

Crime Prevention Through Environmental Design

State Significant Development Application (SSD – 65729209)

Submitted to Department of Planning and Environment NSW
on behalf of SCG Developments Pty Ltd

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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 State Significant Development Application (SSDA) for the new mixed-use residential development at 40 The Retreat Bringelly, as envisaged in the Environmental Impact Statement (EIS) to which this report is appended.

1.1 Purpose of this report

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 and International Standard ISO:22341.

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'.
- Removing conditions that create confusion about required norms of behaviour.

The Crime Risk Rating considers the development as proposed in the architectural drawings prepared by DKO and landscape drawings prepared by Arcadia within the site's environment. 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. Access Control
 5. Environmental Maintenance
 6. Activity and Space Management
 7. Design, Definition and Designation

A site visit has not been undertaken to inform this assessment and therefore recent site photographs have been used to understand the current site conditions, as supplied by Environmental Consulting Services who were provided with access to the site on 27 November 2023. Notwithstanding this, Ethos Urban is familiar with the site and its characteristics and have undertaken a desktop review of the site conditions which has informed our assessment.

This CPTED report is submitted as part of the lodgement package for this State Significant Development Application relating to a new mixed-use residential development.

1.2 Disclaimer

CPTED strategies must work in conjunction with other crime prevention 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.

We note that Ethos Urban are not specialist security consultants and therefore cannot comment on specific security measures or system requirements. Therefore, it is recommended that a security consultant with a Class 2A licence or appropriately qualified person under the *Security Industry Act 1997* is engaged to provide specific advice on the placement, installation, monitoring and maintenance of the CCTV network and other security measures such as bollard/barriers.

1.3 Background

1.3.1 Aerotropolis Station

The site is situated approximately 650m from the future Aerotropolis Station which forms part of the Sydney Metro, Western Sydney Airport Line. The Aerotropolis Station will be located east of Badgerys Creek Road, serving the heart of Western Sydney Aerotropolis. There will be two entrances, one on the eastern side and another on the western side of the station. Aerotropolis Station will become a major transport interchange providing essential connectivity to the future new central business district of the Western Sydney Parkland City. The Sydney Metro – Western Sydney Airport SSDA was approved 23 July 2021. The Station is currently under construction and is anticipated to open mid 2024.

1.3.2 The Fifteen Avenue Smart Transit (FAST) Corridor

The FAST Corridor is a key initiative of the Liverpool City Council to deliver a high quality public transport link between the Liverpool Central Business District (CBD) and the Western Sydney International Airport. Once complete, the framework will provide rapid transport connection between the Western Sydney International Airport, the new Aerotropolis and Liverpool's CBD. FAST is located on Fifteenth Avenue (between Cowpasture Road and Devonshire Road) approximately 4km north east of the site. It will include a primary arterial bus corridor running east-west within the Bradfield City Centre which is located adjacent to the site's western boundary.

The 19km corridor could accommodate fast and efficient transport services such as zero emissions rapid buses, trackless trams, light rail, and alternative modes of transport such as carsharing. The highspeed transits will accommodate low speed urban 'super stops' at centres, and prioritise walking, cycling and micro mobility with segregated shared paths and local landscaping. FAST is anticipated to open in 2026.

1.3.3 Bradfield City Centre

Land to the west will comprise the Bradfield City Centre, which has been subject to a recent master planning process by the Western Sydney Parkland authority (WSPCA). This Bradfield City Centre will also include the new Aerotropolis Core Metro Station which is currently under construction.

Construction of the Bradfield City Centre is underway. This includes work on the First Building, as well as first stage civil and enabling works on new roads and utility services. The First Building is due for completion in 2024. During September 2022, approval was granted by the Department of Planning for a new advanced manufacturing research and development facility. These works will provide the foundation for the Bradfield City Centre which will continue to grow and evolve over the next 30 years.

Key features of the Bradfield City Centre will include 36 hectares of public domain, 60 hectares of land prepared for development, a visitor centre and high tech research facility, commercial and community facilities, a plaza adjacent to the new metro station and other entertainment and leisure infrastructure.

Land to the further north of the Site (approximately 1.8 kilometres) on land identified as 475 Badgerys Creek Road (also known as the Inghams Estate) is currently subject to its own master planning process which will facilitate predominately enterprise and light industrial redevelopment.

1.3.4 This State Significant Development Application

The Department of Planning, Housing and Infrastructure (DPHI) have issued Secretary’s Environmental Assessment Requirements (SEARs) to the applicant for the preparation of an Environmental Impact Statement (EIS) for the proposed development. It is known as SSD-65729209 and were issued on 18 January 2024. This report has been prepared having regard to the SEARs as follows:

Environmental Assessment Requirement	Response / Location in Report
<p>7. Public Space</p> <ul style="list-style-type: none"> Address how Crime Prevention through Environmental Design (CPTED) principles are to be into the development, in accordance with Crime Prevention and the Assessment of Development Applications Guidelines. 	<p>This report has been prepared in response to the SEARs.</p>

The State Significant Development Application seeks consent for the detailed design and delivery (including construction and use) of a new mixed use residential development, to be developed in two (2) stages. Specifically, development consent is sought for:

Stage 1

- Overall site clearing and preparation works, including demolition of all existing development on the Site;
- The redevelopment of the northern portion of the Site, comprising:
 - Temporary Site access to the northern portion of the Site from The Retreat;
 - Temporary bin enclosure adjacent the temporary access;
 - Excavation works and construction of a shared two (2) storey basement to a maximum depth of RL 60.60, with capacity for 311 vehicle car spaces;
 - Construction of three (3) individual mixed use buildings, comprising:
 - Maximum building heights between 30.4m and 39.8m;
 - A total Gross Floor Area (**GFA**) of 26, 204sqm, comprising 25,744 sqm of residential GFA, 248 sqm of non-residential GFA and 212 sqm of retail GFA, distributed across the three buildings;
 - 254 residential units, distributed across the three buildings.
 - Associated landscaping, communal open space and embellishment works; and
 - Delivery and augmentation of services.

Stage 2

- The redevelopment of the southern portion of the Site, comprising:
 - Removal of the Stage 1 temporary access from The Retreat;
 - Connection and access of the Stage 1 basement to the western boundary (to become a future Collector Road);
 - Excavation works and construction of a shared three (3) storey basement to a depth of RL 56.35, with capacity for 336 vehicle car spaces;
 - Site and basement access from the western boundary (to become a future Collector Road);
 - Construction of three (3) individual mixed use buildings, comprising:
 - Maximum building heights between 23.8m and 39.9m;
 - A total Gross Floor Area (**GFA**) of 29,126 sqm, comprising 28,540 sqm of residential GFA, 212 sqm of retail GFA and 374 sqm of non-residential GFA, distributed across the three buildings;

- 279 residential units, distributed across the three buildings.
- Associated landscaping, communal open space and embellishment works; and
- Delivery and augmentation of services.

A detailed description of the proposed development is detailed in Section 3.0 of the Environmental Impact Statement prepared by Ethos Urban

2.0 The Site

2.1 Site Location and Context

The site is located within Dharug Land, in the Liverpool Local Government area (LGA) and also within the Aerotropolis precinct. The Aerotropolis represents a new priority growth precinct designed to leverage off the Western Sydney International (Nancy-Bird Walton) Airport and Aerotropolis Metro.

Within the Aerotropolis, the site is located within the Aerotropolis Core precinct. This precinct is planned to be a dense urban precinct planned around the Aerotropolis Metro Station comprising a commercial precinct for jobs, advanced manufacturing, and high technology to support up to 50,000 to 60,000 jobs. The Aerotropolis Core will also contain a residential sub-precinct in walking distance to the Metro or other public transport, Wianamatta-South Creek, and Thompsons Creek, in identified areas not impacted by significant aircraft noise.

The site's western boundary adjoins the Government-owned Bradfield City Centre, of which a Masterplan has been prepared by the Western Sydney Parkland Authority (WSPCA). The Bradfield City Centre contains the Aerotropolis Metro Station (which has commenced construction) and two advanced Manufacturing Research Facility buildings (one of which is approved and one of which is currently in planning).

The Bradfield City Centre more broadly, is planned to be the heart of the Aerotropolis Core precinct. It will deliver more than 17,000 jobs, open space, retail, entertainment, and cultural facilities. **Figure 1** illustrates the site's surrounding context.

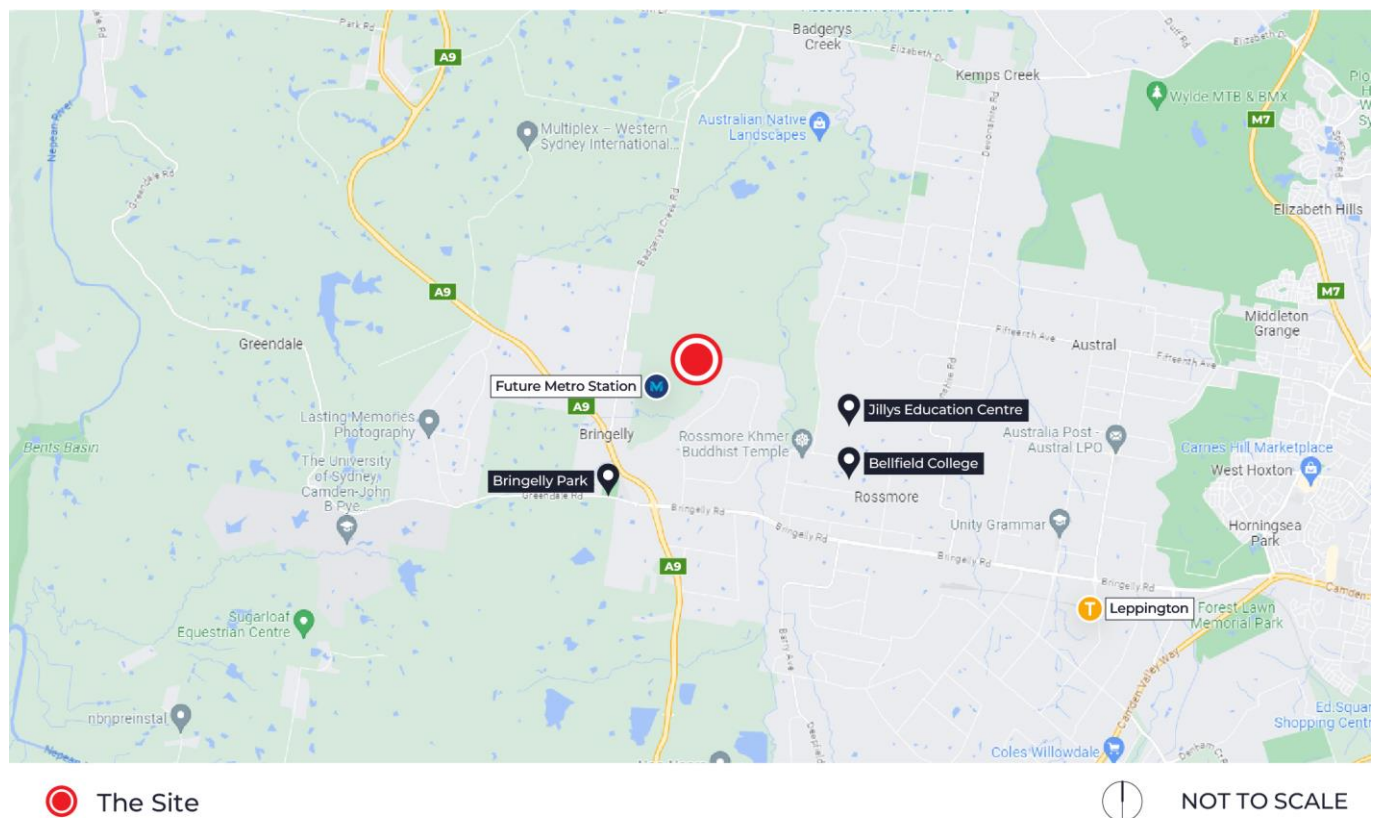


Figure 1 Site Context

Source: Ethos Urban

2.2 Site Description and Existing Development

The site comprises a single allotment known as 40 The Retreat Bringelly, and is legally described as Lot 272 DP 803167. The site currently accommodates a single detached dwelling house. The site is characterised by grass cover with minimal trees and vegetation with rear sheds and a collection of used cars parked adjacent. An aerial image of the site is provided in **Figure 2** below.



Figure 2 Site Aerial

Source: Nearmap, edits by Ethos Urban

The site in its existing condition is demonstrated within the following images as informed via a site inspection undertaken on 27 November 2023.



Figure 3 Existing house, facing north

Source: Environmental Consulting Services



Figure 4 Existing house rear, facing south

Source: Environmental Consulting Services



Figure 5 Rear driveway, facing north

Source: Environmental Consulting Services



Figure 6 Northern portion of site

Source: Environmental Consulting Services



Figure 7 Northeast yard

Source: Environmental Consulting Services



Figure 8 Shed in northern portion of the site

Source: Environmental Consulting Services

2.3 Existing Site Access and Security

2.3.1 Access

The site currently facilitates pedestrian and vehicular access via The Retreat which is cul-de-sac road carriageway, and which connects to Kelvin Park Drive to the southeast. The Northern Road (A9) is located 1.7km southwest of the site. The M7 motorway is located 10km to the east of the site which links the M5 south-west with the M4 and the Hills M2.

2.3.2 Public transport access

Leppington Station is located approximately 7km south-east of the site which represents a key railway station within the regional area as it provides access to the last stop on the Cumberland Railway Line. Due to this, it provides a major interchange, having one of the highest levels of rail and bus accessibility in the immediate area.

2.4 Existing Surrounding Development

The following development surrounds the site:

- **North:** the immediate north of the site is characterised by predominantly agricultural land that is largely devoid of development or many structures. The neighbouring property to the north of the site is characterised by its natural landscape including maintained lawn with some trees and other shrubby vegetation.
- **South:** to the immediate south of the site is the neighbouring property which comprises a single detached dwelling house on a large property that also comprises a shed, dam along with some trees and other shrubby vegetation.
- **East:** to the immediate east of the site is the State Heritage listed 'Kelvin Park Homestead' which comprises multiple buildings of state heritage significance, maintained lawns and sporadic trees and other vegetation.
- **West:** to the immediate west of the site is vacant land, devoid of any existing development and is characterised predominantly by grass coverage.

Figure 9 below demonstrates the site in the context of the Aerotropolis precinct and demonstrates the nature of its existing surrounding development.

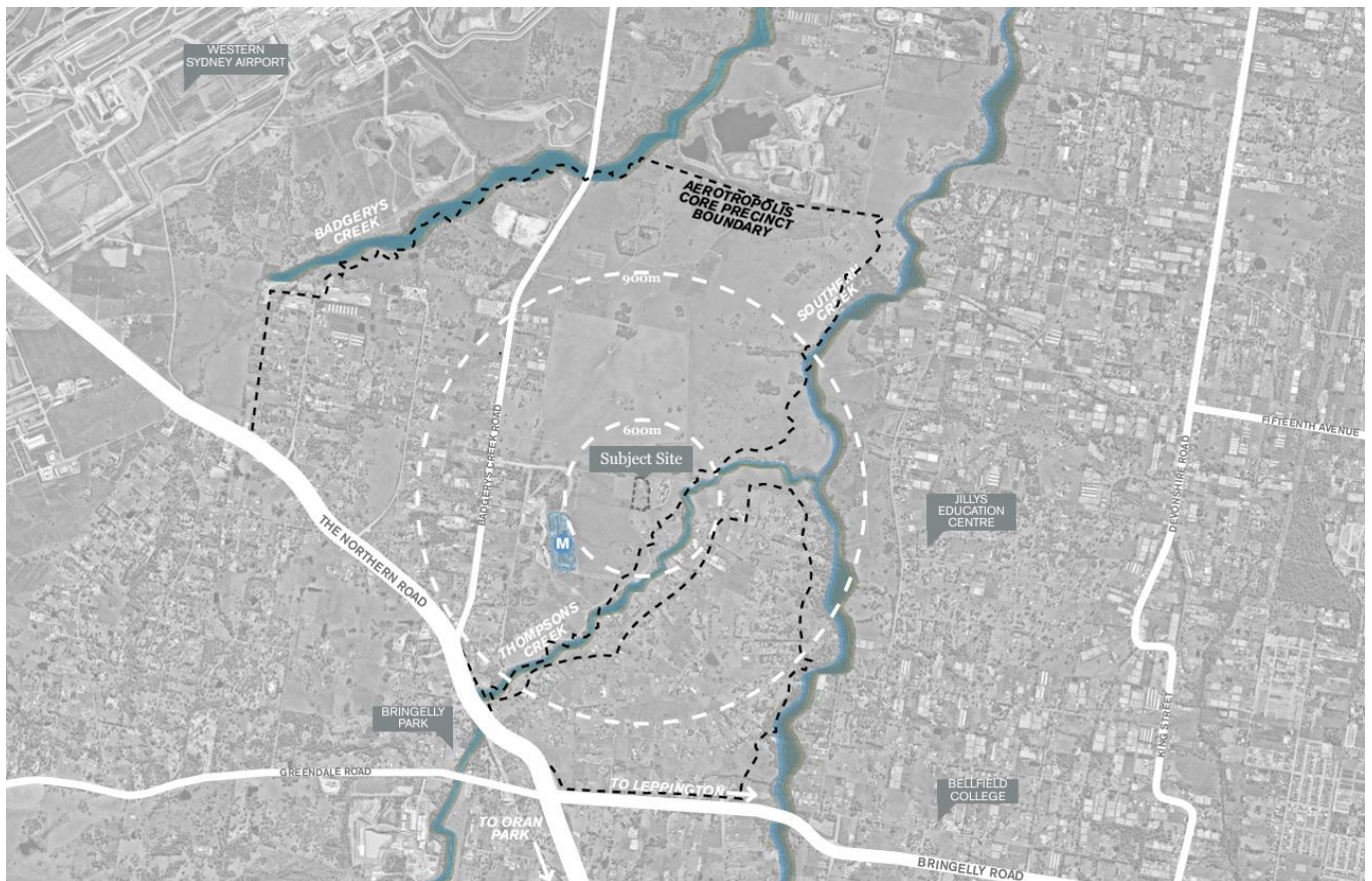


Figure 9 The site in relation to the Aerotropolis Core Precinct

Source: DKO

2.5 Crime Risk Rating

A risk assessment of the site in its existing context and form has been undertaken. The guidelines prepared by the former NSW Department of Urban Affairs and Planning titled "*Crime Prevention and the assessment of development applications*" remains a relevant resource document for the assessment of CPTED under section 4.15 of the *Environmental Planning and Assessment Act 1979*, together with other relevant publications such as the '*Crime Prevention Handbook For Local Government*' prepared by the Australian Institute of Criminology.

Overall, the Crime Risk Rating assessment rated the site in its context as having a 'moderate' risk of crime.

The key positive elements of the site are:

- The site is located within the Aerotropolis Core precinct which is planned to be a future dense urban area around the Aerotropolis Metro Station. Over time, the surrounding development will result in an increased population within the area and will contribute to its renewal and activation.
- The site and surrounding properties lack significant vegetation. This minimises opportunities for concealment or escape opportunities.

Other elements of the site are:

- The site is in a developing area which currently comprises multiple agricultural lots which may contribute to lower levels of activation within the area.
- The surrounding area of which the site in its current state is located is considered rural, it has a smaller population when compared to neighbouring localities and does not have a strong defining character as of yet. Therefore, it may contribute to the perception that there are less people accessing the site or in the site's surrounding area. This might have the potential to create enticing conditions for crimes to be committed.
- Lack of existing security measures such as physical evidence of CCTV or perimeter boundaries and other access control features (fencing).
- There is an existing area at the rear of the property that is noted to include multiple used vehicles in various conditions, along with observed white goods that appear to have been dumped at the site. The condition of this area appears unkept, unmaintained and due to this perception and treatment of the land, may invite opportunities for anti-social behaviour or facilitate a place for hiding or escape.

3.0 Proposed Development

The proposal relates to a SSDA for the design, construction and use of a mixed-use residential development, which is submitted to the Department of Planning and Environment pursuant to the provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and seeks consent for the works detailed below. The development will be delivered in two separate stages.

The State Significant Development Application seeks consent for the detailed design and delivery (including construction and use) of a new mixed use residential development, to be developed in two (2) stages see the Staging Plan at **Figure 10** below. Specifically, development consent is sought for:

Stage 1

- Overall site clearing and preparation works, including demolition of all existing development on the Site;
- The redevelopment of the northern portion of the Site, comprising:
 - Temporary Site access to the northern portion of the Site from The Retreat;
 - Temporary bin enclosure adjacent the temporary access;
 - Excavation works and construction of a shared two (2) storey basement to a maximum depth of RL 60.60, with capacity for 311 vehicle car spaces;
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 - A total Gross Floor Area (**GFA**) of 26, 204sqm, comprising 25,744 sqm of residential GFA, 248 sqm of non-residential GFA and 212 sqm of retail GFA, distributed across the three buildings;
 - 254 residential units, distributed across the three buildings.
 - Associated landscaping, communal open space and embellishment works; and
 - Delivery and augmentation of services.

Stage 2

- The redevelopment of the southern portion of the Site, comprising:
 - Removal of the Stage 1 temporary access from The Retreat;
 - Connection and access of the Stage 1 basement to the western boundary (to become a future Collector Road);
 - Excavation works and construction of a shared three (3) storey basement to a depth of RL 56.35, with capacity for 336 vehicle car spaces;
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 - 279 residential units, distributed across the three buildings.
 - Associated landscaping, communal open space and embellishment works; and
 - Delivery and augmentation of services.

A detailed description of the proposed development is detailed in Section 3.0 of the Environmental Impact Statement prepared by Ethos Urban.

Architectural drawings illustrating the proposed development are included at **Appendix A**. Indicative extracts of the proposed plans, and photo montage, are shown at **Figure 11** and **Figure 12** on the following page.

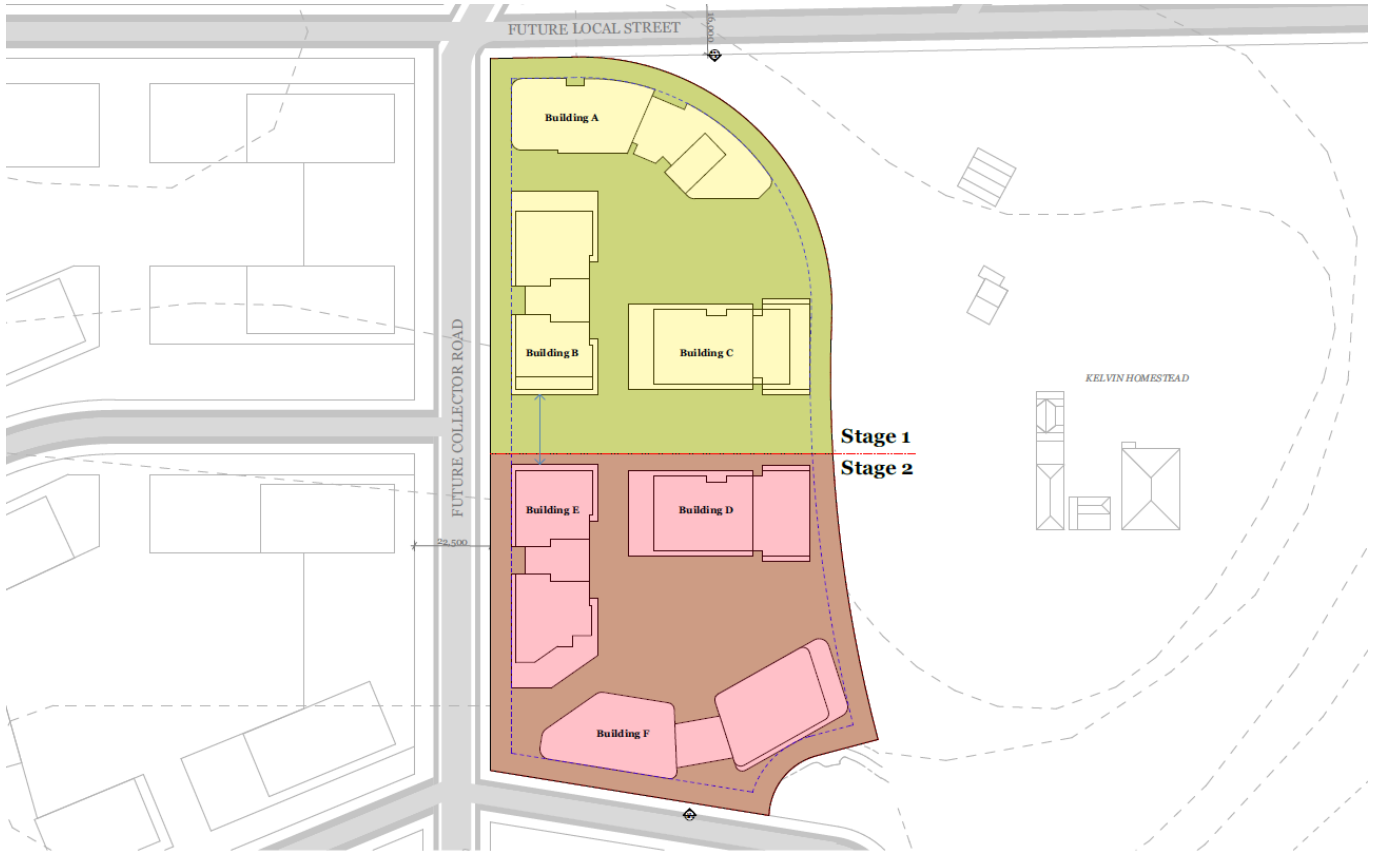


Figure 10 Project Staging

Source: DKO



Figure 11 South western corner perspective of proposed development

Source: DKO



Figure 12 Through site link perspective of proposed development

Source: DKO

3.1 Access and Amenity

3.1.1 Pedestrian access

Pedestrian access will be provided from the future collector road at the site's western boundary. Three pedestrian access points will be provided along the site's western boundary, at the most northern point of the site, at the most southern point of the site and the approximate middle of the western boundary.

The main pedestrian access point will be facilitated via a welcoming public domain area in between Building B and Building E, located at the approximate middle of the site's western boundary.

3.1.2 Vehicular Access

Stage 1 Access

Vehicular access to the northern basement during Stage 1 will occur via a temporary access point located in the centre of the site. The temporary access point to the northern basement will be accessed via a ramp. The basement point of ingress will be connected to the broader road network via a temporary internal road running through the southern portion of the site.

Stage 2 Access

Stage 2 seeks consent for two vehicular access points at the site at the western boundary. The northern and southern basements will be accessible via a local road connecting to the two access points at the sites western boundary which provides access to the two separate basements.

3.1.3 Landscaping/ Public Domain

Significant landscape works are proposed throughout the site and will embellish the public domain between the proposed buildings. The landscaping works will facilitate pedestrian and public domain infrastructure features that will be characterised by multiple wayfinding pathways, seated area, water features, perimeter planting, communal open spaces, and passive recreational play spaces. See **Figure 15** for an illustration of the proposed landscape masterplan.

Specifically, the design of the landscaped spaces and public domain areas will incorporate the following areas within the site:

- The Woodlands.
- The Ridgeline.
- The Grasslands.
- Nature play area.
- Meditation Garden.
- Continuous timber boardwalk.
- Transparent catwalks.
- Seating elements.
- Feature entry planters.
- Open turf areas.
- Swale feature.
- Fitness stations.
- Private courtyards.
- Flexible deck area.



WOODLANDS

The Woodlands are to be built around and incorporate the swale that goes through the landscape allowing for intimate moments and trails of discovery that enable the users to feel enveloped within the landscape.



RIDGELINE

Between buildings The Ridgeline connects both the vertical landscape of the green facades and rooftops with the tall canopy of the trees, whilst also forming a green corridor that forms a desinational place that encourages the public to explore and experience the vista through to Thompsons Creek.



GRASSLANDS

The Grasslands emulate the experience of the cumberland plains, large open spaces with pockets of vegetation and stands of trees. As the creekline forms into the rain garden the landscape becomes a lush green that welcomes community activities.



Figure 13 Landscape masterplan

Source: Arcadia

4.0 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 over the 12 months to June 2023¹ found that the most commonly occurring crimes relevant to within the suburb of Bringelly were:

- Non-domestic assault;
- Domestic assault;
- Robbery (without a weapon);
- Theft (Break and enter dwelling and break and enter non-dwelling);
- Steal from person;
- Steal from retail store;
- Steal from motor vehicle;
- Malicious damage to property; and
- Motor vehicle theft.

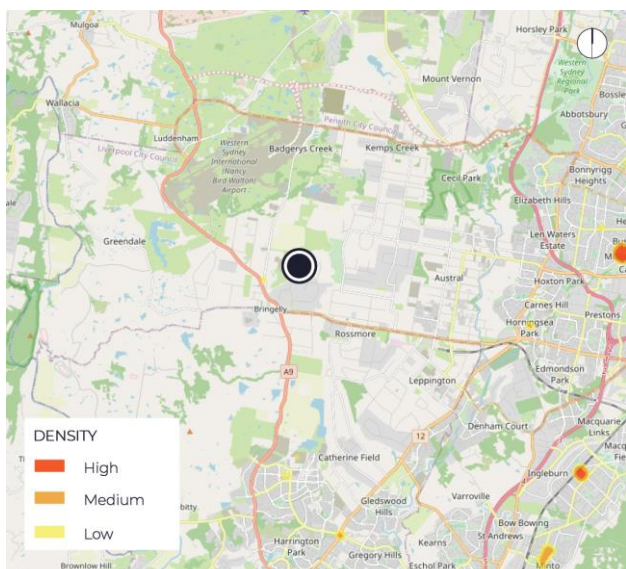
The frequency of the above crimes in the suburb of Bringelly, between June 2020 and June 2023 are detailed in **Table 1** below.

Table 1 *Statistics of crime in the suburb of Bringelly between June 2020 and June 2023*

Crime	Incidents year from June 2020	Rate per 100,000 persons	Incidents year from July 2021	Rate per 100,000 persons	Incidents year from July 2022	Rate per 100,000 persons	Incidents year from July 2023	Rate per 100,000 persons	2020-2023 Trend	Rate per 100,000 Category
Assault – domestic violence related	9	326.1	4	163.6	16	656.5	13	533.4	Increase	Low
Assault – non-domestic violence related	9	348.2	13	530.9	13	533.4	12	492.4	Increase	Low
Break and enter – dwelling	4	151.1	6	245.2	2	82.1	5	205.2	Stable	Low
Break and enter – non-dwelling	2	75.5	0	0.0	2	82.1	2	82.1	Stable	Low
Steal from motor vehicle	2	70.0	5	203.1	2	82.1	4	164.1	Stable	Low
Steal from retail store	0	0	0	0	0	0	0	0	N/A	N/A
Steal from dwelling	3	116.1	4	163.6	4	164.1	0	0	Stable	Very low
Steal from person	0	0	0	0	1	41.0	0	0	Stable	Very low
Motor vehicle theft	6	232.1	5	203.1	2	82.1	5	205.2	Stable	Low
Malicious damage to property	11	407.2	14	572.4	15	615.5	22	902.7	Increase	Low

¹ The most recent crime data available in relation all crimes affecting the suburb of Bringelly between June 2020 to June 2023.

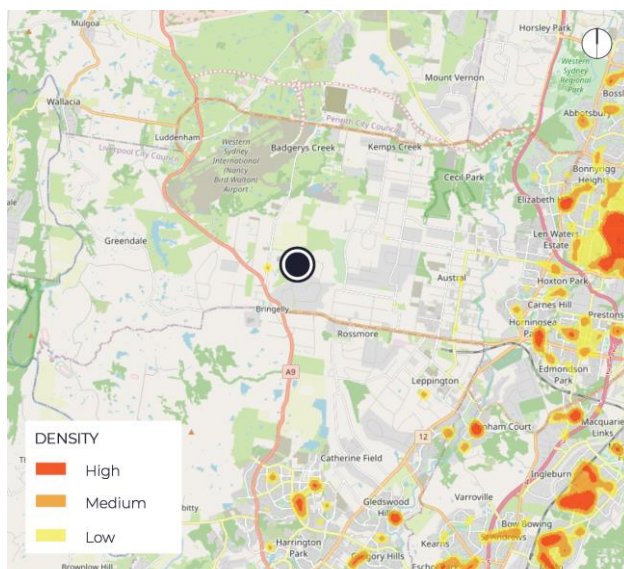
As shown in **Figure 14** to Error! Reference source not found., the BOSCAR database indicates that the site is located within or on the periphery of a hotspot for the above crimes.



● The Site Non-domestic assault

Figure 14 Hotspot - Non-domestic assault

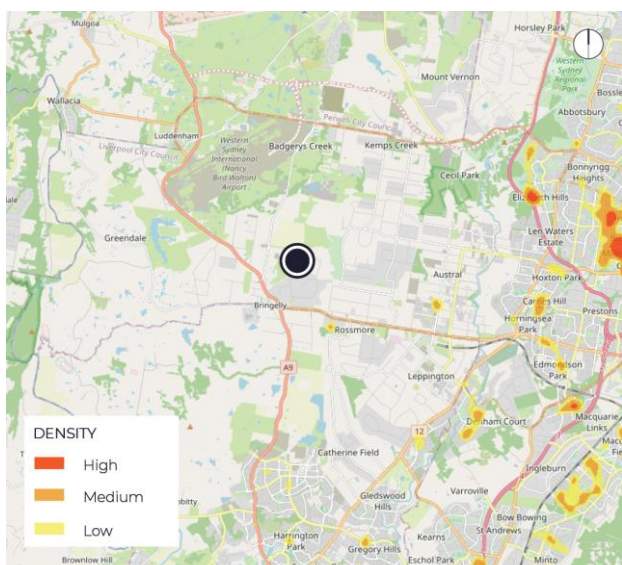
Source: BOSCAR / Ethos Urban



● The Site Domestic assault

Figure 15 Hotspot - Domestic assault

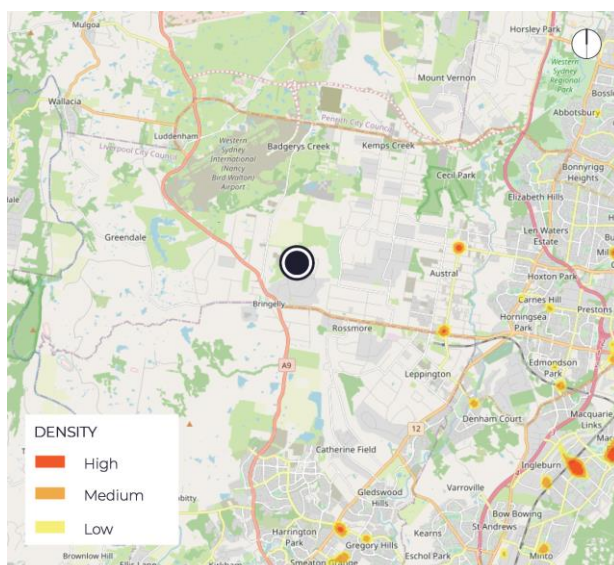
Source: BOSCAR / Ethos Urban



● The Site Break and enter dwelling

Figure 16 Hotspot - Break and enter dwelling

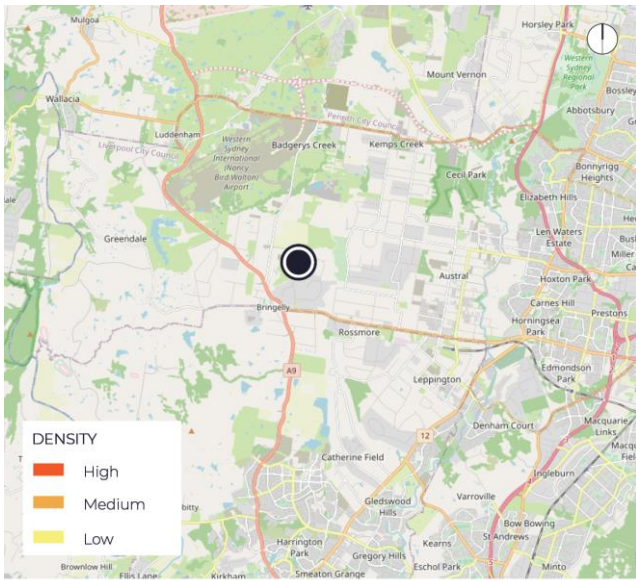
Source: BOSCAR / Ethos Urban



● The Site Break and enter non-dwelling

Figure 17 Hotspot - Break and enter non-dwelling

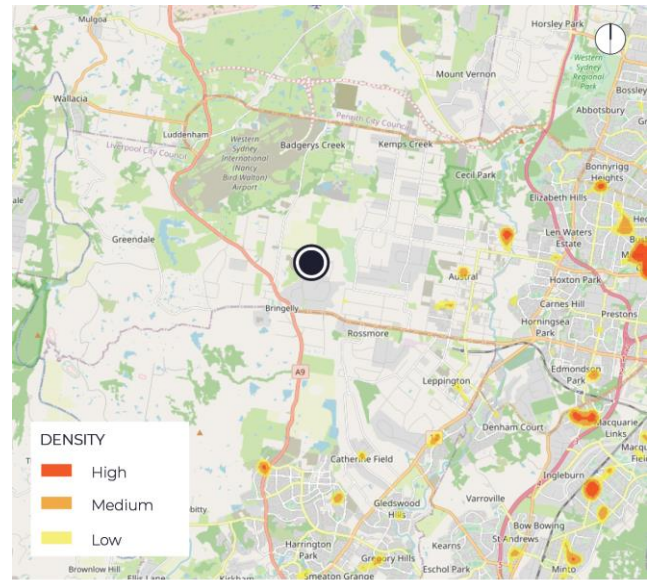
Source: BOSCAR / Ethos Urban



● The Site Steal from person

Figure 18 Hotspot – Steal from person

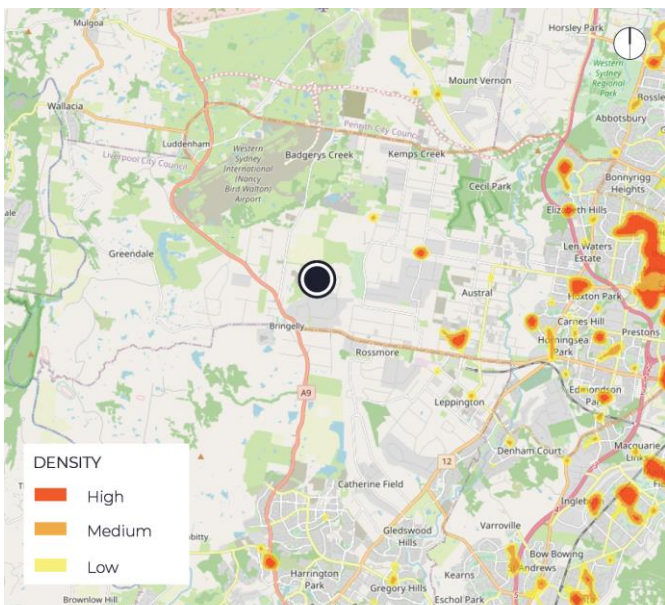
Source: BOSCAR / Ethos Urban



● The Site Steal from dwelling

Figure 19 Hotspot - Steal from dwelling

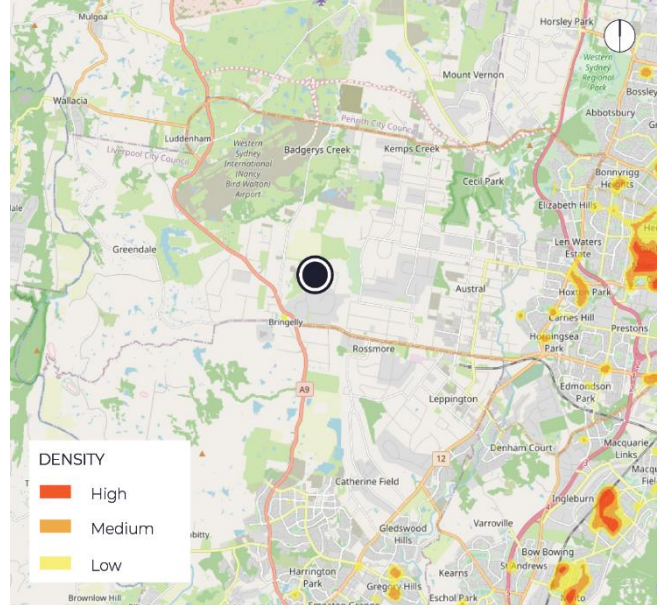
Source: BOSCAR / Ethos Urban



● The Site Motor vehicle theft

Figure 20 Hotspot - Motor vehicle theft

Source: BOSCAR / Ethos Urban



● The Site Malicious damage to property

Figure 21 Hotspot - Malicious damage to property

Source: BOSCAR / Ethos Urban

Hotspots indicate areas of crime density (number of incidents per 50m by 50m) relative to crime concentrations across NSW. They are not adjusted for the number of residents and visitors in the area and thus may not accurately reflect the risk of victimisation in locations that accommodate skewed densities of employment or residential areas with high levels of visitors from outside of the population residence.

Given the site’s anticipated land use as predominately residential, located within a newly zoned mixed use precinct, and given the fact that the crime data for the site is either low or very low, the risk of victimisation is not considered high, relative to other more populated areas to the east of the site. The relatively low rates of crime can be attributed to the existing population density recorded in Bringelly, which is lower than that of its neighbouring suburbs. However, given the future context of the Aerotropolis and the redevelopment of the site, this will likely change in the short term.

Bringelly and the surrounding Aerotropolis Core is a newly developing area, and as such doesn’t have crime data that will be reflective of the proposed development when complete. The hotspot mapping above captures a

larger lens to illustrate its relationship to other nearby populated areas such as Prestons and Hinchinbrook to the east of the development. The hotspot data illustrated above, seeks to provide a useful analysis of the surrounding types of crime patterns that may be present within the area. Nonetheless, it is clear (via the figures provided above) that there are not many hotspots of crime relative to the site. The main hotspots that may be concerned with the proposal include 'domestic assault', 'motor vehicle theft' and 'break and enter'.

Considering the above, the design, layout, and access points of the development for the proposed mixed-use residential development have been carefully reviewed in line with CPTED principles to reduce any incidents of assault or damage to property. The findings and review of all proposed design documentation have informed the CPTED recommendations for the development and are set out at **Section 6.1** of this report including the recommendations for CCTV provisions and other security measures.

4.1 Western Sydney Aerotropolis Development Control Plan 2022

The Western Sydney Aerotropolis Development Control Plan 2022 (Aerotropolis DCP) applies to the site. An assessment of the relevant performance outcomes and benchmark solutions relating to Crime Prevention Through Environmental Design measures as contained in Part 2.14 of the Aerotropolis DCP have been considered in **Table 2** below.

Table 2 Performance Outcomes and Benchmark Solutions

Benchmark Solution	Assessment
PO1 Passive surveillance is maximised.	
<ol style="list-style-type: none"> 1. Visibility and surveillance are provided in all areas of development. 2. Adjoining buildings overlook public places. 3. Building frontages face streets and transport corridors to provide passive surveillance. 4. Use open grill or transparent security (at least 50% visually transparent) shutters to retail frontages (if proposed). 	<p>The new mixed-use residential development has been designed in a manner that presents a clear linear spatial layout of internal spaces and building orientations. It provides central, activated public domain areas through the communal open space areas and retail development at ground level. The proposed activated uses will provide a high degree of activation and surveillance throughout the development.</p> <p>Building B and Building E overlook the future collector road which constitutes passive surveillance. The rear of the buildings further provide surveillance through the proposed active ground floor uses including lobbies, retail developed and ancillary residential uses including the pool and gym.</p> <p>The retail components of the development and the residential lobbies have the opportunity to incorporate visually transparent materials.</p>
PO2 Access and sightlines promote safe movement. Ensure pedestrian and cycleways are designed in accordance with CPTED to ensure a safe and secure environment that encourages activity, vitality and visibility, enabling a greater level of security.	
<ol style="list-style-type: none"> 1. Building entrances are accessible, clearly visible, legible and allow users to see into or out of the building before entering / exiting. 2. Pedestrian paths have well defined routes, clear sight lines and do not channel users into dead ends that are poorly lit or to areas with opportunities for concealment. 3. Minimise corners, poorly lit corridors, laneways with low activity and other kinds of entrapment spots. 4. If entrapment spots are unavoidable, they are to be mitigated using measures such as CCTV surveillance. 	<p>All building entrances are accessible, clearly visible and facilitate sight lines to publicly accessible areas such as lobbies, waste rooms and mail rooms. The design and position of the rounded buildings (Building A and Building F) will facilitate well defined pedestrian routes that lead to public open spaces and retail development which will minimise areas of concealment or any opportunity to create an environment of entrapment.</p> <p>The curved form of the Building A and Building F will frame the internal layout of the development, minimise corners and reduce low activity areas. The ground level of the development will incorporate high activity areas including lobbies, retail, communal open spaces, and ancillary residential uses such as the gym and pool. CCTV surveillance can be incorporated throughout the development.</p>
PO3 Car parking areas, pathways and other elements of transport network infrastructure are in accordance with Crime Prevention Through Environmental Design (CPTED) principles to enhance public safety by discouraging crime and antisocial behaviour.	
<ol style="list-style-type: none"> 1. Car parking areas and structures are designed in accordance with CPTED principles. 	<p>All basement levels have been designed to incorporate multiple lift/stair cores which will reduce the distance residents and visitors must travel from their</p>

Benchmark Solution	Assessment
<p>2. Car park areas and structures are well maintained and incorporate CCTV as a deterrent to crime and anti-social behaviour.</p> <p>3. Ground levels of car park structures are sleeved with active uses to support passive surveillance.</p> <p>4. Ensure passive surveillance to and from the public domain for at grade car parking areas.</p> <p>5. Pedestrian access points to car parks are clearly delineated and located in areas with good visibility from the public realm.</p> <p>6. Facade systems (shown below) are designed to integrate safety barriers and systems while also incorporating visual transparency to facilitate passive surveillance from and to the public realm.</p>	<p>vehicles to the lift/stair cores. The basements have been designed in 'C' shapes which will improve sight lines from the/lift stair cores to car parking spaces. Pedestrian access points to the basement levels will be easily identifiable through the design and positioning of the lobbies.</p> <p>The lift/stair cores will facilitate a high level of visibility through the choice of transparent materiality as presented by DKO. Further, the orientation of lobby access towards key public domain areas proposed within the site such as the round-about and drop off zones, the central ridgeline (linear park), the open turf area and elevated boardwalk. These key public domain areas will provide surveying of the lift/stair cores.</p> <p>The fencing of the residential development at ground level has been carefully designed to ensure safe, secure access. Fencing will be of an appropriate height to ensure privacy and natural surveillance can be achieved. Landscaping lining the fencing will be strategically planted to ensure public domain areas can be overlooked to allow a good level of natural surveillance to public domain areas in between the residential buildings.</p>
<p>PO4 Safety is ensured via the use of appropriate lighting.</p>	
<p>1. Lighting design should address the principles of CPTED where there is significant pedestrian activity, late night work-shifts or safety and security issues.</p> <p>2. Use public lighting to connect areas between lights and avoid unnecessary areas of darkness. The areas should be lit to the minimum AS 1158. Illuminate public areas, entrances to buildings and concealed corners.</p> <p>3. Minimise lighting spillage onto surrounding properties by designing in accordance with AS 4282.</p>	<p>Future lighting structures throughout the mixed-use residential development will be adequate to illuminate public domain areas, pathways, lobbies, lift/stair cores, mail rooms and the ancillary residential areas.</p> <p>Further, spaces between buildings, entrances, the basement levels and key external areas will be lit to allow facial recognition and deter anti-social behaviour. Recommendations in this regard have been provided in Section 6.1.2.</p>
<p>PO5 Public and private spaces are clearly delineated</p>	
<p>1. Clearly demonstrate ownership of private and public space in the design of the public realm and built form.</p> <p>2. Use landscaping to delineate between public and private spaces rather than building materials (e.g. solid fences).</p>	<p>Fencing has been designed to a standard that will ensure the security of residents by providing locking mechanisms and secure access points, especially into the ground floor dwellings. The fencing at the ground floor in particular clearly distinguishes private space from public open spaces through the adoption of alternative paving materiality, gated access and landscaping treatments that provide a delineation of space from the public domain and pedestrian circulation pathways.</p> <p>The proposed boundary treatments to residential spaces have been designed in a way that provides a target hardened approach in a manner that avoids an overly fortified appearance.</p>

Source: Western Sydney Aerotropolis DCP 2022

The detailed design of the development demonstrates an ability to achieve compliance with the above objectives. A review of the architectural plans for the site has demonstrated that the designed development is capable of satisfying and complying with the above provisions to provide a safer outcome on site than what currently exists by providing a Landscape Report that is able to foster high levels of passive and provides an open space arrangement that communicates good space management and territorial reinforcement.

Section 5.0 of this report undertakes a detailed assessment with regards to the relevant matters for consideration and exemplifies how the design of the proposed development achieves compliance with the relevant CPTED principles. Further recommendations that satisfy the provisions contained in the Aerotropolis DCP with regards to CPTED are detailed in **Section 6.0** of this assessment.

4.2 Crime Prevention Strategy

The objectives relating to Crime Prevention Through Environmental Design in The Western Sydney Aerotropolis Development Control Plan 2022 (Aerotropolis DCP) have carefully been considered during the design of the proposed development. Access, lighting, fencing and surveillance have been incorporated to promote a safe environment for future residents and visitors of the site. **Section 5.0** of this CPTED Report addresses how the development has been designed in accordance with the CPTED principles.

The *Western Sydney Aerotropolis Development Control Plan 2022* sets out the role and approach to enhancing safety within the community, and includes the following relevant objectives to assist with reducing opportunities for crime:

- O1. Design in accordance with Crime Prevention Through Environmental Design (CPTED) principles.*
- O2. Ensure the development contributes to the activity, vibrancy, diversity and safety of streets and the public domain through the day and night.*

The development will contribute to a better pedestrian amenity outcome that has been deliberately designed to accommodate a lively and vibrant mixed-use residential, that will prioritise pedestrian movement on site, in proximity to transit, services, and other retail and commercial uses.

The future mixed-use residential development will incorporate an effective governance structure designed to manage each component of the proposed development and help safeguard the increase in population density on site. Further recommendations concurrent with this plan are detailed in **Section 6.0** of this assessment.

5.0 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 the site's location within the future Aerotropolis and understanding the current crime data of nearby hotspots in the area, the following is an assessment of the proposed development's potential to create opportunities for such crimes.

5.1 Surveillance

Opportunities for crime can be reduced by providing opportunities for effective surveillance. The surveillance principle indicates that offenders are often deterred from committing a crime in areas with high levels of surveillance. From a design perspective, deterrence of crime can be achieved by providing:

- Clear, direct path that encourage pedestrian activity and allow for clear lines of sight.
- Activated day and night uses and casual streetscape surveillance offered by activity at the ground floor.
- Establishing buildings close to the street frontage to allow passing traffic to observe the development.
- Clear building entry points, highly visible from the street and pedestrianised areas.
- Orientation of building entrances and windows towards the street, public domain and parking areas.
- Appropriate lighting and effective guardianship of communal and/or public areas; and
- Minimised opportunities for offenders to hide or entrap victims.

Buildings that address the street provide opportunities for the natural surveillance between occupants and the public. This can be maximised through the provision of the glazed elements, pedestrian entrances and main throughfares which face or extend from public areas.

The proposed development provides a high level of natural surveillance internally through the active ground floor uses inclusive of the retail premises at the site's western boundary and wellness room and gym at the site's eastern boundary. Further to these areas, the various areas of public open space throughout the ground floor including the central ridgeline (linear park), the boardwalk and the pickup and drop off zone facilitates areas that could experience higher levels of pedestrian activity. The proposed positioning of the buildings and the layout of the development provide natural surveillance to these areas. However, due to the development's location in the yet to be developed Aerotropolis Core, the site's surrounds are not yet activated by mixed-use developments. The sites surrounding area lacks natural surveillance that would normally be given in an established mixed-use precinct. However, and notwithstanding this, the site will benefit from land uses that are anticipated to be frequented by residents as well as visitors utilising the retail development and proposed high quality open space areas.

By virtue of the mixed-use residential use, the development will be afforded good levels of natural surveillance. However, for the reasons outlined below, it is considered the design of the development will further maximise opportunities for natural surveillance through the following design features as proposed.

Building Design

- The proposed buildings will maximise surveillance through transparent building materials in typically concealed areas. The lobbies, mail rooms and waste disposal rooms have been oriented towards public domain areas where pedestrians will frequently pass to maximise surveillance.
- Opportunities for natural surveillance will be further maximised by the orientation of habitable rooms and private open spaces which overlook public domain areas and external pathways and circulation spaces.
- The pedestrian entrances to the site are activated by the ground floor retail uses, public domain areas inclusive of outdoor furniture and lobbies. These areas are proposed as extensions to the public domain accessed from the lobby lift/stair cores and the future local roads at the site's western boundary. Consequently, the site is expected to accommodate high activity at ground level. Pedestrians are encouraged to linger in these spaces, particularly within the pickup and drop off zone, open turf area, boardwalk, the southern grasslands, meditation garden, fitness stations and the central ridgeline (linear park).
- The internal layout of the development provides a spatial design that is devoid of convoluted paths of travel. In this regard, short, clear sightlines are facilitated throughout the development.
- CCTV should be incorporated throughout the development as discussed in **Section 6.1**.

Communal Facilities

- Communal amenity spaces are proposed to be concentrated in Building C and Building D at ground level. A myriad of shared amenity spaces and communal open spaces are scattered throughout the remaining proposed buildings. The design of Building C and D have been oriented to provide opportunities for casual surveillance at the site's eastern boundary and to the surrounding landscaped areas.
- The positioning of communal and amenity spaces throughout the buildings various levels are located conveniently within the building curtilages. The communal and amenity spaces are available for residents to use and will increase informal guardians on the site and facilitate community policing. . Additional movement within the site and the wider precinct positively contribute to an increase in casual surveillance opportunities and informal guardians on site.
- It is noted that there will be periods outside of standard business hours where retail spaces will experience limited pedestrian movements. However, in alignment with the principle of activation and natural surveillance, the hours of operation of the retail uses are recommended to be flexible and should not be confined to the traditional standard hours of operation.

External Design

- The sites frontage at its western boundary will have a direct interface to a future local road. All proposed buildings address the street or public domain areas. This will provide opportunities for surveillance between occupants and the public.
- The proposed development incorporates various public domain areas at ground level. Various gardens and communal open space areas will encourage people to dwell and therefore survey the areas between buildings.

Car parking

- The proposed development comprises three (3) basement levels shared between all six (6) buildings. The basement envelope generally sits below the entirety of the site but will be divided into two separate basements. The division of these basements create more refined and organised spaces that are able to facilitate shorter site lines and a reduction in distance for resident and visitors to travel from their vehicles to the lift/stair cores, thereby minimising confusion regarding wayfinding.
- The layout of each car park is simple and designed in a logical manner that is able to minimise opportunity to create pockets of concealment that could present as an opportunity for an offender hide or create an environment of entrapment.
- Further, the lift/stair cores are to include glazed elements that allows for sight lines and improved access control between the lift/stair cores and car parking areas,

Regardless of these design features, it recommended that CCTV in conjunction with adequate lighting devices be installed throughout the public domain areas lift lobbies, mail rooms and throughout the basement levels and back of house areas to improve surveillance and ensure clear CCTV footage can be captured.

5.2 Lighting and Technical Supervision

Effective lighting and discrete technical supervision can reduce fear, increase community activity, improve visibility and increase the likelihood of offenders being detected. Lighting and technical supervision are integral in increasing the safety and perceived safety. All lighting provided within and around the development should ideally exceed the minimum Australian Lighting Standard AS/NZ 1158 for public streets, car parks and pedestrian areas, specifically addressing crime and fear reduction. Furthermore, a consistent maintenance and cleaning regime should be put in place to ensure all lighting and CCTV cameras remain in good working condition.

Lighting will 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 in place at all of the building's entrances and egress points. Lighting types should be of a high quality and be vandal resistant to ensure longevity and allow for less maintenance or replacement. All lighting should be designed and managed in the context of the location to maximise effectiveness. Where recesses and blind corners cannot be avoided, the use of extra lighting and / or mirrors should be considered.

Given that several components of the development are intended to be publicly accessible, a CCTV network is recommended to be installed throughout the various areas of the site, including:

- The basement points of ingress and egress.
- Within the public domain space between Buildings B and E, and amongst the curtilage of the ground floor retail tenancies that have an interface to this central public domain spine.

- At the sites eastern boundary which overlooks the neighbouring Kelvin Park homestead and amongst the landscaped space and perimeter pathways surrounding Building A and C.
- Within the sites central outdoor open spaces including the seating elements, the ridgeline, the grasslands, nature play area, meditation garden, continuous timber boardwalk, open turf areas and fitness stations.
- Within all internal circulation spaces of the proposed buildings, particularly within lift lobbies and mail rooms.
- Throughout the various communal spaces accessible to residents and visitors; including the pool, wellness room and gym and communal open space areas.
- Throughout each basement level of the development, particularly within parts of the basement that include back of house ingress and egress.

It is recommended that a CCTV network plan be developed by a security consultant. 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. Recommendations are provided in **Section 6.1**.

5.3 Territorial Reinforcement

The NSW Police Safer by Design Guidelines note that people generally recognise areas that are well cared for and areas that display strong ownership cues are less likely to be improperly used than those that do not. In particular, ownership cues are heightened, and fear can be reduced amongst residents and visitors through the personalisation, marking, maintenance and decoration of a building.

Given that several components of the development are intended to be publicly accessible, the proposal will provide a balanced level of territorial reinforcement that conveys ownership cues whilst remaining inviting and accessible for the areas that are designated to be accessed. However, the proposed development should in no way appear fortified, nor should there be an obvious division between the various leasing and ownership arrangements of the residential components of the development. Critical to the creation of effective guardianship is social inclusion, which is disadvantaged by the obvious physical and visual division of residents based on their ownership/leasing of dwellings. The proposal will provide a high level of territorial reinforcement with the following cues and formal guardians provided:

- The proposed design of the development provides a diversity of materiality and built form to convey clear distinguishment between private residences and the retail tenancies. This will provide strong visual cues that instinctively demonstrate which areas are available for public access and which areas are private.
- The introduction of a greater number of individuals on site will significantly increase the number of residents, visitors, staff, and other management employees. This will create an established presence of formal guardians across the site and therefore contribute to a sense that there is a level of community policing available on site. Consequently, the perceived risk to offenders and the effort required to commit a crime due to the strong presence of persons with a vested interest on site will be enhanced. Care must be taken to ensure that entrances into private spaces from communal spaces are well monitored.
- Territorial reinforcement is understandably absent in the design of the pedestrian entrance to the site and throughout the ground level landscaped areas of communal open space. The footpath network and open spaces throughout the ground level are inherently designed to be publicly traversable spaces that are privately owned. The consistency of design elements effectively communicates the public nature of these spaces however the orientation of residential windows and private open spaces that overlook these spaces convey a level of territorial reinforcement due to their private uses.
- Suitable wayfinding signage at key entrances around the perimeter of the site, along with building and business identification signage associated with the retail and residential uses are recommended. Signage will reduce the opportunities for people to justify gaining unauthorised access and or to loiter in areas of the development where public access is prohibited. The design of access points are intended to be legible and inviting, yet it recommended that signage will further enhance this perception.

Overall, it is considered that the development is capable of providing appropriate opportunities for both formal and informal guardians in and around the development that will help to deter offenders and increase the risk of detection and will contribute to the safety of the area. Recommendations are provided in **Section 6.1.3**.

5.4 Environmental Maintenance

It is commonly understood that area image can impact on feelings of safety and danger, influence local confidence and individual decisions to withdraw or engage in community life. It can also affect the economic prosperity of areas and lessen the likelihood of visitors to return.

Vandalism, graffiti and other crimes can induce fear and avoidance of public spaces, particularly amongst the elderly. As such, maintenance of the proposed development and its surrounds is a key crime prevention mechanism. The proposed development will provide a high quality urban environment which will convey a clarity of ownership and display a space that is well cared for.

As shown within Architectural Plans prepared by DKO, the proposal provides a better use and higher quality design outcome for the site in its entirety than what was previously provided on site. The maintenance of an area encourages regular use in attracting visitors and ensuring their return, which in turn provides opportunities for natural supervision. It is recommended that the public domain and landscaped areas in between the buildings are monitored regularly with an adequate contractor appointed to ensure that appropriate landscaping care is upheld for these spaces.

Additionally, it is recommended that 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. Further, high quality public seating and other furniture, building materials and design of signage should be used to lessen the likelihood of damage and to help reduce maintenance costs.

As the proposed development will include numerous stakeholders in its operation, the clear articulation of a management body is necessary. Management should enforce effective and thorough environmental maintenance procedures. Consistency in the standard upkeep throughout the site and its immediate surround site critical. The site will be densely vegetated and include various gardens, public domain areas and landscape buffers. The site will require adequate maintenance to reflect the site is cared to a high standard.

The areas surrounding the retail tenancies are likely to experience high levels of activity and pedestrian movement, effective environmental maintenance of the main public domain area will be critical to the perceived safety of the environment. Maintenance of this area will need to consider the effect of this space and its operational needs. The landscaped areas of the central public domain upon the pedestrian entrance to the site will require maintenance to ensure the main entrance reflects a distinctive entry way. The quality of the main entry point to the development is critical as it contributes to the identity and definition of the mixed use residential development.

The external environment to the buildings will be subject to a Strata Scheme and Building Management Committee that will ensure the maintenance of all external environments. Specifically, areas such as communal open spaces throughout the levels of the buildings such as the rooftop gardens will require specific attention. These areas will include significant planting and landscaping treatments that will facilitate the activation of these spaces and are anticipated to be used at a high capacity. Further, high quality materiality situated within the external boundary should be utilised to lessen the likelihood of damage and to help reduce maintenance costs. A well-maintained exterior will ensure the site is identified as active and will deter potential crime and antisocial behaviour.

5.5 Activity and Space Management

The management of space and activity is important to maintaining control over a space and preventing incidents of crime. Space management relates to the supervision, control and the ongoing care of a development, similarly to environmental maintenance. Spaces that are infrequently used are known to experience crime and be the subject of abuse. Effective space management also encourages people to feel a shared responsibility for its use and condition.

The proposed development is recommended to include a Plan of Management (PoM). Given the above, it is considered that the architectural design provides for clearly defined spaces, capable of being well managed and cared for in order to prevent incidents of crime.

The management of activity and space of the site will apply to the communal facilities including the gym, wellness room, pool, landscaped areas and communal open space located at ground level and in the upper levels of the proposed buildings. These areas are all accessible to residents, the public will have restricted access to these amenities which will be detailed in the PoM. The PoM is recommended to be prepared to clearly convey how the space is managed and who will undertake the work to maintain these areas. It is noted that the strata schemes will be put in place to include landscaping and building management as well as common property maintenance and cleaning.

The Plan of Management recommended to be prepared to support the proposed development and should include the following:

- Hours of operation (retail tenancies, gym and wellness room and communal open spaces).
- General security protocol.

- Emergency and evacuation procedures.
- Daily operation including access arrangements for pedestrian and vehicles.
- Maintenance and cleaning.
- Waste management.
- Roles and responsibilities of building management, waste collection staff, developers and contract cleaners.
- Security and safety measures.

In light of this, it is considered that the spatial design of the floor layouts of the development endeavours to clearly define spaces, capable of being well managed and cared for in order to prevent incidents of crime. Recommendation in respect of activity and space management are provided in **Section 6.1.5**.

5.6 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. The proposed development includes multiple types of access, these include:

- Primary – access to all public areas, including to the pedestrian pathways and outdoor circulation areas from the public domain and streetscapes. The residential component of the development includes secured access from the internal residential areas.
- Secondary – access to semi-public areas, including the lobbies, retail spaces and the communal amenities including the gym, wellness room and rooftop gardens only accessible to residents.
- Vehicle – access for vehicles for loading and car parking within the proposed development, accessed from the site's frontage at the future local roads (at the sites western boundary).
- Territorial reinforcement of each of the mixed-use residential buildings are benefited from restricted access to the upper levels. Each lobby has been designed to provide access into private dwellings to select individuals who have key access to the residential development. Access control will further enforce what areas are public and private spaces.

The location of Building B and Building E (the two mixed-use residential buildings) front the future local roads. The design therefore demonstrates that it does not provide opportunities to cut through the site or provide opportunities that lead to further retail spaces.

As with territorial reinforcement, it is important to maintain that the proposed development be free of physical access control that appears to fortify the environment. While appearing to fortify the proposed development is considered inappropriate, areas within the proposed development such as the back of house areas within the retail tenancies and waste facility areas in the basement levels, that are nominated for staff use only may require provisions that increase access control measures. In this case, a boom gate is provided for access to the basement levels. Secure security swipe access cards into the basement levels and all residential and ancillary residential components of the development are to be provided to prevent unwanted persons from accessing these spaces.

5.7 Design, Definition and Designation

The design of the proposed development is considered to heavily reflect its purpose and intent, and while perpetrators will often exploit areas with unclear spatial definition, the design of the proposed development generally addresses multiple principles of CPTED. As mentioned above, the design provides for a clear separation of uses in an integrated space.

To further delineate the varying uses provided by the development, it is recommended that clear signage to indicate entry points and facilitate wayfinding be provided to help convey how each space should be used. In particular clear wayfinding signage should be provided at key entrance points to different components of the site.

Clear wayfinding signage should be provided at the entrance points into the site including;

- The main pedestrian entrance to the site (located in the centre of the western boundary) fronting the future local road.
- The two vehicular access points at the western boundary, fronting the future local road.

- The proposed development is absent of undefined or un-designed spaces. The entire development will be developed and will comprise building structures or high quality landscaped areas. This will clearly delineate public from private space.
- The pedestrian paths between Buildings A and B and Buildings E and F.

Signage should clearly delineate all basement levels, particularly where waste, services and bicycle parking are located to prevent individuals of the public from inadvertently or intentionally accessing these spaces and to make it clear how each space is managed.

The site plan layout is benefitted by a regular and linear orientation of the building and internal layouts, which benefits natural surveillance and intuitive wayfinding. Maintenance of the landscaped elements within the public domain should occur to ensure that these areas do not undermine the principles of CPTED, including access control, natural surveillance, effective lighting and technical surveillance.

Access arrangements will play a pivotal use in clearly delineating between the public and private uses on the site.

6.0 Crime Risk Rating and Recommendation

The Crime Risk Rating considers the development as proposed in the architectural plans prepared by DKO. Acknowledging the existing and future site context along with the issues discussed in Section 2, 4, and 5, the Crime Risk Assessment Rating of the place was rated within the 'moderate' category.

An assessment of the proposed development in the context of the CPTED principles has found that, with the implementation of the recommendations to be considered in the future context of the site, the rating would be altered to be within the 'low' category. While the redevelopment of the site will likely increase the population on site, and thereby increasing potential new opportunities for crime, purely by the increase of use and occupancy of the site, our assessment finds that the design of the development is generally consistent with the principles of CPTED. The below recommendations are provided to assist in minimising any opportunities for crime.

6.1 Recommendations

6.1.1 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 circulation spaces (internal and external publicly accessible areas, such as the turf area, pick up and drop off zone, meditation area, fitness stations, all pathways, and throughout basements and car park ingress/egress points) are unobstructed by structures, to remove opportunities for concealment and ensure that pedestrians can move freely with clear sightlines of their surrounds.
- The glazed facades of the building at ground level should be free of clutter and signage to allow sightlines between the development and public domain, retail tenancies, lobbies, ancillary residential areas, the wellness room, gym and landscape areas.

6.1.2 Lighting and Technical Supervision

- A CCTV network is essential for the loading dock and car park area, and anywhere that is able to be traversed by the general public, including back of house areas and within the basement. The CCTV network is to be designed in consultation with a suitably qualified security consultant with a Class 2A licence 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 should endeavour to ensure blackspots of coverage are not created.
- The CCTV network strategy should be partnered with the internal and external lighting strategy to ensure facial recognition is achieved in all lighting conditions.
- Discrete CCTV systems such as small dome cameras are recommended.
- All lighting is to be installed and comply with Australian Standard AS4282:1992: Control of Obtrusive Effects of Outdoor Lighting.

6.1.3 Territorial Reinforcement

- Maintain that building entrances are highly visible from the streetscape frontages and internal paths of travel as well as avoid any entrapment areas associated with entries.
- Display CCTV security notice signs to convey that the site is under constant surveillance (if applicable).
- Clearly delineate between publicly and privately accessible areas via passive boundaries that do not appear to over fortify an environment (such as through landscaping provisions). High fencing is discouraged in these areas.
- Provide signage throughout the precinct to direct pedestrian movements and deter loitering where it is not designated.
- Ensure that pathways around the building curtilage, and within internal corridors are unobstructed at all times to avoid blind spots.

6.1.4 Environmental Maintenance

- Ensure an effective and prompt response to environmental maintenance for the development is clearly specified through a Plan of Management (or the like). Environmental maintenance should acknowledge the

principles of CPTED and ensure general building maintenance and cleanliness is maintained throughout the precinct.

- 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.

6.1.5 Activity and Space Management

- Ensure business, building and wayfinding signage is appropriate to deter access to private spaces and direct pedestrian movements to desired locations.
- Maximise the inclusion of glazed facades with anti-graffiti coatings wherever possible to maximise lines of sight and mitigate the risk of damage.
- Ensure that the Strata Body or Building Management Committee prepare a Plan of Management which should document relevant guidelines to govern behaviour on site and should include emergency evacuation details, maintenance procedures and regulation details of various communal and shared spaces.

6.1.6 Access Control

- Ensure that any access control does not appear to fortify the environment. Indeed, any future fencing along internal street boundaries be visually attractive and low in height.
- Ensure all residents are afforded secure access with security swipe cards that grant private access into the basement levels and all ancillary residential components of the development such as the gym and wellness room.
- Consider installation of an appropriate bollard/barrier system at the future local road pedestrian entrances and within components of the share way to prevent vehicles driving into spaces not designed for vehicles. A security consultant with a Class 2A licence under the *Security Industry Act 1997* is recommended to be engaged to provide specific advice on the type, placement and installation of this bollard/barrier system to ensure vehicles moving at high velocity cannot enter the site in locations not intended for vehicles, if need be.

6.1.7 Design, Definition and Designation

- Security, general staff personnel and employees of the building are advised to do routine parole of the site (including perimeter laps of the public open space areas throughout the development) regularly to minimise opportunities for anti-social behaviour. This should be included in any Plan of Management created for the site.
- Ensure clear way finding signage is provided at the ingress and egress points of the site. Wayfinding signage should also be provided throughout all areas of the site including all basement levels, internal and external circulation areas such as lobbies, hallways, outdoor public spaces including pathways, turf areas, exercise stations and at the pick up and drop off zone.