COCHLEAR GLOBAL HEADQUARTERS – MACQUARIE UNIVERSITY PROJECT APPLICATION
RESPONSE TO SUBMISSIONS

KEY ISSUE / SUBMITTOR	COMMENTS MADE	RESPONSE
Department of Planning	The Department seeks the following additional information: a) Confirm whether new doorways and/or other building alterations are to be provided for the purpose of access and the relocated playground of the Waratah Cottage childcare centre.	a) Revised access and playground arrangements for both the "Gumnut Cottage" and "Waratah" childcare centres is as shown on the attached new / revised plan "Overall Landscape Plan" (drawing la-501 revision a08) prepared by DEM dated 7 October 2008. This demonstrates that drop-off, parking, and access is readily achieved for the centres as a result of the development and has been reconfigured to ensure access is optimised. Relocated playground areas have been provided for the centres at the same area of playground area lost, or greater. See also the submission made by Macquarie University during the exhibition period concerning the operation of the child care centres during construction and the level of consultation undertaken as part of the project.
	b) Generally describe the likely impact on the Waratah and Gumnut childcare centres of future proposal stages, given that the submitted proposal is Stage 1. Give the timing of these future stages, if known.	b) This project is limited to Stage 1 only. The timing of future stages is not definitively known at this point.
	c) Quantify the net impact on car parking for the immediate site and the Macquarie University campus as a whole, taking into account the number of spaces being replaced, in terms of: - total spaces; - number of spaces per square metre for the childcare centres; and - number of spaces per student/staff/other regular users for the campus as a whole and for the childcare centres.	c) The net impact on car parking resulting from all proposed developments on the University site should be co-ordinated and addressed in the Macquarie University Concept Plan (MUCP). Please see Cardno Eppell Olsen's detailed response as attached.
	d) Clarify the proposed timing and detail of the identified road intersection upgrades.	d) Macquarie University acknowledges that the proposed upgrade works at the intersection of Waterloo Road/Herring Road will be incorporated into the revised TMAP, currently being prepared for the MUCP. Macquarie University has undertaken to include the proposed works in the Memorandum of Understanding (MoU) for the University and City of Ryde Voluntary Planning Agreement (VPA).

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Department of Planning	e) Confirm whether the NSW Department of Water and Energy specifications for a riparian buffer are being complied with.	e) The project complies with the intent of the NSW Department of Water and Energy specifications for the riparian buffer. A Vegetation Management Plan (VMP) Report has been prepared for the project and submitted in accordance with the Guidelines for controlled activities. The VMP addresses the specific requirements of the Department of Natural Resources (DNR), as outlined in "DNR Guidelines for Controlled Activities Vegetation Management Plans: March 2007". It firstly identifies the extent of the riparian zone and the Department of Water and Energy (DWE) requirements. DWE has sought a Category 2 outcome, which is a 20 metre wide core riparian zone (measured from top of bank) plus a 10m wide vegetated buffer. DWE has previously acknowledged that there are existing pinch points along University Creek, and that there may be some flexibility with the riparian corridor width to accommodate the new development as pinch points. DWE has stated that, based on the guidelines and application of a pinch point approach, the proposed design conforms with the riparian buffer guidelines/specifications. The project has been designed for a 20 metre wide core riparian zone with a 10 metre wide vegetated buffer adjacent University Creek with some pinch points. Please see DEM's response to this issue attached.
	f) Provide quantitative evidence that the proposed gross pollutant trap and filtration system will be adequate to manage predicted water flows (ie. will not be in 'overflow' mode) the majority of the time.	f) Costin Roe Consulting has demonstrated (in its detailed response to this issue - attached) that the proposed gross pollutant trap and filtration unit are able to adequately manage the predicted stormwater flows for the majority of the time therefore effectively managing the collection and retention of pollutants that are present in the collected stormwater run-off.
	g) Provide a construction noise management plan that includes commitments for maximum noise impacts and proposed restrictions on noisy activities, e.g. duration and frequency.	g) The submitted Acoustic Assessment (by Heggies at Appendix **P**) and the Preliminary Construction Plan (by CRI at Appendix **M**) address these issues.

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RTA / SRDAC	The Sydney Regional Development Advisory Committee (SRDAC) considered the traffic impact of this application at its meeting on the 13 August 2008. Below are the Committee's recommendations and RTA's comments on the subject application: 1. As identified within the Traffic Report, the additional traffic generated by the proposed development will worsen the operational performance of the following two key intersections: - Epping Road / Balaclava Road; and - Waterloo Road / Herring Road However, the RTA's (Bus Network Development) is proposing to implement Stage 1 improvement works to the Epping Road / Balaclava Road intersection within the next 12 months. In lieu of the RTA's improvements to this intersection, the RTA recommends the following remedial improvements to the Waterloo Road / Herring Road intersection. <u>Waterloo Road / Herring Road</u> - Provide an additional short (55m) right turn lane in the Herring Road (north) leg; - Modify the Herring Road (north) leg to provide the following lane arrangement (LT/T/T/R); - Remove the kerbside parking (ie: Provide full time No Stopping) along Herring Road south of the Waterloo Road intersection (ie: southbound departure) for a distance of (minimum 150m) to ensure that three through southbound lanes are provided. (Note: The provision of full time No Stopping will be subject to the approval of Council's Local Traffic Committee); - Amend the Waterloo Road (east) leg to provide the following changes: a) The westbound approach is amended from the existing (L/LT/R) to the following configuration of (L/L/T/R). b) The change in point (a) above will require the provision of an 80m long right turn bay. The provision of this bay can be accommodated by reducing the existing (eastbound) three lane departure along Waterloo Road from the signals at (Waterloo Road/Herring Road) down to a localised two lane departure in the area of the proposed right turn bay. It is strongly recommended that the applicant (Cochlear) and the Macquarie University make suitable arrangements for the funding / implementation of this work to ensure that the signal reconstruction has been completed in advance of the issue of the occupation certificate.	1. Macquarie University acknowledges that the proposed upgrade works at the intersection of Waterloo Road/Herring Road will be incorporated into the revised TMAP, currently being prepared for the MUCP. Macquarie University has undertaken to include the proposed works in the Memorandum of Understanding (MoU) for the University and City of Ryde (CoR) Voluntary Planning Agreement's (VPA). Please see Cardno Eppell Olsen's detailed response as attached.

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RTA / SRDAC	2. The Department should ensure that Cochlear implements Travel Demand Management initiatives (ie: carpooling, teleworking, etc) to reduce demand for car parking and traffic generation.	2. Cochlear will work towards the achievement of a 40% mode share target through the implementation of tailored travel demand management measures contained within the Cochlear Work Place Travel Plan (WPTP). Cochlear will commence implementation of the WPTP at the occupation phase of the development, and continue to promote the achievement of the targets throughout occupancy of the site. The detailed package of travel demand measures will be prepared in consultation with Cochlear staff to provide specific actions to address the needs of staff. The measures will be fully elaborated in the WPTP report, but it is envisaged that some of the likely travel demand measures will include (but not be limited to): ▪ Rideshare (car pool) opportunities ▪ Personalised journey plans ▪ Forming a bicycle user group Please see Cardno Eppell Olsen's detailed response as attached.
	3. In accordance with the Macquarie Park Corridor DCP, the applicant must develop a Workplace Travel Plan (WPTP) prior to the occupation of the site.	3. As above.
	4. The Department of Planning should ensure that secure bicycle parking is provided on site together with change facilities for employees.	4. Parking for 152 bicycles will be provided at the Cochlear development. This facility will be conveniently accessed and supported by a changing facility. The cycle storage will be covered and monitored by CCTV and additional measures to encourage cycling will be included in the WPTP. To assist staff to use sustainable travel from the first day of occupation, consultation will be undertaken with the University regarding the early implementation of the proposed off-road segregated bicycle path along University Avenue as shown in Short Term Option of the Macquarie University Bicycle Network Masterplan. Please see Cardno Eppell Olsen's detailed response as attached and the attached plan in the letter by the Director of the Office of Major Projects at Macquarie University as appended to this document.
	5. To minimise driver confusion and to ensure that localised traffic efficiency is not undermined by the development proposal it is recommended that real time information for each car parking facility be provided at or near the car park accesses for all parking levels.	5. Cochlear will seek to provide / allocate parking areas to staff to minimise confusion rather than provide real time information for multiple parking areas. This matter has been considered at length, and the vast majority of people parking at Cochlear will be staff in allocated locations / spaces. Please see Cardno Eppell Olsen's detailed response as attached.
	6. The development must be consistent with and not preclude the suggested proposals described within the Macquarie University Concept Plan (MP 06_0016).	6. The Cochlear development is consistent with and will not preclude the suggested proposals described within the MUCP.

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RTA / SRDAC	7. Carparking provision to the Department of Planning's satisfaction and provided in accordance with Ryde Council's DCP.	7. The application of the current Ryde DCP 2006 Section 9.3 – Parking would require the provision of a minimum of 703 parking spaces for the Cochlear development. This is in contradiction with the maximum targets set in Ryde LEP 137. However, the subject site falls within the area identified to be included in the Draft DCP and the Macquarie University Concept Plan. The Draft DCP states that car parking for commercial and industrial activities is to be provided for in accordance with the rates contained in the Ryde Planning Scheme. The Ryde Planning Scheme Ordinance indicates that off-street parking requirements should be in accordance with LEP 137. The proposed project site is not included in the Macquarie Park Corridor Parking Restrictions Plan provided in LEP 137. It is considered that applying the parking rate applicable to the area immediately to the south of the subject site (1 per 46m^2), as indicated in LEP 137, would be applicable to this site and therefore appropriate for use in calculating maximum parking provision. The Macquarie University Concept Plan will guide the development of the University precinct for the next 20-25 years. When adopted, the Plan will act as the DCP for Macquarie University lands, currently not covered by existing City of Ryde planning instruments. The Concept Plan proposes that parking spaces at 'Station South Precinct' are provided at a ratio of 1 space per 46m^2. Please see Cardno Eppell Olsen's detailed response as attached.
	8. Off street parking associated with the proposed development (including driveways, grades, aisle widths; aisle lengths, turning paths, sight distance requirements, and parking bay dimensions) should be designed in accordance with AS 2890.1 - 2004 and AS 2890.2 - 2002 for heavy vehicles.	8. Noted. Compliance with these is included as part of the Statement of Commitments.
	9. The proposed changes to the signalised intersection of Waterloo Road / Herring Road shall be designed to meet RTA's requirements and endorsed by a suitably qualified and chartered Engineer (i.e. who is registered with the Institute of Engineers, Australia). The design requirements shall be in accordance with the RTA's Road Design Guide and other Australian Codes of Practice. The certified copies of the traffic signal design plans shall be submitted to the RTA for consideration and approval prior to the release of the occupation certificate and commencement of road works. The RTA fees for administration, plan checking, signal works inspections and project management shall be paid by the developer prior to the commencement of works. The developer may be required to enter into a Works Authorisation Deed (WAD) for the abovementioned works. If required, please note that the Works Authorisation Deed (WAD) will need to be executed prior to the RTA's assessment of the detailed traffic signal design plans.	9. Macquarie University acknowledges that the proposed upgrade works at the intersection of Waterloo Road/Herring Road will be incorporated into the revised TMAP, currently being prepared for the MUCP. Macquarie University has undertaken to include the proposed works in the Memorandum of Understanding (MoU) for the University and City of Ryde (CoR) Voluntary Planning Agreement's (VPA). Please see Cardno Eppell Olsen's detailed response as attached.

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RTA / SRDAC	10. The developer shall be responsible for all public utility adjustment/relocation works, necessitated by the above work and as required by the various public utility authorities and/or their agents.	10. As above.
	11. All works / regulatory signposting associated with the proposed development shall be at no cost to the RTA.	11. It is noted that any costs as a result of this development for signposting, will be at no cost to the RTA.
DECC (Flooding)	As previously stated in the Department's submission regarding the proposed Macquarie University State Significant Site and Concept Plan proposal, any development should be in accordance with the State Government's Flood Prone Land Policy. The policy is merit based and recognises that if all development applications and proposals for rezonings for flood prone land are assessed according to rigid and prescriptive criteria, some appropriate proposals may be unreasonably disallowed or restricted, and equally, quite inappropriate proposals may be approved. Under other circumstances, Local Government is the approving authority for a proposal such as this. The flooding risks and benefits would be assessed in terms of Council's Floodplain Management Plan. It is noted that the proposal has been developed with regard to the issues raised in the Department's previous submission. Under the Government's policy, assessing the risks and benefits of the proposal remains a matter for the approving authority.	Flood modelling of the catchment area surrounding the proposed development has previously been undertaken by Costin Roe Consulting. The result of this modelling indicates that the 100 year ARI flood level adjacent to the proposed development would be RL58.20. The proposed development is located well above these predicted flood levels with Basement B1 at FFL59.25. The development has adequate freeboard to limit any detrimental effects of flooding. The design of the proposed development is in accordance with the NSW State Government Flood Prone Land Policy and the Ryde City Council's floodplain management plan.

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DECC (Contamination Sampling, analysis and investigation)	DECC considers that further sampling, analysis and investigation work is required for the proposal. Further investigations for the site should be undertaken in accordance with the NSW DEC (2005) *Guidelines for Assessing Former Orchards and Market Gardens*. The contamination assessment undertaken by Douglas Partners does not appear to have taken this guideline into account. The majority of samples analysed were from fill material. Three samples from natural soils were analysed for heavy metals and only one of these for organochlorine pesticides. These samples were not collected from the interface of fill and original soil in accordance with the guidelines. Furthermore, any excavated material that needs to be removed off-site will need to be adequately analysed and compared against the new NSW DECC (2008) *Waste classification guidelines* as the soil laboratory results to date gave only a preliminary classification of the fill material as 'inert waste' and natural material as virgin excavated natural material. In addition, further groundwater investigation should be undertaken to ascertain the quality of groundwater associated with previous site activities and any potential for migration. DECC agrees that the likelihood of potential contamination of the site is reasonably low. However, based on previous site activities and the recommended sampling density in the NSW EPA (1995) *Sampling design guidelines* an additional Phase 2 investigation is required to confirm the site's suitability for the proposed development. DECC also agrees with the additional phase 2 investigation scope recommended in the Phase 1 Contamination Assessment. This will involve additional soil sampling locations, installing additional groundwater wells and collecting surface water samples from the open water-course along the south-eastern boundary of the site.	A Phase 2 Contamination Assessment (by Douglas Partners) has been prepared to satisfy this issue. The Assessment is appended to this package. The Phase 2 Contamination assessment included additional soil and groundwater contamination assessment in accordance with the NSW EPA (1995) "sampling design guidelines" to confirm the site's suitability for the proposed development. The report also provided an in-situ waste classification of the materials encountered. The Phase 2 Assessment has concluded that on the basis of the investigation findings, Douglas Partners considers the potential for contamination associated with the site is very low and the site is suitable for the proposed development from a chemical contamination perspective. Correspondence from Douglas Partners dated 17 September 2008 (see appended) specifically addresses these issues.
DECC (Contamination - Auditing)	DECC recommends that a site auditor be appointed for the site, due to the size and complexity of this project and the potential for contamination associated with previous land uses. Appointment of an auditor will ensure that public health and the environment is protected.	In view of the consistently low levels of contaminants detected in both phases of assessment, and noting the proposed commercial land use, Douglas Partners consider that a site audit is not warranted. See correspondence from Douglas Partners dated 17 September 2008 (see appended)
Sydney Water	Water is supplied to the site from private internal university mains. The development will not be included in the customer contract with Sydney Water. However, the development will need to enter into an extended private service (EPS) agreement with Sydney Water. The EPS will be assessed as part of Sydney Water's Section 73 process.	The Extended Private Service (EPS) agreement will be between Macquarie University and Sydney Water to ensure water is provided to Cochlear Site. Lachlan Project Development Pty Limited has no objections to this arrangement.

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Sydney Water	Sydney Water Servicing Sydney Water will assess the impact of the proposed development when the proponent applies for a Section 73 Certificate. This assessment will enable Sydney Water to specify any works required as a result of the development and to assess whether amplification and/or changes are applicable. Sydney Water requests the Department continue to instruct developers to obtain a Section 73 Certificate from Sydney Water. The developer must fund any adjustments needed to Sydney Water infrastructure as a result any development. The developer should engage a Water Servicing Coordinator to get a Section 73 Certificate and manage the servicing aspects of the development. Details are available from any Sydney Water Customer Centre on 13 20 92 or Sydney Water's website at www.sydneywater.com.au.	Sydney Water Servicing The requirement for a S73 certificate for the site is understood as part of the normal development process. This will be carried out in conjunction with Macquarie University. A commitment to this effect is made in the Statement of Commitments.
	Fire Fighting Capacity Sydney Water does not design nor provide fire-fighting capacity from its systems or consider fire-fighting requirements as part of the Section 73 process. The assessment of fire fighting capability is the responsibility of the applicant and should be carried out separately. However, the applicant must ensure that the water supply arrangements for the development do not adversely impact the existing fire fighting capability of surrounding areas. The development will need to arrange hydraulic consultant to certify the private fire fighting system.	Fire Fighting Capacity The statement made by Sydney Water is understood as part of a normal response and Lachlan Project Development Pty Limited has no objections. Lachlan Project Development Pty Limited commits to ensuring that the water supply arrangements for the development do not adversely impact the existing fire fighting capability of surrounding areas and that the development will need to arrange hydraulic consultant to certify the private fire fighting system.

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Sydney Water	Water Sensitive Urban Design and Ecological Sustainable Development The proposed development does not directly discharge stormwater runoff into any of Sydney Water's stormwater assets. However, the development presents an excellent opportunity to integrate the passage and treatment of stormwater using Water Sensitive Urban Design (WSUD). WSUD links water infrastructure, landscape design and the urban built form. WSUD is more attuned to natural hydrological and ecological process than conventional stormwater design. Sydney Water encourages all developers to implement best practice urban stormwater management using WSUD as summarised below: 1. Treat stormwater runoff to NSW EPA draft best practice treatment objectives; - 80% reduction in Total Suspended Solids - 45% reduction in Total Phosphorus - 45% reduction in Total Nitrogen 2. Maximise stormwater reuse through integrated water cycle management, which can reduce potable water demand and assist in achieving the above pollutant load reduction objectives.	Water Sensitive Urban Design and Ecological Sustainable Development The WSUD objectives highlighted by Sydney Water are able to be achieved by the development. Costin Roe Consulting has previously completed a stormwater management plan for the proposed development taking into account the objectives of WSUD and the NSW EPA draft best practice treatment objectives therefore ensuring that these objectives are achieved in the management of stormwater run-off for the proposed development. The plan addresses the objectives of water sensitive WSUD through the use of the following: - A rainwater reuse tank to maximise the reuse of collected stormwater therefore reducing the demand for potable water, an On Site Detention (OSD) tank to provide attenuation therefore limiting the discharge of stormwater from the site to that of pre-development flows; and - permeable paving to remove pollutants and provide infiltration and a gross pollutant trap and filtration unit to remove pollutants from the collected run-off. Through the use of these measures the following reductions in pollutants are achieved: - 88.8% reduction in Total Suspended Solids - 78.9% reduction in Total Phosphorus - 53.7% reduction in Total Nitrogen.
Sydney Water	Water Conservation Measures Sydney Water encourages the developer to consider the following water saving measures: 1. Installing 3 star WELS rated water efficient showerheads, 6 star WELS rated water tap outlets, 5 star WELS rated urinals and 4 star WELS rated toilet cisterns to all amenities in the proposed development. The performance criteria for the WELS rating are listed below: - Shower heads (9 Litres or less per minute) - Basin tap outlets (4 litres or less per minute) - Urinals (1 litre per flush) - Dual flush toilet suite flush equivalent (4.5/3 litre dual flush cistern or approved dual flush equivalent equivalent). 2. Sydney Water encourages the developer to participate in Sydney Water's Every Drop Counts (EDC) Program. The Program is designed to manage water use and drive water efficiencies in Sydney businesses, government agencies and local government. Through the program, Sydney Water works with business customers to develop innovative and sustainable solutions to reduce overall water consumption, improve operational water efficiency and reduce costs.	Water Conservation Measures The current design is based on water efficient fixtures under the project's Greenstar requirements (including WELS ratings). We confirm that this generally complies with Sydney Water considerations. We also note that the proposal can meet the 6 star WELS rating for tapware with 5.8L/minute. This is slightly grater than the Sydney Water letters table indicating 4L/minute.

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Ministry for Transport	The Ministry recognises that Macquarie University provides significant educational and specialised business opportunities adjoining the Macquarie Park Corridor within the broader Global Arc as defined in the Metropolitan Strategy, draft Inner North SubRegional Strategy and the Urban Transport Statement (UTS). The State Government is responding to this growth and is promoting public transport through initiatives such as the Epping to Chatswood Rail Line and the recently announced North West Metro. Significant planning and investment is also underway for buses servicing the Inner North Sub-Region with development of new interchanges at Castle Hill, Epping and Macquarie University. Implementation of Strategic Bus Corridors which service Macquarie University is also continuing together with Integrated Network Planning (INP) for Bus Contract Region 7. Public consultation regarding the INP is likely to commence in late 2008. The investment by Government in public transport provides the opportunity for individual developments to implement measures that reduce private vehicle trips. The Optus Workplace Travel Plan for their Macquarie Park campus is a good example of the private sector aiming for a high mode share target (43% to non car modes) with tailored actions to achieve this change. A similar mode share target (40% to non car modes) is also proposed in the draft Macquarie Park Traffic Study by Ryde City Council. The Ministry has recently reviewed the Macquarie University Concept Plan and the accompanying Transport Management and Accessibility Plan (TMAP). The Concept Plan recommends a range of positive initiatives for increasing mode share to public transport, which are supported by the Ministry. However, the Ministry has raised a number of serious concerns with the TMAP, which are detailed in the attached advice. Given the interrelationship of the proposal by Cochlear and the Macquarie University Concept Plan, both applications should be assessed concurrently.	Noted. It is our view that whilst there is a correlation between both the Concept Plan and this Project Application, any delays in assessment of the Concept Plan concerning wider-ranging issues should not delay assessment and approval of this application. This application should be assessed on its merits and consistency with the overall Concept Plan. It provides for the first new stage of development within this portion of the campus outside of the academic core. Previous assessments and approvals (such as the Macquarie University Private Hospital and the new Macquarie University Library) have been able to proceed on the basis of wider issues being resolved at a later date (as relevant). It should be noted that the application of Campus-wide transport and traffic initiatives should be seen in the context of facilitating the resolution of the current proposal, commitments made as part of this application, and the long timeframe covered by the Concept Plan to achieve positive transport outcomes (ie over 25-40 years).
	The Ministry has reviewed the environmental assessment which accompanies the proposal and is concerned that the Director General's Requirements have not been fully addressed in the Concept Plan. In this regard, the Ministry's key concerns with the proposal are summarised, as follows:	As addressed below.

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Ministry for Transport	1. The Director General's Requirements include the need to consider measures that promote a modal shift to public transport. The environmental assessment does not adequately address this requirement by not identifying a sustainable mode share target for the proposal or a package of discrete measures that can realise a successful shift in mode share to public transport;	1 & 2. Cochlear will work towards the achievement of a 40% mode share target through the implementation of tailored travel demand management measures contained within the Cochlear Work Place Travel Plan (WPTP). Cochlear will commence implementation of the WPTP at the occupation phase of the development, and continue to promote the achievement of the targets throughout occupancy of the site. The detailed package of travel demand measures will be prepared in consultation with Cochlear staff to provide specific actions to address the needs of staff. The measures will be fully elaborated in the WPTP report, but it is envisaged that some of the likely travel demand measures will include (but not be limited to): ▪ Rideshare (car pool) opportunities ▪ Personalised journey plans ▪ Forming a bicycle user group Please see Cardno Eppell Olsen's detailed response as attached.
	2. The draft Macquarie Park Traffic Study recommends a mode share target of 40% to public transport together with walking and cycling within the Macquarie Park Corridor, which includes the University. The Ministry therefore recommends that further mode share analysis of the proposal be completed using current 2006 Journey to Work Census data;	2. As above.
	3. The interrelationship between car parking and achieving a sustainable mode shift to public transport is not adequately addressed. The Ministry has the following specific concerns with the proposal's car parking provision: - The Ministry notes that the proposal is within close walking distance to Macquarie Station and bus interchange and is also directly adjacent to frequent bus services on University Avenue and Epping Road. Given this high level of accessibility by public transport the Ministry recommends a lower car parking rate (maximum 1space per 80m2);	3. The Ministry's recommendation for a parking rate of a maximum of 1 space per 80m^2 is inconsistent with the parking rates specified in the Ryde Council DCP for developments on adjacent sites, within the Macquarie University Campus and, the Corridor as a whole as previously discussed in the Traffic and Parking Impact Assessment. As stated above, the application of 1 space per 46m^2 GFA is consistent with the parking rates in the Ryde's planning instruments, DCP, and the MUCP. Please see Cardno Eppell Olsen's detailed response as attached.
	- The analysis does not consider what other parking options within the University could be utilised to reduce the overall provision within the subject site. Conversely the analysis does not consider the potential use of other parking facilities to further supplement the overall provision of parking to subject the development and its potential impact on mode share; - These options may include access to adjacent and under utilised parking facilities, which has been identified through surveys in the environmental assessment. Access to University parking for future commercial development should be considered as part of a broader parking strategy for the University as part of the Concept Plan; and	The encouragement of off-site parking is contrary to the achievement of encouragement of employees to seek alternative travel methods. If Cochlear is to achieve the Mode Share Target, then its staff should not be encouraged to utilise University car parking. By containing all staff parking on the Cochlear site exclusively, a number of benefits are achieved such as the ability to monitor journey to work patterns, working towards implementation of the WPTP, allowing successful ride-share and parking containment within the site reducing demand on University parking. Please see Cardno Eppell Olsen's detailed response as attached.

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Ministry for Transport	- The parking analysis does not consider what range of potential Travel Demand Measures (TOM) are variable to reduce parking provision such as car-share and car-pooling spaces. Furthermore, the potential for bicycle travel to reduce parking has not been considered despite the proposal including 152 bike spaces and extensive amenities.	The limited parking supply will actively encourage staff to arrive by public / active transport or car pool. A range of Travel Demand Measures specifically tailored to Cochlear staff needs and supporting a Parking Management strategy will form part of the WPTP to allocate parking to staff in a sustainable manner. Staff without an allocated parking space will have limited ability to park on-site and will be encouraged to consider alternative transport methods through the Cochlear WPTP. Please see Cardno Eppell Olsen's detailed response as attached.
	4. The Optus Work Travel Plan for their Macquarie Park Campus includes an identified mode share target and specific measures to achieve this outcome. A work travel plan should be an element for approval under the concept plan particularly given the relocation of Cochlear from Lane Cove;	4. Cardno will be in a working partnership with Cochlear and its staff to develop a Work Place Travel Plan (WPTP). Cochlear will work towards the achievement of a 40% mode share target through the implementation of tailored travel demand management measures contained within the Cochlear WPTP. Cochlear will commence implementation of the WPTP at the occupation phase of the development, and continue to promote the achievement of the targets throughout occupancy of the site. The detailed package of travel demand measures will be prepared in consultation with Cochlear staff to provide specific actions to address the needs of staff. The measures will be fully elaborated in the WPTP report, but it is envisaged that some of the likely travel demand measures will include (but not be limited to): ▪ Rideshare (car pool) opportunities ▪ Personalised journey plans ▪ Forming a bicycle user group Please see Cardno Eppell Olsen's detailed response as attached.

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Ministry for Transport	5. The need to retain the existing roundabout at the intersection of University and Central Avenues is questioned, and if removed would enable a more prominent and functional bus stop with direct connection to the main pedestrian concourse within the proposal; and	5. The removal of the subject roundabout at University Avenue/Central Avenue and relocation of the bus stop, with associated bus stop pedestrian facilities, will be investigated through the MUCP TMAP Review. Recommendations in relation to internal road circulation within the University and provision of bus only links and improved pedestrian facilities have been put to the University as part of the agency stakeholder submissions for the MUCP. The University will consider these recommendations as part of the TMAP review. The TMAP will consider the staging of other proposed works such as the removal of the multi-storey car parks to the north of the site. These recommendations will be considered as part of the overall proposed access routes (vehicular and pedestrian) for the whole University Campus. It is therefore not appropriate for carparking to be considered in isolation as part of this one development. The University acknowledges the need to consider these issues as part of the MUCP TMAP Review. This will include an assessment of the intersection of University Avenue and Central Avenue using the intersection modelling program SIDRA to ascertain whether the intersection can operate adequately as a priority-control T-junction. To address the potential removal of the bus stop, consultation with the Ministry of Transport and State Transit Authority (STA) is in process, to develop a concept design for the bus stop and pedestrian access. Please see Cardno Eppell Olsen's detailed response as attached.
	6. The provision of cycle access to the subject site along University Avenue is not clear within the proposal. Given the high level of proposed bicycle parking a more detailed design approach is required, which builds on the Macquarie University Concept Plan.	6. Parking for 152 bicycles will be provided at the Cochlear development. This facility will be conveniently accessed and supported by a changing facility. The cycle storage will be covered and monitored by CCTV and additional measures to encourage cycling will be included in the WPTP. To assist staff to use sustainable travel from the first day of occupation, consultation will be undertaken with the University regarding the early implementation of the proposed off-road segregated bicycle path along University Avenue as shown in Short Term Option of the Macquarie University Bicycle Network Masterplan. Refer to attached plan in the letter by the Director of the Office of Major Projects at Macquarie University attached to this document. Please see Cardno Eppell Olsen's detailed response as attached.
	The Ministry would also appreciate continued close consultation on the preparation of any planning agreement which has potential to secure funding for local and regional public transport including priority bus measures and roadside infrastructure.	No planning agreement is sought to be entered into as part of this application. All long-term and Campus-wide traffic and transport outcomes are to be resolved through the Concept Plan and any agreements or contributions resolved as part of that exercise.
	The earlier response to the Macquarie University Concept Plan application was also attached for reference.	Noted – wider Concept Plan-related issues. These will be assessed as part of the Concept Plan.

KEY ISSUE / SUBMITTOR	COMMENTS MADE	RESPONSE
Macquarie University	It may not be clear or obvious within the PA that Macquarie University (MQ) is in partnership with Cochlear in the development and will own the facility at its completion. Throughout the development of the Cochlear design and now PA, U@MQ as the lessee and operators of all of our childcare centres has been constantly consulted. In turn, U@MQ have maintained continuous dialogue with staff and parents of the centres effected by the Cochlear project and all have contributed to the options and decisions associated with the centres. MQ in consultation with U@MQ has decided to temporarily close the Waratah centre for the duration of construction as it was to be reasonably effected, mainly for access and requires significant renovation in the medium term. Children from this centre will be relocated to other centres within MQ for the beginning of the new calendar year. The Gumnut Centre to the west of the development will remain operational with modifications to access including roads, paths, retaining, and lighting and with relocation of minor play areas to the North West replacing the same area affected by the development footprint. The facility will be 'buffered' by a 'non-construction' traffic zone and the main site entrance has been designated to the eastern most road access to minimise the effect of construction traffic to the centre. Delivery of our Part 3A, Concept Plan is at the top of the OMP project portfolio. As an extension of our planning processes OMP will in conjunction with U@MQ be developing a strategic plan for the management and delivery of childcare services at MQ.	Noted. This submission goes a long way in part to describing how Macquarie University would also address the issue of future stages of development (should they arise and should the demolition of the childcare centres to make way for future stages not occur). This submission demonstrates the level of consultation undertaken with the childcare providers and resulting revisions to the overall landscaping plan to cater for these centres as a result of the development.