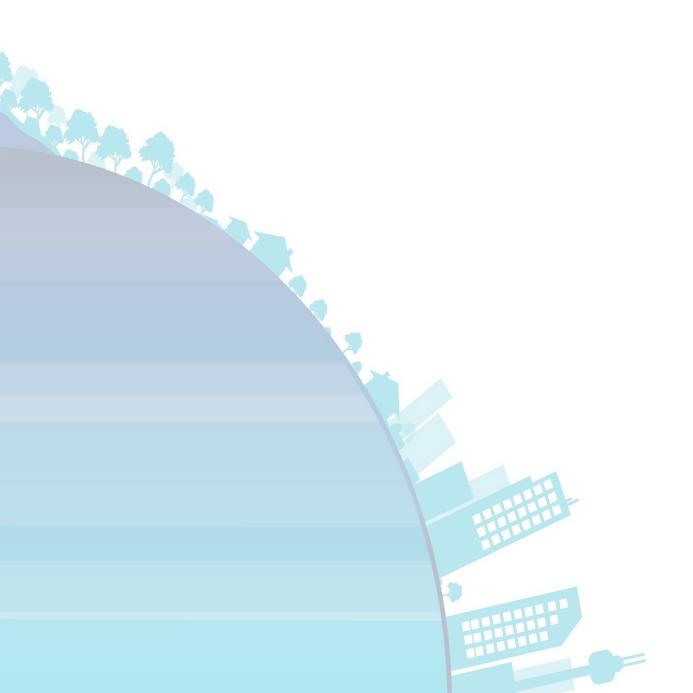


Appendix A. Response to Submissions and Conditions Table





Organisation	Issue	Response
Department of Planning and Environment	Construction hours The Environmental Impact Statement (EIS) and Preliminary Construction Management Plan (PCMP) propose differing construction hours, with the EIS indicating that works will conclude at 6:00 pm during weekdays and the PCMP indicating works will conclude at 5:30 pm. On Saturdays, the EIS indicates works will commence at 8:00 am and the PCMP indicating works will commence at 7:30 am. Clarification is required regarding proposed construction hours, including any reasoning for requesting works outside of standard construction hours identified in the Environment Protection Authority's Interim Construction Noise Guidelines.	The hours of construction are proposed to be: 7am to 6pm Monday to Friday 7:30 am to 3:30pm on Saturday No work Sundays and Public Holidays Additional construction hours are proposed for Saturdays as the closest residential receiver is 300m away however educational receivers are close by and immediately adjacent. On Saturdays the educational receivers will primarily be vacant and therefore more noise intensive works will have a lesser impact on the surrounding environment. Saturday has been identified as the most appropriate day for more noise intensive works and therefore an increase in construction hours on Saturday is warranted to allow these nosier works to be carried out with minimal impacts on the operation of the university. Section 6.5.5 of the Noise Report identifies procedures for noise monitoring during construction. The Applicant confirms the following construction hours are sought as part the application: 7 am to 6 pm Monday to Friday, 7:30 am to 3:30 pm on Saturday, and No work on Sundays and public holidays. The Interim Construction Noise Guideline allows for works outside of the recommended standard construction hours, where it can be demonstrated there is a need to operate outside these hours. Construction is sought to be carried out beyond 1 pm on Saturdays (until 3:30 pm) in order to expedite construction of the development and reduce the duration of noise impacts on sensitive receivers located adjacent the site. It is also anticipated that the more noise-intensive works will be carried out on Saturdays to limit disruptions to educational receivers typically present at the University from Monday to Friday. It is noted that developments of a similar nature have been granted approval for construction works to be carried out beyond 1 pm on Saturdays, including various developments across the University of Sydney campus. On this basis, the request for an additional 2.5 hours to undertake construction works on Saturdays is considered to be justified.



Organisation	Issue	Response
	Construction traffic	
	An assessment of the impact of construction vehicles at key intersections, outside of the campus, along the construction traffic routes proposed.	Construction activity will be at its peak during the Main Stage of Works. Based on the Construction Management Plan, a maximum of 40 construction vehicles will attend the site each day. These will comprise of both Heavy Rigid Vehicles and B-doubles.
		The modelling results indicate that during the construction period associated with the proposed development, the intersection will continue to operate similarly to the existing conditions. Construction traffic will therefore have little or no detrimental impact on the operation of the road network.
		Traffic modelling undertaken as part of the application indicates that traffic impacts during construction will have little to no detrimental impact on the continued operation of the existing road network, including impacts at key intersections located in proximity to the site.
		The Preliminary Traffic Management Plan (PTMP) submitted with the application indicates a maximum of 40 construction vehicles movements per day, to and from the site. Construction vehicles will likely comprise both Medium Rigid Vehicles and articulated vehicles. The estimated frequency, timing and size of construction vehicles will be confirmed by the Contractor and can form part of any Construction Traffic Management Plans that would be required as a condition of approval.
		As part of the Construction Traffic Management Plan, the Applicant will ensure the timing of construction traffic vehicles avoid arriving and departing at the site during the AM and PM peak periods in order to minimise impacts on the Level of Service of intersections in proximity to the site. The proposed construction vehicle traffic route is outlined in the PTMP and has been designed to avoid residential areas.
	Identification of locations for construction worker car parking	Construction workers will be formally asked not to park in the surrounding streets. Construction workers will be encouraged to travel to the site using mass transit methods. The head contractor will be required to identify in their tender proposals what management and control measures they will implement to minimise the impact of construction traffic including worker parking.



Organisation	Issue	Response											
Organisation	Sustainable transport initiatives • Submission of a Green Travel Plan identifying sustainable transport initiatives, actions and targets to be implemented during operation of the proposal to reduce vehicle dependency or further expansion of what the University wide sustainable practices are (including specific initiatives) and how they will be applied to operation of the proposal	Transport S this submis mode share share was o as a whole Private Public Active	Survey sion e whice calculation of car e vehice trans	The Ti th was ated fr mpus r cle – 5 port – port –	established om the ablesult: 65.4 per ce 29.2 per ce 15.3 per ce	urvey 2 ed by m coveme ent ent ent	015 - Su leans of a ntioned th	rvey and an online nree-day	Strategy S survey of s survey per	ummar staff and iod and	y provides d students. indicated	a clear 2015 o he follo	N is attached to picture of the verall mode wing proportions
		transport st 100% 90% 80% 70%			-	•							
		50% - 40% - 30% - 20% -			68.9%		66.2%		60.7%		57.0%		55.4%
		Source	e: AE(2007 COM;	2015, refo	2009 rmatted		2011 Year of stu te Public yhigh; 20	-	²⁰¹³ DW; 201	3	2015	



Organisation	Issue	Response
		The Transport Survey 2015 - Survey and Strategy Summary identifies a number of existing projects and strategies that have either commenced, are partially completed or in progress, or are completed. In addition to the existing projects and strategies there are a number of recommendations to further encourage the staff and students of UOW to utilise a mix of transport methods away from individual private cars. The recommended action items in the Summary are:
		Private Transport
		Undertake comprehensive parking strategy.
		Work in partnership with a car share company such as, GoGet, Charter Drive or Flexicar to trial a car share service on campus and at university accommodation.
		Investigate options for charging spaces for privately owned electric vehicles.
		Encourage purchasers of new University fleet vehicles to consider vehicles with good fuel efficiency and green credentials. Electric vehicles should be considered.
		Public Transport
		Further investigate introducing a southern shuttle bus servicing Figtree and Mangerton/West Wollongong (noting Route 41 introduction).
		Work in partnership with bus operators, TfNSW to devise an integrated transport ticket for staff and students - subsidised by UOW given that UOW heavily subsidises parking;
		Continue to seek an increased frequency of Gong Shuttle at peak times, start of session.
		Consider upgrading all bus stops on campus to include shelter, seating, lighting, UOW branding, fare and route information.
		Encourage WCC/TfNSW to upgrade all major bus stops en-route to the Wollongong Campus to include the University logo, shelter, seating, timetable, fare and route information.
		Active Transport
		Develop a prominent cycle 'end of trip' facility including hire facilities and maintenance workshop on the Wollongong Campus for use by staff and students. This should be partially overseen by UOW Transport to ensure continuity.
		Lobby Council to construct the proposed network of regional and local cycle ways starting with completion of UOW to CBD and UOW to iC routes.
		Extend the footbridge over the freeway to bring pedestrians and cyclists right over the Eastern Entrance.



Organisation	Issue	Response
		 Construct a shared path bridge across Northfields Ave connecting the campus to pedestrians and cyclists from the south as well as new student accommodation. Develop cycle hire/loan options on both UOW and iC campuses and at student accommodation facilities. Encourage Transport for NSW and Council to provide a range of secure cycle parking options for passengers at North Wollongong and Fairy Meadow stations. UOW are currently preparing a Transport strategy and survey 2017 report which includes the provision and rollout of a number of the recommendations of the Transport Survey 2015 - Survey and Strategy Summary.
Transport for NSW	Active transport The applicant should continue to develop travel access guides to assist with increasing the mode share of walking and cycling for staff, students and visitors.	The UOW 2016-2036 Wollongong Campus Master Plan includes significant campus improvements works both with new or renovated buildings and significant open space and access works. As part of these works UOW are committed to the improvement of access signage and facilities to facilitate further increase in active transport to/from the campus. Some of these initiatives are described in the Transport Survey 2015 - Survey and Strategy Summary and summarised in the 'Sustainable transport initiatives' response above. Transport and access guide developed Oct 2016 – This access guide will be updated in 2018.



Organisation	Issue	Response
	Traffic Prior to the commencement of any work on site, the applicant should provide a Construction Pedestrian and Traffic Management Plan (CPTMP) highlighting any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the proposed works.	Applicant accepts a condition of consent to this effect. The applicant requests that a condition of consent require that a Construction Pedestrian and Traffic Management Plan (CPTMP) be prepared prior to the commencement of construction of the MLS Building. The Applicant will accept a condition requiring a comprehensive Construction Pedestrian and Traffic Management Plan (CPTMP) be prepared for the site prior to the commencement of construction works. The CPTMP will address the concerns raised by Transport for NSW and is proposed to contain the following information: any known road closures and consideration of alternate routes, details of any proposed measures to provide alternate safe and accessible routes for cyclists and pedestrians for the duration of construction, discussion of construction activities that may result in the disruption to traffic, cyclists, pedestrians and public transport services, and details of management measures to minimise such impacts to traffic, cyclists, pedestrians and public transport services.
Environment Protection Authority	The assessment and management of potential ASS at the proposed site should be undertaken in accordance with the "Acid Sulphate Soil Manual" (August 1998) issued by the NSW Acid Sulphate Soil Management Advisory Committee.	The Coffey contamination report provided a comment (Section 3.2) as shown below: Acid Sulfate Soil: (NSW DLWC, 1997) The Acid Sulfate Soils risk map shows the site being mapped in an area of 'no known occurrence' of acid sulfate soils. We therefore do not expect that acid sulfate soils would exist in the area of the development or be affected by the development. Our investigations did not identify soil types that are associated with acid sulfate soils. An investigation is not considered necessary. Site investigations carried out by Coffey as part of the EIS did not identify the presence of acid sulfate soils across the site. Section 3.2 of the Contamination Assessment states that The Acid Sulfate Soils risk map shows the site as being within an area of 'no known occurrence' of acid sulfate soils. Consequently, any further assessment and/or management of acid sulfate soils is not considered necessary.



Organisation	Issue	Response
	Noise The proponent should ensure that noise monitoring is undertaken at times when the noise is representative of the demolition and construction activities being undertaken at the time. Further monitoring may also be required if a noise complaint is received and/or during high noise generating activities (For example, piling) to assess the effectiveness of any mitigation and management controls implemented.	UOW will ensure noise monitoring is carried out. It is highly unlikely that the noise at the nearest residential receivers will exceed applicable criteria, whereas buildings on campus are likely to be affected. Section 6.5.4 and 6.5.5 of the acoustic report identify that Any further noise monitoring required under the conditions of approval will be carried out by a suitably qualified acoustic consultant and at times representative of the time during which demolition and construction activities will be carried out or if a complaint is received.
	Preliminary CMP The Preliminary Construction Management Plan dated May 2017 incorrectly refers to the Noise Control Act 1975. The Protection of the Environment Operations Act 1997 (the POEO Act) repeals and replaces this Act. The proponent must ensure that the assessment and management of the project complies with current legislation.	The Preliminary Construction Management Plan has been updated and the amended version is attached to this submission.
	 Waste and Recycling Section 4.9 of the Waste and Recycling Management Plan dated 25 May 2017, includes details for responding to environmental incidents. Under the POEO Act (Part 5.7) pollution incidents causing or threatened harm to the environment should be reported to the Appropriate Regulatory Authority (ARA). The ARA for this project is expected to be Wollongong City Council. The plan should be modified to reflect these regulatory responsibilities. The proponent should consider including other relevant authorities that may need to be contacted should an incident occur. This may include but not be limited to Wollongong Council and SafeWork NSW. 	The updated waste report has been updated and included in this submission to include the following: The ARA updated to be Wollongong City Council Update of authorities to be contacted should an incident occur.



Organisation	Issue	Response
Endeavour Energy	Services and Infrastructure – building footprint/cable location If the applicant can demonstrate that there is no other option but for the 'Building footprint is raised over the easements proposed to remain', then they will need to submit the Company Form (Network) FAM 0048 'Dispensation Request'. Failing this, either the cables will need to be relocated or the building footprint altered so that it is not over the easements proposed to remain.	The specialist equipment housed within the ground floor of the proposed MLS building is extremely sensitive to vibration, acoustic and electromagnetic interference (EMI). Following EMI and Vibration assessments carried out by specialist sub-consultants at potential sites on both the Main Campus and Innovation Campus, the proposed Ovals Carpark site was identified as most technically compliant to meet the stringent environmental stability requirements of the specialist equipment to be housed within the proposed MLS Building.
	Network Capacity / Connection With the new building the applicant for the future proposed development of the site will need to submit an application for connection of additional load via Endeavour Energy's Network Connections Branch to carry out the final load assessment and the method of supply will be determined. Depending on the outcome of the assessment, any required padmount or indoor / chamber substation will need to be located within the property (in a suitable and accessible location) and be protected (including any associated cabling) by an easement and associated restrictions benefiting and gifted to Endeavour Energy.	The level 3 ASP has submitted the application for connection, but has not yet received a response from Endeavour Energy.



Organisation	Issue	Response
	 Easement Management / Network Access Endeavour Energy's electrical easement requirements: Not install or permit to be installed any services or structures within the easement site. Not alter the surface level of the easement site. Not do or permit to be done anything that restricts access to the easement site without the prior written permission of Endeavour Energy and in accordance with such conditions as Endeavour Energy may reasonably impose. 	A letter from Endeavour Energy is provided indicating agreement for the MLS Building to be built over the Endeavour Energy easement. The extent of easements across the site are being developed as part of the level 3 ASP design in accordance with Endeavour Energy requirements.
	Vegetation Management Only low growing shrubs not exceeding 3.0 metres in height, ground covers and smaller shrubs, with non-invasive root systems are to be planted in proximity to electrical infrastructure.	Applicant accepts a condition of approval to this effect.
	Dial before You Dig Before commencing any underground activity the applicant is required to obtain advice from the Dial before You Dig 1100 service in accordance with the requirements of the Electricity Supply Act 1995 (NSW) and associated Regulations.	DBYD was completed and issued to the project team. In addition, subsurface utility location surveys have been undertaken across the development site and utilities shown on the site survey.
	Demolition Demolition work is to be carried out in accordance with Australian Standard AS2601: The demolition of structures (AS 2601).	Applicant accepts a condition of consent to this effect
	Public Safety Carry out work in accordance with Endeavour Energy's public safety training resources	Applicant accepts a condition of consent to this effect. The level 3 ASP design will be designed in accordance with EE. A Level 1 ASP will be engaged to carry out the works in accordance with EE requirements and the level 3 ASP design



Organisation	Issue	Response
	Emergency Contact	
	The applicant should note the Emergencies Telephone is 131 003 which can be contacted 24 hours/7 days.	Emergency contacts have been included in the updated CMP



Organisation	Issue	Response
Roads and Maritime Services	P5 Car Park Extension/ Mount Ousley Interchange The P5 car park extension on the northern side of the university campus would lose spaces should the Mount Ousley Interchange be built. RMS notes that the loss of parking spaces cannot be managed easily without the loss of other facilities.	RMS were contacted to define the impact of the Mt Ousley Interchange on the current and future car parking within UOW Campus. The current designs will result in the loss of approximately 50 spaces within the P5 extension car park according to the RMS. RMS and UOW have met to discuss the interchange and as a result RMS are reviewing the current alignment strategy which may result in a decrease in the impact on UOW Car parking.
		UOW have secured a lease with TAFE NSW for approximately 150 spaces to make up for the car parks that may be lost as a result of the proposed development and interchange. This leasing arrangement will provide for an interim solution until UOW proceed with the planned continued car parking strategy as outlined in the UOW Master Plan. Evidence of this arrangement is provided as part of this response in the form of a letter from TAFE to UOW.
	RMS request more information on how the higher demand for spaces would be catered for within the site.	The UOW 2016-2036 Wollongong Campus Master Plan states the following: 'Over the next 20 years the campus will maintain existing levels of car parking provision on a space per Equivalent Full-Time Student Load basis. On-site car parking will be consolidated into key multi-deck and underground locations, freeing up the core campus for new academic buildings and improved public realm. Convenient, accessible and affordable car parking will continue to be supplied for those who need it, such as service and contractor vehicles, disabled users and regional students.'
		The car parking provision across the campus will increase the available car parking by 272 spaces by 2018 with a combination of consolidation of car parking and new car parking infrastructure. Car parking on campus will continue to be developed with an extra 330 spaces available by 2036. This will maintain the current 5.4 Equivalent Full-Time Student Load per space ratio.
		In addition to the additional cap parking spaces UOW are seeking to further reduce car parking demand utilising the following strategies detailed in the UOW Transport Survey 2015 – Survey and Strategy Summary:
		 Improve walking, cycling and public transport options (infrastructure, facilities and services). Increase the on-campus residential population. Car and bike sharing facilities will be available as part of the new accommodation development.
		 Encourage car pooling with priority parking. Introduce new pricing methods.



Additional details/justification on how the building space that will be left by 69 staff from Building 18 and the Illawarra Health and Medical Research Institute Building will not be used by additional staff and students and thus not require additional parking within	The existing departments that will remain in Building 18 and the Illawarra Health and Medical Research Institute will initially redistribute the existing lab equipment to provide more spacious working and research environments for existing staff and student numbers only. In the short term, no further staff will be provided for in those buildings and the space is welcomed by the schools as the current working and research arrangements are constricted and inefficient.
space that will be left by 69 staff from Building 18 and the Illawarra Health and Medical Research Institute Building will not be used by additional staff and students and thus not require additional parking within	Institute will initially redistribute the existing lab equipment to provide more spacious working and research environments for existing staff and student numbers only. In the short term, no further staff will be provided for in those buildings and the space is welcomed by the schools as the current working and research
the site.	
	In the longer term, to facilitate implementation of UOW's Development Master Plan, existing staff and students will need to relocate (decant) from other buildings into any spare capacity in Building 18 and the Illawarra Health and Medical Research Institute to enable demolition or refurbishment projects. In summary, it is intended that any vacated spaces created as a result of the MLS project will be available as decant space.
Details are required on where staff that are currently located at Building 42 (which is proposed to be demolished) will be located on site.	Regarding staff who were accommodated in Building 42, the first floor (teaching laboratories) of this building had previously been vacated when the School of Biology relocated. The remaining occupants (School of Earth and Environmental Sciences field store and analytical labs) were absorbed into other university spaces.
king Arrangements	
RMS is still of the view that an overall assessment of the University's car parking requirements and provision should be undertaken as per RMS's input into the SEARs.	 A Campus wide car parking assessment and strategy was undertaken to inform the UOW 2016-2036 Wollongong Campus Master Plan. The report fed into the master plan which results in an increase in car parking to maintain the existing ratio of car parks per Equivalent Full-Time Student Load of 5.4. The master plan also identifies existing and ongoing strategies to reduce car dependency including: Improve walking, cycling and public transport options (infrastructure, facilities and services). Increase the on-campus residential population. Car and bike sharing facilities will be available as part of the new accommodation development. Encourage car pooling with priority parking. Introduce new pricing methods.
kin RM the	ated at Building 42 (which is proposed to be molished) will be located on site. g Arrangements IS is still of the view that an overall assessment of University's car parking requirements and evision should be undertaken as per RMS's input



Organisation	Issue	Response
Sydney Water	■ Building Plan Approval ■ The approved plans must be submitted to the Sydney Water Tap in™ online service to determine whether the development will affect any Sydney Water sewer or water main, stormwater drains and/or easement, and if further requirements need to be met.	Applicant accepts a condition of consent to this effect
	Section 73 Certificate A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water.	Applicant accepts a condition of consent to this effect.
Public submission Consideration be given to the University assisting the local community by making appropriate S94 contributions whether monetary or in kind to ensure that the access to the proposed northern campus entrance is available to		UOW are in the process of upgrading the campus car parking in line with the UOW 2016-2036 Wollongong Campus Master Plan. This plan includes new car parks across the campus including one adjacent to the new norther access road. The Mt Ousley interchange is currently undergoing design phases by the RMS and it is understood that the
	staff, students and commuters from the southern parts of the Illawarra via a new off-ramp from the M1 and that the RMS option 1 parking be the preferred location for the interchange construction.	design is being coordinated with UOW. The final location and layout of the interchange will be progressed along with the statutory requirements. The design and location of the interchange and associated car parking is not part of the project subject of this application. UOW have applied to be exempt from S94 contributions for the reasons outlined in the EIS. The exemption is considered to be justified due to the provision of facilities, including car parking, that is used by the wider
		community.



The submission from Wollongong City Council states that "Should the Department proceed to issue the Project Approval; Council requests the following conditions be considered for inclusion". The conditions of consent proposed by Council are described in the following table, along with responses where required.

Wollongong City Council	Project Approval Conditions	Acceptability
Traffic & Parking	 Car Parking and Access The development should make provision for a total of 129 car parking spaces (including 2 disabled car parking spaces), 6 motorbike spaces and 16 bicycle spaces. This requirement shall be reflected on final plans prior to commencement of works. The approved parking spaces should be maintained to the satisfaction of Council, at all times. 	Condition Accepted
	The 129 car parking spaces required for the development should be constructed and operational prior to the commencement of works on the proposed development.	Condition Accepted
	The parking dimensions, internal circulation, aisle widths, kerb splay comets, head clearance heights, ramp widths and grades of the car parking areas should be in conformity with the current relevant Australian Standard AS52890.1. Details of such compliance should be reflected on final plans prior to commencement of works.	The revised plans for the eastern open car park comply
	Bicycle parking facilities should have adequate weather protection and provide the appropriate level of security as required by the current relevant Australian Standard AS452890.3 – Bicycle Parking Facilities and Ausroads Guide to Traffic Management Part 11: Parking (Commentary 9: C9.2). Details of such compliance should be reflected on final plans prior to commencement of works.	Condition Accepted
	Each disabled person's parking space should comply with the current relevant Australian Standard AS2890.6 - Off-street parking for people with disabilities. Details of such compliance should be reflected on final plans prior to commencement of works.	The revised plans for the eastern open car park comply
	The development should make provision for suitable barriers, line-marking and painted signage delineating vehicular flow movements within the car parking areas. These details should be reflected on final plans prior to commencement of works.	The revised plans for the eastern open car park comply.



Wollongong City Council	Project Approval Conditions	Acceptability
	Gradients of ramps and access driveways should be provided in accordance with the current relevant Australian Standard AS2890.1 - Off Street Car Parking. Details of such compliance should be reflected on final plans prior to commencement of works.	Condition Accepted
Landscape	Restricted Vegetation Removal	
	The removal of trees and other vegetation from the site within three (3) metres of the approved buildings is permitted. The pruning of trees within three (3) metres of the approved buildings is also permitted in accordance with AS 4373-2007 Pruning of -Amenity Trees. No other trees or vegetation should be removed or pruned, without the prior written approval of Wollongong City Council.	Recommend as follows. The removal of trees and other vegetation from the site within three (3) metres of the approved buildings or areas required for access around those buildings is permitted.
	Tree Retention / Removal	
	 Any branch pruning permitted should be carried out by a qualified arborist in accordance with Australian Standard AS437 3-2007. All tree protection measures should be installed in accordance with Australian standard 454790- 2009 Protection of Trees on development Sites. All recommendations in Arborist's Report by Paul Vezgoff dated 22 May 2017 should be implemented including and not restricted to: remedial tree pruning, dead wooding, fencing and signage, sediment buffer, stem protection, establishing tree protection zones and watering and root hormone application if required. The removal of trees numbered 7-77, 13-21, and 45-49 is permitted as indicated within the Arborist's report Paul Vezgoff dated 22 May 2017. No other trees should be removed without prior written approval of Wollongong City Council. 	Recommend addition as follows. All recommendations in Arborist's Report by Paul Vezgoff dated 22 May 2017 should be implemented including and not restricted to: remedial tree pruning, dead wooding, fencing and signage, sediment buffer, stem protection, establishing tree protection zones and watering and root hormone application if required. Alternative methods for ensuring tree health shall be approved by a qualified arborist prior to any works commencing.
	Landscaping	
	The submission of a final Landscape Plan should be required in accordance with the requirements of Wollongong City Council DCP 2009 Chapter E6 and the approved Landscape Plan (i.e. as part of this consent).	Condition Accepted
	The submission of certification from a suitably qualified and experienced landscape designer and drainage consultant should be provided prior to commencement of works confirming that the landscape plan and the drainage plan are compatible.	



Wollongong City Council	Project Approval Conditions	Acceptability
	The implementation of a landscape maintenance program in accordance with the approved Landscape Plan for a minimum period of 12 months should be undertaken to ensure that all landscape work becomes well established by regular maintenance.	
	Tree Protection and Management	
	 The existing trees to be retained upon the subject properly and any trees on adjoining properties should not be impacted upon during the excavation or construction phases of the development. This will require the installation and maintenance of appropriate tree protection measures, including (but not necessarily limited to) the following: Installation of Tree Protection Fencing - Protective fencing shall be 1.8 metre cyclone chainmesh fence, 	Condition Accepted
	with posts and portable concrete footings. Details and location of protective fencing should be reflected on final plans prior to commencement of works.	
	Supervising Arborist - Tree Inspection and Installation of Tree Protection Measures	
	Prior to the commencement of any demolition, excavation or construction works, the supervising arborist should certify in writing that tree protection measures have been inspected and installed in accordance with the arborist's recommendations.	Condition Accepted
	Certification from Arborist - Adequate Protection of Trees to be Retained	
	 A qualified arborist should be engaged for the supervision of all on-site excavation or land clearing works. The submission of appropriate certification from the appointed arborist should be provided which confirms that all trees and other vegetation to be retained are protected by fencing and other measures, prior to the commencement of any such excavation or land clearing works. 	Condition Accepted
	Provision of Taps/Irrigation System	
	The provision of common taps and/or an irrigation system should be required to guarantee that all landscape works are adequately watered. The location of common taps and or irrigation system should be implemented in accordance with the approved Landscape Plan.	Condition Accepted
	The developer should make compensatory provision for the trees required to be removed as a result of the development. In this regard, 20 x 100 litre container mature plant stock should be placed throughout the site. The suggested species are Illawarra escarpment species.	Only 12 semi advances species can be located on the site due to spatial constraints. Is the project able to plant an additional 8 trees elsewhere on the campus to compensate?
	Completion of Landscape Works	Condition Accepted



Wollongong City Council	Project Approval Conditions	Acceptability
	The completion of the landscaping works as per the final approved Landscape Plan should be required.	
Stormwater	Overflow paths should be provided to allow for flows of water in excess of the capacity of the pipe/drainage system draining the land, as well as from any detention storage on the land. Blocked pipe situations with 1 in 100 year ARI events should be incorporated in the design. Overflow paths should also be provided in low points and depressions. This requirement should be reflected on final plans prior to commencement of works.	Condition Accepted Design is based on minimal change to existing overland flow routes
	Habitable floor levels should be constructed at a minimum of the adjacent 100 year flood level as determined by a suitably qualified civil engineer plus 0.5m freeboard. This requirement should be reflected on final plans prior to commencement of works.	Condition Accepted This is the basis of the advice provided to date
	Any portion of the building or structure below the adjacent 100 year flood level as determined by a suitably qualified civil engineer plus 0.5m free boat should be built from flood compatible materials. Where materials are proposed and not listed in Appendix B of Chapter E13 of the Wollongong DCP2009, relevant documentation from the manufacturer should be provided demonstrating that the materials satisfy the definition of 'flood compatible materials' as stated in Chapter E13 of the Wollongong DCP2009. These requirements should be reflected on final plans prior to commencement of works.	This condition is not considered to be appropriate. The pre-development flood model (Cardno Flood Report 2017) shows that in the 100 year storm the flood hazard is low, this indicates sufficiently shallow and/or slow moving water that an adult could reasonably wade through the water. As such, the risk of damage to the building caused by floating debris is minimal. The post development flood model indicates minimal change to the flood characteristics and therefore we do not believe that this needs to be considered in the structural design.
	Detailed Drainage Design	
	A detailed drainage design should be submitted. This detailed drainage design should be prepared by a suitably qualified civil engineer in accordance with Chapter 81.4 of Wollongong City Council's Development Control Plan 2009.	Condition Accepted The basis of the stormwater design is maintaining existing flow capacity
	Structural Design Report	
	The submission of a design report from a suitably qualified and experienced structural engineer should be provided. This design report should explain the design features to be adopted in the construction of the proposed development such that a structural certification can be issued by the engineer at the completion	This condition is amended by deleting strikethrough text.



Wollongong City Council	Project Approval Conditions	Acceptability
	of the works, in accordance with this consent. The structural certification should be required to verify that the development can withstand the forces of floodwater, debris and buoyancy up to and including the adjacent 100 year flood level as determined by a suitably qualified civil engineer plus 0.5m freeboard.	The pre-development flood model (Cardno Flood Report 2017) shows that in the 100 year storm the flood hazard is low, this indicates sufficiently shallow and/or slow moving water that an adult could reasonably wade through the water. As such, the risk of damage to the building caused by floating debris is minimal. The post development flood model indicates minimal change to the flood characteristics and therefore we do not believe that this needs to be considered in the structural design.
	Survey Report for Floor Levels	
	A Survey Report should be submitted verifying that each floor level accords with the floor levels as per the approved plans. The survey should be undertaken after the formwork has been completed and prior to the pouring of concrete for each respective level of the building (if the building involves more than one level). All levels should relate to Australian Height Datum.	Condition Accepted
	Supervision of Engineering Works	
	All engineering works associated with the development should be carried out under the supervision of a practicing engineer and or registered surveyor.	Condition Accepted
	No Adverse Run-off Impacts on Adjoining Properties	
	The design of the development should ensure there are no adverse effects to adjoining properties or upon the land as a result of flood or stormwater run-off. Attention should be paid to ensure adequate protection for buildings against the ingress of surface run-off.	Condition Accepted Cardno to produce the post-development flood model based on final design
	Drainage	
	The developer should obtain a certificate of Hydraulic Compliance (using Council's M19 form) from a suitably qualified civil engineer, to confirm that all stormwater drainage works have been constructed in accordance with the approved plans. In addition, full works-as-executed plans, prepared and signed by a	Condition Accepted



Wollongong City Council	Project Approval Conditions	Acceptability
	Registered Surveyor should be submitted. These plans and certification should satisfy all the stormwater requirements stated in Chapter E14 of the Wollongong DCP2009.	
	Structural Soundness Certification	
	The submission of a report from a suitably qualified and experienced structural engineer should be provided. This report is required to verify that the development can withstand the forces of floodwater, debris and buoyancy up to and including the adjacent 100-year flood level as determined by a suitably qualified civil engineer plus 0.5m freeboard.	This condition is not considered to be appropriate. The pre-development flood model (Cardno Flood Report 2017) shows that for the 1 in 100 year storm the flood hazard is low, this indicates sufficiently shallow and/or slow moving water that an adult could reasonably wade through the water. As such, the risk of damage to the building caused by floating debris is minimal. The post development flood model indicates minimal change to the flood characteristics and therefore we do not believe that this needs to be considered in the structural design.