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Mr David Gibson Team Leader Social Infrastructure Assessments Department of Planning and Environment 320 Pitt Street Sydney NSW 2000

Dear Mr Gibson

Proposed Lindfield Learning Village, UTS site 100 Eton Road, Lindfield

Council is generally in support of the proposed adaptive re-use of the former college as an educational establishment. It will provide for the on-going care of the building through a viable re-use. The retention of much of the original building externally will allow the building to continue to be a physical reminder of its history and the history of educational infrastructure.

However, the proposed external alternations and additions, and the extensive internal changes will have some adverse impacts on the ability of the building to demonstrate its internal spatial planning, an important component of the original design.

The proposal takes the approach of "re-branding" the former college through the use of new building external components comprised of sets of brightly coloured triangular shapes joined together to create new spaces and surface treatments. The landscaping similarly makes use of coloured triangular shapes to create bold new paving patterns.

Council's concerns relate to the following key issues:

- 1. Bushfire
- 2. Biodiversity
- 3. Landscape and environmental sustainable design
- 4. Transport and accessibility
- 5. Heritage, built form and environmental amenity

1. Bushfire (SEAR #17)

A peer review of the Bushfire Assessment Report commissioned by Council (BAR) concluded that the development does not comply with the relevant specifications of Planning for Bush Fire Protection 2006 and cannot satisfy the requirements to receive a Bushfire Safety Authority (BSA) as it is currently presented.

1.1 The development is not considered Infill SFPP - the Bushfire Assessment Report relies on the development being assessed under the provisions for Special Fire Protection Purpose as Infill under section 4.2.5 of PBP although the original development (UTS Campus) is not Special Fire Protection Purpose as defined under the Rural Fires Act 1997 or Rural Fires Regulation 2013.

The UTS Campus never contained student or staff accommodation and would therefore not have been captured as Special Fire Protection Purpose development under the Rural Fires Act 1997 or Rural Fires Regulation 2013. However, schools and child care centres are listed as Special Fire Protection Purpose development under the Rural Fires Act 1997.

PBP specifies that universities should be considered on their merits under sections 79BA and 79C of the EP&A Act, with consideration of the specific objectives listed in 4.2.3 of PBP and does not trigger the full application of SFPP development (4.2.7 of PBP). This subsequently can facilitate various concessions that could not be applied to a SFPP development.

If the proposal was assessed under section 4.2.7 Standards for Bush Fire Protection Measures for Special Fire Protection Purpose of PBP the development could not satisfy the relevant specification and requirements.

1.2 Increase in occupant vulnerability is not adequately addressed. Due to the change in use to more vulnerable occupants the application should be assessed against the full requirements of Special Fire Protection Purpose development under section 4.2.7 Standards for Bush Fire Protection Measures for Special Fire Protection Purpose of PBP. The Bushfire Assessment Report identifies an increase in risk and vulnerability as part of this development and rather than demonstrating compliance with SFPP development seeks to address this 'primarily by a comprehensive Bushfire Emergency Evacuation Plan'.

The current use of the site supported 3000 university students. University students are expected to be competent to follow emergency management procedures with minimal assistance / guidance from staff or emergency service personnel.

The proposed school will accommodate approximately 2,100 students from Kindergarten to Year 12 and a 94-space child care centre (12 staff) accommodating 0-5 year olds. Most of these occupants are minors and all but perhaps Year 11 and 12 students would require intensive assistance from staff and / or emergency service personnel in the event of a bushfire.

It is considered that the proposed increase in risk and vulnerability requires more extensive consideration and that if this is to be primarily addressed by a comprehensive Bushfire Emergency Evacuation Plan then this Plan should also form part of the submission package.

It is noted that the Bushfire Assessment Report makes reference to PBP addressing change of use in section 4.3.6. The opening paragraph in this section states 'Applications for developments that are not residential/rural residential subdivisions, SFPPs or residential infill should....' As this application relates to a SFPP development this section of PBP is not relevant.

1.3 Buildings are located within the Flame Zone and therefore the development does not comply with the aim and objectives of PBP (it is noted that an incorrect flame temperature was used in the bushfire design modelling).

Table A3.4.2 of PBP describes Flame Zone as:

Significant radiant heat and significant higher likelihood of flame contact from the fire front will threaten building integrity and result in significant risk to residents.

The proposal does not satisfy the aim and objectives of PBP as it does not "provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition".

1.4 Asset Protection Zones are located on slopes greater than 18 degrees. As identified in the Bushfire Assessment Report there are various areas within the Asset Protection Zones which are located on slopes greater than 18 degrees.

Location of APZs on slopes greater than 18 degrees is not supported for new developments, due to environmental constraints and difficulties in managing vegetation (A2.3 of PBP). Due to the steep slopes within both the APZs and adjacent hazards the canopy within the APZs could carry a fire regardless of the understorey management, compromising its integrity.

There is opportunity to satisfy the Performance Criteria to address the APZs being located on slopes >18 degrees however this has not been included within the Bushfire Assessment Report.

1.5 The development relies on Asset Protection Zones outside the site's boundaries which are currently not maintained to the standard of an Asset Protection Zone and would require significant tree removal to do so.

The proposal seeks to utilise Asset Protection Zones that were required as part of the 'Edgelea Estate' development. These areas are included in a Bushfire Management Plan but at the time of a recent site inspection (19 July 2017) significant vegetation removal / modification would be required to achieve the requirement of an Asset Protection Zone (Inner Protection Area).



Image 02: External APZs which require works

The applicant does not have control of this adjoining land and does not have the ability to undertake the necessary clearing works. It is also noted that this Bushfire Management Plan is now overdue for a complete evaluation, review and update as it has been more than 5 years since it was prepared.

1.6 Significant vegetation removal / management is required to create the Asset Protection Zones onsite which has not been reflected in the EIS or accompanying Biodiversity Assessment Report;

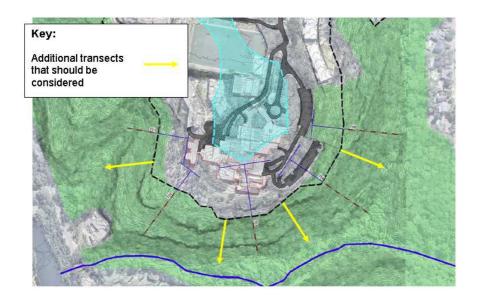


Image 03: APZs within the site which require works

- 1.7 The bushfire design modelling included in the Bushfire Assessment Report has relied on a flame temperature of 1090K where SFPP development must use a flame temperature of 1200K in bushfire design modelling (Addendum Appendix 3 PBP 2010). The increase of the flame temperature from 1090K to 1200K would result in higher radiant heat levels, and subsequently Bushfire Attack Levels, to the subject buildings than the reported in the Bushfire Assessment Report.
- 1.8 Additional transects should be included within the bushfire design modelling as steeper gradients than the transects reported were recorded on the site.

It was identified onsite and also validated in reviewing topographic mapping of the subject area (0.5m contours) that there are additional transects which are located on steeper gradients that should be considered.

The gradient is a fundamental input in the bushfire design modelling and an increase in downslope gradients results in larger flame length, higher radiant heat flux, faster rate of spread and higher fire intensity.



1.9 Access to the site exceeds 100 metres from a public through road. The subject site is serviced by Eton Road to the north. Eton Road also forms part of the sole access to the surrounding 'Edgelea Estate' (which includes numerous residential apartment buildings and lower density residential dwellings) and Charles Bean Sports Field.

Part of Eton Road could also be subject to direct impact from bushfires given the current state of the vegetation adjacent the roadway.

As the subject buildings are located greater than 100 metres from a public through road, the development does not satisfy the Internal Road requirements detailed in section 4.2.7 of PBP.

Traffic impact assessment considering use of Eton Road by surrounding dwellings, sports oval and the proposed school has not been sufficiently addressed. Specifically, Clause 44 of the Rural Fires Regulation 2013 requires the following items to be addressed:

- the capacity of public roads in the vicinity to handle increased volumes of traffic in the event of a bush fire emergency
- whether or not public roads in the vicinity that link with the fire trail network have two-way access
- the adequacy of arrangements for access to and egress from the development site for the purposes of an emergency response
- 1.10 The Bushfire Assessment Report primarily relies on a comprehensive Bushfire Emergency Evacuation Plan to justify the reduction in the minimum required Asset Protection Zones for SFPP development. Given the significance this Plan has, it should also form part of the submission package rather than being a recommendation.
- 1.11 The car parking is located within the Asset Protection Zone and on the hazard side of the development which does not comply for schools within PBP (s4.2.4).
- 1.12 There are additional pedestrian entry / exit points from the buildings not identified in the Bushfire Assessment Report, which are in the Flame Zone.

The Performance Criteria for Asset Protection Zones in Special Fire Protection Purpose developments is that radiant heat levels of greater than 10kW/m² will not be experienced by occupants or emergency services workers entering or exiting a building.

While the Bushfire Assessment Report has focused on the primary entry / exit point, all other entry / exit point must also be considered as attending fire services and occupants may use any entry point at their disposal.

Numerous entry / exit points (some of which were not identified in the Bushfire Assessment Report) are within the Flame Zone and indeed not even the primary entry / exit point satisfies this requirement given the state of the vegetation within the adjacent 'Edgelea Estate'.

Regardless, if the adjacent APZs were adequately managed numerous entry / exit points would still exceed this threshold.

1.13 The proposed construction measures are not considered adequate. The Bushfire Assessment Report indicates that the buildings will exceed the minimum standard for BAL 29 under AS3959 – 2009.

The existing campus was constructed in the early 1970s and subsequently predates any bushfire regulations. While it is acknowledged that the masonry walls and concrete roofs would exceed the provisions for BAL 29, the recommended grade A safety glass does not.

However, there are buildings located in a higher Bushfire Attack Level than BAL 29 (including Flame Zone). The fact that the minimum required Asset Protection Zones have not been achieved puts a higher reliance on the subject buildings being able to withstand the passage of a bushfire and provide a suitable onsite refuge location for students.

If it was accepted by the NSW Rural Fire Service that the minimum required APZs could be reduced to that available to this development, then the proposal should include full retrospective compliance to the relevant Bushfire Attack Level under *Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2009* to all buildings.

- 1.14 New construction, including the shade structures, should also comply with the relevant Bushfire Attack Level. It should be noted that from BAL 12.5 and above (i.e. anything within 100m from a bushfire hazard) *Australian Standard 3959 'Construction of buildings in bushfire-prone areas'2009* requires roof coverings to be non-combustible and subsequently fabric shade structures cannot comply.
- 1.15 Softfall play surfaces and synthetic turf are also not covered in AS3959 2009 and as these materials generally comprise plastics / rubbers and they can give off various toxic by-products during the combustion process which are not conducive to a safe environmental for attending fire services and occupants. Careful consideration should be given to the suitability of these products, which should be approved by the NSW Rural Fire Service as an alternate solution.
- 1.16 The development has not sought to improve perimeter access around the buildings which is the preferred design option under PBP.

The application relies on easements for Asset Protection Zones on adjacent properties. It should be investigated whether these agreements could be potentially broadened to also accommodate improved access provisions around the perimeter of the site and buildings to the south and west. Poor access to the APZs on the adjacent properties is most likely a contributing factor to their current unacceptable state.

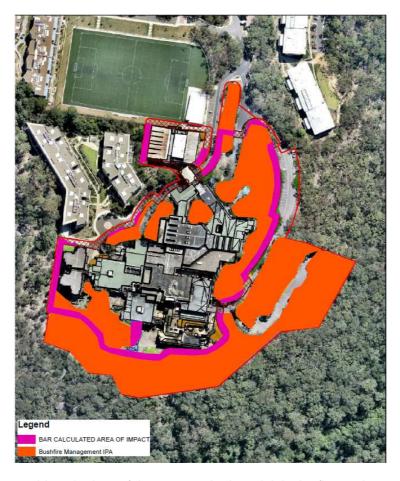
2. Biodiversity (SEAR #8)

The proposal does not adequately assess the biodiversity impacts associated with the development. In particular, the submitted documents generally fail to consider the direct and indirect impacts on the surrounding ecology which would result from the bushfire hazard reduction activity required for the proposal.

The Biodiversity Assessment Report (BAR) submitted for the proposal, incorrectly states on page 1:

Direct impacts to the ecological values of the development site are limited, as a majority of the development is associated with the internal refurbishment of the premises onsite. However, direct impact will occur to the vegetation surrounding the development site with the installation of a new boundary fence and associated 3 metre buffer for vehicle movement (6 metres total). An additional small impact is caused through the construction of a Covered Outdoor Learning Area (COLA) at the southern end of the subject site. The total impact is 0.22 ha, and the impacts have been assessed using the FBA (OEH 2014)

The BAR fails to recognise and assess the additional impacts to vegetation associated with bush fire mitigation.



The BAR only considers the loss of the area marked as pink in the figure above and fails to consider the ecological impacts associated with the bushfire management of the site as an inner protection area (IPA). The extent of the IPA is shown in orange and is significantly greater than the pink area calculated in the BAR.

The figure below extracted from the Rural Fire Service Document Planning for Bushfire Protection (2006) gives a graphic representation of how an IPA should be managed:

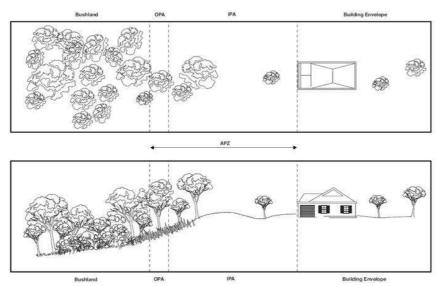


Figure 3.1 shows the APZ, IPA and OPA graphically.

The bushfire report recommends that the site be managed as an inner protection area (IPA), it is clearly evident that the current management of the site does not meet the specifications

of an IPA and that further vegetation/tree removal is required to meet the requirements/recommedation of the bushfire report. Accordingly, the BAR should be amended to assess the loss/modification of the orange area in the figure above to that of an IPA

The current proposal seeks to offset the loss of the pink area through the purchase and retirement of ecosystems credits. However, as the BAR fails to consider the loss of additional areas of biodiversity the BAR offsets are not correct and additional ecosystems credits in the order of 6-7 times will be required to offset the proposal's impacts.

A further BAR report should be prepared that considers both the direct and indirect impacts of the development. Specifically, impacts on vegetation and biodiversity associated with the management of the surrounding vegetation in line with the requirements under cl. 4.2.7 of the Planning for Bushfire Protection (2006), which relates to Bush Fire Protection Measures for Special Fire Protection Purpose.

A vegetation management plan (VMP) should be prepared to outline the management of biodiversity whilst achieving bushfire protection.

3. Landscape and ecologically sustainable development (EIS & SEAR #6)

The proposal lacks sufficient detail and requires additional information to undertake a landscape assessment:

- 3.1 An arborist report should be submitted in accordance with the SEARs detailing trees to be retained/removed. The arborist report should also include a tree protection plan in accordance with AS4970-2009 Protection of trees on development sites.
- 3.2 A detailed Landscape plan should be submitted in accordance with the SEARs identifying any trees to be removed and trees to be retained or transplanted.

The landscape proposal for the building surrounds is only conceptual at this stage (p22 EIS, Urbis, 8 June 2017). The detailed landscape plans will need to demonstrate adherence to the proposed landscape philosophy of minimalist intervention described as having been developed in consultation with Bruce McKenzie, the landscape architect responsible for the design of the UTS landscape including the roof terraces. Retention of significant vegetation and environmentally sensitive sites, including rock outcrops that surround the building, are to be retained. Similarly, a more detailed view assessment of the location of rooftop planters and associated planting should be submitted prior to their removal and replacement with hard surfaces and coloured awnings for play areas.

Section 2.3 of the EIS incorrectly states that 'the proposed development does not involve the removal of any existing trees from within the site' (p15 EIS, Urbis, 8 June 2017). Our assessment concludes that substantial tree removal will be required for the following:

- The additional fire stairs
- The covered outdoor learning area (COLA)
- The fence line buffer (6m width) (Figure 1.3, Biodiversity Assessment Report, Ecoplanning, 7 June 2017
- The vegetation clearance required to satisfy Inner Protection Zone standards
- Tree removal for construction access and material storage in accordance with the Indicative Construction Traffic Management Plan, DA101 Rev B.
- Drainage and utilities
- 3.3 Heritage Impact Assessment of the proposed landscape design for the building surrounds has not been provided (p55 HIS, Urbis, 7 June 2017). The retention of the natural bushland setting is fundamental to the historical significance of the item (p32, HIS, Urbis, 7 June 2017). The assessment of the proposed site fencing as having 'no physical impact on mature indigenous vegetation surrounding the building which is of identified

significance' has not considered the requirement for 3 metres width of vegetation to be cleared on either side of the proposed fence. The HIS has not considered the tree removal required to Inner Protection Zone standards. The HIS states that the landscape design should be subject to further heritage consultant input to ensure retention of significant landscape elements and overall bushland character is retained.

- 3.4 The Bushfire Assessment Report should include certification of the proposed landscape design,including trees to be retained/removed and trees to be planted. Roof garden plantings are to be included in the certification.
- 3.5 The Preliminary Construction Management plan should be amended to identify trees to be retained/removed for construction access and material storage (Indicative Construction Traffic Management Plan, DA101 Rev B).
- 3.6 There is no Integrated Water Management Plan as required by the SEARS. The controls for the existing development would have been quite different from today's controls and would not have included any retention and re-use of roofwater or water quality measures. The SEARS appear to require retrofit of these measures, such as new rainwater tanks, and internal plumbing for example. These measures are not proposed according to the documentation.
- 3.7 There is no stormwater concept plan as required by SEARS #6 (Ecologically Sustainable Development (ESD), however the report on drainage infrastructure by Birzulis Associates states that one is not required, because no new water management measures are required. This is not in the spirit of the SEARs which require that a description of the measures that would be implemented to minimise consumption of resources, water (including water sensitive urban design) and energy.

4. Transport and accessibility (SEAR #5)

4.1 Proposed development

- 4.1.1 Catchment In terms of the school catchment area, the assessment notes that the school would have a wider catchment but it is unclear whether this means wider than the 2km buffer shown in Figure 15 or some other parameter. This needs to be clarified.
- 4.1.2 Drop-off and pick-up access the proposed drop-off and pick-up areas are supported, but the times where it is proposed to implement "No Parking" and "5 Minute Parking" restrictions (to allow efficient turnover) do not align with the proposed staggered opening/closing times, and, as a result, the full capacity of the drop-off and pick-up areas may not be available prior to 8.30am. Also, given the location of the proposed drop-off and pick-up areas with respect to the school buildings, and the site topography, there is no identification of accessible paths of travel.
- 4.1.3 Eton Road Bus Bay the proposed widening of the footpath in the Eton Road bus bay is supported, to cater for the expected numbers of students, although it should be clarified whether the proposed footpath width is adequate if the mode split to buses increases towards the levels currently experienced at Killara High School. There should also be a requirement to extend and widen the existing bus shelter/canopy to provide weather protection, and to provide adequate lighting in and around the shelters (for after-hours/evening events, so that dedicated shuttle bus services can be implemented if necessary).

There is no identified path between the Eton Road bus bay and the main school building, which is expected to be the principal connection for students walking between the bus stop and the main school building. This path should be wide enough

to cater for expected student movements and be adequately lit (for after-hours/evening events).

4.1.4 Spill over parking - Given the history of the site and the on-going parking issues experienced by the nearby residents, there is an opportunity to address and contain the impacts to the site. Relying on surrounding on-street areas to accommodate spill over parking is not supported and parking generated by the proposal should be contained within the site as far as possible.

There may be merit in introducing parking restrictions to improve access to the site by school bus services and the existing (or augmented) Transdev 565 service and would likely receive support from affected residents especially if it results in reducing overall vehicle movements to and from the site. The proposal to restrict parking on both sides of certain sections of Eton Road may be excessive though and may limit opportunities for affected residents and their visitors. It is suggested that one side of Eton Road could be restricted only to School Zone times, to allow greater flexibility of the space in off-peak times.

The proposal to introduce new on-street parking restrictions will be subject to Ku-ringgai Traffic Committee/Council approval. This includes consultation with directly affected residents which would be undertaken by NSW DEC. If approved, installation should be at NSW DEC's cost.

A reduction in parking provision for Year 12 students is therefore only supported if substantial improvements to public transport and active travel access to the site is implemented.

In Table 5 (proposed allocation of parking spaces), the total of the KDCP minimums for the school use (296 spaces) appears to be incorrect – the total should be 213, which close aligns to the proposed provision.

4.1.5 Cycle routes and bicycle parking- The cycle routes shown in section 3.5.4 are fairly limited in terms of applicability to the site. There is a missing link from the site to the existing cycling facilities in Lane Cove National Park and most of the cycling network in the Ku-ring-gai LGA is largely absent. The north-south parallel route to Pacific Highway is probably too far from the site and not of a standard (on road/missed traffic) to allow primary school age children to cycle safely to school.

In principle, the use of the existing bicycle parking facilities is supported, although further investigations should be undertaken to determine if they comply with the relevant Australian Standards in terms of location, type and class of facility and should be of a configuration such that bicycle parking facilities can be expanded if the demand for it increases.

4.1.6 Public transport — The assessment cites the Sydney Metro Northwest/Epping-Chatswood Rail Link as having the potential to provide additional public transport access to the site. We believe the contribution of this rail line to public transport access to the site would be modest at best due to the fact that the rail line skirts around the site at some distance and that passengers would have to alight at Chatswood or Lindfield and connect to the site by bus, which would be a circuitous route to access the site. Unfortunately, the planned station within the site as part of the original Epping-Chatswood Rail Link did not eventuate and would have provided the best opportunities for public transport access to the site.

The frequency of the existing 565 service operated by Transdev is not attractive enough to encourage commuters to use it to access Lindfield/Roseville railway stations or employment areas in Macquarie Park/Chatswood. It is agreed that improvement to bus frequencies is required to make attractive connections to the nearby railway stations.

Pedestrian infrastructure between the site and Lindfield railway station is either non-existent or non-compliant at various points along the site and should be addressed before the Learning Village opens. The Assessment suggests that a Pedestrian Access and Mobility Plan (PAMP) should be prepared to assess pedestrian access and safety improvements, although it is our view that this should be prepared by the applicant and improvements be undertaken by the applicant.

4.2 Possible transport strategies

In principle, improvements to existing route services as well as introducing new school bus routes are supported. Ideally for the high school component, the new school should be targeting a similar mode split to buses as Killara High School, where only 5% of students are picked up by car with the vast majority leaving by bus. Nonetheless, proposed new bus routes would have to undergo a consultation process with affected residents before being further considered or implemented. Where there are overlaps with existing route services or school services, these should be incorporated into the routes to minimise additional amenity impact, roadside infrastructure requirements and road pavement wear.

There is also potential to lever/collaborate with CSIRO Lindfield (potential consolidation of northern Sydney CSIRO sites) on improvements to bus services and access to public transport, as this proposal and CSIRO Lindfield would be relying on any improvements to the existing Transdev 565 service. However, comments from Transport for NSW in the Assessment suggesting that increase in bus frequencies would be subject to TfNSW's Growth Service Initiative does not give the confidence that improvements will actually be made, and it is unclear whether this uncertainty extends to the provision of dedicated school services.

Cycling is not mentioned in the possible transport strategies. This is a lost opportunity to show leadership in active travel strategies and infrastructure provision and to provide a model for other schools to follow. If a local network of safe, separated cycling facilities is provided, it is more likely to encourage high school students and some of the older primary school students to cycle to school. Not only would this reduce vehicle movements and parking requirements for the site but would also provide incidental physical activity for the students. Within the 2km buffer of the site, 3-4 main separated cycle routes radiating from the site should be provided. As a guide and where appropriate, routes identified in the Ku-ring-gai Bicycle Plan could be incorporated into the routes leading to the site.

To formally consolidate and commit the school to the various transport and access strategies, part of the approval should involve the requirement to prepare a Green Travel Plan and submit it to Ku-ring-gai Council for concurrence. Such a plan would include the following considerations and commitments:

- Objectives (what the plan is trying to achieve)
- Outcomes (the initiatives that will be implemented)
- Performance Measurement (identify indicators to evaluate the success of the plan)
- Benchmarking/Targets (measurable and achievable, with a focus towards active transport)
- Monitoring and Review (set intervals for monitoring and review, for continuous improvement, with regular updates/feedback to DEC and Council)

4.3 Future mode split

Ideally for the high school component, the new school should be targeting a similar mode split to buses as Killara High School, where only 5% of students are picked up by car with the vast majority leaving by bus. The preferred target of 70% for the high school component seems low in light of this. Higher mode split to buses would reduce road network traffic impacts and improve amenity for residents on feeder roads to the site.

Cycling is absent in the mode split targets and should be included and complemented with the provision of a local network of safe, separated cycling facilities and quality end-of-trip facilities.

4.4 Impact assessment

- 4.4.1 Traffic distribution The assessment suggests that vehicles arriving in the morning peak to the site from Lady Game Drive (travelling southerly) would divert to Highfield Road, Pacific Highway and Grosvenor Road, due to congestion near the roundabout at Grosvenor Road. While it is agreed that vehicles would divert away from the intersection with Grosvenor Road, there are shorter alternatives to the Highfield Road/Pacific Highway/Grosvenor road route (i.e. Highfield Road/Primula Street/Polding Road/Bent Street/Grosvenor Road), which would be more attractive than entering and leaving Pacific Highway as suggested in the assessment. It is unclear what the effect would be on this alternative route when additional of 25% of the total site traffic generation is assigned to this route. This needs to be clarified.
- 4.4.2 Local road impacts The assessment notes that the Learning Village would perform at a similar level to the former UTS operation, and that local roads would experience higher peak hour traffic but lower off-peak traffic volumes. While this may be the case, the traffic volumes on some of the local roads (such as Eton Road north-east of Austral Avenue) had exceeded the 300 vehicles per hour maximum desirable environmental goal recommended for local roads (as per the RTA Guide to Traffic Generating Developments) when UTS was operating, and are likely to exceed this threshold again when the Learning Village commences operation. During the UTS operation, traffic probably increased in an incremental fashion and Council ultimately was not in a position to request traffic calming improvements from UTS. In this case though, the impacts of the proposal are known and the Learning Village should be required to contribute towards traffic calming and amenity improvements along those local roads where the environmental thresholds would be exceeded.
- 4.4.3 Historical Traffic Volumes 2007 The comment is made that the desirable maximum of 2,000 vehicles per day for local roads assumes that the road services residential areas only, and that this would historically not apply to this area/proposal due to the presence of UTS Ku-ring-gai and Film Australia. This assumption is incorrect as the Film Australia site has since been rezoned for residential development, and the former UTS Ku-ring-gai site has partly also been rezoned for housing. Given that the whole length of Eton Road (with the exception of the southwestern-most end) is now a low density residential area, it would be unfair and inappropriate to apply this rationale and somehow avoid any ameliorative measures to the residents along Eton Road.

4.5 Traffic modelling

4.5.1 Pacific Highway and Grosvenor Road - Ku-ring-gai's commuter road network model, prepared for the Lindfield local centre, suggests that the current operation of the intersection of Pacific Highway and Grosvenor Road is at capacity and future traffic increases will exacerbate this. This model has been submitted to Roads and Maritime Services for their eventual concurrence, and envisages (amongst other things) minor capacity improvements on the Grosvenor Road approach to the intersection, as well as new traffic signals at the intersection of Pacific Highway and Strickland Avenue.

While improvements to the intersection of Pacific Highway and Grosvenor Road are supported in principle, it is noted that the Arup proposal to extend the right turn bay on Pacific Highway shown in Figure 47 (on the northern approach, towards Strickland Avenue) would conflict with Council's proposal to install new traffic signals at the intersection of Pacific Highway and Strickland Avenue, so further discussion with Roads and Maritime Services on this is required.

4.5.2 Lady Game Drive - Planned upgrades identified by Council at 2 intersections on Lady Game Drive have been cited in the assessment. The proposal is likely to add pressure to these intersections and NSW DEC should be required to provide the suggested upgrades or at least contribute to them.

4.6 Construction traffic management plan

The construction traffic vehicle routes shown in Figure 53 suggest Lady Game Drive would be an access route from the south-west. It should be noted that Lady Game Drive is a load-limited road and due to its horizontal and vertical alignment is not suited to ongoing construction traffic, especially large rigid trucks and articulated heavy vehicles. Also, heavy construction vehicles travelling on Grosvenor Road may be subject to movement restrictions during School Zone times, to minimise conflicts with drop-offs and pick-ups associated with Lindfield Public School. Further consultation with Ku-ring-gai Council is recommended for the development of the construction routes.

4.7 Summary of traffic and parking issues:

- 4.7.1 The extent of the proposed student catchment area needs to be clarified.
- 4.7.2 The times of operation of the proposed drop-off and pick-up areas do not align with the proposed staggered opening/closing times and needs to be reviewed.
- 4.7.3 There is no identification of accessible paths of travel between the drop-off and pickup areas and the school buildings.
- 4.7.4 In Table 5 (proposed allocation of parking spaces), the total of the KDCP minimums for the school use needs to be reviewed/clarified.
- 4.7.5 Further investigations should be undertaken to determine the existing bicycle parking complies with the relevant Australian Standards in terms of location, type and class of facility.
- 4.7.6 There is no detail the possible transport strategies of cycle routes or cycling infrastructure improvements.
- 4.7.7 Cycling is absent in the mode split targets.
- 4.7.8 Clarification is required as to whether the proposed footpath width in the Eton Road bus bay is adequate if the mode split to buses increases.
- 4.7.9 An adequate path/pedestrian route between the Eton Road bus bay and the main school building needs to be identified and provided.
- 4.7.10 The effect of additional traffic on the Highfield Road/Primula Street/Polding Road/Bent Street/Grosvenor Road route needs to be clarified.
- 4.7.11 The proposal to extend the right turn bay on Pacific Highway (on the northern approach, towards Strickland Avenue) would conflict with Council's proposal to install new traffic signals at the intersection of Pacific Highway and Strickland Avenue further discussion with Roads and Maritime Services is required.
- 4.7.12 A PAMP is to be prepared by the Applicant to assess pedestrian access and safety improvements, and improvements be undertaken by the applicant.
- 4.7.13 The proposal is likely to add pressure to 2 intersections identified on Lady Game Drive, and the applicant should be required to provide the suggested upgrades or at least contribute to them.
- 4.7.14 Any new on-street parking restrictions are to be referred to the Ku-ring-gai Traffic Committee and Council approval. This includes consultation with directly affected residents which would be undertaken by NSW DEC. Costs of reporting, and installation of new facilities is to be at NSW DECs cost.
- 4.7.15 Proposed new bus routes to undergo a consultation process with affected residents before being further considered or implemented. Where there are overlaps with existing route services or school services, these should be incorporated into the routes.
- 4.7.16 The applicant should be required to prepare a Green Travel Plan and submit it to Kuring-gai Council for concurrence.
- 4.7.17 The existing bus shelter/canopy at the Eton Road bus bay should be extended and adequate lighting in and around the shelters should be provided.
- 4.7.18 The applicant should be contribute towards traffic calming and amenity improvements along those local roads where the environmental thresholds would be exceeded.

5. Heritage, built form and environmental amenity (SEAR #3, #4 & #9)

The site is a heritage item listed in Ku-ring-gai Local Environmental Plan 2015. It is listed by the Australian Institute of Architects as a Nationally Significant building and is listed in the DOCOMOMO Australia Register. Its national recognition, community and cultural value, and current local listing under KLEP 2015 suggest that the driving objectives of future works must prioritise the following criteria:

- a) respect and interpret the philosophy of the original design
- b) respond to the campus's materials and colour palette
- c) take particular care to respect the natural bushland, its character, and how interventions may impact that relationship
- d) ensure interventions are recessive considering their visibility within the site, as well as from a distance viewed from the south and south-east

The application does not demonstrate that these have been satisfied and requires amendments relating to:

- · expression of the additional roof-top storey
- expression of other roof top structures and their visual impact when viewed in close proximity, and from a distance
- materials palette and their colour
- composition of the 'origami' geometry in relation to the existing buildings

As proposed, the architectural aesthetic, its composition and expression of colour and massing appear as if an educational building with a contemporary aesthetic, commonly found in urban and suburban settings, has been taken out of its urban context and installed onto the existing buildings. Alterations and additions can enable the adaptive reuse of this significant item (I422 in KLEP listing) but the external response must be reconsidered.

The internal interventions are generally successful and will enhance the internal functions and interior environment as will cleaning the building to enhance the appearance of the building fabric for its future life.

5.1 Building elements guide - design rules

The applicant's approach to clearly differentiate the original UTS campus building fabric from the proposed interventions has merit in principle. However, to be successful, the interventions require a level of sophistication that is considered and demonstrates consistency with the fundamental aspects that define the building's significance and unique qualities so they can be re-interpreted.

The Design Rules should reflect this. However, the *Lindfield Learning Village Building Elements Guide* prepared by DesignInc and Lacoste + Stevenson (26th May 2017), fails to identify any criteria that would reasonably be expected to drive a design on this site.

The opening statement reads:

The adaptive re-use of the UTS Ku-ring-gai Campus will be following a set of design rules, in order to create a coherent architectural ensemble, while reading the original fabric easily and differentiating new interventions.

There is no reference back to the philosophical basis that should inform these Design Rules. There is no reference to the breadth of specific heritage significance nor to the unique natural and physical setting. The opening statement demonstrates a distinct absence of consideration of the specific heritage significance and the original design philosophy which should inform the design approach of this proposal.

A reasonable interpretation of the Design Rules, therefore, is that they comprise a generic and pragmatic approach applicable to any adaptive reuse of any building.

The five rules that reinforce this interpretation are:

- **1. Singularity:** use a singular architectural language for new interventions, in order to be easily identifiable.
- 2. Use as **few materials** as possible: mainly aluminum panels and stainless steel netting. These materials are versatile and can be used in many locations; for many purposes, indoor and outdoor.
 - a. Outdoor: childcare facade, new fire stairs, handrails and balustrades, shade structures, roof enclosures...
 - Indoor: cable trays, AC ducts, joinery, handrails and balustrades, furniture...

The materials used are '2D' sheets as opposed to brutalist architecture vocabulary which use mass and sculptural aesthetics through '3D' materials (concrete, bricks...)

- **3.** Use **homogenous geometry** throughout: a playful architectural language with educational references to Origami. A geometry that is easily adaptable to different programs.
- **4.** Use a **defined palette of colour**: Possibly one colour per homebase.
- 5. Introduced architectural and fit-out elements are **reversible** and recyclable. While contrasting with the original fabric, this language is part of the same register. It is sympathetic to the existing building.

The Design Rules, therefore appear inadequate by failing to acknowledge and interpret the fundamental first order design considerations for this specific site:

- Sydney School design philosophy as the basis for the heritage significance
- · aesthetic sensitivity of the buildings materials and built form
- impact of visibility from a distance
- natural bushland
- topography
- response to bushfire
- response to biodiversity
- · emerging surrounding urban character that responds to the bushland setting.

In terms of the first priority, heritage significance, the absence of a Conservation Management Plan makes it difficult for the applicant to demonstrate SEAR Key Issue 9 Heritage because there is nothing to test the design against. Furthermore, if this is not captured in the Design Rules upon which the design relies, it follows that the design cannot demonstrate heritage has been adequately considered.

(SEARs Key Issue 9 Heritage)

Include a Heritage Impact Statement that addresses the significance of, and provides an assessment of the impact on the heritage significance of any heritage items on the site and in the vicinity, and/or conservation areas and/or potentially archaeologically significant areas, in accordance with the guidelines in the NSW Heritage Manual.

5.2 Built form

The inadequacies of the Design Rules also impacts on demonstrating how SEAR Key Issue 3 Built Form and Urban Design first two dot points have been satisfied. Despite being quite vague requirements, both a CMP and the Design Rules need to address these.

(SEARs Key Issue 3 Built Form and Urban Design)

- Address the height, density, bulk and scale, setbacks of the proposal in relation to the surrounding development, topography, streetscape and any public open spaces.
- Address design quality, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials, colours and Crime Prevention Through Environmental Design Principles.
- Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.

5.3 Height and scale

The *Built Form and Urban Design Report* prepared by DesignInc and Lacoste + Stevenson (31st March 2017) states at p12 3.3 Height and Scale:

Due to the extensive landscaped surrounds, and the well-modulated building form, the height, density and scale of the existing building nestles comfortably into its hillside setting without significant visual impact.

As the extent of the works involves mainly the internal refurbishment of the existing building, there is no change to the bulk and scale of the existing building.

This finding appears to contradict images contained in the *Building elements Guide*, also prepared by DesignInc and Lacoste + Stevenson. Images contained in the section 'Outside Roofs – New Roof Structures' provide 3-d representations of the proposal.

It is apparent from these images that there will be extensive structures on the roof-tops and an additional storey on part of the building. These elements are brightly coloured and will be highly visible from some distance as well as from the ground and in the near vicinity of the existing heritage buildings. As proposed, these structures have the effect of dominating the heritage item. It changes how the item responds to the natural bushland setting and how the building is read. This appears inconsistent with the integrity of the heritage significance and a departure from being sympathetic to the natural setting.

The urban design question is then whether this domination, on merit, is an appropriate response to the unique bushland setting and protecting the integrity of why the existing buildings are identified as being 'exceptionally significant' at the executive summary of the *Heritage Impact Statement*.

The Built Form and Urban Design Report earlier observes at p10, 3.1 Existing Urban Character:

The new apartment buildings adjacent to the site combine concrete, steel and glass materials with balconies, flat roofs and subdued palets [sic] of white, brown and grey tones.

The houses and apartment buildings are surrounded by natural Australian bushland with trees framing the pedestrian streetscapes.

This appears to further reinforce the design strategy is inconsistent with and unsympathetic to the desired urban character and which has been achieved with the new high density development, and which is highly valued by the community.

The 'origami geometry' has been used to achieve a 'playful' architectural character to contrast with the heavier Neo-Brutalist style of the UTS buildings. Such an approach could be successful where the composition of the geometry, building elements and use of colour interprets and references features of the heritage items. However, the new roof top building elements dominate the existing fabric. The external stair expression likewise dominates the existing buildings. This appears to be because the panel composition and use of colour are expressed at a scale that is unsympathetic to the existing fabric with the effect of changing the relationship to the bushland setting.

It is suggested that if the 'origami geometry' is pursued, it should relate to and express the horizontality of the massing and/or clearly reference height datums of building elements, and/or be expressed to pick up vertical alignments of the UTS building fabric.

5.5 Colour

In principle, the proposed spatial arrangement is sound – locating the childcare to the roof and creating new roof top play areas for the homebases and demonstrates a consistency of the design philosophy to create social place in spatial planning shared with the original architects and landscape architects of the UTS Campus.

While contrasting the proposed interventions with the existing fabric is an approach that may be supported in principle, significant amendments are required to implement it successfully.

The HIS at p34 of the Significance Assessment states:

The significance of the carefully designed relationship between the College and the natural environment cannot be underestimated. The consideration given to the integration of the buildings into the site with as little impact on the existing topography/landforms, and native vegetation as possible, was the result of a clear and conscious effort to integrate the built and natural environments.

The use of bright colour, was confined deliberately to the interior, which is where the 'playfulness' of the architecture was expressed.

a) Exterior colour

The decision of the proponent to bring the vibrant colour as the primary tool for differentiating the exterior is therefore unsympathetic to the heritage significance.

The proposed roof top use of colour is particularly problematic because it will be highly visible, appears randomly applied, compositionally overly busy, unsympathetic to the bushland, unsympathetic to the building fabric, has no cultural significance (original building confines vibrant colour to the interior only). For these reasons the proposed aesthetic detracts from the integrity of the campus buildings.

This multi-coloured application of the child-care in particular also appears inconsistent with Design Rule 4:

Use a **defined palette of colour**: Possibly one colour per homebase.

Bright colourful interventions can be a very effective response when used judiciously in strategic locations but are inappropriate where the new work seeks to or has the effect of dominating the original fabric as is the case.

Considering the HIS further at p34 Aesthetic Significance:

The Ku-ring-gai Campus is recognised as a seminal example of Neo-Brutalist architecture in Australia, combined with the influence of the Sydney School in term of its consideration of the natural environment...

...Bruce MacKenzie's landscape design for the UTS Ku-ring-gai campus is a fine demonstrator of his philosophy that existing contours, rocks and trees can be the main determinants of composition. His intervention was "just sufficient"

to make [the landscape] more habitable so that the marks of change are barely discernible."

The 'origami' geometry generally and its composition in particular appear to exacerbate the colour dominance because of the scale of the panels and/or structures, and/or composition.

If the proponent is committed to the 'origami' geometry, these issues could be better resolved if the façade composition reduces the scale of the geometry expression and implements a disciplined and robust relationship to the existing building fabric such as using horizontal and vertical datums; deferring to the scale of the UTS building elements; and a more limited external expression colour is sympathetically integrated and coordinated with a specific internal function.

b) Interior colour

By contrast, the interior colour interventions are more successful, such as those applied to glazed windows and door panels that respond to the existing panel dimensions and which appear externally. The carpet re-definition, handrails and services also clearly define the interventions and respect the existing fabric so that the original buildings remain legible and retain their dominance.

The use of colour must be considered in context of the effect of previous interventions and existing moral rights.

The HIS at 3.3.7 Additional Works p29 importantly notes:

David Turner in his letter to Jacqueline Urford notes the changes to the main college building as follows:

- replacement of carpets
- exposed conduits and unsympathetic emergency lighting
- library alterations
- additional floor inserted to dining hall
- unsympathetic disabled access arrangements
- seating in the dining hall and outside meeting terrace.

In addition, David Turner further notes that he was unaware when the alterations had been carried out and he believed that the final design had been altered without consultation with the original architect contrary to legislation.

A more natural colour/materials palette for all roof top elements including the additional storey so the existing building and roofs are not visually dominated by colour is strongly suggested.

A more restrained use of the colour palette would allow the existing building fabric to be read and remain dominant, while there may be a possibility for 'punches' of colour to be strategically and judiciously used to achieve the desired 'playfulness'.

5.6 External facades

5.6.1 Shade fabric awnings

The strategy to use fabric awnings is considered inappropriate on two counts; combustibility and durability.

The location on a ridge being exposed to high winds is of concern where minimising on-going maintenance costs will be important. More permanent, non-combustible awning interventions should be considered where they are designed as an integrated architectural element (refer to previous comments).

The proposed intent to use colour to define these elements has merit but for this to be successful, the awnings need to appear as a considered, cohesive addition as a family of elements integrated with the building composition rather than surface

appliques as they currently appear, particularly around higher level windows. Their colour and type should remain recessive to the original campus buildings.

The original design philosophy showed a deep seated knowledge and understanding of how to use buildings as active structures in the environment. This was very important in the original campus building design, which consciously relied on the building mass and passive design features to manage internal climate comfort rather than artificial means of air-conditioning (air-conditioning was limited to such areas as the library only).

The proposal includes a number of new openings which will necessitate a much greater reliance on air-conditioning to achieve a comfortable controlled internal climate. The design also neglects such basic principles as the need to open and close buildings in response to or preparation for the climatic and weather conditions. The effects of exposure to these conditions will be more acute and may also be unsuitable in this application due to bushfire risk.

5.6.2 Childcare centre

Of considerable concern is the impact of the proposed new childcare centre on the main entry. The addition of a brightly coloured additional storey above the main entry will adversely affect the aesthetic values of the building, the entry being a key component in the approach to the building, an approach the architect (David Turner) designed to reinforce the bushland setting. It is recommended that not only the colours be changed but that the addition be screened by appropriate native plantings in a new rooftop planting box.

5.7 Internal works

The proposal will require the demolition of many interior walls. This will remove built form that demonstrates the original design. However, the proposal reflects the original design in that both respond to contemporary educational needs. As a conservation management plan has not been prepared for the building, the level of significance of walls and spaces proposed to be removed is not clear.

The design of the College gave close attention to the role of the building as an educational facility, and the manner in which its spatial planning could facilitate interaction between students and teaching staff, its key element to deliver this being the main circulation spine. The retention of the main circulation spine will continue this original design feature. The internal spaces of the building relate to the surrounding landscape through views, vistas, light shafts and through the use of native plants throughout the building's courtyards and roof decks. This relationship will be retained, although the visual connection will be interrupted by the bright geometric colours and shapes of the proposed alterations and additions resulting in the bush no longer being the primary visual element but instead new brightly coloured interior elements.

The extent of remaining original fittings and fixtures, such as light fittings, is not known. The original college had an educational focus on the training of science teachers and it appears that some of the original purpose designed science lab fitouts remain. In addition, original bench seating in the common areas also appears to remain in-situ. These elements should be investigated, assessed and conserved in accordance with a conservation management plan.

5.8 Bushfire

The design response does not appear to consider the likely BAL and bushfire APZ requirements, which may result in significant numbers of trees being removed, type of construction and materials.

Loss of trees will have a significant impact on the design strategy of the 'origami' geometry and colour palette because the buildings are likely to become significantly more visible.

There is a real possibility that an alternative design option entirely will be required if the bushfire risk and aesthetic integrity of the UTS buildings are to be retained.

5.9 Moral rights

There appears to be no demonstration of the proposal complying with the moral rights obligations under the Copyright Act.

Confirmation from the original architect(s) must be demonstrated in writing and consultation on the proposed alterations and additions must be undertaken in good faith if the original architect wishes to do so.

This is particularly important because the HIS has noted the original architect, David Turner, believed previous works had occurred contrary to moral rights legislation. These rights would also apply to the landscape design and original landscape architects.

5.10 Conservation Management Plan (CMP)

The Secretary's Environmental Assessment Requirements (SEARs) do not require a Conservation Management Plan (CMP) for the UTS campus, rather the application need rely only on a Heritage Impact Statement. It is Council's view that an assessment of the conservation of the heritage values of the former UTS Ku-ring-gai campus is hampered by the lack of a conservation management plan.

The significance of the UTS campus is acknowledged by:

- the AIA as a Nationally Significant Building (Sulman Award 1978; Merit Award 1972)
- · AIA listing on Register of the National Estate
- AIA 20th Century Heritage Register
- DOCOMOMO Australia Register
- · Royal Australian Horticultural Award for Bush Landscape Design
- KLEP 2015 listing as an item of local significance
- City Plan Heritage Assessment 2004 Executive Summary

UTS Ku-ring-gai Campus is of historic significance at State level ...in particular the role of the College in the development of Australian landscape design, and an appreciation for natural bush settings associated with the influential Sydney School. The College also influenced the design of educational buildings, with a particular emphasis on spatial planning to create a social environment...

- ...The site is a major example of the application of [Bruce] Mackenzie's philosophy of building carefully within a pristine natural environment rather than starting with a cleared site and creating an 'artificial' natural landscape...
- ...The site also has an important visual setting, including distant views to and from the site to the south and south east...
- ...Opportunities for additional development are limited given that extent of the significant buildings and the sensitivity of the natural bushland and cultural landscape.

The *Heritage Impact Statement* prepared by Urbis (7th June 2017) states the campus has been nominated for listing on the NSW State Heritage Register, however, at this time that listing has not been approved to my knowledge. The Statement of Significance (p40 of the HIS) acknowledges the importance of the campus:

The UTS Ku-ring-gai Campus is of historic significance at State level...

...The UTS Ku-ring-gai Campus has a high level of aesthetic significance...

The College ...is also rare in the combination of Neo-Brutalist and Sydney School influences on such a scale and with such a high degree of success. The

presence of rare, vulnerable and uncommon indigenous plant species in the vegetation of the site and its surroundings adds to the rarity value.

A CMP would benefit the proposed application and should be used as the foundation for the proposed 'Design Rules'.

5.11 Summary of heritage and urban design issues:

- 5.11.1 A conservation management plan for the former UTS Ku-ring-gai campus should prepared as a matter of priority and that the project architect for the building, David Turner, be consulted regarding the proposed redevelopment. The design should be modified in response to this additional work. The conservation management plan should include an assessment of the heritage value of the landscape design, fittings and built in furniture, and policies for their conservation.
- 5.11.2 The advice of a landscape architect and the heritage consultant for the project be sought if fire fighting vehicle access routes are required.
- 5.11.3 The colour scheme of the proposed new built and landscape elements should be changed so that the external colours are muted colours reflecting the colours of existing adjacent built and landscape elements.
- 5.11.4 A suitably qualified and experienced heritage consultant should be engaged at the start of the next stage of the project to provide advice on the conservation and protection of those parts of the original building and landscape to be retained, and on the appropriate integration of new building and landscape elements with the existing.

Building

- 5.11.5 A methodology should be prepared in consultation with a suitably qualified and experienced heritage consultant for the cleaning of the concrete.
- 5.11.6 A genuine effort must be made to retain the extant timber ceiling of the existing library area. A methodology should be prepared for the removal and salvage of the ceiling and its reinstatement, after the installation of services. A methodology should also be prepared for the installation of services through the ceiling such that removal of fabric is minimised.
- 5.11.7 There is one set of spiral stairs towards the southern boundary of the building (Stage 1 area) between level 2 and 3 which is understood to require removal as it does not satisfy BCA standards and is not required to connect the home bases. As this stair constitutes original, characteristic fabric it is recommended that it is not removed as proposed, but that it be locked and retained in situ for potential future reuse.
- 5.11.8 All built in bench seating in the communal areas should be retained, protected from harm during construction, and appropriately conserved.
- 5.11.9 Alteration or adaptation of the spaces that are accessed directly from the main circulation spine, should utilise the existing patterns of black anodised glazing.
- 5.11.10 Installation of new services and code compliance requirements must be undertaken in a manner that respects the architectural character and integrity of the building complex and materials.
- 5.11.11 Original light fittings should be retained and upgraded, in particular in the public areas
- 5.11.12 The proposed additional of an extra storey near the main entry for a new childcare centre should be screened from the approach and entry by appropriate native plantings in roof top planter boxes.

Landscaping

- 5.11.13 The surrounding bushland and landscaping adjacent to the building should be protected from damage during the building works. Regeneration works should be undertaken if necessary following building works.
- 5.11.14 Sandstone rock outcrops in particular are to be carefully protected from harm during any construction related activity.
- 5.11.15 The proposed school boundary security fence should be painted black to reduce its visual impact.
- 5.11.16 18. The original landscape planting to the planter boxed on the roof terraces should be recovered and then maintained.
- 5.11.17 Brightly coloured geometric paving should not to be laid in the main entry area or main circulation spine. These areas should retain green carpet as per the original interior scheme.
- 5.11.18 The lawn area near the south-eastern corner of the building should be repaired. This lawn area is rare as it is one of the few areas.
- 5.11.19 Consideration should be given to the retention of the orange fibreglass outdoor furniture is the dining terraces.
- 5.11.20 An archival recording should be made by a suitably experienced and qualified heritage consultant prior as soon as possible.

Conclusion

The proposed re-development of the former UTS Ku-ring-gai campus will provide for the adaptive re-use of the existing building. The design approach has been to "re-brand" the building through an engaging architectural design featuring an overlay of vibrantly coloured alterations and additions based on an architectural language of irregular geometric shapes. Rooftop additions, including rooftop play areas with shade covers and bounding security netting, will interrupt the skyline of the existing building. This design approach will detrimentally affect the relationship of the building to the surrounding bushland. Of considerable concern is that extensive areas of surrounding bush may need to be cleared in response to safeguard against bush fire. This will impact the bush setting of the campus and is integral part of its original design and heritage significance.

It is unfortunate that the proposal has not been designed with regard to conservation policies in a conservation management plan for the place. Council is hopeful that the 5 key issues identified throughout this submission will inform a more sympathetic and holistic design approach to the proposed new educational facility resulting in an outcome with fewer adverse impacts.

I trust this clarifies Council's position but please do not hesitate to contact me if you require any additional clarification.

Yours sincerely

Corrie Swanepoel

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