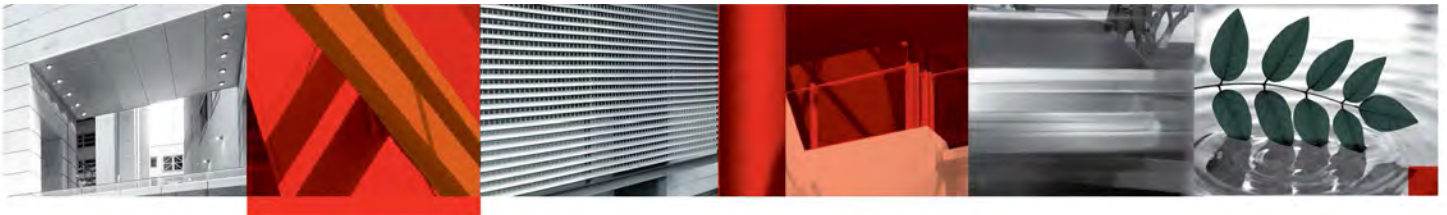




# Environmental Impact Statement State Significant Crown Development



409 Hunter Street, 300 King Street, Newcastle and 20 Laman  
Street, Cooks Hill

University of Newcastle NeW Space Campus

Submitted to Department of Planning and Environment  
On Behalf of University of Newcastle

August 2014 ■ 13473

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This report has been prepared by:



Brendan Hoskins

5/08/2014

This report has been reviewed by:



Scot Brown

5/08/2014

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*Green Forest Australia*
- X** Access Assessment  
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*APP*

### Under Separate Cover

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Quantity Surveyor Letter  
*Wilde and Woollard*

## Statement of Validity

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### Development Application Details

Applicant name	University of Newcastle
Applicant address	c/- JBA Level 1, 35-37 King Street NEWCASTLE NSW 2300
Land to be developed	409 Hunter Street, 300 King Street, Newcastle and 20 Laman Street, Cooks Hill
Proposed development	New educational establishment (university building), refurbishment of University House and car park upgrades as described in Section 3.0 of this Environmental Impact Statement

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### Prepared by

Name	Scot Brown
Qualifications	BUrbRegPlan DipMgt MPIA
Address	Level 1, 35-37 King Street, Newcastle
In respect of	State Significant Development – Crown Development Application

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### Certification

I certify that I have prepared the content of this EIS and to the best of my knowledge:

it is in accordance with Schedule 2 of the Environmental Planning and Assessment Regulation 2000;

all available information that is relevant to the environmental assessment of the development to which the statement relates; and

the information contained in the statement is neither false nor misleading.

Signature



Name

Scot Brown

Date

5 August 2014

# Executive Summary

## Purpose of this Report

This submission to the Planning and Environment (P&E) comprises an Environmental Impact Statement (EIS) for a Development Application under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). It relates to the proposed education facilities as part of the University of Newcastle (UON) NeW Space campus.

UON is a teaching and research institution of international, national and state significance. It is ranked in the top 300 universities in the world according to World University Rankings (2013) and Times Higher Education World University Rankings (2013). Amongst others, it has the Faculties of Business and Law, Education and Arts, Engineering and Built Environment and Health and Medicine, and is a key driver of economic growth. It is renowned for the quality of its graduates and its commitment to new and creative approaches to education and research. Notably, it is also a significant employer within the Newcastle region.

NeW Space will house the UON Faculty of Business and Law and will greatly assist to activate the Civic Precinct in the Newcastle City Centre.

The proposed NeW Space campus is identified as a State Significant Development (SSD) in accordance with Schedule 1 of State Environmental Planning Policy (State and Regional Development) 2011. This SEPP requires development for the purposes of education establishment with a capital investment value (CIV) that exceeds \$30 million to be classified as SSD for the purposes of the EP&A Act. As the proposed development will have a CIV of approximately \$90 million, the proposed development is classified as SSD.

A request for the issue of Secretary's Environmental Assessment Requirements (SEARs) was sought on 28 March 2014. Accordingly, the SEARs were issued on 14 May 2014. This submission is in accordance with the Department's guidelines for SSD applications lodged under Part 4 of the EP&A Act, and addresses the issues raised in the SEARs.

Pursuant to *Environmental Planning and Assessment Regulation 2000*, a development carried out by an Australian University (under the meaning of the *Higher Education Act 2001*) is a Crown development. UON is listed as an Australian University under Schedule 1 of the *Higher Education Act 2001* and as the development will occur on University land, proposed works are a Crown development for the purposes of Division 4 of the EP&A Act.

## Overview of the Project

The Development Application (DA) seeks approval for an education establishment at 409 Hunter Street, 300 King Street, Newcastle and 20 Laman Street, Cooks Hill (the site). Specifically, the proposal includes:

- An education establishment (NeW Space building) that will consist of a library, collaborative learning and teaching spaces, study and recreational areas and zones for professional and community engagement, office space for academic and professional University staff and retail spaces;
- Integration of the proposed NeW Space building with University House (formally NESCA House) via pedestrian links on levels one to three;
- Refurbishment works to University House including the addition of new windows, new deck area, bike storage and end of trip facilities, and internal space and use reconfiguration and upgrade;
- Ancillary retail spaces;

- New pedestrian connections between Christie Place, Hunter Street and Auckland Street;
- Five new parking spaces and areas for bicycle parking;
- Upgrades and expansion of the existing Laman Street Car Park; and
- Associated civil and landscaping works.

### The Site

The site is located at 409 Hunter Street, 300 King Street, Newcastle and 20 Laman Street, Cooks Hill. Whilst 409 Hunter Street is currently devoid of significant development as demolition works were undertaken in 2013, 300 King Street is identified as a heritage item (NESCA House) currently operated by UON as “University House”. The Laman Street car park site (20 Laman Street) is currently operated as a car park for the University of Newcastle.

### Planning Context

**Section 6.0** of the EIS considers all applicable legislation in detail. The proposal is consistent with the requirements of all relevant SEPPs and generally consistent across strategic planning principals applicable to the site, including the Lower Hunter Regional Strategy and Draft Newcastle Urban Renewal Strategy.

Under the *Newcastle Local Environmental Plan 2012*, the site is currently zoned B3 – Commercial Core. The proposed educational establishment is permissible with consent and meets the objectives of the subject zone.

The proposal will also comply with the maximum height of building (except for a minor protrusion by the lift overrun) and floor space ration (FSR) controls that will apply to the site in accordance with the Newcastle LEP 2012.

### Environmental Impacts and Mitigation Measures

This EIS provides an assessment of the environmental impacts of the project in accordance with the SEARs and sets out the undertakings made by UON to manage and minimise potential impacts arising from the development.

### Conclusion and Justification

This EIS addresses the SEARs, and the other relevant statutory requirements.

The development proposal has been designed in a way that respects the heritage fabric of the Civic Precinct of the Newcastle City Centre. Activity associated with the university will assist to activate the surrounding area as up to 2,347 additional students and staff will be expected to use the NeW Space facility during peak periods. As such, the development proposal will be a very significant catalyst project for the Newcastle City Centre and the surrounding region.

Technical investigations have been undertaken with regard to the proposed development site and it is concluded the potential impacts of the development are acceptable and are able to be managed. Given the planning merits of the proposal, the proposed development warrants approval by the Minister for Planning and Infrastructure.



## 1.0 Introduction

This Environmental Impact Statement (EIS) is submitted to the Department of Planning and Environment (Department) pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) in support of an application for State Significant Development (SSD).

The report has been prepared by JBA for the proponent, the University of Newcastle (UON), and is based on design information provided by the design consortia of Lyons and EJE Architecture, as well as supporting technical documents provided by the expert consultant team.

This EIS describes the site, its environs and the proposed development, and includes an assessment of the proposal in accordance with the Secretary's Environmental Assessment Requirements (SEARs) under Part 4 of the EP&A Act. It should be read in conjunction with the information contained within and appended to this report (refer to Table of Contents).

The studies appended to this report provide a technical assessment of the environmental impact of the proposed development, and recommend proposed mitigation measures to manage potential environmental impacts associated with the proposal.

### 1.1 Overview of Proposed Development

This application seeks approval for the proposed UON NeW Space facility, which comprises generally of the following development:

- An education establishment (NeW Space building) that will consist of a library, collaborative learning and teaching spaces, study and recreational areas and zones for professional and community engagement, office space for academic and professional University staff and retail spaces;
- Integration of the proposed NeW Space building with University House (formally NESCA House) via pedestrian links on levels one to three;
- Refurbishment works to University House including the addition of new windows, new deck area, bike storage and end of trip facilities, and internal space and use reconfiguration and upgrade;
- Ancillary retail spaces;
- New pedestrian connections between Christie Place, Hunter Street and Auckland Street;
- Five new parking spaces and areas for bicycle parking;
- Upgrades and expansion of the existing Laman Street Car Park to accommodate 20 new parking spaces; and
- Associated civil and landscaping works.

Under the *State Environmental Planning Policy (State and Regional Development) 2011* (SEPP SRD), a project is classified as SSD if it falls into one of the classes of development listed in Schedule 1 of SEPP SRD. 'Educational establishment (including associated research facilities)' with a CIV of \$30 million or more are identified as SSD under SEPP SRD, and are considered to be development of State significance.

The proposed NeW Space facility will have a Capital Investment Value (CIV) of approximately \$90 million, and therefore satisfies the requirements to qualify as a SSD. The project is considered to have State significance and will contribute significant social benefit to the locality, region and the state.

A Quantity Surveyor's Capital Investment Report confirming the project's CIV is provided under separate cover.

## 1.2 Background to the Development

UON has agreed to purchase the Site at the corner of Hunter and Auckland Streets (409 Hunter Street) from Newcastle City Council to develop its centre piece project of the Hunter Education Precinct, known as NeW Space.

UON is a teaching and research institution of international, national and state significance. It is ranked in the top 300 universities in the world according to World University Rankings (2013) and Times Higher Education World University Rankings (2013). Amongst others, it has the Faculties of Business and Law, Education and Arts, Engineering and Built Environment, and Health and Medicine, and is a key driver of economic growth in Newcastle and the Hunter Region. It is renowned for the quality of its graduates and its commitment to new and creative approaches to education and research. Notably, it is also a significant employer within the Newcastle region.

The NeW Space Project is intended to be a contemporary, technology-enabled building containing UON's Faculty of Business and Law, which is to be consolidated within the NeW Space Project upon completion, and will allow faculty growth from the start of the 2017.

A purpose built, technology-enabled facility, it will contain a range of learning and administrative spaces and community engagement facilities all designed to welcome and encourage current and prospective students as well as city-based professionals to access outstanding education.

NeW Space will incorporate approximately 12,000m<sup>2</sup> of GFA that will consist of library and information common, collaborative learning spaces, and zones for professional and community engagement. Student experience will be supported by state-of-the-art technology accessible 24 hours, seven days a week. Throughout the building, multipurpose technology-enhanced active learning (TEAL) spaces, ranging from 30-110 seats, will transform the learning experience and student environment. Amenities for executive development and corporate programs and community engagement facilities will complement the TEAL spaces.

The proposed development will also be integrated with the adjoining building known as University House (also known as Nesca House) located at the corner of King and Auckland Streets. This building is listed as a State Heritage Item and will be partially refurbished and upgraded as part of the overall NeW Space development. Some operations currently conducted in University House will be integrated in the new facility, including approximately 1,300m<sup>2</sup> of GFA that will house enhanced learning and student social spaces.

There are other functions which will be part of the NeW Space precinct, but remain separate to the NeW Space project proposed by this State Significant Development Application.

## 1.3 Objectives of the Development

The objectives of are to:

- Be a contemporary, technology-enabled building containing UON's Faculty of Business and Law;
- Consolidate the NeW Space Campus upon completion; and
- Allow student growth in the Faculty of Business and Law.

## 1.4 Analysis of Alternatives

### Strategic need for the proposal

The proposal is broadly consistent with the applicable strategic planning policies, objectives and directions.

Specific to the Newcastle, the Newcastle Urban Renewal Strategy (NURS) was released as a strategic guide for urban renewal in the City Centre. The NURS identified several key goals to drive this urban renewal in the City Centre, and included:

- *establishing a university campus in the city centre to stimulate and drive demand for commercial and retail floor space, introduce a student resident and worker population, and create synergies with established businesses and industry sectors*
- *revitalising Hunter Street Mall into a distinct retail, entertainment, leisure and residential precinct to catalyse other renewal in the east end, including nearby major landholdings*
- *reshaping Hunter Street as a key city destination to promote activity, business opportunities, events and other uses in identified nodes. Reshaping can start with less permanent measures on a trial or temporary basis*
- *providing additional connections across the rail corridor for pedestrians, cyclists and cars*
- *appointing a Local Business Coordinator to prepare and implement a Business Improvement Plan*
- *attracting more residents into the city centre to support and build a vibrant and viable city centre*
- *promoting a higher mode shift to public transport to reduce the number of cars in the city centre, encourage activity and support for business, and utilise existing infrastructure and services.*

The proposal will be consistent with the following NURS objectives:

- establish a university in the city centre;
- reshape Hunter Street as a key city destination to promote activity and business opportunities, events and other uses in identified nodes; and
- promote a higher mode shift to public transport to reduce the number of cars in the city centre, encourage activity and support for business, and utilise existing infrastructure and services.

The proposed educational establishment will greatly assist to activate surrounding areas of Hunter Street and overall Civic Precinct. The proposal will also rely on public transport and pedestrian trips, which will reduce the number of cars in the city centre, encourage activity and support for business and use the extant (and planned future) pedestrian and public transport infrastructure.

## Alternative Options

Alternative options are addressed in the relevant subheadings below.

### Do Nothing

In a do-nothing scenario, the site at 409 Hunter Street would remain vacant and continue to impose a very high visual impact on Newcastle City Centre. NESCA house would continue to operate as University House and UON would be required to look to other sites in order to meet the demands of its Business and Law Faculty. An opportunity would be foregone to greatly activate the Civic Precinct in the Newcastle City Centre in a manner consistent with the NURS.

Overall, it is considered 'do-nothing' scenario is not a suitable option, nor in the public interest, and appropriate development should occur on the site.

### Alternative Designs

UON have undertaken an extensive competitive design process where 28 different design consortia responded to the initial EOI. Four (4) of the design consortia were short listed and their preliminary design concepts have been evaluated for the ability to meet the business and design requirements of the proposal. Three panels were formed by UON to evaluate shortlisted preliminary designs.

1. Members of the **Technical Evaluation Panel** independently evaluated and scored the submissions using only the evaluation criteria that were published in the tender documents.
2. Members of the **Commercial Evaluation Panel** each conducted an analysis and provided a report that highlighted potential fee risks within each concept submission.
3. Members of the **Concept Design Evaluation Panel** independently evaluated the designs using only the evaluation criteria that were published in the tender documents. Scoring for the criteria was based on the information presented in the proposal, presentations and clarifications. The Panel objectively rated the criteria as a 0-5 score by identifying the strengths and weaknesses of each submission based on the requirements in the tender documents.

The extensive evaluation method undertaken by UON across a variety of panels indicates the proposed design represents the best functional and financial option to UON and the community.

Public benefits of the design include key pedestrian connections through the site, activation at the street-level and conservation of views from Hunter Street to Newcastle City Hall.

## 1.5 Secretary's Environmental Assessment Requirements

In accordance with section 89G of the EP&A Act, the Acting Secretary of the Department issued the requirements for the preparation of the EIS on 14 May 2014. A copy of the SEARs are included at **Appendix B**.

**Table 1** provides a detailed summary of the individual matters listed in the SEARs and identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

**Table 1 – Secretary’s Environmental Assessment Requirements**

Requirement	Location in Environmental Assessment	
<b>General</b>		
The Environmental Impact Statement (EIS) must address the <i>Environmental Planning and Assessment Act 1979</i> and meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 the Environmental Planning and Assessment Regulation 2000.	Environmental Impact Statement	
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	Section 6.0	
Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: <ul style="list-style-type: none"> <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>	Sections 4.0 and 7.0	
The EIS must be accompanied by a report from a qualified quantity surveyor providing: <ul style="list-style-type: none"> <li>▪ a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all assumptions and components from which the CIV calculation is derived;</li> <li>▪ an estimate of the jobs that will be created by the future development during the construction and operational phases of the development; and</li> <li>▪ certification that the information provided is accurate at the date of preparation.</li> </ul>	Section 1.1 / Under separate cover	
<b>Key Issues</b>	<b>Report / EIS</b>	<b>Technical Study</b>
<p>1) Statutory and Strategic Context</p> <p>Address the statutory provisions applying to the concept proposal contained in all relevant environmental planning instruments, including:</p> <ul style="list-style-type: none"> <li>▪ State Environmental Planning Policy (State &amp; Regional Development) 2011;</li> <li>▪ State Environmental Planning Policy (Infrastructure) 2007;</li> <li>▪ State Environmental Planning Policy No.55 – Remediation of Land;</li> <li>▪ Newcastle Local Environmental Plan 2012; and</li> <li>▪ Draft State Environmental Planning Policy Amendment (Newcastle City Centre) 2014.</li> </ul> <p><i>Permissibility</i></p> <p>Detail the nature and extent of any prohibitions that apply to the development.</p> <p><i>Development Standards</i></p> <p>Identify compliance with the development standards applying to the site.</p> <p>Address the relevant planning provisions, goals and strategic planning objectives in the following:</p> <ul style="list-style-type: none"> <li>▪ NSW 2021;</li> <li>▪ Lower Hunter Regional Strategy;</li> <li>▪ Newcastle Urban Renewal Strategy;</li> <li>▪ Newcastle Development Control Plan 2012;</li> <li>▪ NSW Long Term Transport Master Plan 2012;</li> <li>▪ Hunter Regional Transport Plan 2014;</li> <li>▪ NSW Bike Plan;</li> <li>▪ Planning Guidelines for Walking and Cycling; and</li> <li>▪ Healthy Urban Development Checklist, NSW Health.</li> </ul>	Section 5.1	-

Requirement	Location in Environmental Assessment	
<p>2) Built Form and Urban Design</p> <ul style="list-style-type: none"> <li>▪ Address the height, bulk, scale and setbacks of the proposed development within the context of the locality, adjacent heritage items, surrounding development, topography and streetscape.</li> <li>▪ Demonstrate design quality, with specific consideration of the overall site layout, connectivity, open spaces and edges, interface with the public domain (including Christie Place, Hunter Street and Auckland Street), gateways, facades, rooftop, massing, setbacks, building articulation, materials, colours and signage or signage envelopes.</li> <li>▪ Detail how services, including but not limited to, waste management, loading zones, mechanical plant are integrated into the design of the development.</li> <li>▪ Demonstrate how the proposal achieves design excellence and how it responds to any comments made by any Design Review Panel.</li> </ul> <p><i>Relevant Policies and Guidelines:</i></p> <ul style="list-style-type: none"> <li>▪ Director-General's Design Excellence Guidelines</li> </ul>	Section 4.7 and 5.2	Appendix A and L
<p>3) Environmental and Residential Amenity</p> <p>Provide information detailing the provision of solar access and any overshadowing impacts, acoustic impacts, privacy, view loss and wind impacts. A high level of environmental amenity must be demonstrated, including to the public domain such as Christie Place.</p>	Section 5.3	Appendix A, J and P
<p>4) Ecologically Sustainable Development (ESD)</p> <ul style="list-style-type: none"> <li>▪ Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the design, construction and ongoing operation phases of the development.</li> <li>▪ Demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice.</li> <li>▪ Include a description of the measures that would be implemented to minimise consumption of resources, water (including water sensitive urban design) and energy.</li> </ul>	Section 5.4	Appendix N
<p>5) Heritage</p> <ul style="list-style-type: none"> <li>▪ Include a statement of significance and an assessment of the impact on the heritage significance of any heritage items and/or conservation areas in accordance with the guidelines in the NSW Heritage Manual. In particular: <ul style="list-style-type: none"> <li>– any physical or visual impacts on the adjacent Nesca House must be addressed, including any recommended conservation works for this building arising from the project; and</li> <li>– visual impacts on existing views and vistas to and from nearby State or locally listed items or conservation areas must also be assessed.</li> </ul> </li> <li>▪ Assess any impacts on aboriginal cultural heritage in accordance with the 'Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW' (OEH 2011).</li> <li>▪ Assess any impacts on the archaeological resources of the site, including findings of any archaeological investigations at the subject site and whether any further investigations are required for both the historic and Aboriginal archaeology of the site. Mitigation measures and interpretation should be identified if impacts on the archaeology of the site are anticipated as a consequence of the project.</li> </ul>	Section 5.5	Appendix K
<p>6) Transport and Accessibility</p> <p>Include a transport and accessibility assessment, which details:</p> <ul style="list-style-type: none"> <li>▪ existing pedestrian and cycle movements within the vicinity of the site;</li> <li>▪ estimate the total daily and peak hour trips generated by staff and students to be accommodated within the proposal, including vehicle, public transport, pedestrian and cycle trips;</li> <li>▪ the adequacy of public transport to meet the likely future demand of the proposed development, including consideration of the proposed light rail system;</li> </ul>	Section 5.6	Appendix G and O

Requirement	Location in Environmental Assessment	
<ul style="list-style-type: none"> <li>▪ measures to promote travel choices that support the achievement of State targets, such as a location-specific sustainable travel plan;</li> <li>▪ the daily and peak vehicle movements impact on nearby intersections and the need/associated funding for upgrading or road improvement works (if required);</li> <li>▪ the proposed access arrangements and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and cycle networks;</li> <li>▪ the proposed parking provisions (car, bicycle and motorcycle) and end of trip facilities associated with the proposed development, including consideration of the availability of public transport, and the requirements of the relevant parking codes and Australian Standards;</li> <li>▪ the proposed service vehicle movements (including vehicle type and the likely arrival and departure times); and</li> <li>▪ access and car parking arrangements at all stages of construction and measures to mitigate any associated pedestrian, cycleway, public transport or traffic impacts.</li> </ul> <p><i>Relevant Policies and Guidelines:</i></p> <ul style="list-style-type: none"> <li>▪ Guide to Traffic Generating Developments (RTA)</li> <li>▪ EIS Guidelines – Road and Related Facilities (DoPI)</li> <li>▪ NSW Planning Guidelines for Walking and Cycling</li> <li>▪ Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development</li> </ul>		
<p>7) Noise and Vibration</p> <p>Identify the main noise and vibration generating sources and activities at all stages of construction, and any noise sources during operation. Outline measures to minimise and mitigate potential noise and vibration impacts on surrounding occupiers of land.</p> <p><i>Relevant Policies and Guidelines:</i></p> <ul style="list-style-type: none"> <li>▪ NSW Industrial Noise Policy (EPA)</li> <li>▪ Interim Construction Noise Guideline (DECC)</li> <li>▪ Assessing Vibration: A Technical Guideline 2006</li> </ul>	Section 5.7	Appendix P
<p>8) Social and Economic</p> <p>Include a social and economic assessment, which details:</p> <ul style="list-style-type: none"> <li>▪ potential direct and indirect economic benefits of the development to the local, regional and state economies;</li> <li>▪ potential impacts on local infrastructure and services, including rental accommodation;</li> <li>▪ details of any measures to minimise an adverse social and economic impacts; and</li> <li>▪ a 'Safer By Design' crime prevention assessment.</li> </ul>	Section 5.8	Appendix Q and R
<p>9) Contamination</p> <p>Demonstrate that the site is suitable for the proposed use in accordance with SEPP 55.</p> <p><i>Relevant Policies and Guidelines:</i></p> <ul style="list-style-type: none"> <li>▪ Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP)</li> </ul>	Section 5.9	Appendix S
<p>10) Utilities</p> <ul style="list-style-type: none"> <li>▪ Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation requirements of the development for the provision of utilities including staging of infrastructure shall be addressed.</li> <li>▪ Prepare an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.</li> </ul>	Section 5.10	Appendix H and T

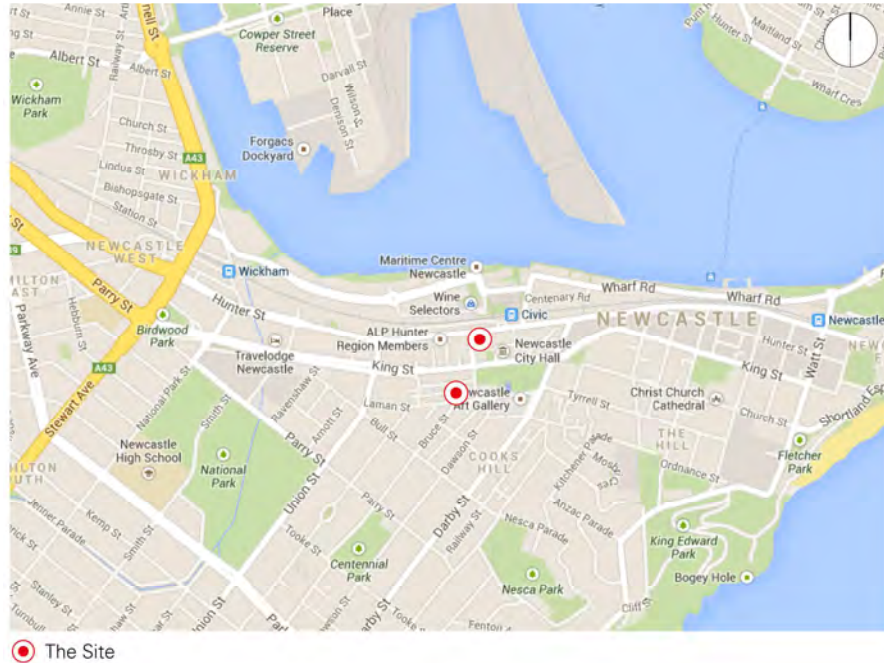
Requirement	Location in Environmental Assessment	
11) Staging Provide details regarding the staging of the proposed development, including consideration of any future expansion of the University campus and associated cumulative impacts.	Section 5.11	-
12) Contributions Address Council's relevant Section 94A Contribution Plan and/or details of any Voluntary Planning Agreement.	Section 5.12	-
13) Flooding Provide an assessment of any flood risk on site and consideration of any relevant provisions of the NSW Floodplain Development Manual (2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity.	Section 5.13	Appendix A and U
14) Drainage Detail drainage associated with the proposal, including stormwater and drainage infrastructure.	Section 5.14	Appendix V
15) Servicing and Waste Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.	Section 5.15	Appendix W
<b>Plans and Documents</b>	<b>Report</b>	<b>Technical Study</b>
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.  In addition, the EIS must include the following: <ul style="list-style-type: none"> <li>▪ Architectural drawings, including plans for excavation;</li> <li>▪ Site survey plan, showing existing levels, location and height of existing and adjacent structures/buildings;</li> <li>▪ Site analysis plan;</li> <li>▪ Shadow diagrams;</li> <li>▪ Access Impact Statement;</li> <li>▪ View analysis/photomontage;</li> <li>▪ Acid Sulfate Soil Assessment;</li> <li>▪ Stormwater Concept Plan;</li> <li>▪ Sediment and Erosion Control Plan;</li> <li>▪ Landscape Plan, including any public domain works;</li> <li>▪ Preliminary Construction Management Plan, inclusive of a Construction Traffic Management Plan;</li> <li>▪ Geotechnical and Structural Report;</li> <li>▪ Signage details (if proposed); and</li> <li>▪ Schedule of materials and finishes.</li> </ul>	Sections 3.0 and 4.0	Appendix A, C, D, E, F and S
<b>Consultation</b>		
During the preparation of the EIS, you must consult with local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.  In particular you must consult with: <ul style="list-style-type: none"> <li>▪ The City of Newcastle;</li> <li>▪ Transport for NSW;</li> <li>▪ Roads and Maritime Services;</li> <li>▪ Hunter Water; and</li> <li>▪ Local heritage group/s.</li> </ul>	Section 4.0	Appendix I

Requirement	Location in Environmental Assessment	
The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.		
<b>Further consultation after 2 years</b>		
If you do not lodge a development application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.	-	-

## 2.0 Site Analysis

### 2.1 Site Location and Context

The site is located at 409 Hunter Street, 300 King Street, Newcastle and 20 Laman Street, Cooks Hill within the Newcastle Local Government Area. The site's locational context is shown at **Figure 1**.



**Figure 1** – Proposed development site and surrounding context  
Base Map Source: Google Maps

The site is predominately located within the Civic Precinct of Newcastle City Centre. Surrounding development includes prominent city destinations such as Civic Theatre, Newcastle City Hall, Wheeler Place and Civic Park.

The 409 Hunter Street and 300 King Street sites are also approximately 50 metres from Civic Railway Station, which is serviced by the Newcastle & Central Coast Line (with services to Gosford and Sydney) and the Hunter Line (with services to Scone and Dungog via Maitland). Buses also service the surrounding area as more than 15 bus routes service Hunter Street in this area.

### 2.2 Site Description

The site is legally described as:

- Lot 1 in DP 1188877 (409 Hunter Street);
- Lot 2 in DP 225689 (300 King Street); and
- Lot 15 in DP999751 (20 Laman Street) and Lot 1 in DP150762 and Lots 1 and 2 in DP995015 (26 Laman Street).

UON is in the process of acquiring the portion of the site known as 409 Hunter Street from the City of Newcastle. This portion of the site remains devoid of significant development following demolition of all previous structures by NCC in 2013.

Mine subsidence stabilisation works, approved under Newcastle City Council Development Application 2013/1405, are currently taking place to suitably prepare the site for development. The site is predominately level with very little variation in topography. Coffey has provided a Geotechnical Report for both the NeW Space Site and Laman Street Car Park outlining the existing geotechnical site conditions (refer to **Appendix C**).

Separate vehicular access points to 409 Hunter Street and 300 King Street are currently provided from Auckland Street, approximately halfway between Hunter Street and King Street. Only vehicular access to Auckland Street will be maintained to the site. Access to the Laman Street car park (20 Laman Street) is available from Charles Street to the upper deck, and Gibson Street to the lower deck.

Whilst 409 Hunter Street is not identified within the Newcastle LEP as a heritage item, 300 King Street is identified as Item 343 (Nesca House). The Laman street car park (20 Laman street) is not classified as a heritage item. The entire development site is within a heritage conservation area.

The site's cumulative area is 7,017m<sup>2</sup>. A survey plan is located at **Appendix D**. An aerial photo of the site is shown at **Figure 2**.



  Proposed Development Sites

**Figure 2** – Proposed development site and immediate surrounding context  
Base Map Source: *nearmap.com*

Current site conditions are outlined at **Figure 3** to **Figure 11**.



**Figure 3** – View from Hunter Street near Auckland Street south to proposed development site  
*Source: JBA*



**Figure 4** – View from Auckland Street near Hunter Street east towards proposed development site and Civic Theatre  
*Source: JBA*



**Figure 5** – View from proposed development site northwest to intersection of Hunter Street and Auckland Street  
*Source: JBA*



**Figure 6** – View to NESCA House (University House) from northeast corner of King Street / Auckland Street Intersection with Civic Administration Building in the background  
*Source: JBA*



**Figure 7** – View to NESCA House from Auckland Street  
*Source: JBA*



**Figure 8** – Upper deck of the Laman Street Car Park  
*Source: JBA*



**Figure 9** – Lower deck of the Laman Street Car Park  
 Source: JBA

## 2.3 Surrounding Development

Development to the north and west of the 409 Hunter Street/300 King Street site is largely 2 to 5 storeys in scale with characteristics typical of heritage conservation areas. To the south is Civic Park, which is an important civic and open space in the Newcastle City Centre.

This portion of the site is part of the Civic Precinct of the Newcastle City Centre, and buildings within this precinct and the immediate surrounds (<200m) of the proposed development site include Newcastle City Hall, Civic Theatre, Civic Railway Station, Civic Park, Christie Place, Wheeler Place and Newcastle City Administration Centre. These destinations are generally east of the 409 Hunter Street/300 King Street site.

Development to the north, west and south of the Laman Street car park site (20 Laman Street) is predominately residential. A vacant lot followed by the UON Conservatorium of Music are located directly to the east of the site. The current car parking on the site supports the UON Conservatorium of Music.

**Figure 10** to **Figure 13** illustrate the surrounding context.



**Figure 10** – Civic Theatre is directly to the east of the proposed development site  
*Source: JBA*



**Figure 11** – Extant development at the southwest corner of Hunter Street and Auckland Street  
*Source: JBA*



**Figure 12** – Development opposite (north of) Hunter Street from proposed development site  
*Source: JBA*



**Figure 13** – View west along Charles Street which provides rear lane access to residential development adjoining the Laman Street car park  
*Source: JBA*

### 3.0 Description of the Development

This chapter of the report provides a detailed description of the proposed development. Architectural drawings prepared by Lyons and EJE Architecture are included at **Appendix A**.

This application seeks approval for the following development:

- An education establishment (NeW Space building) that will consist of a library, collaborative learning and teaching spaces, study and recreational areas and zones for professional and community engagement, office space for academic and professional University staff and retail spaces;
- Integration of the proposed NeW Space building with University House (formally NESCA House) via pedestrian links on levels one to three;
- Refurbishment works to University House including the addition of new windows, new deck area, bike storage and end of trip facilities, and internal space and use reconfiguration and upgrade;
- Ancillary retail spaces;
- New pedestrian connections between Christie Place, Hunter Street and Auckland Street;
- Five new parking spaces and areas for bicycle parking;
- Upgrades and expansion of the existing Laman Street Car Park; and
- Associated civil and landscaping works.

A photomontage of the proposed development is shown at **Figure 14**.



**Figure 14** – Photomontage of proposed development  
Source: Lyons / EJE Architecture

### 3.1 Development/Urban Design Principles

The planning and design principles adopted for the proposed development of the site are as follows:

- The NeW Space Project is intended to be a contemporary, technology-enabled building containing UON's Faculty of Business and Law, which is to be consolidated within the NeW Space Project upon completion;
- The university facilities should assist in the activation of the Civic Precinct in a manner consistent with the NURS. The NeW Space development should satisfactorily accommodate the 2,347 additional students and staff who are anticipated to arrive at the site during peak university times;
- Continuous active frontages should be provided to Hunter Street and Auckland Street where possible. An active frontage should also be provided to Christie Place (to the south and east of the site) with a space enlivened by a micro-retail outlet;
- Sightlines should be maintained from the intersection of Hunter Street and Auckland Street to the Newcastle City Hall clock tower.

### 3.2 Site Preparation Works

Limited site preparation works are proposed as part of this application. As set out in **Section 1.2**, the vast majority of site preparation works have been undertaken or are currently in the process of being carried out.

Demolition works were completed on the 409 Hunter Street portion of the site prior to UON commencing acquisition of the land from NCC. Additional works relating to mine subsidence stabilisation are currently being completed as part of Development Application 2013/1405.

Other associated site preparation works proposed as part of this application include the excavation of the lower deck car park area on the Laman Street car park site and the general demolition works required to upgrade University House.

### 3.3 NeW Space Building

The NeW Space development comprises an education establishment (university building). The education establishment will include a combination of lecture halls, a library, offices and various study areas over a total of 12,434m<sup>2</sup> of GFA. Details of the proposed works are outlined below. Architectural Drawings prepared by Lyons and EJE Architecture are provided at **Appendix A**.

#### Height and Setbacks

The NeW Space building is proposed on the corner of Hunter Street and Auckland Street. The building will comprise of eight levels and will have a maximum building parapet height of RL43.6 above the ground level. A lift overrun will be provided above the central lift core of the building as part of the plant room, resulting in an overall maximum height of RL50.8.

NeW Space will be built up to the site boundary at some locations along both the Hunter Street and Auckland Street boundaries. Setbacks are recessed near building access points to clearly define entries to the proposed building.

At the ground level, NeW Space will be setback from University House. This setback will allow for vehicular access to the parking and service vehicle area proposed onsite from Auckland Street.

At levels one to three, NeW Space will be connected to University House, enabling internal pedestrian connections between the two buildings.

### Building Composition

The NeW Space building has been designed with a unique floor plate, enabling the creation of both intimate and grand spaces within the building and providing significant external visual interest. The ground and first level extend across the majority of the site, before a more slender and angled tower is provided from Levels 2 to 8. The floor plates of Levels 2 to 8 are not regular, and a number of voids, cut outs and pop outs are provided across the building. **Figure 15** illustrates the floor plate of Level 5, highlighting the unique shape of the building.



**Figure 15** – Level 5 floor plate  
Source: Lyons and EJE Architecture

### Level Breakdown

A variety of rooms and spaces will be provided on each level. These rooms/spaces will cater to the formal education of students, and will also facilitate informal interactions and include a number of breakout spaces and nooks for studying and reflection. The variety of uses per level within the proposed NeW Space development is outlined in **Table 2** below:

**Table 2** – Land use proposed and GFA by level within NeW Space

Floor	Use
Ground	Teaching spaces, learning suites, café/retail spaces, gathering space, bathroom facilities, car parking/loading and services
Level 1	Teaching spaces, learning suites, urban rooms, library, meeting rooms, prayer rooms, lecture spaces, gathering space and connection to University House
Level 2	Teaching spaces, learning suites, urban rooms and connection to University House
Level 3	Teaching spaces, collaborative office, student lounge, training facilities and connection to University House
Level 4	Teaching spaces, learning suites, meeting room and collaborative office

Floor	Use
Level 5	Teaching spaces, learning suites, urban rooms, collaborative research lab, collaborative office, kitchen, meeting rooms and lounge
Level 6	Teaching spaces, learning suites, urban room, collaborative office and meeting rooms
Level 7	Teaching spaces, learning suites, urban room, collaborative office, boardroom, meeting rooms and lounge
Level 8	Teaching spaces, learning suites, collaborative office, mock boardroom and meeting rooms
Roof	Plant room and equipment

### External Materials and Finishes

The materials and finishes have been well selected to complement the aesthetic of University House, whilst still allowing NeW Space to achieve an independent and striking character on such a prominent site in the revitalising centre of Newcastle. A schedule of materials is provided at **Appendix A**.

## 3.4 University House Refurbishment

Refurbishment works are proposed to University House to upgrade the current state of the building and ensure the highest and best use is achieved. The total GFA for University House will be in the order of 5,676m<sup>2</sup>, inclusive of the proposed refurbishment works.

The upgrades to University House will primarily include:

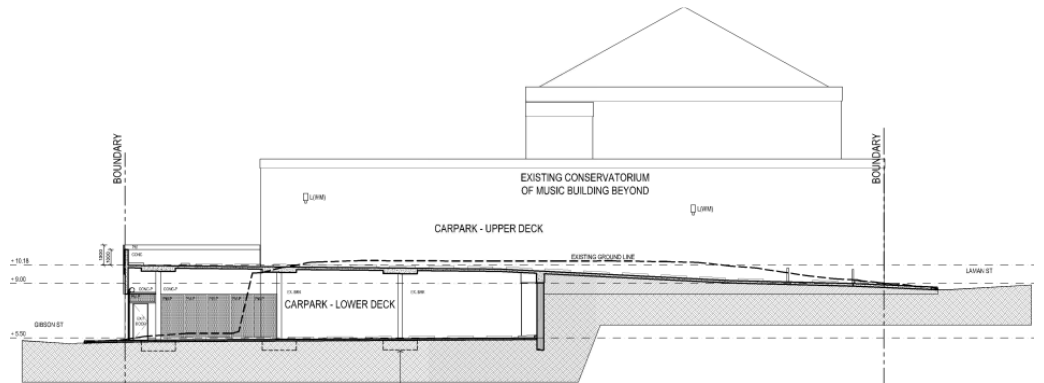
- Provision of bicycle parking and end-of-trip facilities within the basement and ground level;
- Provision of new exhibition space, entry lobby and retail tenancy on the ground level;
- Upgrades to the pedestrians access arrangements include provision of a new ramp and doorways;
- Provision of an outdoor deck area on the Christie Place frontage to support outdoor seating;
- Integration works for the new pedestrian connections to the NeW Space building on level one to three; and
- General upgrades to windows and entries where required.

## 3.5 Laman Street Car Park

Additional car parking spaces are proposed to be included on the Laman Street site. This site is currently being used as an existing car park with approximately 20 spaces on the top level (fronting Laman Street) and seven (7) spaces fronting Gibson Street.

A total of 47 spaces are proposed on the site, which will comprise the upgrade of existing spaces and the provision of new spaces. Access will be provided to the upper deck from Laman Street. The upper deck will contain 34 car parking spaces, including two disabled spaces. Landscaping will be provided at the Laman Street frontage.

Excavation is proposed to extend the existing lower deck. This excavation will enable the lower deck to contain 13 car parking spaces, with access from Gibson Street. A section of the proposed parking arrangement is provided at **Figure 16**. Architectural Drawings illustrating the proposed works are provided at **Appendix A**.



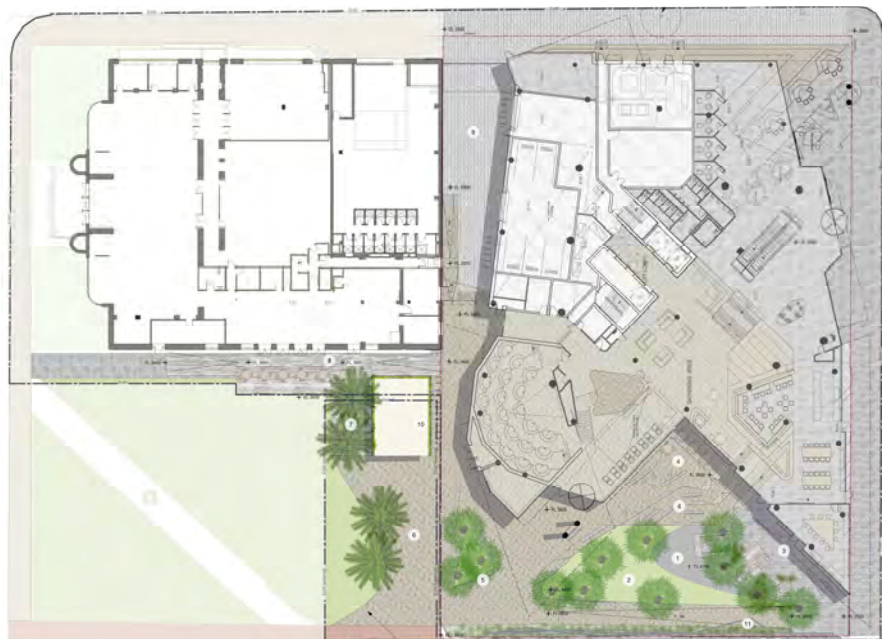
**Figure 16** – Section of proposed car park arrangements  
 Source: Lyons + EJE

### 3.6 Landscaping and Public Domain

Landscape Drawings have been prepared by McGregor Coxall and are included at **Appendix E**. A Landscape Report outlining the intent of the landscaping scheme has also been prepared by McGregor Coxall (**Appendix F**). Three key areas of landscaping will be provided as part of the NeW Space development. These areas are outlined below.

#### Central Courtyard and Surrounds

Towards the eastern edge of the site, landscaping will be provided in a courtyard-like setting between the NeW Space building and Civic Theatre. A lawn 'dune' will shape a central courtyard area which will be supplemented by trees of 5-7 metres in height. To the west of this courtyard will be a tiered seating and gathering space. A green wall in the form of a climbing structure will be provided along theatre walk to provide screening. **Figure 17** illustrates the proposed landscaping works to the ground level of the site.



**Figure 17** – Proposed landscaping at the ground level  
 Source: McGregor Coxall

### Christie Place Extension + University House Deck

An extension of Christie Place will take place as part of the NeW Space development. This will ensure that the new outdoor central courtyard interfaces seamlessly with Christie Place. A deck is proposed to be provided to the eastern façade of University House with outdoor seating. Additional tree planting and landscaping will mask the substation required to be located within this location. The proposed works in this location are illustrated in **Figure 17**.

### Level 5 Urban Room

Planting to the roof space and urban room on Level 5 will soften these spaces and facilitate an organic feeling to the building. Hardy local plants such as Pigface will be planted within these spaces to provide variation to the urban feel of the building.

### Laman Street Car Park

Planting is proposed to the Laman and Gibson Street frontages in order to add vegetation to the streetscapes and to assist in the screening of the parking structure. In addition, a planting bed will be provided on the upper level parking structure adjacent to the western property boundary in order to provide screen planting to the adjoining residential development.

## 3.7 Pedestrian Access

Pedestrian access to the NeW Space Campus will occur from new pedestrian entries from Hunter Street, Auckland Street and Christie Place. Pedestrian access will also be provided on the first three levels between the NeW Space building and University House.

## 3.8 Vehicular Access and Parking

409 Hunter Street currently has vehicular access from Auckland Street. This access is proposed to be maintained and provide two-way circulation from Auckland Street through to the building parking bays.

On the 409 Hunter Street portion of the site, a total of five parking bays will be provided under cover. Access currently afforded by 409 Hunter Street will also provide on-site access for emergency vehicles if required.

It should be noted that there is a historical vehicular access into the portion of the site known as 300 King Street (NESCA House) from Auckland Street into an internal parking area. It is proposed this internal parking be reserved strictly for bicycle parking.

## 3.9 Infrastructure and Services

The proposed development will be serviced by water, sewer, stormwater, electricity and internet services. These infrastructure services have been found to have a capacity suitable to cater for the demands of the proposed development. Existing infrastructure and services will be extended/augmented as required.

## 3.10 Construction Staging

The proposed development will not be staged but be constructed in its entirety once approval for the works has been granted. The internal refurbishment works to the ground floor of University House will occur after the NeW Space project has been completed as the occupants will relocate into NeW Space to allow these spaces to be vacated for the refurbishment works.

## 4.0 Consultation

In accordance with the SEARs issued for this project, consultation was undertaken with relevant public authorities, service providers, community groups and affected landowners.

A summary of the consultation undertaken to-date is provided below.

### 4.1 City of Newcastle

Discussions with Newcastle City Council (NCC) staff are ongoing and have occurred on a regular basis since project inception and appointment of the University's Project Team. Specifically, more recent meetings have been held with NCC to discuss the design of the proposed development on 15 May and 11 June 2014. Details of the matters discussed with NCC that have been considered in the proposed design include:

- Design interface of NeW Space with Christie Place;
- Operational requirements for Civic Theatre and Town Hall, including car parking, waste management, truck access and landscape design;
- Hunter Street requirements in terms of kerb alignment;
- Evacuation space for University House and NeW Space;
- Civic theatre wall treatment and fire exit;
- Light rail; and
- Car Parking.

In addition, representatives of the University's Project Team met with NCC's Urban Design Consultative Group (UDCG) on 19 March 2014. The UDCG is an independent group of design experts appointed by NCC to provide advice to NCC regarding design-related matters and to ensure the design quality for projects throughout the City. The items raised by the UDCG that have been considered in the proposed design are listed below:

- Context;
- Scale;
- Built form;
- Density;
- Resource, energy and water efficiency;
- Landscape;
- Amenity;
- Safety and security;
- Social dimensions; and
- Aesthetics.

In addition to the meetings discussed above, the following meetings were held between the different members of the project team and Council:

- A Meeting on 9 July 2013 with Ken Gouldthorp (General Manager NCC) and Stephen Edmunds (NCC), Nat McGregor (COO UoN), Alan Tracey (UoN NeW Space Project Director) to discuss status of University matters including the NeW Space project.

- Meeting on 11 November 2013 with Ken Gouldthorp (General Manager NCC) and Peter Chrystal (Acting Director Planning and Regulatory Services) to discuss status of NeW Space project including Council's position in providing a suitable car parking option for the development.
- University Management had a meeting with NCC on the 19th March 2014 to discuss NeW Space parking requirements and strategy.
- The University presented the concept design to NCC GM and Mayor on the 12 March 2014.
- NeW Space project team meet with NCC regarding the Flood Certificate on the 10th April 2014.
- NeW Space project team meet with NCC Managers on the 21st May 2014 to discuss issues regarding Christie Place, Hunter Street and waste management.
- A meeting with NCC was held on the 19th May 2014 to discuss parking options for the NeW Space project with NCC advising on the 27th May 2014 that the University should base its parking requirements on the planning requirements and/or a parking contribution in the order of \$41,000. The University indicated in this meeting that the University was assessing options at the Laman Street property in order to provide car parking for the NeW Space development. The University responded to NCC on the 19th June 2014 advising that the University will look at parking options on land controlled by the University.
- NeW Space project team meet with NCC on site to discuss the Christie Place waste bins on the 4th June 2014 to review options for their relocation.
- NeW Space project team presented the SSD Design to NCC Managers on the 11th June 2014 with discussion on light rail, parking and waste management.
- A meeting to discuss NCC Landowner's consent and car parking with Ken Gouldthorp (General Manager NCC), Peter Chrystal (Director Planning and Regulatory Services), Nat McGregor (COO UoN), Alan Tracey (UoN NeW Space Project Director) and Damian Burke (UoN Senior Project Manager) on 3 July 2014.
- A follow up meeting to discuss car parking meeting with Ken Gouldthorp (General Manager NCC), Peter Chrystal (Director Planning and Regulatory Services), Alan Tracey (UoN NeW Space Project Director) and Damian Burke (UoN Senior Project Manager) on 30 July 2014.

## 4.2 Transport for NSW

A meeting was held with Caroline Scott from Transport for NSW (TfNSW) and representatives from the University's Project Team on Friday 27 June 2014 to discuss TfNSW's inputs into the SEARs and its expectations regarding NeW Space.

The key matters discussed at this meeting and which have been considered as part of the preparation of the proposed development included:

- Car Parking – TfNSW supports the approach taken by UON to provide minimal parking and its preference for accommodating active travel measures, including provision of bike storage and end of trip facilities;
- Light Rail – The current status of light rail was discussed along with the context of the site with regard to proposed stops. TfNSW considers that the NeW Space project will be supportive of the proposed investment into Newcastle public transport infrastructure as the primary form of P/T access to the site would be via light rail;

- City Centre Access Plan – TfNSW are working with NCC in regard to the ongoing development of a City Centre Access Plan including consideration for buses and other access to the City. This study was likely to be completed in the next 6 to 12 months and would require further engagement with UON regarding its needs and expectations;
- Interim Bus Routes – The proposed interim bus routes to be used whilst the construction of the transport interchange at Wickham were tabled and discussed.
- Hunter Street Public Domain Works – TfNSW confirmed that UrbanGrowth NSW is now responsible for the public domain works program for Hunter Street in its coordination role for the urban renewal for Newcastle CBD. However, the timeframe for these works is still to be resolved.

### 4.3 Roads and Maritime Services

UON initiated consultation with Roads and Maritime Services (RMS) to discuss its interests in the project and the potential impacts for the classified road network, security of its property assets and land use/transport integration. Representatives of the UON's Project Team met with RMS on 25 June 2014 to discuss the project and to the Transport and Accessibility Assessment that has been undertaken by SECA Solution (see **Appendix G**). At this meeting, RMS confirmed that it would review the assessment completed by SECA Solution when the DA was lodged in the context of the classified road network, traffic impacts and broader transport issues arising from the proposed development.

### 4.4 Hunter Water

Consultation has been undertaken with Hunter Water in respect of its water and sewer assets within and adjacent to the site and the proposed connections to the NeW Space project. Details regarding the outcomes of these discussions and the preferred strategy for connection to services are contained in the Infrastructure Management Plan located at **Appendix H**.

### 4.5 Local Heritage Groups

Contact has been made with a number of local heritage groups and meetings are anticipated to take place in early July 2014. These groups include:

- Hunter Heritage Network;
- National Trust Hunter Region Committee; and
- Coal River Working Party.

### 4.6 Community Engagement Strategy

As part of its broader consultation strategy, UON engaged Bell Communication Pty Ltd to prepare and undertake a Community Engagement Strategy in order to build greater awareness of the NeW Space project and to engage with the community through:

- Establishing standard processes for community engagement;
- Ensuring those processes are implemented by university/project staff and, where relevant, by external consultants and firms associated with the project; and
- Ensuring the community and stakeholders are kept informed of decisions emanating from the community engagement processes.

A number of techniques were employed to identify and inform stakeholders of the opportunities to engage with the University and its project team. These techniques and the outcomes from the engagement process are outlined in more detail below.

#### 4.6.1 Community Information Sessions

The purpose of the community information sessions is to:

- Ensure that factual information is available to those people and groups with an interest in the project and Newcastle's future.
- Allow the community and stakeholders to express their views and preferences.
- Avoid unnecessary delays by addressing community concerns at an early stage.
- Build relationships and trust with the community and other stakeholders by keeping them informed during all important phases of the project.

Two community information sessions have been scheduled by the University in relation to the NeW Space project. The first session was conducted at Newcastle City Hall on 11 June 2014. Details of the issues raised during the first community information session are contained in the Outcomes Report contained in **Appendix I**.

A second community information session is scheduled to take place and will coincide with the public exhibition period to be conducted by the Department of Planning and Environment as part of the SSD DA process.

#### 4.6.2 Local Community Groups

Extensive enquiries were made to identify and contact all local community groups who would likely have an interest in the project. Those identified and contacted include:

- Newcastle East Residents Group;
- Cooks Hill Community Group Inc.;
- Honeysuckle Residents Group;
- Newcastle Inner-City Residents Alliance;
- Rotary Club of Newcastle;
- Newcastle Cycleways Movement; and
- Glovers Lane Residents Group.

A number of representatives from the community group identified above attended the community information session held on 11 June 2014 and their comments are included in the Outcomes Report contained in **Appendix I**.

Newcastle Cycleways Movement has accepted an offer of a briefing and arrangements are currently being made for this briefing to take place.

#### 4.6.3 Business and Industry Groups

Business and industry groups considered to have an interest in the project were identified and invited by mail to attend the community information session on 11 June 2014. They were also offered an update briefing at a time convenient to them. Local business and industry that we contacted included:

- Hunter Business Chamber and its Regional Infrastructure Committee;
- Newcastle NOW;

- Urban Development Institute of Australia;
- Newcastle Business Club;
- Regional Development Australia Hunter;
- Master Builders Association (Newcastle); and
- Property Council of Australia.

A number of briefings have occurred already and others are currently being organised. Among those to receive recent briefings were Hunter Business Council Regional Infrastructure Committee, Ausgrid, Newcastle NOW, Urban Development Institute of Australia and the Property Council of Australia. A briefing to the Regional Development Australia Hunter Board, Master Builders Association (Newcastle) and to TAFE regional CEO will take place in the near future.

#### 4.6.4 Local Councils and Government Bodies

In addition to the direct consultation undertaken with local, State and Commonwealth Government authorities outlined above, letters were sent to NCC and to Hunter Councils Inc. confirming the community information session held in June 2014 and offering an update briefing on the project. Hunter Councils Inc. represents the following 12 councils in the Hunter region:

- Cessnock City Council
- Dungog Shire Council
- Gloucester Shire Council
- Great Lakes Council
- Lake Macquarie City Council
- Maitland City Council
- Mid Western Regional Council
- Muswellbrook Shire Council
- Newcastle City Council
- Port Stephens Shire Council
- Singleton Council
- Upper Hunter Shire Council.

Hunter Councils Inc. has responded to the University's invitation and arrangements are in hand to make a presentation in late July 2014 when all Mayors and General Managers will be in attendance.

There has also been a meeting with Ausgrid in relation to the Christie Street substation which has resulted in the design outcomes currently proposed.

Consultation with relevant government authorities will continue to take place as the project progresses.

### 4.7 Design Review Panel

The recent amendments to the Newcastle Local Environmental Plan 2012 by the *State Environmental Planning Policy (Newcastle City Centre) 2014* identify the NeW Space site as a "Key Site". Therefore the proposed NeW Space development triggers the design excellence provisions of the Newcastle LEP 2012. Specifically, clause 7.5(4)(c) requires that development consent must not be granted to development having a capital value of more than \$1,000,000 on a site identified as a "Key Site" unless an architectural design competition has been held

in relation to the proposed development. However, clause 7.5(5) of the Newcastle LEP prescribes that clause 7.5(4) does not apply if the Director-General certifies in writing that the development is one for which an architectural design competition is not required.

The NSW Government Architect's Office has been delegated the role of determining whether or not to waive the design competition requirement pursuant to Clause 7.5 of Newcastle LEP 2012 and, in this instance, it has been determined that a design competition is not required subject to the establishment of a design review panel to oversee the design development prior to lodging a development application (refer to **Appendix L**).

The design review panel established for the project consists of three qualified design experts representing the proponent, City of Newcastle council and the NSW state government. These representatives include:

- Peter Poulet – NSW Government Architect;
- Colin Brady – Representing the City of Newcastle; and
- Mark Taylor – Representing the University of Newcastle.

The panel met on 17 June 2014 to review the proposed development and details of the matters discussed that have been considered in the proposed design are outlined in **Table 3** below. The minutes of the Design Review Panel meeting on 17 June 2014 are provided at **Appendix L**.

**Table 3** – Design Review Panel Issues and NeW Space Design Response

Design Issue	Design Response
1) 5 Star Green Star Rating	The brief from UON only sought a 5 star rating. However, the project will incorporate a number of strategies beyond 5 star, including: <ul style="list-style-type: none"> <li>▪ Bicycle parking and end of trip facilities;</li> <li>▪ Natural ventilation to majority of social spaces; and</li> <li>▪ Outdoor relief areas associated with the "Urban Rooms".</li> </ul>
2) Mine Rectification Works	Approval has been granted for these works separate to the SSD DA process.
3) Security and Safety	The following strategies had been developed to address security issues: <ul style="list-style-type: none"> <li>▪ Open and transparent ground floor level with a high degree of visibility through the building;</li> <li>▪ 24 hour security to be located on site and integration with CCTV system as part of the broader UON security services;</li> <li>▪ Swipe card access is included for after hours access to the building and the lower;</li> <li>▪ The upper levels of the building will be secure from the lower levels after hours;</li> <li>▪ UON had undertaken consultation with NSW Police regarding the project;</li> <li>▪ Crime Risk Assessment completed as part of the design development process and strategies incorporated into preferred design outcome;</li> <li>▪ UON will provide Ambassadors/Rovers on-site to guide people who visit the facility as part of its Service Delivery Model.</li> </ul>
4) Impacts on Disable Access due to Flooding Constraints	Barrier free access will be available to all parts of the ground floor level and to levels within the building.
5) Overshadowing	The Department of Planning and Environment (formerly Planning and Infrastructure) has provided advice to UON that the development should enable 50% of Christie Place to receive a minimum of two

Design Issue	Design Response
	(2) hours of solar access between 9am and 3pm mid-Winter. In addition, the proposed building responds to the building envelope provisions contained in the Newcastle Urban Renewal Strategy (NURS) and the Newcastle DCP, which requires the location of the tower element in the north-south alignment of University House in order to restrict overshadowing onto Christie Place. Solar access to Christie Place as required by DPE will be achieved during the mid-winter period.
6) Heavy Rail Truncation	The NeW Space transport and parking strategy responds to the city-wide strategies outlined in the NURS and the proposed light rail for Newcastle.
7) Escalators	The escalators are seen as a critical element of the proposal to ensure that the volumes of people expected to use the building will be better served by these facilities rather than being entirely dependent upon lifts. The proposed building also has a number of alternatives for access to all levels of the building including stairs and elevators. A decision has been made to novate the Principal Design Consultant to the project upon appointment of the preferred building contractor to ensure that this component of the design is retained.
8) Depth of Office Floor Plate	The general office depth will be 11 metres, with one deeper floorplate on level 4 of 16.8 metres. This will ensure that all office areas have adequate access to natural light.
9) Ground Floor of University House	The project does not involve the complete refurbishment of University House. Some elements of the refurbishment, such as the façade restoration proposed for University House, was being considered as a separate project to NeW Space. The use of the balance of the floor space not affected by the current proposal was still under investigation and potential uses that are being considered include the relocation of a smaller school from the Callaghan Campus or a new exhibition space to replace the Watt Space gallery.
10) Christie Lane Amenity and Activation	<p>Christie Lane would always be shaded on the basis that it was located to the south of the NeW Space building. The Department of Planning and Infrastructure had identified that the key consideration for solar access should be Christie Place (see comments above).</p> <p>In terms of activation, there will be significant activity in this part of the site due to the physical connection between University House and NeW Space, the location of the bike hub and end of trip facilities in the ground floor level of University House, and the location of retail spaces at the eastern and western end of the lane.</p> <p>The lane will also continue to provide a through site link for people wishing to move through the site to City Hall and/or Auckland Street.</p>
11) Student Housing Strategy	UON is in the process of constructing approx. 778 student accommodation rooms at Callaghan Campus which are will become available before the completion of NeW Space. This is in addition to the existing accommodation (approx. 1,000 beds)

Design Issue	Design Response
	<p>already provided at Callaghan Campus.</p> <p>In addition, the University anticipates NeW Space will be a catalyst for future investment in suitable accommodation and already there are numerous student housing projects on the drawing board from private operators/developers.</p> <p>The SSD DA will also identify and address any potential impacts from NeW Space on rental accommodation in Newcastle in the Social and Economic Impact Assessment that has been prepared.</p>
<p>12) Future Stages of Development</p>	<p>The SSD DA for NeW Space does not incorporate any future stages due to lack of funding and because the role of the University in the broader Newcastle CBD is still being investigated by UON. Should the University consider future stages of the project, these will be completed under a separate approval process.</p>
<p>13) Relationship between Christie Place and NeW Space Courtyard</p>	<p>Christie Place will be activated by the new retail/café space at the ground level of University House whilst the NeW Space will be activated by its direct relationship with the ground floor uses of NeW Space, in addition to an elevated screen adjacent to the western wall of the Civic Theatre that can be used for University activities and other public viewing events.</p> <p>The maintenance of Christie Place will be retained by Newcastle City Council whilst UON will be responsible for the ongoing maintenance of the NeW Space Courtyard.</p>

## 5.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the proposed SSDA. It addresses the matters for consideration set out in the SEARs (see **Section 1.5**).

The Mitigation Measures at **Section 7.0** complement the findings of this section.

### 5.1 Statutory and Strategic Context

The relevant strategies, environmental planning instruments, policies and guidelines as set out in the SEARs are addressed in **Table 4**.

**Table 4** – Summary of consistency with relevant Strategies, EPIs, Policies and Guidelines

Instrument/Strategy	Comments
<b>Strategic Plans</b>	
NSW State Plan 2021	<p>The stated objective of the NSW State Plan 2021 (NSW 2021) is to make NSW Number One. It is a 10-year plan guiding policy and budget positions. NSW 2021 will drive the Government's agenda for change in NSW and is based around the following five strategies:</p> <ul style="list-style-type: none"> <li>▪ Restore economic growth;</li> <li>▪ Return quality health, transport, education, police, justice and community services, putting customer service at the heart of service design;</li> <li>▪ Build infrastructure that drives our economy and improves people's lives;</li> <li>▪ Strengthen our local environments, devolve decision making and return planning powers to the community; and</li> <li>▪ Restore accountability and transparency to government, and give the community a say in decisions affecting their lives.</li> </ul> <p>The following goals (and their targets and priority actions) are relevant to UON and the proposed NeW Space project:</p> <ul style="list-style-type: none"> <li>▪ Goal 1 - Improve the performance of the NSW economy Target: Grow business investment by an average of 4% per year to 2020 <ul style="list-style-type: none"> <li>– Priority Action: Target and attract potential international investors into priority sectors, especially where we have overseas NSW trade and investment, tourism or education offices.</li> <li>– Priority Action: Leverage research and development activities to drive new investment opportunities in NSW.</li> <li>– Target: Grow GDP per capita by an average 1.5% per year to 2020 with specific industry growth targets</li> <li>– Priority Action: Grow critical industries – professional services (financial, professional, legal), manufacturing, digital economy and international education and research.</li> <li>– Priority Action: Develop Industry Action Plans for professional services, manufacturing, digital economy, tourism and events, international education and research by June 2012, in partnership with industry</li> </ul> </li> <li>▪ Goal 4 - Increase the competitiveness of doing business in NSW Target: Reduce Red Tape, Improve development approval and plan making processes <ul style="list-style-type: none"> <li>– Priority Action: Increase the number of developments that are approved without the need for detailed assessment (lengthy merit assessment), by expanding the types of development covered as 'complying development' and further promoting 'complying development'.</li> </ul> </li> <li>Target: Increase Business Innovation, Grow knowledge industries <ul style="list-style-type: none"> <li>– Priority Action: Support high performing businesses to innovate to further enhance productivity through Industry Action Plans. The plans will identify innovation drivers and barriers within key sectors (professional services, manufacturing, digital economy, tourism and events, and education and research).</li> </ul> </li> <li>▪ Goal 6 - Strengthen the NSW skill base Target: More people gain higher level tertiary qualifications <ul style="list-style-type: none"> <li>▪ Priority Action: Increase university enrolments and attainment through improved links between schools, vocational education providers and universities, especially those serving low socio-economic communities and regional NSW</li> </ul> </li> <li>▪ Goal 14 - Increase opportunities for people with a disability Target: Increase participation of people with disabilities in employment or further education</li> </ul>

Instrument/Strategy	Comments
Draft Lower Hunter Regional Strategy	<p>The Regional Strategy applies to the five local government areas of Newcastle, Lake Macquarie, Port Stephens, Maitland and Cessnock, and is one of a number of regional strategies prepared by the Department of Planning.</p> <p>The primary purpose of the Regional Strategy is to ensure that adequate land is available and appropriately located to sustainably accommodate the projected housing and employment needs of the Region's population over the next 25 years. The Regional Strategy plans for the provision of sufficient new urban and employment lands to meet the expected demands for growth in the Lower Hunter. The Regional Strategy also refocuses development in the Lower Hunter towards the strengthening of vibrant centres that support the role of Newcastle City Centre as the regional city.</p> <p>Key elements of the strategy relevant to the NeW Space project are to:</p> <ul style="list-style-type: none"> <li>▪ Promote Newcastle as the regional city of the Lower Hunter, supported by a hierarchy of major regional centres at Charlestown, Cessnock, Maitland and Raymond Terrace, emerging major regional centres at Morisset and Glendale-Cardiff as well as specialised centres and lower order centres.</li> <li>▪ Provide capacity within employment zones, major centres and strategic centres to accommodate up to 85 per cent of the anticipated 66,000 jobs required by 2031.</li> </ul> <p>Establishment of a university campus in Newcastle City Centre will promote and support Newcastle as the regional city of the Lower Hunter and will provide additional employment opportunities within the City Centre.</p> <p>The proposed NeW Space project will be broadly consistent with the goals and objective set forth in the Lower Hunter Regional Strategy.</p>
Draft Newcastle Urban Renewal Strategy (NURS)	<p>The NURS considers the suitability of the Newcastle City Centre for urban renewal. It outlines a clear strategy underpinned by a range of initiatives, and an implementation plan to support the revitalisation of Newcastle over the next 25 years. The strategy proposes a framework for the city to successfully grow and identifies initiatives to improve the city's economy, access, connections and the quality and attractiveness of the public domain, all of which are catalysts for encouraging development.</p> <p>Key elements of the NURS relative to the NeW Space project include:</p> <ul style="list-style-type: none"> <li>▪ Reshaping Hunter Street as the main street and key destination within the city and promoting activity, business opportunities, events and other uses in identified nodes along Hunter Street and in all of the city's key public domain areas.</li> <li>▪ Strengthening the civic precinct as the main civic, educational and cultural hub of Newcastle and promoting specific physical improvements to Wheeler Place.</li> <li>▪ Recognising Newcastle's heritage as an asset and core component of place-making, and encouraging innovation.</li> <li>▪ Diversification of the economy ensuring resilience into the future by encouraging new industries and sectors such as cultural, sustainable energy generation and distribution, education, training and research, port operations, freight and logistics.</li> <li>▪ Planning for 10,000 additional jobs to 2036, promoting the city centre as the main location for commercial office tenancies, and providing enough land in the right locations.</li> <li>▪ Promoting a university presence and educational hub in the city centre to stimulate and drive demand for commercial and retail floor space, and create synergies with established businesses and industry sectors where innovation can occur in a unique setting.</li> </ul> <p>NeW Space will assist to reshape Hunter Street as the main street, serve as a key destination within the city and promote activity and passing trade in its surrounds.</p>

Instrument/Strategy	Comments
	<p>It will also assist to strengthen the Civic Precinct as the main civic, educational and cultural hub of Newcastle and is expected to assist activation of Wheeler Place. Newcastle's heritage will be enhanced as the campus is expected to activate the heritage conservation area it lies within and the surrounding heritage items. Notably, the NeW Space project will be integrated with University House, which is a State listed heritage item. This will assist in the adaptive reuse of an important component of the city's heritage fabric.</p> <p>The proposed development will also assist to further diversify the economy and provide the capacity for more jobs in education, training and research within the Newcastle City Centre. The project will establish a university presence and educational hub in the Civic Precinct in accordance with the NURS and will be a catalyst for other forms of development and economic activity within the broader city centre.</p> <p>In summary, it can be seen that the NeW Space project will be consistent with the NURS and be a very significant catalyst project for the Newcastle City Centre.</p> <p>Additionally, the NURS has proposed upgrades to Hunter Street, including cyclist lanes.</p>
NSW Bike Plan	The proposal is consistent with the NSW Bike Plan as it will encourage cycling in the Newcastle area by providing 212 internal bicycle spaces, 36 casual external spaces and end-of-trip facilities.
Planning Guidelines for Walking and Cycling	The proposal supports the objectives of this publication as it provides ample facilities to encourage cycling. The inclusion of a new pedestrian and through site link also facilitates walking in the locality. The location of the NeW Space development in the Newcastle City Centre ensures that alternative modes of travel are encouraged.
Healthy Urban Development Checklist	The proposal has been designed in accordance with the Healthy Urban Development Checklist, in particular in regards to the permeable ground plane and the provision of bicycle parking. The location of the development in Newcastle's City Centre ensures that it is highly accessible and is well serviced by public transport.
State Legislation	
EP&A Act	<p>The proposed development is consistent with the objects of the EP&amp;A Act for the following reasons:</p> <ul style="list-style-type: none"> <li>▪ the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment;</li> <li>▪ the promotion and co-ordination of the orderly and economic use and development of land;</li> <li>▪ the protection, provision and co-ordination of communication and utility services;</li> <li>▪ the provision of land for public purposes;</li> <li>▪ the provision and co-ordination of community services and facilities; and</li> <li>▪ the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats; and</li> <li>▪ ecologically sustainable development.</li> </ul> <p>UON is listed as an Australian University under Schedule 1 of the Higher Education Act 2001 and as the development will occur on University land, proposed works are a Crown development for the purposes of Division 4 of the EP&amp;A Act.</p> <p>The proposed development is consistent with Division 4.1 of the EP&amp;A Act, particularly for the following reasons:</p> <ul style="list-style-type: none"> <li>▪ the development has been declared to have state significance;</li> <li>▪ the development is not prohibited by an environmental planning instrument; and</li> <li>▪ the development has been evaluated and assessed against the relevant heads of consideration under section 79C.</li> </ul>

Instrument/Strategy	Comments																																		
EP&A Regulation 2000	<p>The EIS has addressed the specification criteria within clause 6 and clause 7 of Schedule 2. Similarly, the EIS has addressed the principles of ecologically sustainable development through the precautionary principle (and other considerations), which assesses the threats of any serious or irreversible environmental damage (see Section 8.3).</p> <p>As required by Clause 7(1)(d)(v) of Schedule 2, the following additional approvals will be required in order to permit the proposed development to occur.</p> <table border="1"> <thead> <tr> <th>Act</th> <th>Approval Required</th> </tr> </thead> <tbody> <tr> <td colspan="2"><b>Legislation that does not apply to State Significant Development</b></td> </tr> <tr> <td><i>Coastal Protection Act 1979</i></td> <td>N/A</td> </tr> <tr> <td><i>Fisheries Management Act 1994</i></td> <td>N/A</td> </tr> <tr> <td><i>Heritage Act 1977</i></td> <td>N/A</td> </tr> <tr> <td><i>National Parks and Wildlife Act 1974</i></td> <td>N/A</td> </tr> <tr> <td><i>Native Vegetation Act 2003</i></td> <td>N/A</td> </tr> <tr> <td><i>Rural Fires Act 1997</i></td> <td>N/A</td> </tr> <tr> <td><i>Water Management Act 2000</i></td> <td>N/A</td> </tr> <tr> <td colspan="2"><b>Legislation that must be applied consistently</b></td> </tr> <tr> <td><i>Fisheries Management Act 1994</i></td> <td>No</td> </tr> <tr> <td><i>Mine Subsidence Compensation Act 1961</i></td> <td>YES</td> </tr> <tr> <td><i>Mining Act 1992</i></td> <td>No</td> </tr> <tr> <td><i>Petroleum (Onshore) Act 1991</i></td> <td>No</td> </tr> <tr> <td><i>Protection of the Environment Operations Act 1997</i></td> <td>No</td> </tr> <tr> <td><i>Roads Act 1993</i></td> <td>No</td> </tr> <tr> <td><i>Pipelines Act 1967</i></td> <td>No</td> </tr> </tbody> </table> <p>Applicable provisions of the Mine Subsidence Compensation Act 1961 are addressed in the relevant section of this EIS.</p> <p>Pursuant to Environmental Planning and Assessment Regulation 2000 Clause 226, a development carried out by an Australian University (under the meaning of the Higher Education Act 2001) is a Crown development. UON is listed as an Australian University under Schedule 1 of the Higher Education Act 2001 and as the development will occur on University land, proposed works are a Crown development for the purposes of Division 4 of the EP&amp;A Act.</p>	Act	Approval Required	<b>Legislation that does not apply to State Significant Development</b>		<i>Coastal Protection Act 1979</i>	N/A	<i>Fisheries Management Act 1994</i>	N/A	<i>Heritage Act 1977</i>	N/A	<i>National Parks and Wildlife Act 1974</i>	N/A	<i>Native Vegetation Act 2003</i>	N/A	<i>Rural Fires Act 1997</i>	N/A	<i>Water Management Act 2000</i>	N/A	<b>Legislation that must be applied consistently</b>		<i>Fisheries Management Act 1994</i>	No	<i>Mine Subsidence Compensation Act 1961</i>	YES	<i>Mining Act 1992</i>	No	<i>Petroleum (Onshore) Act 1991</i>	No	<i>Protection of the Environment Operations Act 1997</i>	No	<i>Roads Act 1993</i>	No	<i>Pipelines Act 1967</i>	No
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SEPP 55	<p>SEPP 55 contains state-wide planning controls for the remediation of contaminated land. When carrying out planning functions under the Act, SEPP 55 requires the consent authority to consider the possibility that a previous land use has caused contamination of the site, the potential risk to health or the environment from that contamination, and whether the land to be developed is able to be remediated.</p> <p>The site has been confirmed as suitable for the proposed use. Further discussion is provided at <b>Section 5.9</b>.</p>																																		
SEPP (Infrastructure)	<p>The site is zoned B3 – Commercial Core under the LEP, which is a prescribed zone under the ISEPP. In accordance with Part 3 Division 3, development for the purpose of educational establishments may be carried out by any person with consent on land in a prescribed zone.</p>																																		
SEPP (State and Regional Development)	<p>In accordance with Part 2, Clause 8 and Schedule 1, Clause 15, Development for the purposes of an educational establishment with a capital investment value of more than \$30 million is SSD. With a capital investment value of approximately \$90 million (under separate cover), the proposed development will be defined as SSD.</p>																																		
Draft Hunter Regional Transport Strategy	<p>The Transport Strategy also identifies actions to be taken to support revitalisation of Newcastle City Centre, specifically to promote a shift to public transport, create a connected pedestrian and cyclist network, and provide dedicated bicycle lanes on Hunter Street.</p>																																		

Instrument/Strategy	Comments
	<p>It is considered the NeW Space campus will provide appropriate pedestrian and cyclist facilities and footpaths are provided along all street frontages and links will be provided through the site. Secure bicycle parking will take place at the ground floor of University House with cyclist access from Auckland Street.</p> <p>Under the assumption the State Government and Newcastle City Council will continue to pursue cyclist lanes along Hunter Street, it can be seen a substantial quantum of pedestrian and cyclist facilities will be provided, and when used concurrently, will greatly assist to activate the Civic Precinct and support revitalisation in the Newcastle City Centre.</p>
<b>Local Planning Instruments and Controls</b>	
Newcastle Local Environmental Plan 2012	<p>Clause 2.3 – Zone Objectives and Land Use Table</p> <p>The proposed educational establishment use is permissible with development consent in the prescribed B3 – Commercial Core.</p> <p>The Laman Street Car Parking site is zoned R3 – Medium Density Residential and the proposed parking use is permissible with consent.</p>
	<p>Clause 4.3 – Height of Buildings</p> <p>A maximum building height of 49.1m is permitted on the NeW Space site. The proposed development will exceed 49.1m, and as such a Clause 4.6 Variation Request has been prepared and is provided at <b>Appendix J</b>. The maximum building height will be at 50.8 AHD (plant room enclosure).</p>
	<p>Clause 4.4 – Floor Space Ratio</p> <p>The LEP permits a maximum FSR of 5.0:1. The proposed development, inclusive of both NeW Space and University House, will have a total GFA of 18,110m<sup>2</sup>, which equates to an FSR of 3.02:1 over the combined site area of 5,988m<sup>2</sup>. As such, the proposal is consistent with the prescribed control.</p>
	<p>Clause 5.10 – Heritage Conservation</p> <p>Part of the site (300 King Street, also known as University House) is identified as a heritage item. The whole of the site is within a heritage conservation area. Heritage considerations have been addressed at <b>Section 5.5</b> and <b>Appendix K</b>.</p>
	<p>Clause 7.4 Building Separation</p> <p>NeW Space will exceed 45m in height and therefore requires a minimum building separation of 24m at 45m or higher above the ground level. No other buildings in the immediate surrounds exceed 45m in height and therefore the development proposal is consistent with this clause.</p>
	<p>Clause 7.5 Design Excellence</p> <p>A development proposed within the Newcastle City Centre that is considered to exhibit design excellence is permitted to achieve a floor space ratio up to 10% greater than that permitted under Clause 4.4 or a maximum building height up to 10% greater than that permitted by Clause 4.3. A design competition waiver has been issued by the Director-General (<b>Appendix L</b>) which certifies the proposed development achieves design excellence.</p>
Newcastle Development Control Plan 2012	<p>Whilst DCP's do not apply to SSD under Clause 11 of the SEPP (State and Regional Development), an assessment of the proposal against the relevant aims and provisions is set out below.</p> <p>The proposal is consistent with the aims of the 'Newcastle City Centre – West' in that:</p> <ul style="list-style-type: none"> <li>▪ It will encourage the redevelopment of a key site in the Newcastle City Centre – West, contributing to this area as the new gateway to the City Centre.</li> <li>▪ It will encourage further redevelopment to reconnect the harbour to Newcastle City Centre - West.</li> </ul>

Instrument/Strategy	Comments
	<ul style="list-style-type: none"> <li>▪ It will significantly contribute to Newcastle City Centre - West becoming a vibrant place for people to work, play, study and live.</li> <li>▪ It will directly revitalise Newcastle City Centre - West to facilitate an educational development in the vicinity of a designated activity nodes.</li> </ul> <p>It will directly contribute to retaining historic elements and significant views that define the character of the city.</p>
A1. Street wall heights	The proposal is generally consistent with the street wall heights of 18 metres and 14 metres specified for the site. The unique form of the building does not result in a conventional podium and tower building. Significant variation is provided through various setbacks and cut-outs/projections up the entire building. The building design also ensures the character of surrounding heritage items is protected as encouraged by the DCP.
A3. Building Separation	The DCP specifies various separation controls for buildings on the same site. The relationship between the NeW Space development and the existing University House has been well considered through a competitive design process. A sufficient separation distance is provided to ensure the heritage significance of University House is maintained; appropriate privacy is achieved; and the two buildings are able to be linked appropriately at the lower levels.
A4. Building depth and bulk	The proposal complies with the maximum floor plate size of less than 2,500m <sup>2</sup> . The floor plates in part exceed the maximum 25 metre guideline. Due to the orientation and layout of the floor plates, an appropriate level of amenity is achieved for students and staff with a clear separation of spaces and significant areas of breakout space.
A5. Building Exteriors	The proposal is consistent with the DCP as it will incorporate materials and finishes which complement the character of the precinct. The building will be completed to a high quality finish as shown in the material and samples board at <b>Appendix A</b> .
A6. Heritage buildings	The proposal is consistent with the DCP as the proposed refurbishment works to University House will assist in the conservation and enhancement of the heritage item.
A8. Design of parking structures	The Laman Street car park is well designed and is visually repressed in the streetscape.
B1. Access Network	The proposal provides a new pedestrian linkage and through site link in accordance with the DCP.
B2. Views and vistas	The proposal maintains and enhances existing views and vistas.
B3. Active street frontages	The proposal incorporates active street frontages where required by the DCP.
B4. Addressing the street	The proposal addresses the street with maximised entries and seamless integration of private and public space.
B5. Public Artwork	The provision of public art within the redevelopment will be investigated during the detailed design of the development.
B6. Sun access to public spaces	Sunlight access to Christie Place is outlined in <b>Section 5.3.2</b> below.
Section C Key Precinct – Wheeler Place	The proposed development is generally consistent with the Wheeler Place Precinct Plan.

Instrument/Strategy	Comments
	C.01 Pedestrian permeability and amenity is improved The proposal significantly enhances pedestrian permeability through providing a new pedestrian linkage and new through site link.
	C.02 Building form integrates with existing heritage character and retains contributory buildings The proposed NeW Space development has been specifically designed to enhance surrounding heritage, creating new view corridors to significant items and providing a development which is sympathetic to the adjoining University House.
	C.04 Servicing and access minimises conflicts with pedestrians All servicing and vehicular access to the site has been located to minimise conflicts with pedestrian movements.

## 5.2 Built Form and Urban Design

An Architectural Design Report has been prepared jointly by Lyons and EJE Architecture that describes the design intent behind the proposed NeW Space project (**Appendix A**). The Landscape Report prepared by McGregor Coxall also outlines the intent of landscaping on the site which complements the architectural design (refer to **Appendix F**).

The SEARs specified several different areas which are required to be assessed in relation to built form and urban design. These areas are dealt with sequentially below.

### Height, Bulk, Scale and Setbacks

The design of the NeW Space building has sought to reflect the public nature of the immediate civic precinct. The new building and surrounds have been described by Lyons and EJE Architecture as *'beautiful, functional and engaging spaces'* which will encourage people to stay and revisit the site.

The building is designed to be a catalyst development for the Newcastle CBD, and as such, is required to possess certain qualities, such as an iconic appearance and physical presence. These requirements need to be achieved whilst responding to the important historical buildings within the immediate vicinity of the site.

The height, bulk and scale of the building have all been designed to ensure the building presents as a gateway to the Newcastle CBD. **Figure 18** illustrates the Hunter Street elevation, demonstrating that the NeW Space building is slightly taller than buildings further east along Hunter Street. This is an intentional and important design feature in achieving a 'gateway' authority for the building and the site.



**Figure 18** – Hunter Street elevation  
Source: Lyons and EJE Architecture

The building bulk is well divided through a unique floor plate design and separate massing elements. The 'twisted' design of the building has originally been adopted to maintain and enhance existing views, yet this achieves a secondary purpose of significantly reducing any unattractive or excessive building proportions. The inclusion of significant articulation in the form of fins and pop-out glass enclosures further enhances the articulation of the building and reduced any potential 'bulk'. **Figure 19** provides a visual representation of the façade design which contributes to dividing the bulk of the building.



**Figure 19** – Fin and pop-out designs  
 Source: Lyons and EJE Architecture

The NeW Space site is well located with generous areas of civic/open space to the south east. This allows a feeling of separation from existing buildings such as the Town Hall. A generous setback of the tower element from the Civic Theatre mitigates any potential impacts on this important existing building. The provision of a new laneway between NeW Space and University House will allow for clear physical separation, and will importantly facilitate new views of University House.

### Design Quality

The design quality of the proposed development has been guaranteed through the competitive design process held by UON. The winners of this competition, Lyons and EJE Architecture, prepared a design which met the criteria established by UON and provided a high quality building which achieves design excellence.

Significant planning has been undertaken to enhance connectivity on the site and ensure all new and existing areas are seamlessly integrated and designed to the highest quality. A key component of site connectivity is the linkage between NeW Space and university House. The new bridge connections on level one to three linking the two buildings will ensure efficient movements through the buildings. At ground level, connections will be available along Hunter Street and Auckland Streets; along the Civic Theatre boundary; through the new laneway between the buildings; and generally through the site as an open and permeable ground level has been proposed.

These connections are complemented by the landscaping scheme which ensures that all new public domain areas are well designed, logical to navigate and usable. In particular, the interface of the new public domain adjacent to NeW Space and Christie Place is well designed to appear seamless and ensure that the site integrates well into the existing environment.

A well selected mix of materials and colours will enliven the façade and strengthen the iconic status of the NeW Space building. The various elements and materials which culminate to create an interesting and inviting building are outlined in the Architectural Design Report at **Appendix A**.

Furthermore, the design has been assessed and critiqued by the established Design Review Panel for the site at a meeting held on 17 June 2014. Further discussion on the Design Review Panel and how the proposal responds to the matters raised is outlined in **Section 4.0** above.

### Services

Lyons and EJE Architecture have adopted an integrated approach to services in the NeW Space building. Services and required infrastructure have been integrated into the design where possible, and placed in locations which minimise their visual presence. For instance, the new laneway between NeW Space and University House will be used for service elements, amongst other purpose, in turn concentrating these required elements away from the primary street frontages.

The design of the roof plant has been centralised to the roof to minimise any visual presence from street level. Mechanical plant equipment and roof plant rooms should not be discernable from the street. Further discussion on the integration of services in the design is provided in the Architectural Design Report at **Appendix A**.

### Design Excellence

The NeW Space development has achieved design excellence due to its careful consideration of a range of important factors. In particular, the development achieves design excellence as:

- The proposal represents a high standard of architectural design by providing a unique and iconic building, selecting a variety of interesting and striking materials and achieving a positive and responsive relationship to the existing built form;
- The form and external appearance will significantly enhance the quality and amenity of the public domain and surrounding built form;
- A balanced approach to views has been achieved, maintaining existing important views and in particular enhancing views to the Town Hall Clock Tower;
- A strong, sympathetic and complementary relationship to existing heritage buildings is provided;
- A well designed and sufficiently articulated and modulated built form is achieved, particularly in consideration of the tower siting, bulk, mass and street frontage heights;
- The principles of ecologically sustainable development are fulfilled; and
- There will not be any adverse pedestrian, cycle, vehicular and service access or circulation impacts.

The way in which the design has responded to the Design Review Panel comments is set out in **Section 4.0** above.

## 5.3 Environmental and Residential Amenity

The proposal has been designed to minimise and mitigate any potential environmental and residential amenity impacts on the surrounding area. A detailed overview of the design and how it responds to the surrounding environment is provided in the Architectural Design Report prepared by Lyons and EJE Architecture (refer to **Appendix A**). The relevant environmental/residential considerations are addressed further below where appropriate.

### 5.3.1 Views

Views are an important consideration in determining the level of surrounding amenity and amenity within the new development. A key element of the competitive design process undertaken by UON was the protection and enhancement of views, in particular, the views to Nobbys, the Hunter River, and the Town Hall Clock Tower.

#### Internal Views

Internal views within the NeW Space building are also an important consideration in the amenity of the new development. The NeW Space building is predominately glazed to capture all potential views. The placement of key spaces such as the urban rooms and internal relaxation spaces has been intentional to maximise views. Important vistas and views which have been captured include Nobbys, the Hunter River, Christie Place and Hunter Street.

## Existing Views

Lyons and EJE Architecture explore the intent behind the building design in the Architectural Design Report (**Appendix A**). The building is described as being 'twisted' to allow for the retention of the key views identified above. The unique design of the building is a testament to the intention of maintaining existing views, as illustrated in **Figure 20**, where the Town Hall Clock Tower is visible from Hunter Street as a result of cantilevering the upper levels of the NeW Space building.



**Figure 20** – View to the Town Hall Clock Tower  
Source: Lyons and EJE Architecture

### 5.3.2 Overshadowing of Public Space

The location of an important public space, being Christie Place, within close proximity of the NeW Space development requires careful consideration of the potential overshadowing impact. Shadow Diagrams are provided in the Architectural Design Report prepared by Lyons and EJE Architecture (**Appendix A**) and the Landscape Report prepared by McGregor Coxall (**Appendix F**).

#### Assessment

These shadow diagrams illustrate that minimal overshadowing will occur on Christie Place as a result of the NeW Space development. As part of further consultation, the Department has clarified that sun access should be provided to 50% of Christie Place for a minimum of 2 hours between 9:00am and 3:00pm in mid-winter.

The worst case scenario for overshadowing is during the winter solstice (June 21). Lyons and EJE Architecture have prepared detailed overshadowing diagrams for June 21 between 9:00am and 3:00pm (refer to **Appendix A**). These diagrams illustrate that between 11:30am and 1:30pm, less than 50% of Christie Place is overshadowed (see **Figure 21**). In light of the above assessment, it is evident that Christie Place continues to receive an acceptable level of daylight access and therefore high level of amenity.



**Figure 21** – Overshadowing of Christie Place  
 Source: Lyons and EJE Architecture

### Mitigation Measures

As the proposal will not result in any adverse overshadowing impacts, no specific mitigation measures are required.

### 5.3.3 Privacy

The consideration of privacy was undertaken in the conceptual planning of the NeW Space building. A brief assessment of the proposal in regards to privacy is provided below.

#### Assessment

The NeW Space development will not result in any adverse privacy implications for existing uses surrounding the site. The site of the NeW Space development is benefited by two street frontages, which ensures that existing uses to the north and west are well separated from the site.

The design of the NeW Space building has also strategically enabled large setbacks to be provided to the east, with the tower element of the building concentrated at the north-western corner of the site. The generally blank northern façade of University House has ensured no specific privacy measures are required on the southern elevation of the NeW Space building.

As such, the proposed development is not expected to result in any privacy impacts to existing uses.

#### Mitigation Measures

Due to no significant privacy impacts, no specific mitigation measures are required.

### 5.3.4 Wind Assessment

AECOM has prepared a Wind Microclimate Assessment to review the impact of wind-induced pedestrian discomfort which may be result from the NeW Space development (refer to **Appendix M**). This Assessment have identified the existing and likely future wind environments, and provided recommendations to mitigate any adverse wind-related impacts.

AECOM has assessed the future wind environment at important outdoor locations being developed as part of NeW Space, including the corner of Hunter and Auckland Street, the courtyard, urban rooms and walkway between the NeW Space building and University House. A brief overview of the assessment for each area is provided below.

### **Corner of Hunter and Auckland Street**

It is unlikely there will be significant acceleration of winds along these streets due to the relatively low height buildings lining the street. The set back of the NeW Space building from the corner of the intersection will enable winds to flow relatively freely around the corner. AECOM suggest it is likely that this area will be suitable for short-term sedentary activities for the majority of the time.

### **The Courtyard**

The courtyard space is exposed to southerly winds coming from Civic Park and Christie Place. AECOM suggest that conditions in this location are unlikely to be any less comfortable than current conditions of Civic Park and Christie Place. The provision of trees within the courtyard will assist in creating comfortable conditions in the seating areas and mitigating southerly winds.

### **Urban Rooms**

The location of the urban rooms means they are exposed to oncoming winds. Full height balustrades, extending to 2100mm above floor level, are provided to each urban room and will provide significant protection to the space. AECOM suggests there is unlikely to be a significant risk of downwash due to the overhangs which protect the rooms. It is therefore unlikely that there will be any detrimental wind impacts in the urban rooms.

### **NeW Space Building and University House Walkway**

The design of this walkway results in a risk that prevailing north-westerly winds may accelerate to uncomfortable speeds. As this space is for transition purposes only, it is not anticipated that pedestrians will be spending sufficient time periods within this space to require the implementation of mitigation measures.

Overall, the wind assessment has determined that the majority of outdoor spaces will experience wind speeds which will not result in uncomfortable pedestrian climates. A complete likelihood of discomfort assessment for each outdoor space is provided at **Appendix M**.

### **Mitigation Measures**

AECOM has determined that with the inclusion of the proposed landscaping scheme, the relevant outdoor areas will achieve suitable environments for pedestrian comfort. As such, the only recommendation relates to the implementation of the proposed landscape scheme.

## **5.4 Ecological Sustainable Development**

The University of Newcastle has an environmental sustainability plan and general philosophy to achieve a range of sustainability targets in new developments. AECOM has provided an overview of the Ecologically Sustainable Development (ESD) principles within the NeW Space development (refer to ESD Report at **Appendix N**).

AECOM has described the various ESD objectives being incorporated into the project, which address the following key areas: water, energy, transport, indoor environmental quality and innovation.

The NeW Space building is targeting a 5 star Green Star rating using the Education v1 Design tool. This will result in the building achieving a benchmark of "Australian Excellence". Based on the current design, AECOM has identified that the building is achieving a Green Star assessment of 66 weighted points, on target to achieving a 5 star 'Australian Excellence' rating for sustainability.

## Mitigation Measures

AECOM has not identified any particular mitigation measures which are required to be implemented into the project. It is acknowledged that the Green Star rating of the building will be reassessed during the final design phase and also at the completion stage to ensure that the 5 star Green Star target is achieved.

## 5.5 Heritage

University House is listed as a heritage item under the Newcastle LEP (Item I325). The entire site the subject of this application is also located within the 'Newcastle City Centre Heritage Conservation Area' under the Newcastle LEP. A number of local and state heritage listed items are located within the vicinity of the site. As such, EJE Heritage has prepared two separate Statements of Heritage Impact for the NeW Space site and the Laman Street Car Park site to assess any potential impacts of the proposal (**Appendix K**). Archaeological Management & Consulting Group (AMCG) has prepared a Management Summary of the archaeological test excavations undertaken on the site (refer to **Appendix K**).

### Assessment

#### European Heritage

The refurbishment works to University House and the construction of the NeW Space building have been assessed by EJE Heritage to determine the degree of potential impact on the elements contributing to the significance of University House as a heritage item.

EJE has noted that the NeW Space design is modern and fitting for its purpose as the first urban renewal project of Newcastle's CBD. EJE has confirmed that the building responds well to surrounding heritage items whilst still achieving a character commensurate to its prominent location. The primary use of the building as an education facility is supported by EJE as it reinforces the historical 'civic' use of the site within the surrounding locality.

The new laneway between University House and the NeW Space building is expected to be beneficial, allowing a new perspective to be gained of University House. No significant views of surrounding heritage items will be impacted by the proposed building. New views will importantly contribute a better appreciation of existing heritage items.

The Laman Street Car Park site has been assessed as having little heritage significance. Furthermore, the proposal will not adversely impact on the significance of the Newcastle City Centre Conservation area or nearby heritage items.

#### Indigenous Heritage

EJE has explored the history of indigenous occupation within the Newcastle region and in particular the potential Aboriginal heritage which could be reinterpreted on the site. An assessment of indigenous heritage has identified that the proposal will provide new ways of interpretation and will celebrate the traditional custodians of the land. Elements such as the inclusion of the urban rooms and the use of Awabakal (original indigenous population) nomenclature will provide avenues for indigenous interpretation.

#### Archaeological Heritage

AMCG has identified that there are Aboriginal artefacts of potential local and regional significance on the site. Of 15 trenches, 11 trenches contained Aboriginal artefacts. AMCG acknowledge that there were no identified artefacts which would be required to remain in-situ, and there are opportunities for extraction and exhibition of Aboriginal artefacts.

No significant European artefacts were located. A schedule of potential European structures on the site from previous development is provided with **Appendix K**. AMCG note that further investigations should be undertaken and at the appropriate time the relevant permits should be obtained for excavation and extraction of the artefacts.

### Mitigation Measures

EJE Heritage has recommended mitigation measures to ensure that the proposal does not result in adverse impacts on surrounding heritage items. These measures include:

#### Construction Non-Indigenous Management Plan

- The lead contractor for the construction of NeW Space shall, before commencing site work, prepare a Construction Non-Indigenous Management Plan setting out the mitigation and management strategies that would be implemented to minimise potential impacts to archaeological items.

#### Excavation Director

- An Excavation Director, whose experience complies with the criteria promulgated by the Heritage Division of the NSW Department of Planning and Infrastructure, shall be appointed prior to any excavation. The Excavation Director must advise on archaeological matters associated with the excavation, and is to ensure compliance with both the procedures to be adopted in the event of unexpected finds and measures for protecting heritage items that are to be conserved.

#### Potential Impacts on Archaeological Resources Associated with the NeW Space Site

Excavation works proposed for the site are likely to unearth items properly classified as relics within the meaning of the Heritage Act 1977 (NSW), s4(1): Relic means any deposit, artefact, object or material evidence that:

- a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement; and
- b) is of State or local heritage significance.

Any such relic disturbed within the subject land falls within the intent of the Heritage Act 1977 (NSW), s139:

1. A person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.
2. A person must not disturb or excavate any land on which the person has discovered or exposed a relic except in accordance with an excavation permit.

The proponent shall, therefore, apply for an Excavation Permit under the Heritage Act 1977 (NSW) s139.

#### Heritage Council must be Notified of Discovery or Location of Relics

Should relics indeed be discovered or located, the proponent and its agents are bound to act in accordance with the provisions of the Heritage Act 1977 (NSW) s146:

A person who is aware or believes that he or she has discovered or located a relic (in any circumstances, and whether or not the person has been issued with a permit) must:

- a) within a reasonable time after he or she first becomes aware or believes that he or she has discovered or located that relic, notify the Heritage Council of the location of the relic, unless he or she believes on reasonable grounds that the Heritage Council is aware of the location of the relic, and
- b) within the period required by the Heritage Council, furnish the Heritage Council with such information concerning the relic as the Heritage Council may reasonably require.

The proponent and its agents are also bound to act in accordance with the provisions of the Heritage Act 1977 (NSW), s 146A:

1. As soon as practicable after a relic is obtained from an excavation carried out by the holder of a permit, the holder shall notify the Minister of the existence of the relic.
2. The holder shall furnish the Minister with such information concerning the relic as the Minister may reasonably require.

#### **Duties and Responsibilities of the Excavation Director**

The Excavation Director shall:

- a) notify the proponent of potentially archaeologically sensitive places;
- b) closely observe the course and conduct of excavations both in those places and in the entire area of excavations;
- c) be responsible to the proponent for compliance with the provisions of the Heritage Act 1977 (NSW) as described above, and
- d) advise the proponent as to the level of significance of such relics as may be discovered within the area of excavations. These levels may be Local, State or National.

#### **Measures for Protecting Heritage Items that are to be Conserved**

Should relics be discovered within the area of excavation, the Excavation Director shall advise the proponent as to practical measures for the protection of those items.

In the first instance, the Excavation Director, in consultation with the Heritage Branch, shall consider the practicality of conserving the relic on site in accordance with Kelly Strickland and Martin Carney, Archaeological Management & Consulting Group (AMAC), 'Archaeological Assessment, Research Design, Excavation Methodology and Heritage Impact Assessment, "NeW Space" Development (December 2013)', together with any further site-specific archaeological reports, as guided by the Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance 2013.

Should this not be possible within the parameters of the Burra Charter, the Excavation Director shall have regard to the Heritage Act 1977 (NSW) s 146B, which provides that:

The Minister may, by notice in writing, direct any person:

- a) who is or has been the holder of a permit, or
- b) who, in the Minister's opinion, has obtained a historic shipwreck as a consequence of having removed the relic without a historic shipwrecks permit, in contravention of section 51, or

- c) who, in the Minister's opinion, has obtained a relic as a consequence of having excavated land without an excavation permit, in contravention of section 139, to deliver the relic to a specified person or body (such as a museum) who in the opinion of the Minister has the facilities and expertise to conserve the relic.

These provisions make clear the need to conserve such relics as cannot be retained on site. The relic or relics will, therefore, be offered in sequential order of priority to the bodies listed below in terms of conservation by location, classification and acquisition policy:

- a) Newcastle Museum, Newcastle NSW;
- b) Museum of Applied Arts and Sciences, Sydney NSW (Powerhouse Museum);
- c) National Museum of Australia, Canberra ACT.

#### **Recommended Actions**

It is recommended that printed and PDF copies of this Statement of Heritage Impact should be made available to University of Newcastle Cultural Collections, Callaghan NSW, and to the Local Studies section of Newcastle Region Library, Newcastle NSW.

It is also recommended that, if so suggested by Awabakal stakeholders, a smoking ceremony should be conducted, so as to reinforce the importance of the NeW Space site to Aboriginal Australians.

#### **Laman Street Car Park**

Digital photographs should be taken of the ruinous remains of the western wall of Devon Terrace before, during and after the removal of the wall. Digitised copies of these should be offered to UON Cultural Collections and to Newcastle Region Library.

Printed and PDF copies of the Statement of Heritage Impact should be made available to UON Cultural Collections and Newcastle Region Library.

#### **Archaeology**

Further investigations should be undertaken and at the appropriate time the relevant permits should be obtained for excavation and extraction of the artefacts.

## **5.6 Transport and Accessibility**

SECA Solution has prepared a Transport & Accessibility Assessment to review the relationship between the NeW Space development and the existing and future traffic considerations around the site (refer to **Appendix G**). A Transport Access Strategy has also been prepared by SECA Solution to provide an ongoing framework for how sustainable travel methods can be achieved for the NeW Space development (refer to **Appendix O**). A brief overview of the Transport & Accessibility Assessment is provided below.

### **Assessment**

#### **Public Transport Capacity**

The site is currently well serviced by public transport and has good pedestrian and cycle infrastructure to support these modes of travel. Expected improvements in public transport, such as the new light rail system, will enhance accessibility to the site.

A letter prepared by SECA Solution addressing the capacity of existing/planned public transport in the locality is provided at **Appendix G**. Based on discussions with Transport for New South Wales, there is sufficient capacity in the existing and future planned public transport infrastructure for the NeW Space development. SECA Solution has outlined the current capacity based on existing infrastructure, the expected future capacity and also the interim arrangements expected to be implemented during the construction of the new light rail (refer to **Appendix G**).

#### **Traffic Generation**

An expected full time student load and teacher population of 4,335 people is anticipated within NeW Space by 2019. A maximum of 2,347 people are expected at any one time within NeW Space. Due to the 24 hour style use of the building, there is expected to be reduced individual peaks for travel time. Traffic generation is expected to be minimal, with approximately 100 vehicle movements per day associated with the NeW Space development. Due to the minor nature of traffic generation, there are not expected to be any impacts on the operation of existing intersections in the local road network.

SECA Solution has analysed the existing Law and Business Faculty student and teacher population to ascertain their residence and travel patterns. Key findings include:

- 56% of students currently live in the Newcastle LGA and 60% of these live within walking or cycling distance of the future NeW Space site;
- The balance of existing students live within one kilometre of the current Callaghan Campus;
- 59% of staff are expected to be living within walking or cycling distance;
- The balance of staff are expected to live in Lake Macquarie City (18%), Lower Hunter (5%), Port Stephens (2%) and Central Coast (8%).

Based on these statistics, SECA Solution has made several assumptions on the future travel and residence patterns of students and teaching staff. Importantly, it is expected that students from outside the immediate Newcastle region would relocate within walking or cycling distance of the NeW Space development. Another determining factor for travel is the current trend in 20-34 year olds, with clear reductions in car mileage, car ownership and licence possession.

#### **Mode Share**

SECA Solution has established a mode share target of 0% car travel, 7% cycling, 36% public transport and 57% walking for students in the NeW Space development. All parking proposed as part of this application will be available for staff use only.

Based on the above data and envisaged mode share targets, SECA Solution expects the following breakdown of residence patterns and travel methods:

- 82% of students living within two kilometres of the NeW Space development and able to walk;
- 10% of students living within cycling distance of the NeW Space development;
- 100 staff living within two kilometres of the NeW Space development and able to walk.
- Remainder staff and students adopting alternate public transport options when not living within walking or cycling distance from the NeW Space development.

Travel between different UON campuses is expected to be via public transport. SECA Solution has provided a range of measures to promote active travel choices and ways to encourage the achievement of the mode share targets. Importantly, SECA Solution confirms that sufficient bicycle parking will be provided in the NeW Space development in the order of 212 secure internal parking spaces and 36 casual external bicycle spaces.

### **Servicing Requirements**

The following requirements for servicing of the NeW Space development have been identified in the letter attached at **Appendix G** and include:

- Mail/Couriers Deliveries – approximately 3-5 movements per day;
- Waste Disposal General – one (1) movement per day (via loading dock);
- Waste disposal Recycled – approximately three (3) movements per week;
- Building Maintenance (Planned) – approximately 2-3 movement per day;
- Building Maintenance (Reactive) – approximately 2-3 movements per day;
- Library Deliveries between campus libraries – approximately one (1) movement per day;
- ICT Technology Maintenance – approximately one (1) movement per day as ICT staff will be located on site;
- Security – Only based on additional security requirements for special events as Security staff will be located on site; and
- Cafe Deliveries – approximately 2-3 deliveries per day.

### **Construction Traffic Management**

A Construction Traffic Management Plan has been prepared by APP and is included in the Construction Management Plan at **Appendix Y**. This plan includes traffic control considerations which will be further refined prior to the commencement of construction works related to the proposal development.

### **Mitigation Measures**

To mitigate any adverse traffic impacts and ensure mode share targets are achieved, SECA Solution has provided the following recommendations:

- To ensure that the mode share targets are met the University must implement a Sustainable Transport Plan which should include:
  - Education and awareness programs
  - Workplace travel plan
  - University travel plan
- The workplace and university travel plans should include discussion on the following areas:
  - Active Transport
  - Bicycle and Pedestrian Travel
  - Public Transport
  - Telecommuting
  - Parking Policy
- A detailed Traffic Management Plan and a Construction Traffic Management Plan should be prepared.

## 5.7 Noise and Vibration

The construction and operational phases of the NeW Space development have the potential to result in noise emissions which may impact nearby noise sensitive locations. As such, a Noise and Vibration Assessment has been prepared by AECOM and is provided at **Appendix P**.

### Assessment

AECOM has identified the existing acoustic environment at surrounding noise sensitive locations, and using the relevant standards and guidelines, have prescribed project specific noise criteria for each phase of development. A brief overview of the assessment for each phase of the development is provided below.

#### Construction Phase

Construction activities are anticipated to take place predominantly during standard working hours (7:00am – 6:00pm Monday to Friday and 8:00am – 1:00pm Saturday). However, there may be occasions where special deliveries and emergency work need to be conducted outside standard working hours.

AECOM have established daytime noise management levels based on the existing noise environment at the closest sensitive receivers. These management levels will be assessed during the construction phase, and management/mitigation measures will be implemented accordingly to ensure these levels are not exceeded.

Both structural and human exposure vibration have also been assessed. Using the relevant standards, AECOM has identified vibration criteria which will be monitored during the construction phase of the development.

#### Operational Phase

The important elements of the building design which will result in noise emission include the externally located plant and the plant rooms. Noise emissions from the Laman Street car park will need to be assessed to determine the impact on nearby noise sensitive receivers. If required, mitigation measures will be provided for the Laman Street car park. Mitigation measures have been recommended by AECOM for the plant material and plant rooms.

### Mitigation Measures

AECOM have provided the following mitigation measures:

#### Construction Phase

A Construction Noise and Vibration Management Plan (CNVMP) should be developed and implemented by the selected Contractor. The CNVMP should include the following information:

- Identifying the locations of noise sensitive locations;
- Determining the sound levels generated by equipment and activities taking place during construction;
- Predict the noise and vibration levels due to construction activity at nearby noise sensitive locations;
- Assess the predicted noise and vibration levels against the construction noise and vibration criteria established in this report;
- Details of noise and vibration mitigation options, which are likely to include but not restricted to the following:
  - d) Source controls
    - Use of less noise and vibration intensive equipment;
    - Respite periods;

## e) Management methods

- Community consultation;
- Complaint response;
- Site layout;
- Avoiding work during sensitive time periods (e.g. night work);
- Vibration logging and attended measurements;
- Training;

## f) Path controls

- Avoid vibration intensive works in a concentrated area and try to work over a large area in order to reduce maximum vibration dose values.

**Operational Phase**

- Acoustic treatment such as the construction of appropriate acoustic screens to enclose the plant, the installation of acoustic attenuators to fans, and locations and configurations of ductwork and plant should be investigated for external plant material.
- Acoustic treatments will need to be determined for plant rooms, which may include, but will not be limited to, the following treatments:
  - Acoustic louvres installed in place of standard architectural weatherproof louvres;
  - Acoustically insulated ductwork and/or attenuators installed between plant and the external environment; and
  - Walls and roof constructions designed to achieve specific sound insulation ratings required to mitigate noise.

## 5.8 Social and Economic

A Social and Economic Impact Assessment (SEIA) has been undertaken by ADW Johnson and is provided at **Appendix Q**. The SEIA has examined the impact of the NeW Space development on students, city life and operations, any surrounding communities and on the Callaghan campus and area. An overview of the SEIA is provided below.

**Assessment**

ADW Johnson has identified the potential social and economic impacts resulting from the NeW Space development and has undertaken consultation with the relevant stakeholders. For each of these potential issues ADW Johnson has described the existing situation; outlined the issue and impacts; and completed an assessment of the proposal.

The potential impacts of the NeW Space development have been deemed to range between low, moderate and high. The 'high' impacts are expected by ADW Johnson to be highly positive. ADW Johnson has prescribed various mitigation measures to ensure that the development does not result in adverse impacts. In general, the NeW Space development will have a net positive social and economic impact as it will:

- Contribute to the Newcastle city renewal as a catalyst project;
- It will deliver students into the city and will therefore result in activation of street life and economic activity;
- Provide a potential investment and cultural stimulation;
- Provide the potential for shared resources such as libraries;

- Improve the quality of life for students through increasing the availability of accommodation and access to recreational facilities and public space close to the University;
- Improving accessibility including disabled access, transport and parking for students and staff through a centralised university location;
- Provide positive impacts on inner city residents;
- Contribute to the essential character and emerging character of the Civic precinct;
- Enhance safety for students and other users of the university;
- Result in negligible impacts on Callaghan and surrounding neighbourhoods;
- Contribute improved quality and choice of education;
- Contribute to increased relationships between the University, business and the community;
- Contribute to overall enrolments, improving the role and value of the University; and
- Not result in immediate impact on housing given the profile and needs of business law students.

### Mitigation Measures

ADW Johnson has provided a range of mitigation measures to be implemented into the NeW Space development to minimise the potential for any social or economic impacts. These measures include:

- Design to maximise access for people with mobility challenges and people with disability in line with University policies of inclusiveness;
- Ensure direct transport links between Callaghan campus (residential colleges) and the city campus;
- Expand educational offerings at Callaghan to compensate for any negative impacts on the local housing market surrounding the Callaghan campus;
- Monitor student needs through existing University housing, legal and health services in cooperation with the student union;
- Develop resource sharing opportunities that add to a cohesive inner city community. These include but are not limited to a shared Law Library, use of public performance spaces, access to community legal services and public education and cultural events;
- Comply with Safety by Design principles;
- Continue the UON commitment to engagement with organisations and networks that build the social capital of the city;
- University health services to give coverage to its city student cohort;
- UON to promote a single point of contact for local residents' groups, near neighbours and business organisations;
- UON to continue to implement social equity policies for the inner city campus;
- Monitor impacts on property values in Callaghan and around the NeW Space development;
- Include the NeW Space development in business and tourism promotions for the City of Newcastle; and
- Target appropriate large law firms and other companies for relocation to the City of Newcastle. At the same time promote the quality of UON graduates.

### 5.8.1 Safety by Design Assessment

The incorporation and consideration of safety principals in design is now recognised as an integral component of achieving a successful, inclusive and safe development. This approach of safety design review has been adopted in the NeW Space development, with AECOM undertaking a safety by design assessment. The findings of this assessment are included in the Security Risk Assessment Report (**Appendix R**).

#### Assessment

AECOM has identified that the City of Newcastle LGA generally has high to medium rates of crime compared to other LGA's within the Sydney region. Based on the type of development and existing context, the primary potential security risks within the NeW Space development are theft, drug/alcohol related offences, robbery, malicious damage to property/graffiti, assault, trespass and antisocial behaviour.

The potential risk of the above matters ranges from medium to high if no treatment occurs, and has been assessed as medium once treatments and mitigation measures are implemented.

#### Mitigation Measures

AECOM has provided a range of mitigation measures which should be implemented into the operation of the NeW Space development to minimise the potential for security risk. These mitigation measures are primarily based around the four principles of Crime Prevention Through Environmental Design (CPTED), and include:

##### CPTED Measures

Where practical, incorporate the following CPTED measures within the works areas:

- Provide clear definition and designation of space in a manner that encourages and predicts authorised movement and does not cause conflict between the intended purpose of the space and the desired behaviour;
- Facilitate clear sightlines and maximise pedestrian circulation areas by:
  - Minimising built structures and avoiding clutter, particularly along main thoroughfares and at main building entry/exit points, and
  - Maximising natural, passive and active surveillance opportunities from the inside and external of the structure.
- Provide lighting design which conforms to Australian and University Standards and provides well lit and uniform lighting throughout the Building and its surrounding areas that promote passive and active surveillance;
- Keep vegetation around the Building well maintained and to a low height, to reduce places for concealment of activities, places for potential offenders to hide, and to enhance the natural and active surveillance of the area;
- Provide vandal resistant fittings and graffiti resistant surfaces where practical, which promotes the prompt repair and cleaning of vandalism and graffiti; and
- Provide security signage to inform the public of restricted and dangerous areas, and to notify them that security measures are in place.

### **Physical Security Measures**

- Provide high security locking devices, well-constructed doors, door frames and door hardware where practical, to provide a level of resistance against forced entry into buildings; and
- Physical security devices and building construction methods to provide a high level of resilience to forced entry.

### **Electronic Security Measures**

- Provide electronic access control to nominated doors to electronically control access into/out of these areas, and to provide an audit function;
- Provide reed switches to nominated doors to monitor their integrity (open/closed/door-open-too-long/forced door);
- Provide passive infra-red volumetric detectors to monitor the integrity of a nominated area;
- Provide a CCTV system to monitor nominated areas, to provide a deterrence against antisocial behaviour, and to provide evidence capturing abilities; and
- Provide emergency help points, and fixed duress alarms to nominated locations to allow students and staff to call for assistance during emergency situations.

### **Information Security Measures**

- Communications rooms to be adequately secured by high security locking devices/EACS and monitored via magnetic reed switches;
- Head-end communications equipment to be securely stored within lockable communications racks;
- Sensitive information to be stored according to University Information Security Management Plan, Policies and Procedures;
- Sensitive information to be securely stored;
- Sensitive information to be disseminated on a 'need to know' basis only;
- Adequate IT security measures to be provided to protect IT infrastructure and University information against attack; and
- Perform regular backups of data.

### **Operational Security Measures**

- Formulation (or review if existing) of comprehensive Standard Operating Procedures for all staff/contractors who will have an operational role at the UON NeW Space Building;
- Determination of adequate security monitoring capabilities and assignment of monitoring responsibilities, either locally (at security desk) or at the Security Services Office, or a combination of each;
- Assignment of effective response personnel and procedures associated with the safe response to security incidents;
- Implementation of a detailed security incident reporting system for the UON NeW Space Building to allow accurate capturing and reporting of incidences. Recorded incidences should be used when monitoring and reviewing the risk profile at the University; and
- Ongoing and systematic training and inductions of staff, contractors and visitors.

### Security Management Measures

- University of Newcastle to continuously monitor the risks and the effectiveness of security treatment measures through post event analysis and reporting, and liaison with NeW Space stakeholders and the Security Department. Periodic reviews of the security risks should be performed. Security risks should also be reviewed at the initial stage of any capital works program occurring at the site.

## 5.9 Contamination

Coffey has prepared a Preliminary Contamination Assessment to ascertain whether there is any potential for contaminants on the site (refer to **Appendix S**). A brief overview of this assessment is provided below.

### Assessment

Following a review of the previous uses on the site and a site inspection, Coffey has determined that there are two areas of medium to high concern. Previous filling on the site results in potential for contaminants of concern within the soil profile. The use of asbestos in previous buildings on the site also raises concern for contaminants on the site.

Soil sampling has verified that the fill material on site is classified as general solid waste (non-putrescible). No contamination was identified on the site in relation to the relevant criteria established by Coffey. As such, Coffey has confirmed that the site is suitable for the proposed use.

It is not expected by Coffey that acid sulphate soils will present any hazard for the proposed development (refer to **Appendix C**).

### Mitigation Measures

As the site has been classified as suitable for the proposed use, no remediation or additional mitigation measures are required.

## 5.10 Utilities and Services

AECOM has prepared an Infrastructure Management Plan to identify the existing infrastructure capacity, detail any augmentation requirements and establish the basis of infrastructure and utility servicing for the development (refer to **Appendix H**). AECOM has also prepared an Integrated Water Management Plan to identify potential water usage on the site and how this water will be sourced (refer **Appendix T**). A summary of each separate utility is outlined below.

### Power

A new high voltage (HV) power supply will be provided to the NeW Space development from the local Ausgrid HV network. The substation capacity will be sized to accommodate the maximum demand of the proposed NeW Space development in addition to allowing for future site provisions as well as relocation of the existing University House supply.

Design of the proposed substation has been carried out in accordance with Ausgrid requirements and standards and in consultation with Ausgrid.

### Telecommunications

The site will be serviced from the existing (TELSTRA) street network. Telstra's records indicate existing underground infrastructure which includes both copper and fibre optic services along Auckland Street and routing into the New Space site.

## Sewer

Connection for sewerage will be made to an existing 150mm diameter sewer main in Auckland Street.

Based on consultation with Hunter Water, an existing 150mm diameter sewer main pipe traverses the site from the Southern boundary to the Hunter Street boundary. Hunter Water has advised that this sewer main was recently replaced from an old clay pipe to a new PVC pipe as part of subdivision works undertaken. As a result, this sewer main will not require modification or re-diversion as part of the NeW Space works.

## Water

Extensive consultation has been undertaken with Hunter Water to determine the most appropriate location for connection of water services to the site in order to meet the requirements of the water services, fire and life safety systems.

It is proposed to provide a single tapping from the 150 diameter Cast Iron Cement Line (CICL) main in Hunter Street.

A rainwater harvesting system and the use of efficient fixtures and fittings will be two strategies implemented to minimise reliance on the water main. AECOM's analysis suggests that potable water could be reduced by up to 28% through the use of a rainwater harvesting system. This recycled water will be used for cooling towers, irrigation and toilets.

## Gas

A connection to the existing natural gas main located in Auckland Street is proposed. A Gas Meter Room will be located on the boundary of the laneway of the NeW Space development to enable easy access.

## 5.11 Staging

The intention is to deliver the entire NeW Space project as a single development with no significantly separate and distinct stages of development. The NeW Space building, refurbishment of University House and the works to the Laman Street car park are all intended to be delivered simultaneously in principle.

The internal refurbishment works to the ground floor of University House will occur after the NeW Space project has been completed as the occupants will relocate into NeW Space to allow these spaces to be vacated for the refurbishment works.

General staging of construction certificates will be sought to logically construct the proposal. An outline of the construction staging has been provided in **Section 3.10** and it is sought that any consent reflects this staged construction approach.

## 5.12 Development Contributions

The *City of Newcastle Section 94A Development Contributions Plan 2009* (Section 94A Plan) applies to the majority of land within the Newcastle LGA. The NeW Space site is located within the area to which the plan applies, and ordinarily, development would be subject to contributions under the plan.

It has been agreed as part of the purchasing agreement between Council and UON that the proposed development will not be subject to the provisions of the Section 94A Plan. As such, no development contributions will be levied from the project.

Regardless of this agreement, the project represents a significant benefit to the immediate community, the City of Newcastle, and the wider region. Not only is the NeW Space development acting as a catalyst for the revitalisation of Newcastle's CBD, fulfilling a key NSW Government initiative, the project is a key piece of education infrastructure. The proposal has direct public benefits and is purpose built to assist and improve the prosperity of present and future generations of people within Newcastle and the state of NSW.

## 5.13 Flooding

NCC has identified that the site is located within a flood prone area. A Flood Certificate provided by Council outlines the relevant matters relating to flood behaviour on the site (see **Appendix U**).

### Assessment

The Probable Maximum Flood (PMF) Level on the site is 3.40m AHD. In consultation with NCC engineers, Lyons and EJE Architecture have determined a design level of 3.8m AHD. This will ensure that the proposal is located above the PMF. The details of this consultation are provided in the Architectural Design Report at **Appendix A**.

It has been agreed with NCC that portions of the development are able to be below the PMF to allow for level transitions into the NeW Space building and achieve active street frontages. The identified entries are to transition from a level of 3.0m AHD at the Hunter Street boundary and 3.6m AHD at the Christie Place boundary. These areas are not to compromise life safety and should not contain essential services.

In light of the above, entries have been designed by Lyons and EJE Architecture to transition from the lower levels to the design level of 3.8m AHD. All essential services will be located at this design level. Equitable access is provided through the site via ramps and a lift providing access to the street level.

### Mitigation Measures

The proposed NeW Space development is to achieve a design level of 3.8m AHD, except for entry transitions where level access is to be facilitated. Where a design level is provided below 3.8m AHD, it must not be at the risk of life safety and must not include the accommodation of essential services.

## 5.14 Drainage

Aurecon has prepared a Civil Design Report outlining the suitability of the civil engineering design (refer to **Appendix V**). A brief outline of the key assessment considerations relating to the civil engineering design is provided below.

### Assessment

The proposed drainage system has been designed in accordance with the Newcastle DCP 2012 guidelines and the system will be sized for the 20 year average recurrence interval (ARI) storm event. Aurecon has identified the required storage volume for rainwater on the site based on the site area and extent of impervious areas.

In light of this required volume, a total of two on-site detention (OSD) tanks are proposed with a combined storage total of 51.7m<sup>3</sup>. An overflow pipe will be provided from the rainwater tanks to the OSD tanks to allow discharge when the rainwater tanks reach capacity. Overflow water from these tanks will be treated before being directed to the street network via overland flow paths.

Aurecon has also provided a general assessment of erosion and sediment control, confirming that controls will be required during the construction phase to capture, control and treat water leaving the site.

### Mitigation Measures

Aurecon has provided the following mitigation measures regarding erosion and sediment control:

- Provide stabilised entry/exit point consisting of large diameter crushed rock pad approximately 5m x 3m.
- Provide sediment fences along the Hunter and Auckland Street frontages.
- Include stormwater pit protection barriers.
- Identify designated material stockpile locations.

## 5.15 Servicing and Waste

Green Forest Australia has prepared an Operational Waste Analysis Report to assess the waste management procedures for the NeW Space development (refer to **Appendix W**).

### Assessment

The expected waste generation has been calculated with regard to the proposed floor areas and uses proposed within the NeW Space development. Based on the expected waste generation, Green Forest Australia has outlined the recommended number of bins and space requirements to store and handle the waste.

Green Forest Australia has confirmed that there is sufficient space within the development to accommodate the storage and handling of the waste expected to be generated.

A Waste Management Plan is included at **Appendix W**, outlining a strategy for the storage and collection of waste.

### Mitigation Measures

The following mitigation measures have been recommended by Green Forest Australia to ensure an effective and efficient waste management and recycling process is achieved:

- Provide all permanent facility users, including library, tenancy and café staff, with written recycling instructions, as well as posters, signage, and other educational materials.
- Train cleaning staff in maintaining effective separation of recycling and landfill streams.
- Place clear signage with large scale print and graphics above bin clusters (at eye level) in office and public areas.
- Fix metal or plastic signs to the wall of the waste and recycling storage area.
- Conduct frequent spot checks and audits during the first month of program implementation.
- Perform ongoing waste audits and visual assessments, and report results to all stakeholders.

## 5.16 Accessibility

Philip Chun Accessibility Consulting has prepared an Access Assessment (**Appendix X**). The Access Assessment has reviewed the proposal against the Building Code of Australia 2014, Disability (Access to Premises - Buildings) Amendment Standards 2010, Disability Discrimination Act 1992, and relevant Australian Standards.

It has been confirmed by Philip Chun Accessibility Consulting that the design has addressed all relevant accessibility requirements and there is further potential to maximise accessibility in the detailed design of the development.

## 5.17 Construction Management

APP has prepared a Construction Management Plan (CMP) for the proposed development (refer to **Appendix Y**). This plan outlines the programme for the proposal and establishes the key requirements for planning and management during the construction of the development. The CMP provides a high level overview of different elements which will be implemented into the construction phase of the proposal to ensure no adverse impacts occur as a result of the development. The CMP addresses the following areas:

- Site establishment;
- Design management;
- Stakeholder involvement;
- Construction co-ordination;
- Environmental and conservation management;
- WH&S management;
- Construction traffic management plan; and
- Construction risk management.

The CMP will continue to be refined and updated prior to, and during, the construction phase of the development.

### Mitigation Measures

Prior to the issue of the relevant construction certificate, an updated and detailed CMP should be provided to the private certifier. The management procedures and strategies in the CMP should be implemented into the construction phase of the development.

## 5.18 Site Suitability

Having regard to the characteristics of the site and its location, the proposal is considered to be appropriate for the site as:

- The site is well located prominently on the corner of Hunter and Auckland Streets within the identified 'Civic Precinct' in the Newcastle CBD;
- The site is within a precinct which has been identified for revitalisation as an educational hub;
- The site comprises a significant and consolidated landholding in the Newcastle CBD which will enable a development of the proposed scale;
- An array of alternative modes of public transport are located in close proximity to the site, encouraging the use of more sustainable methods of travel;

- It will deliver capacity for 4,000 additional students to study within the Newcastle CBD, resulting in significant improvements to the social and economic vitality of the city;
- Existing infrastructure and services located within close proximity to the site will ensure that the new student population is supported and local businesses are made more viable;
- The preceding assessment confirms that there are minimal environmental impacts associated with the NeW Space development and that the anticipated impacts can be managed through the imposition of appropriate mitigation measures; and
- It will make use of a site which is currently disused in part and it will enhance and refresh the appearance and functionality of University House.

## 6.0 Environmental Risk Assessment

The Environmental Risk Assessment (ERA) establishes a residual risk by reviewing the significance of environmental impacts and the ability to manage those impacts. The ERA for the NeW Space development has been adapted from Australian Standard AS4369.1999 Risk Management and Environmental Risk Tools.

In accordance with the SEARs, the ERA addresses the following significant risk issues:

- the adequacy of baseline data;
- the potential cumulative impacts arising from other developments in the vicinity of the Site; and
- measures to avoid, minimise, offset the predicted impacts where necessary involving the preparation of detailed contingency plans for managing any significant risk to the environment.

**Figure 22** indicates the significance of environmental impacts and assigns a value between 1 and 10 based on:

- the receiving environment;
- the level of understanding of the type and extent of impacts; and
- the likely community response to the environmental consequence of the project;

The manageability of environmental impact is assigned a value between 1 and 5 based on:

- the complexity of mitigation measures;
- the known level of performance of the safeguards proposed; and
- the opportunity for adaptive management.

The sum of the values assigned provides an indicative ranking of potential residual impacts after the mitigation measures are implemented.

Significance of impact	Manageability of impact				
	5 Complex	4 Substantial	3 Elementary	2 Standard	1 Simple
1 – Low	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)	2 (Low)
2 – Minor	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)
3 – Moderate	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)
4 – High	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)
5 – Extreme	10 (High)	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)

**Figure 22** – Risk Assessment Matrix

Item	Phase	Potential Environmental Impact	Proposed Mitigation Measures and / or Comment	Risk Assessment		
				Significance of Impact	Manageability of Impact	Residual Impact
Key: C – Construction, O: Operation						
Noise	C+O	<ul style="list-style-type: none"> <li>Increase in noise levels during construction activities</li> <li>Increase in noise levels of operations including students and staff</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of a noise management plans to minimise and managed noise and vibration emissions from the site.</li> <li>Appropriate sound minimisation measures to be incorporated within the plant and mechanical areas and within the car park proposed at the Laman Street site.</li> </ul>	3	1	4 Low / medium
Traffic and Parking	C+O	<ul style="list-style-type: none"> <li>Increased traffic on local roads</li> <li>Increased parking on local roads</li> </ul>	<ul style="list-style-type: none"> <li>The existing and proposed parking arrangements and access to public transport have been assessed by SECA Solution in the Transport and Accessibility Assessment (<b>Appendix G</b>).</li> <li>The Transport and Accessibility Assessment outlines that the construction traffic management measures will be determined by the contractor in preparation of the final Construction Traffic Management Plan (CTMP) in accordance with the Construction Management Plan (CMP).</li> </ul>	3	2	5 Low / medium
Visual	O	<ul style="list-style-type: none"> <li>Visual impact from local residences, public roads and public open space.</li> </ul>	<ul style="list-style-type: none"> <li>Visual impacts arising from the form and scale of the proposed buildings will be mitigated through, building setbacks and location of plant.</li> <li>The development has been designed to be generally consistent with the building envelope nominated within the NURS and DCP provisions. Whilst the proposal slightly exceeds the maximum building height, this is limited to the lift overrun above the plant room and is not considered to have any significant adverse impacts to views form surrounding properties or the public domain.</li> </ul>	3	2	5 Low / medium
Heritage	C+O	<ul style="list-style-type: none"> <li>Impact on heritage items/Conservation areas</li> <li>Impact on heritage items in the vicinity.</li> </ul>	<ul style="list-style-type: none"> <li>The proposed development will not result in any material impact on the significance or value of adjoining Items of Heritage Significance or the Heritage Conservation Area (HCA), and as a result, no further assessment or mitigation measures are considered necessary.</li> </ul>	1	1	2 Low
Air Quality	C	<ul style="list-style-type: none"> <li>Decrease in air quality</li> </ul>	<ul style="list-style-type: none"> <li>The proposed development is not expected to significantly change pollution levels in the area. Measures will be implemented during construction to minimise dust generation, as outlined in the Preliminary CMP included at <b>Appendix J</b>.</li> </ul>	2	2	4 Low/medium
Biodiversity	C+O	<ul style="list-style-type: none"> <li>Loss of trees within the development site</li> <li>No significant impact identified in regard to flora and fauna</li> </ul>	<ul style="list-style-type: none"> <li>Given the developed nature of the site and current and historical uses, there are not likely to be any significant impacts on any threatened species, populations or ecological communities or their habitats.</li> <li>The proposal involves the removal of one (1) existing street tree. This will be compensated through the landscaping proposed as part of the nominated public domain improvements.</li> </ul>	1	1	2 Low
Contamination	C	<ul style="list-style-type: none"> <li>Exposure of contamination or hazardous materials during construction</li> </ul>	<ul style="list-style-type: none"> <li>A Contamination Assessment has been carried out on the site (<b>Appendix S</b>) which found that the site is not listed on the contaminated sites register.</li> <li>Further, testing revealed that the potential AECs and COCs identified at the site reportable include the fill used to develop the site and the use of asbestos and lead based paint in building materials but did</li> </ul>	1	2	3 Low

Item	Phase	Potential Environmental Impact	Proposed Mitigation Measures and / or Comment	Risk Assessment		
				Significance of Impact	Manageability of Impact	Residual Impact
			<ul style="list-style-type: none"> <li>not identify contamination above the adopted criteria.</li> <li>No remediation and/or management of contamination issues are required the site is considered suitable for the proposed commercial development.</li> </ul>			
Water Quality	C+O	<ul style="list-style-type: none"> <li>No significant impact identified</li> </ul>	<ul style="list-style-type: none"> <li>During construction, erosion and sediment controls will be undertaken in accordance with the construction management plan.</li> <li>Stormwater management protocol will be put in place.</li> </ul>	1	2	3 Low
Waste	C + O	<ul style="list-style-type: none"> <li>Generation of waste</li> </ul>	<ul style="list-style-type: none"> <li>Waste management would be addressed as part of the Construction and Waste Management Plan that will be prepared by the contractor on site. This would include initiatives such as:</li> <li>Investigate the use of recycled materials in construction materials;</li> <li>Maximisation of the recycling of wastes where possible;</li> <li>All waste for disposal would be removed by a licensed waste contractor and disposed of at a licensed landfill facility if required.</li> </ul>	1	1	2 Low
Crime	O	<ul style="list-style-type: none"> <li>Potential areas of crime associated behaviour</li> </ul>	<ul style="list-style-type: none"> <li>The proposal encourages increase ground floor and lower level activation within the buildings that will promote passive surveillance with the site and surrounding areas.</li> </ul>	2	2	4 Low / medium
Social and Economic	O	<ul style="list-style-type: none"> <li>Impacts on students</li> <li>Impact to city life, operations and surrounding communities</li> <li>Impact to Callaghan campus and surrounding area</li> </ul>	<ul style="list-style-type: none"> <li>Continue to monitor and provide support for student needs.</li> <li>Allow for shared services and promote the NeW Space development as an integral part of the rejuvenation of Newcastle.</li> <li>Continue the Callaghan university operations, provide connections between both campuses and monitor any change.</li> </ul>	1	1	2 Low
Greenhouse	C + O	<ul style="list-style-type: none"> <li>Potential increase in emissions</li> </ul>	<ul style="list-style-type: none"> <li>The proposal does not generate any additional demand for car parking.</li> <li>Consideration of non-car travel modes including public transport, walking and cycling for staff and visitors.</li> <li>Incorporation of ESD targets in the design of the proposed building.</li> </ul>	1	1	2 (Low)

## 7.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in **Table 5** below. These measures have been derived from the previous assessment in **Section 4.0** and those detailed in appended consultants' reports.

**Table 5 – Mitigation Measures**

Mitigation Measures
<b>Environmental and Residential Amenity</b>
Wind <ul style="list-style-type: none"> <li>▪ The proposed landscaping scheme is to be implemented</li> </ul>
<b>Ecologically Sustainable Development (ESD)</b>
<ul style="list-style-type: none"> <li>▪ The Green Star rating of the building is to be reassessed during the final design phase and also at the completion stage to ensure that the 5 star Green Star target is achieved</li> </ul>
<b>Heritage</b>
<b>Construction Non-Indigenous Management Plan</b> <ul style="list-style-type: none"> <li>▪ The lead contractor for the construction of NeW Space shall, before commencing site work, prepare a Construction Non-Indigenous Management Plan setting out the mitigation and management strategies that would be implemented to minimise potential impacts to archaeological items.</li> </ul>
<b>Excavation Director</b> <ul style="list-style-type: none"> <li>▪ An Excavation Director, whose experience complies with the criteria promulgated by the Heritage Division of the NSW Department of Planning and Infrastructure, shall be appointed prior to any excavation. The Excavation Director must advise on archaeological matters associated with the excavation, and is to ensure compliance with both the procedures to be adopted in the event of unexpected finds and measures for protecting heritage items that are to be conserved.</li> </ul>
<b>Potential Impacts on Archaeological Resources Associated with the NeW Space Site</b>
Excavation works proposed for the site are likely to unearth items properly classified as relics within the meaning of the Heritage Act 1977 (NSW), s4(1): <ul style="list-style-type: none"> <li>▪ Relic means any deposit, artefact, object or material evidence that:</li> <li>▪ relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement; and is of State or local heritage significance.</li> </ul> Any such relic disturbed within the subject land falls within the intent of the Heritage Act 1977 (NSW), s139: <ul style="list-style-type: none"> <li>▪ A person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.</li> <li>▪ A person must not disturb or excavate any land on which the person has discovered or exposed a relic except in accordance with an excavation permit</li> </ul>
The proponent shall, therefore, apply for an Excavation Permit under the Heritage Act 1977 (NSW) s139.
<b>Heritage Council must be Notified of Discovery or Location of Relics</b>
Should relics indeed be discovered or located, the proponent and its agents are bound to act in accordance with the provisions of the Heritage Act 1977 (NSW) s146:
A person who is aware or believes that he or she has discovered or located a relic (in any circumstances, and whether or not the person has been issued with a permit) must: <ul style="list-style-type: none"> <li>▪ within a reasonable time after he or she first becomes aware or believes that he or she has discovered or located that relic, notify the Heritage Council of the location of the relic, unless he or she believes on reasonable grounds that the Heritage Council is aware of the location of the relic, and</li> <li>▪ within the period required by the Heritage Council, furnish the Heritage Council with such information concerning the relic as the Heritage Council may reasonably require.</li> </ul> The proponent and its agents are also bound to act in accordance with the provisions of the Heritage Act 1977 (NSW), s 146A: <ul style="list-style-type: none"> <li>▪ As soon as practicable after a relic is obtained from an excavation carried out by the holder of a permit, the holder shall notify the Minister of the existence of the relic.</li> <li>▪ The holder shall furnish the Minister with such information concerning the relic as the Minister may reasonably require.</li> </ul>
<b>Duties and Responsibilities of the Excavation Director</b>
The Excavation Director shall: <ul style="list-style-type: none"> <li>▪ notify the proponent of potentially archaeologically sensitive places;</li> <li>▪ closely observe the course and conduct of excavations both in those places and in the entire area of excavations;</li> </ul>

- 
- be responsible to the proponent for compliance with the provisions of the Heritage Act 1977 (NSW) as described above, and
  - advise the proponent as to the level of significance of such relics as may be discovered within the area of excavations. These levels may be Local, State or National.

#### **Measures for Protecting Heritage Items that are to be Conserved**

Should relics be discovered within the area of excavation, the Excavation Director shall advise the proponent as to practical measures for the protection of those items.

In the first instance, the Excavation Director, in consultation with the Heritage Branch, shall consider the practicality of conserving the relic on site in accordance with Kelly Strickland and Martin Carney, Archaeological Management & Consulting Group (AMAC), 'Archaeological Assessment, Research Design, Excavation Methodology and Heritage Impact Assessment, "NeW Space" Development (December 2013)', together with any further site-specific archaeological reports, as guided by the Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance 2013.

Should this not be possible within the parameters of the Burra Charter, the Excavation Director shall have regard to the Heritage Act 1977 (NSW) s 146B, which provides that:

The Minister may, by notice in writing, direct any person:

- who is or has been the holder of a permit, or
- who, in the Minister's opinion, has obtained a historic shipwreck as a consequence of having removed the relic without a historic shipwrecks permit, in contravention of section 51, or
- who, in the Minister's opinion, has obtained a relic as a consequence of having excavated land without an excavation permit, in contravention of section 139, to deliver the relic to a specified person or body (such as a museum) who in the opinion of the Minister has the facilities and expertise to conserve the relic.

These provisions make clear the need to conserve such relics as cannot be retained on site. The relic or relics will, therefore, be offered in sequential order of priority to the bodies listed below in terms of conservation by location, classification and acquisition policy:

- Newcastle Museum, Newcastle NSW;
- Museum of Applied Arts and Sciences, Sydney NSW (Powerhouse Museum);
- National Museum of Australia, Canberra ACT.

#### **Recommended Actions**

It is recommended that printed and PDF copies of this Statement of Heritage Impact should be made available to University of Newcastle Cultural Collections, Callaghan NSW, and to the Local Studies section of Newcastle Region Library, Newcastle NSW

It is also recommended that, if so suggested by Awabakal stakeholders, a smoking ceremony should be conducted, so as to reinforce the importance of the NeW Space site to Aboriginal Australians.

#### **Laman Street Car Park**

Digital photographs should be taken of the ruinous remains of the western wall of Devon Terrace before, during and after the removal of the wall. Digitised copies of these should be offered to UON Cultural Collections and to Newcastle Region Library

Printed and PDF copies of the Statement of Heritage Impact should be made available to UON Cultural Collections and Newcastle Region Library

#### **Archaeology**

Further investigations should be undertaken and at the appropriate time the relevant permits should be obtained for excavation and extraction of the artefacts.

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#### **Transport and Accessibility**

- To ensure that the mode share targets are met the University must implement a Sustainable Transport Plan which should include
    - Education and awareness programs
  - Workplace travel plan
    - University travel plan
    - The workplace and university travel plans should include discussion on the following areas
      - Active Transport
      - Bicycle and Pedestrian Travel
      - Public Transport
      - Telecommuting
      - Parking Policy
  - A detailed Traffic Management Plan and a Construction Traffic Management Plan should be prepared.
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## Noise and Vibration

### Construction Phase

A Construction Noise and Vibration Management Plan (CNVMP) should be developed and implemented by the selected Contractor. The CNVMP should include the following information:

- Identifying the locations of noise sensitive locations;
- Determining the sound levels generated by equipment and activities taking place during construction;
- Predict the noise and vibration levels due to construction activity at nearby noise sensitive locations
- Assess the predicted noise and vibration levels against the construction noise and vibration criteria established in this report;
- Details of noise and vibration mitigation options, which are likely to include but not restricted to the following:
  - a) Source controls
    - Use of less noise and vibration intensive equipment;
    - Respite periods;
  - b) Management methods
    - Community consultation;
    - Complaint response;
    - Site layout;
    - Avoiding work during sensitive time periods (e.g. night work);
    - Vibration logging and attended measurements;
    - Training;
  - c) Path controls
    - Avoid vibration intensive works in a concentrated area and try to work over a large area in order to reduce maximum vibration dose values.

### Operational Phase

- Acoustic treatment such as the construction of appropriate acoustic screens to enclose the plant, the installation of acoustic attenuators to fans, and locations and configurations of ductwork and plant should be investigated for external plant material.
- Acoustic treatments will need to be determined for plant rooms, which may include, but will not be limited to, the following treatments:
  - Acoustic louvres installed in place of standard architectural weatherproof louvres;
  - Acoustically insulated ductwork and/or attenuators installed between plant and the external environment; and
  - Walls and roof constructions designed to achieve specific sound insulation ratings required to mitigate noise.

## Social and Economic

- Design to maximise access for people with mobility challenges and people with disability in line with University policies of inclusiveness;
- Ensure direct transport links between Callaghan campus (residential colleges) and the city campus;
- Expand educational offerings at Callaghan to compensate for any negative impacts on the local housing market surrounding the Callaghan campus;
- Monitor student needs through existing University housing, legal and health services in cooperation with the student union;
- Develop resource sharing opportunities that add to a cohesive inner city community. These include but are not limited to a shared Law Library, use of public performance spaces, access to community legal services and public education and cultural events;
- Comply with Safety by Design principles;
- Continue the UON commitment to engagement with organisations and networks that build the social capital of the city;
- University health services to give coverage to its city student cohort;
- UON to promote a single point of contact for local residents' groups, near neighbours and business organisations;
- UON to continue to implement social equity policies for the inner city campus;
- Monitor impacts on property values in Callaghan and around the NeW Space development;
- Include the NeW Space development in business and tourism promotions for the City of Newcastle; and
- Target appropriate large law firms and other companies for relocation to the City of Newcastle. At the same time promote the quality of UON graduates.

## Contamination

### CPTED Measures

- Where practical, incorporate the following CPTED measures within the works areas:
- Provide clear definition and designation of space in a manner that encourages and predicts authorised movement and does not cause conflict between the intended purpose of the space and the desired

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behaviour;

- Facilitate clear sightlines and maximise pedestrian circulation areas by:
  - Minimising built structures and avoiding clutter, particularly along main thoroughfares and at main building entry/exit points, and
  - Maximising natural, passive and active surveillance opportunities from the inside and external of the structure.
- Provide lighting design which conforms to Australian and University Standards and provides well lit and uniform lighting throughout the Building and its surrounding areas that promote passive and active surveillance;
- Keep vegetation around the Building well maintained and to a low height, to reduce places for concealment of activities, places for potential offenders to hide, and to enhance the natural and active surveillance of the area;
- Provide vandal resistant fittings and graffiti resistant surfaces where practical, which promotes the prompt repair and cleaning of vandalism and graffiti; and
- Provide security signage to inform the public of restricted and dangerous areas, and to notify them that security measures are in place.

#### **Physical Security Measures**

- Provide high security locking devices, well-constructed doors, door frames and door hardware where practical, to provide a level of resistance against forced entry into buildings; and
- Physical security devices and building construction methods to provide a high level of resilience to forced entry.

#### **Electronic Security Measures**

- Provide electronic access control to nominated doors to electronically control access into/out of these areas, and to provide an audit function;
- Provide reed switches to nominated doors to monitor their integrity (open/closed/door-open-too-long/forced door);
- Provide passive infra-red volumetric detectors to monitor the integrity of a nominated area;
- Provide a CCTV system to monitor nominated areas, to provide a deterrence against antisocial behaviour, and to provide evidence capturing abilities; and
- Provide emergency help points, and fixed duress alarms to nominated locations to allow students and staff to call for assistance during emergency situations.

#### **Information Security Measures**

- Communications rooms to be adequately secured by high security locking devices/EACS and monitored via magnetic reed switches;
- Head-end communications equipment to be securely stored within lockable communications racks;
- Sensitive information to be stored according to University Information Security Management Plan, Policies and Procedures;
- Sensitive information to be securely stored;
- Sensitive information to be disseminated on a 'need to know' basis only;
- Adequate IT security measures to be provided to protect IT infrastructure and University information against attack; and
- Perform regular backups of data.

#### **Operational Security Measures**

- Formulation (or review if existing) of comprehensive Standard Operating Procedures for all staff/contractors who will have an operational role at the UON NeW Space Building;
- Determination of adequate security monitoring capabilities and assignment of monitoring responsibilities, either locally (at security desk) or at the Security Services Office, or a combination of each;
- Assignment of effective response personnel and procedures associated with the safe response to security incidents;
- Implementation of a detailed security incident reporting system for the UON NeW Space Building to allow accurate capturing and reporting of incidences. Recorded incidences should be used when monitoring and reviewing the risk profile at the University; and
- Ongoing and systematic training and inductions of staff, contractors and visitors.

#### **Security Management Measures**

- University of Newcastle to continuously monitor the risks and the effectiveness of security treatment measures through post event analysis and reporting, and liaison with NeW Space stakeholders and the Security Department. Periodic reviews of the security risks should be performed. Security risks should also be reviewed at the initial stage of any capital works program occurring at the site.

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#### **Flooding**

The proposed NeW Space development is to achieve a design level of 3.8m AHD, except for entry transitions where level access is to be facilitated. Where a design level is provided below 3.8m AHD, it must not be at the risk of life safety and must not include the accommodation of essential services.

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**Drainage**

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- Provide stabilised entry/exit point consisting of large diameter crushed rock pad approximately 5m x 3m.
- Provide sediment fences along the Hunter and Auckland Street frontages.
- Include stormwater pit protection barriers.
- Identify designated material stockpile locations.

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**Servicing and Waste**

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- Provide all permanent facility users, including library, tenancy and café staff, with written recycling instructions, as well as posters, signage, and other educational materials.
- Train cleaning staff in maintaining effective separation of recycling and landfill streams.
- Place clear signage with large scale print and graphics above bin clusters (at eye level) in office and public areas.
- Fix metal or plastic signs to the wall of the waste and recycling storage area.
- Conduct frequent spot checks and audits during the first month of program implementation.
- Perform ongoing waste audits and visual assessments, and report results to all stakeholders.

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**Construction Management**

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- Prior to the issue of the relevant construction certificate, an updated and detailed CMP should be provided to the private certifier. The management procedures and strategies in the CMP should be implemented into the construction phase of the development.
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## 8.0 Justification of the Proposal

In general, investment in major projects can only be justified if the benefits of doing so exceed the costs. Such an assessment must consider all costs and benefits, and not simply those that can be easily quantified. As a result, the EP&A Act specifies that such a justification must be made having regard to biophysical, economic and social considerations and the principles of ecologically sustainable development.

This means that the decision on whether a project can proceed or not needs to be made in the full knowledge of its effects, both positive and negative, whether those impacts can be quantified or not.

The proposed development involves development of an educational establishment with a GFA of approximately 12,000m<sup>2</sup> that will include various learning and teaching suites, public and open space, retail and associated works. The assessment must therefore focus on the identification and appraisal of the effects of the proposed change over the site's existing condition.

Various components of the biophysical, social and economic environments have been examined in this EIS and are summarised below.

### 8.1 Social and Economic

The proposed NeW Space will consist of library and information common, collaborative learning spaces, and zones for professional and community engagement. Student experience will be supported by state-of-the-art technology accessible 24 hours, seven days a week.

The proposal will bring a number of social and economic benefits to UON and in turn the local and regional economy including:

- Establish a university campus in the Newcastle City Centre, as prescribed by the NURS;
- Assist to activate both Hunter Street and Auckland Street in accordance with the provisions of the Newcastle Development Control Plan 2012. The proposal will also assist to activate Christie Place, and more broadly, the Civic Precinct;
- The 24-hour nature of the proposed educational facility will provide for an all-hours eyes on the street and contribute to CPTED principles for the Civic Precinct;
- It will provide a potential investment and cultural stimulation, generally improving the quality of life in the Newcastle city centre;
- Upgrade teaching, research and learning spaces, as well as provide shared resources for the wider population;
- Provide a world class showcase to enable the university to grow and respond to opportunities and improve the reputation of the university and its graduates;
- Attract funding, academics and students;
- Support and encourage learning;
- Support the housing market within Newcastle city centre, increasing both sales and rental demand; and
- Support and showcase UON's commitment to leadership in sustainability.

Overall, it is considered the proposed development will have very substantial social and economic benefits for the greater Newcastle region and the Newcastle City Centre.

## 8.2 Biophysical

**Section 5.0** of this EIS contains a thorough assessment of the likely biophysical impacts of the proposed development. The environmental risk assessment contained at **Section 6.0** demonstrates that the proposed development will not result in any significant adverse environmental impacts that cannot be appropriately addressed through standard conditions of consent or the mitigation measures included at **Section 7.0**.

The environmental impact assessment of the proposed development has demonstrated that:

- water management measures will be implemented to reduce reliance on water from the existing main, and enhance the use of water recycling on the site;
- appropriate sediment and erosion measures can be implemented to prevent any impacts to water quality during the construction and operation phases;
- management measures will ensure that air quality impacts are managed during the construction phase;
- noise and vibration management measures will be appropriately incorporated into the construction and operational phases of the development; and
- all traffic generation will be appropriately managed.

## 8.3 Ecologically Sustainable Development

The EP&A Regulation lists 4 principles of ecologically sustainable development to be considered in assessing a project. They are:

- The precautionary principle;
- Intergenerational equity;
- Conservation of biological diversity and ecological integrity; and
- Improved valuation and pricing of environmental resources.

An analysis of these principles follows.

### Precautionary Principle

The precautionary principle is utilised when uncertainty exists about potential environmental impacts. It provides that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle requires careful evaluation of potential environmental impacts in order to avoid, wherever practicable, serious or irreversible damage to the environment.

This EIS has not identified any serious threat of irreversible damage to the environment and therefore the precautionary principle is not relevant to the proposal.

### Intergenerational Equity

Inter-generational equity is concerned with ensuring that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.

The proposal has been designed to benefit both the existing and future generations by:

- maintaining heritage listed items for future generations to appreciate and enjoy;
- implementing safeguards and management measures to protect environmental values.
- facilitating job creation and the provision of housing in close proximity to public transport; and
- Improving the public domain and amenity in Civic precinct.

The proposal has integrated short and long-term social, financial and environmental considerations so that any foreseeable impacts are not left to be addressed by future generations. Issues with potential long term implications such as waste disposal would be avoided and/or minimised through construction planning and the application of safeguards and management measures described in this EIS and the appended technical reports.

#### Conservation of biological diversity and ecological integrity

The principle of biological diversity upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration.

The proposal would not have any significant effect on the biological diversity and ecological integrity of the study area.

#### Improved valuation, pricing and incentive mechanisms

The principles of improved valuation and pricing of environmental resources requires consideration of all environmental resources which may be affected by a proposal, including air, water, land and living things. Mitigation measures for avoiding, reusing, recycling and managing waste during construction and operation would be implemented to ensure resources are used responsibly in the first instance.

Additional measures will be implemented to ensure no environmental resources in the locality are adversely impacted during the construction or operational phases.

## 9.0 Conclusion

The EIS has been prepared to consider the environmental, social and economic impacts of the proposed education establishment at 409 Hunter Street, 300 King Street, Newcastle and 20 Laman Street, Cooks Hill. The EIS has addressed the issues outlined in the Secretary's Environmental Assessment Requirements (**Appendix B**) and accords with Schedule 2 of the EP&A Regulation.

Having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development, the carrying out of the project is justified for the following reasons:

- The proposed development is permissible with consent and is generally consistent with the relevant statutory and strategic planning controls and vision for Newcastle;
- The proposal represents one of the first major projects to occur in the Newcastle CBD following the release of the Newcastle Urban Renewal Strategy, a key document prepared by the NSW Government reflecting the priority of enhancing the vitality of the Newcastle city centre;
- The proposal exemplifies a true urban renewal development, making use of a disused site in part and enhancing and regenerating a local heritage item (University House) which is in need of upgrade;
- The proposal exhibits a high quality design, achieving design excellence through providing a sympathetic relationship to surrounding heritage buildings, complementing the civic nature of the precinct in scale and providing a new modern and iconic building in Newcastle's CBD;
- NeW Space will accommodate approximately 2,347 new students and staff within the Newcastle CBD at peak times, in turn enhancing the vitality of the city and reinforcing the viability of existing and new businesses and services;
- The proposal comprises a significant and integral piece of education infrastructure which will contribute to the education and enhancement of knowledge in current and future generations;
- The proposal encourages a mix of alternative transport methods to private motor vehicles, reducing car dependency and enhancing the viability of future public transport infrastructure in Newcastle;
- The proposal is consistent with the principles of ecological sustainable development as defined by Schedule 2(7)(4) of the *Environmental Planning and Assessment Regulation 2000*; and
- There will not be any significant adverse environment, social or economic impacts which cannot be managed or mitigated.

In light of the environmental, social and economic benefits of the proposal and the planning merit and significant public benefits associated with the proposal, it is recommended that this application be approved.