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18 December 2012

Anthony Green
Frasers Property Australia Pty Ltd
Suite 11, Level 12
101 Bathurst Street
Sydney NSW 2000

Dear Anthony,

RE: BLOCK 3B, 3C AND 10 – SECTION 75W MODIFICATION

1 INTRODUCTION

Elton Consulting has undertaken a review and Crime Prevention through Environmental Design (CPTED) analysis of the proposed amendments to Block 3B, 3C and 10 to accompany a section 75W modification by Fraser's Broadway Pty Ltd. The amended plans include minor changes to the built form, service design and internal layout of Blocks 3B, 3C and 10.

This letter documents the CPTED assessment of the amended plans, prepared by Tonkin Zulaika Greer (TZG) and issued on 14th December 2012, relative to the previous approved design for Blocks 3B, 3C and 10 (MP 11_0090).

Elton Consulting prepared a report to accompany the previous project application entitled *'Frasers Broadway – Safety Management Strategy and Safety Management Plan for Blocks 3B 3C and 10, Central Park'* (7 May 2012). The previous report outlined the aims, objectives and design elements for Blocks 3B, 3C and 10 that underpinned the Safety Management Strategy and Safety Management Plan. The CPTED aims for Block 3B, 3C and 10 are to:

- Create a safe public domain for all users at all times
- Facilitate a safe and easily accessed pedestrian and transport network
- Create a safe environment during the development process
- Address safety needs of special user groups
- Develop a safe community for residents around and on site
- Promote health and injury prevention
- Promote and support safety
- Create a safe, secure and well maintained built environment
- Protect the heritage building and introduce measures to reduce opportunities for vandalism.

This letter describes the effect of the proposed changes on these CPTED aims against which the previous application was assessed.

2 PROPOSED AMENDMENTS

The section 75W modification seeks approval for the following amendments to Blocks 3B, 3C and 10:

- Reduction in overall building envelope, height, and floor to floor heights
- Reduction in gross floor area by approximately 330m^2
- Amended mix of accommodation rooms to include a greater proportion of studios relative to cluster rooms resulting in an increase from 267 to 271 beds
- Increase in standard studio unit size and increased window sizes
- Reduction of the internal void spaces and addition of a full height window to the northern façade of Block 3B for increased light and ventilation
- Alterations and relocation of internal communal space within the buildings for improved amenity and use at the ground floor level
- Relocation of fire stairs to Block 3C to the west on Carlton Street to increase activation on Kensington Lane
- Increases bicycle storage facilities to be consistent with the relevant DCP requirements and relocation of storage area to level 1 in Block 10 allowing for improved ground floor use
- Relocation of laundry facilities to the ground floor centrally located area as well as increase lobby and administration areas in Block 3B
- Simplify the ground level facade, whilst maintaining the concept of scale transition and response to adjacent heritage items
- Changes the external wall material from concrete to lightweight fibre cement cladding with a significantly reduced embedded carbon footprint and reduction in supporting structure required.

The following section provides an assessment of the impacts of the amendments on crime prevention and safety giving consideration to the 'safer by design' principles and aims for Blocks 3B, 3C and 10.

3 CPTED ANALYSIS OF PROPOSED AMENDMENTS

3.1 BLOCK 3B

Block 3B contains retail uses and services on the ground floor with student accommodation on levels 1 – 7 above. Proposed amendments at the ground floor result in a larger communal area which is used as a lobby / reception / meeting area for the student accommodation use.

A desk separation between the reception and the lobby / meeting area provides improved surveillance of the lobby areas and entry to the building by staff in the reception area, as well as surveillance of people accessing the garbage room, laundry, entering the lifts, using the stairs and using the pedestrian through-link between Blocks 3B and 3C. The amended plans also remove the door separating the lobby area from the circulation space, which is used by students to access residential garbage room, wheelchair bathroom and laundry. The corridor is now directly accessible from the lobby and visible from the entry to the building, providing a safer environment for students.

These changes improve natural surveillance of the communal areas used by students while maintaining access control to "back of house" areas. By removing the wall and door separating these spaces, there is less opportunity for offenders to hide or carry out anti-social or illegal activities in the "back of house" circulation space / corridor.

On levels 1 – 7, there are improvements to the circulation spaces, which provide increased opportunities for overlooking of the public domain below as well as improved perception for students moving between communal areas of the building. The amended plans remove the door separating the

lift lobby and circulation space / corridor from which students gain access to their accommodation. Removal of this door provides for improved surveillance for students entering a new space. Access control will be managed at the ground level, whereby only students with key cards or similar security features can gain entry to the lift and access to upper floors.

The position of the door to the fire stairs has also changed on levels 1 – 7 of Block 3B. The change results in improved circulation between the circulation space / corridor and the fire stairs, with no alcoves or niches that could have functioned as a hiding place for offenders.

The wall and/or door separating the circulation space / corridor in Block 3B and the communal space (located in the "link" between Blocks 3B and 3C) will be of a transparent material. The use of a transparent material such as glass will help to improve sightlines and thus visibility for students entering the communal space yet retain a sense of territoriality and definition of space, thus allowing students to assess the presence of any dangers before entering the space.

On levels 1 – 7, a change in the layout of the student accommodation units means the circulation space / corridor extends the entire length of the block. As a result, the northern façade of Block 3B now contains a full height window to the corridor rather than a window for one private accommodation unit. This means the public domain to the north can be overlooked by students in the corridor, which helps to maintain opportunities for surveillance at all times of the day.

The proposed changes to Block 3B are thereby considered to be acceptable from a CPTED perspective, and in part result in improvements to safety and crime prevention elements of the building.

3.2 BLOCK 3C

Block 3C contains retail uses and services on the ground floor with student accommodation on levels 1 – 5 above, and communal space / a roof terrace on level 6.

Proposed amendments at the ground floor of Block 3C provide additional service area along the Carlton Street façade where a retail frontage was previously located. The reduction in retail frontage is minor, however, and the majority of the frontage to Carlton Street continues to be active with retail uses proposed. This change is considered to have a minimal impact on safety in the public domain around Block 3C.

On level 6, there are changes to the layout of the communal space (located in the "link" between Blocks 3B and 3C) and the roof terrace in Block 3C. In addition, the laundry room has been relocated to the ground floor, and the fire stair access to the communal space has been repositioned. The result is a more "open plan" layout for the communal space which improves sightlines and visibility across the communal area. It is recommended that the wall and/or door separating the communal space and roof terrace be a transparent material, such as glass, to maintain visibility and sightlines.

The door separating the circulation space in Block 3C and the communal space in the link will be a hold open door. The door will release in the event of a fire. The hold open door will allow students to assess the presence of any changes before they enter the space.

It is recommended that controlled access to the roof of Block 3C be provided so as to allow for maintenance of the roof and planter. This access door should be security controlled so that students cannot access the roof, and access restricted to staff and/or maintenance works only.

The proposed changes to Block 3B are considered to be acceptable from a CPTED perspective.

3.3 BLOCK 10

Block 10 contains retail uses and services on the ground floor, a bicycle storage on level 1 and student accommodation on levels 2 – 5 above.

Proposed amendments at the ground floor result in improved visibility and sightlines across the semi-public areas (i.e. lobby and a double height space over the retail area). The entry to Block 10 remains in the same location, however the lobby is now reconfigured so that there is a more direct and straight connection between the building entrance and lift. This change means there are fewer areas in the lobby for offenders to hide, which improves safety for students accessing the lift and accommodation above. It is noted that the wheelchair accessible toilet on the ground floor has been removed.

The amended plans provide a new door between the lobby and "back of house" circulation space / corridor. Although students are unlikely to need to access the "back of house" area, it is noted that the door is directly adjacent to the lift where students gain access to upper floors. This door should therefore be security controlled to discourage students from accessing, and hiding in, the "back of house" circulation space / corridor. By locating a door in this location, the amended plans improve the CPTED principle of territoriality, as the "back of house" area, which contains the retail garbage room and services, is now separated from the student accommodation lobby. There is more direct access from the retail space to the retail garbage room in the amended plan, rather than requiring the retail staff to access the garbage room via Goold Street.

Level 1 of Block 10 now contains no accommodation units. The bike storage room in the northern portion of Block 10 is directly accessible from the lift. Access to the bike storage room should be managed so that only students with a key card (as well as staff of the student accommodation facility) can enter the lift and access level 1.

The terrace on level 2 has increased in area. The terrace now wraps around the majority of the building, and in particular now extends to the northern edge of level 2. This results in improved opportunities for surveillance of the public domain below, being a small "pocket park" fronting Kensington Lane (this public open space is part of the Block 6 and 7 application).

The proposed changes to Block 10 are considered to be acceptable from a CPTED perspective, and in part result in improvements to safety and crime prevention elements of the building.

4 CONCLUSION AND RECOMMENDATIONS

The proposed Block 3B, 3C and 10 amendments maintain the CPTED aims and objectives, and are considered acceptable from a CPTED perspective. The amended plans continue to achieve the general principles of CPTED; territoriality, natural surveillance, access control, maintenance and activity control.

The section 75W modification is therefore considered worthy of support from a safety and crime prevention perspective, subject to the recommendations contained within this letter being incorporated into the design and construction of Blocks 3B, 3C and 10.

The recommendations for a Plan of Management for the student accommodation facility, contained within the previous CPTED assessment, should be carried forward to this modification application.

The information contained within this letter is accurate in so much as it relies on drawings provided at the time of review and reporting. This letter should be read in conjunction with the previous report for Blocks 3B, 3C and 10 entitled *Frasers Broadway – Safety Management Strategy and Safety Management Plan for Blocks 3B 3C and 10, Central Park'* (7 May 2012).

Yours sincerely

Samantha Czyz
Senior Consultant
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ATTACHMENT 1

Frasers Broadway – Safety Management Strategy and Safety Management Plan for Blocks 3B 3C and 10, Central Park

Prepared by Elton Consulting, 7 May 2012

Client
Frasers Broadway Pty Ltd

Project
Blocks 3B 3C and 10, Central Park
Safety Management Strategy and
Safety Management Plan

Date
7 May 2012

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Prepared by	Samantha Czyz and Jenny Rudolph
Reviewed by	
	Don Robertson
Date	7 May 2012
Job number	11/2693
Document name	Safety Management Strategy and Safety Management Plan for Blocks 3B 3C and 10, Central Park
Version	Final Draft

Contents

1 Introduction

1.1 Purpose of this report

This Safety Management Strategy and Safety Management Plan has been prepared to accompany a Project Application for the proposed development of Block 3B, 3C and 10 of Central Park (formerly known as Frasers Broadway).

The Project Application (MP 11_0090) seeks approval for the development of Block 3B, 3C and 10 for student accommodation with associated commercial and retail uses at the ground floor level.

The purpose of this report is to carry out a Crime Prevention through Environmental Design (CPTED) analysis of the proposed development by addressing safer by design principles relating to safety and crime prevention through the proposed building design and in the public domain.

1.2 Consistency with Concept Plan approval and DGRs

This report addresses the "Safer by Design" principles as required within the Director-General's Requirements for MP 11_0090.

This report also addresses Commitments 29, 30 and 31 contained within the Modification Concept Plan Approval for Central Park (MP 10_0217 – MOD 2), as they relate to CPTED.

The Commitments are:

29. A Safety Management Strategy will be prepared and provide guidelines for the application of CPTED principles and Safer by Design best practice models.

30. A Safety Management Plan will be submitted which address issues relating to building design and parking structures design, vandal proof finishes and graffiti proof finishes, lighting, convenience location and other design considerations. The Safety Management Plans will also incorporate the performance criteria and compliance checklist addressing the guidelines outlined in the Department of Urban Affairs and Planning (now the Department of Planning, DoP) Crime Prevention and Assessment of the Development Applications Guidelines under Section 79C of the Environmental Planning and Assessment Act 1979.

31. The NSW Police will be consulted throughout the CPTED assessments for all applications for the CUB site.

1.3 Crime Prevention through Environmental Design (CPTED) Principles

This assessment is based on an overarching strategy for safety and crime prevention at Central Park, as contained within the CPTED Report for the modified Concept Plan (2008). The report sets the CPTED framework for all development in Central Park. The principles adopted in the report are those of CPTED – a contextual approach to crime prevention. This involves using design to both intensify the difficulty to possible offenders and diminishing the rewards. The report is supported by five overlapping principles that have been applied to the modified Concept Plan, and are described in Appendix A. They are:

- Territoriality
- Natural Surveillance
- Access Control
- Maintenance (space management)
- Activity Control.

The CPTED Report (2008) analyses the crime and safety issues in the neighbourhoods surrounding the Central Park site, including crime hot spots, incidents and trends.

This assessment is consistent with the overarching CPTED Report for the modified Concept Plan and in doing so, is consistent with principles and philosophy of the guidelines outlined in the NSW Department of Urban Affairs and Planning (now the Department of Planning and Infrastructure), *Crime prevention and the assessment of development applications: Guidelines under section 79C of the Environmental Planning and Assessment Act 1979*.

This assessment investigates how the Block 3B, 3C and 10 designs embrace, and intends to embrace, principles central to CPTED, being natural surveillance, access control, ownership (territoriality) and space management (maintenance).

Development and implementation of ongoing security management systems for the proposed development are considered essential to achieve the aims for safety by design. This is referred to as CPTEM ('Crime Prevention Through Environmental Management').

The security management systems should be coordinated across all the student accommodation buildings (i.e. Block 10, 3B and 3C). It is also recommended the security management regularly link in with the security systems in place for other buildings in Central Park, to aims for an integrated approach to security and safety management once the buildings are operational.

As the proposal is for student accommodation and is located on the periphery of the central park site, there should be focus on ensuring a seamless security management system that acknowledges the surrounding student housing developments.

See Appendix A for definitions of CPTED Terminology used within this report.

1.4 Methodology

The preparation of this report has relied on consultation with the project design team. Input was also sought from external stakeholders such as the NSW Police. The outcomes of these consultation and engagement activities were supported by desktop research and analysis of design documents.

This report was informed by reviewing the design documents associated with the PA prepared by Tonkin Zulaikha Greer Architects (Refer to PA Drawing Schedule and PA-000 to PA-703).

In addition this report references the following information associated with the Kensington Lane Precinct:

- Public Domain Report and Plans: Blocks 3B, 3C and 10 Project Application (Jeppe Aagaard Andersen + Turf Design Studio, April 2012)
- Traffic Pedestrian and Cycle Routes (Masson Wilson Twiney, 4 April 2008)

Separate information will be provided for the Kensington Lane treatment. This PA (for Blocks 3A, 3B and 10) will be unaffected by the outcome of Kensington Lane works.

This report complements the existing Safety Management documentation prepared for the site including *Preliminary CPTED Report for Modified Concept Plan* (Elton Consulting, April 2008) and Safety Management Strategy and Safety Management Plans prepared for Project Applications for Blocks 1 and 4, Block 5C and the Brewery Yard.

1.5 Structure of this report

Section 1 introduces the report.

Section 2 provides an overview of the consultation undertaken to date pertaining to CPTED issues.

Section 3 outlines the Safety Management Strategy.

Section 4 outlines the Safety Management Plan.

Section 5 outlines the implementation of the Safety Management Strategy and Plan.

1.6 Disclaimer

Information within this report is based upon data provided to Elton Consulting in April 2012 at the time of this assessment.

In conducting this report, Elton Consulting does not offer any promise or guarantee of safety to persons or property.

This report has been peer reviewed by a qualified CPTED professional.

2 Proposed Development

2.1 Background

The Central Park site is a 5.795 hectare rectangular parcel of land that occupies a significant proportion of the north eastern section of the suburb of Chippendale.

Central Park is located on the southern edge of the Sydney Central Business District (CBD). The site is in close proximity to Central Station, Broadway Shopping Centre and the University of Technology, Sydney.

Following the purchase of the site in June 2007, Frasers Broadway Pty Ltd undertook an extensive community consultation and design enquiry process. One of the major issues identified by the public during consultation was community health and safety. In response to this, Frasers Broadway Pty Ltd has directed that safety and CPTED be a fundamental component of the design approach.

Kensington Street.
The vision for the Kensington Lane Precinct is that it become a laneway with retail, restaurant and student accommodation uses that are active for extensive periods of the day and that has a 'student/arts vibe'.

Kensington Lane, between Outram Street and Dwyer Street, will incorporate traffic calming measures to encourage pedestrian activity and safely.

Another key feature of the public domain and thoroughfare network surrounding blocks 3B, 3C and 10 is a publically accessible thoroughfare between Block 3B and 3C. The thoroughfare is an extension of the main east-west pedestrian link that extends across Central Park. It provides straight, clear, uninterrupted east-west access between Kensington Lane the main Park.

2.3 Proposed development

The PA will seek approval for:

- Constriction of a 6 and 7 storey student accommodation development (Blocks 3B and 3C)
- Construction of a 6 storey student accommodation development (Block 10).

2.2 Kensington Lane Precinct

Blocks 3B, 3C and 10 are located to the east of the Central Park site within the Kensington Lane Precinct. Frasers Broadway commissioned Tonkin Zulaika Greer (TZG) for the detailed design of the Kensington Lane Precinct, which incorporates Blocks 3A, 3B, 3C, 10, 6 and 7. The design brief given by Frasers Broadway for the Kensington Lane Precinct incorporated explicit safety requirements, including integration of CPTED principles.

Blocks 3B and 3C are bounded by Kensington Street to the east, the proposed Kent Road to the West and Block 3A to the north. Blocks 3B and 3C are located on the northern side of the intersection between Outram Street, Kent Road, Kensington Street, and O'Connor Street.

Block 10 is an adaptive reuse and extension of the building located to the east of Block 3C, bounded by Goold Street to the east, Kensington Lane to the west and Outram Street to the south. To the north, Block 10 adjoins existing development and the future building within Block 7.

The approved modified Concept Plan for Central Park provides a strong interface between the proposed development and existing buildings in

The student accommodation will incorporate ground floor retail uses, bicycle parking and waste storage facilities.

In total, the student accommodation will provide 267 beds contained within 201 individual dwelling units.

3 Consultation

3.1 Overview

Frasers Broadway has made a major commitment to engage with the community and other key stakeholders regarding Frasers Broadway. This includes consultation on issues pertaining to crime and safety for this project.

Extensive consultation has previously occurred as part of the CPTED assessment for the Concept Plan (2006) and the Modified Concept Plan (2008). This included:

- City of Sydney Council Community Safety officer
- NSW Police (Redfern Local Area Command and Parramatta Crime Prevention Office)
- NSW Department of Planning and Infrastructure (formerly NSW Department of Planning)
- UTS Security Service
- TAFE (Sydney Institute)
- State Transit Authority (STA).

They provided information on crime hotspots, crime incidents and perceptions, and crime trends for the neighbourhoods and educational institutions surrounding the Fraser's Broadway site.

Some key points mentioned were:

- Crime hotspots in the Chippendale area, while relatively common, were mostly transitory in nature and did not have a prolonged life
- The City of Sydney Council Community Safety Officer noted that there was a general perception among Chippendale residents that crime levels in the area were decreasing and that the area was becoming a safer place to live
- Concern was raised by the City of Sydney Community Safety Officer and the representative from the Security Service at the UTS about crime against students travelling to and from the UTS campus along Broadway (towards Glebe and Annandale) and also through Chippendale towards Darlington
- Other crime hot spots identified by the Redfern Local Area Command were Redfern Railway Station and Victoria Park.

It is intended that the development of the Safety Management Strategy and Safety Management Plan reflects the issues and recommendations arising from these earlier consultations. Frasers Broadway have committed to ongoing consultation with key stakeholders throughout development of the project.

3.2 Consultation for this PA

Consultation was undertaken with the NSW Police and NSW Department of Planning and Infrastructure as part of this safety management plan and assessment of the proposal against CPTED principles.

The feedback contained from the relevant stakeholders is summarised below, and referenced throughout this assessment. It should be noted that issues raised during consultation have been assessed and mitigation measures to address the concerns, where necessary, have been recommended.

A community information and feedback session was held on 31 March 2012. Information about the PA was displayed. Stakeholders were invited to attend and provide feedback on the proposal for Kensington Lane precinct, including Blocks 3B, 3C and 10. A consultation outcomes report will be prepared summarising the feedback received.

Relevant stakeholders will also have the opportunity to access information about the proposal and / or provide formal feedback at the public exhibition stage.

3.2.1 Crime Prevention Officer, Redfern Local Area Command, NSW Police

Elton Consulting met with a Crime Prevention Officer from the Redfern Local Area Command on 30 March 2012. The purpose of this meeting was to provide to NSW Police details of the proposal, discuss key CPTED issues as they relate to the site and the proposed development, and receive feedback on safety and crime prevention implications for Block 3B, 3C and 10.

Key issues raised by the Crime Prevention Officer are summarised below. It is noted that the recommendations made by the Crime Prevention Officer relate mainly to the on-going operation and management of the student accommodation premises. Consequently, the recommendations have been incorporated into this report as issues that should be addressed in a future Plan of Management (PoM) for the student accommodation.

It was highlighted by the Crime Prevention Officer that in many instances, crimes are committed by persons who are known to the victim. For this reason, despite restricted access to many areas within the proposed development, careful consideration should be given to communal and restricted access areas, such as "back-of-house" areas, in order to ensure safety for all individuals.

Key issues raised by the Crime Prevention Officer include:

- Communal rooftop terrace could potentially become a place for nuisance (i.e. loud parties) and antisocial behaviour caused by alcohol consumption. The PoM should specify this space as alcohol-free and/or restrict hours of access where necessary.

  Addressed: CCTV cameras are to be installed on the rooftop. Refer to Section 5.2.6.

- Garbage rooms present a risk where there are limited opportunities for surveillance and good opportunities for offenders to hide. It is recommended to install CCTV to bin rooms to increase security.

  Addressed: CCTV cameras are to be installed in garbage rooms. Refer to Section 5.2.6.

- Access to the disabled bathroom on the ground floor level (Block 3B) should be controlled so to ensure no opportunities for illegitimate entry.

- There should be clear sightlines between the entry door to the disability bathroom on the ground floor level (Block 3B) and other public spaces to prevent opportunities for offenders to hide or opportunities for an attack to occur in the bathroom. It is noted that the door must open in its current direction in order to comply with BCA requirements, thus surveillance of the opening is important.

  Addressed: Access will be controlled by on-site management and there will be no public access to this space. Refer to Section 5.2.8.

- Although entry to the building lobby and lift is security-controlled, consideration should be given to emergency access to upper floors.

  Addressed: The building is designed to comply with BCA fire regulations thus appropriate access/egress is provided in case of emergency.

- It is recommended that the NSW Police/Local Area Command be consulted in the event of any major events in the precinct to ensure a security and safety presence where required.

  Addressed: It is recommended the PoM require consultation with the Local Area Command prior to make events in the area.

- The recommendations included throughout the report were discussed and supported by the Local Areas command.

Each issue is addressed within Section 5 ('Safety Management Plan') of this report.

3.2.2 NSW Department of Planning and Infrastructure

Elton Consulting liaised with a Senior Planner from the NSW Department of Planning and Infrastructure by email, to enquire about any specific issues from a safety and crime prevention point of view for Blocks 3B, 3C and 10.
As the PA relates to student accommodation, it was noted that the CPTED assessment must consider access arrangements, such as key/card access, provision of on-site security.

3.2.3 Student accommodation operator and education providers

It is noted that Frasers Broadway and the project team have designed the current proposals in conjunction with input from one Australia's largest operators and managers of student accommodation, UniLodge. UniLodge manages approximately 8,000 student accommodation beds nationally, including accommodation in Broadway. Consequently, it has a broad understanding of the student and local community issues and requirements for student housing.

UniLodge undertook a design appraisal and review of the proposed development at a number of stages in the design process. This has guided the design team to develop the current proposals. Within their appraisal, UniLodge provided guidance on general building design, resident access, on-site management requirements, passive and active security measures and the design of common areas, lobbies and roof top amenities.

It is also noted that Frasers Broadway and the project team have met with the University of Technology and the University of Sydney a number times over the past 12 months in relation to this PA.

4 Safety Management Strategy

4.1 Purpose

This section details the Safety Management Strategy and satisfies Commitment No.29 contained within the modified Concept Plan approval for Central Park (MP 10_0217 – MOD 2).

4.2 Strategy

The following aims underpin the Safety Management Strategy for Blocks 3B, 3C and 10. All of these aims are of equal importance:

- Create a safe public domain for all users at all times
- Facilitate a safe and easily accessed pedestrian and transport network
- Create a safe environment during the development process
- Address safety needs of special user groups
- Develop a safe community for residents around and on site
- Promote health and injury prevention
- Promote and support safety
- Create a safe, secure and well maintained built environment
- Protect the heritage building and introduce measures to reduce opportunities for vandalism.

These aims are consistent in principle and philosophy within the guidelines outlined in the NSW Department of Urban Affairs and Planning (now the Department of Planning and Infrastructure), *Crime prevention and the assessment of development applications: Guidelines under section 79C of the Environmental Planning and Assessment Act 1979* and the City of Sydney's *Design Guide for a Safer Community: A Framework for Planning a Safer City,* John Maynard, June 2004.

4.3 Objectives, design elements and recommendations

4.3.1 Create a safe public domain for all users at all times

Objective

The public domain around Blocks 3B, 3C and 10 shall be legible, be easy to navigate, promote social interaction and contain lively public spaces that are filled with activities compatible with surrounding uses.

Design elements

In pursuit of the above objective, the proposal shall include the following design elements:

- A public domain that encourages visual and pedestrian permeability and connects to the existing road and pedestrian pathways
- Activated streets and public spaces with a compatible mix of activities and users (e.g. shops, cafes, entrances to building lobbies, etc.) so to attract pedestrian activity and thereby maximise natural surveillance
- Entertainment night zones designed to minimise potential disruptions to residents and with safe and direct access to public transport and car parks
- A mix of uses which are compatible with adjoining and co-located uses and are designed to support public safety and health
- Public open space areas that maximise opportunities for natural surveillance and visibility through the use of lighting, appropriate landscaping and straight, wide and legible pathways.

A detailed description of the design features that support this objective is contained in the compliance schedule under the Safety Management Plan (see Section 5).

Complementary strategies / actions for Blocks 3B, 3C and 10

The following strategies and actions should be implemented for Blocks 3B, 3C and 10:

- Locate lobby entrances in highly visible, non-isolated locations
- Select materials and finishes that are likely to discourage vandalism or graffiti
- Provide glazing to the building facade at the ground floor, to enclose the private areas from the adjacent public areas but also encourage sightlines and casual surveillance between public and private space

- Create uninterrupted sightlines in the public domain through the use of lighting, particularly at building entry/exist points. Outdoor lighting should be positioned at regular intervals, so to provide consistency of lighting, avoid shadows and prevent light spill. The entrance to Block 10 should be particularly well lit
- Where landscaping is proposed, use landscaping that will consist of low-lying plants or high-canopy trees that facilitate visual permeability and sightlines between public and private places
- Select landscaping that is low-lying to prevent potential spaces for hiding
- Avoid the creation of small corners or entrapment spaces in the public domain.

4.3.2 Create a safe and easily accessed pedestrian and transport network

Objective

Block 3B, 3C and 10 will be located within a safe, locatable and easily accessed pedestrian and public transport network.

Design elements

In pursuit of the above objective, the proposal includes the following elements:

- A safe pedestrian network, made up of preferred routes and safe spots in public spaces around Blocks 3B, 3C and 10 and its surrounding public domain, that increase safety and security of all users during the day and at night through appropriate use of lighting in the public domain
- Signage used throughout the pedestrian network that includes non-written forms of signage, such as maps, to assist non-English speaking students navigate the site.
- Co-locate pedestrian, cycle and vehicle routes that maximise activity and natural surveillance opportunities, whilst ensuring a safe interface between all modes of transport
- Footpaths, cycleways and pedestrian areas designed to ensure that pedestrians and cyclists have priority over vehicles
- A pedestrian and cycle network which facilitates efficient connectivity with external facilities, including the Central public transport hub
- Activity generators (cafes, restaurant and entertainment areas) that have short logical connections to public transport and the safe pedestrian network

A detailed description of the design features that support this objective is contained in the compliance schedule under the Safety Management Plan (see Section 5).

Complementary strategies / actions for Blocks 3B, 3C and 10

The following strategies and actions should be implemented for Blocks 3B, 3C and 10:

- Use appropriate lighting on pedestrian and vehicle pathways, in particular the pedestrian through-site links and Outram Street, as these are the building/lobby entry points for students
- Position services and the "back" of building areas in Blocks 3B and 3C towards Kent Road, as this is a busier road for vehicle traffic, which can provide additional surveillance for pedestrians walking along the footpaths along Kent Road
- Use signage to increase safety by improving opportunities for users to find their way through the Kensington Lane Precinct, and to and from surrounding areas at all hours (e.g. provide clear information about access routes; ensure that signs that are essential for night-time use are clearly visible; ensure buildings are clearly identified)
- In addition to signage, create visual and physical legibility to ensure pedestrian networks and access ways are inviting and legible to non-English speaking students, through lighting, wide thoroughfares and the avoidance of entrapment spots
- Select landscaping that will not obstruct sightlines on main pedestrian routes, such as low-lying plants, or avoid planting in inappropriate locations including the through-site link
- Use temporary and permanent signage during construction to assist people to easily locate desired active and public transport services and facilities
- Consult with City of Sydney Council and public transport operators (e.g. State Transit, Taxi operators) to encourage the development of safe pedestrian networks beyond the boundaries of the site that link to key public transport interchanges such as Central Station and Railway Square.

4.3.3 Create a safe environment during the development process

Objective

Development will be managed to provide a safe and amenable environment for surrounding business owners, visitors and residents throughout the construction process. Development should take additional precautionary measures to protect the

building, which is a heritage item and significant to the site's history.

Complementary strategies / actions for Blocks 3B, 3C and 10

The following strategies and actions should be implemented for Blocks 3B, 3C and 10:

- Proactively manage and stage development of the Blocks 3B, 3C and 10 so that a safe environment is created for visitors, business owners and residents who pass the site at all times during the construction process (e.g. manage public access to areas under construction, undeveloped sites and roads)
- Minimise disruption to existing surrounding development to the north and east of the site
- Ensure that signage contains current and relevant information as the area is developed
- Ensure prompt maintenance and repairs at all construction sites (e.g. remove graffiti promptly to maintain a 'cared for' image) and facilitate prompt reporting of any damage or repair needs (e.g. place signs indicating contact details for emergency maintenance in a prominent location)
- Provide security barriers and necessary fencing during the construction phase
- Conduct site safety audit each day during construction to ensure safety standards are maintained by workers

Recommended future actions should include:

- Educate surrounding residents, visitors and business owners on safe areas and "no go zones" during the development process.

4.3.4 Address safety needs of special user groups

Objective

The specific safety needs of special user groups (e.g. children, younger people, older people and people living with a disability) are understood and addressed.

Design elements

In pursuit of the above objective, the proposal includes the following elements:

- Ground level maximises pedestrian comfort, amenity and accessibility including wide openings and easy access to retail spaces
- Provision of lifts and ramps in publicly accessible areas
- Pedestrian walkways that accommodates users with mobility disabilities, with the use of ramps, etc

A detailed description of the design features that support this objective is contained in the compliance schedule under the Safety Management Plan (see Section 5).

Complementary strategies / actions for Blocks 3B, 3C and 10

The following strategies and actions should be implemented for Blocks 3B, 3C and 10:

- Through-site pedestrian link shall accommodate users with mobility disabilities
- Use signage to increase safety by improving opportunities for users to find their way through the Kensington lane Precinct, and to and from surrounding areas at all hours (e.g. provide clear information about access routes; ensure that signs that are essential for night-time use are clearly visible; ensure buildings are clearly identified)
- Ensure non-written means of legibility, such as the creation of visually and physically inviting places through the use of lighting and wide pedestrian pathways
- Provide a diversity of fittings and modifications to the public domain that facilitate accessibility and ease of movement for the physically handicapped and for children
- Undertake discussions with relevant authorities and community organisations to manage homelessness and social issues positively
- Ensure that the public domain provides stimulus for a wide diversity of user groups including young children, youth, physical as well as mentally impaired and the elderly

4.3.5 Develop a safe community for residents around and on-site

Objective

Residents, visitors, business owners and service providers (e.g. UTS, TAFE, City of Sydney Council, NSW Police, fire, ambulance, security, State Transit, taxi operators, etc.) will be supported as active partners in creating a safe environment.

Design elements

In pursuit of the above objective, the proposal includes the following elements:

- A centralised technical surveillance system for Central Park
- A co-ordinated security management system for the student accommodation service operators

- On-going consultation with surrounding residents and communities on design and construction progress

A detailed description of the design features that support this objective is contained in the compliance schedule under the Safety Management Plan (see Section 5).

Complementary strategies / actions for Blocks 3B, 3C and 10

The following strategies and actions should be implemented for Blocks 3B, 3C and 10:

- Inform adjacent residents and other major stakeholders of key safety initiatives during the construction phase (e.g. provide regular updates on safety initiatives in a newsletter)
- Consult with government agencies, adjacent communities and residents and owners of commercial facilities during development of Blocks 3B, 3C and 10
- Establish a comprehensive and robust Management Plan for the on-going operation and management of the student accommodation, including non-stationary patrols and links with nearby student housing providers.

4.3.6 Promote and support safety

Objective

Ensure publicly accessible areas will be safe for all user groups, including children. Ensure buildings, streets and public open spaces deter public nuisance, loitering and inappropriate behaviour.

Design elements

In pursuit of the above objective, the proposal includes the following elements:

- A safe pedestrian network, made up of preferred routes and unimpeded sightlines across the precinct that increases safety and security of users during the day and at night, through the use of lighting, straight and legible pathways and glazing to the facade where the building adjoins public open spaces
- Footpaths, cycle-ways and pedestrian areas designed to ensure that pedestrians and cyclists have priority over vehicles and co-located to maximise natural surveillance opportunities
- Safety features such as secure barriers and lighting in open public spaces to reduce the potential for misadventure
- Provide a diversity of fittings and modifications to the public domain that facilitate accessibility and ease of movement for the physically handicapped and for children, such as lighting, handrails, ramps (where required)

A detailed description of the design features that support this objective is contained in the compliance schedule under the Safety Management Plan (see Section 5).

Complementary strategies / actions for Blocks 3B, 3C and 10

The following strategies and actions should be implemented for Blocks 3B, 3C and 10:

- Use signage to increase safety by improving people's ability to find their way about Blocks 3B, 3C and 10, and to and from surrounding areas at all hours (e.g. provide clear information about access routes; ensure that signs that are essential for night-time use are clearly visible; ensure buildings are clearly identified)
- Supplement signage with physically and visually legible streets and public domain areas to ensure non-English speaking students can navigate safely across Blocks 3B, 3C and 10.

4.3.7 Promote health and injury prevention

Objective

The Kensington Lane precinct will encourage people to work and live a healthy lifestyle and which takes an active role in safety and injury prevention.

Design elements

In pursuit of the above objective, the proposal includes the following elements:

- Public spaces that allow for a variety of activities and user groups, which are highly visible from surrounding areas, well lit and accessible
- Clear delineation of public and private spaces, through the provision of doors and alternate paving
- Appropriate locking systems where access should be restricted
- Consistent ground surface and transition between public and private spaces

A detailed description of the design features that support this objective is contained in the compliance schedule under the Safety Management Plan (see Section 5).

Complementary strategies / actions for Blocks 3B, 3C and 10

The following strategies and actions should be implemented for Blocks 3B, 3C and 10:

- Ensure paving of pedestrian pathways and public domain areas is consistent
- Provide smooth transition along pathways.

Recommended future actions should include:

- Promote the development of safe and injury-free activities and environments around Blocks 3B, 3C and 10 by proactively promoting injury prevention and individual/community safety
- Proactively work with all stakeholders during the development phase, including clients, designers, contractors and the workforce, to create an incident and injury-free workplace.

4.3.8 Create a safe, secure and well maintained built environment

Objective

The Kensington Lane precinct will have a legible, durable and well maintained built environment that is secure, feels safe to users and deters crime.

Design elements

In pursuit of the above objective, the proposal includes the following elements:

- Buildings should feel safe for all and deter crime (e.g. a legible hierarchy of spaces; all entrances provide safe egress and access; removed opportunities for illegitimate entry; clearly delineated the boundaries between public, semi-public (or shared) and private spaces; located lifts for maximum visibility and natural surveillance).
- Maximise opportunities for natural surveillance, particularly of public open space areas through the use of glazing at the ground level where public and private spaces interface.
- Ensure opportunities for maintenance of the public domain.
- Appropriate lighting to ensure exit and entry doors are not hidden from view.
- A comprehensive Security Management Plan for the public domain that includes CCTV cameras and a concierge. On-site management will provide a presence to monitor surrounds of Blocks 3B, 3C and 10.
- Wide pedestrian thoroughfares across the site that maximises opportunities for natural surveillance of the Precinct.

A detailed description of the design features that supports this objective is contained in the compliance schedule under the Safety Management Plan (see Section 5).

Complementary strategies / actions for Blocks 3B, 3C and 10

The following strategies and actions should be implemented for Blocks 3B, 3C and 10:

- Use materials, finishes, equipment and fixtures that are attractive, robust, replaceable, reduce opportunities for graffiti and vandalism
- Design lighting so that entrances, exits, service areas, pathways etc., are well lit after dark when they are likely to be used. Provide a safe level of illumination at the ground level and public domain around the buildings with an emphasis given to preferred routes to encourage their usage by pedestrians, and supplementary lighting at lobby entry points
- Ensure prompt maintenance and repairs of the built environment (e.g. remove graffiti promptly to maintain a 'cared for' image) and facilitate prompt reporting of any damage or repair needs.

4.4 Translating the strategy into safety management plan

The next step in implementing this strategy is to transform it into a safety management plan that has practical relevance to the development of the site.

This Safety Management Plan is outlined in Section 5 below.

5 Safety Management Plan

5.1 Purpose

This section details the Safety Management Plan and satisfies Commitment No.30 contained within Frasers Broadway Concept Plan Modification Application 2008. The Plan uses the aims from the Safety Management Strategy as the basis to describe the proposed building design. It also uses the assessment criteria and design requirements/suggestions to address the guidelines outlined in the *Department of Urban Affairs and Planning (now the Department of Planning DoP) Crime Prevention and Assessment of the Development Applications Guidelines under Section 79C of the Environmental Planning and Assessment Act 1979*. Consideration has also been given, in developing the assessment criteria, to local council safety requirements.

5.2 Crime risk review of buildings based on Department of Planning and Infrastructure guidelines

5.2.1 Create a safe public domain for all users at all times

Block 3B, 3C and 10 are located on the periphery of the Central Park site and interface with the surrounding Chippendale community.

The key public domain areas around the proposed development include Kensington Lane (existing street), Kent Road (proposed street), Outram Street and Goold Street (existing streets). These streets service vehicle, pedestrian and cyclist traffic. Two publically accessible pedestrian-only thoroughfares are provided at the ground level between Block 3B and 3C and Block 3B and the adjacent Block 3A (subject to future PA). These public domain features surrounding the proposed buildings connect to the broader network of public domain areas within the Central Park site, such as extensive pedestrian and cyclist thoroughfares, various open spaces, parks and squares and well-lit public spaces surrounding retail, commercial and residential uses. The street layout and associated streetscape contribute to the public domain.

Kensington Lane will be maintained as a road, however will include traffic calming measures to encourage pedestrian activity in the public domain. The proposed treatment of Kensington Lane as a shared way, which may be closed off to vehicle traffic at particular times, would provide good pedestrian accessibility, potentially allowing outdoor cafes, markets and similar activities in the public space. The traffic calming measures that may reduce vehicle traffic at particular times, which could result in reduced levels of passive surveillance, would be offset by increased pedestrian activity and passive surveillance from the adjacent shopfronts in Blocks 3B, 3C and 10. Future activity generating uses in Blocks 6 and 7, such as cafes, retail shops and restaurants/bars will further activate this area and encourage surveillance.

Vehicle traffic on Kent Road, Outram Street and (at times) on Kensington Lane will assist in promoting passive surveillance to the public areas and building entries. Sightlines to the more vulnerable building lobby to Block 10 are provided from the retail space in Block 3C.

Two pedestrian-only through site links are located on the ground level between Blocks 3B and 3C, and Block 3B and 3A. The links measure 11m in width and will be permanently open to the public 24 hours a day, 7 days a week. The through-site links provide direct pedestrian access from Kent Road to Kensington Lane. They act as an extension of the main pedestrian thoroughfare that extends east-west mid-way through the Central Park site; from Abercrombie Street, via Irving Street, adjacent to the brewery building (south), then further east via an underpass in Block 5A and to the eastern end of the site at Kensington Lane. Paving materials along these public areas

function to differentiate the thoroughfares from surrounding streets. Fixed timber seating shall be located in the through-site links, which can be adapted for multiple uses. A 10m x 1.7m timber bench is located in the through-site link between Blocks 3A and 3B. Angled timber benches are located in the through-site link between Blocks 3B and 3C. This furniture is located in highly active areas and can promote pedestrian activity and gathering. Security monitoring shall ensure people who present a safety risk are moved away from the area.

The through site links are short in length (approximately 12.3 – 14m x 11m width) allowing people to clearly see to the other side.

The broader east-west pedestrian link creates visual and pedestrian permeability through the whole Central Park site. The proposed development contributes to the safety and legibility of this important pedestrian (and cyclist) thoroughfare. The use of glazing along the upper floors above the link between Block 3B and 3C, and windows on the western upper façade of the building, encourage passive surveillance of the pedestrian areas below.

Publically accessible open space, in the form of footpaths and walkways, is provided on the ground level outside building entries around the periphery of the proposed buildings. Activity-generating uses (i.e. retail) located on the ground floor of Block 3C and Block 3B have a street address predominantly to Kensington Lane. Block 10 contains retail uses at the ground floor fronting Kensington Lane and Outram Street. There are good sightlines for surveillance across the public domain areas at the ground level as activity-generating uses are proposed for the ground level of the proposed and surrounding buildings. The provision of retail uses along the ground floor and fronting onto public streets encourages activity along the building frontages and activity in the public domain, thereby promoting visibility and natural surveillance of this space.

The pathways and through-site links provide ample space adjacent to buildings that can function as gathering spaces and outdoor cafe areas.

Lobby entries for the student accommodation are provided directly off public streets and situated adjacent to active retail frontages, in order to co-locate activity generators with areas of high-pedestrian activity. Lobbies are directly adjacent to and visible from public streets. The main entrance to student accommodation within Blocks 3B and 3C is located off the pedestrian through-site link. Locating the lobby entry off the through-site link will attract pedestrians to the area and encourage surveillance and safety in the public domain and into the lobby.

The lobby entry to Block 10 is less visible, as it is located off a more narrow street (Outram Street) that does not contain active frontages. Outram Street provides a link between the internal streets within Central Park, such as Kent Road/O'Connor Street, to existing streets such as Regent and Goold Street. As a narrow thoroughfare, care should be taken to ensure the safety of pedestrians using this laneway. The use of glazing to the lobby walls, under-eave lighting, safety cameras/CCTV and retail uses at the ground level of Block 10, shall be satisfactory in terms of encouraging visibility and safety for this entry point.

Lighting along Outram Street, in particular along areas that do not have good surveillance opportunities, will need to exceed ambient light levels to ensure the street is well lit during the night and discourage criminals. Recessed under-eave lighting shall be provided along the southern frontage of Block 10, in particular at the entry point to the lobby of Block 10, to avoid light spill or shadow from street lighting along Kent Road and illuminate the public domain along Outram Street.

The adjacent blocks west of Kent Road (i.e. Blocks 5B / 5C) provide additional opportunities for observation and passive surveillance of Kent Road and the through-site links. These blocks contain apartments/balconies as well as rooftop terraces to assist casual surveillance.

Opportunities for night time activity are provided in the form of ground floor retail spaces in the precinct. The ground floor retail spaces have the potential to accommodate restaurant uses with extended trading hours. It is noted that the Kensington Lane precinct is intended to accommodate uses that are active for extensive periods of the day and night to create a 'student/arts vibe'. To this end, the small scale developments within Block 7 (subject to a future PA) will provide further opportunities for extended

trading retail and night-time uses along Kensington Lane. After hours activation of Kensington Lane will also be created due to the hours of student activity. From a safety point of view, high levels of activity will encourage casual surveillance of Kensington Lane and the entry to Block 3B/3C during the day and night.

There are a number of alternative entry points to the retail uses of Blocks 3B, 3C and 10, which are all provided directly off the adjacent public domain areas. The use of glazing along the ground floor retail frontages at the interface between public and private areas encourages visibility and surveillance. Block 3C contains glazing along the entire ground level street façade, with the exception of the fire stair exit. Block 3B contains extensive glazing that wraps around the northern, eastern (Kensington Lane), and part of the southern facades at the ground level. The western facade contains some glazing along the retail space and to the lobby area, however the majority of the façade contains building services. As Block 10 is a refurbishment of the existing building, glazing is provided between the existing brick elements to all retail frontages and the building lobby. Further details about the building design are contained in Section 5.2.8 of this report.

There are no opportunities for concealment around the perimeter of the buildings, as there is no major recessing in and building entries are generally at the building line and glazed. Consequently, opportunities for entrapment are minimised within the public domain areas surrounding Blocks 3B, 3C and 10.

There are multiple escape routes at this location as there are no dead ends in the surrounding street network, which links to existing streets within Central Park and surrounding areas.

Pathways surrounding the proposed buildings are paved with concrete unit pavers and brick (halmet blue). There shall be seamless transition between different paving materials. An awning above the public pathway around Blocks 3B and 3C contributes to creating a pedestrian friendly environment. Universal access to Australian standards has been incorporated into the streets, connecting walkways and building entries.

There is no landscaping proposed as part of this PA, thus no opportunities for places of concealment. It is noted that the southern wall of the adjacent building (Block 3A) will incorporate climbing vegetation, as well as potentially tall, high canopy trees in the adjacent Block (Block 6/7). These elements shall be assessed as part of future PAs.

In summary, public areas surrounding to the site, including pedestrian pathways and through-site links, are wide and consist of active retail edges. The use of traffic calming measured on Kensington Lane will enhance the pedestrian accessibility of the public domain surrounding the proposed buildings. Appropriate lighting of these areas will further enhance the legibility of the public domain areas. From a community safety point of view. This design provides the area with a legible public realm that is easy to navigate on foot, rather than having to rely altogether on 'second tier' information such as signage. This is particularly important for this project application, as the proposed development may accommodate international students and non-English speaking students. Visual and physical legibility, supplemented by signage, is therefore important.

Assessment Criteria	Design Requirements/ Suggestions	Comment
Design		
Design open space to be legible.	Ensure that entrances and exits are easily identifiable and that people are easily able to find their way around and locate each other.	As shown in the Concept Plan – Public Domain (Foster+Partners, March 2008), the public domain surrounding the site consists of the public streets (roadways and shared ways), public footpaths and publically accessible thoroughfares. The proposed through-site link between Block 3B and 3C is approximately 11m in width and will not contain any landscaping or other elements (such as seating) to disrupt views or encourage loitering within this area. This allows for the creation of views and direct pedestrian connections

Assessment Criteria	Design Requirements/ Suggestions	Comment
		between Kent Road and Kensington Lane. The public domain areas immediately adjacent to the proposed buildings, such as pathways, will be open, accessible and clearly legible from surrounding public streets. The pathways will also be visible from internal areas such as the retail tenancies at the ground level, communal areas within the building (i.e. the spaces that link Block 3B to 3C) and balconies in adjacent buildings. The entry/exit points in the public domain are not closed off, but will be easily accessible at all hours of the day. The open plan format of the public domain allows visibility from a number of active areas, including the surrounding street and the active ground floor uses in the building itself. Extensive use of glazing on the ground floor will further enhance visibility from internal areas to the public domain. Entrances and exits between the public and private spaces are discussed in Section 5.2.8 of this report. Street lighting shall be provided along all public streets. Lighting around the perimeter of the buildings will ensure the public domain is highly visible and identifiable, in particular for people existing the building lobbies. In particular, under-eave lighting shall be incorporated into Block 10 as the streets are narrow with limited opportunities for street lighting.
Create public domain that encourages visual and pedestrian permeability and connects into existing grid.		The proposed development has been designed to provide visual permeability and promote surveillance to the surrounding pedestrian and road network. The design ensures no obstructions of sightlines from the building entry/exit point to the surrounding public pathways and streetscape. Residents can therefore see outside before leaving the building. The use of glazing to predominantly all facades of Block 3C and 3B (as well as Block 3A), and the glazed entries to the ground floor retail spaces, will ensure the surrounding streets and pathways are highly visible. This creates opportunities for natural surveillance of the public domain. Block 10 is adjacent to existing buildings and streets that do not form part of the Central Park site (i.e. Goold Street). The proposed development connects to this existing grid, in terms of its public domain design, by maintaining a vehicle connection from Regent Street into the site, which connects to Kent Road and O'Conner Street. Whilst Goold Street incorporates some non-active uses such as driveway and access to services, some elements of the buildings are accessed off Gold Street (e.g. the community centre at 15-25 Regent Street), thus activating the corner. The upper residential levels of the proposed development of Block 10, and the surrounding development (e.g. 15-25 Regent Street), provide much needed passive surveillance of Goold Street.

Assessment Criteria	Design Requirements/ Suggestions	Comment
		Elements of the public domain and/or external elements of the proposed buildings, that encourage visual and pedestrian permeability and connection into the existing grid, include: • A pedestrian through-link open 24 hours a day, 7 days a week between Block 3B and 3C • Additional lighting along the Goold Street and Outram Street streetscapes • Continuity of paving along Goold Street and Outram Street • Activity generating uses along the ground floor, such as retail uses, with a direct street address along Kensington Lanr, Outram Street and Goold Street • Multiple entries to the retail spaces within the ground floor level of Block 3C • No planting along the public pathways or in the through-site link, to preclude offenders from hiding within or entrapping victims (It is noted that greening elements on the southern wall of Block 3B are shown in the Public Domain Plans. This wall-climbing vegetation shall be maintained to ensure the vegetation does not become overgrown and create opportunities for concealment in the through-site link between Blocks 3B and 3C). • Adjoining blocks (e.g. Block 6 and 7) will contain attractors of activity in the day and night, including retail, bar/café/restaurant use • Traffic calming devices along Kensington Lane will discourage vehicle use and encourage pedestrian activity. The pedestrian pathways that make up the public domain surrounding the building enable it to be clearly legible within the existing street grid. This is achieved through the use of continuous lighting, continuous and/or seamless paving, wide public pathways and pathways that are straight and connect to existing or proposed public thoroughfares. Measures to enhance visual permeability and maximise sightlines to public areas, include the use of glazing to all doors and openings in the building facade. The absence of any 'dead ends' in the street network that could be used to entrap pedestrians aims to encourage community safety and provide 'exit points' in the public domain. The proposed development creates additional opportunities for escape through the creation of a through-site link.
Plan and manage entertainment night zones so that they do not disrupt residents and have safe and direct access to public transport and car parks.		It is envisaged that the ground floor retail spaces will consist of retail units intending to operate between 9am to 9pm (hours of operation to be the subject of separate DAs lodged with Council / Department of Planning and Infrastructure). The proposed retail uses are located within the building so disruption to existing and future residents will be minimised. In Blocks 3B and 3C, the ground floor retail uses are recessed so as to provide a separation from the accommodation uses above. Access to upper levels will be restricted to students only, thus there will be no direct disruption to people residing in the student accommodation.

Assessment Criteria	Design Requirements/ Suggestions	Comment
		It is possible that part of the retail space may be converted to a night time use such as a restaurant or bar, which would assist to activate the area at night. Kensington Lane will be a pedestrian-focused thoroughfare, with a wide street reserve, meaning that offenders have few opportunities to hide. Continuous lighting means that the route between the site and Broadway (public transport) is safe for pedestrians. It is likely that students in Block 10 will use Kensington Lane to access buses at Broadway for public transport as the safest and most active route. Measures such as increased street level lighting and CCTV camera's surrounding Block 10 will create a safer environment for students in Block 10 that select to use the narrow Goold Street / Outram Street to access Central Station. The potential 'night zones' along Kensington Lane are closely situated to public transport services along Broadway. The site is also situated adjacent to the proposed car park accessed off Kent Road, which provides direct visibility to/from the through-site link. Appropriate management of spill over noise from Kensington Lane to the student accommodation shall be required to minimise disruption to future residents in surrounding buildings. The matter of noise shall be included in an overarching strategy for the operation and management of the student accommodation, which is critical for the area. The western façade of Block 3B on the ground floor contains services and thus fewer opportunities for natural surveillance. This area is, however, position to face a busy road (Kent Road) and a driveway to the basement parking, thus is expected to be one of the more heavily-trafficked roads. There are opportunities for surveillance of pedestrian using the footpaths along Kent Road from passing vehicle.
Entrapment spots		
Avoid entrapment spots.	Provide multiple entries/exits to all public open spaces to act as escape routes if people are being pursued.	There is no major recessing in the external perimeter of the proposed buildings, thus opportunities for concealment or entrapment in the public domain are reduced/minimised. The perimeter design of the proposed buildings is such that the buildings are built with one external building line and no recessed for doors or windows, thus avoiding opportunities for entrapment. There are multiple entries/exists in the public domain surrounding the proposed buildings. The street network is such that there are no 'dead-ends'. Opportunities for escape are provided along the street and pedestrian network. There are multiple escape routes from the proposed buildings as the site adjoins public domain and public streets on all boundaries.

Assessment Criteria	Design Requirements/ Suggestions	Comment
Natural surveillance		
Design to maximise opportunities for natural surveillance and visibility of open space areas from pedestrian, cycle and vehicular movements systems.		Open/public spaces in Block 3B, 3C and 10 consist mainly of the through-site links and pedestrian pathways surrounding the proposed buildings. Opportunities for natural surveillance/visibility of these areas from pedestrian, cycle and vehicular movements systems is created through the use of lighting, avoidance of landscaping (especially in the through-site link) and the activation of the ground floor uses, which will attract pedestrians to the area surrounding the site. The site will be visible from Kent Road, Kensington Lane, Outram Street, O'Connor Street and Goold Street (Block 10). A driveway to basement car parking is accessed off Kent Road, adjacent to the proposed pedestrian through-site link. It is envisaged that this location will therefore be high in slow-moving vehicle traffic, thus enhancing visibility and natural surveillance of the public areas and footpaths surrounding the proposed buildings. Outram Street provides a direct link to Regent Street, thus is envisaged to be a highly used thoroughfare. In this regard, there will be good visibility and opportunities from the street to the entry/lobby to the student accommodation portion of Block 10. Natural surveillance and clear sightlines are maintained as there are no structures or planting that could potentially impede on natural surveillance. Furthermore, the buildings adjacent to the site on the west side of Kent Road – Block 5A and 5C – includes balconies that encourage natural surveillance of the pathways surrounding the site. There will also be clear sight lines through the pedestrian link between Block 3B and from the internal road system. A number of activity generators (i.e. retail uses, community uses and multiple lobbies into buildings) will overlook the new public domain space. In particular, the reception area in Block 3B will contain a full-time on-site manager, which will have direct visibility to the through-site link from the building lobby.
Locate open space where it can be easily observed by legitimate users of adjacent space / buildings.	Locate open space at locations surrounded by a mix of land uses, so it can be easily observed by people who are spending time there (not just passing through).	The main public areas within the site, being the pedestrian pathways and through site link, will be easily observed by legitimate users of adjacent spaces and buildings. There is unimpeded visibility from surrounding streets, apartments and balconies of surrounding blocks, and from active retail uses in the Blocks 3B, 3C and 10, and future Block 6 and 7. This includes both day and night time use.
Ensure that the design and	Select trees for critical locations that do	As noted above, there is no landscaping on the ground floor level around the proposed

Assessment Criteria	Design Requirements/ Suggestions	Comment
location of landscaping allows for natural surveillance.	not have branches below 1.5 m (for the trees' protection, it is better if they do not have branches below 2.4 m).	buildings. Landscape elements have been intentionally minimised so to enhance the site's legibility and pedestrian visibility. Wall climbing on the southern wall of Block 3A shall be maintained regularly to ensure the vegetation does not become over-grown, however this is subject to a future application. It is understood that landscaping is also limited in the surrounding public domain areas, so to protect and maintain natural surveillance of the precinct. This includes no use of shrubs or low-lying plants in surrounding public domain areas and wide, paved pedestrian pathways that are well lit.
Avoid plants that create areas of concealment.	Select species having regard to their type and location and their mature size and form to minimise possible hiding places for intruders.	No planting is proposed as part of this PA.
Ensure that landscaping does not obstruct building entries.	Avoid placing taller growing plants and trees in areas that screen doorways, entrances and windows.	No planting is proposed as part of this PA.
Ensure high visibility around paths.	Ensure that planting within 5m of a pedestrian pathway is lower than 1m or thin-trunked with a high canopy.	No planting is proposed as part of this PA.
Avoid future sightline impediments.	Avoid use of landscaping materials that could, when mature, serve as screens or barriers to unimpeded views of pathways etc.	No planting is proposed as part of this PA.
Activity generators		
Create attractive and inviting public open space.	Design public open space to be interesting and inviting to attract usage by legitimate users.	Public open space within the proposed development is limited to the public streets and pathways surrounding the proposed buildings. These spaces are make attractive and inviting through the provision of activity-generating uses at the ground floor level in Blocks 3B, 3C and 10. The ground floor uses will consist of retail uses to activate the street level, and attract users during the day and night. The possibility to include a cafe/restaurant within the ground floor would generate night and day activity in the area. The outdoor spaces outside the proposed building, namely Kensington Lane, will be paved, well lit and have unimpeded visibility to/from the surrounding street network, thereby providing for surveillance and multiple, alternative escape routes. Material selection on the ground floor shall be inviting and attractive, but safe. There are no large expanses of blank walls that would attract graffiti. There is the potential for Kensington Lane to be transformed into a laneway "precinct" for markets, outdoor art and similar activities, further opening the space to pedestrian and activity-

Assessment Criteria	Design Requirements/ Suggestions	Comment
		generation. The design of development fronting Kensington Lane includes extensive ground floor glazing and active uses (e.g. retail) built to the street frontage, thereby providing opportunities for surveillance to/from the internal spaces. Adjoining public domain areas (e.g. Main Park) are 24/7 attractors. Careful management of the night uses should be implemented, so to ensure antisocial behaviour is minimised. The student accommodation management/operator shall provide an additional 24 hour security presence to prevent unauthorised access to the student accommodation, in addition to the security measures described in Section 5.2.8 of this report.
Populate and activate open spaces such as streets and squares with activity generators so as to maximise natural surveillance by a diversity of users.	Locate activity generators at strategic locations along pedestrian routes.	As above. The activity generators located on the ground floor of building fronting Kensington Lane are strategically located to foster a unique students/arts precinct along Kensington Lane. Kensington Lane is the "destination" end point of the main east-west pedestrian route through the site, and will attract a vibrant student population.
Avoid creating spaces that do not attract use.	Avoid creating unused or unusable "dead" spaces or isolated pockets.	No "dead" spaced are proposed, as all spaces are usable and/or accessible with no open space ending at a wall or barrier.
Ensure that adjoining and co-located uses are compatible and do not create an unhealthy situation or danger.		Building uses in the adjoining blocks include future retail/commercial uses along the eastern side of Kensington Lane. These uses will contribute to the creation of a laneway precinct and will provide a location for students of the student accommodation to gather, interact and display art. Safety in this precinct shall be ensured through a focus on active opportunities surveillance from adjacent active ground floor building uses and a 24/7 security/management operator dedicated to the student housing. Lighting and security measures such as CCTV will reinforce security in the precinct. Although Block 10 is slightly separated from the Kensington Lane precinct and on the edge of the Central Park site, it is noted that the development is compatible with co-located uses as existing developments in the area include student accommodation. Block 10 is located in close proximity to the approved student accommodation development at No. 15-25 Regent Street, No. 1-9 Regent Street, and boarding house use at No. 11-13 Regent Street. There would be increased pedestrian activity by students travelling across the Central Park site to Block 10 as well as surrounding student accommodation from UTS and other institutions. It is recommended that a Student Accommodation Plan of Management be prepared to provide a security management system. The system should link with and coordinate with surrounding student accommodation providers/hotels/motels/businesses and residents.

Assessment Criteria	Design Requirements/ Suggestions	Comment
		Continuous lighting and at grade paving ensure the pathways to adjoining uses are safe, legible and easily accessible. Multiple escape routes are provided so to ensure alternative ways of escaping dangerous situations.
Features and fixtures		
Use materials, finishes, equipment, plantings and fixtures in the design of the public domain and artworks that are attractive, robust, replaceable as an integrated design solution to reduce opportunities for graffiti and vandalism.		Paving in public areas of the site shall comply with the relevant City Codes and BCA requirements to ensure slip resistance of the pedestrian surface materials. It is envisaged that the selection of materials shall be consistent with and complement the selection of materials in surrounding blocks of the Central Park site (i.e. paving design will integrate with other public domain areas). All materials shall be high quality and robust. There is no planting within the site so to prevent obstructions to visibility or opportunities for offenders to hide. The use of glazing at the ground level has been maximised as a means of deterring vandalism. As Block 10 is a refurbishment and extension of the existing brick building, elements of the original brick facade have been maintained, however there are no large expanses of blank brick walls. The brick elements are generally narrow with glazing in replacing the original roller stutters. Measures to deter graffiti of the existing building elements includes the use of lighting at the perimeter of the site, and day and night activity generating uses, so to deter opportunities for graffiti in the first instance. The use of spotlighting on the brick elements is discouraged, as this may encourage graffiti. Extensive use of glazing at the ground level of Block 3B and 3C will deter vandalism. The installation of louvers along the facade of Block 3B where building services are located will deter vandalism. This part of the site is highly visible from surrounding streets and development.
Provide facilities in safe, well-used spaces.	Locate facilities (e.g. telephones, barbeques etc) near areas of active use.	Facilities should be located in publicly accessible areas along pedestrian pathways, which have clear sightlines from building entrances and windows of the lobby area. Facilities should be appropriately lit. An accessible/disabled bathroom is located on the ground floor of Block 3B adjacent to the building lobby. The bathroom is accessed off a corridor/circulation space that also provides access to the bicycle storage room and waste room. This circulation space is accessed from the lobby and shall incorporate security/locking measures to ensure no public access. In order to prevent opportunities for unauthorised access to the circulation space and bathroom, it is proposed to incorporate one or more of the following recommendations:

Assessment Criteria	Design Requirements/ Suggestions	Comment
		• Provide glazing along the lobby wall, so to provide direct sightlines from the lobby to the back room/corridor/bathroom entry **and/or** • Provide a glass panel in the door to the circulation space/corridor to provide visibility from the reception. The on-site management/concierge will be present in the lobby and at the entry as an additional precaution to ensure no unauthorised access to the circulation space. Bike parking areas are provided on the ground floor in Block 3B and 10. In Block 10, the door to the bike storage room from Goold Street should be a one-way, exit only door, to prevent opportunities for theft. In Block 3B, the bike room is accessible from a private corridor, which is security controlled and located adjacent to the on-site concierge/manager. The door to exit this space is on the western façade facing Kent Road. This door should be either a one-way, exit only door or security controlled with security access/CCTV.
Ensure signage and / or maps at the entrance to open space which provides clear information regarding access routes and designated special use open spaces.		It is understood a forthcoming Signage Strategy will detail measures to address ease of way finding for pedestrians and vehicles. As the open space areas of the proposal are generally a 24/7 open public thoroughfare and pedestrian pathways, it is not envisaged that signage for the open space areas is critical.
Provide safe routes to facilities.	Ensure that access to facilities is as direct as possible and free of obstruction.	Safe routes will be provided to all facilities. Pedestrian routes will be made safe through the use of appropriate fixtures. Lighting will be provided within the public domain, in particular along streets to encourage visibility at night. Materials selected for the public domain must provide seamless public/private domain connectivity for pedestrians, thus not visually or physically prohibiting public access through the site. This is particularly important as many students/visitors to the site may be international students, and legibility needs to be created through inviting and safe places in addition to signage. Ground floor uses are activity generators (e.g. retail) during the day and night. The site is open and accessible from several streets, thus facilities provided in the public domain will be visible to encourage surveillance from adjoining streets and internal areas. As stated above, the secondary door to exist the bike room in Block 10 is recommended to be an exit-only door, as there are limited surveillance opportunities on Goold Street.
Provide safe seating in areas of active use.	Locate seating in convenient locations where it can be easily seen.	Timber seating is provided within in the 11m-wide through-site links between Blocks 3B and 3C and 3B and 3A. The location of the seating in high-pedestrian traffic areas that are well lit and

Assessment Criteria	Design Requirements/ Suggestions	Comment
		adjacent to active retail uses/lobby entries will encourage pedestrian activity in this area and within the Kensington Lane precinct. The on-site management shall ensure no loitering in this area.
Landscape - Materials		
Grade planting, with taller plants next to walls.		No planting is proposed as part of this PA.
Specify high-quality plants to increase their chance of survival and their resistance to vandalism.	Rather than planting saplings, consider planting heavy standard (120-140 mm girth), extra heavy standard (140-160 mm girth) or even semi-mature trees (200-720 mm) to make it physically more difficult to snap main growing stems.	No planting is proposed as part of this PA.
Avoid plants that obstruct natural surveillance.	Avoid medium-height vegetation with concentrated top-to-bottom foliage.	No planting is proposed as part of this PA.
Use plants that encourage natural surveillance.	Consider plants such as low hedges and shrubs (1 – 1.2m high), creepers, ground covers or high-canopied trees, clean-trunked to a height of 2m, as they permit natural surveillance.	No planting is proposed as part of this PA. It is noted that wall climbing plants on the southern wall of Block 3A may be proposed as part of a future PA for Block 3A. Regular maintenance of the planting should occur to ensure no overgrowth.
Protect delicate foliage.	Use sharp-edged foliage to protect more delicate foliage.	No planting is proposed as part of this PA.
Apply "green screens" on graffiti-prone walls to avoid graffiti.	Carefully locate climbing plants in key locations to prevent graffiti. Take care in selecting these plants, as some are known to damage brickwork and wall surfaces.	No planting is proposed as part of this PA. It is noted that wall climbing plants/green screen is to be proposed on the southern wall of Block 3A.
Utilise "keep-off" planting.	Use shrubs such as prickly thorns to prevent short cuts across beds but ensure that no dangers are created.	NA
Minimise opportunities for vandalism.	Avoid loose stones for ground cover near buildings with windows.	NA
Use hard landscaping as appropriate.	Use hard landscaping details such as low fencing and walls where appropriate to deter pedestrian, cycle, skateboard, rollerblade or vehicle movement, where required.	NA
Provide stable surfaces on all pathways.	If deterrent surfaces are constructed using cobbles or large pebbles, make sure that they are embedded for two-thirds of	All surfaces have stable and seamless paving.

Assessment Criteria	Design Requirements/ Suggestions	Comment
	their own depth.	
Provide solid, non-slip surfaces for pathways.	Avoid using gravel paths and borders, as these both provide loose material that can be used as missiles and may cause difficulties for people with impaired movement.	It is recommended that all ground surfaces will feature non-slip qualities where necessary.
Maintenance		
Consider maintenance processes in public open space design.	Design public open space for easy maintenance of well used areas.	Maintenance of the external/public domain areas shall be detailed in a Student Accommodation Plan of Management.
Ensure that public open space appears well cared for. This will deter vandals.	Ensure that open space and associated amenities are well maintained, indicating that the area is well cared for by ground staff.	As above. A staff member/security officer shall be present on site 24 hours a day. Maintenance of the rooftop landscaping area shall be provided via a lockable door from the rooftop area, for maintenance purposes only.

5.2.2 Create a safe and easily accessed pedestrian and transport network

The proposal is located at the edge of the Central Park site within a high-traffic area of the site in terms of pedestrian activity. The main pedestrian route within the site is the through-site links located between Block 3B and 3C and 3A and 3B. The 11m wide through-site links connect Kensington Lane to the main east-west pedestrian pathway across the Central Park site. The entry point to access the lobby of Block 3B/3C is located off the through-site link.

Through-site links are located at the ground level adjacent to active building uses (i.e. retail) and public streets. This provides the building entries with good visibility and direct sightlines to and from the surrounding public domain, as the links shall be high-traffic pedestrian environments. This pedestrian space/building entry is made safe through the provision of lighting, removal of opportunities for hiding (i.e. no landscaping in this space) and the provision of a 24/7 security/reception within the lobby of Block 3B. The use of glazing at the ground level lobby will create clear sightlines between the lobby and the surrounding public domain.

The pedestrian environment around Block 10 is affected by the existing buildings along Outram Street/Goold Street. These streets are relatively narrow and do not contain active frontages. The entry point to Block 10 is located directly off Outram Street and adjoins retail uses at the ground floor of Block 10. The pedestrian environment in this location is maintained through the use of excess external lighting at the entry point to Block 10, lighting within the lobby and retail spaces and security measures including CCTV.

The transformation of Kensington Lane into a vehicle/pedestrian thoroughfare will encourage accessibility and activity at the ground level. Combined with the active ground floor uses in Blocks 3B, 3C and 10, Kensington Lane will create opportunities for passive surveillance of the public domain and entry points to the proposed student accommodation buildings.

The main pedestrian connection is envisaged to be via Kent Road to Broadway. This route is short distance to the bus interchange located along Broadway, and provides good access to major transport networks i.e. Railway Square/Central Station. Additional signalised crossings will be provided along Abercrombie Street Broadway to minimise potential dangerous crossings and the existing set of traffic signals at Broadway/Jones Street will be reconfigured to introduce a right turn bay into the Balfour Street connection, thus improving safety for students walking to/from UTS. There is direct access from Outram Street to Regent Street and Lee Street, which provides good access to Central station. Outram Street will function as a 2-way street.

Discussions are underway with RMS and City of Sydney Council to determine speed limits within the internal road system, as well as the configuration of Kensington Lane.

Generally, the proposal will include measures to maintain safety, surveillance and accessibility in the pedestrian network as follows:

- Continuity of lighting along the Kent Street and Kensington Lane streetscapes
- Continuity of paving within the through-site link and surrounding public pathways to link to the existing pedestrian network
- Minimal planting in the public domain, with no planting in the through-site link, to preclude offenders from hiding or creating opportunities to entrap victims
- Activity generating uses.

It is recommended there be external lighting for Block 10, in particular at the entry point to the student accommodation lobby.

Assessment criteria	Requirements/Suggestions	Comment

Design of routes and pathways		
Ensure that all pedestrian routes (footpaths along the side of streets, pedestrian laneways/alleyways, and pathway within public open space) are clearly defined to increase safety and security of all users during the day and night (use lighting to encourage use of preferred routes).		Pedestrian routes along Kent Road, Kensington Lane and Outram Street are organised to fit into the surrounding pathways. The site provide a direct pedestrian link between from Kensington Lane to the west, including to Main park (i.e. from east to west) via a public through-site link, which will be open 24 hours a day, 7 days a week. The adjacent building walls at the ground level will be glazed to ensure legibility and visibility at all times day and night. Public areas within the site will be designed to assist the safe movement of pedestrians by eliminating dark spaces along footpaths. Lighting in the public domain surrounding Block 3B, 3C and 10 shall be designed to illuminate the entry points to the buildings. As shown in the Luminaire Schedule, lighting is proposed along Kensington Lane and Kent Road. Lighting should also be provided externally of Block 10 at the entry point to the lobby.
Encourage establishment of activities with a high after hours use along the edges of the pedestrian network.		As mentioned above, the proposed retail uses within Block 3B, 3C and 10, and the future Blocks 6 and 7, have potential to convert to night time uses with temporary outdoor seating and tables. This has the potential to increase pedestrian activity, and therefore passive and active surveillance, of the surrounding public domain, in particular the pedestrian through-site link.
Create activity centres (shopping, restaurant and entertainment areas) that have short logical connections to the public transport and the safe pedestrian network.		The proposed routes from Kensington Lane are direct and cover a short distance to Broadway to access public transport. Continuous lighting is proposed for the perimeter of the site along to promote safety and visibility, especially at night. This pedestrian route via Goold Street and Outram Street contains some non-active frontages, however there should be consideration to external building lighting on Block 10 to ensure the surrounding streets are lit. External illumination at the building entry to Block 10 shall ensure students entering the building at night have clear visibility.
Provide public transport stops (taxi and bus) which maximise natural surveillance.		The existing bus stop along Broadway and at Central is well located to service the site. Natural surveillance will be provided by the retail uses located along Broadway.
Optimise opportunities for alternative transport by designing footpaths, cycleways and pedestrian areas so that pedestrians and cyclists have priority over vehicles (where possible).		The proposal identifies a pedestrian route via a through-site link to enable direct and 24 hour pedestrian access between Kensington Lane and the rest of the Central Park site, including Main Park. The public streets surrounding the site are identified as "main pedestrian ways" in Concept Plan - Traffic - Pedestrian and Cycle Routes, Foster + Partners, April 2008. Two pedestrian crossings are provided across Kent Street providing safe pedestrian access from Block 3B, 3C and 10 to the Central Park site. Kensington Lane is proposed to function as a shared vehicle/pedestrian thoroughfare, with traffic calming devices to slow traffic.

Assessment criteria	Requirements/Suggestions	Comment
Design of routes and pathways		
		Safe bicycle parking facilities are located in Blocks 10 and 3B.
Use temporary and permanent signage to assist people to easily locate desired services and facilities to ensure people feel safe and secure in the public domain, and are directed along safe routes to activity centres and public transport (this may involve the establishment of temporary signage during the construction process).		It is understood that a forthcoming Signage Strategy will detail measures to address ease of way finding for pedestrians accessing services and public transport and for motorists.
Develop partnerships with City of Sydney council and public transport operators (e.g. State Transit, Taxi operators) to encourage the development of safe pedestrian network links that extend beyond the boundaries of the site to key public transport interchanges such as Central station and Railway Square.		The traffic consultant has previously held discussions with State Transit about public transport infrastructure. Dialogue between RMS/Frasers is on-going to determine roadworks, etc.
Design pathways to be direct and to follow pedestrian desire lines.	Ensure that careful consideration of existing and likely preferred routes is reflected in the design of pathways.	The proposal connects to the pedestrian network established in the Concept Plan (Mod 2) and previous PA approvals. In particular, the site is well connected to the main east-west pedestrian link across the site. It is envisaged that Kensington Lane and Kent Road will have high levels of pedestrian activity as these routes are the main links to Broadway/UTS, and likely to be highly active.
Avoid planting dense shrubbery around pedestrian paths.	Set shrubs well back from paths or use plant material with thorns or other repelling characteristics.	No planting is proposed within this PA.
Co-locate natural surveillance areas.	Co-locate pedestrian, cycle and vehicular movements systems to encourage	As stated above, the proposal provides maximum opportunity of surveillance of public areas by proposing activity generating uses for both day and night, utilising appropriate lighting and

Assessment criteria	Requirements/Suggestions	Comment
Design of routes and pathways		
	maximum surveillance of public areas.	glazing elements.
Co-locate pedestrian, cycle and vehicular movements forming a collector system for meeting others and maximising surveillance.	Channel pedestrian traffic between activity generators so that people using footpaths, especially in the evening, meet other people.	People accessing activity generators will be directed to the main pedestrian link across the Central Park site through the pedestrian crossing along Kent Road and through-site link to Kensington Lane, which will both channel people to the building lobby area of the student housing and retail spaces at the ground level. In this regard the proposal encourages natural surveillance by directing pedestrians to a central area.
Ensure that routes are as direct as possible, especially if they will be used at night.	Provide direct access routes to and from buildings from streets, taxi ranks and bus stops.	Routes are direct and will ensure safety. The through-site pedestrian link will be accessible 24/7, will be straight and 11m in width, and will benefit from night activity in the adjacent Kensington Lane precinct. The direct routes to Regent Street, being Outram Street and Goold Street, are not the preferred route to nearby streets as they contain less active frontages.
Edging of pathways		
Make sure that path edging is consistent and sturdy.	Ensure that paving of paths meets surrounding ground at grade to avoid falls.	Path paving shall meet surrounding ground at grade level. Pedestrian pathways shall provide a seamless interface between the surrounding streets, footpaths and building entries. Paving should be sealed and treated to ensure slip resistance. Refer to paving selections in Public Domain Report/Plans.
Clearly define paths from surrounding ground.	Provide clear edge definition between paths and surrounds / planting.	The proposal provides clear material, colour and texture delineation between the paths, surrounding streets and internal areas. As shown in the Site Master Plan - Public Domain: Landscaping (Jeppe Aagaard Andersen & Turf Design Studio), distinct paving materials are used to define different areas in the public domain, such as Brick-Hamlet Blue for the Through site links and footpaths under awnings, Ashpalt for footpaths directly adjacent to Kensington Lane and Outram Street, and Concrete Unit pavers for main pedestrian thoroughfares (i.e. pathways along Kent Road). There shall be seamless connectivity between materials for pedestrians traversing these public areas.
Apply careful use of high-edging.	Use high edging (such as garden walls) to define edges of paths and planter beds; stained broom-finished concrete is the best material. This type of edging may also be used as seating. Ensure that edging cannot obscure potential assailants.	It is understood that the proposal uses robust and durable materials where possible and will not limit the proposal's legibility or pedestrian visibility.
Sightlines		

Assessment criteria	Requirements/Suggestions	Comment
Design of routes and pathways		
Landscape and light paths to maximize sightlines.	Apply footpath lighting and landscaping so that it is possible to see ahead and to both sides of the path, and therefore avoid the chance of attack by a hidden intruder.	Lighting shall be applied to Kensington Lane and Kent Road, as well as Outram Street (or at the entry to Block 10). The lighting elements shall ensure that: • Streets are visible from the building entrances/exits • There are clear sightlines from the building entries, in particular the lift lobby, to outdoor public spaces.
Orient paths to maximize sightlines.	Avoid curves or changes in grade that will impede sightlines. Make paths relatively straight where that does not create a monotonous appearance.	The pedestrian network is based on a right angle grid pattern and will not include any curves or bends that could impede sightlines. This allows for direct sight lines. There is a right angle bend in Goold Street between Block 10 and Regent Street. Sightlines for pedestrians using Goold Street shall be supported by adequate street lighting and, in particular, lighting around the periphery of Block 10 that is consistent with the existing lighting and does not create spill.
Avoid blind corners on pathways.	Ensure that pathways are direct. All barriers along pathways should be optically permeable (see-through) including landscaping, fencing, etc.	There are no/limited obstructions on public pathways or within the through-site link proposed as part of this development, so to prevent the disruption of sightlines.
Avoid sightline impediments	Avoid sharp "blind corners". Where they do occur consider the installation of mirrors to allow users of footpaths to see ahead of them and around corners.	There are no blind corners within the proposal. The existing Goold Street has a right-hand bend, which presents a possible impediment to sightlines. This section of road is outside of the proposed development. It is envisaged that students would primarily use the streets with high levels of pedestrian amenity and activity, such as Kent Road and Kensington Lane to access Blocks 3B, 3C and 10. It is recommended to install a mirror along the Goold Street footpath to assist in visibility.
Create safe routes to bus stops, taxi stands, buildings and car parking.	Orient paths and planting so that the whole route between bus or parking areas and building entries can be clearly seen.	See above.
Natural surveillance		
Co-locate pedestrian, cycle and vehicle movement routes, to maximise activity and natural surveillance opportunities, whilst ensuring a safe interface between them (e.g. dictate low vehicle speed limits in shared zones and	Ensure that all footpaths are visible from activity rooms of adjacent buildings, particularly those where reliable night-time activity can be predicted (e.g., apartments).	People accessing activity generators within the site will be guided or directed by the proposed use of lighting and paving. There are a number of possible routes to allow access for pedestrian and vehicle to Kensington Lane, such as the surrounding public streets (Broadway, Kent Road) and the pedestrian pathways. These routes link directly to adjoining pedestrian and cyclist thoroughfares. The proposed Block 3B, 3C and 10 buildings, in addition to adjacent uses, provide opportunities for natural surveillance of the surrounding public domain, in particular Kensington Lane. There

Assessment criteria	Requirements/Suggestions	Comment
Design of routes and pathways		
heavy pedestrian areas; provide clear definition between bicycle and pedestrian path ways etc).		will be opportunities for visible/surveillance from: • Ground floor retail in Blocks 3B, 3C and 10 • Ground floor retail in Blocks 6 and 7 (subject to future PA) • Outdoor cafe areas in the public domain adjacent to ground floor uses in Blocks 3B, 3C, 10, 6 and 7 • Private rooms of the student accommodation in the upper levels of Blocks 3B and 3C • Private rooms and communal study rooms in the upper levels of Block 10, which have a glazed eastern façade for direct overlooking of Goold Street • Lobbies of Blocks 3B and 10 are finished with clear glazing, allowing clear sightlines to the public areas whilst delineating the public and private territory • The link between Block 3B and 3c incorporates communal areas for student gathering, and are glazed on both the eastern and western sides to allow for clear visibility • Ground floor retail in Block 3A • Upper level commercial rooms of Block 3A • (Refer to *Concept Plan–Indicative Land Use–Typical Floor/Ground Level*, March 2008, Foster + Partners) The upper student accommodation levels of Blocks 3B, 3C provide passive surveillance of Kensington Lane and Kent Road. The upper student accommodation levels of Block 10 provide much needed passive surveillance of Outram Street and Goold Street.
Encourage legitimate use for natural surveillance.	Encourage the casual use of spaces adjacent to pathways so that they can become "animated" and filled with appropriate uses that promote natural surveillance, such as playgrounds.	Kensington Lane and the ground floor public area adjacent to Black 10 will be lined with a mix of retail spaces on the ground floor (that will be used by workers, students, residents and general visitors), as well as building lobbies. These uses will encourage activity and provide natural surveillance to the site. The use of Kensington Lane as a shared-way that, at times, can be limited to pedestrian-only traffic for "animated" uses such as markets and outdoor arts spaces. There will be opportunities for pedestrian activity/social gathering in and around the through-site links as retail uses such as cafes are expected to extend outdoors into these areas, and through the use of furniture in these locations.
Entrapment spots adjacent to pedestrian routes		
Avoid creating entrapment spots by pedestrian routes.	Avoid creating entrapment spots (e.g. storage area, hidden area below or above grade) adjacent to a main pedestrian route, movement predictor or private	There are no dead end or entrapment spots proposed within the development in the public domain. As stated above, the use of glazing along the walls of the ground floor uses will assist in creating sightlines to/from the lobby entrance and the retail spaces. This means that the potential for entrapment is further is minimised. There are multiple escape routes in the

Assessment criteria	Requirements/Suggestions	Comment
Design of routes and pathways		
	dead-end alleyway.	surrounding pedestrian networks.
Avoid creating entrapment spots by pedestrian routes.	Avoid gaps in the street, such as entrances to interior courtyards, which may create an environment that is or appears isolated after dark.	See above.
Escape routes from movement predictors		
Avoid dead-ends.	Provide a visible exit point (or escape route) which provides an alternative route back to the built environment to enable a person to avoid a situation in which he or she might feel threatened. Provide signposts to identify exit routes.	All pedestrian routes have alternative access (escape route). It is understood that a forthcoming Signage Strategy will detail measures to address ease of way finding for pedestrians accessing services and public transport.
Avoid creating entrapment spots.	Ensure that if pathways have a landscape border it is of low-lying or high branching vegetation. Avoid trees or bushes that create entrapment spots and reduce sightlines.	No low-lying planting is proposed for the site.
Maintenance		
Maintain paths and surrounding areas.	Ensure that pathways and surrounding landscaping is carefully maintained to avoid hazards.	Pathways should be maintained and kept free of litter.
Maintain laneways and boundaries.	Ensure that laneways and fencing on laneway boundaries are adequately maintained.	No fencing is proposed.
Cycleways - Safe routes		
Design bicycle routes both for convenience and security.	Locate cycle routes near vehicle and pedestrian traffic during the day and evening. Avoid empty spaces and dangerous crossings as possible.	Bicycle routes are co-located with the main vehicle and pedestrian thoroughfares, being Kent Road, Kensington Lane and Outram Street. Lighting of these thoroughfares shall enhance the cycle pathways by providing safety through adequate illumination and thus visibility of the cycle pathways.
Avoid tall bushes, dense shrubbery and dense clusters of trees immediately adjacent to routes and at predictable	Use low planting (maximum height 600mm) and high-branching trees (2 metres) to open sightlines. These are particularly recommended within a	No bushes, dense shrubbery of clusters are proposed as part of this PA.

Assessment criteria	Requirements/Suggestions	Comment
Design of routes and pathways		
stopping points such as road crossings.	distance of 15 metres from bicycle stop signs or road junctions.	
Signage and lighting		
Ensure that routes are well lit.	Maintain consistent lighting of cycle paths and immediate surrounds.	Appropriate lighting shall be provided to key pedestrian pathways, including Kensington Lane and Kent Road.
Bicycle parking areas		
Ensure that bicycle parking areas are well lit.		Bicycle storage facilities are located within the ground floor of Block 3B and 10 for the use of residents/tenants of the student accommodation. All bicycle parking areas shall be lit at all times. Further details are provided below.
Safe bicycle parking and locking facilities.	Ensure bicycle parking is located where it can be informally surveyed from streets and interiors of the building, not hidden behind walls or fences, for example. Install glazing along walls/doors to provide direct sightlines from public areas to storage rooms.	• Block 3B Bicycle storage is located at the ground level within a private/restricted back-of-house area. This space is located adjacent to the building lobby through a door located immediately adjacent to the full-time security manager/reception/administration area. In order to provide opportunities for direct visibility to the back of house from the lobby, it is recommended to: – Provide glazing along the lobby wall, so to provide direct sightlines from the lobby to the back room/corridor/bike storage room and/or – As a minimum, provide a glass panel in the door to the back room/corridor to provide visibility between the reception and back room. The back room/bicycle store room shall be lit at all times and include CCTV cameras. The door to exist the "back of house" area to Kent Road shall either be an exit-only door, or include security measures such as security access and CCTV. • Block 10 Bicycle storage is located at the ground level and accessed directly from the building lobby. It is recommended that the room be lit at all times and/or with sensors when people entre the room. As an added safety measure, it is recommended that CCTV be provided in the bike room, and the exit door to Goold Street be a one-way exit only door, to avoid opportunities for unauthorised access to the room from the street. Alternatively, this door shall be access controlled to allow restricted movement in and out for users of the building only.
Car park design		
Ensure that the design of car parks provides direct access routes that maximise natural		There is no parking proposed as part of this PA.

Assessment criteria	Requirements/Suggestions	Comment
Design of routes and pathways		
surveillance and visibility.		
Ensure that roof heights in car parks are above 2.2m to allow for maximum visual surveillance and to reduce vandalism of lighting fixtures.		There is no parking proposed as part of this PA.
Ensure basement car parks uses materials and finishes that reflect light.		There is no parking proposed as part of this PA.
Surveillance		
Ensure open sightlines which allow for maximum surveillance of car parks.		There is no parking proposed as part of this PA.
Where appropriate use technical surveillance measures in car parks and buildings.		There is no parking proposed as part of this PA.
Entrapment spaces		
Ensure blind spots, sharp angle corners, heavy columns and entrapment spots are minimised within car parks.		There is no parking proposed as part of this PA.
Building egress and access		
Ensure direct and easy access is provided from the car park to the street, apartment blocks, and retail outlet.		Basement parking has been approved under previous PAs.
Secure pedestrian and vehicular entrances and exits to car parks.		As above.

5.2.3 Create a safe environment during the development process

It is intended that safety management systems and protocols pertaining to the construction phase of the development will be designed through the preparation of Construction Management Plans at the next stage of the development process. Construction Safety Management Plans should include information relating to construction signage and site access.

Given the development of Block 10 will retain elements of the existing building, it will be important to protect the fabric of the building and ensure no damage, vandalism or graffiti occurs during the construction phase.

As Block 3B, 3C and 10 are located at the south-eastern edge of the Central Park site, care should be taken during the construction phase to ensure safety for adjoining and adjacent existing development outside of the Central Park development.

Assessment criteria	Requirements/Suggestions	Comment
Construction sites		
Develop a specific management program for construction sites.		To be addressed through the preparation of a Construction Safety Management Plan for the site.
Avoid creating opportunities for vandalism during construction.	During construction, delay installing equipment until the site is ready, then promptly remove rubbish.	24 hour supervision of the site will limit opportunities for vandalism. More detailed guidelines and directives to minimise damage to the site should be identified in the Construction Safety Management Plan.
Ensure prompt maintenance and repairs at all construction sites (e.g. remove graffiti promptly to maintain a 'cared for' image) and facilitate prompt reporting of any damage or repair needs (e.g. place signs indicating contact details for emergency maintenance in prominent location).		24 hour supervision of the site will ensure rapid identification and action on graffiti or repair requirements. Building contracts should incorporate requirements to meet the Construction Safety Management Plan.
Proactively manage and stage development so that a safe environment is maintained for visitors, business owners and residents at all times during the construction process (e.g. management public access to areas under construction,		This should be addressed in a Construction Safety Management Plan.

Assessment criteria	Requirements/Suggestions	Comment
Construction sites		
undeveloped sites and roads).		
Ensure that signage contains current and relevant information as the area is developed.		This should be addressed in a Construction Safety Management Plan as well as the Signage Strategy.
Educate surrounding residents/visitors/business owners on safe areas and "no go zones" during the development process.		Consultations with City of Sydney, TAFE, UTS and surrounding residents/businesses will be undertaken at the next stage to development to inform stakeholders and the community with respect to safe areas and "no go zones". In addition, information on the construction process will be provided on the Central Park website, community newsletter and site hoardings. Regular community information and feedback sessions are held at the site to keep residents up to date on the process of the development. The most recent session was held on 31st March 2012.
Maintenance		
Place signage indicating contact details for emergency maintenance in prominent locations.		It is understood that the forthcoming Signage Strategy will detail measures to provide relevant and current information during the development phase.
Remove graffiti promptly to maintain a "cared for" image.		It is understood that all common activities and maintenance issues will be administered and managed by the Building Management Committee designated for the whole site.
Durable surface materials		
Use robust, replaceable materials.	Specify materials that can withstand normal hard use and can be easily replaced. Use standard-sized panels, panes and fittings to facilitate replacement.	As mentioned above, it is understood that the proposal utilises attractive, robust and durable materials where this is appropriate. The overarching Sustainability Strategy encourages the use of standard sizes and fittings to reduce waste and enhance opportunities for recycling and easy disassembly.
Select security grilles, shutters and doors that allow natural observation of the street.	Ensure that security grilles and security doors are optically permeable (see-through) and sympathetic to the architectural style of the building.	This information is currently not available, however will need to be integrated into the detailed design specifications for the proposed buildings.

5.2.4 Address safety needs of special user groups such as children, older people and people living with a disability

The ground level pedestrian environment has been orientated towards maximising pedestrian movement and comfort with the provision of easy access pathways, ramps and lifts. The pedestrian routes through the site are direct, cover a short distance to the bus network located along Broadway, and link to the street network surrounding the site.

Discussions have previously occurred and are on-going with the RTA (now RMA) and City of Sydney Council, to determine speed limits within the internal road system.

The approved Concept Plan (MOD 2) was independently assessed by Access Associates Sydney (May, 2008) to test accessibility across the site for people with disabilities. The report stated the proposal has the potential to meet all accessibility requirements as per Australian Standards. Recommendations of an access report/study for this PA shall be complied with to ensure accessibility and safety for special user groups.

Assessment criteria	Requirements/Suggestions	Comment
Create a safe environment in the for children and young people	Ensure safe road crossings, consider change in level and materials to ensure safe use	The streets will be treated in such a way that drivers will be made aware of the likely presence of pedestrians, particularly in Kensington Lane. In Kensington Lane, vehicles will be encouraged to travel at slow speeds within the internal street network. Pedestrian crossings are located at two positions across Kent Road to provide safe pedestrian access to Blocks 3B and 3C and the Kensington Lane precinct. The narrowness of the vehicular streets should provide an "environmental signal" to traffic to slow down along the internal streets. The speed limit along Kensington Lane should be slow to reflect this shared arrangement, so as to provide safety for pedestrians, cyclists and motorists. There will be level access to all building entry points. Ramps will not be required. Footpath gradients will comply with codes.
Provide a safe environment in for older people and people living with a disability	Clear signage to identify safe and accessible access and egress for people with disability Safe road crossings	It is understood that the forthcoming Signage Strategy will detail measures to address ease of way finding for pedestrians accessing services and public transport and for vehicles. The ground level pedestrian environment shall maximise pedestrian comfort and amenity. All public domain areas pedestrian areas will be wheelchair accessible and will accommodate people with disabilities. There shall be seamless transition from the pathways in the surrounding public domain to areas outside of Blocks 3B, 3C and 10, thus providing wheelchair access to the surrounding network of pathways.
Undertake discussions with relevant authorities and community organisations to manage homelessness and social issues in a positive way.		Discussions will be undertaken with City of Sydney Council in this regard. It is noted that the proposal will provide much needed student accommodation in a relatively run-down area of the City. The close proximity of the site to UTS, TAFE and other education institutions, as well as the co-location of other student housing along Regent Street, means that

Assessment criteria	Requirements/Suggestions	Comment
		the site is ideally located to revive this area and provide for a suitable accommodation option for students. Liaison by the operator/manager of the student accommodation with UTS and nearby educational institutions should occur, to ensure the accommodation is meeting the needs of a range of students, including local and international students.

5.2.5 Develop on-going liaison with stakeholders surrounding the area and on the site for a safe community

On-going consultation with external stakeholders who have shown an interest in the Central Park development will be maintained and opportunities for input during the construction phase of the project will be provided, and through to operation of the site.

On-going liaison with security management teams/systems that manage nearby student accommodation will be critical, in order to ensure the safety of students and co-ordinately management.

Assessment criteria	Requirements/Suggestions	Comment
Inform adjacent residents and other major stakeholders of key safety initiatives during the development phase (e.g. provide regular updates on community safety initiatives in a newsletter).		Information on the construction process will be provided on the Central Park website, community newsletter and site hoarding boards. Regular community information and feedback sessions are held at the site to keep communities informed about the progress of planning, development and construction, including safety and access issues. The most recent session was held on 31st March 2012.
Foster partnerships with government agencies, adjacent communities and residents and owners of commercial facilities during development of the block.		A major aspect of the Frasers Broadway approach has been to facilitate active partnerships with key stakeholders and the community. Refer to the Community Consultation Plan for details of the engagement strategy for the next phase of the development process. As the proposal relates to student accommodation, it is recommended that the role of the security management team/operator be expanded to include relationships with surrounding hotels/motels/ businesses and residents. The 24 hour on-site security/staff member shall actively liaise with the security management teams of student accommodation premises in the local area, to ensure a co-coordinated approach to ensure the safety of all residents. The details of the coordinately management system shall be outlined in a Student Housing Plan of Management. The Plan of Management shall outline responsibility for the operation, administration, cleanliness and fire safety of the premises, including compliance with the Emergency Management and Evacuation Plan.
Promote a centralised technical surveillance system for Central Park.		It is understood that a Security Management Plan will apply to the whole Central Park site. The Plan should provide a centralised technical surveillance system that should be implemented and managed for the site, and be linked to the specific management systems for the student accommodation buildings, in coordination with the whole development. The Student Housing Plan of Management shall provided details about the monitoring systems in place for CCTV around Blocks 3B, 3C and 10, in particular for Block 10.

5.2.6 Promote and support safety

Publically accessible areas of the proposed development shall be safe for all user groups and deter public nuisance, loitering and inappropriate behaviour.

The proposal incorporates retail uses along the ground floor of each proposed building, thus providing an active edge to the public realm, promoting clear natural surveillance of the street and encouraging ground level pedestrian activity. It is acknowledged that there may be some "back of house" along part of the façade, however the majority is envisaged to be glazed and active.

The proposal will provide access 24 hours a day, seven days per week, via a through site links between the Kent Road and Kensington Lane. This will help improve the identity and viability of the area, particularly the Kensington Lane precinct, as an active and vibrant area which currently has minimal opportunities for gathering and casual surveillance. Good visual and pedestrian connections between the ground floor retail uses and lobby of Blocks 3B and 3C and 10 and public environments will deter crime by making the offender's behaviour more easily noticeable to passers by.

A Security Management Plan will be developed for the site, prior to occupation of the building, in conjunction with a specific Student Accommodation Plan of Management. The Plan of Management should contain safety and security measures for all residents, which may include but not be limited to such things as:

- Internal signage indicating the property caretaker or manager and contact number
- Emergency contact numbers for essential services such as fire, ambulance, police, and utilities such as gas, electricity, plumbing
- Installation of perimeter lighting
- Appropriate fencing and secure gates, particular to the communal areas and rooftop space
- All residents to have own room keys (note: keys for security entrance doors should be made available to essential services such as fire brigade in case of emergency)
- Provision for residents to ring emergency services in the event of an emergency, i.e. provision of a landline telephone at reception and/or on each level of student accommodation
- Control the hours of operation of outdoor areas on the rooftop terrace
- Recommendations relating to the positioning of expensive equipment within rooms (i.e. not in the direct sightlines from the doors).
- Responsibility for the operation, administration, cleanliness and fire safety of the premises, including the management's responsibility for the control of noise and litter generated by tenants and the management's responsibility for the removal of all graffiti from the building within 48 hours of its application

The Student Housing Management shall ensure that the behaviour of tenants entering and leaving the premises does not detrimentally affect the amenity of the neighbourhood. In this regard, the Management shall be responsible for the control of noise and litter generated by tenants of the premises.

Assessment Criteria	Design Requirements/Suggestions	Comment
Formal Surveillance		
Design buildings, streets and public open spaces so that they deter public nuisance, loitering and inappropriate behaviour.		The proposal includes retail and community uses along street frontages. This provides an active edge to the public realm on all boundaries of the site, promotes clear and unobstructed natural surveillance of the street and encourages ground level pedestrian activity. In Block 3C, glazing is provided to predominantly all facades of the building, thus creating good visual connections between internal uses and public environments. This will assist to deter crime

Assessment Criteria	Design Requirements/Suggestions	Comment
		by making the offender's behaviour more easily noticeable to passersby. In Block 3B, glazing is provided to the eastern, northern, and part of the western and southern facades. All retail facades have clear visibility from the internal spaces to the public domain through the installation of glazing. Similarly, the building lobby and main entry to the student accommodation, located off the through-site link on the southern façade of Block 3B, is glazed to allow for uninterrupted sightlines. Loitering and antisocial behaviour in the reception/lobby area and in the through-site link will be prevented through the presence of a 24 hour security/administration detail within the building lobby. The western façade will be partially active, through bike users existing and potentially entering, as well as weekly uses such as staff putting out bins. Thus, the western façade is not a blank wall and only occasionally active. Glazing is provided to part of the western façade of the building adjacent to the lobby, for additional opportunities for visibility to/from the lobby to prevent opportunities for offenders to loiter or hide in the lobby area. As the lobby to student accommodation in Block 10 is located off Outram Street, there are fewer opportunities for natural surveillance as this street is likely to be less active than Kensington Lane. Notwithstanding, the ground floor of Block 10 also contains active retail frontages with glazing, adjacent to the lobby entry. Pedestrian activity in this section of the site should assist to deter loitering outside the lobby entry. Security measures such as CCTV which is linked live to the security/reception located in Block 3B, shall be installed at the building entry point. As there are fewer opportunities for natural surveillance at this location, outdoor lighting shall be installed at the entry point to Block 10. The lighting shall exceed ambient light levels to provide additional visibility in this space, and shall exceed the lighting levels from the illumination of the lobby and ground floor retail spaces.
Use signage to increase safety by improving people's ability to find their way about the site, and to and from its surrounding areas at all hours	Provide clear information about access routes; ensure that signs that are essential for night-time use are clearly visible; ensure buildings are clearly identified.	It is understood that the forthcoming Signage Strategy will detail measures to address ease of way finding for pedestrians accessing services and public transport and for vehicles. As discussed in Section 5.2.2, legibility is provided by straight pedestrian thoroughfares at right angles to one another allowing visual permeability through the site. From a community safety point of view, this provides the area with a legible public realm that is easy to navigate on foot, rather than having to rely altogether on 'second tier' information such as signage. This is particularly important for international students who may not be able to rely on signage.
Promote a feeling of safety and security for businesses, residents and visitors.		As stated above, it is recommended that a Plan of Management be developed for the student accommodation. The Plan should outline the security measures for the site, linked to the overarching Security Management Plan for Central Park, including a centralised technical surveillance system which is to be implemented and managed for Central Park.

Assessment Criteria	Design Requirements/Suggestions	Comment
		It is understood that the forthcoming Signage Strategy will detail measures to address ease of way finding for pedestrians accessing services and public transport and for vehicles. It has been recommended earlier that the student accommodation security management system be attempt to develop links and relationships with surrounding businesses and residents.
Provide a permanent security presence including a 24-hour on-site security and facilities control centre. The facility will be responsible for the provision of the following services: operation and management of the CCTV system, response co-ordination to help-points and other enquires, operation and administration of electronic access control systems, co-ordination and management of property maintenance.		The Plan of Management for student accommodation shall specify the need for a staff member/security officer to be present on site 24 hours a day. The 24/7 officer shall attempt to link in with the overall Central Park security system. It is recommend that the security officer forms a working relationships with the security management of nearby student housing providers, and not be stationary (i.e. there should be opportunities for a secondary officer to undertake patrols around the student accommodation buildings at certain times of the day and in vulnerable areas such as around the lobby entry to Block 10). The Plan should outline the security measures for the site including a centralised technical surveillance system which is to be implemented and managed for the student accommodation. All security on site should be coordinated and guards should have two-way radio contact. Security cameras should monitor the building lobby entry points as well as any vulnerable back-of-house areas such as waste rooms, bicycle storage rooms, as well as the communal rooftop terrace. Access to student accommodation levels above shall be restricted by way of a security card or key system. It is noted that concerns about access between floors of the student accommodation has been raised by the NSW Police, however the discussions resulted in a view that access between student accommodation levels should be unrestricted in order to allow students to gather together. Access to individual room shall be restricted to key access only.
Installation of real-time video surveillance (CCTV) coverage of entry lobbies to all buildings, entry and exits to car parks; pedestrian walkways in public and communal spaces, coverage of public open spaces, access points to public open spaces and to visitor parking areas.		As stated above, it is recommended that as part of the Security Management Plan/Plan of Management, CCTV cameras be installed at all major entry and exit points as well as within the public domain. These should form part of the technical surveillance system. CCTV cameras shall also be installed at the rooftop terrace and garbage rooms, and monitored at all times. CCTV cameras should be recessed if possible (under eaves in the perimeter of the building), and should be positioned at all external corners of the proposed buildings.
Security patrols to entail a permanent presence of licensed uniformed security		It is recommended that as part of the Plan of Management, afterhours security guards would patrol the site in addition to the 24 hour presence of trained personnel.

Assessment Criteria	Design Requirements/Suggestions	Comment
officers.		
Provide an electronic security system that provides intruder detection and electronic access control. Access control should use a common platform across all buildings yet provide flexibility in credential card types and formats. System to be centrally administered by the Security and Facilities Control Centre.		Appropriate security systems to prevent unauthorised access to the student accommodation levels, or to private "back-of-house" areas, should be implemented to ensure no unauthorised entry.
Streets designed to accommodate emergency vehicles Emergency access.		Emergency vehicle access will be available via all streets within the street network in Central Park, including Kensington Lane.
Signage design		
Ensure that signage is easily legible.		It is understood that a forthcoming Signage Strategy will detail measures to address ease of way finding for pedestrians accessing services and public transport and for motorists. It is recommended that the signage strategy incorporates the use of LED electronic signage where appropriate. It is recommended that signage include warnings/details about the emergency access/egress for the proposed buildings.
Ensure that signs that are essential for night-time use are clearly visible.	Illuminate or use reflective or luminous signs for night-time use.	Signage Strategy should document requirements for night time visibility of essential signs. Avoid signage that creates glare for night time users.
Ensure buildings are clearly identifiable by number and/or name.		Building numbering and/ or naming should be addressed in the Signage Strategy.
Signage Location		
Utilise a signage plan to develop a carefully considered strategy for the location of signs.	Prepare a signage plan for the building, related to the system of "safe routes" and preferred pedestrian paths and indicating destinations, facilities and amenities en route.	See above.
Locate signs where people will see them.	Locate signs strategically at building entrances and near activity nodes.	This issue is to be addressed in the Signage Strategy.

Assessment Criteria	Design Requirements/Suggestions	Comment
Avoid entrapment spaces	Ensure that the size and siting of signs outside the building do not create entrapment spaces.	This issue is to be addressed in the Signage Strategy.
Locate signs for maximum visibility.	Locate signs so that they are not likely to be obscured by growing vegetation as it matures.	There is no landscaping proposed as part of this PA.
Content of signs		
Provide clear information about security.	Provide interior and exterior signage that indicates where to go for assistance.	This issue is to be addressed in the Signage Strategy.
Provide clear information about the location of public facilities and amenities.	Provide signage describing the location of telephones, duress buttons, taxis, bus stops and the nearest "safe" place.	This issue is to be addressed in the Signage Strategy.
Provide clear signage at local public facilities.		This issue is to be addressed in the Signage Strategy.
Provide clear information about hours of operation.	Clearly indicate closing hours at building entrances adjacent to public areas that are closed off at night. Clearly indicate where to go for help.	This issue is to be addressed in the Signage Strategy.
Provide clear information about access routes	Provide clear and regular signposting to main pedestrian routes.	This issue is to be addressed in the Signage Strategy.
Provide clear information about the location of the entry, space, etc.	Provide maps of the building at all main entrances and ensure that information is in plain words in the languages of various identified user groups. Make sure all signs are clearly marked with "you are here".	This issue is to be addressed in the Signage Strategy.

5.2.7 Promote health and injury prevention

The project has involved local and international collaboration between built environment specialists with a deep understanding of creating safe, active spaces. This has included extensive consultation with operators/managers of student accommodation to understand and implement in the building design, issues that are specific to the safety of students.

Assessment Criteria	Design Requirements/Suggestions	Comment
Work with masterplanners, landscape architects, urban designers, recreational planners and architects to create an environment at the Kensington Lane precinct that encourages people to lead healthy, socially engaged, and physically active lives.		The proposal encourages pedestrian activity by providing safe, accessible and easily legible pedestrian walkways that link in with the existing thoroughfares within Central Park and the surrounding community.
Promote the development of safe and injury-free activities and environments at the Kensington Lane precinct for all users by not only complying with safety standards, but proactively promoting injury prevention, and individual and community safety.		To be addressed through the preparation of Construction Safety Management Plan. CPTED principles have been incorporated into the design approach to ensure the development of model 'Safer by Design' approach to the adaptive re-use of the building and associated public domain. The use of Kensington Lane for public activities at certain times, such as markets and art shows, shall be undertaken with a view to ensure safety and security. Any such activity shall be co-ordinated with the on-site student accommodation security management, the broader Central Park security management. The NSW Police and Council should be consulted prior to any outdoor/public activities in Kensington Lane.
Proactively work with all stakeholders during the development phase, including clients, designers, contractors and the workforce to create an incident and injury-free workplace (e.g. establish a stakeholder focus group that carries out monthly inspections).		Regular project meeting have been undertaken with the project team through the design and development of Central Park. A Construction Safety Management Plan shall be developed to ensure that safety principles are considered throughout the development phase for Blocks 3B, 3C and 10.

5.2.8 Create a safe, secure and well maintained built environment

The creation of active retail and commercial edges around the perimeter of the proposed buildings will be of particular importance to activate public areas of the Kensington Lane precinct as well as the surrounding public domain.

It is anticipated that this area will attract a wide cross section of demographic user groups including students from UTS campus and TAFE, residents and visitors who will utilise the retail, commercial and art opportunities within the buildings. To ensure the safety and security of these people, a range of measures have been implemented in the building design, in terms of access and egress, building materials, lighting design and security/management systems. Whilst these groups will generate activity and vibrancy around the site, thus enhancing opportunities for surveillance, the measures implemented in the design of the buildings together with the associated management systems, will ensure their safety.

It is understood that all common activities and maintenance issues will be administered and managed by the Building Management Committee designated for the whole site, in conjunction with the management/operators of the student accommodation.

Assessment Criteria	Requirements/Suggestions	Comment
Design		
Promote usage by cross demographic user groups.		The proposal provides for a range of uses across the site including day and night retail uses, the potential for a night café/restaurant use, and student housing. The proposed uses will attract a wide range of users groups including workers, residents (existing and future), students (UTS and TAFE) and general visitors during different times and days of the week. The Kensington Lane precinct is being planned, designed and developed as a unique space lined with active commercial, retail, hotel and creative business/art uses to attract a wide demographic.
Design building so that they feel safe for all and deter crime (e.g. create a legible hierarchy of spaces).		The building design is such that users feel safe and opportunities for crime are avoided/ prevented. • Block 3B Block 3B contains ground level retail which will provide an active edge along the eastern perimeter of the building. The ground floor will feature multiple building entries to the retail spaces adjacent to the vibrant and active Kensington Lane. Entry to the lobby/student accommodation reception area is located directly from the 24/7 through site link, allowing pedestrians to have unimpeded access to the building entry. The mix of uses of uses and extensive glazing at the building entry points will improve the visibility of this site and to create opportunities for passive surveillance, whilst maintaining clear territorial boundaries between indoor/outdoor and public/private spaces. The through-site link is free of landscaping and furniture that could act as a hiding place or provide an opportunity for people to loiter. The through-site links can also assist with surveillance.

Assessment Criteria	Requirements/Suggestions	Comment
		The disabled bathroom on the ground floor of Block 3B shall have security controlled access to prevent unauthorised access. The bathroom is accessible from a "back of house" area that shall be is access controlled. Only private entry to this area will be permitted. An on-site concierge/manager is located adjacent to the entry door to ensure no unauthorised access. As a precautionary measure, there should be some form of visibility between the public lobby area and private circulation space. This could be achieved via a clear glazed window in the door. • Block 3C Block 3C contains ground level retail with glazing along almost the entire ground floor façade, which will provide an active edge around the building. The use of lighting around the perimeter of the building will enhance visibility and safety. • Block 10 Block 10 contains ground level retail which will provide an active edge along the southern and western edges of the building. The ground floor will feature 2 retail entries along the western façade, 1 retail entry along the southern facade and 1 entry to the building lobby/student accommodation on the southern façade. As the southern entry points are accessed off Outram Street, which is a narrower and less active thoroughfare, additional safety measures include the installation of CCTV and external lighting in excess of ambient light levels on the perimeter of the building. The lobby entry is glazed to allow students to see into/out of the lobby doors when entering/existing. • Communal areas The communal rooftop terrace in Block 3B/3C is accessible to all students via a door from the circulation space on Level 6 or via fire stairs. Entry to the laundry room on the rooftop shall be via a security/key card access. It is recommended that doors between the undercover and open areas of the rooftop be glazed, in order to provide direct sightlines and visibility across the whole terrace area. This door will also provide the opportunity to management to restrict access to the outdoor area at certain times (as necessary) to control noise and nuisance to neighbouring properties. A 1.8m high glass screen shall be installed around the perimeter of the terrace provide for good visibility and restricted access to the landscaped area, and access for maintenance of the landscape is provided in two locations. This glass shall be a robust and durable material to minimise opportunities for damage. The internal communal areas are located in the "link" between Block 3B and 3C, including open lounge areas for gathering, private study rooms and the like. All walls in these communal areas

Assessment Criteria	Requirements/Suggestions	Comment
		shall be glazed. In order to prevent opportunities for entrapment within private study rooms, the rooms shall be semi-private and incorporate either glass walls and/or glass panels in the doors or both. The study room doors should be lockable, to ensure students with their backs to the door cannot be attacked. The external walls on the eastern and western facades of the "link" are also glazed, thus providing good opportunities for visibility and casual surveillance of the streetscape and public domain below.
Ensure all entrances provide safe egress and access; remove opportunities for illegitimate entry.		The through-site links will remain open at all times, and provide legible access between two public streets. There is one entry to the lobby of Block 10 and one entry to the lobby of Block 3B/3C. Security measures shall be applied to both lobby doors to reduce opportunities for illegitimate entry. The entry/exits will be finished with glazing to enable clear visibility for visitors and workers entering/existing the building. Sightlines to this entry should be enhanced by appropriate lighting design and clear, unimpeded sightlines to/from the outdoor areas. In Block 3B, the ground floor contains several additional doors that provide entry/exit to the waste rooms, hydraulics room and to the circulation space in the "back-of-house" area. Block 10 also incorporates door in the eastern façade located off the bike storage room and waste rooms. It is recommended these doors be exist-only doors. In Block 10, it is recommended that a door be provided adjacent to the lift core to block access to the hall way leading to the fire exit. This is recommended in order to remove the opportunity for offenders to hide/loiter in the corridor and reduced the temptation for students to use this hallway unnecessarily. There are multiple other entries to the ground floor retail/commercial areas. These are located on the facades of the building, will be finished with glazed doors, and should be provided with appropriate downlighting in the internal spaces. It is recommended that the door separating the loft lobby from the circulation space in Block 3B (levels 1 – 7) be removed or provided with a glass panel at eye level. The installation of a door in this location provides a opportunity for offenders to hide and is not considered to be necessary.
Ensure that exit and entry doors are not hidden from view.	Locate entrances at prominent positions. Ensure that the front door to the building faces the street.	Entry to the lobby of Block 3B is considered ideal from a surveillance/public safety point of view, as described above. While the preferred location of the entry to the Block 10 lobby door is to the west off Kensington Lane (in order to provide better surveillance opportunities), the use of glazing along the lobby

Assessment Criteria	Requirements/Suggestions	Comment
		entry door, the co-location of a retail entry point in close proximity, and the installation of lighting and CCTV at the entry point is considered a satisfactory response. It is noted that this entry point will be visible from Block 3C and the surrounding street network. The location of all building entry/exits is directly off, and clearly visible from the adjacent public domain areas/streets.
Create a legible hierarchy of spaces.	Encourage a clear hierarchy of space from the public street to the semi-private areas of buildings to increase the territoriality of the building and make it uncomfortable for offenders to loiter in entranceways.	The selection of paving materials assists to create a clear hierarchy of space between public and private areas. The selection of three (3) types of paving in the public domain distinguishes three different areas - the through-site links, public pathways, and pathways adjacent to Kensington Lane. As Kensington Lane will function as a pedestrian-friendly zone, the distinction of paving adjacent to Kensington Lane as opposed to paving elsewhere assist to define this semi-pedestrian area. Internal spaces within buildings at the ground floor are distinguished from outdoor public areas through the use of glazing along the active ground floor facades and different tiles/floor materials. The use of glazing creates a good visual connection between internal ground floor uses and public environments, thereby deterring crime by making the offender's behaviour more easily noticeable to passersby and users of the active spaces. The extensive use of glazing along the building facades, and multiple entry points, will ensure public and private spaces are visible yet differentiated from one another.
Design entrances to be clearly defined entry points.	Make the area around the main entranceway clearly distinguishable from public walkways leading to it so that users feel distinctly that they are entering an area controlled by the users.	The main building entrances are via a glazed door to the lobbies. Appropriate lighting should be applied to the entry points, in the form of recessed down-lights above the entry point. The entry doors to lobbies should be controlled by security card/key access. This ensures secure/unrestricted access and allows the on-site security guard to patrol the area and not be required to be stationary at all times.
Design entrances so that they cannot hide intruders.	Provide a direct external entry path and foyer to the building to avoid potential hiding places.	The lobbies will be glazed and are located off public streets/thoroughfares, and as such will have direct access. Hiding places are minimised through the use of appropriate lighting (for improved surveillance), and the avoidance of any planting/street furniture in the areas outside the lobbies that would enable offenders to hide.
Design entrances for maximum visibility.	Design building lobbies to be visible from the exterior. Ensure clear views out from within buildings for people exiting.	Proposal complies, as noted above. All entry doors are glazed. Appropriate lighting should be provided internally to all lobby areas (i.e. downlighting).
Avoid locating ramped and lift entrances in isolated areas.	Locate ramp and lift entrances in safe, well-used areas.	The lifts within the lobbies of Block 3B and 10 are located in highly visible areas. In Block 3B, the lift is located directly opposite the reception area. Seating is provided opposite the lift door to provide additional opportunities for students to gather and thus, activating the area and

Assessment Criteria	Requirements/Suggestions	Comment
		providing opportunities for surveillance around the lift. The seating in the lobby area shall not be in the form of booths, where heads are not visible. Rather, the lounges shall be low scale. In Block 10, the lift is located in view of the building entry in a straight, direct line of sight. External fire stairs from Blocks 3B and 3C are direct to public roads and thus in a safe location.
Secure non-pedestrian entrances.	Ensure that non-pedestrian entrances are secured against illicit entry.	It is recommended that the Security Management Plan/ Plan of Management include measures to secure non-pedestrian entry through security card/key access to appropriate maintenance and security personnel. As stated above, it is recommended that doors from waste rooms, bike storage areas and back-of-house circulation areas are exit-only doors to prevent opportunities for unauthorised access. Alternatively, to allow bins to be brought in and out, the doors for bin rooms shall be security controlled and CCTV cameras located in this area to allow monitoring of the entry/exit points.
Remove opportunities for illegitimate entry.	Locate delivery hatches, bins, light fixtures and landscaping /trees so that they do not assist an intruder to gain access to windows and doors.	It is recommended that the Security Management Plan/Plan of Management include measures to prevent illegal entry, such as secure card access to student accommodation floors above and back of house areas. Lighting fixtures should be located above street level to discourage illegitimate entry via light poles.
Street frontages of retail facilities to reinforce pedestrian activity at ground level		As mentioned above, the proposed retail uses at the ground level will reinforce pedestrian activity at the ground level and around the building/lobby entry points.
Clearly define spaces to express a sense of ownership and reduce illegitimate use / entry.	Physical and / or psychological barriers (e.g., fences, gardens, lawn strips, varying textured surfaces) can be used to define spaces.	Internal and external spaces will be clearly differentiated. The buildings are designed with no recessed for doors, windows and the like at the ground level. As such, all doors align with the building line to create a defined internal/external space. As stated above, the entry doors to the lobby should be controlled by security card/key access. This ensures secure/unrestricted access and allows the on-site security guard to patrol the area and not be required to be stationary at all times.
Ensure that lifts feel used and 'cared for'.	Use graffiti and vandal-resistant materials in lift design.	Glazing will be used for part of the lift foyer, which will deter opportunities for graffiti. The option to install glass panel in the lift doors at eye level shall be considered.
Surveillance		
Ensure that all retail development allows for clear, unobstructed casual surveillance from the shop to the street, footpath and other areas.		As mentioned above, retail uses along the ground floor are adjacent to and accessible from highly public areas of the development. The retail uses on the ground floor will have the potential for extended hours for café/restaurants in order to encourage night time use and activity. This will maximise natural surveillance and encourage activity after working hours.
Reduce entrapment risks at	Do not locate ATMs in out-of-the-way	No details of ATMs are provided in the DA documentation. All facilities in the public realm should

Assessment Criteria	Requirements/Suggestions	Comment
Automatic Teller Machines (ATMs) and public telephones.	places or adjacent to licensed premises. Ensure clear sight lines and provide card access only to those internal spaces after hours. Locate public facilities such as Automatic Teller Machines (ATMs) and public telephones at a highly visible location that is well lit at night.	be provided in areas that are well-lit and not obstructed by walls.
Locate lifts for maximum visibility and natural surveillance.		As discussed, the lift doors are located in visible areas including the reception, lobby area. See above.
Materials		
Use materials, finishes, equipment and fixtures that are attractive, robust, replaceable, reduce opportunities for graffiti and vandalism.	Do not use highly vulnerable materials such as flimsy paneling, delicately made light fittings and external fixtures that can be easily removed.	It is recommended that the proposal use attractive, robust and durable materials where possible. It is understood that all common activities and maintenance issues will be administered and managed by the Building Management Committee designated for the whole site. The Plan of Management for the Student Accommodation shall ensure that any graffiti is promptly removed.
Avoid extensive use of problem materials such as heavy-duty mesh, cyclone fencing and grilles, which may encourage wilful damage.	Do not use flimsy materials at the expense of building appearance. Unattractive, impersonal areas can deter users and become unsafe. Avoid solid shutters on front windows and doors that will create an impression that the area is uninhabited and inhibit natural surveillance.	The design of the building is aiming for a 24 hour lively architecture. It is intended to avoid those problem materials as far as possible. It is noted that the adaptive re-use of the existing building at Block 10 will remove the use of problem materials, such as roller shutters that currently are installed, and replace these with glazing.
Use materials which reduce opportunities for vandalism.	Use strong, wear-resistant laminate, impervious glazed ceramics, treated masonry products, stainless steel materials, anti-graffiti paints and clear over sprays to reduce the opportunity for vandalism. Avoid flat or porous finishes in areas where graffiti is likely to be a problem.	High quality and durable materials shall be used throughout the design of the public domain in order to reduce the opportunity for vandalism. Opportunities for graffiti and other forms of vandalism are to be minimised through appropriate finishes and surveillance measures (e.g. extensive use of glazing along the perimeter of the building where possible). If graffiti/vandalism was to occur, graffiti removal is to occur immediately by contracted specialist cleaners or coordinated by the Building Management Committee or Student Accommodation management/operator.
Use protective coatings over	Employ protective coatings able to	It is recommended that the brick elements of the existing building located at Block 10 be

Assessment Criteria	Requirements/Suggestions	Comment
materials that are not naturally robust and vandal resistant.	withstand normal wear and tear and be resistant to attack: graffiti, scratching and peeling.	protected as far as possible, through the use of protective treatments.
Use graffiti-resistant materials and design.	Avoid large blank walls that invite graffiti. Where large walls are unavoidable, consider the use of vegetation or anti-graffiti paint. Alternatively, modulate the wall, or use dark colours to discourage graffiti on vulnerable walls.	The design of the building does not include large blank walls.
Use open style transparent materials on stairwells.	Install glass panels in stairwells, where appropriate to promote visibility.	The central stair in Blocks 3B/3C is fully glazed and promotes 180 degree surveillance of the surrounding public domain.
Maintenance		
Ensure prompt maintenance and repairs of the built environment (e.g. remove graffiti promptly to maintain a 'cared for' image) and facilitate prompt reporting of any damage or repair needs.		It is understood that common activities and maintenance issues will be administered and managed by the Building Management Committee designated for the whole site, which will coordinate with the operator/manager of the Student Accommodation.
Hardware and fixtures		
Ensure that security hardware is robust.	Use sturdy, non-corrosive catches, bolts and locks.	Details of security hardware are not available however, it is recommended that the proposal use attractive but robust and durable security hardware where required. It is recommended that non-corrosive security locks and bolts will be used.
Ensure that service boxes are secure.	Use flush-mounted meter boxes or service points within a secure building/enclosure for protection.	It is recommended that service boxes be secure.
Ensure that communal furniture is robust and secure.	Communal / street furniture should be made of hardwearing vandal resistant materials and secured by sturdy anchor points or removed after hours.	Communal furniture in the internal communal areas and the rooftop communal space in Blocks 3B/3C shall be durable and safely anchored to the floor.
Provide deadlocks for storage areas.	Specify appropriate heavy-duty hardware, such as dead-bolt locks for all storage areas adjacent to pedestrian routes.	It is recommended the bike storage areas are lockable and that doors to provide access from the bike storage rooms to the outside of the building are exit-only. As an additional safety measure, it could be considered to include a glass panel in the doors to bike storage rooms for additional safety for people entering/exiting the room.
Provide physical barriers to limit access to restricted areas.		Access to restricted areas such as plant rooms and the like shall be prevented through the use of security cards/key for maintenance workers and managers/operators only.

Assessment Criteria	Requirements/Suggestions	Comment
Utilise materials for durability and visible permeability.	Use transparent, unbreakable materials in parts of doors and walls at major entry points.	It is recommended durable and robust materials be used at major entry points, including sturdy glazing.
Security devices must be carefully selected and used to prevent reducing the building to a fortress like appearance.	Transparent or open grill devices should be as unobtrusive as possible.	It is recommended that any security fixtures be designed to be unobtrusive and blend with the design of the building.
Use security hardware and / or human measure ONLY where required to reduce opportunities for unauthorised access.	As required: Install high-quality locks on external windows and doors. Provide monitored alarm systems. Provide building supervisors or security guards.	Security alarms and fixtures should be installed to best practice specifications. It is recommended that this be included as part of the Security Management Plan/Plan of Management.
Lighting - General guideline		
Design lighting so that entrances, exits, service areas, pathways, car parking etc., are well lit after dark when they are likely to be used.		The Luminaire Schedule (JAAA+TDS) indicated the lighting selection for the PA, however does not indicate the location of pole-mounted lighting in public domain areas. All external public domain areas surrounding Blocks 10, 3B and 3C are required to be well lit through the installation of street lighting and/or external building lighting. Building entry points shall be lit to a higher lux level than surrounding streets. Adequate internal lighting (in the building entries and lobbies) as well as light-throw from street lights (located at regular intervals along Kensington Lane and Kent Road is considered adequate to illuminate the public domain areas, to ensure appropriate visibility. At Outram Street is narrow, there is no street lighting directly in front of Block 10 due to the width of the footpath. There shall be external lighting to the residential building entrance of Block 10, in addition to light-throw from the lobby and retail shop fronts, which are heavily glazed. It is recommended that all external lighting and lighting in semi-private areas will be compliant with Australian Standards and Design Guides for Lux Levels.
Provide a safe level of illumination across the site with an emphasis given to preferred routes to encourage their usage by pedestrians.		Kent Road and Kensington Lane are key routes which will be well lit to encourage pedestrians to use these main thoroughfares. Street lighting along Kensington Lane shall consist of 5m pole-mounted lights (refer to H6 in Luminaire Schedule). 6.5m pole-mounted LED lights will be installed as street lighting on Kent Road (refer to H1 and H1A in Luminaire Schedule). It is also recommended that lighting be installed externally to Block 10, and as a minimum, at the residential entry point to Block 10. It could be considered to install lighting on the underside of the upper (new) levels of Block 10 to provide light throw onto Outram Street.

Assessment Criteria	Requirements/Suggestions	Comment
Treat lighting in a comprehensive manner; select an approach consistent with the local conditions and crime problems specific to the context.		As above.
Minimum standards		
Ensure that all exterior lighting complies with the minimum light technical values and principles as set down in Australian Standards.		It is envisaged the proposed lighting will be compliant with Australian Standards and Design Guides for Lux levels. This will be detailed at the next design phase.
Lighting must meet local council lighting requirements	Comply with the City of Sydney Exterior Lighting Strategy.	All lighting fixtures shall meet Council lighting requirements. The Luminaire Schedule indicates that 6.5m and 5m light poles are proposed to be installed as street lights along Kensington Lane and Kent Road. Street lighting is unlikely to be installed on Outram Street given the width of the street and buildings built to the street edge. As such, external building lighting on Block 10 shall be designed to meet council requirements where applicable.
Location and orientation of lighting		
Ensure that entrances, exits, service areas, pathways, car parks, etc. are well lit after dark when they are likely to be used.	As a guide, areas should be lit well enough to enable users to identify a person's face from 15m away.	The location of lighting is not known at this time. It is recommended that street lighting is installed at regular intervals and distances to meet Local Council requirements for street lighting, and additional sources of lighting located: • On the underside of the building above the through-site link between Blocks 3B and 3C, to illuminate the building/lobby entry point • Externally at the entry point to Block 10, or, on the underside of the upper levels of Block 10.
Ensure inset spaces, access/egress routes and signage is well lit.	Direct lights towards access / egress routes to illuminate potential offenders, rather than towards buildings or observation points.	As above.
Use lighting to encourage use of preferred pedestrian routes.	Illuminate pre-identified "preferred pedestrian routes" so that these become the focus of legitimate pedestrian activity after dark and pedestrians are discouraged from using other routes after dark.	As above. In order to activate Kensington Lane, extensive use of lighting shall be installed at regular intervals along the thoroughfare to encourage pedestrian activity.
Illuminate signage	Provide adequate illumination for	Signage to direct students to student accommodation shall be lit, where necessary.

Assessment Criteria	Requirements/Suggestions	Comment
	directional signage and maps.	
Minimise opportunities to use lighting fixtures in vandalism or theft.	Avoid locating lighting columns and electrical equipment alongside walls or low buildings, as they can provide opportunities for climbing and further vandalism or criminal acts.	Lighting shall be provided as under-eave lighting, or recessed on the underside of buildings, or on 5m – 6.5m light poles.
Minimise opportunities to vandalise lighting fixtures.	Provide high-level, out-of-reach lighting to maintain a daylight appearance, reduce the number of targets for attack and provide a high level of general lighting.	As above. Lighting shall be on 5m or 6.5m light pole or recessed.
Consistency of lighting		
Take care not to create heavy shadow areas, especially close to pathways etc.	Use luminaires with a wide beam of illumination which reaches to the beam of the next light, or the perimeter of the site or area being traversed.	Outdoor lighting shall ensure appropriate light spill onto the street (particularly around block 10) through the use of external lighting at regular intervals or lighting on the underside of the upper levels. Street lighting on Kensington Lane shall be at regular intervals to avoid shadow.
Consider creating variety in brightness levels to give pedestrians an impression of warmth.	Use a mixture of lighting (within the constraints applied by the relevant Australian Standards).	As above.
Luminaire selection		
Utilise FCO lighting to reduce glare	Wherever practical, use luminaires that have a Full Cut-Off (FCO) light distribution characteristic to keep discomfort and disability glare to a minimum.	It is recommended FCO lighting is used.
Select light sources which provide good colour rendition — preferably equal to or better than Ra 85.		Detailed to be provided in the detailed design of lighting.
Provide adequate number of luminaires for effective lighting.		As above.
Avoid time-switched lamps, as they can be inoperative for days if there is a long maintenance cycle.		No time switch lamps are proposed.
Maintenance		
Ensure that light fixtures are		It is understood that all common activities and maintenance issues will be administered and

Assessment Criteria	Requirements/Suggestions	Comment
maintained in a clean condition and promptly replaced if burnt out or broken.		managed by the Building Management Committee designated for the whole site, which shall be coordinated with the management/security for the student accommodation.
Site planning and design		
Ensure that a CPTED lighting expert is consulted through out the design and development phase to ensure that lighting provisions and requirements are in accordance to Australian Standards and/or building management practices.	Ensure that CPTED consultants liaise with lighting consultants regarding CPTED lighting provisions and requirements according to Australian Standards and/or building management practices.	CPTED lighting experts to be consulted throughout detailed design phase.

5.3 Conclusion

The Safety Management Plan details how the design of Block 3B, 3C and 10 meets and/or exceeds safety and crime compliance requirements. Frasers Broadway Pty Ltd or any future purchasers of the site will need to comply with all safety management requirements during the construction phase of the project and beyond. Additional information on specific materials, fittings and location of building and public domain elements will be provided in the detailed design stages.

On-going management strategies that are co-ordinated across the student accommodation buildings (Block 3B, 3C and 10), and attempt to link in with the wider security management of buildings within Central Park, will assist to ensure safety and crime prevention in the longer term. Whilst it is acknowledged that the sale of blocks within Central Park means that security will be managed on a block-by-block basis, attempts should be made to ensure security systems are seamless.

A detailed Student Accommodation Plan of Management will be critical to the operation and management of the accommodation, and shall be prepared and implemented prior to and throughout the occupation/operation of the building.

This report is accurate in so much as it relies on information provided at the time of the review and reporting process. As additional information is provided it may be necessary to review and update this Safety Management Plan.

6 Implementation of Safety Management Plan

Frasers Broadway will ensure the Safety Management Strategy and the Safety Management Plan will be implemented by a qualified person at the next phase of the project.

A Security Management Plan and Student Accommodation Plan of Management shall be prepared and implemented prior to occupation of Blocks 3B, 3C and 10.

7 Appendix A

What is Crime Prevention through Environmental Design (CPTED)

General CPTED concepts

Crime Prevention through Environmental Design (CPTED) is the design and effective use of the built environment so as to lead to a reduction in the fear and incidence of crime and an improvement in the quality of life. CPTED involves the design of a physical space so that it enhances the needs of legitimate users of the space. This emphasis on design and use deviates from the traditional 'target-hardening' approach to crime prevention.

For CPTED to be successful, it must be understandable and practicable for the normal users of the space. The normal users know more about what is going on in the environment and they have a vested interest (their own well-being) in ensuring that their immediate environment operates properly.

The Three D's: designation, definition and design

The 'Three D's' approach to space assessment provides a simple guide for the normal users in determining the appropriateness of how their space is designed and used. The Three-D concept is based on the three functions or dimensions of human space:

- All human space has some designated purpose;
- All human space has social, cultural, legal or physical definitions that prescribe the desired and acceptable behaviours; and
- All human space is designed to support and encourage the desired behaviours.

CPTED involves the design of the physical space in the context of the legitimate user of the space, the normal and expected use of that space, and the predictable behaviour of the bona fide users and offenders. CPTED emphasises the connection between the functional objective of space utilisation and behaviour management. We must differentiate between designation of the purpose of space, its definition in terms of management and identity and its design as it relates to function and behaviour management.

By using the 'Three D's' as a guide, space may be evaluated by asking the following types of questions:

<u>Designation</u>

- What is the designated purpose of this space?
- For what purpose was it originally intended?
- How well does the space support its current use or its intended use?
- Is there conflict?

<u>Definition</u>

- How is space defined?
- Is it clear who owns it?
- Where are its borders?
- Are there social or cultural definitions that affect how space is used?
- Are the legal or administrative rules clearly set out and reinforced in policy?
- Are there signs?
- Is there conflict or confusion between purpose and definition?

<u>Design</u>

- How well does the physical design support the intended function?
- How well does the physical design support the desired or accepted behaviours?
- Does the physical design conflict with or impede the productive use of the space or the proper functioning of the intended human activity?
- Is there confusion or conflict in the manner in which physical design is intended to control behaviour?

Once these questions have been asked, the information received may be used as a means of guiding decisions about the use of human space. The proper functions have to be matched with space that can support them.

The design must assure that the intended activity can function well and it must directly support the control of any behaviour that results.

Five key CPTED principles

CPTED is supported by the following five overlapping principles that are applied to specific sites and situations.

Territoriality

Territoriality is a concept that clearly delineates private space from semi-public and public spaces, and creates a sense of ownership. People usually protect territory that they feel is their own and have a certain respect for the territory of others. Fences, paving, art, signs, good maintenance and landscaping are some physical ways to express ownership. Identifying intruders is much easier in a well-defined space. An area that looks protected gives the impression that greater effort is required to commit a crime. A cared for environment can also reduce fear of crime. Areas that are run-down and the subject of graffiti and vandalism are generally more intimidating than areas that do not display such characteristics. Ownership creates an environment where appearance of such strangers and intruders stand out and are more easily identified through:

- An enhanced feeling of legitimate ownership by reinforcing existing natural surveillance and natural access control strategies with additional symbolic or social ones;
- Design of space to allow for its continued use and intended purpose; and
- Use of pavement treatments, landscaping, art, signage, screening and fences to define and outline ownership of space.

Natural surveillance

Natural surveillance is a design concept directed primarily at keeping intruders under observation. Provision of natural surveillance helps to create environments where there is plenty of opportunity for people engaged in their normal behaviour to observe the space around them.

Criminals usually do not want to be seen. Placing physical features, activities and people in ways that maximise the ability to see what is happening discourages crime. For example, placing cafés and kiosks in parks increases natural surveillance by park users, while placing clotheslines near play equipment in a multiple unit development increases natural surveillance of the play area.

Barriers such as bushes or sheds can make it difficult to observe activity. Areas can be designed so they are more easily observed through design and placement of physical features to maximise visibility. This will include:

- Building orientation, windows, entrances and exits, car parks, rubbish bins, walkways; landscape trees and shrubs, use of wrought iron fences or walls, signage and other physical obstructions;
- Placement of persons or activities to maximise surveillance possibilities; and
- Minimum maintained lighting standards that provide for night-time illumination of car parks, walkways, entrances, exits and related areas to promote a safe environment.

Access control

Access control is a design concept directed primarily at decreasing criminal accessibility. Provision of natural access control limits access and increases natural surveillance to restrict criminal intrusion, especially into areas where they will not be easily observed. Access can be restricted by physical barriers such as bollards, fences, doorways etc., or by security hardware such as locks, chains and alarms. Human measures can also be used, such as security guards. All these methods aim to increase the effort required to commit a crime and therefore, reduce the potential for it to happen.

When present, intruders are more readily recognised through:

- Use footpaths, pavement, gates, lighting and landscaping to clearly guide the public to and from entrances and exists; and
- Use gates, fences, walls, landscaping and lighting to prevent or discourage public access to or from dark or unmonitored areas.

Activity support

Activity support is the presence of activity planned for the space. Activity support involves placing activity where the individuals engaged in such an activity will become part of the natural surveillance system. Examples include:

- Place safe activities in areas that will discourage would be offenders, to increase the natural surveillance of these activities and the perception of safety for normal users, and the perception of risk for offenders;

- Place high-risk activities in safer locations to overcome the vulnerability of these activities by using natural surveillance and access control of the safe area;

- Locate gathering areas in locations that provide for natural surveillance and access control or in locations away from the view of would-be offenders; and

- Improve the scheduling of space to allow for effective use and appropriate intensity of accepted behaviours.

Maintenance

Proper maintenance of landscaping, lighting treatment and other features can facilitate the principles of CPTED, territorial reinforcement, natural surveillance and natural access control. Functions include:

- Proper maintenance of lighting fixtures to prescribed standards;

- Landscaping which is maintained at prescribed standards; and

- Minimising the conflicts between surveillance and landscaping as the ground cover, shrubs and trees mature.

Crime risk assessment: key design elements

During a crime-risk assessment process, specific types of problems can be identified. These include features such as activity generators, edge effects, movement predictors, conflicting user groups, crime "hotspots" and displacement effects. Once identified, CPTED principles can be brought to bear to reduce the impact of these problems. These are summarised below.

Activity generators

Activity generators are features that tend to create local activity: playgrounds, benches, picnic areas and kiosks. Crime opportunities can be high in such areas if CPTED is not applied. In some circumstances, activity generators can be used to reduce opportunities for crime.

Edge effects

Edge effects are generated around the actual, or perceived, physical borders of different land uses, such as the edge of a park, the border of a commercial strip or around a shopping mall. Research has shown that high crime rates have been found in such areas. Contemporary CPTED aims to identify, soften or eliminate as many as possible.

Movement predictors

Movement predictors are predictable or unchangeable routes or paths that offer few choices to pedestrians. Pedestrian bridges, enclosed pathways and staircases are examples. Often alternate routes are unavailable to pedestrians and this becomes a problem, especially if the movement predictor contains entrapment areas where offenders can hide and wait for victims. Movement predictors also determine the awareness spaces that offenders have of neighbourhoods and where targets may be located.

Conflicting user groups

Urban features designated for one legitimate group can conflict with other groups nearby, such as older people. In addition, different groups using design features for different reasons can often cause conflicts, such as walking trails used by both bicyclists and hikers. Attention must be given to avoid generating opportunities for problems by creating or exacerbating conflicts between user groups.

Hotspots

Hotspots are existing high-crime locations that can affect a nearby area. These can include areas of high car theft such as certain underground parking lots, pick-pocketing in bus terminals, or specific pubs experiencing fights at closing time. Consideration must be given to the proximity of such locations and how to provide for public safety in the project.

Displacement

The 'displacement phenomenon' occurs when crime is moved away, or drawn into, new projects. Many aspects of a problem or crime can be displaced, including its place, timing, and nature of offence, target and the method. Research has shown that displacement is not always negative. It can be controlled, and even used positively, if proper CPTED planning principles are incorporated.

Thinking like a criminal when designing to reduce crime: Rational Choice Theory

Criminologists have long known that criminals make rational choices about their targets and generally:

- The greater the risk of being seen, challenged or caught, the less likely they are to commit a crime;

- The greater the effort required, the less likely they are to commit a crime;

- The fewer the reasonable or believable excuses that can be offered, the less likely they are to commit a crime; and
- The lesser the actual or perceived reward, the less likely they are to commit a crime.

CPTED principles in planning, design and management of the environment are therefore used to ensure that:

- There is more chance of being seen, challenged or caught;
- Greater effort is required;
- Territorial boundaries make it clear when people are not on public land or in public space;
- The actual or perceived rewards are less; and
- Opportunities for criminal activity are minimised.