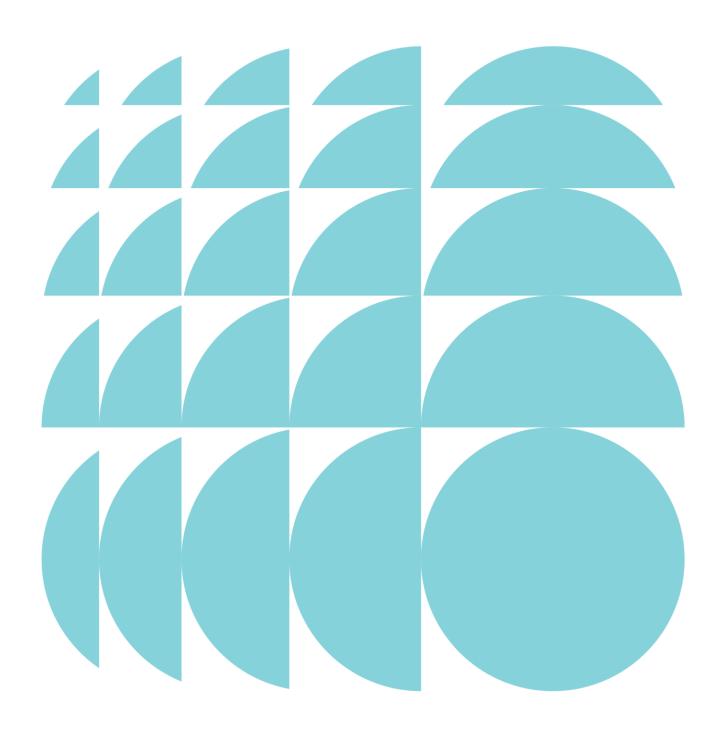
ETHOS URBAN

Crime Prevention Through Environmental Design Assessment

16 Honeysuckle Drive, Newcastle Stage 1A of the Honeysuckle City Campus

Submitted to Department of Planning and Environment
On behalf of The University of Newcastle

09 May 2019 | 218153



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Contents

1.0	Introduction	3
1.1	Disclaimer	4
2.0	Packground	4
	Background The Site	
3.0		6
3.1	Existing Development	6
3.2	Access and Security	7 7
3.3	Topography and Landscaping	
3.4 3.5	Surrounding Development Risk Assessment of Existing Site	7 10
	THOR / 100000 Mont of Exiculty One	10
4.0	The Proposed Development	11
4.1	Pedestrian Access	11
4.2	Parking	11
4.3	Bicycle Parking	11
5.0	Nature of Recorded Crime	12
5.1	Crime Prevention Strategy	14
6.0	Matters for Consideration	15
6.1	Surveillance	15
6.2	Lighting and Technical Supervision	16
6.3	Territorial Reinforcement	17
6.4	Environmental Maintenance	17
6.5	Activity and Space Management	17
6.6	Access Control	18
6.7	Design, Definition and Designation	18
7.0	Crime Risk Rating and Recommendation	18
7.1	Recommendations	18
7.1	Recommendations	10
Figures		
Figure 1	Indicative Development Site to which the Concept Plan relates	5
Figure 2	Development lots diagram and the location of Building A1	5
Figure 3	Locational Context	6
Figure 4	Site entrance viewed looking north towards	J
	Honeysuckle Drive	7
Figure 5	Electrical substation located on the site's north	•
3 :	western boundary	7
Figure 6	Site viewed looking east	7
Figure 7	Site entrance viewed looking north from the	
Ü	southern boundary	7

Contents

Figure 8	Shop top housing development to the west along	
- : 0	Honeysuckle Drive	9
Figure 9	Shop top housing development to the immediate north	9
F: 10		9
Figure 10	Through-site link to the east adjoining Chifley Apartments	9
Figure 11	Enclosed car park to the south	9
Figure 12	The rear of the developments along Civic Lane	9
Figure 13	Civic Lane adjacent to the shop top housing	
	developments fronting Wright Lane	9
Figure 14	Domestic Assault	13
Figure 15	Non-domestic Assault	13
Figure 16	Break and enter non-dwelling	13
Figure 17	Motor Vehicle Theft	13
Figure 18	Steal from motor vehicle	13
Figure 19	Steal from dwelling	13
Figure 20	Malicious damage to property	14
Tables		
Table 1	Statistics of recorded crime in Newcastle (suburb) between 2014 and 2018	12

1.0 Introduction

This Crime Prevention Through Environmental Design (CPTED) Assessment has been undertaken to assess the potential opportunities for crime and the perceived fear of crime that may be associated with the proposed Stage 1A development of the Honeysuckle Drive Campus for The University of Newcastle, as envisaged in the Environmental Impact Statement (EIS) to which this report is appended.

CPTED is a situational crime prevention strategy that focuses on the design, planning and structure of the environment. This assessment aims to identify the potential opportunities of crime created by the proposed development by assessing the development in accordance with design and place management principles of CPTED.

Ethos Urban has prepared this assessment in accordance with the methods and resources of the NSW Police Force *Safer by Design Course*. This assessment has been prepared and reviewed by experienced CPTED professionals, following their completion of the NSW Police Force *Safer by Design Course*. The assessment uses qualitative and quantitative measures to analyse the physical and social environment in which the proposed development is located, and recommends actions to mitigate crime opportunity in accordance with the Australian and New Zealand Risk Management Standard AS/NZS 31000:2009.

In accordance with the NSW Department of Planning and Environment's Guidelines (2001) the aim of the CPTED strategy is to influence the design of buildings and places by:

- increasing the perception of risk to criminals by increasing the possibility of detection, challenge and capture;
- increasing the effort required to commit a crime by increasing the time, energy or resources which need to be expended;
- · reducing the potential rewards of crime by minimising, removing or concealing 'crime benefits'; and
- · removing conditions that create confusion about required norms of behaviour.

Architectural Drawings prepared by EJE Architecture (**Appendix B** of the EIS) have been reviewed as part of this assessment.

The following tasks were undertaken in the preparation of this assessment:

- review of the Safer By Design Manual by the NSW Police Force;
- collection and analysis of local and NSW State crime statistics from the Bureau of Crime Statistics and Research (BOCSAR); and
- a crime risk assessment, in accordance with the current NSW policy and practice, of the following regulation and assessment principles:
- 1. Surveillance
- 2. Lighting/technical supervision
- 3. Territorial reinforcement
- 4. Environmental maintenance
- 5. Activity and Space Management
- 6. Access control
- 7. Design, Definition and Designation

A site inspection was undertaken on the 13 November 2018 between the hours 11.00am and 1.00pm to assess the current site conditions, situational crime prevention measures and perceived safety of the existing environment.

This CPTED report is to be read in conjunction with the Environmental Impact Statement prepared by Ethos Urban and submitted as part of the development application submissions package for the Stage 1A redevelopment.

1.1 Disclaimer

CPTED strategies must work in conjunction with other crime prevention and social intervention strategies and police operations. By using the recommendations contained in this assessment, a person must acknowledge that:

- there is no definitive measure of 'safety'. Therefore, this assessment cannot be used as proof of a definitive measure of safety.
- this assessment does not ensure complete safety for the community, and public and private property.
- assessment and recommendations are informed by information provided, with observations made at the time the document was prepared.
- this document does not guarantee that all risks have been identified, or that the area assessed will be free from criminal activity if recommendations are followed.
- this assessment has been undertaken on behalf of the applicant and does not represent the opinions and expertise of the NSW Police Force.

The principles of CPTED aim to minimise the opportunity for crime, but it is recognised that environmental design cannot definitively eliminate opportunities for crime, or prevent a determined perpetrator from committing such crimes.

2.0 Background

The Honeysuckle City Campus development is located on a series of lots situated between Honeysuckle Drive and Civic Lane, acquired by the University from the Hunter and Central Coast Development Corporation (HCCDC), formally Hunter Development Corporation. The development of the Honeysuckle City Campus in the heart of Newcastle forms part of the University's NeW Futures Strategic Plan (2016-2025), which promotes a long-term vision of delivering new modes of education focused around a compact campus setting in a central location. This is consistent with the University's broader strategy of attracting the best students and academic staff and promoting their national and global presence in education, research and innovation.

On 2 July 2018 a State Significant Development (SSD) Application in support of a Concept Development Application for the University of Newcastle was submitted to the Department of Planning and Environment. The application seeks consent for the establishment of seven (7) building envelopes for student accommodation, academic and ancillary uses (refer to **Figures 1 – 2**). The Application was publicly exhibited from 2 August 2018 to 28 August 2018 and is currently under assessment.

Stage 1A represents the first stage of the Concept Plan redevelopment and will build on the University's historical presence (University House, Northumberland House, and Conservatorium of Music), and the more recent development of NeW Space in the CBD. Stage 1A relates to the delivery of a new four storey building located in a visually prominent position on the corner of Honeysuckle Drive and Worth Place (refer to **Figure 2**). Stage 1A is proposed to accommodate facilities for the University's School of Creative Industries (SOCI) and the Innovation Hub.



Figure 1 Indicative Development Site to which the Concept Plan relates Source: Cox Architecture

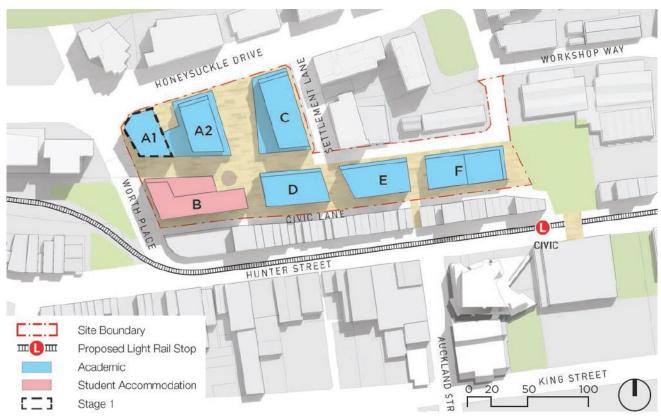


Figure 2 Development lots diagram and the location of Building A1

Source: Cox Architecture

3.0 The Site

The proposed Honeysuckle City Campus development is located within the Newcastle City Council LGA at 16 Honeysuckle Drive, Newcastle. The campus development is located on a series of sites situated between Honeysuckle Drive and Civic Lane, acquired from the Hunter and Central Coast Development Corporation (HCCDC).

Stage 1A is located at the north western corner of the Honeysuckle City Campus site and is bound by Honeysuckle Drive to the north, Worth Place to the west, and Wright Lane to the south. The Stage 1A site is legally described as Lot 1 in DP 1163346 and has a total area of a total area of 1,899m².

Located within the wider Honeysuckle Precinct, the site is strategically positioned in the geographic heart of the Newcastle CBD. This area is experiencing a process of revitalisation, with a number of major commercial and residential developments having been completed recently.

The site is also located in close proximity to the Newcastle Light Rail, which commenced operation on 17 February 2019. With stops at Honeysuckle and Civic, the Newcastle Light Rail will improve transport connectivity to the site and the broader area. The Hunter River is located north of the site, while the Civic Precinct of Newcastle and the iconic NeW Space building sit just to the southeast. The locational context of the site is shown at **Figure 3**.



Figure 3 Locational Context
Source: Google Maps and Ethos Urban

3.1 Existing Development

The campus development is proposed to occupy a number of allotments which are currently vacant. Stage 1A which forms the subject of this application is proposed to occupy the north western portion of the site. Secure fencing is provided around the perimeters and demarcates the site from the surrounding development.

Photos of the existing site are shown below from Figures 4 - 7.



Figure 4 Site entrance viewed looking north towards Honeysuckle Drive



Figure 5 Electrical substation located on the site's north western boundary



Figure 6 Site viewed looking east



Figure 7 Site entrance viewed looking north from the southern boundary

3.2 Access and Security

Vehicle access to the site is currently provided off Wright Lane. As the site is currently vacant, access to the site from Honeysuckle Drive and Worth Place is restricted by an enclosed wire fence.

On-street parking is provided along Honeysuckle Drive and Settlement Lane. Off-street parking is available to the public in the Wright Lane Car Park which forms part of the wider University of Newcastle City Campus site.

3.3 Topography and Landscaping

The site has a flat topography. Further details are provided on the Survey Plan located at **Appendix D** of the EIS. The vacant land to be development is largely devoid of vegetation. Turfed grass is sparsely located across the site.

3.4 Surrounding Development

The surrounding development is pivotal to understanding the crime risk associated with the site. The site is located within the Honeysuckle Precinct which has undergone steady redevelopment over the last two decades, with the HCCDC overseeing a number of large projects in the vicinity of the site. The site is located in a prominent position at the intersection of Honeysuckle Drive and Worth Place. It benefits from being surrounded by a number of current and recently constructed mixed-use residential developments that directly overlook the site.

To the North

To the immediate north, the site is bounded by Honeysuckle Drive which consists of a busy east-west two lane road that functions as a key corridor within the Honeysuckle Precinct. A landscaped medium strip divides the west east lanes and incorporates tree planting. The tree planting is evenly spaced and permits sightlines to the northern side of Honeysuckle Drive. To the north west, the intersection of Worth Place and Honeysuckle Drive incorporates a round-a-bout with low lying vegetation and palm trees.

A series of predominantly high-density shop top housing developments up to seven storeys in height line Worth Place and Honeysuckle Drive. At street level these developments incorporate retail and commercial uses that facilitate street front activation. The Honeysuckle Hotel is located beyond this, on the edge of the Hunter River.

To the East

To the east the site adjoins two vacant allotments that form part of the Honeysuckle Campus Concept Plan redevelopment. Immediately adjoining the site, is Site A2 associated with Stage 2 of the Concept Plan redevelopment. Adjoining this site, is Site C which is envisaged to form part of the Stage 3 redevelopment. Located further eastward, the Honeysuckle Campus is bounded by Settlement Lane. Further east is the Chifley Apartments hotel development which reaches eight storeys in height. The balconies and windows associated with this development are oriented towards the site. Office uses with glazed fenestration are provided at street level.

To the north east is a shop top housing development reaching eight storeys in height and known as the 'Honeysuckle Executive Suites'. It contains ground level office uses and residential apartments above. The windows of this development are oriented towards the site and balconies oriented away from the development towards the north.

A through-site link is located between the Chifley Apartments and the Honeysuckle Executive Suites. The through-site link facilities access to Honeysuckle Drive and the public open space area located further eastward. The through-site link incorporates bollards to prevent vehicular access.

To the South

To the immediate south, the site is bounded by Wright Lane, which functions as a no-through road. Further southward is an open car park which forms part of the Honeysuckle City Campus Development precinct. Beyond this the development consists of Civic Lane and of fine-grained shop top housing development ranging from two to seven storeys in height. The shop frontages of these developments are oriented towards Hunter Street. Accordingly, the rear of these developments front the site. Windows are generally incorporated on each building and provide some overlooking of the site.

To the West

To the west of the site is Worth Place which provides a connection between Honeysuckle Drive and Hunter Street. The development to the west of this consists of a nine storey shop top housing development that incorporates retail and commercial uses at street level oriented towards Honeysuckle Drive. The entrance point of this development and a small portion of landscaped area front the site at the western interface.

A recently constructed landscaped area is located to the south west and incorporates a pedestrian access point that provides a connection that extends between the rear of the developments and the new light rail. This landscaped area predominantly comprises turfed grass and incorporates minimal tree planting.

The surrounding development is shown from Figure 8 – 13.



Figure 8 Shop top housing development to the west along Honeysuckle Drive



Figure 9 Shop top housing development to the immediate north



Figure 10 Through-site link to the east adjoining Chifley Apartments



Figure 11 Enclosed car park to the south



Figure 12 The rear of the developments along Civic Lane



Figure 13 Civic Lane adjacent to the shop top housing developments fronting Wright Lane

3.5 Risk Assessment of Existing Site

A risk assessment of the site in its existing context and form has been undertaken. Overall, the Crime Risk Rating is considered 'moderate'. The reasons for this are:

The key positive elements of the site are:

- The site sits adjacent to the busy intersection of Honeysuckle Drive and Worth Place which support a high level
 of pedestrian and vehicular traffic.
- The surrounding development consists of high rise residential buildings with retail uses provided at ground level.
 These developments overlook the site and provided a high degree of 'natural' community policing and effective quardianship.
- The surrounding locality is generally well maintained and includes signage, secure fencing, landscaping and paving that provides a clear delineation between public and private space.
- The surrounding streetscape provides dedicated footpaths that experience high levels of pedestrian usage consistent with its CBD location.
- The site is located in a transitional area subject to extensive redevelopment that has precipitated the introduction of a number of multistorey developments in the surrounds that overlook the site.
- The site is located directly adjacent to an expansive open at-grade carpark that will provide a high level of natural surveillance during daylight hours.
- Many of the surrounding buildings provide secure access arrangements with guardians within the foyer areas at street level which will provide opportunities for surveillance and natural community policing.
- The landscaping surrounding the site is well maintained and provides limited opportunities for concealment.

The key negative elements of the site are:

- The site is located within a central business district (CBD) which typically experience higher rates of crime, as indicated by the crime statistics and hotspot maps detailed in Section 5.0 (however, not necessarily higher rates of victimisation).
- The site adjoins an open car park that will be less frequently used at night, consequently providing minimal opportunities for onlooking.
- The through-site link to the direct east has the potential to function as an escape route.
- The fine-grained top shop housing development to the south is oriented away from the site, providing little activation of the ground plane.
- The open space area to the west and the pedestrian connections within may provide opportunities for escape routes.
- The site is located in proximity to licensed premises along Hunter Street and Honeysuckle Drive.

It is noted that this risk assessment is based on the current physical environment of the site and its surrounds. This assessment does not speculate on the future condition of the surrounding urban environment. A risk assessment of the site could change once the surrounding precinct is completed.

Notwithstanding this, the formation of the newly developing urban environment and its surrounds are evident and inform the risk assessment for the site.

4.0 The Proposed Development

The Environmental Impact Statement (EIS) to which this CPTED report is appended is submitted to the Department of Planning and Environment in support of a SSD Application for an educational building that incorporates following works:

- Construction of a four (4) storey building (known as Stage 1A), to be used for academic and ancillary uses;
- Maximum gross floor area (GFA) of 2,390m²;
- Maximum building height of RL 27.5 (four storeys);
- Internal fit out works including open plan workspaces and smaller enclosed studios, staff meeting rooms, student common area, specialised suites and offices; and
- · Landscaping works.

4.1 Pedestrian Access

Access to the development is obtained from the street frontages of Honeysuckle Drive and Worth Place via dedicated pedestrian paths. The primary entrance point is located along Worth Place and provides access to a centrally located lobby which accommodates a concierge desk. The secondary access point is proposed adjacent to Honeysuckle Drive and provides access to an open plan foyer.

Both entrance points incorporate glazed fenestration which permit sightlines to and from the building, including the concierge desk.

Dedicated pedestrian paths are proposed from each entrance to the dedicated pedestrian footpath network that surrounds the site.

4.2 Parking

A small loading bay is included in the design, however there is no provision for additional parking on the Stage 1A site. It is envisaged that visitors to the site will rely on public transport. Interim accessible parking is proposed to be provided within the at-grade parking to the south of Stage 1A (also owned by the University) and long term accessible parking will form part of the future public domain plan for the campus.

4.3 Bicycle Parking

The use of alternative modes, particularly cycling is promoted through the provision of interim end-of-trip (EoT) facilities and bike storage. Permanent facilities will be provided as part of later stages of the Concept Plan and will be identified though the future public domain design process.

5.0 Nature of Recorded Crime

Crime statistics obtained from the NSW Bureau of Crime Statistics and Research (BOCSAR) represents criminal incidents recorded by NSW Police. A review of the local statistics from 2014 to 2018 found that the most commonly occurring crimes relevant to CPTED within the Newcastle City Council LGA were:

- · Assault domestic violence related
- Assault non-domestic violence related
- · Break and enter dwelling
- Break and enter non-dwelling
- · Steal from motor vehicle
- · Steal from retail store
- Steal from dwelling
- Fraud
- · Malicious damage to property

The frequency of the above crimes in the suburb of Newcastle are detailed below.

Table 1 Statistics of recorded crime in Newcastle (suburb) between 2014 and 2018

Crime	Incidents 2014 - 2015	Incidents 2015 - 2016	Incidents 2016 - 2017		2014-2018 Trend	Rate per 100,00 Population
Domestic Assault	712	687	690	654	Stable	Medium
Non-domestic Assault	1098	1057	1122	1047	Stable	Very High
Break and Enter Non-Dwelling	437	296	357	384	Decline	Medium
Break and Enter Dwelling	800	878	950	921	Stable	High
Steal from retail store	616	748	764	877	Increase	Very High
Steal from Motor Vehicle	1528	1862	2165	2057	Increase	High
Steal from Dwelling	698	701	757	728	Increase	Medium
Malicious Damage to Property	1933	1911	2283	2054	Stable	Very High

Source: Bureau of Crime Statistics and Research NSW, 2018

Whilst the above offences have been reports to occur within the wider Newcastle LGA, the site is located within the hotspots listed below (refer to **Figures 11 - 15)**.

- Domestic Assault
- · Non-domestic Assault
- · Break and Enter Non-Dwelling
- Motor Vehicle Theft
- Steal from Motor Vehicle
- Steal from Dwelling
- Malicious Damage to Property

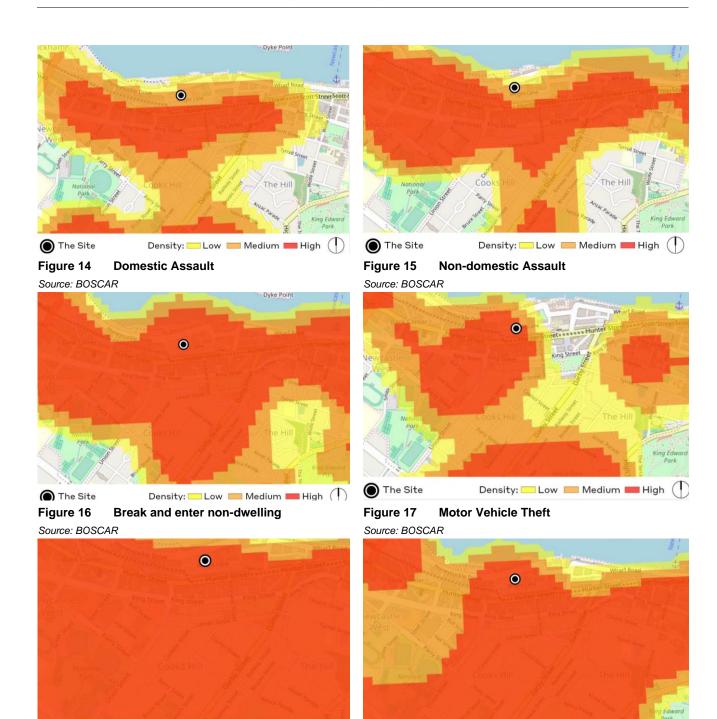


Figure 18 Steal from motor vehicle

Density: Dow Medium

Source: BOSCAR

The Site

Figure 19 Steal from dwelling

Density: Low Medium High

Source: BOSCAR

The Site



Figure 20 Malicious damage to property

Source: BOSCAR

Hotspots indicate areas of high crime density (number of incidents per 50m²) relative to crime concentrations across NSW. They are not adjusted for the number of residents and visitors in the area and therefore may not reflect the risk of victimisation.

5.1 Crime Prevention Strategy

In 2017, Newcastle City Council produced the *Safe City Plan 2017 – 2020*. The Plan has been prepared to support Newcastle Council's 2030 Community Strategic Plan (CSP). It is a four year plan that outlines the key relevant community safety issues occurring the Newcastle Local Government Area (LGA). It is informed by an extensive community consultation process that identified the following key crime related issues:

- The use of drugs and alcohol was identified to be a significant issue and key contributors to assaults, robberies, and people consuming alcohol in public spaces.
- Malicious damage due to the presence of graffiti, unrepaired damage to property, syringes in public spaces and a lack of adequate lighting at night.
- Break and enter into commercial premises, theft (both steal from person and steal from motor vehicle) were other issues of concern.

The consultant and the aforementioned findings inform the following crime prevention strategies:

- Strategy 1.2. Increase natural surveillance and perceptions of safety within the Newcastle Community;
- Strategy 1.3 Implementation of target hardening measures in car parks in hot-spot areas to reduce theft from motor vehicles;
- Strategy 3.2 Provide open space community assets that facilitate positive social interaction and wellbeing;
- Strategy 3.3. Improve perceptions of safety within the Newcastle LGA;
- Strategy 3.4. Contribute to a reduction in malicious damage including vandalism, graffiti and illegal bill posters in the Newcastle LGA;
- Strategy 4.2 Utilise emerging technologies to improve perceptions of safety and lighting;

The Strategy is relevant in informing crime prevention measures that are applicable to the site and the proposed development. The proposed development is entirely consistent with the strategic directions listed above and will contribute to the realisation of the Plan's intended outcomes.

6.0 Matters for Consideration

A potential perpetrator can take advantage of the environment, with access and the opportunity for concealment significantly affecting the safety and perceived safety of an environment. Given that malicious damage to property, non-domestic assault, steal from motor vehicle and steal from dwelling are likely to be the main criminal offences affecting the users of the proposed development, the following is an assessment of the proposed development's potential to create opportunities for such crimes.

The proposed development is located within a mixed use area and in proposing a new commercial and retail centre along with high density residential, the proposed development will generate a significant amount of new activity. The context of the proposed development underpins the assessment of the proposal in accordance with the principles of CPTED. The key components are described below.

6.1 Surveillance

Effective natural and incidental surveillance can reduce the opportunities for crime. The principle indicates that offenders are often deterred from committing a crime in areas with high levels of natural surveillance. The following design interventions benefit optimal natural surveillance:

- clear sight lines between public and private places and maximising natural surveillance;
- appropriate lighting and effective guardianship of communal and/or public areas; and
- minimal opportunity for offenders to conceal themselves or entrap victims.

The proposed development currently benefits from surveillance opportunities from the existing buildings surrounding the site which predominately comprise multistorey shop top housing developments containing ground level retail/commercial uses. These developments provide a high level of surveillance and increase the level of pedestrian activity within the surrounds of the site. It is considered that the proposed development will further improve natural surveillance by providing opportunities for the observation of both the development and the surrounds.

Building Exterior

Buildings that address the street help to facilitate natural connections between the occupants and passers-by. The site is located in a prominent position along Honeysuckle Drive and benefits from three street frontages. It is therefore ideally located to receive a high level of natural surveillance. The proposed design has sought to capitalise on its locational advantages. As shown at **Appendix B** of the EIS, the building has been designed to occupy a large portion of the site and is sited in proximity to all street frontages. In addition to this, the proposed exterior largely comprises glazed fenestration. Accordingly, the façade of the building has been designed to be highly transparent and allow sightlines to the interior, permitting the observation of the activities and spaces within. The exterior will also effectively promote an improved visual connection between occupants and passers-by. In light of this, the orientation of the building along with its materiality will substantially improve passive surveillance which will reduce incidences of loitering and antisocial behaviour.

Uneven building alignments, inset doorways and hidden entrances are known to facilitate predatory crimes, thefts, malicious damage and other offences. As shown at **Appendix B** of the EIS, the proposal provides for linear façade alignments that achieve a simple rectilinear building footprint devoid of inset doorways or hidden entrances. Accordingly, the provision of the proposed clear façade alignment will prevent opportunities for concealed and unmonitored corners.

Blank walls have strategically been located along the eastern elevation where the building is not positioned adjacent to a street frontage. As the proposed use relates to an educational facility and is therefore publicly accessible, consideration should be given to the provision of a CCTV system for the site. This system should have the potential to monitor concealed places such as the external area located along the eastern elevation where sightlines are not permitted to and from the development.

Building Layout

It is considered that the internal floor planning will significantly maximise sightlines to and from the development. The ground floor plan incorporates a variety of open plan spaces that will foster communal activity and increase sightlines to and from the development where it interfaces with the street frontages. As shown at **Appendix B** of the EIS, the main foyer entrance occupies a large portion of the floorplate and is oriented towards the north and western street frontages. The foyer entrance includes a café which will encourage individuals to frequent the space. The café will also be operated by staff that will likely occupy the space at all times of the day. In addition to the foyer, the ground level accommodates a flexible event space and fast lab. These spaces will support a variety of activities throughout the day, which will be highly visible from each of the three street frontages as a consequence of the glazed facade.

It is recommended that foyer remain free of visual obstructions for the purpose of maintaining sightlines. It is also recommended that adequate internal lighting be provided during the day and at night to increase the visibility of the building's internal spaces and the occupants within to create a strong sense of surveillance for passers-by.

In the eastern portion of the floorplate where the development incorporates a blank facade, the internal layout accommodates a fast lab, amenities and service areas. The lifts are oriented towards the north and the wider foyer area. Their proposed location will facilitate sightlines to and from the development. It is noted that future stages of the Concept Plan will result in a new building immediately to the east for the majority of this frontage.

The amenities and service areas are accessible from a lengthy corridor that is not afforded visibility from the street frontage. Similarly, the fire stairs are enclosed providing opportunities for concealment. The use of formal surveillance through the provision of CCTV cameras in locations such as these would add to the level of surveillance.

Landscaping

The proposed landscaping comprises open paved areas and low-lying planting. All planting is concentrated along the perimeters of the site at evenly spaced intervals. Accordingly, sight lines to and from the development will be maintained.

The proposed landscape areas surrounding the development are overlooked by residential units and the adjacent street level retail / commercial uses. Landscaping, particularly in proximity to the external footpath should be the subject of a maintenance regime to ensure sightlines and natural surveillance opportunities are promoted.

Overall, the proposed design is considered to provide a good level of natural surveillance within the development itself and towards the surrounding streets.

6.2 Lighting and Technical Supervision

Effective lighting and discrete technical supervision can reduce fear, increase community activity, improve visibility and enhance the likelihood of offenders being detected. Lighting and technical supervision are integral to increasing safety and perceived safety. All lighting provided within and around the proposed development, including pedestrian paths, should ideally exceed the minimum Australian Lighting Standard AS/NZ 1158 for public streets, car parks and pedestrian areas, specifically addressing the objectives for crime and fear reduction.

Lighting should be provided internally and externally to the development. Lighting levels should be adequate to permit facial recognition and allow for informal surveillance. Bright and well distributed lighting should be placed at the building's primary entrance, along the footpaths and perimeter of the site. Lighting types should be of a high quality and be vandal resistant to ensure longevity and allow for less maintenance or replacement.

Given that the development is likely to be publicly accessible, CCTV cameras should be installed throughout the development, particularly in the back of house area in the eastern portion of the floorplate. It is recommended that a CCTV network plan be developed by a security consultant for the back of house areas and the overall development. To ensure the CCTV network is effective, lighting in and around the development should be designed to correspond with the placement of the CCTV cameras to permit adequate facial recognition of CCTV images at all times. A suitably qualified consultant should be engaged to advise on the lighting specifications.

6.3 Territorial Reinforcement

Territorial reinforcement involves the perceived ownership of public spaces. Users will be more inclined to visit areas that are maintained and to which they feel they have a connection to or interest in. A well-used and dynamic public space is made safer by natural surveillance. Designing with a clear transition between public and private space, and clear design cues indicating the intended use of space is critical. A well maintained public domain is critical in encouraging occupancy of space, both in the interior and exterior of the development.

The location of the foyer / concierge desk, student communal areas and café combined with the glazed fenestration and open plan layout, which will enhance the visibility of these spaces, will increase the perceived presence of formal guardians. The visible presence of formal guardians in and around the development will send cues that the proposal is frequently occupied and well cared for. This will help to deter offenders as this increases the risk of being detected and challenged.

Overall, the introduction of a greater number of people to the site will increase territorial reinforcement. In particular, the strategic location of the employers associated with the café and concierge desk adjacent to the building's entrance will increase the presence of informal guardians and enhance the risk to offenders and crime effort.

Suitable wayfinding signage at the perimeter and entrance to the development is recommended for the purpose of reducing opportunities for people to find excuses to gain unauthorised access and / or to loiter in areas of the development or immediately adjacent to entries. The proposed access points are legible and inviting, however signage will further enhance this perception.

6.4 Environmental Maintenance

There is a strong association between environmental maintenance and the fear or perceived fear of crime. General image can greatly affect an individual's desire to enter and engage with space. Environmental maintenance and territorial reinforcement are co-dependent in achieving a safer space and are integral in achieving optimal natural surveillance. The maintenance of the built form, landscaping and lighting will assist in communicating care and the presence of effective guardianship. Routine maintenance is a strong indicator of area management and safety.

As the proposal is of high quality design and provides for comprehensive landscaping, the development is expected to enhance and redefine the prominent street frontages and complement the existing surrounding residential uses. Additionally, lighting, clarity of land uses, and increased activity will help enhance the quality of the environment further.

The ongoing maintenance of the proposed buildings, facilities and landscaping is important to balance the safety and aesthetics of the development. Well maintained spaces encourage regular use, which in turn creates natural supervision of publicly accessible areas. The proposal incorporates high quality materials that will lessen the likelihood of damage and contribute to the ongoing maintenance of the development. It is recommended that the buildings and landscaped areas be subject to regular maintenance. A rapid removal policy should be in place for vandalism repair and the removal of graffiti and all public spaces should be kept clean and tidy.

6.5 Activity and Space Management

Similar to environmental maintenance, there is a strong association between activity and space management, and the fear or perceived fear of crime. Unlike environmental maintenance, this principle endeavours to manage the more dynamic activity and use of space.

The proposal effectively introduces a clearly defined use for the site (i.e. an educational establishment) and will increase the occupation of the area both during the day and night. As more individuals will frequently use the site, surveillance and natural community policing of the area will improve. The proposal will encourage people to use the space and provide new employment opportunities, therefore resulting in people occupying the site for longer periods of time.

The proposed innovation hubs, co-working spaces and workplace learning spaces will function as hubs of activity. Staff and students will be encouraged to utilise these learning spaces and feel a sense of shared ownership for them and the broader development.

Overall the proposed development will redevelop an underutilised site that will greatly enhance its image and contribute to a sense of shared space.

6.6 Access Control

Access control strategies restrict, channel and encourage the movement of people and vehicles into and through designated areas. Unauthorised entry is reduced by physical and technical barriers, as they increase the effort required to commit a crime.

It is envisaged that the future building will be provided with appropriate access control devices (i.e. card controlled entries and out of hours lift control). Access to the plant and services contained in the eastern portion of the floorplate are recommended to be restricted to authorised personal. Access to these areas should be also be managed by a control strategy.

The landscape design includes tiered areas which act as vehicle constraints. Where this is not the case, it is recommended that a bollard / barrier system be installed at the perimeters of the site to deter and prevent vehicular access. It is anticipated this will enhance perceptions of safety for the public.

6.7 Design, Definition and Designation

The design of the proposed development reflects its purpose, and while perpetrators will often exploit areas with unclear spatial definition, the design of the proposed development generally addresses multiple principles of CPTED.

The façade incorporates large areas of glazed fenestration and the internal areas, including the foyer and the majority of the learning spaces, are visible form the street frontage. It is recommended the glazed fenestration remain free of clutter for the purpose of maintaining sightlines to and from the development, which will also help to convey the nature of the building's use and activities.

Being an educational use, the building will be publicly accessible during day-time operating hours. For this reason, it is recommended that appropriate technical surveillance be included throughout the interior and exterior of the development and should form part of a wider CCTV network.

7.0 Crime Risk Rating and Recommendation

The Crime Risk Rating considers the development as proposed in architectural drawings prepared by EJE Architecture acknowledging the existing and future site context along with the issues discussed in Sections 3 - 6, the Crime Risk Assessment Rating of the proposed development is rated within the 'moderate' category.

An assessment of the proposal using the CPTED principles has found that, with the implementation of the recommendations, the rating would still remain within the 'moderate' category. We note that this is a product of the dense urban environment and rather than CPTED deficiencies in the design itself. It is considered that from a crime and safety perspective, the design provides an improved outcome for the site and is considered to be generally consistent with the principles of CPTED.

The recommendations below however aim to further improve the safety and security of the proposed development.

7.1 Recommendations

Surveillance

- Maintain sightlines to and from the proposed development and the surrounds by ensuring signage and equipment do not create a significant visual obstruction.
- Ensure the main foyer and circulation spaces are unobstructed by structures to remove opportunities for concealment and ensure sightlines are provided to and from the development.

• The glazed facades of the building at street level should be free of clutter and signage to allow sightlines between the development and the public domain.

Lighting and Technical Supervision

- A CCTV network should be provided for the back of house areas and overall development. The CCTV network
 is to be designed in consultation with a suitably qualified security consultant with a Class 2A license under the
 Security Industry Act 1997 who can provide specific advice on the placement, installation, monitoring and
 maintenance of the CCTV network.
- The CCTV network strategy should be partnered with the internal and external lighting strategy to ensure facial recognition is achieved in all lighting conditions and an appropriate colour rendering index is achieved (minimum 60).
- Discrete CCTV systems such as small dome cameras are recommended.
- The CCTV network should endeavor to ensure blackspots of coverage are not created.
- Provide appropriate lighting in and around the development and consult with a qualified lighting engineer to
 ensure that correct lighting is provided to meet the minimum Australian and New Zealand Lighting Standards.
 Further, ensure lighting is sufficient and bright enough to enable surveillance, but also does not generate
 inappropriate light spills to the surrounding public domain.
- Maintain a consistent level of lighting throughout the exterior of the proposed development. Lighting should be adequate to permit facial recognition and provide visibility into a vehicle. An average lighting level of between 30-40 Lux with 0.4 uniformity is recommended.

Territorial Reinforcement

- Provide wayfinding signage and building identification signage where appropriate to reinforce perceptions of safety and legibility in the development.
- Maintain the provision of a concierge / help desk within the foyer to introduce formal guardians to the area.

Environmental Maintenance

- Ensure mechanisms are in place to facilitate the on-going maintenance of the building, including the implementation of a rapid removal policy for vandalism repair and the removal of graffiti.
- Ensure that landscaping is well maintained and cared for to prevent vegetation from becoming overgrown and creating opportunities for concealment.
- To maintain sightlines to and from the development, it is recommended that plant species not exceed a mature height of 500mm above ground level, or in the case of trees, should achieve a minimum canopy height of 1.8m when mature.

Activity and Space Management

- Ensure that wayfinding signage is appropriate to deter access to prevent private areas and direct pedestrian movements to desired locations.
- Maximise the inclusion of glazed facades with anti-graffiti coatings wherever possible to maximize lines of sight and mitigate the risk of damage.

Access Control

- Provide secure electronic access (card / key controlled entries / lifts etc.) to all entrances of the building to facilitate in demarcating the site's public and non-publicly accessible areas.
- Care should be given to the design of the awning proposed along the street frontages to ensure that natural ladders are avoided. Natural ladders can provide unwanted access to the upper levels of the development.

Design, Definition and Designation

 Security personal are advised to parole the publicly accessible areas of the site to minimise opportunities for anti-social behaviour.