

ETHOS URBAN

Crime Prevention Through Environmental Design – Stage 2 SSDA

338 Pitt Street, Sydney NSW 2000
CPTED Report

Submitted to City of Sydney
On behalf of China Centre Development Pty Ltd

16 December 2019 | 2190027



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Contents

1.0	Introduction	2
1.1	Disclaimer	3
2.0	The Site	3
2.1	Existing Development	5
3.0	The Proposed Development	9
3.1	Pedestrian Access	10
3.2	Vehicular Access	11
3.3	Bicycle Access	11
4.0	Nature of Recorded Crime	11
5.0	Matters for Consideration	14
5.1	Surveillance	14
5.2	Lighting and Technical Supervision	15
5.3	Territorial Reinforcement	15
5.4	Environmental Maintenance	16
5.5	Activity and Space Management	17
5.6	Design, Definition and Designation	17
6.0	Crime Risk Rating and Recommendation	17
6.1	Recommendations	18

Figures

Figure 1	Site Locational Context	4
Figure 2	Aerial Context Map	5
Figure 3	Ramp access at 324 Pitt Street	6
Figure 4	Ramp access at 233 Castlereagh Street	6
Figure 5	Dungate Lane	6
Figure 6	Dungate Lane	6
Figure 7	Concealed areas within Dungate Lane	7
Figure 8	Rear ramp access within Dungate Lane	7
Figure 9	View of Proposed Development from Hyde Park	10

Tables

Table 1	Legal Description of the Site	3
Table 2	Statistics of recorded crime in Sydney (Suburb)	13

1.0 Introduction

This Crime Prevention Through Environmental Design (CPTED) Assessment has been undertaken to assess the potential opportunities for crime and the perceived fear of crime that may be associated with the proposed mixed use tower development with podium and ground floor plaza at 338 Pitt Street, Sydney, as envisaged in the Environmental Impact Statement (EIS) to which this report is appended.

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

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

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

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

Architectural drawings prepared by FJMT have been reviewed as part of this assessment.

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

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

A site inspection was undertaken on the 11 December 2019 between the hours 3.00pm and 4.00pm to assess the current site conditions, situational crime prevention measures and perceived safety of the existing environment.

This CPTED report is submitted as part of the development application submission package for the SSD Application relating to the proposed mixed-use towers, podium and ground floor plaza.

1.1 Disclaimer

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

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

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

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 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.

2.0 The Site

The site is located at 338 Pitt Street on the corner of Pitt Street and Liverpool Street, within the 'Mid Town' precinct of Sydney's Central Business District (CBD), characterised with a diverse employment profile, good accessibility and more affordable commercial office floor space in comparison to other parts of the CBD. The site is approximately 150m west of Museum Station and Hyde Park, and approximately 350m from Town Hall Station. The site is an irregular shape and has a combined area of approximately 5,900m² and constitutes nearly one third of the city block between Bathurst Street, Pitt Street and Liverpool Street.

The site has street frontages to Pitt Street (90m), Liverpool Street (24m), Castlereagh Street (84m) and Dungate Lane (23m) and has a gentle fall from the north-eastern corner to the south west. A site context map and aerial map is shown at **Figure 1** and **Figure 2**.

The site includes several allotments as listed at **Table 1** which form the development site.

Table 1 Legal Description of the Site

Street Address	Lot/Deposited Plan
338-348 Pitt Street	10/857070
332-336 Pitt Street	1/66428
324-330 Pitt Street / 233 Castlereagh Street	3/1044304
241-243 Castlereagh Street	1/90016
245-247 Castlereagh Street	1/78245
245-247 Castlereagh Street	1/70702
249-253 Castlereagh Street	B/183853
126 Liverpool Street	A/448971
128 Liverpool Street	B/448971
130 Liverpool Street	C/448971

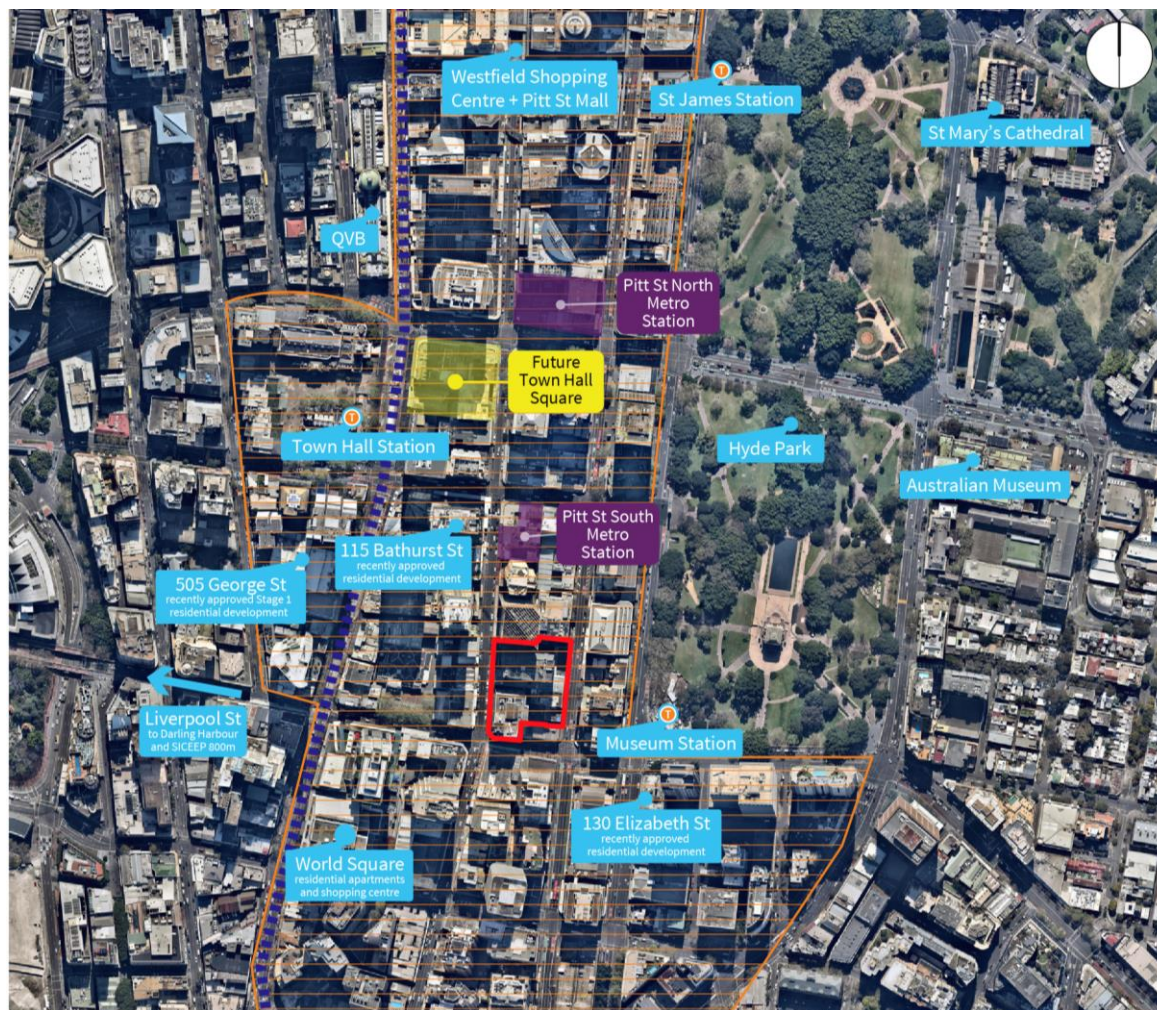
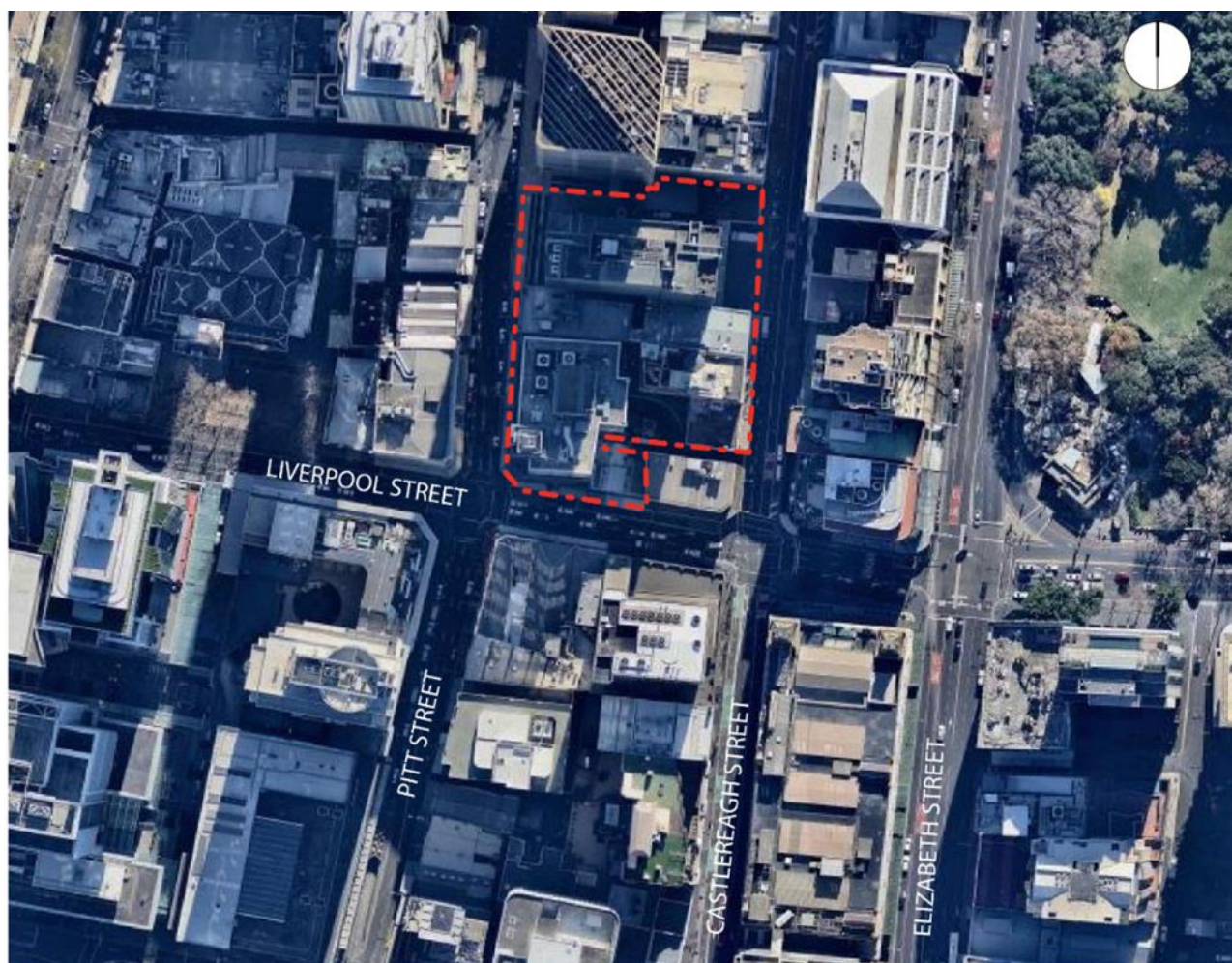


Figure 1 Site Locational Context

Source: Ethos Urban / Nearmap



 The Site

Figure 2 Aerial Context Map

Source: Ethos Urban / Nearmap

2.1 Existing Development

Since the site is an agglomeration of acquired lots, comprising a significant land holding for renewal. The site in its current condition accommodates a number of existing buildings being:

- A high rise commercial tower at 338 Pitt Street;
- A two-storey terrace-style building at 126 Liverpool Street;
- A high rise commercial tower at 324 Pitt Street and 233 Castlereagh Street;
- A six storey commercial building at 326 Pitt Street; and
- Three multi-storey commercial buildings at 245-247 Castlereagh Street and 249-253 Castlereagh Street 338 Pitt Street.

2.1.1 Existing Site Access and Security

Vehicular Access and Parking

Vehicular access to the site is currently via Pitt Street, Castlereagh Street and Dungate Lane, which provide a number of basement access ramps. These basement access ramps cut through/intersect the existing footpath, occupying a substantial portion of the front setback of both 233 Castlereagh Street and 324 Pitt Street (refer to

Figure 3 and 4. This portion of the site is identified as an ‘opportunity site’ under the SLEP 2012, with the desire to relocate existing driveways and ramps, infill the setback area and reconfigure pedestrian access. The majority of the buildings on the site adjoin Dungate Lane, which is used as a loading area and for waste storage (refer to **Figure 5** to **Figure 8**).

Dungate Lane is accessed from Castlereagh Street via a vehicular cross-over that isn’t delineated from the footpath in terms of paving elements. It includes access to a ramp which provides rear vehicle basement access into 338 Pitt Street. There are concealed areas and inconsistencies in built form within Dungate Lane which opens up to the rear and reveals places that can providing concealment opportunities, capitalising on the lack of natural surveillance, activation, effective guardianship, ambiguous ownership and poor lighting provisions.



Figure 3 Ramp access at 324 Pitt Street

Source: Ethos Urban



Figure 4 Ramp access at 233 Castlereagh Street

Source: Google Maps



Figure 5 Dungate Lane

Source: Ethos Urban



Figure 6 Dungate Lane looking towards Castlereagh Street

Source: Ethos Urban



Figure 7 Concealed areas within Dungate Lane

Source: Ethos Urban

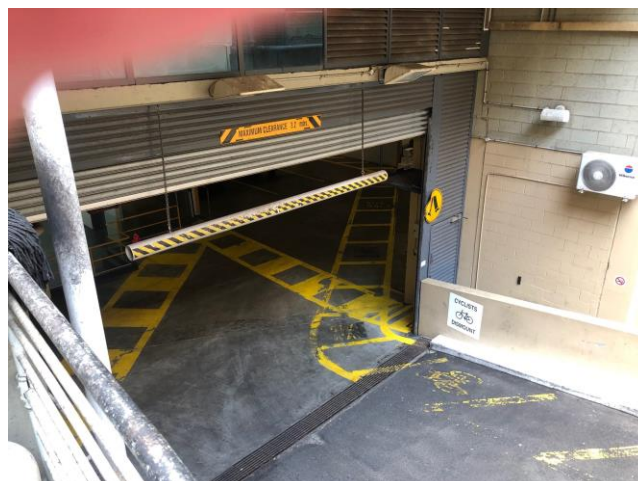


Figure 8 Rear ramp access within Dungate Lane

Source: Ethos Urban

Pedestrians

Pedestrian access to the existing site is provided from Pitt Street, Castlereagh Street and Liverpool Street. There is an existing retail arcade running through the site, providing pedestrian access between Pitt Street and Castlereagh Street (refer to **Figure 9**). There is currently no public pedestrian access through to Pitt Street from Dungate Lane.

Bicycle

The site benefits from proximity to the Liverpool Street Cycleway, which runs along the northern side of Liverpool Street, connecting to the broader cycleway network of Sydney. The Liverpool Street Cycleway is two-lane and separated from the road, providing an east-west cycling route through the CBD (refer to **Figure 10**).

The proposed development will also potentially benefit from a future cycleway along the northern end of Castlereagh Street, along the eastern boundary of the site. This cycleway will be two-way and separated from the road, providing a north-south cycling route through the CBD.



Figure 9 Existing through-site arcade

Source: Ethos Urban



Figure 10 Protected Bike Lane at Liverpool Street

Source: Ethos Urban

2.1.2 Surrounding Development

The surrounding development is pivotal to understanding the crime risks associated with the site. The site is located within the 'Mid Town' precinct in the Sydney CBD and surrounded by high rise multi storey mixed-use developments. The site benefits from three street frontages and is located on the corner of two busy intersections. Consequently, mixed use towers with active uses at street level overlook the development and are segregated from the site by roads that experience high levels of pedestrian and traffic movements.

To the direct south the site is bounded by Liverpool Street which functions as one of the three primary frontages to the site, comprising a one-way arterial road that provides three general traffic lanes and a protected bicycle lane. Liverpool Street experiences high amounts of pedestrian, vehicular and cyclist traffic as it connects south-eastern parts of the city (Surry Hills/ Darlinghurst) to the CBD and western suburbs via the Anzac Bridge. Liverpool Street contains the Commonwealth Building on the corner of Pitt and Liverpool Street, which comprises a multistorey commercial building podium and ground floor entrance atrium with multi-storey commercial levels above. Adjacent to the Commonwealth Building is a heritage listed five storey heritage listed building known as the Chamberlain Hotel, accommodating a food and drink premises at street level, with mixed-use above.

To the immediate east Castlereagh Street bounds the site, which consists of a two-lane street that carries southbound traffic. On the eastern side of Castlereagh Street directly adjacent to the site are a range of multi-storey buildings that provide a series of fine-grained retail tenancies at street level. To the south east lies the busy intersection of Castlereagh Street and Liverpool Street which accommodates the Downing Centre that is setback from Liverpool Street, characterised by busy, high traffic and pedestrian volumes. Further to the east is the entrance to Museum Station and beyond this lies Hyde Park.

To the direct north the site is bounded by a commercial tower known as 320 Pitt Street, positioned directly adjacent to the site. The development includes a multi-storey tower incorporating an expansive recently renovated foyer with glazed fenestration that extends along the Pitt Street frontage and accommodates a concierge. The podium supports a multi-storey commercial tower that contains office uses with windows oriented towards Pitt Street and the subject site that provide opportunities for onlooking. Further north on the western side of Pitt Street is the former Sydney Water building, a heritage listed building that now serves as the Primus Hotel, which includes 24 hour operational activity and doorman, providing above average opportunities for casual surveillance along Pitt Street.

To the direct west the site is bounded by Pitt Street which supports northbound traffic. On the western side of Pitt Street adjacent to the subject site are a range of multi-storey buildings that provide a series of fine-grained ground floor tenancies which support both retail and food and beverage outlets. To the south-west lies the busy intersection of Pitt and Liverpool Street which accommodates a multi-storey existing Rydges Hotel which is in operation 24 hours a day, providing good surveillance and activity in space management close to the existing site.

Overall, the Crime Risk of the site is considered to be 'moderate'.

The key positive elements of the site are:

- The site lies between two busy intersections and has a frontage to three high traffic volume streets which support a high level of pedestrian and vehicular traffic.
- The site is surrounded by multi-storey buildings and tower developments with podiums built to the street frontage. Some of these developments generally provide active retail uses at street level and office uses or mixed-uses above that overlook the development and provide a high level of 'natural' community policing and effective guardianship.
- Some surrounding building uses relate to businesses that operate outside of standard trading hours and encourage the pedestrianisation of the area both during the day and at night.
- The surrounding built form is characterised by a number of high quality developments, including recently refurbished buildings or heritage listed buildings, that contribute to the perception that the area is well cared for.
- Some surrounding buildings provide secure access arrangements with guardians such as security guards and concierges located within foyer areas at street level that provide opportunities for surveillance and natural community policing; and

- The surrounding streetscape provides dedicated footpaths that have high levels of pedestrian usage consistent with its CBD location.

The key negative elements of the site are:

- The site is located centrally within the Mid Town precinct of Sydney's CBD which typically experience higher rates of crime (however not necessarily higher rates of victimisation).
- The existing condition of Dungate Lane is considered conducive to unsocial behaviour, provides little opportunity for natural surveillance or effective guardianship, has the perception of ambiguous ownership and provides areas that are concealed and a capable of acting as hiding places.
- The site sits near multiple infrastructure assets including railway stations and road laneways, which can be more susceptible to criminal activity.
- Due to the agglomeration of multiple buildings which make up the wider site, the site contains many concealed and disjointed areas by way of multiple basement access ramps and an underutilised through-site link which are not well advertised or provide adequate wayfinding signage.
- The Liverpool and Castlereagh Street intersection accommodates the Downing Centre and Museum Station entrance which provides opportunities for loitering.
- The existing NAB branch building is positioned in a prominent position at the Liverpool and Castlereagh Street intersection and does not form part of the site and therefore no improvements in street activation or general design improvements can occur on this corner.

3.0 The Proposed Development

The proposal relates to a Stage 2 Stage Significant Development Application (SSDA) for the mixed-use redevelopment of 338 Pitt Street, Sydney, which is submitted to the City of Sydney pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act). China Centre Development Pty Ltd is the proponent of the SSDA.

The proposed development comprises an 80 storey twin tower mixed-use development including:

- Demolition of the existing structures at 233-249 Castlereagh Street, 332-348 Pitt Street and 126 - 130 Liverpool Street, excavation and site preparation, including any required remediation.
- Construction of a new 5 Level basement including hotel drop off, shared loading facilities for the 338 Pitt Street development and the neighbouring Telstra building at 320 Pitt Street, bicycle parking, hotel facilities, plant, residential storage and car parking for retail, hotel, residential uses plus car parking for the neighbouring 'Telstra' building.
- A new ground floor Public Domain and associated high quality landscape design including through site links, arcades and a new Urban Courtyard. The Public domain is predominantly at Pitt Street level and connects Castlereagh, Pitt and Liverpool Streets and Dungate Lane.
- Six podium buildings designed by four architectural practices containing retail and hotel uses.
- Two slender 257m towers which are predominantly residential use with hotel uses up to level 17 of the south tower.
- A mid level bridge connection between the towers with two double height levels. One level contains restaurant and bar facilities for use by the hotel and the general public. Public passenger lifts serve this level in addition to the hotel lifts. The other level contains the hotel and residential swimming pools and wellness facilities.

A detailed description of development is provided by Ethos Urban within the Environmental Impact Statement in which this CPTED Report is appended to.

A photomontage of the proposed development is shown at **Figure 11**.



Figure 11 View of Proposed Development from Hyde Park

Source: FJMT

3.1 Pedestrian Access

As the site is situated centrally in the Sydney CBD, it benefits from an established pedestrian network that is highly pedestrianised and well serviced by public transport. Direct access to the site is proposed from all three street frontages via new and consolidated entrances, providing a myriad of through-site links that will surround a new central courtyard containing retail, food and beverage outlets as well as the new hotel lobby.

Specifically, the proposal will improve on the existing pedestrian experience through and around the site by facilitating direct access arrangements in the way of three new east-west through-site pedestrian connections, as well a new connection from Liverpool Street, reclaiming a fine grain human scale with a public domain of pedestrian streets, laneways, arcades and courtyard gardens at the ground level of the site. The amenity of the ground floor plaza will be greatly improved by open to the sky pathway configurations.

3.2 Vehicular Access

The proposed development incorporates below ground car parking beneath the public domain component of the development. Access to the parking areas will be obtained from Dungate Lane and will facilitate parking for private use, hotel use and bicycle use. The main ramp access entrance into the car park will be met with the hotel lobby concierge drop-off and pick up zone, where temporary hotel guests will have private access direct to the hotel lobby via the basement. All other vehicles and parking facilities will have to bypass the hotel lobby drop off zone, which provides an activated use within a basement car park and acts as a traffic calming device in itself. The round the clock operations of the hotel will ensure that there is constant natural surveillance at the entrance and exit to the car park.

3.3 Bicycle Access

The site is highly accessible to cyclists via a network of cycle routes, including a number of current and future cycleway corridors. Park Street and Pitt Street are both considered as 'Direct Routes with Higher Traffic', although they do not have a dedicated cycleway. However, in accordance with the Sydney City Centre Access Strategy, the site will benefit from new cycle networks, including the construction of a new cycleway along Pitt Street and Park Street that will improve cycle connections to the broader CBD. Liverpool Street already benefits from protected bicycle lanes.

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 for 2019 found that the most commonly occurring crimes relevant to CPTED within the City of Sydney LGA (rates per 100,000 persons) were:

- Non-domestic assault
- Robbery (without a weapon)
- Sexual offences
- Theft (Break and enter non-dwelling)
- Steal from retail store
- Steal from person
- Fraud
- Malicious damage to property
- Disorderly conduct
- Drug offences

As shown in **Figures 12 to 18**, the BOSCAR database indicates that the site is located within a hotspot for the following crimes:

- Non-domestic assault
- Fraud
- Robbery (without a weapon)

Notwithstanding the above, hotspots indicate areas of high crime density (number of incidents per 50m by 50m) relative to crime concentrations across NSW. They are not adjusted for the number of non-residents and temporary visitors akin to the status of Sydney CBD as a global destination with tourists frequenting the area both day and night, and thus may not reflect the risk of victimisation. It is noted that the BOSCAR statistics indicate that the majority of the Sydney CBD is included within these hotspot areas.

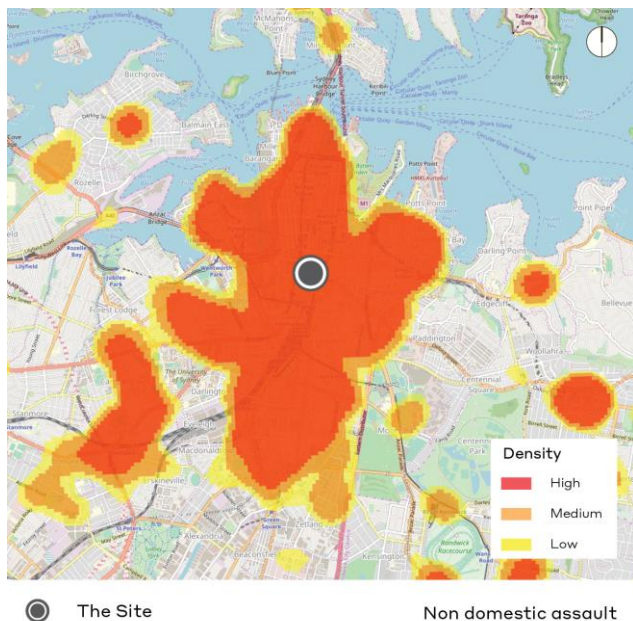


Figure 12 BOSCAR Non-domestic assault hotspot map

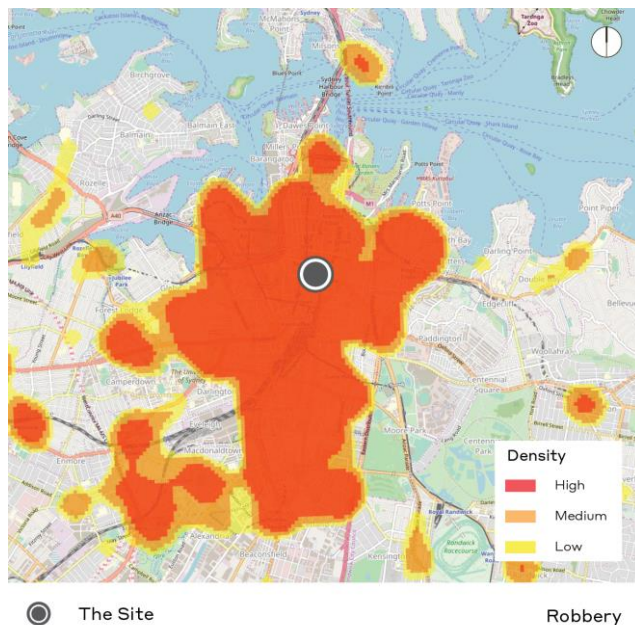


Figure 13 BOSCAR Robbery Hotspot Map

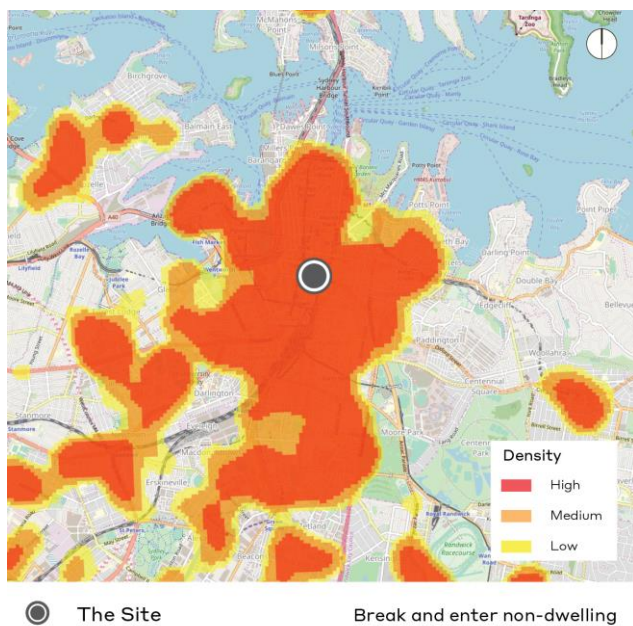


Figure 14 BOSCAR Break and Enter Hotspot Map

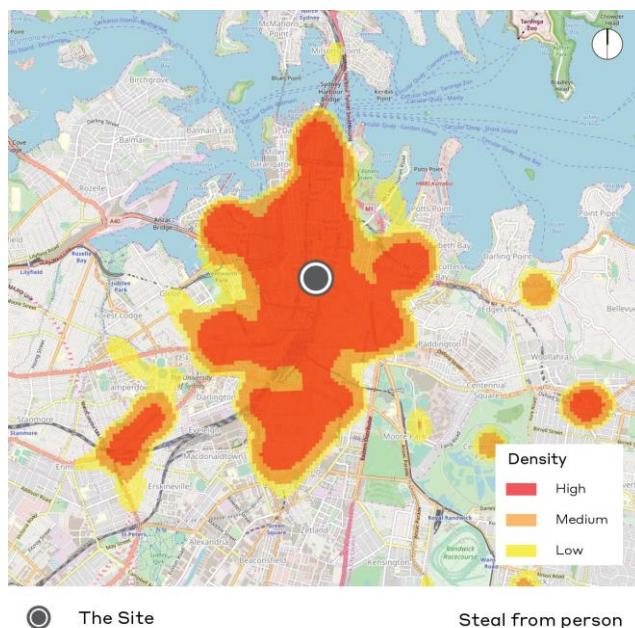


Figure 15 BOSCAR Steal from Person Hotspot Map

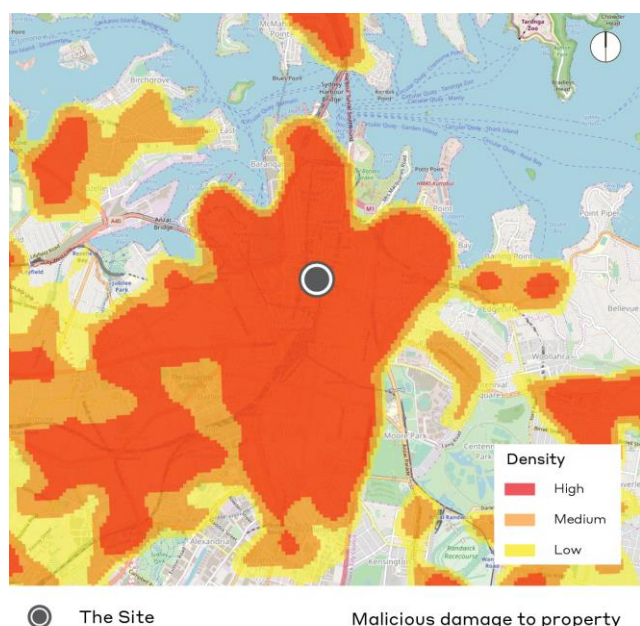


Figure 16 BSOCAR Malicious Damage Hotspot Map

The frequency of the crimes identified above in the Sydney CBD, between October 2015 and September 2019 are detailed below in **Table 2**.

Table 2 Statistics of recorded crime in Sydney (Suburb)

Crime	Oct 2015- Sept 2016	Oct 2016- Sept 2017	Oct 2017- Sept 2018	Oct 2018- Sept 2019	2015-2019 Trend	Rate per 100,00 Population Oct 2018 – Sept 2019	Rating Category
Assault – non-domestic assault	31632	32126	32283	31943	Stable	4857.9	Medium
Robbery (without a weapon)	1378	1444	1474	1483	Stable	179.5	Very high
Sexual offences	144	216	223	195	Stable	1000.3	Very Low
Theft (Break and enter non-dwelling)	129	129	124	76	Decreasing	389.9	Very Low
Steal from retail store	1163	1659	1372	1356	Stable	6956	Medium
Steal from person	697	479	454	369	Decreasing	1892.9	Very High
Fraud	2175	1394	1388	1164	Decreasing	5971.1	Low
Malicious damage to property	418	393	359	427	Stable	2190.4	Low
Disorderly conduct	522	480	489	555	Stable	2847	Low
Drug offences	968	1150	1343	1208	Stable	6196.8	Very Low

The rate per 100,000 residents and the corresponding category are not adjusted for the number of non-residents, visitors and tourists in the Sydney CBD and thus does not accurately reflect the risk of victimisation in a unique location in NSW such as the Sydney CBD that has very high levels of non-residents and visitors which would inflate the above rates. The above data reflects crimes that were actually reported and recorded.

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 CBD context and its location within the hotspots identified above, 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 natural surveillance. The surveillance principle indicates that offenders are often deterred from committing a crime in areas with high levels of natural surveillance that foster communal activity. The following design features can improve natural surveillance:

- clear, direct path that encourage pedestrian activity and allow for clear lines of sight;
- 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; and
- appropriate lighting and effective guardianship of communal and/or public areas; and minimised opportunities for offenders to hide or entrap victims.

5.1.1 Ground Level

The proposed development provides a high level of natural surveillance, both to the development itself and to the surrounds. The site benefits from three street frontages that are frequented by high levels of vehicle and foot traffic throughout the day. Due to the site's location in the core of the CBD, the site is surrounded by high rise commercial and mixed use developments, with active frontages typically provided at street level. Accordingly, the site is already afforded a high level of natural surveillance. For the reasons outlined below, it is considered the Stage 2 SSDA will further maximise opportunities for natural surveillance.

Buildings that address the street provide opportunities for natural surveillance between occupants and the general public, which can be maximised through the provision of windows and pedestrian entrances which face public areas. The Stage 2 SSDA incorporates active spaces such as the central courtyard which is proposed as an extension to the public domain at street level. Consequently, the site is expected to accommodate an even higher number of pedestrians and as it is intended for individuals to linger in the new central courtyard and surrounding pedestrianised spaces (known as a 'third place' between the traditional private and public space norms), opportunities for natural surveillance will need to be further maximised. It is noted that there will be periods outside of standard business hours where the courtyard will experience limited pedestrian movements, however in alignment with City of Sydney's recent Late Night Economy Policy, the hours of operation for the uses within this space are recommended to be flexible and should not be confined to traditional habits of constricting hours of operation. In light of this, formal surveillance measures such as CCTV should still be incorporated, as discussed in the recommendations provided in Section 6.1.

The layout, placement and orientation of these active spaces will maximise informal surveillance opportunities. These active spaces have been located along and oriented towards each of the three street frontages. Specifically, the hotel foyer will be located as a buffer zone between the internal courtyard space and street frontage at Castlereagh Street, which will include 24 hour activation typical of hotel lobby services. The new through site links will provide a myriad of pedestrian connections and will allow pedestrians to move in and around the site in designated passageways that are easy to navigate, creating a strong sense of natural surveillance for passers-by and generally providing clear sight lines and linear paths of travel. Consequently, the building and courtyard entries will be easily identifiable from the streetscape, allowing each to permit natural surveillance from the public domain to internal site areas at night.

The built form surrounding the above mentioned through site links will be built to the street frontages and generally will provide straight building alignments devoid of alcoves, inset doorways or recesses that are capable of impeding sightlines or providing opportunities for offenders to hide. The use of formal surveillance through the provision of CCTV cameras in these locations would further add to the level of surveillance.

5.1.2 Loading Dock

The loading dock is located at Basement Level 3 and will be frequented by vehicles and foot traffic throughout the day. The loading dock is incorporated on the same level as waste room facilities, laundry room facilities, and Telstra staff car parking bays and thus it is likely to be in frequent use with multiple persons utilising the facilities at the same time. This can be seen to exemplify good surveillance, access control and community guardianship of the space. The loading dock will be supervised by a dock manager who will be stationed within the basement who will manage the activity within the space and provide formal surveillance and guardianship of the dock area, restricting public access to these areas.

5.1.3 Basement

The proposed basement will comprise 6 levels and will serve a crucial purpose to the functionality of the wider site. The basement levels will include the hotel lobby drop-off and pick up zones as the first service visible when initially entering the basement, all vehicles and cyclists will need to by-pass the hotel lobby within the basement prior to entering other sections of the basement. Lower levels predominantly contain facilities for staff, which include storage rooms, end of trip facilities, lockers, laundry/linen rooms, kitchens, engineering and IT offices and garbage rooms for hotel, retail and residential. The basement will also accommodate maintenance offices, and multiple plants, switchrooms and services. Access to the basement will be restricted to hotel guests, employees, residents and personnel associated with the loading dock (as maintained by the loading dock manager). The basement is likely to be activated by these facilities during most hours of the day, with 24 hour activity occurring at the initial entrance to the basement to service the hotel drop-off and pick up zones. The internal layout generally provides linear corridors to circulation points; however, there are some corridors with non-linear paths of travel with blind corners that provide opportunities for concealment. Given this, it is recommended CCTV in conjunction with adequate illumination be installed throughout to improve surveillance in these areas and ensure clear CCTV footage can be captured.

5.2 Lighting and Technical Supervision

Effective lighting can reduce fear, increase community activity, improve visibility and increase the likelihood that offenders will be detected. All lighting should meet (and preferably exceed) minimum Australia and New Zealand Lighting Standards and the objectives for crime and fear reduction outlined in Australian Lighting Standards. 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 ground floor and basement areas of the of the proposed. 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.

The proposal will provide a high level of territorial reinforcement, with the following ownership cues and formal guardians provided:

- the hotel lobby is proposed at both the basement level and the ground floor level and will incorporate a glazed façade with reception desk that will be highly visible from the frontages of Castlereagh Street, showcasing activation of the space through formal guardians such as doormen and concierge staff;
- The internal courtyard will include retail tenancies that all face internally towards the courtyard (some with dual frontages to both the courtyard and the streetscape) with glazed facades, providing strong casual surveillance and territorial reinforcement cues signifying ownership and management of space;
- a dock manager will be stationed within the basement and will act as a community guardian and activity manager for the loading dock, overseeing both vehicles and personnel entering and exiting the area; and
- even though the internal courtyard is private land, designed to be a public space to facilitate a feeling of the 'third place', the management and quality of the design for the space will be high and will reinforce regular maintenance and that it is cared for, strengthening cues of territorial reinforcement.

The location of the aforementioned lobbies, reception areas, basement management and activity and additional retail tenancies will increase the presence of formal guardians across the site. Consequently, the perceived risk to offenders and the effort needed to commit a crime due to formal guardians will be enhanced. Care must be taken to ensure that the internal courtyard is managed, maintained and well monitored in the future.

The introduction of a greater number of individuals will increase the territorial reinforcement of the site. The provision of active spaces such as the internal courtyard or basement levels 1 and 3 with hotel lobby and loading dock facilities will increase the presence of informal guardians. The strategic location of formal guardians such as retail employees, loading dock managers and hotel concierge staff will increase the risk to offenders and the degree of effort required to commit a crime, as it is commonly thought that supervision provided by employees is more effective as a crime deterrent than surveillance provided by passers-by.

Suitable way finding signage at the perimeter of the development, along with building / business identification signage associated with the hotel, residential and retail uses is recommended to help reduce the opportunities for people to find excuses to gain unauthorised access and / or to loiter in areas of the development, or immediately adjacent to entries. Whilst all public access points are designed to be legible and inviting, signage will further enhance this perception.

Overall, it is considered that the development is capable of providing appropriate opportunities for formal guardians in and around the development that will help to deter offenders and increase the risk of detection. As such, it is considered the proposed development will be an improvement to the current situation on the site and will significantly enhance the safety of the area.

5.4 Environmental Maintenance

As mentioned above, the image of an area can influence perceptions of safety and danger, and impact an individual's decision to engage with the community. The image of the interim and completed development can have a large impact on the overall level of real and perceived safety on the site. It can also affect the economic prosperity of areas and lessen the likelihood of visitors returning. 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 the Design Report and on the Architectural Plans prepared by FJMT, the proposal provides a higher quality outcome than what previously exists on site, eliminating current conditions that contributed to its overall crime risk rating. This in turn provides the opportunity to act as a catalyst for environmental improvements to the surrounding public areas and provide the opportunity to reduce levels of graffiti, litter, and urban decay, which all negatively impact perceptions of safety; community confidence in using a space; and crime opportunity.

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 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 courtyard furniture, building materials and design of signage should be used to lessen the likelihood of damage and to help reduce maintenance costs.

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 has given due consideration to activity and space management, with the various uses provided by the development clearly delineated by the architectural design of the building, podium and ground floor courtyard. The courtyard occupies a central position within the site that can be accessed from multiple points at each streetscape frontage and is clearly visible from the widened through-site links which provide direct site lines indicating that it can be utilised as an extension of public space to inform the 'third space' that is owned privately but is intended for public use. Consequently, it is considered the proposed access arrangements clearly delineate the development from the surrounding public domain.

The hotel and residential components of the development each have separate lobby areas, allowing for each space to be managed in accordance with its function. The hotel lobby occupies a substantial portion of the Castlereagh street frontage and given the nature of the use will have extended operational hours that will allow it to be well lit during the day and night, including at basement level. This combined with the scale of the lobby frontages externally and internally within the site, along with the concierge desk positioned within clearly conveys that the space will operate in connection with the site's hotel use. The residential lobby is accessible from the same building but is not visible from the street frontage to protect the private nature and use of the residential component within the development and will be subject to different elevators and basement provisions. The configuration of the entrances and their location provide for well-designated and carefully controlled areas that convey clear cues that signify they are for private use.

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.

5.6 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 the entrance points of the through site links to the basement and back of house facilities to prevent individuals of the public from inadvertently or intentionally accessing these spaces and to make it clear how each space is managed.

Many façades that make up the ground floor space and podium levels incorporates large areas of glazed fenestration and internal areas such as lobbies, concierge desks and retail tenancies which are strategically positioned along or in proximity to the street frontages or have a dual frontage to the internal courtyard area in order to maximise opportunities for natural surveillance around all spaces, through the provision of clear sightlines.

As courtyards, plazas and 'third places' between buildings are typically subject to higher levels of crime and attractive places for loitering, there could be potential for conflict to occur between patrons of the retail tenancies at the ground floor courtyard space and users of the immediate surrounding uses. For this reason, appropriate technical surveillance will be required throughout the interior and exterior of the development and should form part of a wider CCTV network. Recommendations are provided in Section 6.1.

6.0 Crime Risk Rating and Recommendation

The Crime Risk Rating considers the development as proposed in the design report and within architectural drawings prepared by FJMT. 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 proposed development is rated within the 'moderate' category.

An assessment of the proposal using the CPTED principles has found that, with the implementation of the recommendations, the rating would still remain within the 'moderate' category. We note that this is a product of the dense urban environment itself rather than the high quality, award winning design itself, and the design is considered consistent with the principles of CPTED. Crime will continue to exist outside of the development as is typical of a highly urbanised CBD settings, however the development has the opportunities to improve the safety and security of the proposed development via the recommendations below.

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 courtyard, hotel / residential lobby curtilage, basement ingress/egress, public areas surrounding the external walls of the building) 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 street level should be free of clutter and signage to allow sightlines between the development and the public domain.
- Ensure glazed elements to the concierge desk within the hotel foyer is clearly visible from the street frontage to assist in maximising surveillance.

6.1.2 Lighting and Technical Supervision

- A CCTV network is essential for the back of house areas and overall development. The CCTV network is to be designed in consultation with a suitably qualified security consultant with a Class 2A 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 and a minimum colour rendering index of 60 is achieved.
- Discrete CCTV systems such as small dome cameras are recommended.
- A lighting strategy should be developed by or in consultation with a suitably qualified and experienced lighting expert. It is recommended that when designing the lighting strategy for the publicly accessible areas of the ground levels and the basements, a CPTED professional is consulted.

6.1.3 Territorial Reinforcement

- Ensure public furniture is durable and of high quality design.
- Maintain that building entrances remain free of clutter to ensure entry points are highly visible from the street frontages.
- Provide signage within the basement and ground floor plane to direct pedestrian movements and deter loitering.
- Ensure that pathways within lobbies and through site link corridors are unobstructed at all times to avoid blind spots.
- Provide wayfinding signage and building / business identification signage where appropriate to reinforce perceptions of safety and legibility.

6.1.4 Environmental Maintenance

- Ensure mechanisms are in place to facilitate the on-going maintenance of the building, including the implementation of a rapid removal policy for vandalism repair and the removal of graffiti.

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.

6.1.6 Access Control

- Provide secure electronic access (card / key controlled entries / lifts etc.) to all private entrances of the building and differing lifts to facilitate in demarcating the residential and non-residential uses of the building and providing a delineation between public and private spaces.
- Basement car parking needs to include additional access control provisions to ensure that no public or employee persons are able to access private residential parking areas.
- Install a security door at an appropriate location to prevent unauthorised individuals from entering restricted areas not intended for public use (such as within the back of house basement areas, areas where there is residential sensitivity and loading dock).
- Install an appropriate bollard/barrier system at the main entrance to the internal courtyard to prevent vehicles driving into this area. 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 main street level entry area of the internalised courtyard and hotel basement lobby drop-off/ pick up turning circle, if need be.
- Ensure concierges / receptions and formal guardians occupy publicly accessible spaces such as the lobbies and the hotel foyer.

6.1.7 Design, Definition and Designation

- Security, general hotel personnel and employees of the building are advised to parole / occupy the publicly accessible areas visibly and regularly to minimise opportunities for anti-social behaviour.