





### 1. CIP RESPONSE TO SUBMISSIONS

The University of Sydney has reviewed all submissions received during the statutory public exhibition period and the extended (non-statutory) public consultation period of State Significant Application SSD 13\_6123 The University of Sydney Campus Improvement Program 2014-2020 for Camperdown-Darlington Campus.

The University of Sydney's response to submissions has been designed into the following categories in order to differentiate between typology of submissions and relevant disciplines:

- 1. Response to Public Submissions
  - A. Response to Community Submissions
  - B. Response to Organisation Submissions
  - C. Response to Verbal Issues Raised at the University's Community Drop-In Sessions
  - D. Response to Community Briefing Meeting 23 June 2014
- 2. Response to Building Envelope Submissions
- 3. Response to Heritage Submissions
- 4. Response to Traffic & Transport Submissions
- 5. Other Issues
- 6. Mitigation Measures

This submission should be read in conjunction with other accompanying CIP documentation including:

- CIP Urban Design Review
- Amended CIP SSD Plans
- Amended CIP Shadow Analysis
- Grounds Conservation Management Plan
- Campus Concept Landscape Plan







### 1. CIP RESPONSE TO PUBLIC SUBMISSIONS

The University of Sydney has undertaken a significant program of public consultation of the Campus Improvement Program 2014-2020 SSD 13 6123. This has involved the following program:

- A dedicated CIP document exhibition and public display area in the University's foyer of 22 Codrington Street, Darlington from 30 January 2014 to June 2014 inclusive.
- One statutory public exhibition period during February 2014
- One further public consultation period during March 2014
- Note: The University has agreed to the DPE undertaking a further 1-month period of public notification for this CIP 'Response to Submissions' package of documentation
- Seven (7) community drop-in information sessions to discuss the CIP details between February and June 2014
- Open invitation for local residents to convene one-on-one discussions with University staff on the CIP
- Two separate letterbox drops to 1,100 local residences advising on where to source CIP documents, how to meet University staff, and the community drop-in information sessions
- Two VC's Column in the South Sydney Herald (circulation 40,000)
- Dedicated webpage on The University of Sydney website

The following tables addresses written submissions and verbal comments/recommendations made during CIP exhibition and public consultation periods, and are itemized under the following table categories:

- 1. Response to Community Submissions
- 2. Response to Organisation Submissions
- 3. Response to Verbal Issues Raised at the University's 6 Community Drop-In Sessions (February March 2014 inclusive)
- 4. Response to Verbal Issues Raised at the Community Briefing Meeting 23 June 2014



## A. RESPONSE TO COMMUNITY SUBMISSIONS

#### **SUMMARY OF ISSUES**

The CIP received 84 submissions from members of the public. These submissions consisted of 49 modified versions of form letters and 35 original compositions. This section identifies and responds to the issues raised in the submissions. As many of the submissions raised the same issues, they have been responded to thematically and are in no particular order of priority.

ISSUE		CIP RESPONSE
<ol> <li>TRAFFIC</li> <li>The proposed centralised service/delivery not identify, discuss or make any acknow traffic impacts on Shepherd Street as a redevelopment.</li> <li>The reduction of vehicles on campus and movements to periphery will increase prelocal roads which are already strained.</li> <li>The increased use of Shepherd Street for inappropriate.</li> <li>Traffic could also potentially be compound Engineering Building.</li> <li>The implications of proposals (if any) to salong Codrington and Butlin Streets should capacity several times a day and removing pressure on local streets and have a negotherough the generation of noise and emission.</li> <li>The University already encroaches on the another building looming over the houses has the potential of bringing more noise and</li> </ol>	viedgement of potential esult of this particular dipush of vehicle essure on Darlington's or University traffic is totally ended due to the proposed slow or restrict traffic flow ald be addressed. It is already breaching ng car spaces will increase pative impact on residents assions.	Noted. The University's CIP Access Strategy considers a holistic approach to managing access, parking, servicing, pedestrian and cyclist movements and impacts on the adjoining streets.  The rationalisation of service delivery centres brings a significant number of advantages including reducing the number of vehicles accessing the University of Sydney through avoiding the duplication of service deliveries and contractor vehicles.  Disagree: The focus of service vehicles to Shepherd Street/Lander Road will rationalise, limit and consequently reduce vehicle access to the Engineering precinct at one principal point. The removal of the Rose Street car park will also reduce the need for vehicle access along Shepherd Street.  In 2010, the University students and staff had a mode share of 53% public transport use, 26% either walking or cycling and 21% using a private motor car. The University will be implementing parking policy to encourage mode shift to active and public transport modes.  Transport for NSW supports the University's proposed travel demand strategy as the strategy reduces demand for private vehicle travel and increases the use of active transport modes.



ISSUE	CIP RESPONSE
This development cannot take place until the State puts in a traffic control plan for the area.	Further specific and detailed buildings including assessment and mitigation measures for transport, traffic and access and will be subject to future detailed Application or other approval pathways and will be generally consistent with the Stage 1 CIP SSD consent.
	The proposed Engineering envelopes are wholly contained within the existing Engineering Precinct and sited on University owned land.
The University of Sydney needs to do additional work concerning the impact of its student housing and limiting traffic impacts on Darlington before producing its response.	Noted. There is generally low car ownership rates associated with student accommodation facilities. The City of Sydney's requirements for student accommodation include high ratios of bicycle parking facilities per unit.
2. THREE MONTH EXTENSION TO 31 MAY 2014 Request at least another three months extension to the 31 May to comment (form letter).	The statutory public exhibition period is the responsibility of Department of Planning and Environment (DPE) under the provisions of the <i>Environmental Planning and Assessment Act 1979</i> . The University has already granted a further 1 month extension to the DPE period in receiving public submissions. This extension was endorsed by DPE.
3. EXTENSION OF CONSULTATION PERIOD	
Giving the residents only 4 weeks to absorb a wealth of information, understand the implications it may have on the surrounding community, and formulate a meaningful response was simply unfair and unacceptable.	Agreed. In response to community request, the University extended its consultation period by 1 month to the 31 March 2014. This included the provision of three additional (total of 6) <i>Community Drop-In Information Sessions</i> that were staffed by the CIP Project
The University said that it will consider submissions up until 31 March, 2014. It also put on 3 more token Community Information Sessions during that time. We submit this was too little and too late.	Director, Campus Planning Manager, Engineering and Sustainability Manager and Heritage Architect to be able to provide community members with expert advice in relation to the CIP.
The University has not adequately consulted with the Darlington community and informed people of its proposals.	In addition to the formal DPE exhibition period and the University's 1-month extension for consultation, the University has also undertaken the following activities to communicate with the local community:



ISSUE	CIP RESPONSE
Disappointed that changes proposed have not been communicated to myself or the neighbours.	<ul> <li>Two periods of public consultation for 1 month each, and with a further 3<sup>rd</sup> one-month consultation period soon to take place.</li> <li>Two separate letterbox drops to 1,100 local residences</li> <li>Two VC's Column in the South Sydney Herald (circulation 40,000)</li> <li>Dedicated webpage on The University of Sydney website</li> <li>Seven Community Information Drop In Session held in the evenings and on weekends</li> <li>Email to database of local community.</li> <li>CIP Exhibition and documents available in the foyer of 22 Codrington Street, Darlington from 30 January 2014 to date.</li> </ul>
5. CONSULTATION	
Limited consultation for such large scale development.	Specific and regular email invitations were sent to local residents including RAIDD and REDWatch, inviting members to attend all of the University community drop-in sessions scheduled during the DPE statutory public exhibition period as well as the extended/additional University sessions.
Lack of consultation with RAIDD.	Invitations were sent to RAIDD offering members the opportunity to meet with University specialists working on the CIP including the Project Director, Campus Planning Manager, Heritage Architect and the Engineering and Sustainability Manager. The University offered RAIDD alternative arrangements if the scheduled community drop-in times/dates did not suit. On 20 March 2014, RAIDD responded by email to advise that they would not be attending these sessions, did not consider these sessions to constitute consultation, and would not be seeking alternative arrangements as offered by the University.
6. BENEFITS TO THE COMMUNITY     The University has not proposed any real benefits to its neighbours.	Disagree. The CIP contains many tangible benefits to the community including but not limited to:  - Increased local employment opportunities  - Increased community access to and through campus including access to University facilities (library, sport, retail, open space)



ISSUE	CIP RESPONSE
	<ul> <li>Enhanced retail services</li> <li>Creation of gateway entrances that engage the community and invite them to use the campus.</li> <li>Provision of affordable student accommodation on campus - by increasing student accommodation The University of Sydney puts affordable beds into the market, increasing supply (with downward pressure on rents). At the same time each bed the University creates removes one bed from the low end of the private and public rental markets, creating opportunities for key workers to fill these vacancies.</li> <li>Establishment of an Event Management Structure to manage and control all events including reasonable hours of operations and appropriate location of activities</li> <li>Linking cycle ways to the City of Sydney Cycle network</li> <li>Road safe campus for walking, cycling, children's play.</li> </ul>
<ul> <li>7. EUCALYPT TREES</li> <li>Objects to the proposal to remove the stand of eucalypts near the Engineering School on the Darlington Campus.</li> <li>If removed it would accentuate a tunnel effect.</li> <li>Tearing down the grove would have a negative impact on local residents.</li> <li>These trees are important for the birdlife and general ambience that has come to define Darlington.</li> <li>This is a vital stretch of greenery not only providing a buffer for residents but also provides a refuge for native birds and other wildlife.</li> <li>There is insufficient amenity in Darlington and we cannot afford the loss of this vital stand of trees.</li> </ul>	Noted. The University acknowledges the concerns raised in relation to the Eucalypt trees. The University has since revised the CIP Engineering envelope (submitted with this 'Response to Submissions' package to DPE). The revised envelope includes a building envelope setback from Shepherd Street footpath to retain a number of the existing Eucalypts on the University's car park site. The envelope maintains and upgrades the landscaping of the existing Rose Street courtyard located behind the car park site. The CIP also encourages further street trees along Shepherd Street footpath (City of Sydney asset).
There is likelihood of occurrence at the site for the Grey-headed flying fox, the Eastern Bentwing bat, the little Bentwing Bat and the	The Flora and Fauna Report undertaken by Australian Museums Consulting have not identified any threatened species at this site.



	ISSUE	CIP RESPONSE
	Large-eared Pied Bat.	
•	The Eucalypt Grove have very significant aesthetic values and provides a refuge for native birds and other wildlife and provides the only greenery left along the western side of Shepherd Street.	
•	This is the only area that gives us a little privacy from the University.	
•	The University should implement its own planting principles.	The University has an adopted Landscape Manual 2012 which
•	Removal of several large trees from the Engineering Sector is inconsistent with advice in the supporting ecological assessment that recommends maintaining mature trees.	identifies an appropriate range of tree and landscape species for the University campus.
•	These trees also provide a carbon offset and reduce the likelihood of a heat sink occurring in the area.	
8. \$	STUDENT ACCOMMODATION	
•	Queries the proposal to provide a significant increase of affordable student accommodation on campus. The alternative of developing more student accommodation off-campus needs to be properly assessed.  This area will become nothing more than a student slum.	Disagree. The University commissioned a report entitled 'Student Accommodation Study, University of Sydney' by Location IQ (July 2013). The findings of this report revealed that there is a strong business case for the CIP to target the supply of up to 4,000 affordable student accommodation beds on or near the Camperdown-Darlington campus.
		Camperdown-Danington campus.
•	Previously the University Colleges accommodated a lot of students, but these are operated by religious boards and interests. Why aren't these purpose built, delegated areas overwhelmingly shifting their focus, knocking down or extending up and out for more student accommodation on their land?	The University is also currently creating 802 beds off-campus in the Queen Mary Building at Camperdown and will continue to look for further opportunities off-campus to provide this much needed affordable accommodation.
		The University of Sydney Student Services will ensure that appropriate administration, security and well-being models are central to the management of the student accommodation facilities.
		The Residential Colleges (e.g. St Andrews, Wesley, Womens etc.) are independent bodies, are located on separate land titles, and operate under a separate Act from the University. The land they are



ISSUE	CIP RESPONSE
	located on is separate from the University of Sydney although the public perception is that their sites are on the University campus.
9. PROCESS  • The Development Application should not be considered by the Department of Planning and Infrastructure. The University should be instructed to abide by the Director-General's Requirements and consult properly with the local community, taking into account any issues raised and demonstrating the changes made to address each issue, before resubmitting a new State Significant Development Application to the Department. (Form letter)	Disagree. The CIP SSD13_6123 is not a Development Application, but a Stage 1 Concept Strategy for the Camperdown-Darlington campus. The CIP seeks consent for a range of University land uses and precinct based envelopes with indicative urban design principles. The University lodged a test of adequacy of the DGR's with the DPE (formerly Department of Planning & Infrastructure) prior to officially lodging the Campus Improvement Plan application. On 18 December 2013, DPE determined that the CIP satisfactorily addressed the DGRs for the purposes of public exhibition.
<ul> <li>The University has failed to address the DGR's Environmental Assessment Requirements and include:         <ul> <li>Potential environmental impacts associated with the development;</li> <li>Adequate baseline data;</li> <li>Consideration of potential cumulative impacts due to other development in the vicinity; and</li> <li>Measures to avoid minimise and if necessary offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.</li> </ul> </li> </ul>	<ul> <li>The University understands that the DPE has written to relevant community groups advising that no provisions exist under Part 4.1. of the <i>Environmental Planning and Assessment Act 1979</i> requiring an environmental impact statement (EIS) to be reviewed against the DGRs for adequacy. Refer to response above Item 9. <i>Process</i>.</li> <li>The CIP Environmental Impact Statement report includes a section 11 Environmental, Social and Economic Benefits.</li> <li>The CIP Access Strategy addresses the cumulative impacts of traffic and access including a strategy to rationalise and reduce vehicle movements to/through campus and surrounding streets.</li> <li>This CIP 'Response to Submissions' package addresses existing and additional shadow impacts to all CIP precincts.</li> <li>This 'Response to Submissions' package includes an Urban design Review including the visual impact of building envelopes to surrounding streetscapes.</li> </ul>



ISSUE	CIP RESPONSE
10. COMMUNITY INCLUSION	
The University needs to include in its CIP elements that reflect community perspectives on how the surrounding community interact or wish to interact with the University.	Noted. The CIP provides tangible benefits for the surrounding community and will consider community needs in the planning of any new buildings/facilities/open space. The University will continue to work with local and interested community in the future planning.
<ul> <li>The University needs to consider and adequately respond to a range of other concerns raised about their initial CIP by REDWatch and other in the extended community consultation.</li> </ul>	Noted. The University will continue to engage with the community regarding the CIP. All relevant community stakeholders will have access to this CIP Response to Submissions package.
11. APPENDIX N	Annual College (College) to fall out of the control of the college
I am outraged to see my name and others from the community listed in Appendix N Consultation outcomes.	Appendix N specifically relates to following information contained in 10.2 Community Engagement:  "The University has been engaging with the local community throughout 2013 on the Darlington Campus Abercrombie Redevelopment Project. This has resulted in meetings with key stakeholders and local community with the University providing regular communication regarding the development of the Business School, the Abercrombie Student Accommodation project and the Darlington Pedestrian and Bicycle Access Strategy. Details of these community stakeholders can be found at Appendix N."  The names of the people that appear in this list attended the meetings in 2013 as described above.
<ul> <li>12. CURTILAGE AROUND OVAL NO.1</li> <li>Proposed building number 5 should not take precedence over the O'Neill Memorial and the curtilage around Oval No 1 should be preserved as highly significant to the 148 year history of Oval No1.</li> </ul>	The proposed Building N° 5 is a replacement (to DA approved) Grandstand for Oval N° 2 and does not apply to Oval N° 1.  Noted: The CIP Health Precinct proposes the removal of the Victor Coppleson building and to open up vista and views down Western Avenue towards Oval N° 1. The future detailed Application solution for the Health Precinct will address the location and retention of the O'Neill Memorial fronting the south side of Oval N° 1.



	ISSUE	CIP RESPONSE
13.	PROPOSED ENGINEERING BUILDING (SHEPHERD STREET SITE)	
•	The building will increase overshadowing on Shepherd and Calder Streets.	The revised CIP Engineering Precinct building envelope and Shadow Analysis reveals that additional mid-winter shadows will fall upon the
•	The unusual geographical lie of the land finds Calder Road Terraces from no.'s 57-67 facing this site almost directly. The existing two to three story Civil Engineering Building fronting Shepherd Street already shadows terraces from 67 Calder to 153 Shepherd Street in winter.	Shepherd Street carriageway from noon onwards. Additional shadows will be cast upon the dwelling facades of 54 Calder and 146 Shepherd Street between 2:30 and 3:00pm. However, no additional afternoon shadows are created to the rear yards of Shepherd and Calder Street dwellings as these are already caused by existing boundary walls and fences. The revised CIP envelope for
•	The building will create additional noise through its use.	Engineering reduces the projected additional shadows (compared to
•	The building will also significantly reduce the visual amenity of Shepherd Street.	the original CIP) as a consequence of building envelope setbacks.
•	The proposed building height is much higher than the houses opposite and this will further reinforce the fortress like quality of the University.	The CIP has been prepared to deliver the systematic refurbishment and redevelopment of the existing Engineering precinct which is proposed to deliver world class teaching, learning and research facilities over time.
•	This building will bring pollution.	
•	This building will bring crime.	The Engineering faculty is pursuing a program of upgrading old
•	This building will do nothing good to the aesthetics of the area.	building mechanical and other equipment to meet appropriate regulatory requirements for acoustic performance.
•	The University should look at other sites.	
•	Building façade being 3 storeys will impinge on my privacy as it will be a direct line of sight into my backyard.	Further specific and detailed buildings will be subject to future detailed Application or other approval pathways and will be generally consistent with the Stage 1 CIP SSD consent.
•	The building will block my already limited sunlight into my backyard.	The CIP Engineering Precinct is located wholly on University land
•	The building will be populated with people who will drive to work. Currently parking is unobtainable due to University Students.	and within a precinct that has historically been limited ti the Engineering faculty.
•	The building will bring visual pollution.	The Engineering building will be subject to a future detailed
•	The building will do nothing but harm flora and fauna.	Application and the issues raised in the submissions relating to shadowing, privacy, noise impacts, pollution etc. will be addressed through that process.



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•	Why not build the building on the large grassed area on Cadigal Green.  Queries the possibility of opening up a vista from Shepherd Street to Cadigal Green as the planned building will prevent it.  Construction of a building in the current eucalypt grove and car park will increase ground temperatures on the surrounding streets and contribute to overshadowing on Shepherd Street.	The CIP proposes to remove vehicle car parking from the Engineering Rose Street car park and relocate this to campus peripheral parking locations. The CIP Access Strategy aims to reduce unnecessary vehicle access to campus and to increase use of public transport and active (walking and cycle) modes of transport.  Both the existing and revised CIP Engineering building envelope provides a clear pedestrian entry and connection opposite Calder Street, and through to the Engineering Rose Street courtyard and Cadigal Green beyond.
•	The construction of this building close to the road would also cause homes to be overlooked by windows day and night and create light and noise pollution with air conditioning at night.  Objects to the proposed 3 storey building in Shepherd Street and the "multi-disciplinary" building opposite the Sports Centre both of which will overlook resident's homes in Shepherd St, Calder Rd, Lander St, Boundary Rd and Abercrombie St.	Both the existing and revised CIP Engineering building envelopes provide a setback of 16-20 metres from the 4 residential Shepherd Street dwellings opposite the Rose Street car park site. The building envelope site is not intended for student accommodation but for teaching and learning facilities during University daytime hours. The proposed distance is satisfactory to mitigate privacy invasion.
14.	LANDSCAPING (GREEN BUFFER ZONES)  We need buffer zones between the campus and the residential areas.  The University should provide quiet green buffer zones.  The University has not demonstrated how it will provide any buffer zones between proposed new University buildings and activities and residential buildings in order to protect resident's current levels of privacy and from additional noise impact.	The CIP 'Response to Submissions' package includes a Concept Landscape Plan, including the maintenance, upgrade and provision of a variety of landscape elements, throughout the Camperdown-Darlington campus.  The CIP seeks to retain and upgrade the landscape canopy over the Darlington (23% cover) and Camperdown (28% cover) campuses.
•	The University should be required to create green buffer zones between its buildings and residential buildings.  Objects to the destruction of green areas on campus and the replacing of native vegetation by buildings and hard landscaping.  The University should implement its own planting principles.	The University has an adopted Landscape Standards Manual addressing planting, surfaces and outdoor furniture.  The University has recently applied a prohibition of University events at locations where the campus meets residential areas opposite, including along Abercrombie and Shepherd Streets.



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15.	CAR PARKING	
•	Removing car spaces will increase pressure on local streets and have a negative impact on residents through the generation of noise and emissions.	Noted. The CIP Access Strategy objective is to rationalise the existing plethora of campus parking locations with limited and peripheral locations on campus. The CIP proposes to increase the
•	This building (Engineering) will have grave implications to parking.	amount of car parking from approximately 2,400 to 2, 800 spaces
•	The building (Engineering) will be populated with people who will drive to work. Currently parking is unobtainable due to University Students.	throughout the Camperdown-Darlington campus. The CIP parking strategy will provide appropriate additional spaces for the proposed increase of floor area, whilst encouraging greater use of public transport, walking and cycling modes.
•	Need more car spaces for teachers/students.	and open, naming and eyemig medeel
•	Residents stressed with noise and parking loss.	The CIP Access Strategy, prepared by ARUP, includes an
•	We object to the introduction of large car parks on the Darlington campus. With the projected huge increase in the University population coming to the Darlington campus to use these car parks will come the associated problem of traffic congestion on residential streets.	assessment of traffic redistribution and concludes "there is an expected 13% increase in traffic levels due to the 19% increase in parking levels. There will be shift towards Butlin Avenue and Western Avenue to the location of the parking stations. However, the change of traffic flows is minimal in the context of surrounding flows."
•	The University should be required to encourage short term parking on the larger Camperdown campus and not on the Darlington campus.	Noted. Parking areas will be relocated to peripheral locations, typically as basements to new CIP buildings, on both the Darlington and Camperdown campuses.
16.	CADIGAL GREEN	Noted. The University is establishing an Events Policy to manage
•	Request that Cadigal Green should be used for passive and therefore relatively quiet events only.	and control all events including reasonable hours of operations and appropriate location of activities. The request for passive events on Gadigal Green will be considered in the development of the University Events Policy.
17.	LOCAL INFRASTRUCTURE	
•	Upgrade to the footpaths (i.e. widen them).	Noted and supported. However the upgrade of railway stations and Council footpaths is beyond the University's jurisdiction and requires
•	Upgrade Redfern Station.	and commitment from those relevant Government agencies.
•	Need a Government plan dealing with the University of Sydney and Central to Eveleigh.	Notwithstanding, the University will continue to work with those agencies to progress this matter.



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•	Need a Government infrastructure/services plan dealing with Sydney University and the railway developments.	The University is already contributing to the City of Sydney's program of upgrading Abercrombie Street with contribution to specifically to the works on Abercrombie Street, the Shepherd/Abercrombie Streets
•	Objects to the proposal as it will be a gross overdevelopment that fails to address stressed infrastructure of Darlington.	junction, and along Codrington Street.
•	The CIP should not be approved unless Planning & Infrastructure can get the Government to address the infrastructure deficiencies at Redfern Station and on the pedestrian route between the Station	The University is an active stakeholder in the push for improvements in local infrastructure for residents and visitors and in particular the upgrade of Redfern Station.
•	and the University.  Access needs to be addressed by the State Government, City of Sydney Council and the University as part of this redevelopment plan for Sydney University of Sydney.	In the University's June 2013 response to the NSW Government's Draft Metropolitan Strategy for Sydney 2013 the following recommendation was requested to be considered:  "The University requests urgent NSW government investment in
•	There should be provision in the plans for the replacement of the bridge at the western end of Redfern Station, and a tunnel for pedestrians and cyclists from Redfern Station to the Maze Crescent and Victoria Park linking Redfern to Broadway and the proposed light rail.	critical infrastructure to service the <i>Broadway and Camperdown Education and Health</i> precinct, in particular the upgrade of Redfern Station (in accordance with the NSW Long Term Transport Masterplan Dec 2012). This is instrumental to achieving the draft Strategy's objective '16: Achieve productivity outcomes through
•	There are so many trees, enlarged tree route squares around trees cut into the pavement, rubbish bins, uneven pavement areas and also uneven pavement areas where sections have been dug up to place new lines (water/electricity etc.) that cause physical negotiation problems for elderly people, people on crutches, walkers, canes etc. to walk smoothly along the surface.	investment in critical and enabling infrastructure', and objective '26: Improve accessibility & connections for centres'."
18.	UNIVERSITY OPERATIONS (NOISE)	Noted. The CIP is the University's vision for the future which is to
•	The University has not acknowledged operational plant noise, and the cumulative effect of new plant noise and existing plant noise and how this will be addressed.	create a campus environment that meets the recreational, cultural, research and educational needs of those who work and study here and for those who live in the surrounding community.
•	Lab buildings on Darlington Campus are sources of occasional odours and night-time machinery that the CIP does not address.	Further specific and detailed buildings will be subject to future detailed Application or other approval pathways and will be generally
•	Objects to increased noise pollution from the new buildings and their ain con units.	consistent with the Stage 1 CIP SSD consent. All new buildings will be designed to include low noise abatement.



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•	The 24/7 noise from plant equipment with the proposed new buildings will create a very negative effect on residents' amenity.	The University's Campus Improvement and Services (CIS) department is the professional service unit responsible for issues
•	Due to the height of the building the noise will travel unabated 24/7.	associated with the University's operations. The reporting of incidences that are of concern to the community will be directed to CIS for management and resolution.
•	The University should develop a public noise impact policy and maintain effective governance arrangements which ensure compliance with the policy.	CIS for management and resolution.
19.	CITY OF SYDNEY DEVELOPMENT CONTROL PLAN 2012	The CID has already addressed valouset as a set of the Code of DCD
•	The University should implement the Council (City of Sydney) Development Control Plan 2012.	The CIP has already addressed relevant aspects of the Sydney DCP 2012, for example adherence to the DCP Parking Supply provisions. Future detailed applications for each site will include a response to the DCP2012 guidelines.
20.	GROWTH IN STUDENT NUMBERS	
•	Objects to the growth in student numbers until infrastructure upgrades are complete at Redfern Station and existing pedestrian and traffic issues are resolved.	The upgrade of Redfern Station is the responsibility of the NSW Government's RailCorp and Transport for NSW agencies.  Notwithstanding, the University continues to encourage the NSW Government for the upgrade to Redfern Station. Note that the
•	The plan to increase through the greater amount of floor space the student population from its present 49,500 to 60,000 is fundamentally flawed. The local infrastructure does not cope with	University is already working with the City of Sydney in implementing \$2 million dollars to upgrade local infrastructure (pedestrian and cycling links) in Darlington.
•	present student numbers as it is.  Moreover, as the Teaching Quality Fellow in the Faculty of Economics and Business for over 16 years, I argue that such an increase in student numbers can only have a detrimental effect on the education process.	The projected campus population increase is predominantly the consequence of relocating existing satellite campus locations (e.g. Mallet Street, Australian Technology Park) back onto the Camperdown-Darlington campus. This relocation will result in reduced travel between existing campus locations. Furthermore, the provision of up to 4,000 student accommodation beds will see more students living on campus and therefore reducing a need to commute to campus on a daily basis.
		The CIP through its increased floor space will be able to provide world class teaching and learning hubs that will result in an enhanced university experience for students.



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21. HERITAGE OF THE AREA  • The planned new buildings will devalue the heritage value of terraced streets of Darlington.	This is a subjective comment that the University cannot respond to. However, the University notes the recent urban renewal of Redfern-Waterloo, including development of new buildings, has resulted in the median house price increasing from \$547,000 to \$757,000 (38%) between 2005 to 2009.
<ul> <li>22. THE UNIVERSITY OF SYDNEY STATUS USING ITS STATUS AS AN EDUCATOR TO EXECUTE A BUSINESS PLAN</li> <li>Sydney University is a business and should be treated as one.</li> </ul>	Disagree. The University is recognised as the nation's principal University specialising in the delivery of tertiary education and research pedagogy. It is imperative that the University continue to position itself as the leading teaching, learning and research institute in Australia. The implementation of the CIP is instrumental to achieving this objective.
<ul> <li>23. HEIGHT AND BULK OF THE BUILDINGS</li> <li>The height and bulk of the proposed development are much too great for the low rise heritage conservation residential precinct that is Darlington/Chippendale.</li> <li>A number of the proposed buildings (Regiment and site of the Eucalypt Grove) will overlook residential buildings.</li> <li>Objects to the huge increase in residential accommodation and in office floor space planned for the site.</li> <li>The height of the buildings seems out of character for the area.</li> </ul>	The CIP seeks consent for precinct based building envelopes and built form design controls, open space and transport linkages. Indicative land uses are provided and will be confirmed at a future detailed Application stage. Further specific and detailed buildings will be subject to subsequent future detailed Applications or other approval pathways and will be generally consistent with the Stage 1 CIP SSD consent.  This CIP 'Response to Submissions' includes an independent Urban Design Review of CIP envelopes prepared by Cox Richardson architects. The review has modified all proposed CIP envelopes (except for the Macleay building envelope) and reduced in scale justified by, and commensurate with, the surrounding built environment.
<ul> <li>We object to building heights of up to 19 storeys.</li> <li>The University should be required to scale down the size of the proposed buildings.</li> </ul>	Refuted. The CIP proposal does not include any building heights up to 19 storeys. The tallest building will be along City Road and at a scale commensurate with the City of Sydney Council's approval for the St Michael's College site.



	ISSUE	CIP RESPONSE
24.	DARLINGTON ST TERRACE HOUSES	
•	The terraces from 86-130 Darlington Road are A rated as "highly intact" by the National Trust. The proposal to infill their backyards with 3 storey extensions will degrade their heritage value.	Noted. The Darlington Terraces are an integral part of the University in particular for the provision of much needed student accommodation.
•	Objects to the plans to destroy the integrity of the last intact terrace houses in Darlington Road.	The CIP does not seek to redevelop the University owned terraces, but to apply building envelope additions to the rear of each terrace
•	Does this mean if this is allowed the University will build around the backyards of the private residents?	site.
•	The impact and damage to heritage listed properties for more student housing along Darlington Road seems out of touch with community concerns and the need to maintain local heritage and character.	The proposed envelopes apply only to University owned terraces. Any future development of these buildings will carefully integrate heritage considerations into the design.
25.	ABLITY TO DRIVE THROUGH CAMPUS  We object to removing the ability of students and staff to drive through the campus.	The CIP proposal of preventing general vehicle access through the Camperdown campus will provide many positive benefits to the University and surrounding community including:  Rationalisation and reduction of unnecessary vehicle movements Increased road safety for pedestrians and cyclists Increased physical activity that supports both the NSW Government and University's Health policies.  A quieter campus More available land for green and social spaces Reduced greenhouse emissions on campus
		<b>Note:</b> The CIP Parking Strategy will still allow cross-campus vehicle access for emergency vehicles, University service vehicles, and vehicles for persons with a disability.
<b>26.</b> •	BOUNDARY LANE CHILDRENS CENTRE  The removal of the pre-school/day care centre – there is no offering to the community to replace such a vital social infrastructure.	Refuted. The University has built a \$5 million purpose built child care centre at its' Burren Street Newtown site for the Boundary Lane Children's Centre to continue child care services in the area. The Centre commenced operations from this site on 14 April 2014.



ISSUE	CIP RESPONSE
27. INCREASED SUN EXPOSURE  • The removal of the established trees and the increased sun exposure and reflection of glass buildings in some cases will require additional air conditioning at cost to residents and the environment. Thermal heat from these buildings may also cause issue.	Noted. New buildings will implement operational and design measures to target a 5 Star green star rating. The CIP Tree Canopy Strategy seeks to retain and upgrade the University canopy cover for Camperdown campus (currently 28% cover) and Darlington campus (currently 22% canopy cover).
28. REQUEST FOR SEPARATE D.A.'S  • Each new building or refurbishment of an existing building should be subject to individual development applications so that the dimensions scale and use of each building is specified and conditions are imposed upon arrival.	Agreed. The CIP seeks consent for precinct based building envelope and built form design controls, open space and transport linkages. Indicative land uses are provided and will be confirmed at a future detailed Application stage. Further specific and detailed buildings will be subject to subsequent future detailed Applications for each site or other approval pathways and will be generally consistent with the Stage 1 CIP SSD consent.
<ul> <li>29. BUTLIN AVENUE AS A SHARED ZONE</li> <li>We object to Butlin Ave becoming a shared zone between traffic and pedestrians. It is one of the main roads in and out of Darlington for vehicles. As a shared zone it would create an unsafe environment for pedestrians and drivers alike.</li> </ul>	Disagree. Butlin Avenue is not proposed as a Shared Zone.
<ul> <li>30. SERVICE CENTRE ON SHEPHERD STREET</li> <li>We object to the proposed Service Centre on Shepherd Street as this will bring heavy, loud vehicles onto a residential street. As it will be positioned on the narrowest part of this street, it will also create a dangerous traffic hazard.</li> </ul>	Noted. Most buildings in the University have their own loading zones including the Engineering Precinct that is accessed by Shepherd Street. The CIP rationale for principal Service Centres is to coordinate the current significant truck activity at close proximity to arterial and main roads, and for managed and more efficient arrangement of loading and unloading deliveries with reduced service vehicles on local roads.
<ul> <li>31. ARCHITECTURE</li> <li>Is the architecture of the buildings going to be a legacy or a distraction to the character of the area? Further information should be provided.</li> </ul>	Agreed. Every future University major project will be subject to an Architectural Design Competition managed by the University's procurement policy and utilising the University's specialist panels of architects, designers and associated consultants



ISSUE	CIP RESPONSE
<ul> <li>32. INCREASED FLOOR SPACE</li> <li>We object to this massive building program that would increase floor space by a massive 68% from 555,600 m2 to 937, 800 m2.</li> </ul>	Refuted. The submitted CIP Precinct Envelopes projected a notional increase of GFA from existing 674,700m² to CIP 937,800m², and which represents a 38% increase (and not 68%).
	This CIP Response to Submissions package includes amendments and reductions to all proposed CIP envelopes and which is estimated to reduce the projected notional GFA by about 7%.
	The CIP provides the rationale for the University to increase floor space to ensure that it continues to position itself as the leading teaching, learning and research institute in Australia.
<ul> <li>33. CLOSURE OF BUTLIN AND CODRINGTON STREET</li> <li>I am also against the closure of Butlin St/Codrington Street.</li> </ul>	The CIP does not propose to close Butlin Street or Codrington Street.
<ul> <li>We object to the proposed development of the Regiment Building which will be up to 9 storeys in height. It will result in significant overshadowing of the public housing in Golden Grove Street and also of the Darlington Public School Playground.</li> </ul>	The proposed scale of the Regiment is commensurate with the DPE approved scale of the Moore Theological College opposite on City Road. The two buildings combined will mark the gateway entrance to The University of Sydney.
	The original CIP application, and this revised CIP 'Response to Submissions' provide CIP precinct drawings and shadow analyses demonstrating that the Golden Grove housing estate is already overshadowed by the cantilevered balconies and sunken nature of the dwellings, as well as existing dense vegetation in front of the island crossing. Notwithstanding, the majority of these dwellings will continue to receive a minimum 3 hours solar access during midwinter months. The Darlington Public School playground will not be affected by additional shadows from the CIP envelopes.
	The building will be subject to a future detailed Application and the issues raised in the submissions relating to shadowing will be addressed through that process.



ISSUE	CIP RESPONSE
<ul> <li>35. SETBACKS</li> <li>All new buildings should be setback from the street and well within the University boundaries.</li> </ul>	Noted. The revised CIP precinct drawings introduces building setbacks along City Road, Butlin Avenue, Shepherd Street and Ross Street.
	Further specific and detailed buildings will be subject to future detailed Application or other approval pathways and will be generally consistent with the Stage 1 CIP SSD consent.
<ul> <li>36. HERITAGE – CONSERVATION MANAGEMENT PLANT</li> <li>The University needs to negotiate the Grounds Conser Management Plan with the Heritage Office in dialogue Heritage bodies like the National Trust and bring back community an agreed Heritage Assessment of the Universitage assets that can be used by the community to heritage impact of the University's CIP.</li> </ul>	The Grounds Conservation Management Plan has amended to provide further detail on the landscape significance of the campus. The GCMP has be discussed with the NSW Heritage Office, who is responsible for assessing and endorsing the GCMP. All Heritage Impact Assessment reports under the CIP are included in the SSD.
<ul> <li>37. AMALGAMATION WITH OTHER ORGANISATIONS</li> <li>Why isn't the University helping to amalgamate with an regional university/hospital/business area to strengther of Sydney and NSW instead of just feeding the overses students. Councils are being forced to amalgamate which like it or not, but the universities are so locked into their rights that there appears to be little sharing and strengthe benefit of all.</li> </ul>	the whole as paying ether they power  Westmead, Royal Prince Alfred, Royal North Shore, Nepean, Concord and the Sydney Adventist Hospitals as well as having campuses located in regional areas including Lismore, Broken Hill, Dubbo and Orange. The University has a long standing commitment



#### B. RESPONSE TO ORGANISATION SUBMISSIONS

Five submissions were received from the following organisations (numbers in brackets refer to the DPE submissions register):

- RAIDD (92971)
- RAIDD (94742)
- REDWatch (94703)
- Chippendale Residents Interest Group (93445)
- Elegancy Catering, St Pauls (92975)

Note: The following 'Organisation' submissions (as referred to by the DPE Submissions register) are addressed elsewhere in this 'CIP Response Submissions' package:

- St Andrew's College (92854) and Wesley College (93547) refer to 'CIP Response to CIP Precincts'
- Ausgrid (93414) refer to 'Other Issues'
- The National Trust of Australia (92964) refer to 'CIP Response to Heritage Issues'

This section identifies the issues raised in the submissions. As many of the submissions raised the same issues, they have been responded to thematically and are in no particular order of priority.

ISSUE	CIP RESPONSE
38. INFRASTRUCTURE DEFICIENCIES  • The CIP should not be approved unless P&I can get the Government to address infrastructure deficiencies at Redfern Station and on the pedestrian route between the Station and the University.	Refer to CIP response to Item 17
<ul> <li>39. STUDENT HOUSING</li> <li>The University needs to do additional work concerning the impact of its student housing.</li> <li>REDWatch cannot support the location of student housing on the old University Regiment Procinct. This student housing is</li> </ul>	Noted. The University of Sydney Student Services will ensure that appropriate administration, security and well-being models are central to the management of the student accommodation facilities. Refer to CIP response to Item 34.
old University Regiment Precinct. This student housing is immediately opposite public housing between Forbes and Golden	



ISSUE	CIP RESPONSE
Grove Streets and is especially problematic as the <i>proposed</i> student housing overshadows the public housing.	
TRAFFIC IMPACTS     The University needs to do additional work concerning limiting traffic impacts on Darlington.	Noted. The CIP Access Strategy provides a holistic approach to managing access, parking, servicing, pedestrian and cyclist movements and impacts on the adjoining streets.
The CIP should include an undertaking by the University to prepare a Sustainable Transport Strategy and Workplace Travel Plan to be promoted to University Staff and Students.	Agreed. The University provides eligible staff with an opportunity to seek reimbursement for the cost of an annual public transport pass and to repay the cost over a 12-month period through fortnightly salary deductions.
41. COMMUNITY PRINCIPLES	Noted The University received cores constructive foodback through
The University needs to include in its CIP, elements that reflect community perspectives on how the surrounding community interact or wish to interact with the University.	Noted. The University received some constructive feedback through the Community Information Drop In Sessions and will convene further meetings on relevant issues. For example the University's CIS convened a meeting on 23 June 2014 with Calder and Shepherd Street residents to discuss resident concerns regarding the Rose Street car park development site (Engineering Precinct) and CIP building envelope options.
42. HERITAGE	Defeate CID recovered to Heart 20
The University needs to negotiate the Grounds Conservation     Management Plan with the Heritage Office in dialogue with     heritage bodies like the National Trust and bring back to the     community an agreed Heritage Assessment of the University's     heritage assets that can be used by the community to assess the     heritage impact of the University's CIP.	Refer to CIP response to Item 36.
REDWatch objects to three-storey student housing in the backyards of the Darlington Street terraces as it degrades the heritage value.	The CIP Heritage Impact Assessment report on the proposed additions to the Darlington Terraces concludes the concept proposal on the heritage significance to be acceptable. The HIA includes recommendations which will be addressed in a future detailed Application for this project.



ISSUE	CIP RESPONSE
43. MAKING THE UNIVERSITY MORE PERMEABLE TO COMMUNITY PEDESTRIAN MOVEMENTS  • REDWatch submit that the University should take into account the community desire lines and seek to accommodate them in the in the long term University planning.	<ul> <li>Noted.</li> <li>A principal CIP 'Objective' is to establish the campus as a visitor destination, including local community access to university facilities and places.</li> <li>The CIP Access Strategy considers a holistic approach to managing access, parking, servicing, pedestrian and cyclist's movements around and through the campus for the benefit of University students, staff and also the surrounding community.</li> <li>The Access Strategy also provides cycle links with the City of Sydney's cycle network.</li> </ul>
44. PROTECTION OF DARLINGTON STREET PRIVATE RESIDENTS.	
The proposal for three-storey student housing to the boundary of private residences is opposed due to overshadowing and loss of residential amenity.	Noted. The Darlington Terraces are an integral part of the University in particular for the provision of much needed student accommodation. This 'CIP Response to Submissions' package includes amended envelopes with mid-winter shadow analysis that conclude privately owned terraces to receive the minimum required 3 hours mid-winter solar access to their rear gardens (compliant with the City of Sydney DCP 2012 control for solar access).
45.SCALE AND LOCATION OF MULTIDISCIPLINE TEACHING AND RESEARCH BUILDING	
REDWatch objects to the scale and location of the new Multidiscipline Teaching and Research Building proposed near the main pedestrian entrance off City Road and requests that this building be scaled back to a size consistent with other buildings currently in this precinct.	Noted. This 'CIP Response to Submissions' package includes amended City Road building envelopes with reduced heights and applied street setbacks that produce a scale that is commensurate with the City of Sydney's recent approval of the St Michael's College on City Road.



	ISSUE	CIP RESPONSE
46.	THE SHEPHERD STREET SITE	
•	REDWatch submits that the CIP should look at softening the edge of the University along Shepherd Street and increasing permeability rather than placing a new building where the grove of trees currently stands.  REDWatch notes that the University considers Shepherd Street as one of its gateways for drop-off and pickup points and REDWatch does not consider this to be appropriate.	Noted. The Engineering Faculty's Rose Street car park is instrumental to the faculty's future growth in providing world class teaching and learning facilities. This amended Engineering building envelope for the Rose Street car park site includes setbacks to retain a number of the existing Eucalypts, a pedestrian gateway from Shepherd Street through to Cadigal Green, and recommended street planting.  Agreed: The CIP Concept Landscape Plan includes opportunities for the softening of the Shepherd Street campus edge and providing greater permeability into the campus.  Agreed: The amended CIP removes the previous proposal of Shepherd Street as a vehicle drop-off and pick-up point.
•	USE OF 85% OF EACH ENVELOPE OF THE MODIFIED CIP REDWatch submits that the University should provide a written undertaking to only use 85% of each envelope in its modified CIP and that P&I should specify a maximum of 85% utilisation of the envelopes for each building in any approval.	Noted. The CIP proposed concept precinct building envelopes with the following definition of a 'Building Envelope;' derived from the City of Sydney LEP 2012 glossary:  **Building envelope** means the vertical distance between the ground level (existing) of a site and the highest point that a building can achieve. The building envelope provides the volumetric area within which future building forms, heights, setbacks, open space, and connections are designed. The height of a building envelope includes plants and lift overruns, but excludes communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.  The CIP does not seek approval to commence any development activities – all future CIP precincts will be the subject of future detailed Applications addressing the land use, architectural design and landscaping of University sites.



ISSUE	CIP RESPONSE
48. EXTENSION IN TIME TO COMMENT	
From our initial reading of the plans the proposed "notional" increase in GFA is 222k which is nearly as much as the introduction of Central Park. As such the increased usage will have a flow-on impact in terms of local infrastructure, open space, traffic and residential and business amenity. In response, we would greatly appreciate an extension in time to comment.	Agreed - Refer to CIP response Items 2 and 3.
49. WEBSITE EXHIBITION MATERIAL	
Much of the detail in terms of the accompanying legends for key diagrams/maps cannot be clearly viewed. It would be helpful if urgent arrangements are made to address this.	Following feedback from the Community Information Drop In Session (held 5 February 2014) at which this issue was raised, the University of Sydney provided high resolution documents to DPE and these were uploaded to their website on 7 February, 2014.
50. DEVELOPMENT OF THE PAVED AREA NEXT TO THE VICTOR COPPLESON BUILDING	
The proposed development includes an area which is part of the Elegancy Catering Business's liquor licensed and lease area. In the event that this area is modified, the licenced area will be reduced making it impossible to use for outdoor events.	The CIP Health Precinct proposes a flexible range of University uses which will be designed in detail under a future detailed Application process. However, the CIP does not address or propose the relocation or reduction of any licenced areas.
The plans do not show any road access to "The Bruce Williams Pavilion" which will make it impossible for our deliveries to be received and for our patrons to have access to the parking area.	The CIP proposes continued service deliveries via Western Avenue and a service delivery option to be facilitated via a lower ground parking and service area to the Health Precinct with access to the southern side of Oval No.1.



# C. RESPONSE TO VERBAL ISSUES RAISED AT THE UNIVERSITY'S COMMUNITY DROP-IN SESSIONS

Total number of people in attendance over the 6 sessions = **22 people** 

ISSUE	CIP RESPONSE
51. WEBSITE EXHIBITION MATERIAL	
The resolution of the plans and reports on P&I website is too low making diagrams hard to read.	Refer to CIP response to item 48.
52. CADIGAL GREEN	
Concern that events held on Gadigal Green will include amplified music that will impact on local residents.	Refer to CIP response to Item 16.
53. PROPOSED ENGINEERING BUILDINGS	Noted. The CIP does not propose student accommodation for the Engineering Rose Street car park site.
<ul> <li>Request that the building not be used for student accommodation.</li> </ul>	Refer to CIP response to Item 19.
Concern that new buildings will exacerbate plant room noise omission from the Engineering precinct.	The amended CIP Shadow Analysis illustrates that the neighbouring child care centre is already in shade as a consequence of the 5 metre
Request that the Chemical Engineering building does not adversely overshadow the neighbouring child care centre.	high privacy screen along the edge of the boardwalk, combined with intentionally erected shade devices over the child care centre's outdoor spaces (erected for child protection from solar access). Details of overshadowing and noise will be addressed through a future detailed Application process.
54. EUCALYPTUS TREES	
Concern at loss of eucalypt trees, open space and habitat.	Noted. Please see CIP response to Issue 7.
<ul> <li>Advised that there was an agreement by the University to retain the eucalypts.</li> </ul>	The University has no documentation or knowledge of past agreement to retain the eucalypts.
55. REGIMENT BUILDING	
Concern in relation to potential noise from students if the building is developed for student accommodation.	Further specific and detailed buildings will be subject to future detailed Application or other approval pathways and will be generally
Concern of the Regiment building overshadowing the Housing NSW estate at corner of Golden Grove and Darlington Rd.	consistent with the Stage 1 CIP SSD consent. Refer to CIP response to Issue 34.



ISSUE	CIP RESPONSE
Concern that the height and bulk of the building will detract from the heritage character of King Street Newtown.	The Regiment building envelope is commensurate with the DPE approved envelope for the Moore Theological College opposite on City Road. These 2 buildings will mark the City Road gateway to The University of Sydney and the King Street termination of Newtown.
56. REDFERN STATION	
Redfern Station requires more than one lift to make it accessible.	Refer to CIP response to Issue 17.
Improve connections to and from Redfern Station.	
57. SHEPHERD STREET	Defeate CID response to leave 45
Suggest visual activation along Shepherd Street and continued connection to green courtyard opposite Calder Street.	Refer to CIP response to Issue 45.
58. ENGINEER COURTYARD	
<ul> <li>Concern regarding closing the access to the Engineer courtyard opposite Calder Street.</li> </ul>	Refer to CIP response to Issue 13.
Request that Rose Street car park (Engineering) has physical and visible connection to internal green courtyard and through to Gadigal Green.	
59. PEDESTRIAN ACCESS	Noted and supported.
Improve pedestrian connection between Cadigal Green and Seymour Centre.	Noted. The CIP building envelope recommends a basement parking under Merewether and the G08 car park site, and which will return the
Recommends removal of parking directly outside the Aquatic Centre as this is a pedestrian conflict point.	public domain outside the Noel Martin Aquatic Centre to a zone of pedestrian prioritisation.
60. SERVICE DOCK- ENGINEERING PRECINCT	DI OID 1 1 100
Concern that proposed service dock will increase traffic movements along Lawson/Shepherd Streets.	Please see CIP response to Issue 1 and 30.
61. CAR PARKING	DI 01D 11 15 150
Concern at limited parking outside Aquatic Centre especially evenings and weekends which results in users parking on	Please see CIP response to Issues 15 and 58.



	ISSUE	CIP RESPONSE
	residential streets.  Prohibit parking to undergraduate students.  Support of removal of surface parking.	Agreed.
ļ	PEDESTRIAN/CYCLISTS  Recommends end of trip facilities.  Requests University and City of Sydney consider bicycle stations on campus and at Redfern Station.  Supports CIP bicycle routes through campus cycle connection to Council bicycle network and the removal of surface car parks.  Concern that the cyclist/ pedestrian mix may be dangerous with cyclists not taking enough care of pedestrian traffic.  Opportunity for a pedestrian tunnel from Redfern Station to Cadigal Green.	Noted and supported.  Noted and supported.  Noted and supported.  Noted. Future campus 'Shared Zones' will include appropriate design and signage in relation to pedestrian safety and cyclist speeds.  Noted. The University does not own the land that would be required to implement this recommendation.
63.	STAGING OF DEVELOPMENT  Recommends staging of the development of the precincts to minimise construction impacts upon the surrounding neighbourhoods.	Noted and supported. The CIP includes a notional staging and development plan.
<ul><li>64.</li><li>•</li></ul>	CITY ROAD PRECINCT  Concern that the City Road Precinct will create shadows on Gadigal Green.  Concerns about wall heights along City Road and the potential for poorly designed buildings.	Noted. The CIP revised City Road Precinct provides a shadow analysis that concludes Cadigal Green will continue to receive adequate levels of solar access.  Future development of the City Road Precinct will be subject to architectural design competition.
65. •	DARLINGTON ROAD TERRACES  Concern that the development on the rear of the terraces will lose the existing heritage terrace views from Darlington Lane – last remaining row of terraces displaying the original character of Darlington.	Refer to CIP response to Item 24.



ISSUE	CIP RESPONSE
<ul> <li>66. TRAFFIC</li> <li>The community have long requested a traffic plan for the whole of Redfern-Darlington as the existing road infrastructure struggles to cope with existing traffic and directs traffic into high risk areas such as past the Darlington Public School.</li> <li>Request that the University introduce salary sacrifice for employees to use public transport.</li> </ul>	Noted. As directed by the State Government's Transport for NSW department, the CIP includes an Access Strategy that addresses traffic capacities at key roads and intersections.  Agreed. The University provides eligible staff with an opportunity to seek reimbursement for the cost of an annual public transport pass and to repay the cost over a 12-month period through fortnightly salary deductions.
<ul> <li>67. ACCESS</li> <li>Suggestion of a well-lit pathway down Maze Crescent through to the Seymour Centre and link with a pedestrian bridge to Victoria Park.</li> </ul>	Noted. The CIP Concept Landscape Plan supports the proposal for a well-lit and safe pedestrian connection along Maze Crescent to the Seymour Centre.  The proposal for a bridge over City Road to Victoria Park requires the agreement and strategic commitment of the State Government's Roads and Maritime Services and the City of Sydney Council.
<ul> <li>68. ARCHITECTURE</li> <li>Ensure high quality buildings through architectural design competitions.</li> </ul>	Agreed. Future development of the City Road Precinct will be subject to architectural design competition.
<ul><li>69. OPEN SPACE</li><li>Ensure high quality open space/public domain.</li></ul>	Noted and supported. The CIP Concept Landscape Plan addresses opportunities for achieving a high quality campus public domain.
<ul> <li>70. CHILD CARE FACILITIES</li> <li>The University needs more child care centres.</li> </ul>	Noted and supported. The University is currently convening a Child Care Working Party to review current and future child care needs on campus.
<ul> <li>71. FEAR OF DEVELOPMENT</li> <li>The community are fearful of development and need to understand the difference between Concept Building Envelopes</li> </ul>	The CIP seeks the Minister for Planning's consent for a number of CIP Precinct Building Envelopes within which future building developments can be designed within. The CIP provides the following definition:
and development footprints.	"Building envelope means the vertical distance between the ground level (existing) of a site and the highest point that a building can achieve. The building envelope provides the volumetric area within which future building forms, heights, setbacks, open space, and



ISSUE	CIP RESPONSE
	connections are designed. The height of a building envelope includes plants and lift overruns, but excludes communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like."
	All future major developments will be the subject of future detailed Applications and architectural design competitions.



## D. RESPONSE TO COMMUNITY BRIEFING MEETING 23 JUNE 2014

#### **SUMMARY OF ISSUES**

Feedback provided by participants at the Campus Improvement Program (CIP) Community Information Drop In Sessions included conversations about the grove of Eucalypt Trees in the Rose Street car park, the Rose Street courtyard behind, and public access between Shepherd Street and Cadigal Green. To gain further comment on this subject, and to present the revised building envelope and proposed landscaping plan for this area, The University of Sydney invited interested residents to a meeting held on 23 June 2014. Twenty one local residents attended the meeting.

ISSUE	CIP RESPONSE
<ul> <li>72. ROSE STREET CAR PARK TITLE</li> <li>Concern relating to The University referring to the area as the Rose Street carpark as this street had long disappeared and this was confusing to the local community.</li> </ul>	Noted. The University of Sydney's official name for the car park is the Rose Street Car Park. Future reference to this site will clarify which car park is being referred to. The University also wishes to avoid confusion with the existing Shepherd Street car park located at the junction of Shepherd and Cleveland Streets.
<ul> <li>73. CONSULTANTS BRIEF</li> <li>The brief the University issued the Consultants did not provide the opportunity to look objectively at the issues and offer different solutions</li> </ul>	Noted. The brief developed by the University was designed to reflect the request by DPE for an urban design review of the CIP building envelopes to support and justify the design and development of future built forms.
<ul> <li>74. PERCENTAGE OF INCREASE IN FLOOR SPACE</li> <li>What is the % of floor space increase in the CIP over and above what now exists? 68% or 38%</li> </ul>	The CIP projects an increase in floorspace from 674,700m² to notional 937,800m² under the CIP which reflects an approximate 39% increase in campus floorspace.
<ul> <li>75 VOLUME OF FOOT TRAFFIC</li> <li>The foot traffic in the local area needs to be quantified and better understood for improved pedestrian management/noise reduction.</li> </ul>	Noted. The CIP Access Strategy acknowledges the University's Travel Modal Survey 2012 and the Pedestrian & Traffic Audit 2008.
<ul> <li>76. CAR PARKING</li> <li>The CIP need to identify the relocation of existing parking including how this would impact on Shepherd Street.</li> </ul>	Noted. The CIP does provide this information on page 58 of Appendix G "Access Strategy".

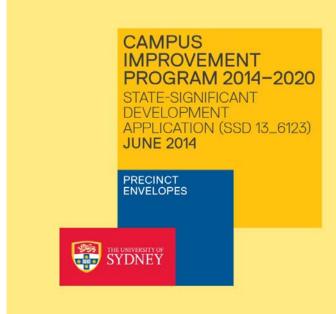


ISSUE	CIP RESPONSE
<ul> <li>77. RETENTION OF THE TREES</li> <li>The trees to be retained need to be identified by survey on the plan and the canopies identified.</li> </ul>	Noted. This will be addressed at a future detailed Application process.
<ul> <li>78. MAINTENANCE OF EXISTING WILDLIFE/BIRDS</li> <li>How the new landscape strategy provide for the existing wildlife/birds?</li> </ul>	Noted. The CIP Landscape Masterplan addresses the appropriate use of landscaping species which includes the support of existing fauna and wildlife on campus.
<ul> <li>79. PEDESTRIAN GATEWAYS</li> <li>Concern that the proposed improved pedestrian entries to the campus will result in increased pedestrian traffic on Shepherd Street.</li> </ul>	Noted. Notwithstanding, the proposed upgrade of pedestrian entries to campus along Shepherd Street is also in direct response to current community concerns that the engineering precinct has a very poor design regard to the Shepherd Street residential character.
<ul> <li>80. LOSS OF PRIVACY</li> <li>A 3-4 storey building on this site will look into neighbouring backyards.</li> </ul>	Noted. Appropriate screening to openings will be applied to the building to ensure that the current privacy is maintained. This will be addressed at a future detailed Application process.
81. RELOCATE PROPOSED BUILDING TO MAZE CRESCENT  • Consider moving the location of the proposed building to Maze Crescent	Not supported. The CIP intends for Maze Crescent to revert to a shared zone incorporating pedestrian prioritisation, cycle routes and authorised service vehicles. Maze Crescent will also form the principal pedestrian spine from Darlington Road to the new pedestrian gateway between Seymour Centre and International House site, and also in support of the student accommodation proposed for the campus.
SHADOW DIAGRAMS     Update the shadow diagrams for the proposed envelope on the Boardwalk and indicate existing and proposed shadows.	Noted. The shadow diagrams have been revised accordingly and submitted as part of this 'CIP Response to Submissions' package.
<ul> <li>83. POPULATION OF THE ENGINEERING FACULTY</li> <li>What is the existing and projected population of the Engineering Faculty?</li> </ul>	Noted. The Faculty of Engineering and Information Technologies has an approximate total of 400 staff and an equivalent full time student population of approximately 3,500 students including approximately 900 Post Graduate and Higher Degree Researchers.



ISSUE	CIP RESPONSE
	The physical population of students and staff within the area of the Faculty of Engineering and Information Technologies will vary according to timetabling, course delivery modes and the nature of the program each student is undertaking. Timetabling of teaching and laboratory spaces is co-ordinated to even out peaks, maintain amenity of the buildings and site and optimise the utilisation of space.
	In line with its short and long term strategic goals the Faculty of Engineering and Information Technologies is pursuing the attraction of high quality students with only modest growth in student numbers within the faculty. The CIP anticipates and projects the University's current annual population rate of growth at 1.9%.
<ul> <li>84. ACOUSTIC STANDARD OS BUILDINGS IN THE ENGINEERING PRECINCT</li> <li>What acoustic standards will be developed for the engineering buildings?</li> </ul>	Noted. The future upgrade of the Faculty of Engineering and Information Technologies buildings will include consideration of acoustic performance both within and outside the buildings. The faculty is also pursuing a program of upgrading old building mechanical and other equipment to meet appropriate regulatory requirements for acoustic performance.
85. PEDESTRIAN DESIRE LINE TO VICTORIA PARK	Refer to CIP response Item 43 and Item 67.
The existing desire line from Vine Street through Engineering, behind the Seymour Centre to Victoria Park should be incorporated into site planning and improved	
86. REQUEST TO PROTECT THE PLANTING BED BEHIND THE SEYMOUR CENTRE	Noted. The CIP Concept Landscape Masterplan will address this request.
Request that the planting bed behind the Seymour Centre be incorporated into the landscape plan to protect the gymea lily and other bird attracting shrubs	
87. EUCALYPT TREES	Refer to CIP response Item 7 and Item 54
Objects to the proposal to remove the stand of eucalypts near the engineering school on the Darlington campus	







# 2. CIP RESPONSE TO SUBMISSIONS ON CIP PRECINCT BUILDING ENVELOPE

The following table addresses relevant issues raised by submissions on the CIP regarding Precinct Building Envelopes and associated impacts from:

- City of Sydney Council (CoS)
- Department of Planning & Environment (DPE)
- Wesley College (WC)
- St Andrews College (StAC)
- Sydney Local Health District (SLHD) incorporating the Royal Prince Alfred Hospital (RPAH)

This submission should be read in conjunction with other documents submitted in this 'CIP response to Submissions' package including:

- CIP Urban Design Review
- Amended CIP SSD Plans and Shadow Analysis

Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
1. OVERARCHING:	
Need for a campus-wide approach and strategic vision for future improvements. (CoS)	The CIP provides a campus wide strategic approach to future campus precinct building envelopes, landscaping concepts, access and parking arrangements, and infrastructure requirements for the period 2014-2020.
Request for more detailed architectural and urban design principles to support the CIP building envelopes. (DPE)	Agreed: The University has reviewed each CIP Precinct envelope in identifying realistic representation of future envelopes and development sites. This revision has been addressed and peer reviewed by Cox Richardson and included in this CIP Response to Submissions package as the 'Urban Design Review' to the CIP.



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
Request for review and amendment of CIP precinct building envelopes to address more realistic representation of development sites and improved contextual relationship to the precincts. (DPE)	<ul> <li>This peer review incorporates:</li> <li>Response to surrounding building scale, heritage items, and vehicle and pedestrian/cycle movement.</li> <li>Urban Design analysis and justification for CIP building envelope retention or variation.</li> <li>Proposed amendments to CIP Precinct envelopes.</li> <li>Streetscape sketch perspectives illustrating proposed context and scale</li> <li>Shadow analysis for specific sites.</li> <li>The Urban Design Review (or elements of) has included presentations to:</li> <li>City of Sydney Council officers</li> <li>Heritage Office NSW officers</li> <li>Local Darlington residents from Shepherd Street, Calder Road, RAIDD and REDWatch (23 June 2014 for the Engineering precinct)</li> <li>Department of Planning &amp; Environment officers (for information)</li> <li>Wesley College and St Andrews College officers (Health precinct)</li> </ul>
The proposal appears skewed towards function and operational considerations over design outcome. (CoS)	This CIP Urban Design Review revises some of the precinct building envelopes commensurate with surrounding or approved development scale and context.  The detailed design of future buildings and places will be addressed by future detailed Application, and will be guided by the CIP precinct
A Landscape Master Plan should be prepared to fundamentally inform this masterplan (concept plan). (DPE) (CoS)	envelopes and Campus Concept Landscape Plan.  Agreed: A CIP Concept Landscape Plan is submitted with this CIP Response to Submissions' package, and was prepared by Clouston Associates for the University. The Concept Landscape Plan has been informed by the Grounds Conservation Management Plan (GCMP) Landscape Legacy and Opportunities plans.



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
There is a lack of integration between the proposed elements of the master plan with existing colleges, public domain and landscape character. (CoS)	While acknowledging the different land ownerships surrounding the University (including the Colleges which operate under separate Acts and property lot titles), the University's GCMP and the CIP Concept Landscape Plan has been revised/prepared (respectively) to include an extended curtilage, and includes further detail on landscape elements (including Colleges), and their significance.
2. MEREWETHER PRECINCT: Requirement to justify the proposed height of the Merewether Building particularly with regards to its relationship with the Institute Building and the importance of protecting its existing heritage significance. (DPE) The proposal should maintain and enhance the landscape setting and form of the Institute Building. (CoS) (DPE)	The Institute Building CMP (1995) prepared by John Graham establishes the heritage curtilage and conservation policies for future development. The revised Merewether Envelope Plan (SSD-C-11) proposes a greater City Road setback, and a setback that aligns with the Institute building, compared with the existing Merewether building.
	The revised Merewether envelope height is reduced from RL89.50 to RL83.10 and matches the Wentworth building envelope height opposite on Butlin Avenue/City Road.
	The setback enhances the existing landscape setting of the Institute Building. The CIP Landscape Concept Plan addresses a future landscape setting for the total forecourt of Merewether/Institute sites with the proposed removal of surface parking.
The proposed Merewether building along City Road should be:  a) reduced in height to RL 53; and  b) in the form of a podium/tower design.  (CoS)	CoS suggests RL 53 for Merewether but RL 65 for Wentworth. This position is in contrast to DPE recommendation for complementary building envelope heights. The CIP supports the urban design rationale of Merewether and Wentworth buildings producing a principal gateway into the Darlington campus both from the views along Eastern Avenue and from City Road's arterial address.
	From an urban design perspective, the peer review advice is that it is more critical that the proposed Merewether and Wentworth buildings form a "gateway" into the western sector of Darlington campus than a perceived extension of Eastern Ave.



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
The height of the proposed Merewether building should be reduced in conjunction with the Wentworth building to improve outcome. (DPE)	Agreed: The building envelope height of the Merewether height is reduced by over 6 metres to RL89.5 and to match the proposed envelope height of the Wentworth site.
	The Wentworth and Merewether buildings will together form the principal gateway into the Darlington campus. Sitting across from each other on the corner of Butlin Ave and City Road, they are landmark buildings along a highly pedestrianised access route through the University. The configuration of the development consists of a podium level matching in height to the adjacent Jane Foss Russell building with tower elements above setback from street.
	The podium level provides a predominant pedestrian-scale focus to the buildings. The buildings have matching heights to reinforce their gateway nature. The maximum height RL of the buildings is similar to the tallest tower proposed for the City Road precinct - Wilkinson-International sites (although the position is further up the hill thus the overall height is not as tall) so when looking holistically at the City Road elevation the heights will be in keeping with the surrounding development.
The Institute's rear West Wing (original school building-1879) should be conserved and the proposed building above that wing should be no higher than the opposing wing. (CoS)	The Institute CMP rates the Ground Floor of the West Wing (original school building – 1879) as having Considerable Significance, but the upper floor additions are ranked as being of Little Significance relative to the whole building.
	The merits of demolishing the upper floors, retaining the ground floor and then constructing additional floors, would be of little heritage value. The University has concluded that construction of a new wing would produce a more sympathetic outcome for the Institute Building.
Clarification is sought with respect to the envelope details shown on Dwgs. SSD-C-13 Rev A and Dwg. SSD-C-15 Rev A that imply built form is proposed immediately towards the rear of the Institute Building, while associated precinct contextual diagrams appear to	The Merewether building envelope proposes the removal of a section of Darlington Road 1 ½ storey wall (5.2 metre height average, but varied), the top of which finishes above the rear ground level of the Institute Building.



ISSUE	THE UNIVERSITY OF SYDNEY CIP RESPONSE
indicate an improved view of the Institute Building when viewed from Darlington Road. (DPE)	The proposal is to then excavate that site to the lower Darlington Road level and to introduce a building form that will activate Darlington Road. The roof of this new building form will also create a trafficable roof directly behind the Institute Building at its' current ground floor level.
	Views from Darlington Road to the rear of the Institute Building will be significantly improved by the removal of the Storie Dixson Wing building and will subsequently be converted to open space.
The proposed Molecular Sciences Building (G08) should be	The height of the G08 car park is retained at RL 74.7 for reasons including:
reduced in height to RL 65 and in the form of a podium tower design. (CoS)	The height transitions down from that of the Wentworth envelope (RL83.1) on City Road
Height of G8 should be reduced to provide transition to Sports and	The envelope establishes a setback consistent with the Wentworth site.
Aquatic Centre). (DPE)	The site is one of three greenfield sites on campus that can accommodate an excellent building footprint and future teaching/learning and/ student accommodation facilities.
	The site lies opposite the internalised Noel Martin Aquatic Centre. This building has very few windows into the gym/pool complex and therefore overshadowing of the building is not considered to be an issue.
	Neither the campus public domain, Cadigal Green are adversely or unreasonably affected by this scale of development at this location.
The height of the Regiment Building should be reconsidered, given the prominence of the site. The proposed Regiment building's architectural features and a transition in the height and mass from the street level, particularly 2-3 storeys at Darlington Road, would be more appropriate. (CoS)  Consider reducing the height of the proposed Regiment building to match the proposed Moore College building. (DPE)	The Regiment site heralds a functional and visual shift from residential Newtown to the University precinct. The CIP proposed building envelope height matches approved development proposal for the Moore Theological College opposite on City Road. Together, the Moore College and Regiment sites will herald the termination of King Street, the change in road alignment direction with City Road, and the gateway to the University's Camperdown and Darlington campuses.



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
Development at the rear of the Darlington Road terrace houses should be subservient to the scale of the terraces at the Darlington Street frontage. (CoS)	Agreed: With the southern fall of the site, and the need for new student accommodation to achieve at-grade access off Darlington Lane, the proposed building envelopes for the proposed student accommodation will be no higher than the existing roof apex of the terraces. Design details will be addressed at future detailed Application process.
Concern regarding privacy and overshadowing of the privately owned Darlington terrace houses. (DPE)	Agreed: The Darlington Terraces building envelope has been revised by removing sections of potential building footprint so as to ensure that adjoining privately owned terraces receive adequate levels of solar access to their rear yards, compliant with the City of Sydney DCP 2012 (section 4.1.3 – Residential Amenity).
	Devices for privacy mitigation between all Darlington Terraces will be addressed at future detailed Application process.
Options for the adaptive reuse of the terrace houses should be considered prior to establishing whether additional floor space is appropriate. (CoS)	The objective is to undertake minimal alterations to the existing terrace houses, in order to not trigger the need for extensive BCA upgrades, and thereby retaining maximum original building fabric.
3. CITY ROAD PRECINCT: The agency considers greater significance should be placed on the immediate context within which these building envelopes are proposed, rather than more distant built form on the fringe of the central business district. (DPE)	The proposed form of building envelope and notional building footprints on the Wilkinson-International sites comprises a strong, consistent, pedestrian-scale podium level with tower elements setback above.
	From street level the podium with its colonnade (being introduced to effectively widen the footpath) will be the predominant element that pedestrians and vehicular users will experience. The height of the podium level is in keeping with the podium of the adjacent St Michaels development, is commensurate with the nearby Seymour Centre and is in keeping with the lower scale of development on approach to the University's campuses.
	The towers above are setback from the street and step up in height from the east to provide architectural variety. Predominantly they are in keeping with the height of the adjacent St Michaels tower with one tower slightly



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
	higher in the middle. The width of the tower floor plates have been reduced to provide better solar access to the adjacent towers and to Cadigal Green to the south. The slender tower forms are more in keeping with the adjacent St Michaels tower and other tower elements in the city skyline.
The proposed buildings on the Wilkinson and International House sites should be: (CoS)	The City Road precinct envelopes for the Wilkinson and International House sites have been revised as follows:
a) reduced in height to a maximum of RL65;	a) The overall envelope height plane is amended and reduced. From the eastern end, four notional tower elements would incrementally step up from RL56.5 (east – celebrating the junction of Cleveland Street and City Road and pedestrian gateway to Darlington campus), and 2 <sup>nd</sup> notional tower at RL67.35 to match St Michaels, a 3rd central tower at RL84.6, and finally a 4th notional tower back down to RL67.35 (west) to again match St Michaels tower.
	These tower elements are in keeping with other tower elements in the city skyline that can be seen from various viewpoints, i.e. the Fraser and the Carslaw buildings. The variation in envelope heights is designed to produce architectural variety and interest along City Road with appropriate tower form separation, rather than a uniform street wall height. The CIP shadow analysis accompanying this package also demonstrates the built forms will ensure that a satisfactory level of solar access to Cadigal Green (to the south) is retained.
b) incorporate a 5.5m set-back along City Road; and	b) produce a 6 metres setback from City Road; and
c) be of a podium / tower design.	c) a podium height consistent with the approved St Michael's College site.
Consideration should be given to reducing heights commensurate to the height of the approved St Michael's site. (DPE)	See comments above.



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
Podium height should match that of St Michael's development. (DPE)	Agreed: The proposed podiums height match that of the Council approved St Michael's site. The CIP Urban Design Review, which accompanies this 'CIP Response to Submissions', provides sketch photomontages illustrating conceptual streetscape for City Road. Design details for the City Road streetscape will be addressed at a future detailed Application process.
International House should be:  a) considered for retention; or  b) additional justification for its demolition should be provided.  (CoS)	Retention of International House would disrupt what will be a significant new group of buildings and streetscape fronting City Road. Refer to justification details on proposed redevelopment of International House in the CIP response to 'Heritage' submissions on the same issue.  A HIS report on the redevelopment of this site will be submitted as part of the future detailed Application for this site.
4. ENGINEERING PRECINCT: The proposed Demolition of the Chemical Engineering Building	There is no proposal to demolish the Civil and Mining Engineering Building  – CIP Drwg A-DIA-03 Rev B has been amended.
and Civil and Mining Engineer Building is not supported. (CoS)	The demolition of the Chemical Engineering is required as a second stage of the Engineering precinct upgrade. This will enable the remaining core of the late modern significant buildings to be retained and adaptively reused.
	The Chemical Engineering Building is the least adaptable building within the Engineering precinct and it is critical to the overall needs of the Engineering Faculty that it is replaced. The building has significant issues in terms of being adaptively reused. The building has major structural deficiencies and the floor plates are extremely inefficient, and therefore not allow for new/current teaching pedagogy required at a University.  Refer to CIP response to 'Heritage' submissions on the same issue.
The proposed alterations to the Electrical Engineering Building should be designed with regard to its impact on the original building. (CoS)	Agreed: Future building additions will be designed to be connected to and be compatible with the existing Electrical Engineering building. Detailed design will be addressed in the future detailed Application process.



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
Further consideration be given to the improved transition between the new Services Building & Workshop and the proposed Chemical Engineering building. (DPE)	Agreed. The revised CIP Engineering building envelope proposes a transition in scale from the Chemical Engineering building to the lower Services Workshop.
5. HEALTH PRECINCT: Retention of the Blackburn Building should be investigated; Alternatively, additional justification for its demolition should be provided by way of a Demolition Report.  (CoS)	<ul> <li>The proposed redevelopment of the Blackburn Building within the 'Health Precinct' is proposed for the following reasons:</li> <li>The adaptive reuse of the Blackburn Building is too difficult given the changes of level across each floor, the poor level of accessibility between and across levels, and the low level useable floorspace within the building combined with the large central voids used for infrastructure. In summary, the floorplate configuration is not suitable for current teaching pedagogy.</li> <li>The Heritage Impact Assessment report by Clive Lucas Stapleton &amp; Partners concludes "in the view of this firm, although the proposal if constructed would have some substantial impacts on the heritage significance of the University, it could be approved by the consent authorities under provisions of the <i>University of Sydney Grounds Conservation Management Plan (2013).</i>"</li> <li>The significance of research and medical breakthroughs lies more with the Medical Faculty than the building. This association will continue with the medical faculty occupying part of the new facilities on site. The building was renamed the Blackburn Building only in 1960, in honour of Blackburn's long standing role as Vice-Chancellor, not because of any close association with this building. The University frequently renames buildings.</li> <li>A Demolition report will be submitted as part of the future detailed Application process.</li> </ul>



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
Height of proposed Health Sciences building should match RPAH and be commensurate with the height of the Charles Perkins Centre, rather than Chris O'Brien Life House. (DPE, SHLD, StAC)	Agreed: The amended CIP Health Precinct building envelope reduces the maximum envelope height to match that of the adjoining RPAH.
Further consultation should be undertaken with St Andrew's and Wesley Colleges regarding their concerns. (DPE)	Agreed and completed: The amended CIP Health Precinct envelopes submitted with this package were consulted with St Andrew's College (meeting on 22 May 2014) and Wesley College (meeting on 27 May 2014).
	We note St Andrew's verbal agreement to explore providing a vehicle access under St Andrew's Oval to link the existing car park under St Andrew's Oval with the new Health precinct lower car park. This would have the benefit of creating an at-grade pedestrian priority access route along Cadigal Lane with vehicle movements redirected below. This opportunity, whilst not formally part of the CIP, will be explored in greater detail between the University and St Andrews College.
Concern at Western Ave as a major service road. St Andrews intends Cadigal Lane/West Ave as a principal entry, social hub & café. Concerns about pedestrian safety. (StAC)	Noted. See comments above. Subject to future discussions with St Andrews, design and future detailed Application process.
Potential to improve connection to the St A Oval car park. (StAC)	
Support proposed alignment of ground floor between Health Precinct and St Andrews. Required detailed design due to topographic change. (StAC)	Noted. Subject to future discussions with St Andrews, design and future detailed Application process.
Support pedestrian connection between Health, St Andrews and RPAH; suggest a series of colonnades and walkways. (StAC)	Noted. Subject to future discussions with St Andrews, design and future detailed Application process.
Service docks and parking should be distributed to several locations in precinct. (StAC)	Agreed. The CIP Access Strategy proposes a carefully thought strategy for locating parking and service docks at key peripheral locations close to surrounding arterial roads, and thereby reducing through campus vehicle movements.



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
Recommend building frontage to Cadigal Lane and Western Ave limited to 3 storeys with additional 2 storeys setback by 6m. (StAC)	The revised Health precinct proposes a 3-4 storey scale and active frontage along Cadigal Lane and Western Avenue and with further height setback above this podium. The former splayed building envelope proposal is removed and replaced by a setback solution.
Preference for N-S block orientation to minimise shadows on Oval (and not E-W) (StAC)	The University prefers the east-west orientation model as this will provide solar access benefits to future buildings as well as provide a breakup of building mass of the RPAH when viewed from Western Avenue, Wesley and Women's Colleges.
	The design and orientation of future buildings will be addressed at future detailed Application process.
Stacked vertically, this is a 35 storey bulky building that rivals a Barangaroo tower. (WC)	Disagree. The revised Health Precinct building envelope proposes a maximum height that will not exceed that of neighbouring Royal Prince Alfred Hospital.
The 3-4 storey scale along Western Avenue is out of character and has no setback.  Overall, building heights must be reduced or setbacks introduced to improve the urban design result. (WC)	Noted. The revised Health precinct building envelope reduces the overall precinct envelope height, proposes building setbacks above podium level, and illustrates the reasonableness of proposed scale through inclusion of sketch perspectives in the CIP Urban Design Review, and shadow analysis as part of the revised SSD plans.
Building envelopes have been planned to soften impact on St Andrews Oval, but at the expense of a reasonable urban design outcome as it presents to Western Ave and the residential Colleges (Wesley and Women's) that look out in the westerly direction. (WC)	The building envelopes are amended in height, scale and setback. The proposed east-west orientation of Health precinct buildings have the potential to produce separated building forms, setback from one another, and a satisfactory buffer against the backdrop wall of the St Andrews Hospital behind. Subject to future design and future detailed Application process.
The proposed Western Avenue "active edge" is highly desirable, but activity normally only occurs at ground level, so the best result would be retail / active at the street face level with a setback	The University will pursue the activation of buildings at ground and levels above through a variety of uses and world class architectural detailing. Subject to future design and future detailed Application process.



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
above. (WC)	
Any intensification of traffic along the southern part of Western Ave is of major concern, as the intersections at Carillon Ave gates together with the gates themselves severely restrict capacity for vehicles at this entry. (WC)	The University intends to explore the widening of the gate entrance at Western Avenue to permit 2-way traffic.  Refer to comments on discussions with St Andrews College (above) for a potential shared vehicle route under St Andrews Oval.
Concern of building being built hard up against rear service land and trees within RPAH land. (SHLD)	Noted. The CIP proposed building envelopes within which future DA design for buildings, open space and connections will be addressed. The formal design of building footprints within any approved CIP building envelope will be addressed at a future detailed Application process.
Concern about overshadowing impacts upon surrounding land including St Andrew's Oval, junction of Western Avenue and Cadigal Lane, Wesely College, and RPAH. (SHLD, StAC, WC).	The amended CIP Health precinct includes revised shadow plans which demonstrates satisfactory levels existing and additional mid-winter shadows on all surrounding land, and compliant with City of Sydney DCP solar access requirements.
Incorrect University site boundary overlapping the rear of the Royal Prince Alfred Hospital. (SHLD)	Agreed: The University's Health Precinct boundaries are amended to reflect correct site boundaries.
SLHD and RPA are keen to work with the University to develop a joint long-term plan to the development of integrated facilities along the shared RPHA and University boundary that will achieve mutually beneficial outcomes. (SHLD)	Agreed. On 1 May 2014 the University met with the SLHD regarding a proposed master plan for the RPAH. The meeting agreed upon a joint strategic development program across the RPAH and University Health precinct in partnership with one other. This process will be guided by jointly agreed principles to reflect the strong working relationship between both parties, including the emerging Sydney Research partnership. On 25 June 2014, the inaugural meeting of this program was convened and cochaired by the University's Vice-Chancellor and the CEO of the SLHD. The University therefore requires resolution on the CIP Health Precinct building envelope in order to realise the area within which the University Health Precinct can contribute towards a joint development programme with SLHD and the RPA.



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
Potential to improve pedestrian connectivity between RPAH and the University. (SLHD)	Agreed. See comment above.
Concern about the "Proposed Future Service Road". (SHLD)	Noted. The proposed future service road to Missenden Road is not a formal proposal of the CIP. Any future connections between RPHA, St Andrews and the University will be the subject of a joint long term plan (see comments above).
6. LIFE SCIENCES PRECINCT:	
The extent of the proposed building west of the Ross Street gates should be set back in comparison to the indicated envelopes. (CoS)	Agreed: The amended CIP Life Sciences Precinct Building envelope addresses:
	a principal vehicle entrance at the Ross Street gateway, and with the intention of incorporating a colonnade to create a wider pedestrian environment; and
	setting back the building footprint along Parramatta Road to create a landscape zone with breakout spaces on ground level.
The height of the building east of Ross Street should be reduced to	Note the ridge of the RD Watt building is RL 47.5 and not RL40.
be no higher than the main ridge of the RD Watt Building (RL40). (CoS)	The amended Life Sciences building envelope is lowered by 6 metres to RL 43.5 between Ross Street entrance and the western curtilage of the
The section of building between RD Watt Building, the substation and the Hayden Lawrence Building is not supported. (CoS)	RD Watt building. Refer to CIP Urban Design Review which addresses the surrounding context and scale of the Health Precinct.
Proposed height should be reduced in response to urban setting. (DPE)	The residual envelope height is retained at RL49.5 in front of RD Watt. At issue is retention of the view of the rear of RD Watt building from Parramatta Road. The building was designed to be seen primarily from Science Road; the rear view from Parramatta Road being incidental. Archival photographs show that the McMillan Building (constructed c.1961, demolished in 2012) obscured this view (see photo below). The RD Watt building was never designed to be seen from Parramatta Road.



ISSUE	THE UNIVERSITY OF SYDNEY CIP RESPONSE
Clarification required re reference to "bridge" on Drwg SSD-F-12 Rev A. (DPE)	The CIP Life Science precinct includes an overhead built connection above the Ross Street entrance that will provide useable floorspace and/or pedestrian connections between buildings. The overhead built connection will provide internal benefits of:
	a) level accessibility between floors and buildings, particularly where ground level gradient challenges prevail such as the fall of Science Road descending to the Ross Street entrance; and
	b) a direct response to the University's Disability Action Plan.
	The overhead built connections will provide external benefits of a covered and framed gateway for the Ross Street gateway and a framed vista through to Oval 2 behind and beyond.
	The design of the overhead built connections will be specifically detailed at a future detailed Application design.



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
The location and size of the proposed western addition to the McMaster Building should be reconsidered with reference to the McMaster CMP. (CoS)	Agreed: The proposed extension of the McMaster building is no longer included in the CIP and diagrammatic references are deleted from the proposal.
The re-designed grandstand should ensure retention of existing views and the setting of the nearby JD Stewart Building. (CoS)	Combined with the realignment of Regimental Road to allow for a shared road (pedestrians and delivery/emergency vehicles only), the Grandstand envelope will allow for continued views across to the JD Stewart building.
7. CULTURAL PRECINCT: Future development applications for works to the Macleay and Edgeworth Buildings should be supported by a Heritage Impact Statement addressing their impacts assessment. (CoS)	An HIS will be prepared as part of the subsequent future detailed Application.







# 3. CIP RESPONSE TO HERITAGE & CONSERVATION SUBMISSIONS

The following table addresses relevant access and transport issues raised in heritage and conservation submissions from:

- City of Sydney Council
- Department of Planning & Environment
- NSW Heritage Council
- National Trust NSW

The CIP responses refer back to the relevant sections of the Grounds Conservation Management Plan or Heritage Impact Assessment reports that were originally submitted as part of the CIP application.

CITY OF SYDNEY (CoS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
1. OVERARCHING:				
Need for a campus-wide approach and strategic vision for future improvements.			NT has a concern regarding the creation of a high rise campus.	The CIP provides a campus wide strategic approach to future campus precinct building envelopes, landscaping concepts, access and parking targets, and infrastructure requirements for the period 2014-2020.
				The selective location of high rise buildings around the campus perimeter, specifically on main roads alongside recently approved buildings of similar scale, enables the University to grow without encroaching on areas of high significance – in particular the Collegiate Gothic core.



CITY OF SYDNEY (COS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
The proposal appears skewed towards function and operational considerations over design outcome.			NT envisages the University campus as an antipodean version of the "dreaming spires of Oxford."	This CIP 'Response to Submissions' package includes a strategic Urban Design Review of all the CIP precincts (incorporating a peer review by Cox Richardson architects). The review revises the precinct building envelopes commensurate with surrounding and approved development scale and context.
				The detailed design of future buildings and places will be addressed by future detailed Application, and will be guided by the CIP building envelopes and Campus Concept Landscape plan.
There is a lack of integration between the proposed elements of the master plan with existing colleges, public domain and landscape character.		The Grounds CMP does not incorporate the University Colleges.		While acknowledging the different land ownership surrounding the University, the GCMP has been revised to include an extended curtilage, and includes further detail on landscape elements (including Colleges) and their significance. The GCMP identifies the critical view corridors from the various University Colleges (pp.146-147, Figs.4.3 & 4.4) and the critical visual and planning axes (pp.156-157, Figs.4.5 & 4.6). The HIS for each development precinct makes reference to these view corridors where relevant.
The Grounds CMP submitted should be updated to include the				Agreed. The GCMP has been updated - refer to comments above.



CITY OF SYDNEY (CoS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
residential colleges, particular with reference to significant views.				
A Landscape Master Plan should be prepared to fundamentally inform this masterplan (concept plan).	Concurs with CoS recommendation that a Campus Landscape Plan be prepared.			A CIP Concept Landscape Plan is submitted with this CIP Response to Submissions' package, and was prepared by Clouston Associates for the University. The Concept Landscape Plan has been informed by the GCMP Landscape Legacy and Opportunities plans.
			NT queries the preparation of the HIS by a University employee.	External and qualified heritage consultants have prepared the HIS for each of CIP precincts. The CIP Assessment of Heritage Impact (Appendix K), prepared by CIS, is an overarching document that incorporates the consultants' conclusions into one document.
2. MEREWETHER PRECINCT: The proposed Merewether building along City Road should be: a) reduced in height to RL 53; and b) in the form of a podium/tower design.	The height of the proposed Merewether building should be reduced in conjunction with the Wentworth building to improve outcome.			CoS suggests RL 53 for Merewether but RL 65 for Wentworth. This position is in contrast to DPE recommendation for complementary building envelope heights. From an urban design perspective, it is more critical that the proposed Merewether and Wentworth buildings form a "gateway" into the western sector of Darlington campus than a perceived extension of Eastern Avenue.



CITY OF SYDNEY (CoS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
The proposal should maintain and enhance the landscape setting and form of the Institute Building.	Highlight the importance of retaining the heritage significance of the Institute Building.	A heritage curtilage to be established for the Institute and the Superintendent's Residence to protect the significant setting.  The visual integrity of the Institute Building and its relationship with the Superintendent's Residence and boundary fences should be maintained.		The University agrees with the comments by the CoS, DPE, and NSW Heritage Council that a heritage curtilage should be established around the Institute Building and Superintendent's Residence. The University agrees that the boundary fences should be maintained, but has obtained advice that minor alterations to provide new openings are appropriate to activate streetscapes and facades. This will be detailed in the future detailed Application.  The Institute Building CMP (1995), prepared by John Graham, establishes the heritage curtilage and conservation policies for future development. The revised Merewether Envelope Plan (SSD-C-11) demonstrates the proposed new buildings envelope provide a greater City Road setback, and aligns with the Institute building, compared with the existing Merewether building.  New building facades which front onto the Institute can be detailed to provide an understated backdrop for the highly detailed and colourful Institute Building. (cf Gov. Macquarie Tower and Phillip St terrace houses.)



CITY OF SYDNEY (COS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
The Institute's rear West Wing (original school building-1879) should be conserved and the proposed building above that wing should be no		The West Wing (original school building-1879) should be retained.		The Institute CMP rates the Ground Floor of the West Wing (original school building – 1879) as having Considerable Significance, but the upper floor additions are ranked as being of Little Significance relative to the whole building.
higher than the opposing wing.				The merits of demolishing the upper floors, retaining the ground floor and then constructing additional floors, as has been suggested, would be of little heritage value. The University has concluded that construction of a new wing would produce a more sympathetic outcome for the Institute Building.
Institute / Regiment boundary fence should be retained. (see Fig.13).	General query about the building proposed at the rear of the Institute Building.			The Institute CMP Policy 48 (p.75) allows for a building to be constructed between the Institute and the Darlington Road fence. The University proposes a separate building of lower scale behind the Superintendent's Residence would break up the mass of the proposed Regiment building, when viewed from Darlington Rd., as well as address the issue of retaining the Institute's western boundary fence.



CITY OF SYDNEY (COS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
		The 19 <sup>th</sup> C palisade fence and brick boundary wall around the Merewether – Institute building site should be retained and conserved.		The perimeter palisade fence and brick wall were built to define the public and private realms, i.e. to separate and exclude people. The CIP objective is to increase permeability onto and through the Merewether precinct, which means introducing site access at appropriate places whilst maintaining the overall integrity of the perimeter fence. Details of boundary wall retention and penetrations will be addressed at the future detailed Application design.
		Submit a CMP and HIS with any future DA for the Institute / Merewether site.		The existing CMP will be updated and referenced in an HIS for the future detailed Application.
The height of the Regiment Building should be reconsidered, given the prominence of the site.	Consider reducing the height of the proposed Regiment building to match the proposed Moore College building).			The Regiment site, together with the approved development for the Moore Theological College opposite on City Road, will announce a gateway arrival to the University campus, and the termination of King Street Newtown. This gateway if further emphasised by the directional change of the road alignment from King Street to City Road.  The Regiment building envelope complements the height and scale of the approved Moore College site opposite.



CITY OF SYDNEY (CoS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
The proposed Regiment building's architectural features and a transition in the height and mass from the street level, particularly 2-3 storeys at Darlington Road, would be more appropriate.				See comments above.  The Institute's brick retaining wall along Darlington Road reflects the marked difference in levels between the Institute and the Darlington Road terrace houses. When combined with the broad width of Darlington Road it is difficult to achieve any meaningful visual connection between both sides of the street, let alone a visual transition.
Development at the rear of the Darlington Road terrace houses should be subservient to the scale of the terraces at the Darlington Street frontage.		The height of the proposed student accommodation at the rear of the Darlington Road terrace houses should be reduced to a height of 8.6m.		Due to southern fall of the site and the need to achieve at-grade access off Darlington Lane, the proposed building envelopes for the proposed student accommodation will be subservient to the existing terrace houses. Design details will be provided at a future detailed Application process.
		The setback of the proposed student accommodation from the Darlington Road terrace houses should be increased from 4m to 6m.		The proposed minimum 4m setback satisfies the CoS Guidelines for Alterations and Additions to Terraces requirement of a minimum of 20m² usable open space



CITY OF SYDNEY (COS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
	Concern regarding privacy and overshadowing of the privately owned terrace houses.			The revised Darlington Terraces envelope has removed certain 'building footprint' sections so as to ensure that adjacent privately owned terraces receive the minimum required solar access to open space required by the City of Sydney DCP (section 4.1.3 Residential Amenity).  Design details and privacy mitigation will be addressed at future detailed Application process.
Options for the adaptive reuse of the terrace houses should be considered prior to establishing whether additional floor space is appropriate.				The objective is to undertake minimal alterations to the existing terrace houses, in order to not trigger the need for extensive BCA upgrades, and thereby retaining maximum original building fabric. The proposed new rear buildings will satisfy BCA and Accessibility requirements and will be addressed in the future detailed Application.
3. CITY ROAD PRECINCT: The proposed Wentworth building should be: a) reduced in height to a maximum of RL65; b) reduce the podium height onto Butlin Ave to RL 53; and	Height should be reduced to that of St Michael's development (RL67.35).  Podium height should match that of St Michael's development.			The City Road precinct envelopes are revised to produce a 6 metres setback from City Road and a podium height consistent with the approved St Michael's College site. Above the podium are proposed a corner element celebrating the junction of City Road and Cleveland Street, 2 towers with a complementary height to St Michael's and one tower that rises above the St Michael's height.



CITY OF SYDNEY (COS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
c) provide a 6.0m set- back along City Road				The CIP Urban Design Review which accompanies this 'CIP Response to Submissions', provides sketch photomontages illustrating conceptual streetscape for City Road. Design details for the City Road streetscape will be addressed at a future detailed Application process.
International House should be:  a) considered for retention; or b) additional justification for its demolition should be provided.		International House, consisting of the rotunda and residential slab, is of state significance, and should be retained.  A heritage curtilage to be established for International House. Submit a CMP for International House and an HIS with DA.	NT opposes the demolition of International House.	The justification for the proposed demolition and redevelopment of International House is addressed at the end of this table.  Retention of International House would disrupt what will be a significant new group of buildings and streetscape fronting City Road.  A HIS report will be submitted as part of the future detailed Application for this site.
4. ENGINEERING PRECINCT: The proposed Demolition of the Chemical Engineering Building and Civil and Mining Engineer Building is not			Drwg A-DIA-03 Rev B to be amended to show retention of PNR Building.	There is no proposal to demolish the Civil and Mining Engineering Building – CIP Drwg A-DIA-03 Rev B has been amended. The operational requirement to demolish Chemical Engineering should be made in a Demolition Report as part of a future detailed Application.



CITY OF SYDNEY (COS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
supported.				The demolition of the Chemical Engineering is required as a second stage in the upgrade of the Engineering precinct. This will enable the core of the remaining late modern significant buildings to be retained and adaptively reused. The Chemical Engineering Building is the least adaptable building within the engineering precinct and it is critical to the overall needs of the Engineering Faculty that it is replaced.
				The HIA concludes that "The loss of the highly significant 1960s Chemical Engineering Building (J01) component of the Precinct is unfortunate in heritage terms, but can be supported if it becomes an effective mechanism to achieve the broader upgrading and continuity of the remaining significant buildings and important circulation spines within the Precinct". (CIP Appendix K, Engineering Precinct, Assessment of Heritage Impact, prepared by GB&A, Section 6.1.4, p.61)
The proposed alterations to the Electrical Engineering Building should be designed with regard to its impact on the original building.				Future building additions will be designed to be connected to and be compatible with the existing Electrical Engineering building. Detailed design will be addressed in the future detailed Application process.



CITY OF SYDNEY (COS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
A CMP for the precinct should be developed and significant buildings within the precinct retained and conserved.				The necessity for a CMP is not supported in this instance. The Engineering Precinct HIS provides an assessment of the heritage significance of each of the buildings within the precinct and assesses the impact of the proposed demolition of some rated buildings within the overall significance of the precinct as a whole.
5. HEALTH PRECINCT: Retention of the Blackburn Building should be investigated; alternatively additional justification for its demolition should be provided by way of a Demolition Report.			Blackburn Building should be retained.  Blackburn Building has significance for:  • research and medical breakthroughs; and  • its association with Blackburn family	The proposed replacement of the Blackburn Building is proposed for the following reasons:  The adaptive reuse of the Blackburn Building is too difficult given the changes of level across each floor, the poor level of accessibility between and across levels, and the low level useable floorspace within the building combined with the large central voids used for infrastructure.  The HIA by Clive Lucas Stapleton & Partners concludes "in the view of this firm, although the proposal if constructed would have some substantial impacts on the heritage significance of the University, it could be approved by the consent authorities under provisions of the University of Sydney Grounds Conservation Management Plan (2013)." (CIP Appendix K, Blackburn and Vet



CITY OF SYDNEY (COS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
				The significance of research and medical breakthroughs lies more with the Medical Faculty than the building. This association will continue with the medical faculty occupying part of the new facilities on site.
				The building was renamed the Blackburn Building only in 1960, in honour of Blackburn's long standing role as Vice-Chancellor, not because of any close association with this building. The University frequently renames buildings.
6. LIFE SCIENCES PRECINCT  The extent of the proposed building west of the Ross Street gates should be set back in comparison to the indicated envelopes;				The amended CIP Life Sciences Precinct Building envelope addresses:  a pedestrian primary zone at Ross Street entry by removing the traffic island and providing a colonnade to create a wider pedestrian environment; and  setting back the building footprint along Parramatta Road to create a landscape zone with breakout spaces on ground level.
The height of the building east of Ross Street should be reduced to be no higher than the main ridge of	Proposed height should be reduced in response to urban setting.			The amended Life Sciences building envelope is lowered by 6 metres to RL 43.5 between Ross Street entrance and the western curtilage of the RD Watt building.



CITY OF SYDNEY (COS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
the RD Watt Building (RL40).				The residual envelope height is retained at RL49.5 in front of RD Watt. The former McMillan Building (demolished end 2012) was located in behind (north) of the RD Watt building was of a similar in height – see photo below. The RD Watt building was never designed to be seen from Parramatta Road.
	Clarification required re reference to "bridge" on Drwg SSD-F-12 Rev A.			A "bridge" defining the Ross Street entrance was envisaged in the Wilkinson Master Plan (1920).
				Externally, the principal Ross Street campus gateway will be framed by the overhead link, which will also afford a vista to the Oval 2 and beyond.
				Internally, the overhead built connection will provide:



CITY OF SYDNEY (COS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
				a) level accessibility between floors and buildings, particularly where ground level gradient challenges prevail such as the fall of Science Road down to the Ross Street entrance; and     b) a direct response and solution to the University's Disability Action Plan
				The design of the overhead built connection will be specifically detailed in a future Application.
The section of building between RD Watt Building, the substation and the Hayden Lawrence Building is not supported.				At issue is retention of the view of the rear of RD Watt building from Parramatta Road. The building was designed to be seen primarily from Science Road; the rear view from Parramatta Road being incidental. Archival photographs show that the McMillan Building (constructed c.1961, demolished in 2011) obscured this view for fifty years. (see photo above)
The location and size of the proposed western addition to the McMaster Building should be reconsidered with reference to the McMaster CMP. It will:  a) block views to the Roundhouse;				The proposed extension of the McMaster building is no longer included in the CIP and diagrammatic references, therefore, are deleted from the proposal.



CITY OF SYDNEY (COS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
<ul><li>b) conceal the western façade;</li><li>c) (visual) impact on the Vet Science Caretaker's Cottage.</li></ul>				
The extent of additions to the Grandstand should ensure retention of significant views specified within the Grounds CMP.				The proposed relocation of the grandstand (which has an approved DA) is specifically sited to retain View Corridor CV7.
The re-designed grandstand should ensure retention of existing views and the setting of the nearby JD Stewart Building.				At issue is the realignment of Regimental Road, which is to be downgraded to a shared access for pedestrian priority and service/emergency vehicles only. The HIS for the proposed relocation of the Grandstand has highlighted this issue (CIP Appendix K, Blackburn and Vet Science Precinct, Assessment of Heritage Impact, prepared by CLS&P, p.102, Recommendation 2) with regard to landscape elements.



CITY OF SYDNEY (CoS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
7. CULTURAL PRECINCT: Future development applications for works to the Macleay and Edgeworth Buildings should be supported by a Heritage Impact Statement addressing their impacts assessment.				The CIP specifically states that a HIS will be prepared as part of the subsequent DA. (CIP Appendix K, Assessment of Heritage Impact, p.24, 7.7.2 Recommendation.)
		An experienced heritage consultant is to be commissioned to work with the consultant team during the design development, documentation and construction stages (of each project).		Agreed. All future detailed Application involving heritage buildings and items will involve a qualified heritage consultant.
		Future DAs for six nominated heritage buildings to include a building fabric survey, including façade and general building condition		Agreed. This information will be submitted as part of the future detailed Application affecting each heritage building.



CITY OF SYDNEY (COS)	DEPT. PLANNING & ENVIRONMENT	NSW HERITAGE COUNCIL	National Trust (NSW)	THE UNIVERSITY OF SYDNEY  CIP RESPONSE
		and a schedule of required conservation works.		
		Digital Archival documentation is to be prepared in accordance with Heritage Office Guidelines for any works on nominated heritage buildings.		Agreed. This information is a typical requirement as a condition of approval for any DA impacting on a heritage building.
		A University Heritage Interpretation Plan, prepared in accordance with Heritage Office guidelines, to be submitted as part of any future CIP DA.		The University agrees to the preparation of a Heritage Interpretation Plan.



#### Statement on International House:

The following arguments are presented in justifying the proposed demolition and redevelopment of International House:

### 1. Urban Form & Context

Historically, the original design of the building addressed the corner of Cleveland Street and City Road in a strong way with the rotunda becoming the visual focus on the corner. This created a gateway building with the accommodation block behind. The building then was relatively grand in scale, bounded by two storey terraces on either side, terminating a vista up City Road.

Today the site's context is very different. The construction of the adjoining Seymour Centre and the SIT buildings, the demolition of adjoining terraces, the construction of a robust wall around the site, and the growth of the fig trees have all diminished the visual prominence of International House in the current urban landscape.

The future plans for University's CIP City Road Precinct are different again in that the CIP intends to:

- · Activate the City Road frontage
- Provide through-site links between City Road and the Darlington campus (Cadigal Green) behind
- Create a continuity of development scale and form that links City Road through to Broadway
- Produce a University Gateway approach and pedestrian connection into the heart of Darlington campus
- Reinstate the original (former) Darlington Road alignment through the above-mentioned pedestrian gateway entrance between Seymour Centre and the International House site (this initiative is strongly supported by City of Sydney officers).

Consequently the CIP City Road precinct proposes a stronger, increased mass and scale of buildings fronting City Road; characterised by a consistent podium, providing weather protection along the footpath, through site and accessible links to the Darlington campus, and separated tower elements offering architectural expressions and interest.

The proposed building will address the intersection of Cleveland and City Road at a scale appropriate to the proposed City Road streetscape, again giving it the importance it deserves.



### 2. Economic Context:

The University notes that International House received significant financial focus towards the rotunda building which serves as an arrival point and common areas, whereas the actual student accommodation is provided in the adjoining slab building.

The current layout of the existing student accommodation, consisting of small sleeping areas and communal bathrooms, is not efficient, given current requirements in affordable student accommodation. Current demands are towards larger self-contained areas where students are encouraged to become independent with self-catering facilities. To convert the existing building would not be economically efficient, does not benefit from an inefficient building footprint, and would require extensive redevelopment of the site and is not supported by the University. The high cost of the conversion and the resultant low numbers yielded by the current design would be too low to achieve affordable efficient student accommodation. Refurbishment of the existing building therefore does not align with the University's strategic of providing affordable student accommodation on campus.

### 3. Response to National Trust heritage significance:

The first stage of International House has been listed by the National Trust. The proposed redevelopment of International House responds to the following themes of heritage significance identified by the National Trust:

Significance	CIP Response
Historical significance: Designed to provide independent, inexpensive housing modern accommodation that to accommodate students of both sexes as well as domestic and international origins.	The University notes that the rotunda does not provide any accommodation; this is provided in the adjoining slab building.  The University seeks to construct modern and affordable student housing that not only will accommodate all cultures, sexes and origins, but which can integrate into other university teaching/learning and support facilities and thereby provide sustainable buildings that will contribute to the University student village atmosphere.
Social significance: Past and present associations with the nationalities studying at the University.	The University's program for future student accommodation will continue to provide an affordable range of accommodation to serve all students from all nationalities, cultures and backgrounds who attend the University.



Significance	CIP Response
Aesthetic significance: Late 20 <sup>th</sup> century International style designed by Bunning & Madden in 1967.	The University acknowledges the rotunda building, which serves as a common area and arrival to International House, has some fine detailing. Whereas the student accommodation itself, housed in the adjoining residential slab building, offers minimal finishes and details of aesthetic significance. Due to the financial constraints at the time of construction the design effort went into the public spaces in the Rotunda, rather than the accommodation areas.  Today the rotunda building is barely visible from the public domain or campus due to existing walled boundaries and mature vegetation.
	The University notes other genres of rotunda buildings found around Sydney including:
	The former St Margaret's Chapel, now the Object-Australian     Centre for Design, Bourke St Surry Hills (1958 – Ken Woolley)
	<ol> <li>The Roundhouse at UNSW</li> <li>The Australian Academy of Science's Shine Dome, Canberra (1959 – Roy Grounds)</li> </ol>
	MLC Centre, Sydney (particularly the travelling salesman club on Martin Place)
	<ul><li>5. Australia Square, Sydney (1961-67, Harry Seidler</li><li>6. Gazebo Apartments, Kings Cross</li></ul>
	7. Mandalay Apartments, Manly
<b>Landmark significance:</b> Landmark position on a major road heading into the Sydney CBD	The proposed CIP site redevelopment will also produce a landmark building for this site which:
	announce a principal City Road gateway to the University of Sydney;



Significance	CIP Response
	produce a building designed to modern spatial requirements and standards, as well as facilitate a principal pedestrian arrival to the Darlington campus; and
	provide the interpretation of the former Darlington Road alignment, as strongly encouraged by the City of Sydney Council.

## 4. Recommendation of the Heritage Impact Assessment (HIA):

The HIA report prepared by Tanner Kibble Denton Architects suggests a number of items that should be retained should the building be demolished, including:

- photographic archival recording
- interpretations as part of the any future redevelopment
- boundary stone located within the International House site is to be retained in a similar location

The University is in agreement that the above recommendations be implemented.



# CAMPUS IMPROVEMENT PROGRAM 2014–2020

STATE-SIGNIFICANT DEVELOPMENT APPLICATION (SSD 13\_6123) JUNE 2014

TRAFFIC





# 4. CIP RESPONSE TO GOVERNMENT AGENCY TRAFFIC & ACCESS SUBMISSIONS

The following table addresses relevant access and transport issues raised in Government agency submissions by *Transport for NSW* (TfNSW) / *Roads & Maritime Services* (RMS) and the *City of Sydney Council* (CoS), and provides the CIP response to each Government authority.

The University commissioned *Arup* to prepare the Campus Improvement Program (CIP) 2014-2020 Access Strategy. The University and Arup have reviewed and responded to the Government agency submissions in the table below. The CIP responses refer back to the relevant sections of the CIP Access Strategy and provides additional information or analysis where required.

The CIP Access Strategy provides a holistic strategy on movements to and through the University's Camperdown-Darlington campus to meet the objectives of the CIP, and is addressed through a number of sub-strategies including:

- Vehicle access
- Parking
- Servicing
- Pedestrian
- Cycling
- Travel Demand
- Accessibility

The CIP Access Strategy addresses the anticipated growth in activity on the campus and each sub-strategy provides guidance in providing for the future movement. Staged development will occur in precincts across the campus and the detail relating to each development will be provided at future detailed Application stage.



# A.RESPONSE TO TRANSPORT FOR NSW SUBMISSION

TRANSPORT FOR NSW	CIP RESPONSE
1. CAR PARKING  The Parking Strategy suggests an increase in the amount of car parking, in line with future increases in the student population, from approximately 2,400 spaces to 2,800 spaces on site. The increase in car parking does not support increasing public and active transport mode shares in the future. TfNSW/RMS requests that the University consider maintaining the current level of car parking (2400 parking spaces) in the future to encourage greater public and active transport participation by University population.	The car parking strategy has sought to minimise additional car parking facilities in line with the objectives of increasing the use of public transport. Therefore a total future parking provision of 2,800 car parking spaces could be achieved under full realisation of the CIP up to year 2020. This represents a 19% increase above the year 2010 car parking provision. This is considerably lower than the 38% increase in building GFA proposed by Transformational and CIP developments. Based on this building GFA increase, the overall rate of parking provision is significantly reduced.
	This level of parking growth is appropriate given the prioritisation of active modes and sustainable transport initiatives that will be implemented as part of the CIP to facilitate the growth in non-car mode required to meet student and staff travel demands. It is less than the expected 21% increase in University population.
	The Access Strategy has explored travel demand measures including pricing mechanisms to ensure that the use of private vehicles for access to the University is equitable and targets a more sustainable travel outcome for the CIP.
	The City of Sydney Local Environmental Plan 2013 provides a maximum parking rate of 1 per 200m². The CIP proposed provision of up to 2800 spaces which results in 1 space per 350m². The City of Sydney also supports this minimal increase in car parking which provides a balance between limiting overflow onto surrounding street parking, whilst reducing overall car mode.



TRANSPORT FOR NSW	CIP RESPONSE
2. MISSENDEN ROAD GATEWAY  There are concerns in regards to the proposed gateway (and potential future access road) on Missenden Road. Additional traffic will be directed onto this roadway and there are concerns as to the impact this additional traffic would have on the intersections along Carillon Avenue and Missenden Road, existing bus stops and bus services in this vicinity. Should any impacts be identified, the measures proposed to mitigate these must be committed to being enforced.	The CIP does not formally propose an access road between Missenden Road and the University health precinct of Cadigal Lane and Western Avenue. The potential for a future connection here is a matter for future investigation and agreement between the Sydney Local Health District (SLHD) / Royal Prince Alfred Hospital, St Andrew's College, and the University.  Furthermore, the SLHD and the University have already commenced working together in preparing an integrated strategy for the RPA Eastern Campus with the University Health Precinct. There is a strong desire to improve permeability between Missenden Road and the University for pedestrians and cyclists. There would also be benefit for sharing of roadways for servicing the buildings in these precincts.  The Health Precinct car park access will however be focussed on Western Avenue which connects with Carillon Avenue. Furthermore, St Andrew's College and the University have agreed to investigate the opportunity for a shared access route from Western Avenue, under the St Andrew's Oval, and to connect with the existing car park under St Andrew's Oval and the proposed adjoining health Precinct car park. On this basis it is anticipated that any vehicle access to Missenden Road for University and College generated vehicles will be for authorised staff/student, service and emergency vehicles only with minimal change to traffic volumes. The CIP proposed cessation of cross campus traffic (typically between the Ross Street car park/Parramatta Road to the north and Western Avenue/Carillon Avenue to the south), will also facilitate reduced traffic volumes.  The traffic redistribution analysis undertaken in Section 6.3.5 of the Access Strategy assumes all additional traffic generated by the Health Precinct car park will use Western Avenue.



TRANSPORT FOR NSW	CIP RESPONSE
	<ul> <li>With this increased activity, an upgrade of the Western Avenue intersection with Carillon Avenue may be required to provide additional entry and exit capacity, including:</li> <li>Removal of kerbside parking currently on the north and west approaches. These lanes could be converted to no-stopping during peak periods only if warranted.</li> <li>Introduction of a short 15m right turn bay on the west approach to help through traffic flows, without impact to the bus stop.</li> <li>Widening of the gates on Western Avenue to increase entry and exit lane capacity.</li> </ul>
	The Missenden Road / Carillon Avenue intersection operates at capacity during the peak periods. Additional traffic accessing Western Avenue can choose to access the wider road network via King Street to avoid Missenden Road and Carillon Avenue (continuing west). The University traffic load is spread over the day which minimises the impact on peak periods.
3. BUS SERVICES  Consideration must be given to any potential impact during the operational phase to regular bus services operating in this area from the proposed additional on-site parking and associated traffic and the proposed drop off areas. Should any impacts be identified, the measures proposed to mitigate these must be committed to being enforced.	Driveways fronting bus routes will have minimal change in car usage and hence no impact on bus services. The drop-off areas described in Section 6.3.6 rationalises existing activities, and accommodate all activity on-site. Additionally, the closure of the through traffic routes to general/public vehicles across the Camperdown campus will assist with reducing driveway use.
4. BICYCLE FACILITIES TfNSW/RMS requests that bicycle parking facilities be designed to meet AS2890.3 whilst the layout of the of the proposed car parking areas be designed in accordance with AS2890.1-2004 and AS2890.2-2002.	Facilities for car parking, loading and bicycles will be designed to the relevant Australian Standards and approved during the future detailed Application process.



TRANSPORT FOR NSW	CIP RESPONSE
5. CONSTRUCTION TRAFFIC MANAGEMENT PLANS Individual Construction Traffic Management Plans (CTMP) should be prepared for each construction site in consultation with RMS, Transport Management Centre (TMC), Council and other relevant agencies, prior to the commencement of substantial demolition/construction on each site.	CTMPs are an important part of managing traffic for construction and will need to be prepared for each development during the future detailed Application process.
6. REGULATORY SIGNAGE All works/regulatory signage associated with the proposed development shall be at no cost to TfNSW/RMS.	Any associate works and signage costs within the campus, and at the access points to the campus, will be borne by the University.
7. WAYFINDING SIGNAGE The proposed way finding strategy should incorporate clear and appropriate directions to bus stops and train stations.	Signage to public transport nodes will be provided by the University as part of the way-finding strategy.



# B. RESPONSE TO CITY OF SYDNEY COUNCIL SUBMISSION

CITY OF SYDNEY COUNCIL	CIP RESPONSE
1. TRAVEL DEMAND STRATEGY The 400 spaces would not be sufficient to accommodate the existing vehicle driver mode shares (21%) and as such mode shift would be required. This is supported however a strategy to achieve this needs to be developed to ensure that the increase student and staff numbers do not have an undesirable impact on on-street parking availability in the vicinity of the site.	The CIP Access Strategy outlines a Travel Demand Strategy to further encourage non-car based travel for staff and students. Further to this, Section 5.4 in the Access Strategy outlines parking demand management measures such as the constrained nature of surrounding on-street car parking and on-site pricing mechanisms.
2. STAGING OF PARKING It is noted that the removal of surface parking isn't proposed until several of the basement parking areas are provided. The CIP identifies a closure method (pg 59) which should be included in any development consent to ensure that all surface parking is removed, as envisaged by the Strategy	Stage development construction will need to occur in accordance with a precinct based staging program for the gradual removal of surface parking areas during the transformation program of the subject precinct. This will be addressed in the future detailed Application process.
3. PUBLIC TRANSPORT IMPACTS  The number of students / staff on site is forecast to increase by approximately 11,000 to 2020, equivalent to a 21% increase. The Strategy should identify impacts on public transport, including access to public transport stops and connections to these (particularly along Parramatta Road). The Strategy states that no additional car parking will be provided for student accommodation and this is supported.	Section 4.1 of the Access Strategy outlines student growth on campus to 2020 of 10,200. This increase includes the transfer of students from Mallet Street Camperdown (Nursing), ATP Eveleigh (Agriculture & Environment), Rozelle (Sydney College of Arts) and Cumberland (Health Sciences). Approximately 70% of these satellite campus students are already visiting the Camperdown-Darlington campus on a daily basis, for courses, lectures and access to University facilities (libraries, sports, administration, and events), and currently utilising predominantly public transport and some private vehicle modes to do so.  The natural annual growth rate of University enrolments is 1.9% p.a., and which will account for an additional 5,800 students over the CIR 2014 2020 period. The residual growth projection of 4.400.
	the CIP 2014-2020 period. The residual growth projection of 4,400 students will be those transferred from University satellite campuses.



CITY OF SYDNEY COUNCIL		CIP RESPONS	E	
	Consequently, the actual campus is approximately The anticipated staff incre	7,100 over the	CIP 2014-2020 period	d.
	The Access Strategy furt up to 4,000 additional sturesult in a potential reduction the campus by these study.	ident beds on/nation of the	ear campus. This will	
	In 2013 there were approday. This is 65% of the to additional number of studentherefore 4,600.	otal 2013 enrolm	nents of 43,300. The	
	The 2011 Journey to Wo for a mode share of 15% passengers is therefore a (students and staff) inbou. This has been analysed is and hence the likely bu along with the indicative atable below.	to the Universite anticipated to be und and the sam to identify where is route they will	y. The increase in buse 750 passengers ne outbound each day at the origin for each us I take. These proportion	ser
	Bus Stops	AM Peak Proportion	Indicative Student/Staff (increase only)	
	City Road EB	27%	200	
	City Road WB	16%	120	
	Parramatta Road EB	34%	255	
	Parramatta Road WB	23%	175	<b> </b>
	Total additional		750	



CITY OF SYDNEY COUNCIL	CIP RESPONSE
	The Access Strategy assumes that buses hold approximately 50 people on average, therefore accounting for a capacity increase of the equivalent of an additional 15 bus services on City Road and Parramatta Road combined over an arrival or departure period. Given that many students travel outside of the peak period, some of this capacity will already exist on buses passing the campus.  Over the 7 years that the CIP is proposed to occur, this is a
	relatively small increase in bus services that will likely be provided.
	Additionally, bus stop capacity needs to be considered when analysing this data. With an anticipated increase of 750 passengers arriving or departing the university over a day, no more than 200 passengers could be expected in a peak one hour period. These passengers are spread over a number of bus stops and a number of routes. Improved pedestrian connections outlined in the Access Strategy will improve accessibility for these passengers.
4. BICYCLE PARKING  Minimum bicycle parking rates should be provided and should be in the order of a minimum of 1 space per 2 beds.	For the accommodation projects, bicycle parking facilities will be documented as part of the future detailed Application process. A minimum provision of 1 space per 2 beds is considered a reasonable rate for this type of facility.
A minimum of 1 bicycle parking space per 10 students/staff is to be provided, based on peak occupancy rates.	Bicycle parking facilities comprising bicycle racks and secure cages will be implemented across the campus to respond to growth in demand. Section 5.1.3 of the Access Strategy outlines a potential provision of up to 2,800 bicycle parking spaces which adopts the rate of 1 bicycle space per 10 students and staff on site at any one time.



CITY OF SYDNEY COUNCIL	CIP RESPONSE
A total of 3 secure bicycle cage parking areas are indicated. The University should be encouraged to investigate an additional area on the western side of the campus around University Oval 1/2 or Hockey Square.	The secure bicycle cages shown on the strategy are existing facilities. The intention is that new secure bicycle parking facilities be provided in each new CIP precinct as a component of a building. These precincts will be supplemented with bicycle racks to cater for short-term localised demand for parking, including the Life Sciences precinct north of Oval 2 and the Health precinct south of Oval No.1.
5. BICYCLE FACILITIES End-of-trip facilities need to be provided for use by both students and staff and should be based on expected peak occupancy.	Peak student occupancy on the campus is approximately 50% of enrolments and bicycle racks are planned to be provided to this rate. The shortfall in end-of-trip facilities is noted in Section 5.3.4, and will be delivered as part of new developments in each of the precincts.
6. MOTORCYCLE PARKING Sydney DCP 2012 requires that in all buildings that provide onsite parking, 1 motorcycle parking space be provided for every 12 car parking spaces as separate parking for motorcycles. Based on 2,800 car parking spaces, approximately 233 motorcycle spaces should be provided.	The new car parks will include motorcycle parking provisions. The intention is to provide motorcycle parking at the DCP rate which will require staged introduction of up to an additional 133 motorcycle parking spaces to add to the existing 100 spaces on campus as new developments are delivered.
7. MODAL SPLIT  Target modal splits to the site need to be identified and appropriate measures identified to show how these targets will be achieved throughout the course of the development.	The Access Strategy argues that limiting car parking provision will provide a car mode target; therefore, all other non-car modes will naturally increase given the measures outlined in Section 8.3 (travel demand strategy).
8. CYCLEWAY STRATEGY The Proposed Cycleway Strategy should be updated to ensure it aligns with both the existing and proposed City of Sydney Cycle Network.	The proposed cycleway strategy (Figure 39) has been updated based on the March 2014 Sydney Cycling Map on the City of Sydney website and is attached.
9. SHARED PEDESTRIAN & CYCLE ACCESS Provision of shared pedestrian / cycling access along the existing boardwalk between Shepherd Street and Darlington Road shared	These investigations will occur as the shared zones are identified. All campus footpaths will not be 'pedestrian only', but will be noted with pedestrian priority. Shared paths will be designated cycle routes with appropriate signage and line marking.



CITY OF SYDNEY COUNCIL	CIP RESPONSE
zone and allowing for an east-west cycling connection through Victoria Park should be investigated. Access to bus stops on Parramatta Road should be reviewed as part of the Access Strategy, including potential upgrades to facilities and connections.	The existing boardwalk currently has a large number of pedestrian movements within a constrained width. It is not considered appropriate to mark this as a designated cycle route. However, cyclists will not be excluded from this path, and will need to recognise this is a low speed environment with priority given to pedestrians at all times. At very busy times it is expected that cyclists would use an alternative route such as Shepherd Street and Maze Crescent.
	Grade differences and stairs on Barff Road (Law Building) and University Avenue currently limit the cycling east-west connections to Victoria Park. It is proposed to connect cyclists using the Parramatta Road / University Avenue intersection or via City Road. Furthermore, the City of Sydney recently consulted the University (June 2014) regarding the City's proposed \$3.8 million program to upgrade Victoria Park. This strategy should incorporate appropriate cycle links and connections with the City's existing Cycle Network.
	A future upgrade to the footbridge across Parramatta Road can address improved/ DDA access between Arundel Street and the Camperdown Campus. The University has recently highlighted this opportunity to the City of Sydney as part of the City's proposed upgrade of Arundel Street parking and pedestrian capital works. This upgraded bridge could also cater for cyclists in the future.









# 5. CIP RESPONSE TO SUBMISSIONS - OTHER ISSUES

Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
DEFINITION OF "BUILDING ENVELOPES"	For clarification, the following definition of <i>Building Envelope</i> is provided and is consistent with the City of Sydney definition for <i>Building Height</i> :  **Building envelope** means the vertical distance between the ground level (existing) of a site and the highest point that a building can achieve. The building envelope provides the volumetric area within which future building forms, heights, setbacks, open space, and connections are designed. The height of a building envelope includes plants and lift overruns, but excludes communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.
UNIVERSITY OF SYDNEY SITE BOUNDARY	An amended Property Titles plan depicting the University of Sydney site boundaries and relevant land titles is attached by plan numbered A-DIA-28 Property Titles.
DESIGN COMPETITION FOR MAJOR PROJECTS: (CoS)	Pursuit of Design Excellence
The City of Sydney has sought confirmation that the University will pursue a process of Design Excellence Competition for future major projects.	The University's Campus Infrastructure & Services (CIS) has established a thorough and rigorous procurement process during 2013 & 2014 for specialist architecture panels for the following disciplines:  • Health • Laboratories • Heritage • Refurbishments under \$10m • Refurbishment over \$10m • New builds under \$10m • New builds over \$10m • New builds over \$10m



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
	Tenders for these panels had to demonstrate design excellence in their field and world best practice in the design and delivery of projects. Tender submissions were reference checked and interviewed by a selected tender evaluation committee comprising University and independent members.  CIS has also established specialist panels for related professional disciplines including (but not limited to):  • Town Planning  • Landscape Design  • Heritage  • Quantity Surveying  • BCA  • PCA  All future University major projects will incur a design competition, administered by the University, and members from the University's specialist panels will be invited to tender for specific projects. For projects over a value of \$50m, panel members will be encouraged to partner with an international design company.
BUILDINGS PROPOSED FOR DEMOLITION: (DPE) Clarification on whether the following buildings are intended for demolition:  Engineering Precinct buildings 4 and 5  Life Sciences Precinct building 30  Macleay Precinct building 8 (this should read 38)	<ul> <li>The following buildings ARE proposed for demolition:</li> <li>Macleay Precinct buildings 37 (Glass House) and 38 (former Substation building)</li> <li>Life Sciences Precinct building 30 (the Demountable Village)</li> <li>The following buildings are NOT proposed for demolition:</li> <li>Engineering Precinct buildings 4 (PNR) and 5 (Mechanical Engineering)</li> <li>An amended drawing of buildings proposed for demolition accompanies this response to submissions – refer to DWG A-DIA-03 Rev C.</li> </ul>



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
OVERHEAD BUILT CONNECTIONS: (CoS, DPE) The City of Sydney has sought clarification on the proposed use and design of bridges providing linkages	The CIP has two proposed precinct building envelopes that include overhead built connections that will provide useable floorspace and/or pedestrian connections between buildings:  1. Ross Street gateway (Life Sciences precinct).  2. Rose Street Car Park (Engineering precinct on Shepherd Street)  3. A third potential connection may see the Health Precinct connect with the Royal Prince Alfred Hospital (RPAH). This matter is notional at this stage and the subject of future discussions with the RPAH, and may not
	The overhead built connections provide internal benefits of:  c) Level accessibility between floors and buildings, particularly where ground level gradient challenges prevail such as the fall of Science Road descending to the Ross Street entrance;  d) a direct response and solution to the University's Disability Action Plan  The overhead built connections provide external benefits of providing a covered and framed gateway for principal entries to the campus:  a) the Ross Street gateway will be framed by the overhead link and will afford a vista to the Oval 2 behind and beyond  b) The Rose Street Engineering gateway providing a clearly articulated pedestrian link to the Rose Street courtyard behind and Cadigal Green beyond.  The design of the overhead built connections will be specifically detailed at a future detailed Application.



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
NSW EPA  Details of demolition, site preparation and construction related:  Noise & vibration impacts  Dust control and management  Sediment control management  Operation noise and vibration impacts  Potential site contamination issue following demolition of buildings  Presence on campus of:  friable asbestos  De-commissioned underground petroleum  Risk contamination from existing buildings of:  Demolition waste containing radioactive material  Whether regulated material requires disposal.	The majority of the information requested by EPA will be addressed under a future detailed Application. The EPA submission clearly outlines how each of these matters must be managed, and the CIP consequently acknowledges these requirements.  Works resulting in potential site contamination following building demolition would definitely need to be specific to the future detailed Application works proposed.  The potential of groundwater and underground storage tanks (UST) will be dealt with at future detailed Application site basis and will form part of a detailed assessment prior to demolition works. Notwithstanding the University has not identified any USTs on the proposed CIP sites. Should any USTs be identified on campus in the future, these will be appropriately remediated as part of future building works.  Concerning Site Contamination, the University maintains hazardous material reports (asbestos, lead etc.) on its campuses and all instances of positive identification (e.g. for friable asbestos) are risk assessed and control measures are implemented. Where remediation is required this is completed on a priority assigned bases after risk assessment and achieving a particular risk rating. Again, the presence and potential for environmental risk are specific items that would be assessed on a case-by-case basis as part of future detailed Application works.
AUSGRID:  No Objections raised  The submissions includes standard conditions addressing "prior to commencement", and "during, construction" works. These include the location, site proximity, potential impact upon, relocation of, work methodologies, affecting Ausgrid infrastructure.	All matters raised will be addressed in the future detailed Application process.



Issue	THE UNIVERSITY OF SYDNEY CIP RESPONSE
Water and Wastewater Requirements     Location of Sydney Water Stormwater Assets     Building Over and Adjacent to Stormwater Assets     Location of Sydney Water Stormwater Assets     Direct Stormwater Connection to Sydney Water's Stormwater Assets     Sydney Water E-Planning	All matters raised will be addressed in the future detailed Application process.
METROPOLITAN LOCAL ABORIGINAL LAND COUNCIL The University is to consult with the Metropolitan Local Aboriginal Land Council (Request by DPE)	The University has contacted the MLALC on numerous occasions including setting up a meeting to discuss the CIP. The MLALC cancelled the meeting and has not replied to the University's calls for further engagement.

CoS = City of Sydney Council

DPE = Department of Planning & Environment

EPA = Environmental Protection Authority

MLALC = Metropolitan Local Aboriginal Land Council

RPAH = Royal Prince Alfred Hospital







## PROPOSED MITIGATION MEASURES

The proposed measures required to mitigate the impacts associated with the proposed works are detailed in Table 1 below. These measures have been derived from the assessment contained in the Environmental Impact Statement and those detailed by specialist consultant studies supporting the CIP.

Future detailed design applications will be required to be prepared and submitted to the relevant consent authority in accordance with the Environmental Planning and Assessment Act, 1979. The following mitigation measures have been identified for incorporation within those applications where relevant.

# **MITIGATION MEASURES**

#### **A**RCHAEOLOGY

In order to mitigate any impacts to potential non-indigenous archaeological resources, Clive Lucas Stapleton & Partners has included in the Grounds Conservation Management Plan, Policy 38 which relates to historical archaeological (including Aboriginal or European) potential parts of the site as follows:

Ranking	Guideline
Ranking 1	An historical archaeologist should be consulted prior to any ground disturbance in this area. Manual archaeological investigation may be needed so as not to cause damage to the archaeological value of the place.
Ranking 2	An historical archaeologist should be consulted prior to any ground disturbance in this area. Depending on the locality and scope of the proposed disturbance, a watching brief over the work may be desirable.
Ranking 3	Ground disturbance in this area could proceed without prior consultation with an historical archaeologist. However, if upon further physical disturbance a sub-surface deposit is revealed, an historical archaeologist should be consulted.
Ranking 4	Ground disturbance in this area could proceed without archaeological supervision.



#### ABORIGINAL HERITAGE

In order to mitigate any impacts to potential Aboriginal archaeological deposits, GML Pty Ltd recommend in the Aboriginal Due Diligence Report that the following measures be implemented for the future development of the CIP Precincts:

- Should Aboriginal objects be located during the course of future development, work should cease immediately and an archaeologist be contacted to document and assess these finds. The objects must be reported to the OEH under Section 90 of the NPW Act;
- Specifically, with respect to the Life Sciences Precinct:
  - Further archaeological monitoring and testing should be undertaken on the areas under the foundations of any buildings within this
    precinct that are proposed to be demolished;
  - If proposed work in this precinct includes excavation to a depth greater than 3m, it is recommended that program of archaeological text
    excavation be carried out prior to the commencement of works, followed by archaeological monitoring of the proposed excavation; and
  - If any Aboriginal objects are located during the course of archaeological monitoring and/or test excavations these objects should be
    documented and recorded by an archaeologist and report to the OEH under Section 90 of the NPW Act.

#### HERITAGE

To preserve the site's heritage elements, future detailed applications for each precinct/site will have regard to the following:

- Grounds Conservation Management Plan (GCMP) recommends that an Interpretation Strategy shall be prepared for the place, utilising a combination of:
  - Introduces interpretive devices (pamphlets, displays, signs, electronic and printed media etc)
  - Restoration and reconstruction works to the fabric
  - Allowing access to the public and specialists (source GCMP Policy 20)
- Specific recommendations to the following precincts:

#### **Merewether Precinct**

 The maximum amount of 19th century palisade fencing around the Merewether site, where not affected by site entrances and active building edges, will be retained and conserved as part of the detailed design of the Merewether site.



- The two sculptures presently in the Merewether courtyard will be retained and conserved in a suitable location on the University campus;
- The footprint of proposed buildings in the Merewether Precinct have been adjusted to provide a clear curtilage to protect views to the front elevation of the Institute Building in order to maintain its heritage significance. The volume and scale of future development will preserve the visual integrity of the Institute Building.
- Interpretation will form part of any future redevelopment involving demolition of buildings. Moveable items including plaques commemorating the opening of buildings will be retained and conserved within the development, and incorporated into interpretive devices.

## **Darlington Road Housing**

- The interpretation of the original subdivision pattern will be delineated in the new buildings at the detailed design stage.
- The introduction of services for the café function will require careful detailing in accordance with the CMP policies to minimize any adverse physical impacts.
- The new buildings, at the rear of the terrace houses, will be subservient in height and bulk to the original terrace houses when viewed from Darlington Road.
- Maintaining the privacy of the occupants of adjoining privately owned terrace houses (in particular houses nos.93, 97 & 102) will be resolved at the future detailed application design stage.

# **City Road Precinct**

- An archival quality photographic recording of International House, the Wilkinson, Wentworth and Merewether and the University Regiment buildings will be undertaken in accordance with Heritage Council guidelines prior to demolition.
- Interpretation will form part of any future redevelopment involving demolition of buildings. Moveable items such as plaque commemorating
  the opening of buildings will be retained and conserved within the development, and incorporated into interpretive devices.
- The boundary stone within the International House site will be retained and conserved in the site redevelopment, close to its original location at the intersection of City Road and Cleveland Street.
- The bust of Lloyd Rees will be relocated to maintain its close association with the Faculty of Architecture and the Tin Shed Gallery.
- The plaque commemorating Phil Jones, an individual who had strong associations with the Student Union, will be relocated to maintain a close association with any future Union redevelopment.



## **Engineering Precinct**

- Any adaptive re-use or upgrading proposal for any significant building within the Engineering Precinct will take careful note of the original architectural and structural characteristics and connectivity's within the Engineering Precinct as part of the design development phase.
- The planning and design of all major alterations and additions, including selective demolition and internal refurbishments of all the late 20th century significant buildings and features of the Precinct will be undertaken with the benefit of detailed analysis and advice from experienced heritage consultants and as relevant, advice from the original architectural firm for the Precinct.
- Each future detailed Application for the nominated CIP buildings within the Engineering Precinct will be accompanied by a detailed Heritage Impact Assessment report.
- An archival quality photographic recording of each building or feature will be undertaken in accordance with Heritage Council guidelines prior to physical intervention.
- At the future detailed application process, the new, free-standing building occupying the Rose Street car park site will be of a scale and quality that reflects the highly resolved surrounding planning and architectural context of the late 20th century Engineering complex.
- The planning and design of the new building to be developed in the future detailed application will pay careful attention to the planning and circulation principles inherent in the way that the existing building is connected into the main circulation spine known as "Engineers' Walk".
   Its architectural expression should respect (but not mimic) its physical and spatial relationships with the nearby significant Engineering Precinct buildings.
- The planning and design of the Stage 3 extensions to the Electrical Engineering Building (J03) and the Stage 4 additions to the Workshop facilities of the Civil and Mining Engineering Building (J05) will take careful consideration of its existing architectural, spatial, and structural character, as well as the connections to the main circulation spine through the Precinct.

### **Health Precinct**

- At the future detailed application stage process, further detailed, sympathetic design of proposed new Health Precinct buildings (Sites 1, 2, 3, 4 and 5) will address the relationship and proximity to the Royal Prince Alfred Hospital Chapel and the rear of Gloucester House.
- The detailed design as part of the future detailed application will retain significant views CV5 and CV6 (refer GCMP, Fig 4.3, p.150) and the enhancement of A5 (refer GCMP, Fig. 4.5, p.153)
- New buildings will be designed with respect to significant Character Areas and Significant Landscapes G7 and G7(a) (refer GCMP, Fig 4.7, p.159)
- Efforts will be made to relocate / replant significant trees D30, D34, D35, D37 and D39 near to their present locations (refer GCMP, Table 4.3, p.140)



- Site feature D29 will be suitably relocated near to its present location (refer GCMP, Table 4.3, p.139).
- An Interpretation Strategy will be prepared and implemented for the new Health Precinct in relation to significant buildings, site features and associations.
- An archival quality photographic recording of the Blackburn Building and the Bosch Buildings 1A and 1B will be undertaken in accordance with Heritage Council guidelines prior to demolition.
- At the future detailed application process, detailed documentation shall address the following:
  - New buildings are to be designed with respect to the landscaped areas located to the east of the Royal Prince Alfred Hospital (on the western boundary of the University), in particular the remnant site features, road configuration and mature trees related to Professor Waterhouse's original landscape design for the area.
  - New buildings are to be designed with respect to the former physical links between the Blackburn Building and the RPA Hospital site and the existing Chapel Building.
  - An experienced conservation architect is to be commissioned to work with the consultant team throughout the design development of the project and evidence and details of the above commission is to be provided to Council with the submission of the future detailed application/s.

#### **Life Sciences Precinct**

- At the future detailed application stage process, detailed documentation shall address the heritage contexts of the following adjoining buildings:
  - o Ross Street East Building adjacent to R.D. Watts Building; and
  - o Ross Street West Building adjacent to J.D. Stewart Building.
- Significant site features including A7, A7A, A7B (fences and gates at Ross Street), A8, B1, B2 and B17. (GCMP, Table 4.3, p.133 & p.138) will be retained.
- Significant views CV7, EV11 and V11 (GCMP, Table 4.3, p.150) and the enhancement of A5 (GCMP, Table 4.5, p.153) will be retained as part of the future detailed application design.
- New buildings will be designed with respect to significant Character Areas and Significant Landscapes P5, P9, and G6. (GCMP, Table 4.7, p.159)
- An Interpretation Strategy is to be developed for the new Life Sciences Precinct in relation to significant buildings, site features and associations.
- An archival recording of the R.M.C. Gunn Building and the North Wing of the J.D. Stewart Building will be undertaken in accordance with Heritage Council guidelines prior to demolition.



- An experienced conservation architect is to be commissioned to work with the consultant team throughout the design development of the project and evidence and details of the above commission is to be provided to the consent authority with the submission of the future detailed application/s.
- The Grandstand site: The siting and scale of the new grandstand will ensure the retention of the significant view line CV7.

#### **Cultural Precinct**

A Heritage Impact Assessment will be prepared for the future detailed application, at which time more specific design details will be available.

#### TRANSPORT AND ACCESS

To minimise impacts on the surrounding road network and to encourage alternative forms of access to the site, the following measures will be implemented as part of the future detailed application:

- Bicycle parking facilities will be provided at a rate of 1 per 10 staff and 1 per 10 students on campus at the peak occupancy level. (In accordance with City of Sydney DCP 2012)
- The Cycling Strategy has been designed to provide links into the City of Sydney bicycle network. The University will work with the City of Sydney to facilitate these connections.
- Parking for motor cycles will be provided at a rate of 1 space per 12 car spaces. (In accordance with City of Sydney DCP 2012)
- The future rationalisation of car parking across the campus is expected to result in increased traffic access to the Western Avenue gate on Carillon Avenue. This is associated with car parking provided in the University Health Precinct. The requirement for upgrading the Western Avenue intersection with Carillon Avenue will be dealt with and approved during the future detailed application process.
- Travel demand management measures will be developed and monitored through a Sustainable Transport and Mobility Plan.
- The parking strategy relocates car parks to peripheral locations which allows for the removal of cross campus vehicle movements. This permits shared zones to be installed on many of the internal roadways where pedestrians and cyclists will have equal priority with authorised university vehicles.



Other recommendations provided in the ARUP Access Strategy document will be further investigated upon the detailed design development of future CIP Precincts. This includes:

- Provision of six gateways to provide drop-off and pick-up points to facilitate access to each of the precincts for taxis, buses and private
  vehicles. Future design development of the Health Precinct will include investigations to a new access that could be created along the
  southern side of Royal Prince Alfred Hospital and St Andrews College. This is dependent on agreement between RPA, St Andrews College
  and The University of Sydney;
- Implementation of shared zones along the remaining internal University roads;
- Implementation of the parking strategy to minimise additional car parking facilities and encouraging use of public transport and other forms of transport. This includes consideration to reviewing standard parking pricing;
- Centralisation of service deliveries, waste collection and construction compounds will be implemented through the staged construction of four peripheral Transfer Stations;
- Secure bicycle parking will be provided in key locations as precincts are developed. Bicycle racks to be instated at grade adjacent to shared
  path and access roadways; whilst end of trip facilities will be incorporated into new precinct developments;
- Provision of shared zones for pedestrians, cyclists and authorised vehicles; and
- Investigations for further initiatives for increased public transport usage by staff.

### PRECINCT & BUILDING DESIGN

To achieve appropriate urban design outcomes, the future design of precincts and buildings will be required to respond to the University's Urban Design, Architectural and Landscape Principles.

### **ARCHITECTURAL DESIGN COMPETITIONS**

For future detailed major applications, the University will conduct a design competition, administered by the University, and members from the University's specialist panels will be invited to tender for specific projects. For projects over a value of \$50m, panel members will be encouraged to partner with an international design company.



#### LANDSCAPING

To preserve the University's landscape character and to establish new landscape areas that will connect future buildings with planned open space areas, landscape design associated with future detailed applications will be based upon the following policies:

- Policy 1: Any significant remnant features of natural landscape on the Camperdown-Darlington site, such as watercourses, landforms or vegetation, will inform campus wide spatial planning for the improvement program and can be interpreted in the site design for new campus facilities and their landscape settings. Where appropriate, the characteristics of the original landscape in the surrounding local environment are to be considered and creatively employed to give a local identity to the design and continuity to the structure of the campus landscape.
- Policy 2: Elements of cultural heritage in the campus landscape, from references to pre- colonial Aboriginal management, aspects of successive approaches to site master planning, through to significant features of contemporary design, are to be considered and conserved where appropriate, and sensitively integrated into the continuing landscape development of the campus.
- Policy 3: The landscape of the campus, from broad scale management to individual site design solutions will promote best practice standards of sustainability through adherence to the 'Four Pillars' Environment, Social, Economic and Cultural Value.

  Design of Landscape and the public domain will be pursued in co-ordination with other components of campus development such as storm water management, building construction and energy supply to achieve integrated solutions such as Water Sensitive Urban Design (WSUD), heat island reduction, energy conservation, noise and pollution reduction.
- Policy 4: All campus pedestrian movement through the public domain, open space and parkland, and connection to and from surrounding campus facilities, are to be designed to 'best practice' standards and, wherever possible, designed to meet 'all access' performance as established through the provisions of the DDA and BCA.
- Policy 5: Landscape and public domain design will promote safety for pedestrian movement throughout the campus by applying Crime Prevention Through Environmental Design (CPTED) guidelines to all new development, and to encourage all adjacent college, institutional and local government place managers to co-ordinate any linking areas with these standards.
- Policy 6: Trees for new plantings around campus, or for replacing specimens removed under the established management program, will be selected from the University's Preferred Species List and chosen for particular suitability to purpose for each situation. A wide diversity of trees will be employed in accordance with the character of planting suggested in the Concept Landscape Plan. These will include a range of forms, and incorporate native and exotic species both evergreen and deciduous.
- Policy 7: The design of landscape and the public domain will promote integration with the townscape and local community in practical ways which present the campus as a valued city asset and good neighbour. Where appropriate, the University and its edges should look for opportunities to draw the surrounding community into its campus.



- Policy 8: All campus new and existing buildings to look to utilise stormwater runoff for recapture. This stormwater can then irrigate sporting turfed areas and ovals.
- Policy 9: The campus improvement program looks to increase the overall building footprint of the university. Ensure that the amount of landscape and public domain areas do not decrease.

#### FLORA AND FAUNA

To preserve the University's flora and fauna, future detailed applications will have regard to the following:

- Appropriate measures to protect trees in proximity to building/refurbishment sites during demolition, excavation, construction and refurbishment works will be implemented.
- Implementation of the University's Tree Management Plan for the Camperdown and Darlington Campuses.
- Opportunities to enhance habitat for flora and fauna will be considered during the landscape planning of future CIP Precincts as outlined in the Preliminary Ecological Assessment report by Australian Museum Consulting.

### **UTILITIES**

The University is developing an integrated water management plan (IWMP) to maximise benefits from water resource planning and to ensure water is used optimally. Water supply, sewerage and stormwater will be holistically planned and managed in an integrated manner to ensure maximum value is obtained from the resource and environment benefits are maximised. To ensure appropriate provision of infrastructure, consultation with all utility and service providers will continue during the design and development phase. The following utility infrastructure works will be incorporated where relevant, as part of the future detailed applications as detailed below.

# Water supply

Key works that will be required to accommodate water supply to the proposed development include:

- Upgrades to some water supply mains to existing and proposed developments.
- Augmentation of Sydney Water Corporation's (SWC's) water supply mains to buildings higher than 27m to meet fire safety water supply requirements.
- Water main augmentation for fire safety water supply will required for the City Road, Merewether and Health precincts.
- Back-up water supply from a large capacity water main is required for parts of Camperdown Campus to provide redundancy in case of a
  failure in the University's water distribution system. Augmentation of the second water supply main from City Road to the Camperdown
  Campus is needed to ensure adequate back-up supply redundancy.



### Sewerage

Key sewerage facility upgrades will entail:

- Localised amplification to parts of the sewerage network throughout the University's Camperdown-Darlington Campus.
- Realignment and redirection of smaller SWC sewer pipes as a result of construction works for CIP developments in the Engineering, City Road and Health precincts.
- Sewer diversion in the Health precinct where basements of buildings encroach on large SWC trunk sewers. Footings of buildings in the
  City Road and Engineering precincts must be designed and engineered to minimise the impact of foundation loads on the major SWC
  trunk sewer by bridging over it.

## **Electricity Supply**

The University is preparing an Energy Master Plan to address electricity demand and consumption. The objectives of the Energy Master Plan:

- Securing energy supply to support future growth planned by the CIP.
- Identifying efficient and cost-effective energy supply and distribution infrastructure.
- Reducing the carbon intensity and improving environmental sustainability of energy supply and distribution.
- Identifying capital investment for augmentation of energy supply and distribution infrastructure, including distributed energy centres and centralised mechanical services plant to service precincts or building clusters.
- Limit demand impacts on Ausgrid's and distribution network.

# Gas Supply

Gas consumption will be accommodated by:

- Relatively minor augmentation of the local gas distribution network for the Merewether precinct.
- Diversion of the high pressure main to a safe location outside proposed construction areas as a result of future development in the Life Sciences precinct; and potential augmentation of Jemena's upstream gas supply network infrastructure.



# Flooding & Stormwater Management (WSUD)

Developments proposed in 100 year ARI flood prone areas will be subject to site-specific development controls on the design of buildings and infrastructure to mitigate existing and known flood threats to the University's assets and infrastructure whilst also ensuring flood impacts on surrounding areas are not exacerbated. Site-specific development controls on the design of buildings and infrastructure include:

- Designing the floor levels and above ground car parks are set above the 100 year ARI peak flood levels.
- Critical facilities like electricity substations must be placed above the 100 year ARI flood level + 0.5 metres or the probable maximum flood level, whichever is higher.

### ACID SULPHATE SOILS

Detailed investigations relating to acid sulphate soils will apply at the detailed DA stage for Precinct D, where development will involve excavation.