WARRINGAH MALL- STAGE 2 DEVELOPMENT APPLICATION CPTED ASSESSMENT

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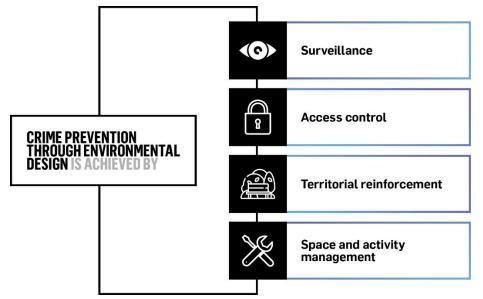
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EXECUTIVE SUMMARY

This Crime Prevention Through Environmental Design (CPTED) assessment was prepared on behalf of Scentre Group to inform the preparation of the Westfield Warringah Mall (the Mall) – Stage 2 development application (DA).

A CPTED assessment was undertaken to analyse a development and identify potential improvements to the design which may help to reduce crime and anti-social behaviour. The four main CPTED principles used to assess the proposed development are illustrated below.





THE SITE

The Mall is located in the Northern Beaches Local Government Area (LGA) (former Warringah LGA) and is situated on a large parcel of land in the suburb of Brookvale, bounded by Cross Street to the north, Old Pittwater Road to the south and to the east by Condamine Street/Pittwater Road.

THE PROPOSAL

The Stage 2 proposal includes additional floor space to cater for new forecourts, retail, hospitality and entertainment spaces. It is proposed to reconfigure the existing on-grade car parking at Condamine Street and Pittwater Road including new vehicle entry and exit points, as well additional car parking. New pedestrian access points along Condamine Street are also proposed to provide better connection to the Mall and bus interchange. There will also be landscaping treatment along Condamine Street and Pittwater Road.

STRATEGIC CONTEXT

A policy review was undertaken to understand strategic priorities in relation to crime and community safety for the Mall. The former Warringah Council policies relevant to this proposal are still adopted by the amalgamated Northern Beaches Council. Key findings from the policy review include:

- The North District Plan identifies the Mall as one of the largest retail areas in Greater Sydney and there is a need to encourage and support improvements to Warringah Mall and better integrate it within the fabric and life of Brookvale-Dee Why. There is a need to also promote walking, cycling and public transport to Warringah Mall and the surrounding Brookvale industrial area and Dee Why.
- The Warringah Development Control Plan 2011 states that a draft Operational Plan of Management that outlines the potential measures to be implemented to ensure the safety and security of the public is to be submitted with any DA involving a major expansion of the Mall.

- The Warringah Mall Graffiti Management Plan identifies a three pronged approach to reduced vandalism including urban design and artistic development.
- The Westfield Warringah Mall Security Management Plan (June 2018) outlines Scentre Group's commitment to safety and security for the shopping centre. The plan states that Westfield Warringah Mall currently has a full security service that aims to protect the community, their customers and their tenants against security threats.

CRIME PROFILE

Crime data from the NSW Bureau of Crime Statistics and Research (BOCSAR) was analysed for Brookvale suburb and Northern beaches LGA to identify the crime context for the development. The data indicates that Brookvale generally has higher levels of crime compared to the NSW average and the most prevalent crime type is 'steal from retail store' and 'fraud.' However, analysis of two year crime trends indicates that crime in Brookvale and the Northern Beaches LGA is either stable or declining. In Brookvale steal from retail store has decreased by 26.9% and malicious damage to property has decreased by 29.2%.

The Mall is one of the largest retail areas in Greater Sydney and elevated rates of retail theft and fraud could be expected. These types of opportunistic crime can also be minimised through the adoption of appropriate CPTED principles.

CPTED ASSESSMENT AND RECOMMENDATIONS

Based on the research undertaken for this report, a series of CPTED recommendations have been made based for the following areas of the proposed development:

- Site layout and building frontages
- Public transport
- Pedestrian access and safety

- Location of amenities
- Lighting
- Safety and security management

Entrances and exits

• Construction.

Car park areas

CONCLUSION

Overall it is considered that the design of the proposed development has considered CPTED principles. With the implementation of CPTED recommendations outlined in this report, the proposed development will help to activate and improve the safety and security of the local area.

1. INTRODUCTION

This report was prepared on behalf of Scentre Group to consider CPTED issues and inform the preparation of the Westfield Warringah Mall (the Mall) – Stage 2 development application.

1.1. AIM OF THIS REPORT

A CPTED assessment is an independent specialist study undertaken to identify and analyse potential improvements to design and management, which may help to reduce crime and anti-social behaviour.

This report makes recommendations in accordance with professional standards and statutory obligations and guidelines included in the following documents:

- *Environmental Planning and Assessment Act 1979* (section 4.15), which requires the consent authority to consider the likely impacts of that development and the public interest.
- Section G4 of the Warringah Development Control Plan 2011.
- NSW Police Safer by Design Principles and CPTED Checklist.

The four principles outlined in Figure 2.

Figure 2 – CPTED principles



1.2. METHODOLOGY

The following activities were undertaken to complete this CPTED assessment:

- Review of concept plans and technical studies against CPTED standards and guidelines.
- Site visit, identification of opportunities and priority areas for the development.
- Review of demographic profile and crime statistics.
- Development of CPTED recommendations to project team to inform the final design.
- Review of Westfield Warringah Mall Security Management Plan.
- CPTED assessment and recommendations on potential mitigation measures.

1.3. THE SITE

The Mall is located in the Northern Beaches Local Government Area (LGA) (former Warringah LGA) and is situated on a large parcel of land in Brookvale bounded to the north by Cross Street, to the south by Old Pittwater Road and to the east by Condamine Street/Pittwater Road.

Principal features include:

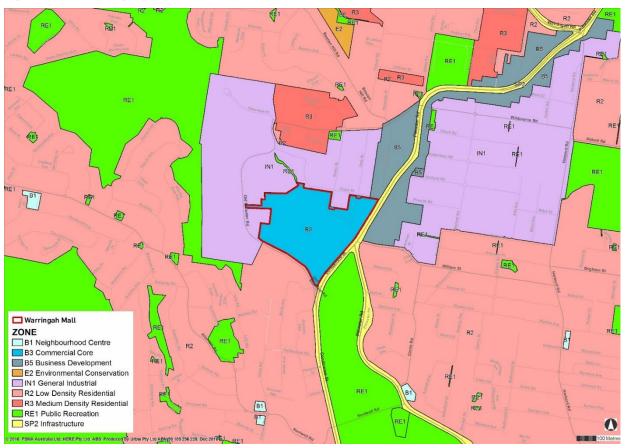
- The site has a total area of approximately 170,600m².
- The site has its street frontage to Condamine Street/Pittwater Road (527m) and secondary street frontages to Old Pittwater Road (382m) and Cross Street (292m).
- The site has a gradual natural slope that falls from the north-west to the south-east of the site.
- Vehicle access to the site is currently available at multiple locations along Old Pittwater Road, Pittwater Road and Cross Street frontages of the site.
- The site is surrounded by IN1 (General Industrial), B5 (Business Development) and R2 (Low Density Residential), with RE1 (Public Recreation) land to the south of the site.

Figure 3 – Site layout



Source: Urbis GIS

Figure 4 – Land zoning



Source: reproduced by Urbis GIS from Warringah LEP 2011

1.4. EXISTING USES

The Mall is a significant retail centre. It is currently the only regional shopping centre servicing the Northern Beaches. The mall accommodates a mix of indoor and outdoor spaces and uses over two levels, including:

- 2 department stores
- 2 discount department stores
- 2 supermarkets
- 15 mini-major tenants
- 239 retail specialty stores
- Non-retail and entertainment floor space
- Hoyts Cinema complex

- Gymnasium
- Commercial offices
- Medical centre
- External floor space
- Car parking
- A public library
- Multipurpose rooms for hire.

1.5. THE PROPOSAL

The Stage 2 proposal relates to the eastern portion of the existing Mall adjacent to Pittwater and Condamine Streets and includes the following:

- Floor Space: additional floor space, including new forecourts, new retail, hospitality and entertainment spaces.
- Facilities:
 - Additional major and speciality retail stores
 - New casual dining spaces and fresh food stores
 - Additional level with new cinema complex and mini-major stores
 - Modifications and upgrades to existing retail facilities.

• Parking and access:

- Reconfiguration of the existing on-grade car parking at Condamine Street and Pittwater Road including new vehicle entry and exit points
- Additional car parking spaces to the north of the existing Orange car park on Level 1 and Level 1 mezzanine
- New pedestrian access points along Condamine Street to provide better connection to the Mall and bus interchange.

• Landscaping

- Landscaping treatment along Condamine Street and Pittwater Road.

Figure 5 – Ground floor plan



2. STRATEGIC CONTEXT

The Mall is located in the former Warringah LGA, now part of the Northern Beaches LGA. Relevant policies of the former Warringah LGA are still adopted by Council. The following documents were reviewed to inform this assessment:

- NSW Police Safer by Design Guidelines.
- Warringah DCP 2011.
- Warringah Council Graffiti Management Plan.
- Warringah Mall Security Management Plan (2018).

2.1. NSW POLICE SAFER BY DESIGN GUIDELINES

CPTED aims to create the reality (or perception) that the costs of committing crime are greater than the likely benefits. This is achieved by creating environmental and social conditions that:

- Maximise risk to offenders (increasing the likelihood of detection, challenge and apprehension);
- Maximise the effort required to commit crime (increasing the time, energy and resources required to commit crime);
- Minimise the actual and perceived benefits of crime (removing, minimising or concealing crime attractors and rewards); and
- Minimise excuse making opportunities (removing conditions that encourage/facilitate rationalisation of inappropriate behaviour).

CPTED employs four key strategies. These are territorial re-enforcement, surveillance, access control and space/activity management.

2.2. LOCAL CPTED GUIDELINES

Section G4 of the Warringah DCP 2011 outlines specific CPTED assessment requirements for the Mall:

- Development is to be designed to incorporate and/or enhance opportunities for effective natural surveillance by providing clear sight lines between public and private places, installation of effective lighting particularly in public spaces and carparks, and the appropriate landscaping of public areas.
- The need for technical surveillance which is achieved through mechanical/electronic measures such as the provision of closed circuit television (CCTV), help points and mirrored building panels, is to be addressed in future developments.
- New development is to be designed to remove any opportunities for the concealment of crime.
- The incorporation of crime prevention measures in the design of buildings and spaces is not to detract from the quality of the urban design of the development and the streetscape.
- The development is to be consistent with CPTED principles. A report providing an assessment of the
 proposal against CPTED principles is to be submitted with all development applications for additions to
 the Mall.
- A draft Operational Plan of Management that outlines the potential measures to be implemented to
 ensure the safety and security of the public is to be submitted with any development application involving
 a major expansion of the Mall.

2.3. WARRINGAH COUNCIL GRAFFITI MANAGEMENT PLAN

The *Warringah Council Graffiti Management Plan* outlines strategies to respond to vandalism and tagging in the LGA. Three overarching approaches are outlined as follows:

Reactive/punitive elements:

- Graffiti reporting and removal
- Working with police and other agencies
- Urban design to deter graffiti.
- Preventive/cultural development elements:
 - Working with community agencies
 - Artistic development and education
 - Walls where graffiti is allowed for educational purposes.
- Evaluation and further development:
 - Establish partnerships with universities and other research bodies to develop and implement a comprehensive set of tools for defining and measuring success for each element of the program.

2.4. REVIEW OF SECURITY MANAGEMENT PLAN JUNE 2018

The Westfield Warringah Mall Security Management Plan (June 2018) outlines Scentre Group's commitment to safety and security for the shopping centre. The draft plan states:

"Westfield Warringah Mall currently has a full security service that aims to protect the community, their customers and their tenants against security threats. The security system incorporates passive and active technology and community policing. The system places a key emphasis on effective incident management and customer service."

Key management strategies covered in the plan include:

- **Surveillance:** CCTV cameras located at all entrances and exits to the centre and all publicly accessible areas. The property is currently secured and monitored 24 hours a day by a security service provider. Detailed operational policies for security are also outlined.
- Lighting: the current lighting standards followed by the Mall are based on the relevant Australian standard. In some instances, a higher level of luminance is required to assist CCTV systems and centre visibility.
- **Territorial reinforcement:** there is a strong emphasis on way-finding throughout the centre. Existing measures include centre directories, restriction and enforcement signage and customer services.
- **Space/Activity Management:** a combination of passive surveillance, CCTV and active surveillance measures are included in the plan.
- Amenity of Neighbourhood: staff and licensed venues within the centre are instructed to consider the amenity of the Centre and the Centre's neighbours and take all reasonable measures to eliminate the potential for adverse impact on surrounding areas.
- **Behaviour of Customers:** The Licensees and the Centre Management Team are responsible for taking reasonable steps to control the behaviour of customers whilst on the licensed premises.
- Environmental Maintenance: The Centre currently outsources maintenance contracts including cleaning, HVAC, pest control, vertical transportation, waste and garden maintenance for external and internal areas. This includes daily cleaning inspections of common areas and the monitoring of graffiti, detection and repair of any dilapidation to any parts of the premises.
- Access Control: The Centre currently has a centralised access control system using proximity cards and a solenoid door lock system.
- **In-house policies:** The Centre has a comprehensive house policy, which includes strategies on RSA, pets and skateboards, prevention of antisocial behaviour, environmental management.
- Youth strategy: Westfield Warringah Mall, in partnership with Street Works, provide a service on Thursday nights specifically targeting young people in the Mall area. Management and security staff

have regular dialogue with representatives of the Northern Beaches LAC police, in particular their Youth Liaison and Crime Prevention Officers.

3. COMMUNITY PROFILE

The following demographic analysis is based on 2016 Australian Bureau of Statistics (ABS) census data for the Brookvale suburb (Study Area), Freshwater-Brookvale SA2 and Greater Sydney.

A full demographic summary table is provided at Appendix A.

In 2016 the estimated population living in the Study Area was 3,161 people. Key characteristics of the study area are outlined below:

- The average number of people per household in the Study Area is 2.3 persons, compared with 2.6 for Freshwater-Brookvale SA2 and 2.8 for Greater Sydney.
- Over half of the Study Area (61.85%) live in flats or apartments which is significantly higher than Freshwater-Brookvale SA2 (49.2%) and Greater Sydney (28.1%).
- Nearly one third (29.9%) of the Study Area population are middle-aged (30-44 years of age).
- The Study Area has higher rates of cultural diversity compared to the Brookvale-Freshwater SA2, with 65% of the Study Area population speaking only English compared with 79.1% for the Brookvale-Freshwater SA2.
- Nearly one third (28.9%) of the Study Area has a bachelor degree or higher.
- The median household income for the Study Area is \$1,822 which is higher than Greater Sydney (\$1,750).
- Freshwater-Brookvale is characterised as among the top 10% most advantaged SA2's in Australia, and is within 20% for economic resources.

Table 1 – SEIFA indexes for postcode 2100, NSW

Advanta disadva	•	Disadvar	ntage	Economic	resources	Education a	and occupation
Score	Decile	Score	Decile	Score	Decile	Score	Decile
1131	10	1098	10	1074	9	1127	10

Source: SEIFA, 2016

3.1. CRIME RATES

Crime data from the NSW Bureau of Crime Statistics and Research (BOCSAR) was analysed to provide a baseline for the assessment.

Table 2 below provides an overview of the major offences that took place in Brookvale between April 2017 and March 2018. The data presented is based on crimes with the highest count rate (ratio of crimes per 100,000 people).

The data shows that Brookvale generally has higher levels of crime than the NSW average, particularly for 'steal from retail store' and 'fraud' crime types. The Mall is a significant retail centre located in Brookvale suburb, and therefore higher rates of 'steal from retail store' could be expected. Similarly, some of the categories defined as fraud by BOSCSAR include fail to pay and corrupt payment which can be associated with a significant retail centre. Brookvale has higher rates than the NSW average in the following crime types:

- Steal from retail store
- Fraud
- Malicious damage to property
- Assault-non domestic violence related
- Steal from motor vehicle.

Table 2 - Crime rates per 100,000 people

Type of crime	Brookvale suburb	NSW
Assault - domestic violence related	357.6	365.3
Assault - non-domestic violence related	1430.3	415.5
Incident of assault, act of indecent & other sexual offences	238.4	97.5
Break and enter dwelling	327.8	352.9
Break and enter non-dwelling	447.0	133.4
Receiving/handling stolen goods	417.2	95.7
Motor vehicle theft	327.8	167.5
Steal from motor vehicle	804.5	504.6
Steal from retail store	5661.5	316.7
Steal from dwelling	208.6	249.6
Steal from person	327.8	58.8
Fraud	4529.2	627.4
Malicious damage to property	1519.7	779.5

Source: BOCSAR, 2018

3.2. CRIME TRENDS

Table 3 below presents the two year trends (April 2016 to March 2018) in the incident rates for key crime types in the Northern Beaches LGA. The trends for both Brookvale suburb and Northern Beaches LGA are either stable or declining. In Brookvale 'steal from retail store' has decreased by 26.9% and 'malicious damage to property' has decreased by 29.2%.

Table 3 – Crime trends (April 2016-March 2018)

Type of crime	Two-year trend (Apr	Two-year trend (April 2016 to March 2018)		
	Brookvale suburb	Northern Beaches LGA		
Assault - domestic violence related	n.c	Stable		
Assault - non-domestic violence related	Stable	Stable		
Break and enter dwelling	n.c	Stable		
Break and enter non-dwelling	n.c	Stable		
Motor vehicle theft	n.c	Stable		
Steal from motor vehicle	Stable	Stable		

Type of crime	Two-year trend (Apr	il 2016 to March 2018)
	Brookvale suburb	Northern Beaches LGA
Steal from retail store	-26.9%	Stable
Steal from dwelling	n.c	Stable
Steal from person	n.c	Stable
Fraud	Stable	Stable
Malicious damage to property	-29.2%	Stable

Source: BOCSAR, 2018

3.3. CRIME HOTSPOTS

BOCSAR publishes "hotspot" maps to illustrate areas of high crime density relative to crime concentrations across NSW.

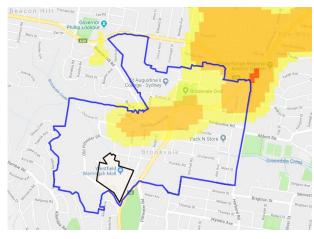
Figure 5 overleaf shows crime hotspots in Brookvale suburb and their relationship to the Mall.

The Mall is near crime hotspots for the following crime types:

- Domestic assault
- Non-domestic assault
- Break and enter dwelling
- Break and enter non-dwelling
- Motor vehicle theft
- Steal from motor vehicle
- Steal from dwelling
- Steal from person
- Malicious damage to property.

Many of these crimes are opportunistic and incidences of their occurrence can be minimised through the adoption of appropriate CPTED principles.

Figure 6 – Crime hotspots

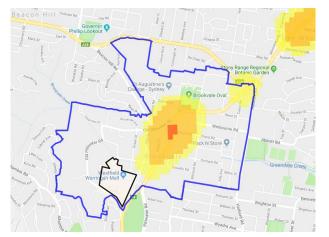


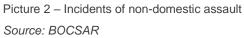


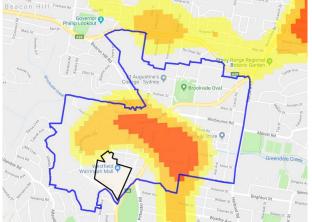
Source: BOCSAR



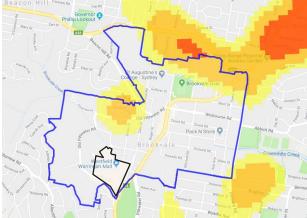
Picture 4 – Incidents of break & enter non-dwelling Source: BOCSAR



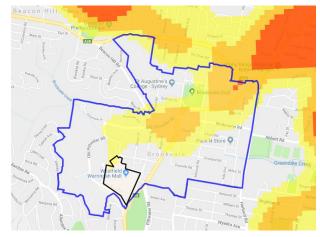




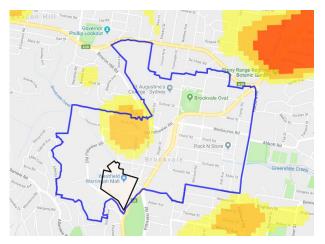
Picture 5 – Incidents of motor vehicle theft Source: BOCSAR



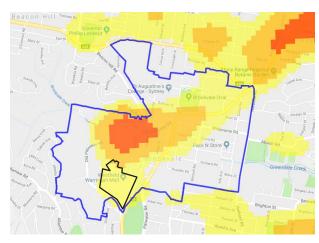
Picture 3 – Incidents of break & enter dwelling Source: BOCSAR



Picture 6 – Incidents of steal from motor vehicle Source: BOCSAR







Picture 7 – Incidents of steal from dwelling Source: BOCSAR

Picture 8 – Incidents of steal from person Source: BOCSAR

Picture 9 – Incidents of malicious damage to property Source: BOCSAR

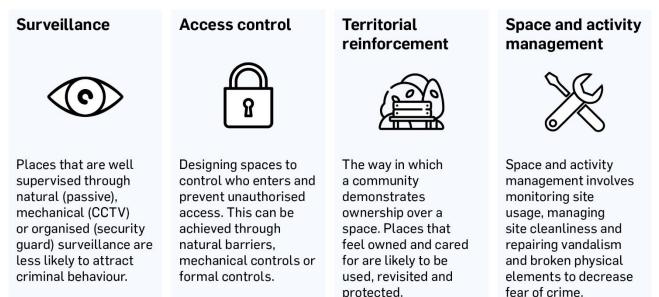
4. CPTED ASSESSMENT AND RECOMMENDATIONS

The following section assesses the concept plans for the Westfield Warringah Mall Stage 2 DA against relevant CPTED standards and provides high-level CPTED and management recommendations.

4.1. CPTED PRINCIPLES

A CPTED assessment identifies and analyses potential improvements to the design of a project which may help reduce crime and anti-social behaviour as per the CPTED principles outlined below:

Figure 7 – CPTED principles



4.2. PRIORITY AREAS

The discussion below sets out a detailed assessment and recommendations for the following CPTED priority areas:

- Site layout and building frontages.
- Public transport.
- Pedestrian access and safety.
- Entrance and exits.
- Car park areas.
- Location of amenities.
- Lighting.
- Safety and security management.
- Construction.

4.2.1. Site Layout and Building Frontages Assessment

The Mall is a large retail centre with multiple street frontages. The Stage 2 development presents a significant opportunity to maximise territorial reinforcement through the use of soft features, such as landscaping, accessible footpaths, public lighting and public art.

A landscaping and public art plan has been prepared as part of the development application. The public art plan provides focus areas at nodal points, entry points and key façade applications for landscape and art integration. The design recommendations in this plan should be implemented in the final stages of development.

The Plan of Management for the Centre includes a rapid removal of graffiti and graffiti monitoring strategy, including regular security patrolling, CCTV cameras and the use of signage to deter vandalism.

The following recommendations should be considered in relation to site layout and building frontages.

Table 4 – Site layout and building frontages

Recommendations

- It is recommended that visibility from the carpark areas to the street is maximised through the use of glazing, metal battens and landscaping.
- Due to the nature of the uses of the Mall (cinemas, car parking and large retail stores), it is not possible to include active frontages everywhere. Active frontages on as many sides of the building as possible are encouraged to provide natural surveillance.
- The use of sensor lighting in car park areas and CCTV in key entry points and along blank walls will
 reduce the risk of graffiti at night and contribute to the territorial reinforcement of the Mall.
- An important Council policy direction for the Mall includes minimising opportunities for graffiti. This can be achieved by using graffiti-prone materials, CCTV, landscaping and public lighting surrounding large walls and building fronts. Minimising the use of white paint will also make walls less attractive to graffiti.
- The interface between private and public land around the Mall should be demarcated via low fences or landscaping, which allow a high degree of visibility from both private and public space.
- The proposal includes a diverse mix of activities, which present an opportunity for the Mall to provide
 passive surveillance at different times of the day and night. A range of different opening hours can
 contribute to providing passive surveillance and additional 'eyes on the street'.
- Night-time uses (cinemas and restaurants) should be located in accessible and visible locations with universal access, signage and adequate lighting.
- The new cinema complex is a night-time use with access available after the centre's hours of operation. A direct pathway should be available to users of the cinema to the car park and pedestrian exits. This should be well lit and include appropriate wayfinding signage, for example signage directing pedestrians to the car park.
- Safety measures such as CCTV cameras, security patrolling and maintenance and repair strategies documented in the Security Management Plan will also maximise safety around the Mall.

4.2.2. Public Transport Assessment

Public transport stops are key areas of activity and significant way-finding features. As a key type of social infrastructure, they should be located in areas with good connectivity, accessibility, passive surveillance and activity. The following recommendations should be considered in relation to public transport provision.

The location of the B-line stop adjacent to the Mall on Pittwater Road presents an opportunity to maximise connectivity, street activation, and to create an attractive and integrated pedestrian gateway between the bus stop, the Mall and the local area, catering for all mobility needs.

The proposal includes landscaping at the interface with the B-line stop (to the north and south), which contributes to access management and territorial reinforcement (sense of ownership).

Table 5 – Public transport.

Recommendations

- The interface between the car park and the B-line stop should be designed to maximise passive surveillance and reduce risk of vandalism by including soft features such as a landscaped buffer between the edge of the building and the bus stop.
- The inclusion of retail, entertainment and after-hours uses fronting the bus stop is not feasible in this case, due to the nature of the proposal and the layout of the Mall. Therefore, alternative CPTED measures must be considered to keep the area active and with passive surveillance, especially after-hours.
- Alternative measures that may be considered to maximise safety around the bus stop include the use of way-finding signage, well-lit spaces, the minimisation or corners and potential places for entrapment, CCTV cameras, regular security patrolling, graffiti and vandalism-prone materials (which include concrete and metal and excludes glass) and emergency phones.
- Pedestrian connectivity from the B-line stop to Old Pittwater Road and to the south of the Mall must be unrestricted. This pedestrian link must be well-lit, include clear sightlines and provide a sense of ownership and surveillance.
- It is important that landscaping is designed to avoid creating places to hide (for example behind trees and corners).
- Bus-stop design should include seating that invites the congregation of people and loitering. Rows of seats for commuters as opposed to seats that face each other minimise the risk of loitering.

4.2.3. Pedestrian Access and Safety Assessment

People prefer to walk along streets where there is activity, visual interest and they feel safe. Pathways should encourage straight-forward movement between different parts of the Mall and its surroundings.

The following recommendations should be considered in relation to pedestrian access and safety.

Table 6 - Pedestrian access and safety

Recommendations

- The proposal includes pedestrian connections to Condamine Street and Pittwater Road. It is recommended that these pedestrian links are made fully accessible to wheelchairs, prams and people with mobility impairment in order to maximise pedestrian safety around the Mall.
- Pedestrian access within and around the Mall should be safe, clear and friendly to people with a physical disability. As a guideline, paths should allow pedestrians to walk two abreast, which means pathways should be wider than 1.2 metres. Multiple pedestrian access points are desirable to create site permeability and integration of the Mall within the wider Brookvale centre.
- Where possible, ensure pedestrian circulation routes are not compromised or interrupted by traffic devices such as roundabouts, vehicle ramps and boom gates. Roundabouts present specific problems for ease of pedestrian movement, limiting the ability for safe, informal street crossings by pedestrians.

Recommendations

- Alternative pedestrian routes should be provided for areas where roundabouts may restrict pedestrian connectivity. Way-finding signs may guide pedestrians to alternative routes.
- Internal forecourts and corridors must contribute to passive surveillance by providing clear sight-lines, lighting and clear messages indicating their opening hours. Areas of the Mall that are not used afterhours should be closed. Access to these areas should be restricted through physical barriers and signage.
- It is recommended that the proposal co-locates pedestrian, cycle and vehicle movement systems to
 encourage maximum surveillance of public areas. The Mall currently has a number of areas for bicycle
 parking and pedestrian movement through car park areas. It also includes way-finding signage and
 vehicle speed controls. These measures should be consistently applied to the development.
- Vertical transport (lifts) should be located in visible areas, have adequate lighting, CCTV and be
 monitored by security personnel. The use of lifts after-hours should be monitored, especially in car park
 areas and in proximity to the bus stop.

4.2.4. Entrances and Exits Assessment

Entry and exit points should ideally be located adjacent to areas which offer high levels of visibility and opportunities for surveillance. The following recommendations should be considered in relation to entrances and exits.

Table 7 – Entrances and exits

Recommendations

- Ensure entrances and exits are well-defined, secure, well-lit and can be seen from the street.
- Ensure that entrances and exits are not covered by trees and low-branching trees, to avoid creating
 potential hiding places.
- Design entrances which provide easy access to all users (including people with disability), afford visibility to and from the street, and minimise the potential for hiding spots.
- Design with clear transitions and boundaries between public and private space.
- Signage should clearly indicate closing hours at entrances to all areas and provide information about how to report maintenance problems or vandalism/graffiti on signs.
- Restricted access to internal areas or high-risk areas (like carparks, storage areas or other rarely visited areas) should be clear physical barriers.
- CCTV cameras should be included for all new entry and exit points.
- Emergency exists must not contribute to the creation of areas for entrapment and hiding.
- Avoid emergency exits with deep recesses and unclear sightlines.

4.2.5. Car Park Assessment

Car park areas are common spaces for offences against property or persons. BOCSAR indicates that incidents of 'steal from motor vehicle' are in the top five crime types in Brookvale and therefore recommendations for car park areas are considered of importance to avoid incidences of stealing from motor vehicles.

Table 8 – Car park areas

Recommendations

- Vehicle exit and entry points must include measures for pedestrian safety. These include adequate footpaths and way-finding signage to deter people from using vehicle entry and exit points as pedestrian exit and entry points.
- The interface between car park and other areas must be clear. Landscaping may be used to reinforce
 the separation of uses and provide a sense of ownership around car park areas. Design features such
 as metal battens, glazing and concrete with textures and patterns also contribute to maximising the
 sense of ownership of these areas.
- Ensure pedestrian friendliness of car park areas. Signage and vehicle speed limits inside car parks should be located strategically to create safe areas for pedestrians to walk and reach the car park entry and exit points.
- Implement measures to prevent loitering in car park areas, especially after-hours. These may include CCTV cameras, security patrolling and the closure of certain areas of the car-park after-hours.
- The loading dock must be clearly separated from pedestrian activity. Ensure that trucks entering the Mall
 are aware of the location of the loading dock by using appropriate signage.
- Maximise sightlines within and into car parks by avoiding mid-level dense vegetation, solid fences, signage or unnecessary structures that block views.
- The new car park areas should not include stairs with unnecessary alcoves and recesses or enclosed spaces surrounding emergency exists, which may be used as places for concealment.
- Ensure lighting is adequate to allow pedestrians to see into the interior of cars and that shadows between cars are eliminated. The use of light coloured paint on vertical surfaces and ceilings in these areas may be used to maximise light distribution.
- Locate disabled parking in highly visible areas that are convenient to shops, public transport and other facilities.

4.2.6. Location of Amenities Assessment

The location of certain types of amenities (e.g. toilets, ATMs) must respond to design that minimises the risk of vandalism and damage. Some amenities can also be placed to activate a particular area or maximise the sense of ownership and passive surveillance.

The following recommendations should be considered in relation to location of amenities.

Table 9 – Location of amenities

Recommendations

- Avoid using thick landscaping in areas without frequent pedestrian activity (to avoid littering around patches with thick vegetation).
- Locate automatic teller machines (ATMs) in highly visible and accessible locations to promote their use and enhance user's safety. Avoid positioning ATMs in recesses, alcoves or in buildings adjacent to laneways.
- Provide maps at building entrances, lifts, at the bus stop and at key car park locations showing connections and destinations and the location of public facilities including seating, drinking fountains and toilets.
- Provide public toilets in highly visible and accessible locations to promote their use and enhance people's perception of safety. Do not position seats and public telephones next to toilets as this legitimises loitering.
- Bicycle parking must be located in highly visible and accessible locations to enhance user safety.

Recommendations

Ensure facilities are well maintained and graffiti promptly removed to promote a perception of safety.

4.2.7. Lighting Assessment

Lighting plays an important role in preventing crime from occurring, creating a sense of safety and encouraging a greater appreciation for spaces at night in both internal and external areas. Council's *Graffiti Management Plan* identifies the need for well-lit spaces that deter graffiti marking and vandalism.

The following recommendations should be considered in relation to lighting.

Table 10 – Lighting

Recommendations

- Position lighting appropriately to improve visibility for pedestrians and cyclists and enhance natural surveillance opportunities. In retail and commercial areas, lighting levels should be higher than surrounding areas. However, avoid over-lighting areas as this creates the impression that adjacent places are under-lit.
- Consider the use of surveillance equipment (CCTV) in vulnerable areas where 'informal surveillance' is not possible (storage areas, staff-only areas, loading dock and back-of-storage areas).
- Ensure lighting intensity and direction is appropriate for the development. Luminaires should be directed downwards to minimise stray light into the night sky, and avoid spill lighting past the property boundary.
- Lighting should be designed to provide facial recognition of approaching people up to 10-15 metres away. Avoid excessive over lighting to minimise contrast between illuminated areas and surrounds.
- Ensure lighting is easily maintained and minimises potential for wilful damage. Lighting should be at a height that prevents vandalism. Where lighting is used at a lower level, vandal-proof fittings should be used.
- Illuminate urban public space used at night, including building entrances, exits and other main pedestrian routes of travel. Areas not intended for night-time use should not be lit to discourage attention, and should be closed off from public.
- Lighting should be well integrated with signage, landscaping and other public space elements in order to maximise safety.
- Paths and street lighting should, as a minimum, meet Australian Standard AS/NZS1158.
- Adhere to the lighting levels outlined in the Lighting Statement prepared by Leo Trimboli Lighting Designer.

4.2.8. Safety and Security Management Assessment

Developments that are well maintained are less likely to attract criminal activity through establishing a sense of ownership and pride for those who use the centre, live and work in the surrounding areas. Active security measures are also key to managing ongoing crime risks in a facility of this scale.

Incidents of 'steal from retail store' is the highest crime type in Brookvale and is therefore considered a high priority for this development.

The Warringah Mall Security Management Plan includes an emphasis on effective incident management and customer service. A robust and detailed Security Management Plan will contribute to the appropriate and long-term management of the Mall's assets. The Security Plan of Management is a key component for the security management of the Mall, which complements and enhances the benefits of passive CPTED measures, such as building design, the use of landscaping and the maximisation of passive surveillance.

The following recommendations should be considered in relation to safety and security management.

Table 11 - Safety and security management

Recommendations

- It is important that the Security Plan of Management is periodically reviewed and updated to respond to changes relating to:
 - Liaison with key public bodies (e.g. ambulance, Fire Brigade and Police)
 - Graffiti management and lighting
 - CCTV operations and technology
 - Repair and replacement strategies.

4.2.9. Construction Assessment

Construction areas will be a key area of concern as the Mall will be in operation during construction. The following recommendations should be considered when establishing construction areas to ensure their security.

Table 12 - Construction

Recommendations

- Implement measures outlined in the Construction Management Plan to ensure a safe working site is maintained and potential construction impacts are reduced.
- Prepare Individual Traffic Management Plans (TMP) for each stage of construction as recommended in the Construction Management Plan.
- Ensure that storage of equipment and construction maximises natural surveillance opportunities.
- Consider storing equipment behind high fences or inside secure sheds, as per Australian Standards, so
 that it cannot be used for criminal activities such as vandalism, assault, break and enter or as
 opportunities for concealment.
- Consider sealing vacant buildings or buildings under construction with high fencing, as per Australian Standards, so that they do not attract crime activities inside.
- Consider implementing random security patrols at night.
- Maintain clear lines of communication with tenants, customers and visitors to avoid construction areas.

5. CONCLUSION

Urbis has undertaken a CPTED assessment for the proposed Westfield Warringah Mall Stage 2 development application against the four CPTED principles and has identified potential risk areas and recommendations which help to reduce crime and anti-social behaviour.

Based on the above assessment, the design of the proposed development has considered CPTED principles. With the implementation of CPTED recommendations, the proposed development will help to activate and improve the safety and security of the local area.

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This report is dated 26 July 2018 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Scentre Group (**Instructing Party**) for the purpose of CPTED Assessment (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A DEMOGRAPHIC PROFILE

Table 13 – Demographic summary table

Data item	Brookvale suburb	Freshwater- Brookvale SA2	Greater Sydney (GCCSA)	
Population	3,161	20,978	4,823,991	
Median age	35	36	36	
Average people per household	2.3	2.6	2.8	
	Age distr	ibution (%)		
Aged 0-4	7.2%	7.0%	6.4%	
Aged 5-9	4.2%	6.7%	6.4%	
Aged 10-14	3.3%	5.8%	5.8%	
Aged 15-19	4.2%	4.7%	6.0%	
Aged 20-24	6.6%	5.0%	7.1%	
Aged 25-29	11.2%	8.0%	7.9%	
Aged 30-34	11.8%	10.3%	8.1%	
Aged 35-39	11.0%	9.3%	7.4%	
Aged 40-44	7.1%	8.6%	7.1%	
Aged 45-49	6.6%	7.8%	6.7%	
Aged 50-54	6.3%	6.4%	6.3%	
Aged 55-59	6.0%	5.3%	5.8%	
Aged 60-64	4.1%	4.4%	5.0%	
Aged 65-69	3.2%	3.6%	4.4%	
Aged 70-74	1.8%	2.4%	3.3%	
Aged 75-79	1.6%	1.6%	2.4%	
Aged 80-84	1.4%	1.2%	1.8%	
Aged 85+	2.6%	1.7%	2.0%	
Country of birth and Indigenous identification (%)				
Australia	53.7%	63.3%	57.1%	
England	5.5%	7.9%	3.1%	
China	4.8%	1.06%	4.7%	

Data item	Brookvale suburb	Freshwater- Brookvale SA2	Greater Sydney (GCCSA)	
New Zealand	3.5%	3.0%	2.7%	
Aboriginal or Torres Strait Islander	0.9%	0.5%	1.5%	
	Language spo	ken at home (%)		
English only	65.0%	79.1%	58.4%	
Mandarin	4.1%	1.0%	4.7%	
Italian	3.4%	1.9%	1.3%	
Spanish	2.3%	1.2%	1.2%	
	Family com	position (%)		
Couple family without children	43.1%	39.5%	33.4%	
Couple family with children	38.2%	47.7%	49.5%	
One parent family	16.5%	11.3%	15.2%	
Other family	2.2%	1.5%	1.8%	
	Household co	omposition (%)		
Family households	64.7%	70.8%	73.6%	
Lone person households	30.9%	23.8%	21.6%	
Group households	4.4%	5.4%	4.7%	
	Dwelling s	tructure (%)		
Separate house	17.9%	42.4%	56.9%	
Semi-detached	17.4%	7.0%	14.0%	
Flat or apartment	61.8%	49.2%	28.1%	
Other dwelling	2.3%	0.9%	0.6%	
Employment (%)				
Labour force participation	72.7%	72.0%	61.6%	
Unemployed	3.8%	3.2%	6.0%	
Occupation (%)				
Professionals	23.1%	30.3%	26.3%	

Data item	Brookvale suburb	Freshwater- Brookvale SA2	Greater Sydney (GCCSA)		
Technicians and Trades Workers	15.6%	11.6%	11.7%		
Clerical and Administrative Workers	14.8%	12.9%	14.6%		
Managers	13.9%	18.5%	13.7%		
Sales Workers	9.9%	8.2%	9.0%		
Labourers	6.8%	4.9%	7.5%		
Community and Personal Service Workers	9.6%	9.4%	9.6%		
Machinery Operators and Drivers	5.0%	2.7%	5.6%		
	Inco	me (\$)			
Median household weekly income	\$1,822	\$2,251	\$1,750		
	Housing	Status (%)			
Owner	15.7%	26.1%	29.1%		
Purchaser	38.3%	35.2%	33.2%		
Renter	42.3%	35.6%	34.1%		
Households in Mortgage Stress (% Households)	10.7%	7.9%	8.4%		
Loan Mortgage Repayments (monthly \$)	\$2,200	\$2,600	\$2,167		
Households in Rental Stress (% households)	19.2%	13.4%	14.2%		
Rent Payments (weekly \$)	\$500	\$550	\$440		
Highest Level of Education Attainment (%)					
Year 9 or below	5.4%	4.0%	7.1%		
Year 10	8.0%	6.4%	9.4%		
Year 11	2.8%	2.4%	3.1%		
Year 12	17.0%	14.9%	17.3%		
Certificate level I-IV	14.8%	12.3%	12.2%		

Data item	Brookvale suburb	Freshwater- Brookvale SA2	Greater Sydney (GCCSA)
Advanced Diploma and Diploma level	11.3%	11.5%	9.3%
Bachelor Degree level and above	28.9%	36.7%	28.3%
Motor vehicles (%)			
None	10.1%	6.6%	11.1%
1 motor vehicle	47.2%	41.9%	37.1%
2 motor vehicle	32.0%	36.6%	32.8%
3 or more vehicles	7.3%	11.9%	15.7%

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