



Block 11, Central Park, State Significant Development Application

Crime Prevention Through Environmental Design report

Client:
Fraser's Broadway

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1 Introduction

1.1 General

This report has been prepared on behalf of Frasers Broadway to accompany a State Significant Development Application (SSDA) for a mixed use development known as Block 11 at Central Park, Chippendale.

The purpose of this report is to carry out a Crime Prevention through Environmental Design (CPTED) analysis of the proposed development of Block 11. This report addresses 'Safer by Design' principles for crime prevention and safety for Block 11. It contains:

- » **Community Safety Strategy** – which outlines broad aims, objectives and strategies for CPTED that generally apply across the whole Central Park site against best practice 'Safer by Design' principles; and
- » **Community Safety Plan** – which provides commentary, assessment and recommendations relating to Block 11's building design, parking structure design and other design considerations, against the stated aims, objectives and strategies in the Community Safety Strategy.

This report considers design (physical) and management / operational (non-physical) components of Block 11 that relate to crime prevention and community safety.

1.2 CPTED Principles

The assessment undertaken in the preparation of this report is based on an overarching strategy for safety and crime prevention at Central Park, as contained within the overarching CPTED Report for the modified Concept Plan (*Preliminary CPTED Report for Modified Concept Plan*, Elton Consulting, April 2008). The overarching report set out the CPTED framework for all development at Central Park and contained an analysis of the crime and safety issues in the neighbourhoods surrounding the Central Park site, including crime hot spots, incidents and trends.

The principles adopted in the overarching 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. The principles are listed below and described in further detail at **Appendix A**.

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

The assessment of Block 11 is consistent with the overarching report for the Concept Plan and in doing so, is consistent with principles and philosophy NSW Department of Urban Affairs and Planning's (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*.

The assessment of Block 11 investigates how the design embraces, or intends to embrace, principles of CPTED; 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 'Safety by Design' principles. This is referred to as CPTM ('Crime Prevention Through Environmental Management'). It is therefore recommended that as an ongoing crime

prevention strategy, the security management regularly link in with the security systems in place for other buildings in Central Park.

1.3 Statement of Commitments

This report has been prepared to satisfy the Statement of Commitments associated with the approved Concept Plan. Specifically, this report addresses commitments no. 30 – 32 contained within Schedule 4 of the Concept Plan Approval (MP06_0171) as modified. Commitments no. 30 – 32 relate to the undertaking of detailed CPTED assessment as part of the PA stage.

The relevant commitments are:

- 30. A Safety Management Strategy will be prepared and provide guidelines for the application of CPTED principles and 'Safer by Design' best practice models.*
- 31. 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 and Infrastructure) Crime Prevention and Assessment of the Development Applications Guidelines under Section 79C of the Environmental Planning and Assessment Act 1979.*
- 32. The NSW Police will be consulted throughout the CPTED assessments for all applications for the CUB site.*

1.4 Methodology

Elton Consulting has relied on consultation with the project team, desktop research and review and analysis of design documentation in the preparation of this report. The documentation for review has primarily included plans and reports prepared by francis-jones morehen thorp (FJMT) including:

- » Landscape Report – Frasers Block 11 (FJMT)
- » CCTV and Public Domain Security Plan (FJMT)
- » SSDA Plans (FJMT) including:
 - > SITE PLANS
 - 01_Site Plan
 - 01_Site Analysis Plan
 - > PLANS
 - 01_Key Plans
 - 01_Ground Level
 - 01_Level 01
 - 01_Level 02
 - 01_Level 03
 - 01_Level 04-06
 - 01_Level 07 Setback Floor South
 - 01_Level 08 Setback Floor North
 - 01_Level 09
 - 01_Level 10-12
 - 01_Level 13
 - 01_Roof
 - 01_Basement Level 01
 - 01_Basement Level 02

- 01_Basement Level 03
- > SECTIONS
 - 01_Section
 - 01_Section
 - 01_Solar Access Sections
- > ELEVATIONS
 - 01_North and South Elevations
 - 01_East and West Elevations
- > GROUND PLANE DETAIL ELEVATIONS
 - 01_Detail Elevations - North
 - 01_Detail Elevations - South
 - 01_Detail Elevations - East and West
 - 01_Facade Types
- > TYPICAL LAYOUTS
 - 01_Adaptable Apartments
 - 01_Adaptable Apartments
- > Analysis Diagrams
 - Shadow Diagrams
 - Ventilation and Solar Analysis Diagrams
 - Retail Signage Zones
 - Finishes Board
- > Envelope Details
 - FAC03, 04, 05, 11 Terracotta and Sliding Screens
 - FAC02, 03, 04, 05, 11 Terracotta and Vertical Louvres
 - FAC02 Option A - Vertical Louvres
 - FAC02 Option B - Bi-fold Sunshades
 - FAC 02 Terracotta and Vertical Louvres
 - FAC 02 Terracotta and Vertical Louvres
- > VIEWS
 - Facade Views
- > LANDSCAPE
 - Cover Page
 - Ground Floor
 - Level 10 & Level 14 Green Roof
 - Level 9 Terraces
 - Landscape Sections

1.5 Disclaimer

Information within this report is based upon information provided to Elton Consulting in October 2014. In preparing 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, concluding that the report contains rigour in its detail and relevance and addresses the requirements of the Block 11 architecture and engineering design to intentionally consider, and adhere to, CPTED principles. 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 report.

2 Proposed Development

2.1 Central Park

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 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 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 has directed that safety and CPTED be a fundamental component of the design approach.

2.1.1 Concept Plan

The Concept Plan approval for Central Park (MP 06_0171), as modified, permits the construction of a mixed use precinct comprising:

- » 11 development blocks;
- » A maximum Gross Floor Area (GFA) of 255,500m²;
- » Combined basement car parks, providing car parking for Blocks 1, 4 and 8 and Blocks 2, 5, 9 and the Kensington Precinct;
- » A new public park;
- » Tri-generation and re-cycle water treatment plants;
- » Retention of heritage items;
- » Public domain works;
- » Contributions.

2.2 Block 11

2.2.1 Location and context

Block 11 is located on the south eastern boundary of the Central Park site and is bounded by O'Connor Street to the north, Kensington Street to the east, Wellington Street to the south and Balfour Street Pocket Park to the west. The site is in close proximity to the Central Park public open space ("Chippendale Green") and the Heritage Brewery building. The location of Block 11 within the Central Park site is shown at Figure 1.

Surrounding development includes:

- » Chippendale Green and Block 5C to the north (retail ground floor with residential accommodation above)
- » Balfour Park to the west;
- » Mixed uses including commercial units, terraces and residential flat buildings to the south (not within the Central Park precinct).

Given that Block 11 is located at the edge of the Central Park site, it forms an integrate role in the interface between new development and the existing Chippendale community. Development outside of the Central Park site and surrounding Block 11 consists primarily of commercial (office) and residential uses., as well as a number of converted industrial buildings.

2.2.2 Proposed development of Block 11

The proposed development of Block 11 comprises a part 10, part 14 storey mixed use building containing two separate towers linked from Level 2 upwards. The proposal for Block 11 includes:

- » Residential apartments;
- » A child care centre within the eastern tower at Level 1;
- » Ground floor retail tenancies;
- » Castle Connell Hotel (existing hotel at the south-east corner to be retained and reused);
- » Three levels of basement car and bicycle parking facilities, as well as building waste storage facilities and mechanical/plant rooms.

Refer to architectural plans prepared by FJMT for further details.

There are a number of public domain improvements proposed as part of the Block 11 SSDA, including hard and soft landscape treatment of the surrounding footpath areas around the proposed built form envelope. Two new open space areas are also proposed – Public Open Space South and Public Open Space North:

- » Public Open Space North – includes a communal plaza, Kensington plaza and lawn;
- » Public Open Space South – included a large Garden adjoining Wellington Street and pocket plaza adjoining Balfour Park.

Streetscape and public domain features are located along the interfaces with Wellington Street to the south, Kensington Street to the east and O'Connor Street to the north.

Figure 1 Location of Block 11



Source: Frasers

[illegible]

6 **Block 11, Central Park, State Significant Development Application** Elton Consulting

3 Consultation

There has been a major commitment to engagement with the community and other key stakeholders throughout the planning and development of Central Park. This includes consultation on issues pertaining to crime and safety for this project.

Extensive consultation has previously occurred as part of the overarching CPTED report for the Concept Plan (2006) and the modified Concept Plan (2008). This included consultation with:

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

These stakeholders provided information on crime hotspots, crime incidents and perceptions, and crime trends for the neighbourhoods and educational institutions surrounding the Central Park site. Key points 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;
- » Other crime hot spots identified by the Redfern Local Area Command were Redfern Railway Station and Victoria Park.

This broader information about the crime activity in the area was used to inform the development of overarching CPTED principles that have been the basis of review and assessment of individual blocks within Central Park.

Consultation with the NSW Police (Redfern Local Area Command) has occurred in the preparation of detailed CPTED reports for individual blocks in Central Park. For Block 11, a meeting was held with the Crime Prevention Officer from Redfern Local Area Command on 23 July 2014. The purpose of the meeting was to provide details of the Block 11 proposal to the Crime Prevention Officer, discuss key CPTED issues relating to Block 11 and obtain feedback on CPTED matters for consideration in the ongoing design of Block 11.

Feedback obtained at this meeting has been used to inform the ongoing design of Block 11. It is intended that the preparation of this report reflects the issues and recommendations arising from these earlier consultations. Key issues raised by the Crime Prevention Officer are summarised below:

Comment	How Block 11 proposal responds
Localised mounding in the public domain should not inhibit visual connections – the height of the mounding must ensure sightlines are maintained.	Maximum 1.2m depth to mounding will enable visual connections and sightlines.
O'Connor street is a desire line for pedestrians.	Noted. The proposal seeks to activate and encourage passive surveillance of O'Connor Street through: <ul style="list-style-type: none">» Ground Floor accessible dwellings fronting O'Connor Street;» Public open space/thoroughfare along O'Connor Street;» Retail use at the western end, fronting O'Connor Street

Comment	How Block 11 proposal responds
	<p>and Balfour Park, with opportunities for outdoor dining for continued passive surveillance;</p> <ul style="list-style-type: none"> » Balconies of residential dwellings on upper level facing north provide overlooking opportunities to O'Connor Street; » Public pathway located along the entire O'Connor Street edge of Block 11.
<p>Ensure through-way/driveway is well lit to help avoid conflict between pedestrians, cyclists and vehicles, and possible shared way signage and/or different ground treatment to differentiate this space as a shared way.</p>	<p>Driveway/throughway will be provided with lighting and CCTV coverage for surveillance.</p>
<p>Ensure swipe card/secured entry to different uses</p>	<p>Noted.</p>
<p>Ensure any public bike parking is locked at night time but publicly accessible during day. Screen or mesh door should be used to enable some visual permeability.</p>	<p>Noted. Appropriate measures shall be put in place to ensure no illegitimate entry to the bike storage room, located off the driveway/shared way.</p>
<p>Fencing or hedges should be used to deter people accessing balconies for Ground Floor dwellings.</p>	<p>A fence is provided to ground floor units, approximately 1.5m in height. At this height, the fence allows for some passive surveillance and reduces the likelihood of an intruder hiding behind the fence. Climber plants are proposed to add visual privacy to the private open space of dwellings on the ground floor.</p>
<p>Use of balconies promotes good passive surveillance.</p>	<p>Upper residential levels incorporate balconies on all facades to provide opportunities for overlooking to all public domain areas immediately surrounding Block 11.</p>
<p>Ensure any horizontal sections on facade will not allow intruders to climb and access upper level dwellings.</p>	<p>The building façade includes a range of architectural treatments to create visual interest, such as:</p> <ul style="list-style-type: none"> » Glazing; » Aluminium bi-fold screens on sliding tracks; » Sunshade spanning between mullions; » Horizontal sliding aluminium louvres with track; » Terracotta cladding; » Operable louvres; » Fixed vertical aluminium louvres; » Glazed balustrades (1.2m high); » 400mm high planter on the external façade (outside of Balustrade). <p>These features have not been made to carry the full load of a person, and thus it would be difficult to climb into a balcony.</p>
<p>Public open space fronting Kensington Street should allow pedestrians to move through easily.</p>	<p>This public open space comprises of a paved promenade, adjacent to the retail tenancies, which will facilitate pedestrian movements.</p> <p>The park itself comprises of pathways navigating through raised and sloping turf mounds. The concrete edging to the mounds allows for sitting/gathering and provides a potential meeting place and passive recreation, adjacent</p>

Comment	How Block 11 proposal responds
	<p>to the main Chippendale Green.</p> <p>There will be extensive surveillance opportunities from outdoor dining spaces overlooking and viewing through the park, as well as upper level balconies.</p>
<p>Use of wire mesh to storage areas is acceptable; keep secure with swipe card access and "roof" on storage area.</p>	<p>The basement storage rooms are entirely enclosed, and doors provided to ensure only legitimate entry (by residents). A key card/swipe system is recommended to ensure entry to the storage room is by residents only.</p>
<p>Preferable to provide some on-street parking for emergency vehicles.</p>	<p>On-street car parking spaces are provided along O'Connor Street, and a drop off zone along Kensington Lane.</p>
<p>Ensure intercom connects to facilities manager if concierge not available (in case of emergency).</p>	<p>Noted. This is to be provided for prior to the issue of an occupation certificate and be detailed in a facilities management plan/document.</p>
<p>Clearly marked building numbers are preferred.</p>	<p>Noted. This detail is to be provided at the CC stage.</p>

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

4 Community Safety Management Strategy

This section contains a Community Safety Management Strategy to satisfy commitment no. 30 contained within the Concept Plan approval for Central Park (as modified).

According to the Statement of Commitments, the Community Safety Management Strategy provides guidelines for the application of CPTED principles and 'Safer by Design' best practice models. As such, the Strategy is broad and contains objectives and generic design features that, if implemented, could assist to achieve CPTED principles.

4.1 CPTED objectives

The following objectives underpin the Community Safety Management Strategy for Block 11:

- » Create a secure public domain for all users at all times;
- » Create a secure and easily accessed pedestrian and transport network;
- » Create a secure environment during the construction process;
- » Address the crime prevention needs of special user groups;
- » Contribute to the creation of a secure community for residents around and on site;
- » Promote health and injury prevention;
- » Promote and support crime prevention through formal surveillance and appropriate signage;
- » Create a secure and well-maintained built environment.

It is noted that these objectives refer to aspects of community safety that are outside of the scope of CPTED; however, are important elements to the creation of an environment that promotes community safety.

These objectives are consistent in principle and philosophy within the guidelines outlined in the NSW Department of Urban Affairs and Planning's (now 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).

4.2 CPTED design and management features

Objective 1: Create a secure public domain for all users at all times

Explanation of the objective

The public domain around Block 11 shall be legible, easy to navigate, promote social interaction and contain lively public spaces that are filled with activities compatible with surrounding uses.

In pursuit of this objective, the proposal shall include the following design and/or management elements:

- » A public domain that encourages visual and pedestrian permeability by connecting to the existing road and pedestrian pathways;
- » A public domain that maximises opportunities for natural surveillance and visibility, and created uninterrupted sightlines, through the use of lighting, appropriate landscaping and straight, wide and legible pathways;

- » Activated streets and public spaces that allow for a variety of compatible activities and user groups (e.g. shops, cafes, entrances to building lobbies, etc.) so to attract pedestrian activity and thereby maximise natural surveillance;
- » A mix of uses which are compatible with adjoining and co-located uses and are designed to support public safety and health;
- » Avoidance of small corners or entrapment spaces in the public domain.

Design features to assist in achieving this objective

- » Use of glazing on the building facade at the ground floor to enclose private areas from the adjacent public areas, but also encourage sightlines and casual surveillance between public and private domain;
- » Position outdoor lighting at regular intervals, so to provide consistency of lighting and prevent shadows and glare;
- » Use landscaping that consists of low-lying plants or high-canopy trees that facilitate visual permeability and sightlines in the public domain and to prevent potential spaces for concealment.

Objective 2: Create a secure and easily accessed pedestrian and transport network

Explanation of the objective

Block 11 will be located within a safe, locatable and easily accessed pedestrian and public transport network.

In pursuit of this objective, the proposal shall include the following design and/or management elements:

- » A secure pedestrian network, made up of preferred routes and safe spots in public spaces, that increase security of all users during the day and at night;
- » Signage used throughout the pedestrian network that includes non-written forms of signage, such as maps, to assist non-English speaking people to 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, cycle-ways and pedestrian areas designed to ensure that pedestrians and cyclists have priority over vehicles;
- » Car parks that provide direct access routes which maximise natural surveillance and visibility;
- » 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.

Design features to assist in achieving this objective

- » Use appropriate lighting in the public domain, particularly on pedestrian and vehicle pathways and entry points to the building / lobby;
- » Discourage the location of blank walls along main roads or pedestrian routes;
- » Use temporary and permanent signage during construction to assist people to easily locate desired active and public transport services and facilities.

Objective 3: Create a secure environment during the construction process

Explanation of the objective

Development of Block 11 will be managed to provide a safe and amenable environment for surrounding business owners, visitors and residents throughout the construction process.

In pursuit of this objective, the proposal shall include the following design and/or management elements:

- » Proactively manage and stage development 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);
- » 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);
- » Educate surrounding residents, visitors and business owners on safe areas and "no go zones" during the development process;
- » Conduct site safety audit each day during construction to ensure safety standards are maintained by workers.

Design features to assist in achieving this objective

- » Provide security barriers and necessary fencing during the construction phase;
- » Ensure paving of pedestrian pathways and public domain areas is consistent and provide smooth transition along pathways during construction.

Objective 4: Address the crime prevention needs of special user groups

Explanation of the objective

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

In pursuit of this objective, the proposal shall include the following design and/or management elements:

- » Ground level maximises pedestrian comfort, amenity and accessibility through 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 (e.g. use of ramps);
- » Create non-written means of legibility, such as the creation of visually and physically inviting places, through the use of lighting and wide, inviting pedestrian pathways;
- » Undertake discussions with relevant authorities and community organisations to manage homelessness and social issues positively;
- » Ensure 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;
- » 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).

Design features to assist in achieving this objective

- » Provide consistent ground treatments (e.g. paving) and smooth transitions between public domain, semi-public and private areas.

Objective 5: Develop a secure community for residents around and on-site

Explanation of the 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.

In pursuit of this objective, the proposal shall include the following design and/or management elements:

- » On-going consultation with surrounding residents and communities on design and construction progress, to inform adjacent residents and other major stakeholders of key safety initiatives during construction;
- » Consult with government agencies, adjacent communities and residents and owners of commercial facilities during development;
- » Technical surveillance provided for Central Park.

Objective 6: Promote health and injury prevention

Explanation of the objective

Encourage people to work and live a healthy lifestyle and take an active role in safety and injury prevention.

In pursuit of this objective, the proposal shall include the following design and/or management elements:

- » Encourage a variety of diverse and active uses linked to public open space;
- » Proactively work with all stakeholders during the development phase, including clients, designers, contractors and the workforce, to create an incident and injury-free workplace.

Objective 7: Promote and support crime prevention through formal surveillance and appropriate signage

Explanation of the objective

Ensure publicly accessible areas will be safe for all user groups through the use of formal surveillance and signage.

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

- » A comprehensive security management system that includes CCTV cameras in the public domain and semi-public areas if the building and on-site management to monitor Block 11 and its surrounds;
- » Install CCTV cameras in appropriate locations to enable surveillance of vulnerable areas;
- » Use signage to increase safety by improving people's ability to find their way about Block 11 at all hours;
- » Use signage to provide clear information about access routes.

Design features to assist in achieving this objective

- » Ensure that signs that are essential for night-time use are lit.

Objective 8: Create a secure and well maintained built environment

Explanation of the objective

Block 11 will have a legible, durable and well maintained built environment that is secure, feels safe to users and deters crime.

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

- » Buildings should be made to feel safe and deter crime by creating a legible hierarchy of spaces; providing safe egress and access at all building entrances; removing opportunities for illegitimate entry; clearly delineate boundaries between public, semi-public (or shared) and private spaces; locate lifts for maximum visibility and natural surveillance;
- » Maximise opportunities for passive surveillance, particularly of public open space areas;
- » Ensure ample and safe opportunities for maintenance of the public domain;
- » 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;
- » Clearly delineate public and private spaces through the provision of glazing, doors and materials;
- » Ensure consistent ground surface and transition between public and private spaces;

- » 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;
- » Develop a building management or facilities maintenance plan on occupation to ensure maintenance is carried out regularly.

Design features to assist in achieving this objective

- » Use appropriate locking systems where access should be restricted;
- » Design lighting so that entrances, exits, service areas, pathways etc., are well lit after dark when they are likely to be used;
- » Provide wide pedestrian thoroughfares across the site;
- » Use glazing at the ground level where public and private spaces interface;
- » Use materials, finishes, equipment and fixtures that are attractive, robust, replaceable, reduce; opportunities for graffiti and vandalism.

5 Community Safety Management Plan

This section contains the Community Safety Management Plan to satisfy commitment no. 31 of the Concept Plan approval for Central Park (as modified). The Community Safety Management Plan uses the broad objectives of the Community Safety Management Strategy as the basis to describe and assess the proposed SSDA plans for Block 11.

The assessment contained in this section of the report is structured in accordance with the main design (physical) and management (non-physical) elements of Block 11 and addresses the public domain, semi-public domain and interface between public/semi-public and private areas.

The assessment of the Block 11 SSDA Plans addresses the following:

- » Building design (e.g. entry/exit points);
- » Building design – car and bicycle parking and delivery / loading areas;
- » Building design – communal areas;
- » Building design – servicing areas (e.g. “Back of house” areas such as plant rooms and garbage rooms);
- » Public domain design;
- » Public domain design – lighting;
- » Public domain design – signage;
- » Landscaping;
- » Formal surveillance and security;
- » Building uses;
- » Transport;
- » Construction management.

5.1 Review of Block 11

5.1.1 Building design

This section focuses on the proposed built form for Block 11 and considers whether the building design is secure, feels ‘safe’ to users and is designed to help deter crime.

Aspects of the built form that influence the feeling of safety include:

- » Design of the building to be legible, create a clear hierarchy of space, enable safe access/egress, and enable formal and passive surveillance;
- » Selection of appropriate materials, fixtures and lighting (which are durable and kept well maintained) to enhance community safety; and
- » Proposed use of the building to promote activity (detailed in Section 5.2.10).

The creation of active retail / commercial edges along some facades of the proposed building will be important to activate the public domain, therefore building features that encourage sightlines between active and public places are to be encouraged along this façade.

It is anticipated that Block 11 will attract a high volume of visitors, as well as nearby residents who will utilise the retail opportunities within the building. To ensure the 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 building together with the associated management systems, should assist to prevent crimes.

CPTED objective	Assessment / Commentary / Notation / Recommendation for Block 11
Safe egress and access at entry points	<p><i>As a general rule, main building entries should:</i></p> <ul style="list-style-type: none"> » <i>Provide safe egress and access</i> » <i>Remove opportunities for illegitimate entry</i> » <i>Create clearly defined entry points</i> » <i>Are designed so that they cannot hide intruders</i> » <i>Provide for maximum visibility.</i> <p>All entrances are to be clearly distinguishable from public walkways, through the use of appropriate lighting which should highlight the entrances, and the design of the doorways being setback from the building edge. Paving features should also distinguish the public domain from the internal spaces.</p> <p>Main building entry/exit – Block 11</p> <p>The entrances and exits to Block 11 are not hidden from view of people in the public realm and are designed to be visible from the exterior so that there are clear views out from within buildings for people exiting.</p> <p>The main entrances to the residential and retail components of Block 11 are located in prominent positions visible from the adjacent main open space in Central Park ("Chippendale Green") and the Public Open Space North within Block 11.</p> <p>The lobby entrances to the western tower face O'Connor Street and are visible from Chippendale Green. These residential lobbies are secured by a 1.2m high gate (pending finalisation of detailed design).</p> <p>The lobby entry to the eastern tower faces the Public Open Space North and is visible from Kensington Street and O'Connor Street (through the park). This lobby is secured by a glazed sliding door that is to be security/key card accessible for residents only.</p> <p>Ground floor apartments have direct access from the public domain, through a lockable secure gate. The direct access from the ground level is considered a positive design feature that will activate the ground floor plane and surrounding public domain. These entries/exits are defined by lockable gates.</p> <p>The main building entry points to the ground floor retail tenancies are highly visible from the public domain. Glazing is used to all retail entrances to promote visibility and active frontages.</p> <p>The childcare lobby is glazed and located in prominent position facing Kensington Street (eastern elevation).</p> <p>For the existing Castle Connell Hotel building, the entrance is located in a prominent position on the corner of Kensington and Regent Streets; with windows facing the street encouraging passive surveillance of the public domain.</p> <p>In summary, the following features contribute to safe and clearly defined entrances to Block 11:</p> <ul style="list-style-type: none"> » All entrances are located off a public street/thoroughfare/public domain feature; » Lobbies are glazed and setback from the building line, and are to be provided with under awning lighting to draw visitors to the entries; » Access to the ground floor units are distinguished by a gate; » Retail entries are glazed and face public spaces.

CPTED objective	Assessment / Commentary / Notation / Recommendation for Block 11
Surveillance – glazing	<p>Opportunities for surveillance are maximised through the use of glazing on walls that define public from private space, as follows:</p> <p>» Lobbies</p> <p>Glazing is provided at the entrance to the lobbies at the ground level. This ensures the lobbies are highly visible to occupants/visitors entering and exiting so as to detect any offenders.</p> <p>Street lighting, under-awning lighting, light spill from retail tenancies and other forms of pathway lighting (i.e. pole-mounted lighting) should be designed to create consistent and even lighting spread so that there is no glare for pedestrians and thus no adverse impact to visual sightlines in the evenings.</p> <p>» Upper levels</p> <p>Upper level facades to residential dwellings contain a mix of glazing and architectural features such as louvres, etc to balconies. Extensive use of glazing will promote surveillance of surrounding public domain areas.</p> <p>» Non-residential</p> <p>Glazing is provided along the retail and childcare facades as well as at the windows and doors of the Hotel. This glazing provides for clear, unobstructed casual surveillance to the street, footpath and public areas. This also encourages ground level pedestrian activity. In turn, this assists to deter crime by making the offender's behaviour more easily noticeable to passers-by.</p> <p>Non-active, non-glazed facades on the ground level are minimised. Areas where glazing is not applied are generally limited to the southern façade (alongside the ramp to access the Block 11 basement) and building servicing areas that are located off the central driveway. These areas generally adjoin parts of the site that will benefit from pedestrian activity/connectivity through the parks, and do not present a significant crime risk.</p>
Access control	<p>Access control shall be provided to all non-public areas of Block 11. Security code/intercom/access passes shall be used to control illegitimate entry or access to the residential components of Block 11, as well as lockable gates to the ground floor accessible dwellings.</p> <p>Specific security measures shall be applied to the Block 11 lobby doors to reduce opportunities for illegitimate entry, including lockable/access controlled security gates to the western tower. A concierge at the residential lobby to the eastern tower is provided, with an intercom/security access glazed sliding door.</p> <p>Deterrence of illegitimate entry shall also be encouraged at the "back of house" areas where doors provide risks for entry. In particular fire stairs doors located along the southern elevation as well as door to bicycle storage facilities should automatically lock.</p> <p>The ground floor retail uses should be security lockable to deter illegitimate entry when not used.</p> <p>While fencing is provided at the ground floor unit courtyards fronting O'Connor Street and Wellington Streets these areas may be vulnerable to illegitimate entry therefore care should be taken to ensure the glass doors to internal areas are security lockable and/or strengthened glazing should be used to prevent illegitimate entry.</p>

CPTED objective	Assessment / Commentary / Notation / Recommendation for Block 11
Defined spaces	<p>Clearly defined external/public versus private areas express a sense of ownership and reduce opportunities for illegitimate use or entry. Physical and/or psychological barriers can be used to define spaces to reinforce this sense of ownership.</p> <p>Internal and external spaces within Block 11 are defined by glass doors and facades (to define ownership but clear maintain sightlines).</p> <p>Internal spaces within Block 11 at the ground floor are distinguished from outdoor public areas through the use of walls and doors. Glazing along the active ground floor facades also helps to maintain opportunities for surveillance, thereby deterring crime by making the offender's behaviour more easily noticeable to passers-by and users of the outdoor spaces.</p> <p>Outdoor paving materials are differentiated from indoor flooring materials to define the space.</p>
Avoidance of large blank walls	<p>The use of glazing at the ground level has been maximised as a means of deterring vandalism. There is however a large wall (brick) on the southern elevation of the eastern tower at Ground Level that has the potential to attract graffiti. Windows treatments have been applied to part of this wall. There potential for graffiti in this area could be minimised by further treatment of the façade or wall climbing plants.</p> <p>Installation of lighting at the perimeter of the site, and day and night activity generating uses, will also help to deter opportunities for graffiti in the first instance by encouraging surveillance.</p>
Entrapment spots	<p>Based on a review of the ground floor plan there are no observable entrapment spots that would provide a significant security risk.</p> <p>It is noted that one of the entries to the residential units on the ground floor from O'Connor are setback from the building line. This is area is further secured by a 1.2m security fence. It is recommended that there is good provision of under awning/under building lighting in this location.</p>
Lift entrances	<p>The lifts within the Block 11 are located in a highly visible and secure area in the ground floor lobbies of the building. The lifts are not obstructed by any walls and are directly visible from the entrances to the lobbies to encourage maximum visibility and surveillance.</p> <p>As an added security measure, glazing used for the lift doors could be considered to deter opportunities for graffiti and further encourage sightlines. However, the lobby in Block 11 does not present a vulnerable security risk and as such, this design feature is not considered essential.</p>
Materials and finishes	<p>The design of the building is comprised of glazing of the retail facades and entrances, ground floor courtyards and terraces and small expanses of blank walls (southern façade of eastern tower). These design features will help deter people from undertaking vandalism on the building.</p> <p>Further information regarding materials to be used along the façade is provided in the detailed elevation plans however full details of specific building materials and design details will be confirmed at detailed design (CC) stage. Nonetheless, it is noted that there is a good use of a mix of treatments to add visual interest. Solid shutters on front windows and doors have not been utilised.</p> <p>The following features are recommended in the choice of detailed materials and finishes:</p>

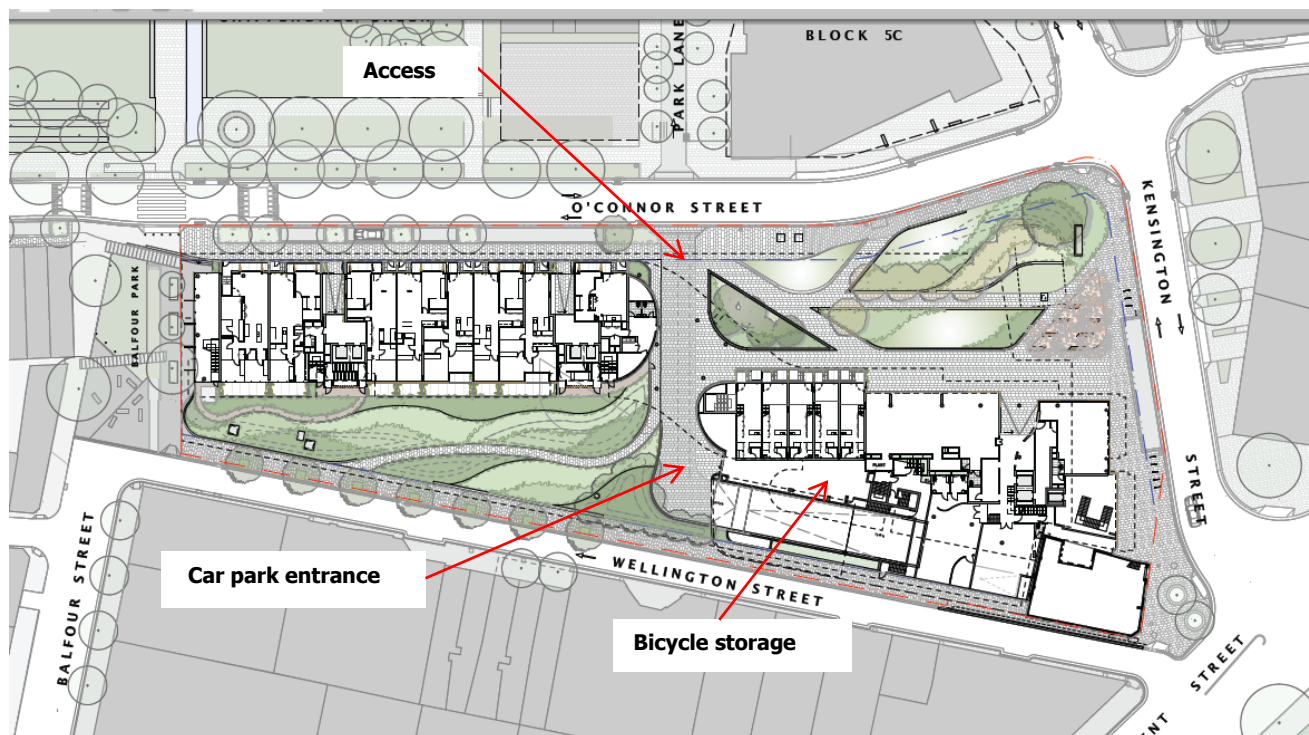
CPTED objective	Assessment / Commentary / Notation / Recommendation for Block 11
	<ul style="list-style-type: none"> » Robust, durable and high quality materials are used; » Use strong, wear-resistant laminate, impervious glazed ceramics, treated masonry products, stainless steel materials, anti-graffiti paints and clear over sprays to reduce the opportunity for vandalism.
Hardware and fixtures	<p>Details of security hardware are not known at this stage and will be confirmed at detailed design (CC) stage. However, it is recommended that robust and durable hardware and fixtures are used to prevent illegitimate entry and ensure security.</p> <p>The following recommendations are noted:</p> <ul style="list-style-type: none"> » Use sturdy, non-corrosive catches, bolts and locks (e.g. metallic bollards and bike racks located along Central Park Ave); » Use flush-mounted meter boxes or service points within a secure building/enclosure for protection; » Use non-corrosive security locks and bolts; » Communal / street furniture should be made of hardwearing vandal resistant materials and secured by sturdy anchor points or removed after hours; » Specify appropriate heavy-duty hardware, such as dead-bolt locks for all storage areas adjacent to pedestrian routes; » Use transparent, unbreakable materials in parts of doors and walls at major entry points; » Provide monitored alarm systems; » Security alarms and fixtures should be installed to best practice specifications.
Maintenance	<p>Maintenance and repairs of the built environment (e.g. remove graffiti promptly to maintain a 'cared for' image) and reporting of any damage or repair needs should be carried out promptly. It is understood that common activities and maintenance around Block 11 will be administered and managed by a Building Management Committee. Maintenance issues to be addressed after occupation should include:</p> <ul style="list-style-type: none"> » Ensure light fixtures are maintained and replaced if burnt out or broken; » If graffiti/vandalism occurs, graffiti removal is to occur immediately by contracted specialist cleaners or coordinated by the Building Management Committee.

5.1.2 Building design – basement (parking, loading bay and service areas)

This section focuses on specific crime prevention and community safety issues for the car parking and bicycle parking areas of Block 11. Three levels of basement car parking are proposed. Entry/exit to the basement car parking is via a driveway/shared way off O'Connor Street. Visitor bike parking and amenities are provided at ground level, off the driveway and within the eastern tower.

The basement provides parking (vehicle and bicycle), loading bay and service areas for all the different uses within Block 11. Design of the basement ensures safe access and surveillance for these areas, during the day and night. Based on a review of the basement plans, there do not appear to be any blind spots of concern, sharp angle corners, heavy columns and entrapment spots. In addition, on street car parking is provided along O'Connor Street and a drop off zone at Kensington Street for the child care use.

Figure 3 On Street car parking and car park entry location



Source: FJMT

CPTED objective	Assessment / Commentary / Notation / Recommendation for Block 11
Safe access and surveillance for private car parking areas	<p>Based on a review of the basement and ground floor plans, the design of the car park is considered to provide direct access routes that enable natural surveillance and visibility. Entry to parking is via a ramp from the driveway off O'Connor Street (Refer to Figure 3). A roller shutter will close the ramp off. A boom gate is provided at the driveway near O'Connor Street to restrict illegitimate entry, with an intercom system to be in use.</p> <p>Review of the three basement levels of car parking indicates that the basement car parking has been designed to ensure there are no concealed areas that may pose a risk to residents, employees and visitor of the development.</p> <p>The parking, storage and service areas are to be well lit and subject to security access to ensure maximum safety for all users. Ceiling heights in car park shall be at least 2.2m to allow for maximum visual surveillance within the basement levels, as well as to reduce vandalism of lighting fixtures.</p> <p>Access to different areas of the basement is controlled by boom gates. This will provided added measure of safety. Pedestrian entry to the basement is directly from the building lobby via lifts.</p>
Safe access and surveillance for bicycle parking areas	<p>Bicycle parking and amenities for the non-residential uses will be provided on the Ground Floor and Basement Level 1. It is considered that it is located in an area that it can be surveyed by users upon approach.</p> <p>Access to/from the basement for bicycle storage shall be access controlled to ensure no illegitimate entry to Block 11 basement levels. The basement and bicycle storage area shall be lit at all times. Visitor bike parking and amenities is provided at ground level via the driveway off O'Connor Street. As an added safety measure, CCTV may has been provided in the ground floor bicycle parking room.</p> <p>In addition, bike racks are to be provided along Kensington Street (as shown in</p>

CPTED objective	Assessment / Commentary / Notation / Recommendation for Block 11
	ground level plan) and O'Connor Street (as shown in the northern elevation).
Surveillance for on-street car parking	There are clear sightlines between the on-street car parking along O'Connor Street and public areas of Block 11 and surrounding blocks. Ensuring open sightlines allows for maximum surveillance of these car spaces.
Technical surveillance	It is recommended that technical surveillance via security (CCTV) cameras is provided in the basement, non-residential bicycle storage area in the basement and visitor bicycle storage area at ground level. Refer to section 5.1.9 for further details.

5.1.3 Building design – communal areas

This section provides commentary on the communal areas of the proposed Block 11 development. The main communal/semi-public areas of the proposal include:

- » A community room (located on the ground floor);
- » Gym and spa (located on the ground floor);
- » Garden Terrace (located on Level 9).

Design of the communal areas will be finalised at the detailed design stage, therefore the following comments are limited to matter of access/entry rather than internal fit-out issues. Communal areas that are accessible to residents only should be interesting and inviting to attract usage by legitimate users, and ensure the continuation of crime prevention and community safety design elements.

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Surveillance and legibility	<p>Ground Level – Community room</p> <p>A community room is located on the ground floor of Block 11. The community room is accessible via a glazed door located off the lobby. Access to the community room should be restricted to residents (and their visitors, if supervised) only. A key card/security access should be used to deter illegitimate entry. CCTV monitoring of this area is proposed (refer to CCTV and Public Domain Security Plan).</p> <p>Ground Level – Gym</p> <p>A communal gym is accessible via the lobby on the ground level. Access to the gym and spa should be restricted to residents (and their visitors, if supervised) only. Any change rooms located in this area and should be limited to the same restrictions. A key card/security access should be used for all spaces to deter illegitimate entry. Given that the gymnasium, spa and changes rooms do not provide for any form of natural surveillance, CCTV monitoring of entries/exits to this area is required (refer to CCTV and Public Domain Security Plan).</p> <p>Level 9 Garden Terrace</p> <p>A communal outdoor landscaped terrace is provided on level 9. This terrace includes a BBQ and plunge pool with large areas of deck for small groups to gather and interact. Screen planting to the perimeter include plants of interest whilst providing privacy and buffer to the surrounding private terraces. A change room facility adjoins the space for amenity.</p> <p>Access to the terrace should be restricted to residents (and their visitors, if supervised) only. Change rooms should be limited to the same restrictions. A key card/security access should be used for all spaces to deter illegitimate entry. Fencing should also be provided around the pool area in accordance with any legislative requirements.</p>

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Landscaping	Landscaping is proposed on the communal terrace. Refer to landscaping section (5.1.8) for assessment / comment.

5.1.4 Building design – servicing areas

Servicing areas, such as garbage rooms, loading areas, etc., are generally considered to be vulnerable elements of a residential or mixed use development. These spaces are generally less active and therefore vulnerable to illegitimate entry, vandalism and crime. The design of Block 11 should ensure that servicing areas located deter crime by avoiding the creation of entrapment spots.

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Entrances to non-pedestrian areas	<p>Illicit entry to Block 11 shall be restricted through security lockable doors.</p> <p>Entry to servicing or “back of house” areas is available primarily through the car park and loading bay entry via the driveway off O’Connor Street. There is also “back of house” areas including retail toilet amenities and other uses associated with the operation of the building located off the driveway of O’Connor Street.</p> <p>Opportunities for illegitimate entry at the servicing / loading areas of the building should be minimised through the installation of key card/security access at each servicing entry. It is also noted that this area is to be monitored by CCTV.</p> <p>Notwithstanding, it is acknowledged that the pedestrian link and driveway will attract vehicle movement and pedestrian activity with people travelling east/west to from the public open space south to the public open space north. Movement within this thoroughfare will provide some passive surveillance.</p>
Surveillance	<p>As the servicing areas of the building are considered to be more vulnerable because of lower levels of activity and thus fewer opportunities for passive surveillance, it is considered appropriate to install CCTV cameras in the basement areas particularly to the garbage rooms and storage areas (or entry to these areas). As shown in the CCTV and Public Domain Security Plan, surveillance of the basement is provided, as well as in the bicycle storage area. Refer to technical surveillance details in Section 5.2.9 of this report.</p>

5.1.5 Public domain design

This section addresses aspects of the public domain design (and interface between the public, semi-public and private realms) to encourage crime prevention and community safety. Public domain areas of the site shall be designed to be interesting and inviting to attract usage by legitimate users, as well as encourage visual and pedestrian permeability. This section also considers the use of materials, finishes, equipment and fixtures in the design of the public domain that are attractive, robust and replaceable, so as to reduce opportunities for graffiti and vandalism.

The public domain design shall also consider specific crime prevention needs of special user groups (e.g. children, younger people, older people and people living with a disability). For example, the need to escape during a crime should be made legible for the elderly, young and people in a wheelchair.

It is noted that this report does not consider BCA issues or Australian Standards and it is recommended that all relevant BCA matters and relevant Australian Standards are complied with.

Public domain in Block 11

Public areas within and around Block 11 consist of the public streets and pathways directly surrounding the proposed built form, which are made attractive and inviting for legitimate users through a variety of physical design and non-physical elements.

The public domain/park to the north of the site is a publically accessible area located along O'Connor Street and Wellington Street. A park to the south of the western tower is also provided. Connection between the parks is provided via a pathway link underneath the building at the ground level.

Another feature of Block 11's public domain is the pedestrian connection off Wellington Street, to the south of the park, which provides a pedestrian connection to the thoroughfare between the towers connecting Wellington Street to O'Connor Street. It is envisaged that the link and the public open space will generate high volumes of pedestrian activity through the site linking to the wider precinct.

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Design public areas to be legible	<p>Based on a review of the plans, it is considered that the design of the public domain within Block 11 is legible (i.e. easily understood and navigated).</p> <p>The public pathways around the proposed building are wide and connect to existing or proposed public thoroughfares surrounding Block 11. The pedestrian pathways that make up the public domain enable it to be clearly legible from the existing street grid, through the use of different paving types. It is recommended that pathway paving types are consistent with the paving selections in adjoining blocks to create continuity in the public domain (refer to Landscape report prepared by FJMT).</p> <p>The landscape upgrade within the site is predominately a streetscape upgrade to meet the City of Sydney public domain paving design policy. The public domain precast paving 400mm x 600mm is proposed to extended to the site boundary. All paving materials should be non-slip, in particular across the loading bay driveway.</p> <p>Other strategies to ensure the public domain is legible (i.e. easily understood and navigated) include the provision of signage to assist in way-finding.</p>
Activity-generating uses	<p>Activity generating uses have been located adjacent to public domain areas which will maximise natural surveillance of the adjacent public domain. This includes:</p> <ul style="list-style-type: none"> » Retail adjoin Balfour Park and Chippendale Green; » Retail adjacent to public open space north. <p>The public domain also allows for, and encourages, pedestrian use and activity. Various forms of seating are provided throughout the site including:</p> <ul style="list-style-type: none"> » Raised and sloping turf mounds; » Timber seating; » Raised planter boxes; » Outdoor seating associated with retail tenancies. <p>These seating areas will allow people to sit in and enjoy the space, providing respite of pedestrians and improving surveillance. The ground floor courtyards will also generate some level of activity with residents entering and exiting, assisting in surveillance of the public domain.</p>
Safe routes	<p>The proposal does not obstruct safe routes to nearby facilities. As noted above a key feature of this proposal is the thoroughfare connecting Wellington Street and wider Central Park precinct. It will also maintain and reinforce the pedestrian route along Regent Street through to Central station.</p> <p>Pedestrian routes will be made safe through the use of appropriate lighting within the public domain, in particular along streets, to encourage visibility at night.</p>

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
	<p>Paving materials selected for the public domain shall provide seamless public/private domain connectivity for pedestrians, thus not visually or physically prohibiting public access across the site.</p>
<p>Entrapment spots</p>	<p>Multiple entries / exits to all public open space areas should be provided so to act as escape routes if people are being pursued. Block 11 is surrounded on all four frontages by public streets, thereby multiple escape routes are provided to ensure alternative ways of escaping dangerous situations.</p> <p>Based on a review of the ground floor plans, there is no major recessing in the external perimeter of the proposed buildings which would create a safety risk for people in the public domain, thus opportunities for concealment or entrapment in the public domain are minimised.</p> <p>There are multiple entry and exit routes in the public domain surrounding the proposed building. The street network is such that there are no “dead-ends”. Opportunities for escape are provided along the street and pedestrian network.</p> <p>The pedestrian network is based on a right angle grid pattern and does not showcase curves or bends that could impede sightlines. This allows for direct sight lines.</p> <p>In addition the pedestrian thoroughfare connecting Wellington Street to the O’Connor Street enhances pedestrian access and movements.</p>
<p>Materials and finishes</p>	<p>The selection of materials for pathways should be consistent with and complement the selection of pathway materials in surrounding blocks in Central Park (i.e. paving design will integrate with other public domain areas).</p> <p>Universal access to Australian Standards (AS) has been incorporated into the streetscape, connecting walkways and building entries without compromising design quality. It is understood that paving in public areas of the site shall comply with the relevant BCA requirements to ensure slip resistant pedestrian surface materials.</p> <p>Path edging shall be consistent and sturdy, ensuring that paving meets the surrounding ground at grade to avoid falls. All BCA requirements should be adhered to.</p> <p>It is noted that building façade features should not enable illegitimate entry by climbing on the elements to gain entry to upper level units.</p>
<p>Surveillance – sightlines</p>	<p>There will be ample opportunities for natural surveillance and visibility of the public domain (i.e. of the pedestrian pathways surrounding Block 11 and the thoroughfare between the west and northern blocks) from pedestrian, cycle and vehicle movement systems around Block 11.</p> <p>As shown in the Ground Floor plan there will be clear sight lines between the streets and the pedestrian pathways. Opportunities for natural surveillance/visibility of the pathways from pedestrian, cycle and vehicular movements systems is improved through the use of consistent lighting, avoidance of low-lying plants and the activation of the ground floor uses, which will attract pedestrians to the area surrounding the site.</p> <p>The proposed design does create major obstructions to sightlines at the street level across the public domain. It is noted that the landscaped mounds will be grassed and therefore not create obstructions to visibility.</p> <p>Trees are positioned along the northern, western and southern frontages. The Landscaping section of this report (Section 5.1.8) details the recommended soft and hard landscaping selections that will ensure species and planting types do not create</p>

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
	visual or physical barriers, particularly to sightlines.
Escape routes	The proposal provides a viable exit points (or escape route) in the public domain to enable a person to avoid a situation in which he or she might feel threatened. As mentioned previously, there are no “dead ends” in the public domain created by the proposed development. All pedestrian routes have alternative access (escape route) via a connecting street.
Maintenance	Public domain areas containing landscaping shall be carefully maintained to avoid hazards. Refer to Section 5.1.8 for further details on maintenance of landscaping.
Technical surveillance	Technical surveillance via security cameras are proposed in the basement car parks. Refer to Section 5.1.9 of this report.

5.1.6 Public domain design – lighting

This section addresses the design, location and selection of lighting in the public domain. The design of lighting should ensure that entrances, exits, service areas, pathways, car parking etc., are well lit after dark. It should also provide a safe level of illumination across the site with an emphasis given to preferred routes, namely Wellington Street, O’Connor Street, to encourage their usage by pedestrians.

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Surveillance – Lighting at entries/exits and streets	<p>Lighting details are unknown at this stage. However, a range of recommendations for the selection, location and maintenance of lighting are outlined below.</p> <ul style="list-style-type: none"> » All external public domain areas 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; » All street lighting shall preferably be pole-mounted lights, and spaced at regular intervals along key thoroughfares to encourage pedestrian activity; » Adequate internal lighting (in the building entries and lobbies) as well as light-throw from street lights should ensure the pathways around Block 11 are well lit in the day and night; » All external lighting and lighting in semi-private areas shall be compliant with Australian Standards and Design Guides for Lux Levels.
Surveillance – Positioning of lights	<p>Lighting details are unknown at this stage. However, a range of recommendations for the selection, location and maintenance of lighting are outlined below.</p> <ul style="list-style-type: none"> » As a guide, areas should be lit well enough to enable users to identify a person’s face from 15m away; » In addition to street lighting, lighting shall be provided on the underside of awnings or within building entries (where glazed) to illuminate the building/lobby entry point; » Direct lights towards access/egress routes to illuminate potential offenders, rather than towards buildings or observation points; » Care should be taken to provide good lighting at the entrance to the car park and vehicle loading bay/servicing areas; » 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; » Provide adequate illumination for directional signage and maps; » Ensure lighting is out-of-reach so as to minimise opportunities to vandalise lighting fixtures.

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Surveillance – Selection of lighting	<p>The following recommendations for the selection of lighting are noted.</p> <ul style="list-style-type: none"> » 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; » Wherever practical, use luminaires that have a Full Cut-Off (FCO) light distribution characteristic to keep discomfort and disability glare to a minimum; » Avoid time-switched lamps, as they can be inoperative for days if there is a long maintenance cycle; » Select light sources which provide good colour rendition — preferably equal to or better than Ra 85.
Lighting design	<p>It is recommended that a CPTED lighting expert is consulted throughout the detailed design phase to ensure that lighting provisions and requirements are in accordance to Australian Standards and/or building management practices.</p>

5.1.7 Public domain design – signage

This section addresses the design, location and selection of signage in the public domain. Signage should be used to provide clear information about buildings (i.e. building number or name), places of security, preferred routes, facilities/amenities and locations of entry/exit/escape routes

Building signage should be located so as to be clear and visible to pedestrians in the public domain, and highlight preferred access routes. In particular, signage should be located for maximum visibility, during the day and night, along preferred routes and so that it cannot be obscured.

The table below contains a series of recommendations to be incorporated into the Signage Strategy.

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Ensure signage is easily legible	<p>Signage related to way-finding and the location of nearby blocks/amenities should be located at the entrance to open space areas so as to provide clear information regarding access routes and designated special use open spaces. As Block 11 is located adjacent to public open space, any signage related to the parks and open space areas should be clear. It is recommended that the following features be incorporated into a signage strategy for implementation:</p> <ul style="list-style-type: none"> » Use of LED electronic signage where appropriate, to ensure visibility of essential signs at night; » Information containing warnings/details about the emergency access/egress for Block 11; » Building numbering and/ or naming so that buildings are clearly identifiable; » Ensure that the size and siting of signs outside of building entries / exits do not create entrapment spaces
Signage location	<p>It is recommended that the following features be incorporated into a signage strategy for implementation:</p> <ul style="list-style-type: none"> » Place signage in identified “safe routes” and preferred pedestrian paths indicating destinations, facilities, amenities and buildings en route; » Place signs at building entrances and near activity nodes; » Where signs are placed close to vegetation, ensure the siting (and vegetation selection) of the sign cannot be obscured by growing vegetation as it matures
Signage content	<p>It is recommended that the following content features be incorporated into a signage strategy for implementation:</p>

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
	<ul style="list-style-type: none"> » Information about where to go for assistance in case of emergency; » The location of telephones, duress buttons, taxis, bus stops and the nearest "safe" place; » Closing hours at building entrances adjacent to public areas that are closed off at night; » Clear and regular signposting to main pedestrian routes; » Maps of the building at main entrances; » Ensure information is in plain words marked with "you are here".

5.1.8 Landscaping

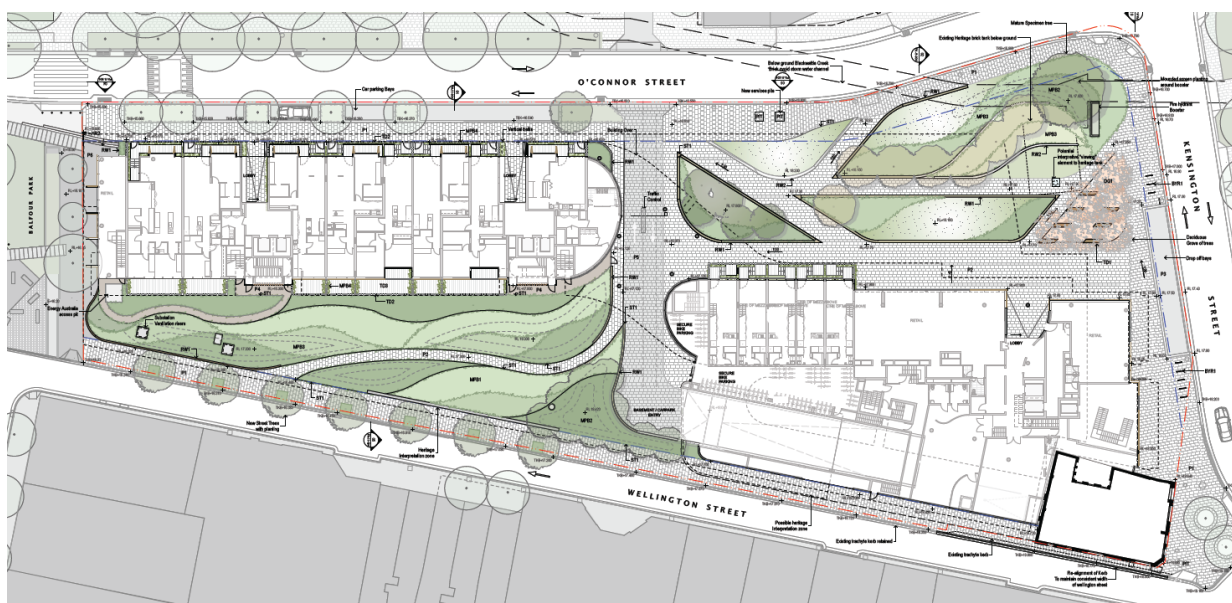
Landscaping has a significant impact on creating an attractive public domain, however should be carefully designed so as to avoid the creation of obstructions that facilitate crime.

As a general rule of thumb, the design and location of landscaping should allow for, and not inhibit, natural surveillance. In relation to soft landscaping in particular (i.e. plantings and the like), the type and location of species, noting their size and form at maturity, should be taken into account to minimise the creation of possible hiding places for intruders both at the time of construction and in the future.

The proposal incorporates both hard and soft landscaping features as shown in Figure 4 below and the FJMT Report. Key aspects of the landscaping design include:

- » Public Open Space North – includes a communal plaza, Kensington plaza and lawn;
- » Public Open Space South – includes a large Garden adjoining Wellington Street and pocket plaza adjoining Balfour park;
- » Streetscape and public Domain interfaces with Wellington Street to the South Kensington Street to the East and O'Connor Street to the North;
- » Communal open space terrace on level 9;
- » Two Green roofs on Levels 10 and 14.

Figure 4 Landscape Plan



Source: FJMT (Refer to FJMT report for high resolution plan and plan legend)

As stated in the Landscaping Report:

The design where possible maintains clear lines of sight across the public open spaces. Plant species will be selected for shape, height and foliage to deter intruders seeking to gain access to ground level apartments / terraces as well as to maintain clear sight lines and views. Plant species height will be considered so as to prevent intruders climbing to access higher levels.

The commentary in the following table is based on a review of the Ground Floor Plans and Landscaping Plans prepared by FJMT:

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Surveillance	<p>The selection of trees/planting types, and their location in the public domain, has the potential to impede sightlines for pedestrians.</p> <p>Landscaping in the public domain should be selected so as to protect and maintain natural surveillance of the site and its surrounds. This includes no use of shrubs or low-lying plants in public domain areas and maintenance of wide, paved pedestrian pathways that are well lit.</p> <p>Trees are proposed to be planted on the street frontages of the western block along street frontages of Wellington and O'Connor. A mix of trees, ground cover and grasses will be planted in the Public Open Space North and South. A summary of these areas is provided below:</p> <p>Street frontages</p> <p>As shown in the plans, the location of street trees is in an orderly arrangement that will not limit the proposal's legibility or pedestrian visibility, by being planted in a linear fashion. Based on the review of the plans the tall trees do not obstruct the view of any building entries. Notwithstanding this there should be sufficient footpath width to avoid unnecessary obstruction of building entries. Any proposed tree planting along the pathways should take into account their shape and size as they mature (refer to 'plant types' below).</p> <p>Climbers-trellis planting is envisaged to grow along the fencing that separates the units from the public realm. This is considered necessary so as to keep internal spaces private. The use of climbers (e.g. <i>Trachelospermum jasminoides</i>) on the fence will create an attractive element when viewed from the street. Such planting is not considered to hamper surveillance given that it will be limited to growing along the fence.</p> <p>Public Open Space North</p> <p>Deciduous and evergreen trees with a mix of low lying with ground cover and grasses are proposed, filter views while maintaining sightlines at ground level. The following features encourage natural surveillance of the area:</p> <ul style="list-style-type: none"> » Raised and sloping turf mounds allow sitting / gathering and provide meeting places and passive recreation; » Raised planter boxes and timber seating in Kensington Plaza; » Outdoor dining associated with retail tenancies; » Heritage Tank – interpretive "viewing lens" element that would allow people to look down into the old brewery tank. <p>Care should be taken in plant selection in the planter bed area adjoining resident's private courtyards. Planting in the void spaces should not be able to grow to medium height (over 600mm), as this may present an opportunity for offenders to hide.</p>

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
	<p>Public Open Space South – Wellington Park</p> <p>The garden provides a green outlook and buffer space between the Block 11 apartments and Chippendale beyond, this through-site link takes the form of an integrated public ground plane aligning directly with Park Lane and connecting the two Public Open Space areas. Some natural surveillance of the area will be provided by the use of the park and apartments overlooking this area</p> <p>A series of undulating mounds with trees provides screening to transition the private apartment courtyards to the public open space. The plans indicate that the area is not intended accommodated any tall bushes and shrubbery immediately adjacent to routes and at predictable stopping points such as road crossings. However there is an area of concern between the open space north and eastern edge of Block 11 that screens Park Lane and driveway into basement levels particularly given the blank wall.</p> <p>Balfour Park Retail (Public Open Space – South)</p> <p>The existing Balfour Park to the west has been carefully considered and integrated into the design. The proposed retail on grade connection creates an extension to the park and provides a transition to the Wellington Garden that adjoins Wellington Street. Through site links have also been addressed with landscaped buffer to the South to deter any through traffic to the retail space. Plantings in this area do not obstruct entry to this building. Outdoor dining will provide natural surveillance of this area.</p>
Planting types	<p>The selection of plants for the public domain is discussed in the FJMT Report. It is recommended that no dense shrubs be planted on the ground floor level which may create a visual barrier to key thoroughfares and building entries.</p> <p>The selection of trees should consider the following:</p> <ul style="list-style-type: none"> » Select trees for planting in the public domain that do not have branches below 1.5m (for the trees' protection, it is better if they do not have branches below 2.4m); » Select trees in the vicinity of the built form which will not overhand balconies; » Avoid medium-height vegetation with concentrated top-to-bottom foliage; » Ensure that planting within 5m of a pedestrian pathway is lower than 600mm OR thin-trunked with a high canopy; » Use low planting (maximum height 600mm) and high-branching trees (2m) to open sightlines; these are particularly recommended within a distance of 15m from bicycle stop signs or road junctions; » Rather than planting saplings, consider planting heavy standard (120-140mm girth), extra heavy standard (140-160mm girth) or even semi-mature trees (200-720mm) to make it physically more difficult to snap main growing stems. <p>The proposal also includes private courtyards to the ground floor apartments at the private-public street front interfaces along O'Connor Street (and facing the northern park). The proposed courtyard planting consists of climbers-trellis planting to the fences. This provides a 'green wall' screening to the ground floor apartments, providing visual amenity and privacy. Green screens provide a type of graffiti-prone wall to assist in the deterrence of graffiti, if located in key locations. Planting in these locations is considered to contribute to the creation of an attractive built form and will add visual interest to Block 11.</p> <p>The fence material on which the climbers will be attached shall be robust to deter illegitimate entry. The landscaping selection in this location (climbers) should not assist an intruder to gain access to windows and doors of upper floors.</p>

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Future sightline impediments	The planting selections should ensure that, when mature, the plants will not serve as screens or barriers to unimpeded views of pathways etc.
Landscaping in communal areas	<p>Landscaping is proposed around the perimeter of the garden terrace on Levels 9, as shown in the FJMT Report. Consideration should be given to the following :</p> <ul style="list-style-type: none"> » Screen planting to the perimeter shall provide planting that creates privacy and a buffer to the surrounding private terraces; » Low lying shrubs and ground covers and grasses be used to provide interest whilst providing privacy and buffer to the surrounding private terraces; » Any planters placed on the terraces should be either fixed or of a weight that does not enable them to be picked up or thrown; » Any pebbles used should be fixed rather than loose. <p>Landscaping – inaccessible areas</p> <ul style="list-style-type: none"> » Landscaping is proposed on Level 1 providing screening for residential tenancies and childcare. It is recommended that this be of a height to ensure adequate screening. It is noted however that approval for the childcare and landscaping within will be subject to a separate DA. » Two green roofs (Level 10 & 14) are proposed both featuring a gravel perimeter path, providing access for maintenance of the building facade and the roof top plantings. While access is restricted it is recommended that this gravel is secured or light weight to ensure. » Landscaping will be provided around the balconies of the residential units on Level 9. Species is should be low lying and low maintenance to ensure that views are maintained to public domain areas, however appropriate screen planting to create privacy from the communal garden terrace on Level 9. The area should be secured to ensure that access to this area is restricted to maintenance.
Pathways	<p>Pathways in the public domain should create a solid, non-slip surface. Based on a review of the Landscape Plans, no pedestrian pathways in Block 11 feature gravel paths and borders.</p> <p>It is recommended that all surfaces have stable and seamless paving, or provide appropriate transitions where paving materials differ.</p> <p>Paving used in the public domain should be non-slip and provide stable transitions between pathways and streets, and pathways and private areas.</p>

5.1.9 Formal surveillance and security

This section focuses on promoting community safety and crime prevention through the implementation of formal surveillance and security measures to help create a safe environment and ensure vulnerable areas are monitored. It is understood that a centralised security management plan is to be developed for the whole Central Park site. The plan should provide for centralised technical surveillance and monitoring systems. The security management shall be confirmed prior to occupation of the site.

A CCTV and Public Domain Security Plan has been prepared by FJMT. The plan shows the location of CCTV cameras and the areas of coverage for the cameras. As shown in Figure 5, the CCTV plan has good distribution and coverage of public domain areas of Block 11, including entry/exist points into the building, public pathways, driveway and areas around the retail spaces.

Figure 5 CCTV coverage



Source: FJMT (Note: areas shaded in red show CCTV camera coverage)

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Security cameras	<p>Installation of security cameras – real-time video surveillance (CCTV) – has been positioned to monitor all high-activity areas, such as the lobbies, outside the building along the major pedestrian routes along all four frontages of the building, access to “back-of-house” areas fronting driveway off O’Connor Street, at the entry to the car park, and in the basement.</p> <p>CCTV cameras should be recessed if possible (under eaves in the perimeter of the building).</p>
Security controlled access	<p>The entry doors to the building should be controlled by security card/key access.</p> <p>All “back of house” areas including garbage rooms, loading bay, bike storage room and fire stairs should also be controlled by security card/key access.</p> <p>The residents’ communal room is to be restricted for access and use by residents (and their visitors) only.</p> <p>It is recommended that a consistent electronic security system that provides intruder detection and electronic access control is provided for all entries to Block 11, which accords with that used in other central Park developments. Access control should use a common platform across all buildings yet provide flexibility in credential card types and formats.</p>
Security management	<p>A permanent security presence is provided across Central Park through a 24-hour on-site security and facilities control centre. The control centre is responsible for the provision of the following services:</p> <ul style="list-style-type: none"> » 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; » Security patrols (including licensed uniformed security officers). <p>The security presence shall be operational at Block 11 during business hours (at the Block 11 concierge) and the Central Park facilities manager (out-of-hours).</p>

5.1.10 Building uses

This section addresses the details related to the proposed building uses and the implications for crime prevention and community safety. Building uses shall ensure that adjoining and co-located uses are compatible and do not create a dangerous situation.

Uses and activities with afterhours use along the edges of the pedestrian network should be encouraged.

Entertainment night zones, and centres of activity such as restaurants, should be planned and managed so that they do not disrupt residents and have short logical connections to public transport and car parks.

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Active ground floor uses	<p>Retail uses and Castle Connell Hotel at the ground level in Block 11 are adjacent to, and accessible from, public areas along O'Connor Street, Kensington Street, Regent Street.</p> <p>The retail uses on the ground floor will have the potential for café/restaurant use extending to outdoor dining into the evening, which will encourage night time use, surveillance and activity. This will maximise natural surveillance and encourage activity after working hours.</p> <p>The design of the retail/commercial components provides opportunities for surveillance of the public domain. This is achieved through the use of glazing, which facilitates direct sightlines and light spill from internal lighting, and therefore contributes to lighting the pathways and making public areas feel safer during the day and night. In the case of the existing Hotel building, a number of windows and doors are provided to help to encourage passive surveillance.</p> <p>There will be opportunities for pedestrian activity/social gathering in and around the retail uses with outdoor seating located along the east-west pedestrian link.</p> <p>Security monitoring of this area should occur at night to ensure visitors to the nearby licensed premises do not loiter at the site.</p>
Surveillance	<p>Opportunities of surveillance of the public domain are afforded through the location of balconies/terraces on upper floors of the proposed development. Overlooking of the public domain from private space is considered a contributing form of overarching surveillance of the site and surrounding areas, particularly the public open space.</p>
Compatible adjoining uses	<p>Areas adjoining Block 11 include:</p> <ul style="list-style-type: none"> » Balfour Park to the west; » Chippendale Green and Block 5C to the north (retail ground floor with residential accommodation above); » Surrounding development (not within the Central Park site) to the south and the east containing mixed uses including residential. <p>Residential accommodation, child care and a small amount of retail is considered to be a suitable mix of uses in this locality. The ground floor retail uses facilitate activation at the street level and assist in passive surveillance of the surrounding public domain. As noted in the lighting section of this report (Section 5.1.6), given the location of the site at the edge of the Central Park precinct, continuous lighting is recommended to the pathways that adjoin Block 11.</p> <p>The street/pathway lighting should be complementary to the existing City of Sydney Council street lighting. Care should be taken in the selection of street lights to avoid creating glare or shadow. This will ensure users of adjoining buildings have secure and legible paths of travel.</p>

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Night zones	<p>The proposed retail uses within Block 11 have potential to convert to night-time uses (e.g. Castle Connell Hotel and restaurants/cafes within the retail tenancies) or trade with extended trading hours.</p> <p>It is envisaged that the ground floor will contain retail tenancies operating between 9am to 11pm (subject to future approvals). This has the potential to increase pedestrian activity, and therefore passive and active surveillance, of the surrounding public domain in Block 11 at night.</p> <p>These 'night zones' are within close proximity to public transport services along Broadway, Central Station and the proposed basement car parking in Block 11.</p> <p>A series of measures are proposed that will ensure the pedestrian route to Broadway and Central is safe, including the installation of consistent and regular streetlights along Wellington and Kensington Streets.</p> <p>It is envisaged that appropriate management of spill over noise from retail spaces shall be required with future DA's for the proposed use, to minimise disruption to future residents in Block 11 and surrounding buildings.</p> <p>Lastly, approval for any future uses will be subject to separate DA's. It is noted that licensed premises will require a Safety Management Plan.</p>
Cross-demographic user groups	<p>The Castle Connell Hotel and uses such as shops and/or cafes have the potential to attract a wide range of users groups including workers, residents (existing and future), students from nearby universities (UTS and TAFE) and general visitors during different times and days of the week.</p>

5.1.11 Transport

This section describes the CPTED implications for transport and travel behaviour as a result of the Block 11 proposal. In particular, the development shall ensure that natural surveillance is provided to public transport nodes and key pedestrian routes.

Opportunities for alternative transport should be optimised, by designing the Public Domain and proposed development so that pedestrians and cyclists have priority over vehicles (where possible).

The pedestrian and transport network surrounding the site comprises of:

- » **O'Connor Street:** provides a link east to west along the northern boundary of Block 11. It also borders the main park within the precinct "Chippendale Green" and the Brewery; providing pedestrian access to the heart of the precinct. This street links through to Abercrombie Street.
- » **Wellington Street:** an existing east-west road link that continues to Dick Street through to Abercrombie Street. Wellington is located on the southern boundary of Block 11.
- » **Kensington Street:** is located on the eastern boundary of block running north-south to Broadway, intersecting with Carlton Street a main road through the precinct and connecting to Regent Street to the south.

The topography of the site is such that a slope from east (Kensington Street) to west (Balfour park) is evident, as well as a slope from south (Wellington Street) to north.

This network of streets and pathways should be made safe and accessible through the design of the public domain and adjacent buildings (e.g. activity generating uses fronting onto the main routes), use of materials and fixtures (e.g. lighting, appropriate landscaping and furniture to promote activity) and technical surveillance systems (e.g. CCTV).

The pathways immediately adjoining Block 11 should provide seamless access and transition to adjoining pathways, roads or public spaces so as to enable safe movement across Central Park. Further detail is provided in the tables below.

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 11
Natural surveillance	The existing bus stops along Broadway and at Central are well located to service the site. The proposal contributes to maintaining pedestrian routes to Central (via Regent Street) and Broadway (via Kensington Street or Park Lane or through Chippendale Green). Creation of active frontages (containing active retail ground floor uses) will assist in natural surveillance of these key pedestrian routes.
Alternative transport	As shown in the Ground Floor Plan, cyclists and pedestrians have multiple options to travel to/from Block 11. There are pathways along the perimeter of the site and a pedestrian thoroughfare across the site. These pathways connect to surrounding (existing) streets such as Regent Street through to Abercrombie Street. Safe bicycle parking facilities are located around the perimeter of the site, at the ground floor and within the basement levels of Block 11 to encourage cycling as a preferred form of transport.
Emergency vehicle access	Emergency vehicle access must be made available via all streets within the street network in Central Park.

5.1.12 Construction management

This section addresses crime prevention and community safety for the construction phase of the development. Work Health and Safety matters are not within the scope of this report. However, it is important to ensure the site, during construction, will be secure and planned in such a way so as to encourage crime prevention and community safety.

It is envisaged that further detail will be provided in a Construction Safety Management Plan at the next stage of the development process. Construction Safety Management Plans should include information relating to safety of workers and the public during construction, construction signage and site access. The Plan should outline necessary maintenance procedures to ensure safety during the construction phase.

CPTED Item	Assessment / Commentary / Notation / Recommendation for Block 1
Construction Management Plan	On-site security of the site is recommended in order to limit opportunities for vandalism. Where vandalism or graffiti occurs, it should be removed or repaired promptly to maintain a "cared for" image. Signs indicating contact details for emergency maintenance should be located in prominent locations. Signage should also be used to assist in informing surrounding residents/visitors/business owners on safe areas and "no go zones" during the construction phase. These aspects should be incorporated into a Construction Management Plan for the site.

6 Addressing CPTED provisions of Sydney DCP 2012

Section 3.13.1 of the Sydney DCP 2013 addresses crime prevention through environmental design. The objective of this section of the DCP is to:

"Provide a safe environment and minimise opportunities for criminal and anti-social behaviour."

As outlined in this report, the proposal for Block 11 has been designed to incorporate and satisfy all CPTED principles, thus achieves this objective. The following table provides an overview of how this report, and the Block 11 proposal, addresses the relevant provisions of Section 3.13.1.

DCP provision	Block 11 compliance	Comments
(1) Active spaces and windows of habitable rooms within buildings are to be located to maximise casual surveillance of streets, laneways, parking areas, public spaces and communal courtyard space.	✓	As shown in the FJMT Plans, all facades provide for residential balconies, where predominantly glazing is used to maximise surveillance of the surrounding streets, park and public domain.
(2) In commercial, retail or public buildings, facilities such as toilets and parents rooms are to be conveniently located and designed to maximise casual surveillance to facility entries.	✓	The retail premises are provided with amenities on the ground floor.
(3) Minimise blind-corners, recesses and other external areas that have the potential for concealment or entrapment.	✓	The design of Block 11 avoids blind-corners, recesses and other entrapment spaces. The design of the interface between the public and private (and semi-private) domain encourages good surveillance and does not create areas where predators can be concealed.
(4) Building entries are to be clearly visible, unobstructed and easily identifiable from the street, other public areas and other development. Where practicable lift lobbies, stairwells, hallways and corridors should be visible from the public domain.	✓	The residential lobbies are clearly defined through the use of glazed automatic doors. Security gates are used in the western tower to secure the lobbies. All other ground floor entries are glazed, and awnings are provided to define the pedestrian realm on the periphery of the building. It has been recommended that under-awning lighting is used to further define and enlighten entry points.

DCP provision	Block 11 compliance	Comments
(5) Ground floors of non-residential buildings, the non-residential component of mixed use developments, and the foyers of residential buildings, are to be designed to enable surveillance from the public domain to the inside of the building at night.	✓	Glazing is used to all retail and other non-residential uses (or to lobbies of those uses in the case of the child care). The residential lobbies are visible from the public domain via glazing or through semi-permeable security gates.
(6) Pedestrian routes from car parking spaces to lift lobbies are to be as direct as possible with clear lines of sight along the route.	✓	The basement plans have been reviewed, and it is considered that the three basement levels provide good sightlines to lifts and stairs. Appropriate lighting to ensure no dark areas of excessive shadow is provided in the basement levels.
(7) Where dwelling units have individual main entries directly from a public space, the entry is to include a clearly defined transitional space between public and private areas.	✓	The entry to ground floor residential dwellings off the public domain is via a gate within a consistent fence, where planting is used as a screen along the length of the fence. A courtyard/private outdoor area is provided to the dwellings, as a transition space to the internal dwelling.
(8) Building details such as fencing, drainpipes and landscaping are to be designed so that illegitimate access is not facilitated by the opportunity for foot or hand-holds, concealment and the like.	✓	Opportunities for illegitimate entry have been minimised through the use of glazing along the majority of the building façade. It is noted that the façade is treated with a range of architectural design elements, however these are not designed to carry the weight of an individual and in large part, provide vertical elements that would be difficult to mount. CCTV cameras shall monitor all public domain areas.

7 Conclusion and implementation

7.1 General

This report details how the design of Block 11 (including the public domain of Block 11) meets and/or exceeds the 'safer by design' principles of CPTED. In summary, this report concludes that:

- » The building design of Block 11 meets the principles of CPTED, as the building materials and treatments encourage surveillance of the public domain and will allow users to gain access to the building safely;
- » The design discourages illegitimate entry to Block 11 by maximising opportunities for surveillance, providing lighting and appropriate security, and ensuring security lockable doors are provided;
- » The landscaping design for Block 11 provides to safe movement through the site, maintaining sightlines and providing for attractive landscaped areas for use by pedestrians and building users;
- » The proposed building uses, in particular ground floor retail tenancies, will generate some activity in and around Block 11, contributing to passive surveillance;
- » The ground floor accessible units will contribute to activity at the ground plane, whilst upper level residential dwellings provide balconies along all facades to encourage surveillance of the surrounding public domain.

It is noted that future development approval for the Castle Connell Hotel use shall ensure appropriate security measures are in place for the management of the premises. It is also noted that future development approval for the child care use in Level 1 of the eastern tower shall ensure all outdoor play areas are secure and appropriately screened.

Future purchasers/tenants of Block 11 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.

Based upon this assessment, the proposal for Block 11 is considered worthy of support from a safety and crime prevention perspective, subject to the recommendation contained within this report.

7.2 Compliance

This report sets out a variety of CPTED matters that concern physical aspects of the building design, as well as non-physical aspects such as on-going management. Compliance assessment of the proposal in future stages of development (e.g. Construction Certificate or Occupation Certificate) should be carried out against the observations and recommendations made in respect to the physical building design aspects only.

Appendices

A

Appendix A: What is CPTED

A Appendix A: What is CPTED

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:

Designation

- » 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?

Definition

- » 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?

Design

- » 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 exits; 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.



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