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SSD 8790

18/10/18

Ms Aditi Coomar
Department of Planning and Environment
GPO BOX 39
SYDNEY NSW 2001

Dear Ms Coomar

SSD 8790 – PARRAMATTA WEST PUBLIC SCHOOL REDEVELOPMENT – ENVIRONMENTAL IMPACT STATEMENT (EIS)

I am writing to you in reply to your invitation to the Environment Protection Authority (EPA) to make a submission concerning the above project EIS.

The EPA requests that this submission be read in conjunction with its letter dated 20 October 2017 in respect of the draft Secretary's environmental assessment requirements for the project.

The EPA emphasises that it does not review or endorse environmental management plans or the like for reasons of maintaining regulatory 'arm's length'. The EPA has not reviewed any environmental management plan forming part of or referred to in the EIS.

The EPA notes that the development site straddles Railway Street and the new structure, including the school hall, located on part of the existing sports fields on the northern side of Railway Street. The EPA further notes that the new structure is proposed approximately 10 metres from the rear boundary of Franklin Street residences and provides some acoustic shielding of residences from activities (including community use) on the sports field located between that structure and Burra Reserve.

The EPA has identified the following site specific concerns based on the project information available on the Department of Planning and Environment major projects web site:

- (a) the need for a detailed assessment of potential site contamination, including information about groundwater and a detailed assessment of the footprint and surrounds of existing buildings following their demolition;
- (b) construction phase noise and vibration impacts (including recommended standard construction hours and intra-day respite periods for highly intrusive noise generating work) on noise sensitive receivers such as surrounding residences;
- (c) construction phase dust control and management,

- (d) construction phase erosion and sediment control and management;
- (e) operational noise impacts on noise sensitive receivers (especially surrounding residences on adjoining and adjacent holdings) arising from operational activities such as public address/school bell systems, community use of school facilities, waste collection services and mechanical services (especially air conditioning plant);
- (f) the need to assess feasible and reasonable noise mitigation and management measures (including time restrictions on the use of the facilities proposed to be available for community use) to minimise operational noise impacts on surrounding residences;
- (g) practical opportunities to implement water sensitive urban design principles, including stormwater re-use; and
- (h) practical opportunities to minimise consumption of energy generated from non-renewable sources and to implement effective energy efficiency measures.

Should you require clarification of any of the above please contact John Goodwin on 9995 6838.

Yours sincerely



SARAH THOMSON
Unit Head, Metropolitan Infrastructure
NSW Environment Protection Authority

Attachment A

Contact officer: JOHN GOODWIN

ATTACHMENT A

- ENVIRONMENT PROTECTION AUTHORITY COMMENTS – PARRAMATTA WEST PUBLIC SCHOOL REDEVELOPMENT

1. General

The EPA considers that the project comprises distinct phases of construction and operation and has set out its comments on that basis.

The EPA notes the proximity of surrounding residences which may be adversely affected by noise impacts during demolition, site preparation, construction and operation phases of the project.

2. Construction phase

The EPA anticipates that site establishment, demolition, bulk earthworks, construction and construction-related activities will be undertaken in an environmentally responsible manner with particular emphasis on –

- the site contamination remediation action plan accompanying the EIS,
- compliance with recommended standard construction hours,
- intra-day respite periods from high noise generating construction activities (including jack hammering, rock breaking, pile boring or driving, saw cutting),
- feasible and reasonable noise and vibration minimisation and mitigation,
- effective dust control and management,
- erosion and sediment control, and
- waste handling and management, particularly concrete waste and rinse water.

2.1 Site contamination (incl. asbestos containing material)

The development site is comprised of a northern and southern campus divided by Railway Street. However, the EPA notes that ‘the site’ defined in Figure 1 to EIS Appendix Q only refers to that part of the development site located on the northern side (existing sports fields) of Railway Street despite proposed development on that part of the development site located on the southern side (existing complex of buildings) of Railway Street.

Section 10 to EIS Appendix Q ‘*Detailed Site Investigation*’ concludes that “... remediation is required to address risks associated with carcinogenic PAHs at one location (TP32) and asbestos (as bonded ACM) in fill across the entire site.”.

The EPA anticipates that given the age of some of the structures on the southern campus, asbestos containing materials and lead-based paints are likely to be encountered during demolition and redevelopment on that side of the development site. However, the EIS does not appear to include a hazardous materials survey of the southern campus.

EIS Appendix Q does not –

- (i) include evidence that the surface/exposed material suspected of containing asbestos was tested to confirm the presence of asbestos,

- (ii) confirm whether suspected asbestos containing material removed from the development site was disposed on at a landfill legally able to accept that waste,
- (iii) fully delineate the extent of some contaminants,
- (iv) include an adequate groundwater assessment,
- (v) clearly indicate where the asbestos samples were collected,
- (vi) clearly indicate if the soil contamination was vertically delineated, and
- (vii) indicate that a groundwater sampling well down hydraulic gradient of the 'the site' to determine whether suspected groundwater contamination was migrating off the site.

In particular, Appendix Q did not vertically delineate the extent of contamination from the following locations -

- TP15, asbestos in soil exceeding criteria at 0.1 to 1 m depth (no deeper samples tested). It is noted the Detailed site investigation indicated deepest fill (of >1.0 m, not defined how deep) was encountered on the western section of the investigation area; and
- TP30, total recoverable hydrocarbons in the >C16-C34 (F3) range exceeding criteria at 0.3 m depth (no deeper samples tested).

Appendix Q applies a 95% upper confidence limit (UCL) to screening results against NEPM Health Investigation Level -A (HIL-A) guidelines. For instance, a 95% UCL value of 8.8 mg/kg carcinogenic PAH was calculated and applied for screening purposes. The EPA notes that –

- (a) the standard NEPM HIL-A values for carcinogenic PAHs is 3 mg/kg concentration,
- (b) of 30 samples tested, six carcinogenic PAH values were reported above detection levels and the remaining 24 were reported at concentrations of less than laboratory limits of reporting, so the calculation appears to have been made by transforming the less than LOR values to 0.

Accordingly, the EPA considers that the screening value of 8.8 mg/kg appears to be appropriate in this case.

EIS Appendix CC '*Remediation Action Plan*' proposes capping and containment of asbestos contaminated soils with a 300 millimetres cap of clean fill over the marker layer. However, the Western Australian DoH '*Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia – May 2009*' recommends the depth of the clean fill should be at least 1 m for public open spaces and at least 0.5 m for all other uses, such as residential or commercial activities.

Accordingly, the EPA considers the emplacement of only 300 millimetres of clean material over the marker layer and no cap under hardstand areas poses a potential risk to future users.

EIS Appendix CC proposes the excavation and removal of PAH contaminated soil but omits any remediation of other hotspots of contamination (e.g. Pb and TRH).

Therefore, the EPA having regard to foregoing and the sensitive nature of the proposed use, considers that the proponent should engage an accredited site auditor. The proponent should note that the EPA requires all contamination assessment and validation reports submitted to the EPA to comply with the requirements of the *Contaminated Land Management Act 1997* and to be prepared, or reviewed and approved, by a certified consultant.

Recommendations

1. The proponent be required to engage a site auditor (accredited under the *Contaminated Land Management Act 1997*) to:
 - (a) review the adequacy of contamination assessment reports, any remediation action plan and unexpected finds procedure, and
 - (b) provide a Section A Site Audit Statement (SAS) and accompanying Site Audit Report (SAR) certifying the suitability of the development site for the proposed use.
2. That the proponent be required to implement the recommendations of the Remedial Action Plan as conditioned by the accredited site auditor.
3. The proponent be required to ensure:
 - (a) further details of the proposed remediation and validation strategy are provided to the site auditor in a Works Plan and a Validation Sampling and Analysis Quality Plan (VSAQP) for review by the site auditor prior to remediation commencing;
 - (b) an Asbestos Works Management Plan (AWMP), including stringent controls on dust emissions, is prepared and submitted to the site auditor for review; and
 - (c) a long term Environmental Management Plan (LTEMP) is prepared following remediation of the development site to document -
 - (i) the expected limitations on the development site use,
 - (ii) relevant environmental and health and safety processes and procedures,
 - (iii) management processes, procedures and responsibilities to be adopted by future site users within the development site, and
 - (iv) details on the location and extent of placed or residual asbestos contaminated fill materials, capping layers and marker barriers within the development site.
4. The proponent be required, prior to commencing work (on that part of the school campus on the southern side of Railway Street), to undertake a hazardous material survey and to prepare and implement an appropriate procedure for identifying and dealing with unexpected finds of site contamination, including –
 - (i) asbestos containing materials, and
 - (ii) lead-based paint,
5. The proponent be required to satisfy the requirements of the Protection of the Environment Operations (Waste) Regulation 2014 with particular reference to Part 7 'asbestos wastes'.

Note: The EPA provides additional guidance material at its web-site

<http://www.environment.nsw.gov.au/waste/asbestos/index.htm>.

6. The proponent be required to consult with Safework NSW concerning the handling of any asbestos waste that may be encountered during the course of the project.

7. The proponent be required consider the guidance material provided in *The National Environment Protection (Assessment of Site Contamination) Measure* as well as the following EPA documents when undertaking further site assessment and validation -
 - Technical Note: Investigation of Service Station Sites, 2014,
 - NSW EPA Sampling Design Guidelines,
 - Guidelines for the NSW Site Auditor Scheme (3rd edition) 2017, and
 - Guidelines for Consultants Reporting on Contaminated Sites, 2011.
8. The proponent be required to ensure that the processes outlined in *State Environmental Planning Policy 55 - Remediation of Land (SEPP55)* are followed in assessing the suitability of the land and any remediation required in relation to the proposed use.
9. The proponent be required to ensure that the proposed development does not result in a change of risk in relation to any pre-existing contamination on the site so as to result in significant contamination.
- 10 The proponent be required to notify the EPA should any contamination of the development site be identified which meets the triggers in the *Guidelines for the Duty to Report Contamination*.

2.2 noise and vibration

The EPA anticipates that demolition, site preparation (including tree clearing), bulk earthworks, construction and construction-related activities are likely to have significant noise and vibration impacts on surrounding residences, especially adjoining residences in Franklin Street.

2.2.1 *general construction hours*

The EPA emphasises that demolition, site preparation, bulk earthworks, construction and construction-related activities should be undertaken during the recommended standard construction hours.

The EPA notes that the proponent is a 'public authority' within the meaning of the *Protection of the Environment Administration Act 1991*. Further, that the EPA has general responsibility under that Act for amongst other things:

- (a) ensuring that the best practicable measures are taken for environment protection in accordance with the environment protection legislation and other legislation, and
- (b) coordinating the activities of all public authorities in respect of those measures.

Table 1 to the EPA's Interim Construction Noise Guideline clearly identifies the best practicable measures in respect of the recommended standard hours of construction (in the absence of strong justification for alternative hours in the particular case).

Section 4.4 to EIS Appendix U proposes Saturday construction hours from 8.00 am to **5.00 pm** instead of the standard recommended hours of 8.00 am to **1.00 pm**. The proponent does not provide strong justification for construction outside the standard hours on Saturdays.

Recommendation

The proponent be required to ensure that as far as practicable all demolition, site preparation, bulk earthworks, construction and construction-related activities likely to be audible at any noise sensitive receivers such as surrounding residences are only undertaken during the standard construction hours, being -

- (a) 7.00 am to 6.00 pm Monday to Friday,
- (b) 8.00 am to 1.00 pm Saturday, and
- (c) no work on Sundays or gazetted public holidays.

2.2.2 *intra-day respite periods*

The EPA anticipates that those demolition, site preparation, bulk earthworks, construction and construction-related activities generating noise with particularly annoying or intrusive characteristics (such as those identified as particularly annoying in section 4.5 of the Interim Construction Noise Guideline) would be subject to a regime of intra-day respite periods where –

- (a) they are only undertaken after 8.00 am,
- (b) they are only undertaken over continuous periods not exceeding 3 hours with at least a 1 hour respite every three hours, and
- (c) ‘continuous’ means any period during which there is less than an uninterrupted 60 minute respite between temporarily halting and recommencing any of the intrusive and annoying work referred to in Interim Construction Noise Guideline section 4.5.

The EPA emphasises that intra-day respite periods are not proposed to apply to those demolition, site preparation, bulk earthworks, construction and construction-related activities that do not generate noise with particularly annoying or intrusive characteristics.

Recommendation

The proponent be required to schedule intra-day ‘respite periods’ for construction activities identified in section 4.5 of the Interim Construction Noise Guideline as being particularly annoying to noise sensitive receivers, including surrounding residents.

2.2.3 *idling and queuing construction vehicles*

The EPA is aware from previous major infrastructure projects that community concerns are likely to arise from noise impacts associated with the early arrival and idling of construction vehicles (including concrete agitator trucks) at the development site and in the residential precincts surrounding that site.

Recommendation

The proponent be required to ensure construction vehicles (including concrete agitator trucks) involved in demolition, site preparation, bulk earthworks, construction and construction-related activities do not arrive at the project site or in surrounding residential precincts outside approved construction hours.

2.2.4 *reversing and movement alarms*

The EPA has identified the noise from ‘beeper’ type plant movement alarms to be particularly intrusive and is aware of feasible and reasonable alternatives. Transport for NSW, Barangaroo Delivery Authority/Lend Lease and Leighton Contractors have undertaken safety risk assessments of alternatives to the traditional ‘beeper’ alarms. Each determined that adoption of ‘quacker’ type movement/reversing alarms instead of traditional beepers on all plant and vehicles would not only maintain a safe workplace but also deliver improved outcomes of reduced noise impacts on surrounding residents. Interim Construction Noise Guideline Appendix C provides additional background material on this issue.

Recommendation

The proponent be required to consider undertaking a safety risk assessment of site preparation, bulk earth works, construction and construction-related activities to determine whether it is practicable to use audible movement alarms of a type that would minimise the noise impact on surrounding noise sensitive receivers, without compromising safety.

2.3 Dust control and management

The EPA considers dust control and management to be an important air quality issue during demolition, site preparation, bulk earthworks and subsequent construction.

Recommendation

The proponent be required to minimise dust emissions on the site and prevent dust emissions from the site.

2.4 Sediment control

Managing Urban Stormwater Soils and Construction, 4th Edition published by Landcom (the so-called 'Blue Book') provides guidance material for achieving effective sediment control on construction sites. The proponent should implement all such feasible and reasonable measures as may be necessary to prevent water pollution in the course of developing the site.

The EPA emphasises the importance of –

- (a) not commencing demolition, site preparation, bulk earthworks, construction and construction-related activities until appropriate and effective sediment controls are in place, and
- (b) daily inspection of sediment controls which is fundamental to ensuring timely maintenance and repair of those controls.

2.5 Waste control and management (general)

The proponent should manage waste in accordance with the waste management hierarchy. The waste hierarchy, established under the [Waste Avoidance and Resource Recovery Act 2001](#), is one that ensures that resource management options are considered against the following priorities:

Avoidance including action to reduce the amount of waste generated by households, industry and all levels of government

Resource recovery including reuse, recycling, reprocessing and energy recovery, consistent with the most efficient use of the recovered resources

Disposal including management of all disposal options in the most environmentally responsible manner.

All wastes generated during the project must be properly assessed, classified and managed in accordance with the EPA's guidelines to ensure proper treatment, transport and disposal at a landfill legally able to accept those wastes.

The EPA further anticipates that, without proper site controls and management, mud and waste may be tracked off the site during the course of the project.

Recommendation

The proponent be required to ensure that:

- (1) all waste generated during the project is assessed, classified and managed in accordance with the EPA "*Waste Classification Guidelines Part 1: Classifying Waste*", November 2014 and the 2016 Addendum thereto;
- (2) the body of any vehicle or trailer, used to transport waste or excavation spoil from the premises, is covered before leaving the premises to prevent any spill or escape of any dust, waste, or spoil from the vehicle or trailer; and
- (3) mud, splatter, dust and other material likely to fall from or be cast off the wheels, underside or body of any vehicle, trailer or motorised plant leaving the site, is removed before the vehicle, trailer or motorised plant leaves the premises.

2.6 Waste control and management (concrete and concrete rinse water)

The EPA anticipates that during the course of the project concrete deliveries and pumping are likely to generate significant volumes of concrete waste and rinse water. The proponent should ensure that concrete waste and rinse water is not disposed of on the project site and instead that –

- (a) waste concrete is either returned in the agitator trucks to the supplier or directed to a dedicated watertight skip protected from the entry of precipitation, and
- (b) concrete rinse water is directed to a dedicated watertight skip protected from the entry of precipitation or a suitable water treatment plant.

Recommendation

The proponent be required to ensure that concrete waste and rinse water are not disposed of on the development site, and prevented from entering waters, including any natural or artificial watercourse.

3. Operational phase

The EPA considers that environmental impacts that arise once the development is operational should be able to be largely averted by responsible environmental management practices, particularly with regard to:

- (a) feasible and reasonable noise mitigation measures;
- (b) waste management in accordance with the waste management hierarchy;
- (c) water sensitive urban design; and
- (d) energy conservation and efficiency.

3.1 Noise and vibration impacts

The EPA anticipates the proposed development (especially out of hours use of school facilities by external parties) may have significant operational noise impacts on nearby sensitive receivers, especially adjoining residences in Franklin Street.

The EPA notes with concern the proximity of the surrounding residences and is aware from long experience of the need for appropriate operational noise mitigation and management measures, particularly in regard to:

- (a) the nature of and times during which school facilities are made available for community use;
- (b) the design and operation of the school public address/bell system;

- (c) the design and location of waste storage facilities;
- (d) time restrictions on waste collection services;
- (e) design, selection and operation of mechanical ventilation plant and equipment; and
- (f) time restrictions on grounds maintenance using powered equipment (e.g. leaf blowers, brush cutters and lawn mowers).

background noise measurement

The EPA emphasises that properly establishing background noise levels in accordance with guidance material in the New South Wales Industrial Noise Policy (INP) is fundamental to a consistent approach to the quantitative assessment of noise impacts of development.

EIS Section 3.3.1 to EIS Appendix U indicates that loggers used to undertake background noise monitoring at locations L1 and L2 were installed between 5 and 13 December 2017.

The NSW INP specifies that at least a 'week's worth' of monitoring data is required to establish background noise levels and that noise levels measured during rainfall should be excluded when deriving those background levels. The Bureau of Meteorology Horsley Park and Sydney Olympic Park weather stations both recorded rainfall on 5, 7 and 9 December 2017 and EIS Section 3.3.1 to EIS Appendix U states that "... rain affected data has been excluded from calculations."

The INP guidance material also specifies that –

- (a) background noise should be measured at the most-affected or potentially most-affected noise sensitive receiver locations (i.e. residences in Franklin Street), and
- (b) noise from an existing development should be excluded from background noise measurements.

However, Figure 1 to EIS Appendix U –

- indicates that unattended background noise monitoring locations L2 and L3 were located on the southern campus (existing complex of school buildings),
- indicates that unattended background noise monitoring location L1 is located on the vacant northern campus, and
- omits the location of attended noise monitoring location P1.

Table 1 to EIS Appendix U appears to indicate that noise monitoring at location L3 was affected by a noise source on the southern campus.

Recommendations

1. The proponent be required to revise project assessment background levels, rating background levels and project specific noise levels based on the unattended background noise data obtained at monitoring locations L1.
2. The proponent be required to provide day to a page graphical representation of background noise monitoring data as well as the extent of weather affected data excluded from calculation of background and project specific noise levels.

3. The proponent be required to review the location of the proposed buildings on the northern campus to a position further west of the adjoining Franklin Street residences.

out of hours' community use of school facilities

The EPA is aware of government policy to encourage out of hours community use of school facilities provided that use does not cause noise emissions that interfere unreasonably with the comfort or repose of persons not on the premises.

The EPA considers that, in relation to the school hall, noise from normal school activities in class hours would not be acoustically significant. However, the use of the hall for other events, particularly outside school hours, has the potential to adversely impact on residences. The EPA considers the proposed community use of school facilities (especially the hall and sports field) outside normal school hours needs to be carefully managed to ensure noise impacts on nearby residences are minimised.

Section 5.2.2 to EIS Appendix U outlines the predicted noise impacts of a concert type activity held in the school hall under certain assumed conditions and recommends that the hall not be made available for concert type activities after 6.00 pm. EIS section 10.3.5 proposes that the school hall not be used after 10.00pm and adopts the recommended 6.00pm curfew on concerts.

The EPA is aware of community concern arising from the use of facilities at a number of schools for activities involving amplified music and band rehearsals.

Recommendations

1. The proponent be required to ensure that the school hall is not made available:
 - (a) for community use after 10.00pm; and
 - (b) for activities involving amplified music or band rehearsals (other than the annual school concert)–
 - (i) after 6.00 pm Monday to Friday, and
 - (ii) on Saturdays, Sundays and gazetted public holidays.
2. The proponent be required to –
 - (a) undertake comprehensive noise compliance monitoring of representative uses of the school hall and sports field and associated facilities (e.g. parking) outside school hours to demonstrate that the level, nature, quality and character of noise emitted by those uses and the time at which and frequency of those uses would not interfere unreasonably with or be likely to interfere unreasonably with the comfort or repose of persons not on the development site, especially the occupants of nearby residences.
 - (b) submit a detailed noise compliance monitoring report with noise measurements reported against relevant noise criteria and the outcomes of appropriate community consultation together with detailed recommendations concerning any additional feasible and reasonable noise mitigation and management measures, including stricter or more relaxed restrictions on the times at which and the frequency of each type of use of the school hall, sports field and associated facilities (e.g. parking) outside school hours.
 - (c) ensure that noise compliance monitoring referred to in paragraph (a) above, would include quantitative noise impact assessment to address noise emissions arising from amongst other things –
 - audience/spectator noise,

- referee whistle noise,
- training sessions as well as sporting events,
- any amplified sound during sporting events and any associated training sessions, and
- post-event audience/spectator noise, including vehicle door slamming and departure noise.

mechanical plant and equipment

Section 5.5 to EIS Appendix U indicates a worst case scenario of mechanical ventilation plant and goes on in section 5.5.1 to recommend that the proponent consider various mitigation measures "... during the design development stage ...".

Recommendation

The proponent be required to:

- (a) provide a comprehensive quantitative assessment of operational noise impacts of any mechanical plant and equipment on surrounding noise sensitive receivers, especially residences in Franklin Street; and
- (b) ensure mechanical plant and equipment installed on the development site does not generate noise that –
 - (i) exceeds 5 dbA above the rating background noise level (day, evening and night) measured at the eastern boundary of the development site, and
 - (ii) exhibits tonal or other annoying characteristics.

Public address and school bell system

The EPA notes numerous reports of community concern arising from inadequate design and installation as well as inappropriate use of school public address and bell systems and considers that appropriate design, installation and operation of those systems can both –

- meet the proponent's objectives of proper administration of the school and ensuring the safety of students, staff and visitors, and
- avoid interfering unreasonably with the comfort and repose of occupants of nearby residences.

Recommendation

The proponent be required to design, install and operate the school public address/bell system to implement all such other measures as may be necessary to ensure use of that system does not interfere unreasonably with the comfort and repose of occupants of nearby residences.

waste collection services

The EPA notes numerous reports of community concern arising from waste collection services undertaken at schools and especially during evening and night times.

Section 5.2.4 to EIS Appendix U proposes that waste collection services be restricted to the hours of 7.00 am to 10.00 pm.

The EPA has previously directed the Department of Education to, in general, restrict undertaking waste collection services at its schools to between the hours of 7.30 am to 6.00 pm Monday to Friday.

Recommendation

The proponent be required to ensure waste collection services are not undertaken outside the hours of 7.30 am to 6.00 pm Monday to Friday.

grounds maintenance using powered equipment

The EPA notes numerous reports of community concern arising from grounds maintenance involving the use of powered equipment (example: leaf blowers, lawn mowers, brush cutters) at schools during early morning and evening periods as well as on weekends and public holidays.

However, section 5.2.4 to EIS Appendix U proposes that grounds maintenance only occur during standard school hours (i.e. 7.00 am to 6.00 pm).

The EPA has previously directed the Department of Education to restrict undertaking grounds maintenance using powered equipment to between the hours of 7.30 am to 6.00 pm Monday to Friday.

Recommendation

The proponent be required to ensure grounds maintenance involving the use of powered equipment is not undertaken outside the hours of 7.30 am to 6.00 pm Monday to Friday.

3.2 Waste management

The proponent should manage waste in accordance with the waste management hierarchy mentioned earlier.

Recommendation

The proponent be required to identify and implement feasible and reasonable opportunities for the re-use and recycling of waste, including food waste.

3.3 Water sensitive urban design and energy conservation and efficiency

The EPA acknowledges that EIS Appendix N comprises an environmentally sustainable development report that proposes –

- (a) (in section 3.2) a range of water sensitive urban design measures “... which could be applied ...”, including –
 - (i) rainwater harvesting and re-use, and
 - (ii) water efficient fixtures; and
- (b) (in section 3.1.1) a range of measures to maximise energy efficiency and minimise energy consumption “... to be considered ...”, including –
 - (i) natural ventilation and lighting of all teaching and learning spaces, and
 - (ii) installation of solar photovoltaic arrays.

EIS section 10.5 appears to reiterate the mitigation and management measures contemplated by section 3.1.1 and 3.2 to EIS Appendix N, whilst the architectural drawings indicate the installation of rooftop solar photovoltaic array. However, the EIS does not appear to clearly state that the proponent would adopt the passive and active environmentally sustainable development measures outlined in EIS Appendix N.

Recommendation

The proponent be required to commit to implementing the passive and active environmentally sustainable development measures outlined in EIS Appendix N.
