

Water quality management and erosion and sediment control during the construction phase are discussed in the stormwater management plan and the construction environmental management plan. Both of these documents are generic and provide inadequate guidance for a construction project of the scale of the proposal.

Sediment basin calculations are generic and do not consider the method of construction. The stormwater report states that existing reeds will be removed as part of construction, although there do not appear to be any existing basins or reeds on site. The concept civil engineering plans show use of the basement lift well as a sediment basin.

Section 5 of the construction environmental management plan states “sediment laden water from Newmarket Green construction site may flow into the stormwater and adjoining canal”. This comment appears to refer to a different development.

The EIS states that 75,626.99 cubic meters of material needs to be removed from site however this material may be contaminated. Until such time as a detailed contamination assessment is completed it is premature to determine how the bulk excavation and removal of excess material from the site will be carried out. The waste management plan included in the EIS (Appendix 31) refers to waste generated by operation of the hospital facility and does not include any construction waste.

Rock anchors are required to extend on to adjacent areas and underneath a public roadway. Potential impacts to these areas have not been assessed and these engineering features are not shown or allowed for on the concept engineering plans.

Construction environmental management plans need to reflect the complexities of the proposed bulk earth works to be carried out on site. They need to include a demolition phase, a remediation phase and a bulk earthworks phase. The effects of heavy rock breaking equipment on adjacent services and sensitive land uses, such as sewerage and water infrastructure, electricity transmission line, schools and residential areas near the site need to be considered. The vibration assessment included in the EIS focuses on plant within the proposed hospital. It does not address the need to use heavy rock breaking equipment to carry out the bulk excavation required to construct the proposal.

#### Recommendation 8

The stormwater management and construction environmental management plans should be revised to reflect site specific conditions, construction methods including bulk excavation and rock breaking, and other relevant environmental impacts identified for the project.