

File no: SSD 9809; MC-19-00001.

21 November 2019

Social and Infrastructure Assessment Department of Planning, Industry & Environment GPO Box 39 SYDNEY NSW 2001

Attention: David Way

Dear Mr Way,

Re: SSD9809 - Richmond Road, Marsden Park - Marsden Park Public

School

Thank you for the opportunity to comment on the State Significant Development proposal lodged under Part 4 of the Environmental Planning and Assessment Act 1979 ("the Act").

The proposal has been reviewed by our officers and comments and issues have been raised and listed in **Attachment A** to this letter. We request the items listed in Attachment A be addressed by way of amended or additional details and referred back to us for reconsideration and conditions before any final determination is made by you.

If you would like to discuss this matter further, please contact our Assistant Team Leader Ms Luma Araim on 9839 6958.

Yours faithfully

Alan Middlemiss

ABM MSBlown

Acting Manager Development Assessment

ATTACHMENT A

Matters to be considered and addressed:-

Engineers

Details of the following are required:-

Stormwater.

- 1. A stormwater design plan shall be prepared for the 'temporary school' scenario.
- 2. We cannot support the proposed on-site detention (OSD) storage volume of 130m³. Storage volumes shall be provided in the order of:
 - a) 300m³/Ha up to the 1.5 year ARI top water level; and
 - b) 455m³/Ha up to the 100 year ARI top water level;

as per Council's Water Sensitive Urban Design Standard Drawings, Drawing No. A(BS)175M, Page 20.

- 3. OSD details including cross sections shall be provided in the stormwater plan set. The OSD shall be designed in accordance with Council's Water Sensitive Urban Design Standard Drawings, Drawing No. A(BS)175M, Page 22/23.
- 4. There are stormwater lines shown on the stormwater plan which have surface levels slope opposite to the invert levels which cannot be supported. This arrangement could potentially cause ponding at low points in the event of a pipe blockage and shall be amended to ensure all surface and invert levels generally slope towards the final point of discharge.
- 5. We cannot support the placement of a grated pit inside the soccer field area. The stormwater plans shall be amended accordingly.
- 6. A soft copy(s) of the MUSIC modelling for the site shall be submitted to us for review.

Road and Traffic

- 7. A loading bay management plan shall be prepared and submitted to us for review. The loading bay management plan shall ensure all loading activities associated with waste collection occur outside of peak hours and organising delivery times during school hours to minimise conflicts.
- 8. We note that the development proposes a pick-up/drop-off zone to the east of the site along Northbourne Drive. However, that section of Northbourne Drive is currently under construction (approved under CC-19-00843) and does not have any provisions for a kerbside pick-up/drop-off zone.

General

9. Clarification is required whether the development plans to subdivide the western area of the site which has been reserved for 'alternate use'.

Please refer to the following comments from our Drainage unit from the pre-lodgement meeting held on 18 July 2019 that still apply to the site:

Our drainage comments and water quality requirements for this development are based on the general requirements under Part J & A of BDCP 2015, WSUD Developer's Handbook Part 4, Engineering Guideline 2005 and the BCC Growth Centres DCP 2018.

On-site Stormwater Detention (OSD)

- Section 7.11 (formerly S.94) No.21 contributions apply in the area. However, public schools are not obligated to pay S.7.11 contributions. Contact <u>Catherine.Harris@blacktown.nsw.gov.au</u> for rates and applications if otherwise.
- 2. Permanent OSD is required if contributions are not paid.
- 3. Design and construct the OSD so as to comply, as a minimum, with the requirements of our Water Sensitive Urban Design (WSUD) Standard Drawings Plan No. A(BS)175M and the OSD Deemed to Comply Tool Developer's Edition (latest version available).

Our WSUD Standard drawings – A(BS)175M can be accessed in the following way:

- a. www.blacktown.nsw.gov.au
- b. Click on Plan and Build from Menu Tab
- c. Click on Stage-2 Plan & Guidelines
- d. Click on Engineering Design Guide Library
- e. Click on Water Sensitive Urban Design
- f. Scroll to WSUD Standard Drawings.
- 4. Provide a detailed design for OSD basin with details of the control pits and basin sections.
- 5. Where a tank is used, all the access points have to be grated. The spacing depends upon the depth of OSD. Access grates are to be positioned such that the maximum distance from any point in the tank to the nearest grate is not greater than 1.5 m for clear heights less than 0.7 m, 2 m for clear heights less than 1.0 m, 3 m for clear heights less than 1.5 m, 4 m for clear heights less than 2.0 m, 5 m for clear heights less than 2.5 m and 6 m for clear heights greater than 2.5 m.
- 6. Minimum grate size is 900x900mm otherwise all discharge control pits>1.2m deep must have 1200x1200mm openings.
- 7. Provide an OSD catchment plan

WSUD

- 8. Section 7.11 (formerly S.94) No.21 contributions apply in the area. However, public schools are not obligated to pay S.7.11 contributions. Contact Catherine.Harris@blacktown.nsw.gov.au for rates and applications if otherwise.
- 9. Provide permanent water quality on-lot if S.7.11 contributions are not paid.
- 10. We accept bio-retention systems to satisfy the permanent water quality requirements. This is provided by using MUSIC to assess the performance of the water quality systems and provide an electronic copy to us for assessment. Alternatively the water quality can be addressed using proprietary products. Draft MUSIC modelling guidelines for Blacktown are available through the WSUD Developer's Handbook Part 4. We have the appropriate source nodes, design rainfall data set including evapotranspiration data and specific approved treatment nodes for Blacktown available electronically upon request or a directly available through MUSIC 6.
- 11. Refer to our "Water Sensitive Urban Design (WSUD) Standard Drawings", Plan No: A(BS)175M and WSUD Developers Handbook. Both documents are found on our web page.
- 12. Refer to Section 4.2 of Part J of BDCP 2015 for load reduction requirements.
- 13. Provide a MUSIC catchment plan.

Water Conservation

- 14. A rainwater tank (RWT) is required to meet water the conservation targets under Part J for the development. A minimum of 80% of non-potable water demand for the development is to be met through the reuse of rainwater. Non potable water demand is to include landscape watering and toilet/urinal flushing.
- 15. Allow for a minimum usage rate of 0.1 kL/day/toilet or urinal and a minimum of 0.4 kL/m²/ year for landscape watering (excluding turfed areas if need be). For 5 days a week usage multiply rates by 5/7 and ignore school holidays.
- 16. If the full demand could not be met through a RWT alone; a stormwater tank (SWT) could also be provided to meet the water conservation targets.
- 17. Where a SWT is used, the RWT is to collect the roof water only and is to be re-used for all the toilets and urinals.
- 18. A SWT may be needed to achieve the reuse demand. Where WSUD is provided on-site, the SWT is to collect the treated flows from the water quality treatment. The final treatment requirements will be subject to further assessment. The SWT reuse is to target the landscaped areas only, typically through subsoil drainage.
- 19. MUSIC is generally used to assess the performance of the rainwater tank using the node water balance and an electronic copy of the MUSIC model needs to be provided to us for assessment.
- 20. Draft MUSIC modelling guidelines including water usage rates for Blacktown are available through the WSUD Developer's Handbook Part 4.
- 21. Allow for a 20% loss in rainwater tank size volume in MUSIC to that shown

- on the design plans to allow for anaerobic zones, mains water top up levels and overflow levels. e.g. where a 50,000 L tank is specified on the drainage plan it is to be modelled in MUSIC as 40,000 L.
- 22. All RWT and SWT overflow outlets are to be gravity drained.
- 23. All calculations/graphs are to be provided.

Traffic

- 10. The BDCP 2015 control requires 60 parking spaces and the proposal is to provide 48 parking spaces including a disable parking space. We do not support 12 spaces less car parking spaces than required by our planning control. Our experience in other parts of the LGA indicates that adequate parking must be provided to all schools otherwise the negative impact of parking is increased on the surrounding road network. In most cases, surrounding streets to a school are residential and the streets are not wide enough to allow parking on both sides. Our view is that insufficient parking for this school will impact the surrounding residential streets.
- 11. The report discussed travel demand measures in the form of a Green Travel Plan (GTP). A similar GTP was developed for a public school open several years ago in The Ponds (Riverbank Drive). To date, the GTP has no desired effect on staff and students' travel patterns and recently the school principal requested us not to have any parking restrictions on the nearby streets as the school staff park on these streets. It is interesting to note that the report is suggesting schools should actively seek local government support for increased management of on-street parking surrounding the school whereas school principals do not support parking restrictions in nearby streets.
- 12. The report suggested traffic generation rate of 0.45 per student to be used which is based on the GHD survey at other schools. Accepting the proposed traffic generation rate, it is unclear how the peak traffic generation is 306 trips only for a school of 1000 students.
- 13. Three wombat crossings (pedestrian crossing) are proposed along 3 frontage roads of the proposed school. All crossings are to be provided at no cost to us (including street lighting at the crossings). For each crossing a separate approval through the Local Traffic Committee process is required.
- 14. A pick-up and drop-off indented bay along the western side of Northbourne Drive is proposed. However, from our experience this bay will not be sufficient to contain all pick-up and drop-off activity especially in the afternoon. Nothing about pick-up and drop-off has been mentioned along the eastern side of Northbourne Drive.
- 15. There is no school access from the drop off bay on Northbourne Avenue. Children will be dropped off and have to walk around the corner to the entrance. This will not work.

- 16. The proposed bus pick-up and drop-off bay along the northern road (Bolwarra Drive) is a long way from the access point on this road. The proposed bus bay needs concurrence from bus operator(s) and TfNSW. The proposed bus bay location has an inherited problem as there is no turning facility for a bus to turn and go back to the direction from which it came.
- 17. The report states, "To minimise impacts on local streets, parents should be discouraged from dropping their children off on Beale Street or Enmore Street". We require clarification on how this is going to be achieved.
- 18. Support Unit access seems to be via a locked gate at the front of the drop off bay on Northbourne Drive. How do parents actually drop these children off? Most need escorting into the classroom so a locked gate will be especially difficult. It appears that the location of the unit may need reconsidering. What parking provision is there for these parents as there is nothing available on the road.

Natural Areas

19. The native species list provided as attachment A in the Biodiversity Statement (Eco Logical Australia 2019) is to be incorporated into landscaping plans subject to the Department of Education's approved planting list.

Open Space

20. The landscape plan requires specific details for the planting and maintenance of the street trees along with species listed below:

Enmore Street - Flindersia australis

Northbourne Drive - Lophostemon confertus

Bolwarra Drive (proposed major road) - Angophora costata

Urban Design

- 21. The masterplan for the new school buildings are generally well considered and the site planning results school having an 'inward' orientation. This is an acceptable approach to the planning of a school environment as it minimises the impact on the surrounding neighbourhood, improves the safety for the students and provides a communal/neighbourhood approach for the design of the school.
- 22. The building materiality and articulation is generally appropriate for the type of development proposed and incorporates a suitable mix of high-quality materials and thoughtful composition of building elements.
- 23. Urban heat is a significant issue in western Sydney which the proposal has significant tree coverage across the site. It is recommended that where possible, these trees benefit for passive irrigation systems to improve water efficiencies, manage run-off and treatment of water and improving tree growth through better soil and water conditions.

- 24. Waste collection configuration must be wholly within the site. Trucks must enter and leave in a forward direction. Collection areas should be adequately screened with landscaping and have suitable acoustic treatment to minimise impact on students and the neighbouring development. Preference is for waste storage bays to be integrated into the design of the building on site to eliminate isolated storage bays that disrupt the landscape.
- 25. The interface with the street at a pedestrian level is dominated by high fences, which also restricts the opportunity for community uses of the sports fields. Fencing alignment and landscaping are to be considered to mitigate the negative impact that palisade fences have on the streetscape.