

Crime Prevention Through Environmental Design (CPTED) Report

Bringelly Road Warehouse Facility SSDA

5 Skyline Crescent, Horningsea Park
Bringelly Road Business Hub, Lot 1

Prepared on behalf of ESR

May 2022



Project Director

Adam Coburn



9 May 2022

Project Planners

Luke Zajac

*This document is for discussion purposes only unless signed and dated by project director.

Contact

Mecone
Level 2, 3 Horwood Place
Parramatta, New South Wales 2150
info@mecone.com.au
mecone.com.au

© Mecone

All Rights Reserved. No part of this document may be reproduced, transmitted, stored in a retrieval system, or translated into any language in any form by any means without the written permission of Mecone.

All Rights Reserved. All methods, processes, commercial proposals and other contents described in this document are the confidential intellectual property of Mecone and may not be used or disclosed to any party without the written permission of Mecone.

Table of Contents

1	Introduction	4
1.1	Report Purpose	4
1.2	Report Structure	5
2	Site Analysis	6
2.1	Site Context	6
2.2	Key Features and Site Surrounds	7
3	Proposed Development	8
4	Crime Profile	10
5	CPTED Principles	16
5.1	Natural Surveillance	16
5.2	Territorial Re-Enforcement	17
5.3	Access Control	19
5.4	Space/Activity Management	20
6	Conclusion	21

Appendices

Appendix 1: NSW Police Force CPTED Guideline Assessment

1 Introduction

This Crime Prevention Through Environmental Design (CPTED) accompanies an Environmental Impact Statement (EIS) pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) in support of an application for a State Significant Development (SSD No 37558583).

The SSDA is for the construction and operation of a light industrial building, being a warehouse on lot 1 of the approved Bringelly Road Business Hub.

A CPTED Report was not requested in Secretary's Environmental Assessment Requirements (SEARs) dated 4 March 2022. It was rather requested via email from the Department of Planning and Environment (DPE) following Adequacy Review of the SSDA, dated 28 April 2022:

Concept Approval

The following areas of the Concept Approval do not appear to have been addressed.

- *Crime Prevention Through Environment Design (Condition B16) – No response to the CPTED requirement in the concept approval has been provided*

Development consent SSD 6324 (Concept SSDA or Concept Plan) was approved by a delegate of the NSW Minister for Planning on 13 January 2016 for the Bringelly Road Business Hub Staged Development Application.

A review of Condition B16 of SSD-6324 confirms that a CPTED is required for all subsequent planning applications on the site:

Crime Prevention

B16. Future development applications must include a crime prevention through environmental design (CPTED) assessment, including mitigation measures, where necessary.

The subject CPTED report has been prepared in response to DPE's request, and to satisfy condition B16 of SSDA-6324.

1.1 Report Purpose

The purpose of this report is to assess the proposal in terms of the key principles of CPTED and to provide recommendations that can be considered as part of detailed design for the site.

This report responds to the Adequacy Review undertaken for the project and to satisfy condition B16 of SSDA-6324. It has been prepared with regard to the following documents:

- Crime prevention and the assessment of development applications – Guidelines under section 79C [now 4.15] of the Environmental Planning and Assessment Act 1979 (Department of Urban Affairs and Planning, 2001);
- "Safer by design – Crime Risk Assessment" (NSW Police Force, 2016); and
- Companion to Safer by Design Crime Risk Assessment (NSW Police Force).

The assessment undertaken in this report is based on the drawings package issued by SBA Architects in February 2022.

1.2 Report Structure

The structure of this report is as follows:

- Chapter 1 introduces the report;
- Chapter 2 identifies the site and context;
- Chapter 3 provides an overview of the proposal;
- Chapter 4 provides an overview of crime in the area
- Chapter 5 provides a discussion of the development in the context of CPTED principles and provides recommendations for future implementation;
- Chapter 6 concludes the report.

Additionally, an assessment against the NSW Police Force CPTED Checklist is provided at **Appendix 1**.

2 Site Analysis

2.1 Site Context

The Bringelly Road Business Hub is situated at the south-eastern edge of Western Sydney Parklands. The Bringelly Road Business Hub is bordered by Stuart Road to the north and west, Cowpasture Road to the east and Bringelly Road to the south. Skyline Crescent, which follows the former alignment of Bringelly Road, intersects the site and provides access to the individual allotments. The site forms part of the broader Western Sydney Parklands and is located within the Liverpool Local Government Area (LGA).

The site is located in close proximity to the M5 and M7 Motorways, which provide excellent access to the state and regional road network, as well as surrounding key employment and industrial lands. The South West Rail Link is also located to the south of the Site, with the site located approximately halfway between Edmondson Park and Leppington Stations.



Figure 1: Bringelly Precinct of the Western Sydney Parklands

Source: WSPT Plan of Management 2030

The ESR Facility is proposed on Lot 1 and has an area of 12,794m², which is located within the wider Business Hub (see Figure 1 above). The site is bounded by Skyline Crescent with Lot 3 to the north (which has been developed by Bunnings), Lot 2 to the east, Bringelly Road to the south and open space to the west.

The site is owned by the Western Sydney Parkland Trust (the Trust) and ESR has entered a development management agreement with the Trust to develop the land.

The site is generally cleared of vegetation and is currently undeveloped (see Figure 2 below).



Figure 2: Site Aerial Photograph

Source: Nearmaps & Ethos Urban

2.2 Key Features and Site Surrounds

The surrounding uses of the Bringelly Road Business Hub comprise:

- The broader Western Sydney Parklands are immediately north of the site. Low density residential dwellings in West Hoxton lie further north beyond Stuart Road
- Low density residential dwellings in Horningsea Park to the east beyond Cowpasture Road; and
- Rural residential lands are provided to the west and south.

A map demonstrating the surrounding context is provided at Figure 3.

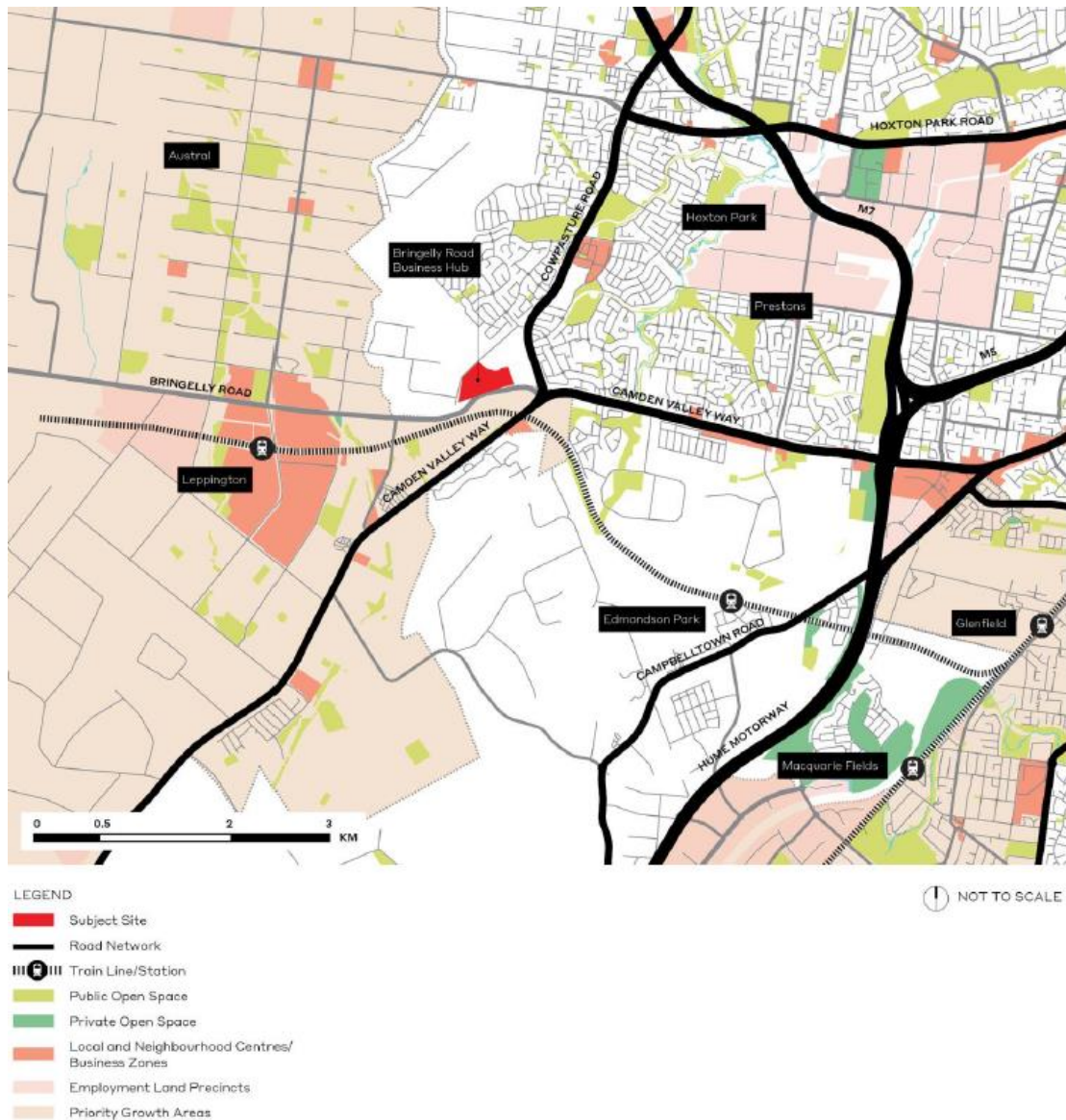


Figure 3: Site Context Map
Source: Ethos Urban

3 Proposed Development

The SSDA seeks approval for the construction of a new warehouse and distribution facility and associated landscaping at Lot 1 of the Bringelly Road Business Hub. It includes the detailed development and construction of a warehouse facility of 5,470m² in Gross Floor Area (GFA) comprising the following:

- 4,470m² of warehousing GFA;
- 1,000m² of supporting office GFA;
- 41 car parking spaces;
- 5 truck parking bays; and
- An outdoor staff amenities area.

Architectural extracts of the proposed development are provided below.

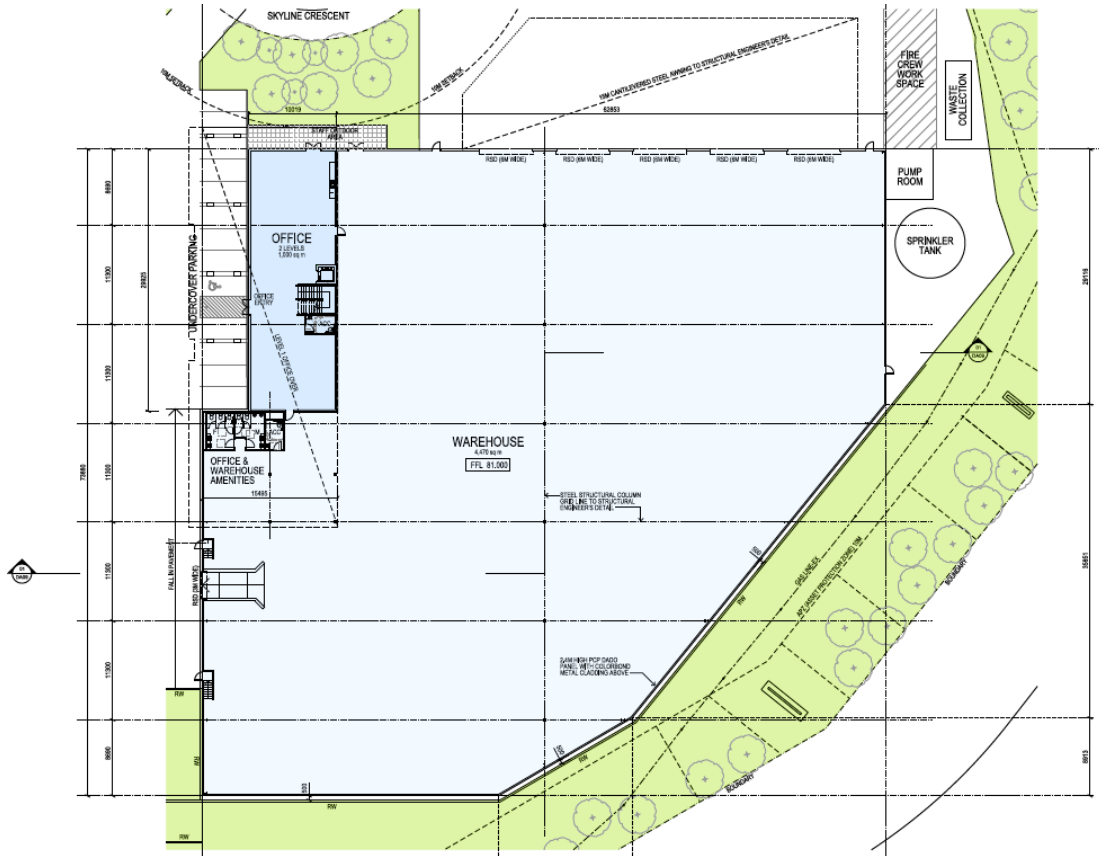


Figure 4: Proposed site plan
Source: SBA Architects

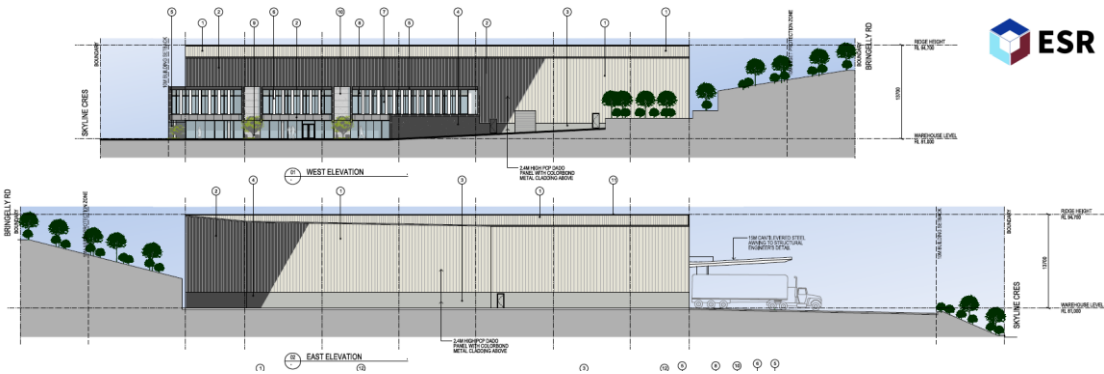


Figure 5: West and east elevation
Source: SBA Architects

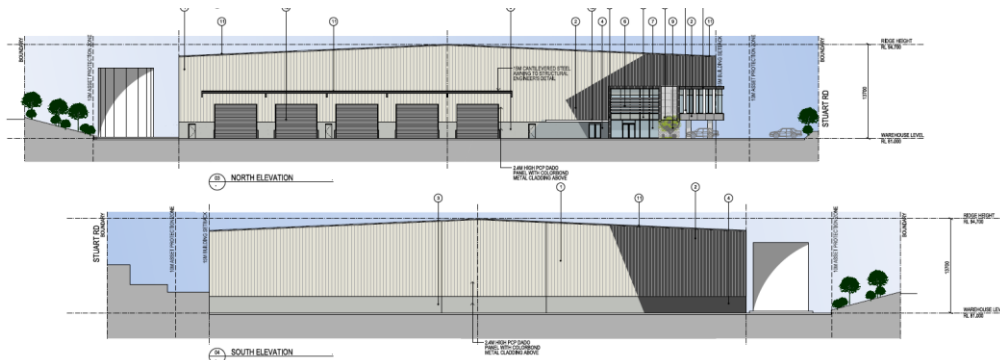


Figure 6: North and south elevation
Source: SBA Architects

4 Crime Profile

Table 2 below provides a breakdown of major crime rates in Liverpool LGA based on data from the NSW Bureau of Crime and Statistics and Research (BOSCAR) document 'NSW Recorded Crime Statistics – Quarterly Update December Quarter 2021'.

The table shows the incident rate ratio of Liverpool LGA crime rates (with the NSW rate equivalent to 1) from the past year (December 2020 to December 2021).

The crime figures discussed in this section of the report are only those crimes that have been recorded by NSW Police and as such cannot be seen to represent all crimes committed in the area.

Also, levels of reported crime are sensitive to a range of factors, such as the willingness or ability of people to report a criminal activity and the levels and nature of police activity.

Table 2. Liverpool LGA Crime Overview – December 2020 to December 2021	
Offence Type	Liverpool-to-NSW incident rate ratio
Murder	No data
Assault – domestic violence related	1.2:1
Assault – non-domestic violence	0.8:1
Sexual assault	0.8:1
Sexual touching, sexual act and other sexual offences	1:1
Robbery	1.4:1
Break and enter dwelling	0.9:1
Break and enter non-dwelling	0.6:1
Motor vehicle theft	1.1:1
Steal from motor vehicle	1.1:1
Steal from retail store	0.7:1
Other stealing offences	0.8:1
Malicious damage to property	0.8:1

Compared to the rest of NSW, Liverpool generally has **average crime rates**.

There is no meaningful data on trends at the suburb or Council level. Data is only provided for three offenses, being robbery, break and enter dwelling and motor vehicle theft. Whilst these incidents have decreased over the past two years, it

cannot be determined if overall crime has increased or decreased over the previous two-year period due to a lack of data.

While Liverpool LGA broadly displays average crime rates, it is important to note that the location of the proposed industrial development is not located within a designated “hotspot”.

As shown in the images below, BOSCAR data for the Horningsea Park indicates that the site is not located in or near any hotspots, which are mostly limited to the suburban developments within the suburb and nearby Carnes Hill Town Centre. There have been no isolated incidents in the locality of the proposed warehouse.

Hotspots indicate areas of high crime density (number of incidents per 50m x 50m) relative to crime concentrations across NSW.

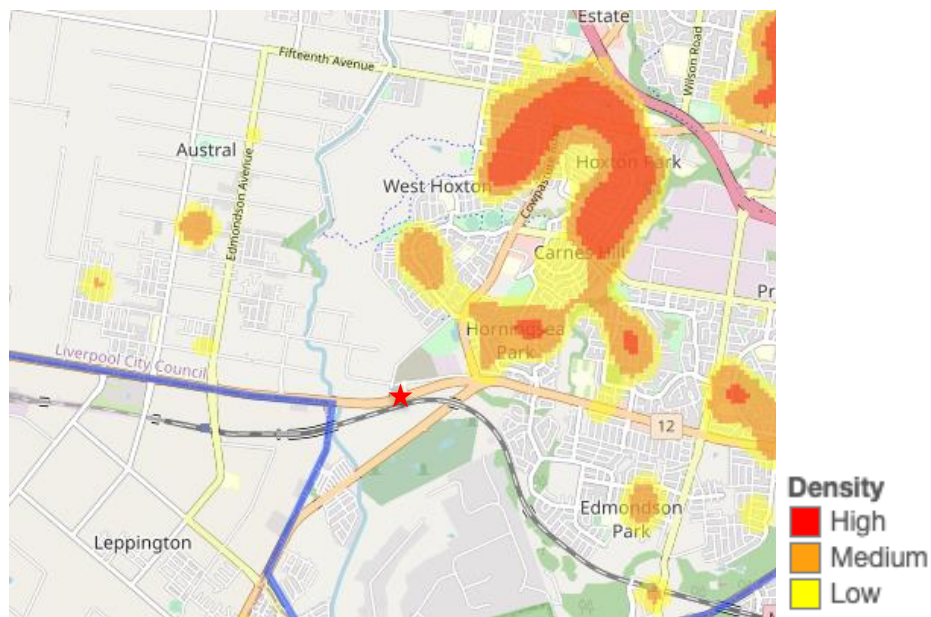


Figure 7: Incidents of domestic assault hot spot map

Source: BOSCAR NSW

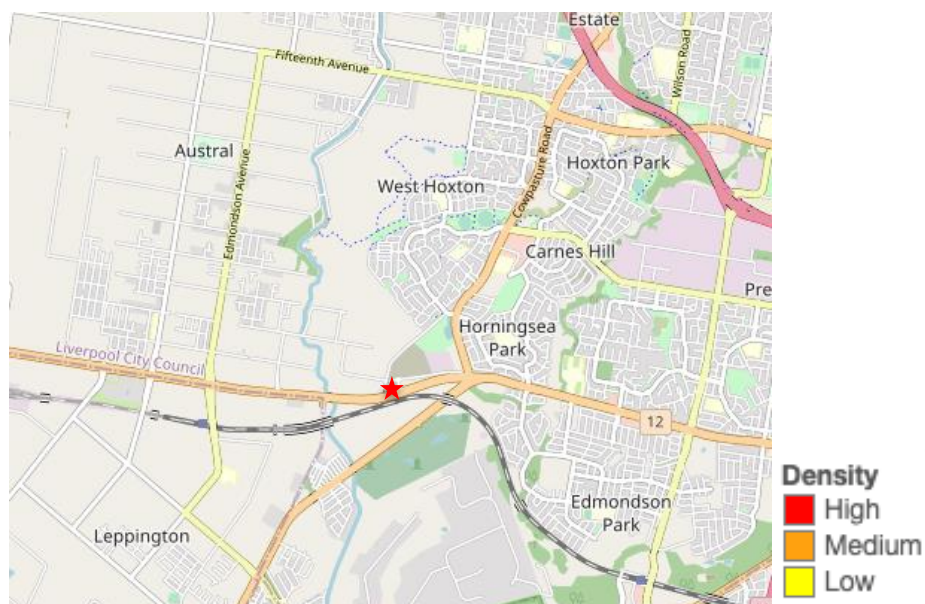


Figure 8: Incidents of non-domestic assault hot spot map

Source: BOSCAR NSW

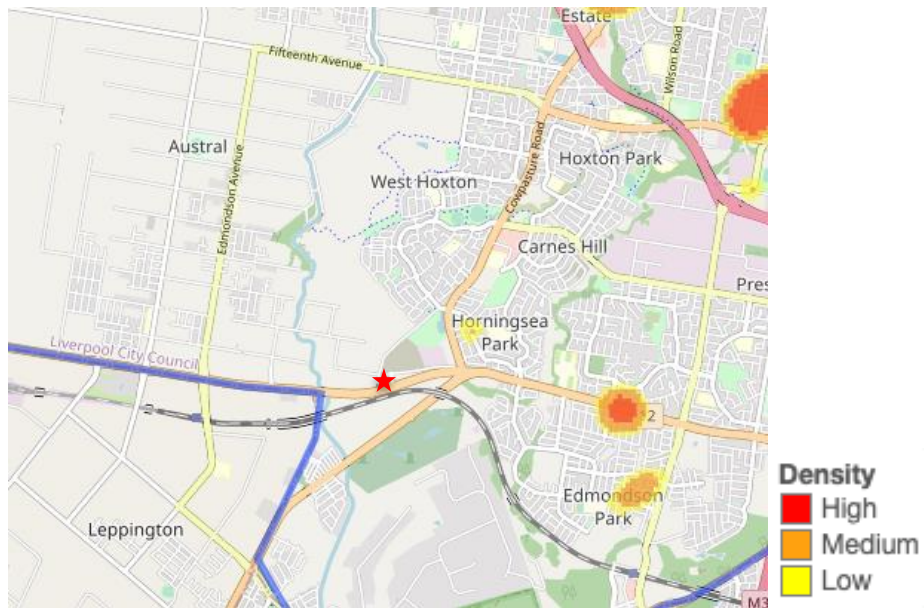


Figure 9: Incidents of robbery hot spot map

Source: BOSCAR NSW

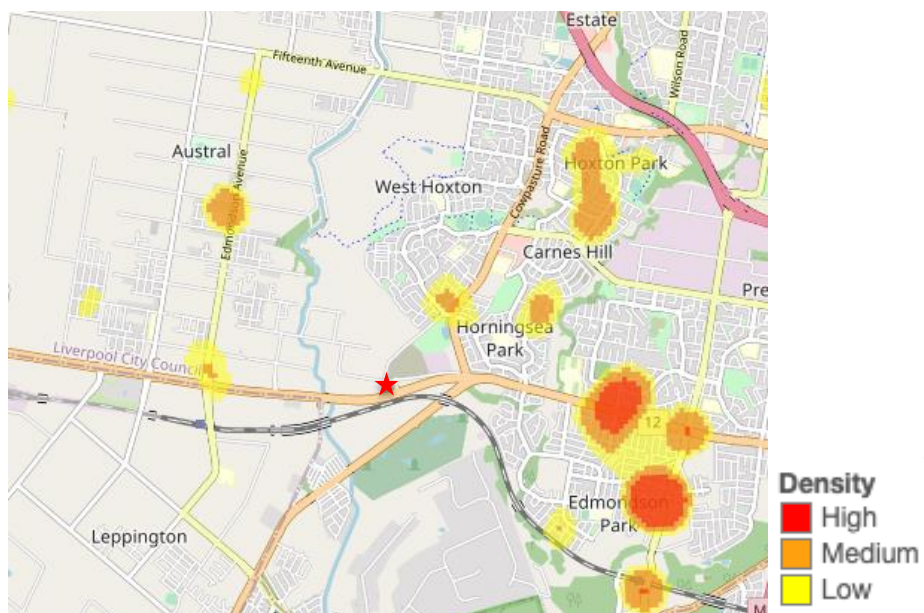


Figure 10: Incidents of theft (break and enter dwelling) hot spot map

Source: BOSCAR NSW

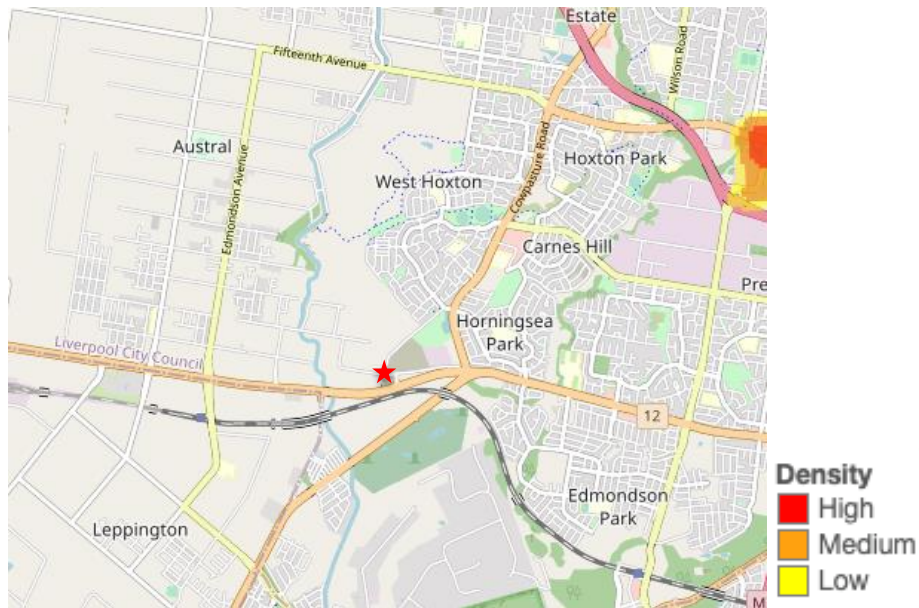


Figure 11: Incidents of theft (break and enter non-dwelling) hot spot map
 Source: BOSCAR NSW

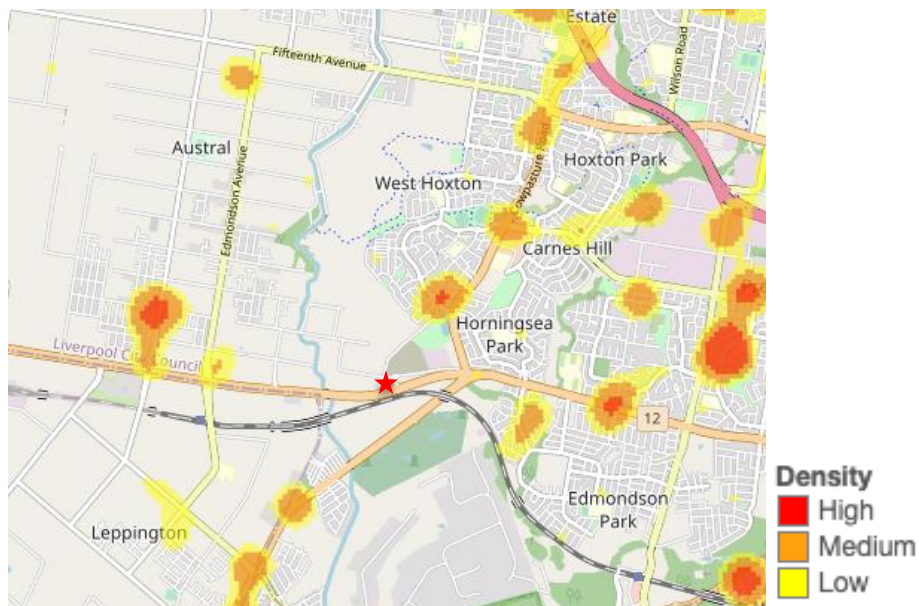


Figure 12: Incidents of theft (motor vehicle theft) hot spot map
 Source: BOSCAR NSW

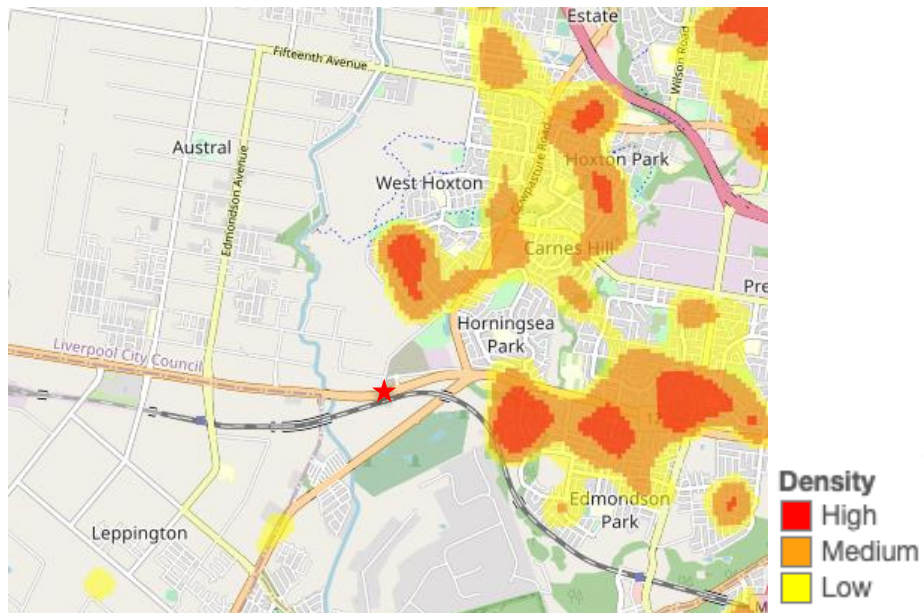


Figure 13: Incidents of theft (steal from motor vehicle) hot spot map
Source: BOSCAR NSW

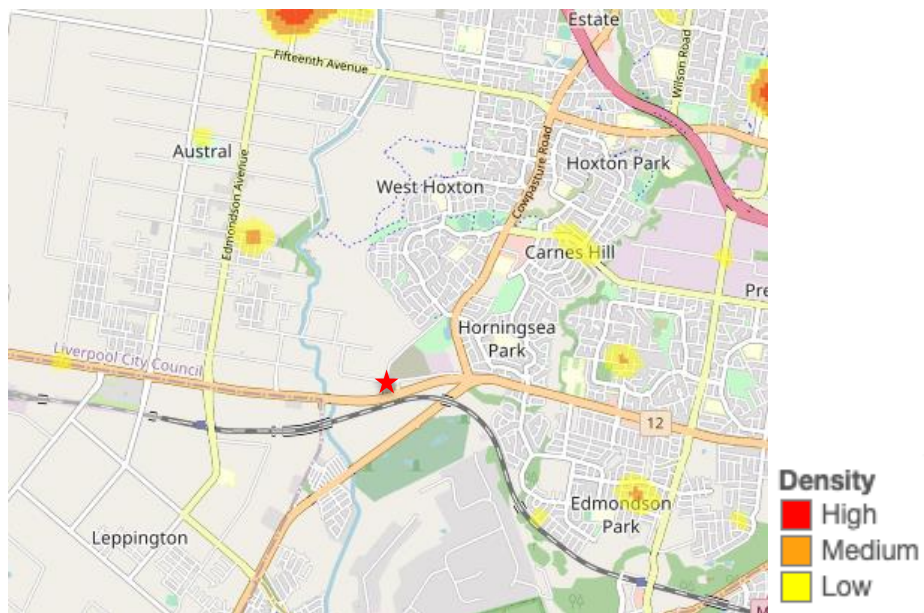


Figure 14: Incidents of theft (steal from dwelling) hot spot map
Source: BOSCAR NSW

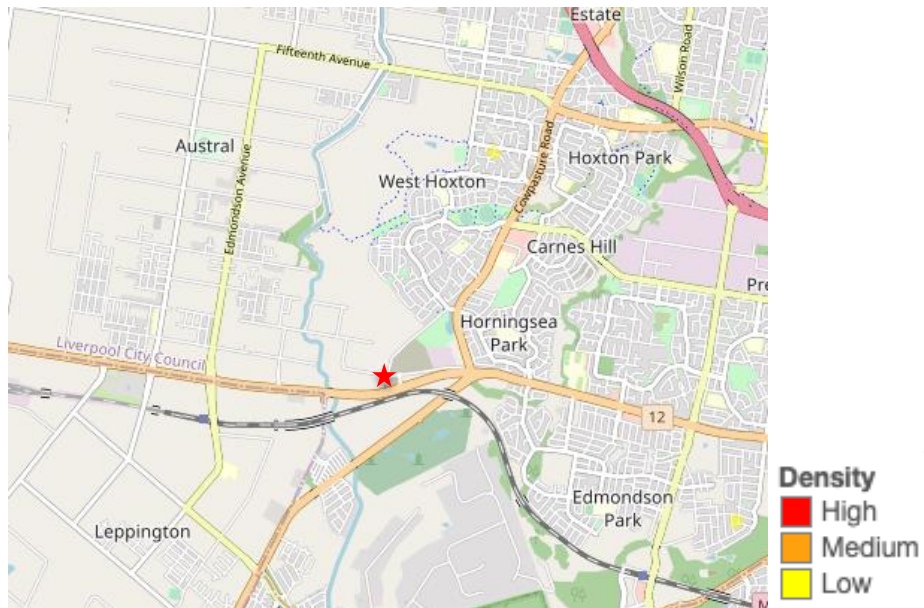


Figure 15: Incidents of theft (steal from person) hot spot map
Source: BOSCAR NSW

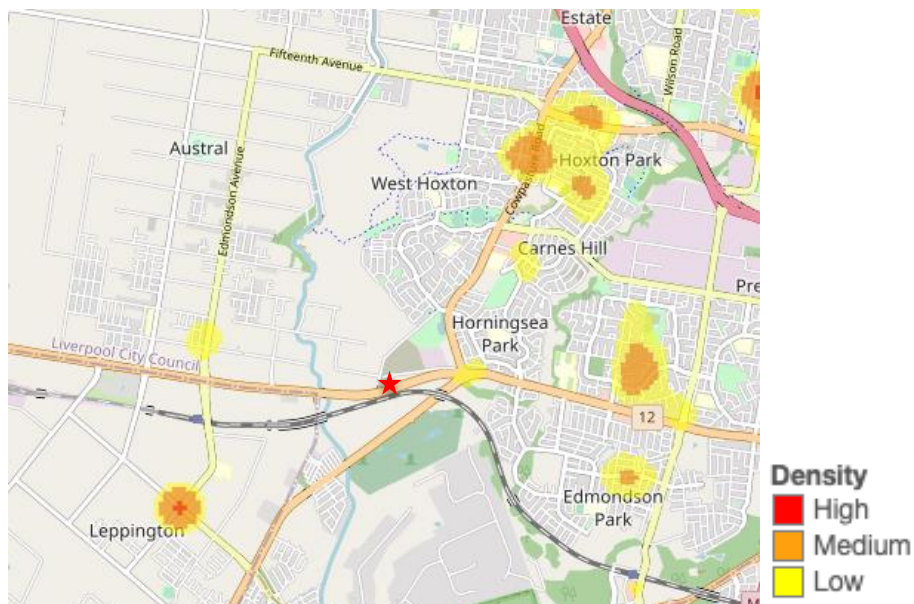


Figure 16: Incidents of malicious damage to property hot spot map
Source: BOSCAR NSW

Overall, the crime data for the suburb of Horningssea Park and Liverpool LGA point to a **low-incident crime environment**.

5 CPTED Principles

This report utilises the principles of CPTED, which are based on a situational approach to crime prevention that seeks to minimise the risks for possible crime offences to occur. This is achieved by:

- Increasing the possibility of detection, challenge and capture;
- Increasing the effort required to commit crime;
- Reducing the potential rewards of crime by minimising, removing or concealing 'crime benefits'; and
- Removing conditions that create confusion about required norms of behaviour.

Notwithstanding, this report and approach acknowledge that any design strategy cannot operate effectively in isolation and is just one element of a broader approach to a crime prevention strategy that includes social and community inputs and complementary strategies.

There are four key CPTED principles laid out in the CPTED guidelines:

- Natural surveillance;
- Access control;
- Territorial re-enforcement; and
- Space management.

The following subsections discuss these principles in greater detail in the context of the proposed development. Additionally, an assessment against the NSW Police Force CPTED Checklist is provided at **Appendix 1**.

5.1 Natural Surveillance

NSW police defines natural surveillance as follows:

Natural surveillance is achieved when normal space users can see and be seen by others. This highlights the importance of building layout, orientation and location; the strategic use of design; landscaping and lighting – it is a by-product of well-planned, well-designed and well-used space.

Natural surveillance is achieved by:

- Orienting buildings, windows, entrances and exits, car parks, rubbish bins, walkways, landscape trees and shrubs, in a manner that will not obstruct opportunities for surveillance of public spaces;
- Placing persons or activities to maximise surveillance possibilities; and
- Providing lighting for night-time illumination of car parks, walkways, entrances, exits and related areas to promote a safe environment.

5.1.1 Evaluation

Our review of the plans indicates the following in relation to natural surveillance:

- The office entry, warehouse entry and associated loading bays have been cited to front Skyline Crescent. This provides ongoing natural and passive surveillance of the site entry, Skyline Crescent and adjoining Leppington Bunnings at-grade customer carpark.

- The building is aligned and set back to the street frontage, which affords opportunities for passive and natural surveillance along the site entry, car park, Stuart Road and Skyline Crescent;
- The two-storey office is located on a high point of the site in relation to the surrounding Bringelly Road Business Hub, providing views and overlooking opportunities across the hub and broader public domain.
- The warehouse has been designed to respond to the topography and steep fall of the surrounding land. It avoids significant changes in level to maintain adequate levels of visibility and generally even surfaces. This minimises opportunities for concealment in outdoor areas.
- Whilst no overlooking opportunities are provided to the southern and western elevations, this is mitigated by the site's island nature, being surrounded by public domain on all boundaries. Bringelly Road is a busy traffic corridor that will mitigate the lack of overlooking opportunities provided to these facades.
- The proposed at-grade parking is located to the front of the warehouse to ensuring constant surveillance of main activity areas;
- The proposed staff outdoor area is located in the front setback adjacent to the main building entry, carpark and site access point, ensuring it is well overlooked at all times and contributes to overlooking of these important areas;
- The office component of the warehouse provides extensive glazing to the front and western boundaries, overlooking Skyline Drive, the carpark and adjoining Stuart Road;
- Landscaping utilises low level shrubs interspersed with canopy trees to allow for sightlines at eye-level and to minimise opportunities for hiding, particularly where level changes are significant;
- The front setback will contribute to the creation of an attractive streetscape in an industrial setting that will not detract pedestrian activity and help create natural community policing.

5.1.2 Recommendations

- Entries and the car park should be illuminated during night-time in accordance with the relevant standards;
- All areas intended to be used at night should allow for appropriate levels of visibility;
- CCTV at entries, car park and southern and eastern facades should be considered;
- Particular consideration of surveillance should be made between the car park footpath and access to the office at night time;
- Particular consideration of lighting along the southern and western elevations should be considered due to their blank facades;
- Trees should be maintained by a regular maintenance plan that keeps good sightlines to the building entries, particularly within the at-grade car park and front setback.

5.2 Territorial Re-Enforcement

NSW Police defines territorial re-enforcement as follows:

Territorial re-enforcement uses actual and symbolic boundary markers, spatial legibility and environmental cues to 'connect' people with space, to encourage communal responsibility for public areas and facilities, and to communicate to people where they should/not be and what activities are appropriate.

Territorial enforcement is achieved by:

- Enhancing the feeling of legitimate ownership by reinforcing existing natural surveillance and natural access control strategies with additional symbolic or social ones;
- Designing space to allow for its continued use and intended purpose; and
- Using landscaping, pavement finishes, art, screening and fences to define and outline ownership of space.

5.2.1 Evaluation

Our review of the plans indicates the following in relation to territorial re-enforcement:

- The development has been designed for specific purposes with a large warehouse, dedicated on-site parking, loading bay and outdoor staffed area;
- The outdoor staff area is well delineated from the adjoining public domain through high quality landscaped treatments;
- The separation of the truck entry and car entry is well considered in context of the warehouse's function and assists with navigation on the site grounds;
- The separation will assist with legibility between staff and deliveries and avoid unnecessary access or confusion through the site grounds;
- The proposed colour scheme of the building is clearly delineated in relation to adjoining properties. The proposed feature planting to Bringelly Road and general landscape embellishments respond to the various conditions on the site boundaries and are suitably incorporated into the overall site design;
- The building entries have regard to existing site topography, interfaces and are located and designed to be easily identifiable;
 - The proposed office and warehouse entries are co-located in close proximity to the overall site entry from Skyline Crescent;
- It is anticipated that building entries will be marked with appropriate wayfinding signage, this is particularly important given the site's location within a broader industrial precinct; and
- The development's materials and finishes will distinguish the development from the surrounding public domain.

5.2.2 Recommendations

- Appropriate signage and wayfinding should be provided in semi-public areas including the car park and outdoor staff area;
- Outdoor seating areas should be located in the outdoor staff area to encourage use; and
- The use of signage and transition cues should be carefully considered primarily around the two vehicle access points to avoid confusion of this space.

5.3 Access Control

NSW Police defines access control as follows:

Access control treatments restrict, channel and encourage people and vehicles into, out of and around the development. Way-finding, desire-lines and formal/informal routes are important crime prevention considerations. Effective access control can be achieved by using physical and symbolic barriers that channel and group pedestrians into areas, therefore increasing the time and effort required for criminals to commit crime.

Access control is achieved by:

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

5.3.1 Evaluation

Our review of the plans indicates the following in relation to access control:

- The site does not currently provide dedicated pedestrian entries.
- Limited vehicle entry points and fit-for-purpose fencing will create a safe and secure site;
- The future adjoining road dedication area will be securely fenced (2.7m high metal palisade fence) from the public domain;
- The building entries are positioned to allow clear and direct access to the surrounding pedestrian network, car park and access road;
- The consolidated driveway, car park and loading bay formalise vehicular and pedestrian movements into and out of the site; and
- It is anticipated that appropriate signage will direct pedestrians to the entries.

5.3.2 Recommendations

- Noting the warehouse will be operational 24/7, the warehouse facilities should be locked and only be accessible (where practical) via a security key outside of peak operation hours as defined in the EIS (8am-5:30pm Monday to Friday);
- Appropriate signage should be implemented that delineates the car entry and vehicle entry driveway. This should be particularly considered at the site frontage to Skyline Crescent;
- Consideration should be made as to how the future road dedication will be secured or activated;
- A dedicated pedestrian path should be provided between the street, carpark, outdoor staff area and office and warehouse entries;
- All pathways should be clearly illuminated to provide a clear and safe path of travel from the car park to the buildings;
- Fire exit doors should be fitted with measures to restrict unauthorised access from the outside; and
- All areas should be fitted with doors that comply with relevant Australian Standards.

5.4 Space/Activity Management

NSW Police defines space/activity management as follows:

Space/Activity Management strategies are an important way to develop and maintain natural community control. Space management involves the formal supervision, control and care of the development. All space, even well planned and well-designed areas need to be effectively used and maintained to maximise community safety. Places that are infrequently used are commonly abused. There is a high correlation between urban decay, fear of crime and avoidance behaviour.

Space/activity management is achieved by:

- Ensuring premises are well maintained and cared for; and
- Ensuring rapid repair of vandalism and replacement of lighting.

5.4.1 Evaluation

Our review of the plans indicates the following in relation to space/activity management:

- The building has been designed for specific purposes and will be owned and maintained by an experienced industrial estate manager; and
- It is anticipated that a management plan/strategy will be put into place to ensure proper building maintenance.

5.4.2 Recommendations

- Consideration should be given to the use of graffiti-resistance materials;
- Graffiti management measures should be incorporated into the maintenance plan/strategy for the building. Research has shown that the most effective strategy for reducing graffiti attacks is the quick removal of graffiti within a 48-hour period;
- The building maintenance plan/strategy should provide information within the building on how to report maintenance or vandalism;
- The building maintenance plan/strategy should also maintain landscaping to ensure the site displays strong ownership; and
- The design should incorporate a robust material palette, particularly for outdoor spaces in order to reduce susceptibility to vandalism and wear and tear.

6 Conclusion

This CPTED report supports an SSDA submitted to the DPE for the proposed warehouse development at 5 Skyline Crescent, Horningsea Park - Bringelly Road Business Hub, Lot 1.

The proposed development has been evaluated in the context of the four key principles of CPTED and relevant data from BOSCAR.

Section 5 of this report outlines measures that will enable the design and ongoing use of the development to align with those CPTED principles to reduce opportunities for crime.

The recommendations identified are minor in scope and can be achieved by means of conditions of consent or otherwise detailed in the Construction Certificate drawings.

This CPTED report demonstrates that the proposed new warehouse will promote casual surveillance of the Skyline Crescent and Bringelly Road, further activate the Bringelly Road Business Hub and provide appropriate security measures to ensure the safety of workers and broader public.

Given the above, we conclude that the development is acceptable from a crime risk perspective.

Appendix 1

NSW Police CPTED Guideline Assessment

NSW Police CPTED Guideline Assessment

Standard	Provisions	Compliance
Natural Surveillance	Openings in buildings are located and designed to overlook public places to maximize casual surveillance.	Entry points are visible and clearly distinguishable.
	The main entry to a building should face the street.	The main entry to both the office and warehouse front Skyline Crescent.
	An external entry path and the foyer to a building must be direct to avoid potential hiding places.	Able to be implemented. It is recommended that future paths provide no opportunity for potential hiding places and direct line of sight into the building.
	Entry lobby areas to and from car parking areas should be transparent allowing viewing into and from these areas.	Entrances to carparking areas are clearly defined and transparent.
	Landscaping must not conceal the front door to a building when viewed from the street	Able to be implemented.
	Pedestrian access should be well lit and maximize sight lines.	Able to be implemented. It is recommended that future pedestrian access paths are direct and provide sight lines into the development.
	Landscaping should not inhibit sight lines.	Able to be implemented.
	ATM design and location is within direct view of pedestrian paths so that they can be overlooked from vantage points.	No ATMs are proposed.
	The street number of a building must be visible from the street and made of a reflective material to allow visitors and emergency	Able to be implemented, if required.

NSW Police CPTED Guideline Assessment

Standard	Provisions	Compliance
	vehicles to easily identify the location of the building.	
	Landscaping should be designed to maximise sight lines.	Landscaping proposes low ground covers and canopy trees, maintaining sight lines.
Measures /security devices	All windows and doors on the ground floor must be made of toughened glass to reduce the opportunities for 'smash and grab' and 'break and enter' offences.	Able to be implemented.
	A security alarm system must be installed in a building.	Able to be implemented.
	Unless impracticable, access to an outdoor car park must be closed to the public outside of business hours via a lockable gate.	Able to be implemented.
	CCTV system must cover all high-risk areas and including all entry areas.	Able to be implemented.
Access control	Loading docks in the vicinity of main entry areas are secured outside of business hours.	Able to be implemented.
	Access to a loading dock, or other restricted area in a building must only be accessible to tenants via a security door, intercom, code or other mechanism.	Able to be implemented.
	Clear signage should be erected indicating loading docks and other areas which cannot be accessed by the general public.	Able to be implemented.

NSW Police CPTED Guideline Assessment

Standard	Provisions	Compliance
Territoriality/ownership	Site planning provides a clear definition of territory and ownership of all private, semi-public and public places.	The site and design make a clear distinction between private and public areas.
Lighting	Both natural and artificial lighting is used to reduce poorly lit or dark areas and therefore deterring crime and vandalism.	Natural and artificial light will improve visibility of the development, the semi-public spaces and the street.
	Lighting must be provided to the following areas of a building to promote safety and security and night; A – an external entry path, foyer, driveway and car park to a building b- shopfront. This may be in the form of motion sensitive lighting or timer lighting c – the underside of an awning.	Able to be implemented.
	Lift access to a car park that are intended for night use must be well lit using a vandal resistant, high mounted light fixture.	N/A.
	The lighting in a car park must confirm to Australian Standards 1158.1, 2890.1.	Able to be implemented.
	The use of lighting fixtures, and vandal resistant, high mounted light fixtures, which are less susceptible to damage in the car park and laneway areas.	Able to be implemented.
	Car parking areas should be painted in light colours which	Able to be implemented.

NSW Police CPTED Guideline Assessment

Standard	Provisions	Compliance
	will increase levels of illumination.	
Vandalism and graffiti	Development minimises blank walls along all street frontages.	The design includes articulation and modulation in the front and western façade and transparent materials to both express the building where possible and avoid graffiti opportunities.