

# Crime Prevention Through Environmental Design Assessment Report

Neringah Hospital - State Significant Development Application (SSD-45121248)

Submitted on behalf of HammondCare

4-12 Neringah Avenue South, Wahroonga



### 'Gura Bulga'

Liz Belanjee Cameron



'Gura Bulga' – translates to Warm Green Country. Representing New South Wales.

By using the green and blue colours to represent NSW, this painting unites the contrasting landscapes. The use of green symbolises tranquillity and health. The colour cyan, a greenish-blue, sparks feelings of calmness and reminds us of the importance of nature, while various shades of blue hues denote emotions of new beginnings and growth. The use of emerald green in this image speaks of place as a fluid moving topography of rhythmical connection, echoed by densely layered patterning and symbolic shapes which project the hypnotic vibrations of the earth, waterways and skies.

Ethos Urban acknowledges the Traditional Custodians of Country throughout Australia and recognises their continuing connection to land, waters and culture.

We acknowledge the Gadigal people, of the Eora Nation, the Traditional Custodians of the land where this document was prepared, and all peoples and nations from lands affected.

We pay our respects to their Elders past, present and emerging.

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# 1.0 Introduction

This Crime Prevention Through Environmental Design (CPTED) Assessment Report is submitted to the Department of Planning and Environment (DPE) in support of a State Significant Development Application (SSD-45121248) for the redevelopment of part of the site at 4-12 Neringah Avenue South, Wahroonga for the purposes of delivering additional community health services, seniors housing, as well as upgraded palliative care facilities that will contribute to the broader operation of ‘Neringah Hospital.’

The report has been undertaken to assess the potential opportunities for crime and the perceived fear of crime that may be associated with the proposed development, including the following scope of works:

- Site preparation works comprising:
  - Demolition of the Neringah Hospital building, kiosk, and existing at-grade carparks;
  - Clearing of nominated vegetation on the proposed development areas;
  - Bulk earthworks including basement excavation; and
  - Remediation works where necessary across the site.
- Construction and use of an integrated seniors housing and health services facility across two buildings ranging from 4-5 storeys above ground, comprising:
  - 2 basement levels containing 145 car parking spaces and service dock;
  - 12 residential aged care facility beds (extension to existing Stage 1 provision);
  - 18 palliative care hospice beds (Schedule 3 health services facility);
  - Community healthcare services, including outpatient palliative care, centre for positive aging and Hammond at Home;
  - 57 seniors housing dwellings;
  - On-site administration, amenities, and ancillary operations spaces.
- Ground level and on-building landscaping works, including the provision of a through site pedestrian link connecting Archdale Park and Balcombe Park;
- Public domain works, specifically, regrading of part of the pedestrian walkway known as ‘Archdale Walk’ to provide accessible connection; and
- Extension and augmentation of infrastructure and services as required.

This report has been prepared in response to addressing the Secretary’s Environmental Assessment Requirements (SEARs) for SSD-45121248 that were issued on 24 June 2022 (refer to **Table 1**).

**Table 1** Secretary’s Environmental Assessment Requirements

Issue and Assessment Requirements	Documentation
<b>7. Public Space</b> <ul style="list-style-type: none"><li>• Address how Crime Prevention through Environmental Design (CPTED) principles are to be integrated into the development, in accordance with <i>Crime Prevention and the Assessment of Development Applications Guidelines</i>.</li></ul>	This report.

## 1.1 Crime Prevention Through Environmental Design

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 Bickerton Masters and Landscape Plans prepared by Arterra 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 1<sup>st</sup> August 2022 between the hours 7:30am and 8:30am to assess the current site conditions, situational crime prevention measures and perceived safety of the existing environment.

## 1.2 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.

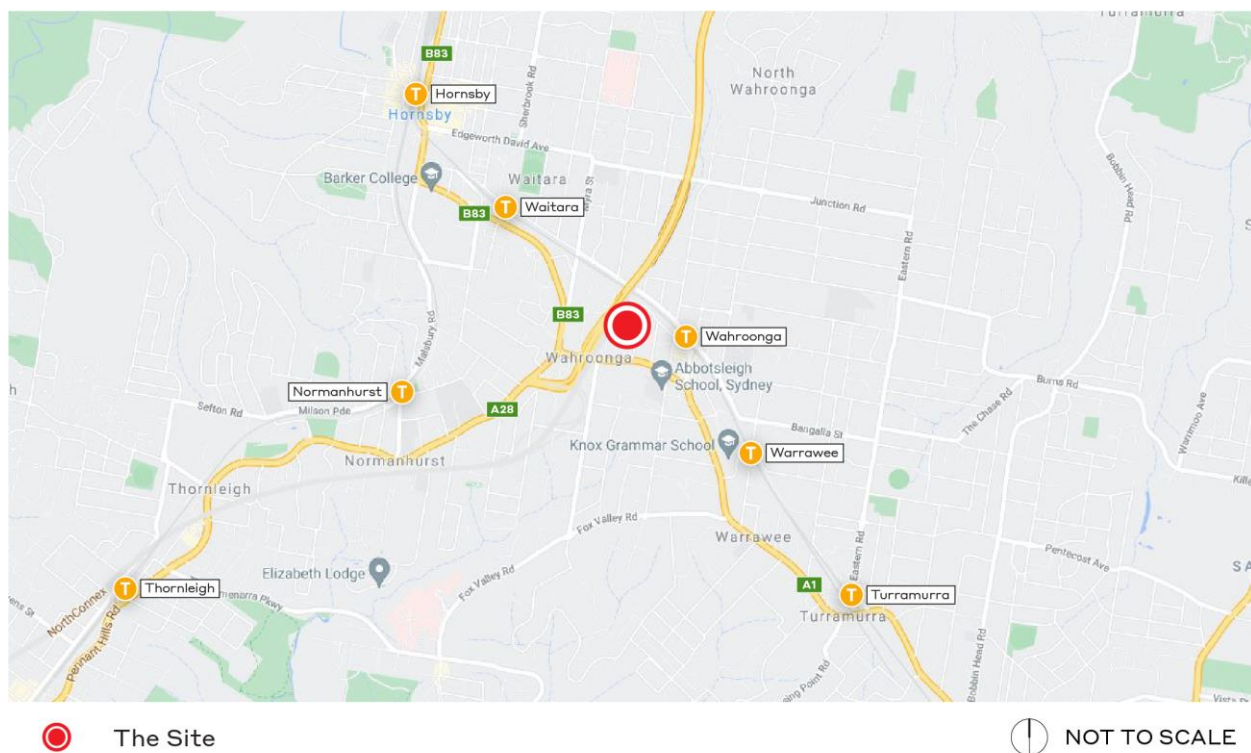
## 2.0 The site

The site is situated upon the lands of the Darramuragal people, located at 4-12 Neringah Avenue South, Wahroonga in the Ku-ring-gai Local Government Area. The site is approximately 250m west of Wahroonga Station 100m north of the Pacific Highway and 200m east of the M1 Pacific Motorway.

The site is regular in shape and is legally described as:

- Lot 1 in DP960051 (2 Neringah Avenue South, Wahroonga);
- Lot 1 in DP1199937 (4-10 Neringah Avenue South, Wahroonga); and
- Lot 52 in DP2666 (no street address).

The site has street frontages to Neringah Avenue South at its eastern interface (140m) and Woonona Avenue (83m) at its western interface. A site context map and aerial locational map is shown at **Figure 1** and **Figure 2**.



**Figure 1**      *Locational Context*

Source: Nearmap / Ethos Urban





The Site
  Proposed Development

NOT TO SCALE

**Figure 2** Site Aerial

Source: Nearmap / Ethos Urban

## 2.1 Existing Development

The site currently comprises three main buildings. The western portion of the site, fronting Woonona Avenue, contains the 4 storey 'Wahroonga' building, which is currently utilised as the primary location for residential aged care facility beds and associated amenities (**Figure 3**). To the south of the Wahroonga building, is a locally listed heritage item known as 'Woonona Cottage'; comprising a single storey former dwelling that is now utilised by HammondCare for on-site administration purposes (**Figure 4**).

The eastern portion of the site, the subject of this application, is currently occupied by 'Neringah Hospital,' a Schedule 3 health services facility that comprises HammondCare's existing palliative care facilities as well as hospital administration areas (**Figure 5**). The southernmost area of the site is currently vacant (**Figure 8**).

Loading facilities are provided through an unsecured access point in the Neringah Hospital Building (**Figure 6** and **Figure 7**).



**Figure 3** The Wahroonga Building

Source/Notes:



**Figure 4** Woonona Cottage

Source/Notes:





**Figure 5** Neringah Hospital

Source: Ethos Urban



**Figure 6** Loading Area

Source: Ethos Urban



**Figure 7** Pit adjacent to the loading area which presents an opportunity for entrapment

Source: Ethos Urban



**Figure 8** Vacant unmaintained land which communicates the opportunity for crime

Source: Ethos Urban

## 2.1.1 Existing Site Access and Security

- **Pedestrian Access:** The site can be accessed by pedestrians from both street frontages at Neringah Avenue and Woonona Avenue, facilitated by existing paved footpaths towards each entry. The primary frontage is located opposite to Archdale Walk (**Figure 9**) which is a pedestrian only thoroughfare linking Neringah Avenue South to the Wahroonga Village.
- **Vehicular Access and Parking:** Access to Neringah Hospital is provided from Neringah Avenue South which is a local road that connects from the Pacific Highway to the south and Warwilla Avenue in the north. Parking is provided in two at-grade carparks, separated by the hospital building. The southern carpark is unsecured without any existing access control arrangements. The northern carpark is secured by a boom gate and fence. Access to the Wahroonga Building is facilitated from Woonona Avenue, which is a local road that runs parallel to Neringah Avenue South. Basement parking is contained within the Wahroonga building, accessed by an existing driveway at the northern portion of the site (**Figure 10**). The basement can be secured by a roller door, though was left open at the time of the site visit.
- **Public Transport Access:** Wahroonga Railway Station is located approximately 250m west of the site and was recently upgraded to be fully accessible. Bus services are available from Wahroonga Station and from the surrounding street network.





**Figure 9** Archdale Walk

Source: Ethos Urban



**Figure 10** Wahroonga Building Driveway

Source: Ethos Urban

## 2.2 Surrounding Development

The following development informs the surrounding context of the site:

- **North:** To the north of the site is medium density residential development, predominantly in the form of apartments. Further to the north is the T1 North Shore rail line.
- **East:** To the east of the site is Archdale Park, alongside low-density residential development. Further to the east is Wahroonga Village centre.
- **South:** Immediately south of the site is the Heritage Listed Wahroonga Reservoir No.3, a large brick structure which fronts the Pacific Highway.
- **West:** To the immediate west of the site is Balcombe Park. Adjacent to this is low to medium density residential development. To the northwest lies the independent Abbotsleigh Junior School which experiences activity predominantly during the day and afternoon.



**Figure 11** Apartment development to the north

Source: Ethos Urban



**Figure 12** Archdale Park

Source: Ethos Urban





**Figure 13** *Partially concealed area alongside Wahroonga Reservoir*

Source: Ethos Urban



**Figure 14** *Balcombe Park*

Source: Ethos Urban

## 2.3 Crime Risk Rating

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

The key positive elements of the site are:

- The surrounding built form is characterised by a high quality of development, including recently refurbished/completed buildings and public domain, contributing to the perception that the area is well cared for.
- The surrounding streetscape provides dedicated footpaths and opportunities that enable people to overlook the site.
- The existing land use is well established, marked and compatible with its surroundings.

Other elements of the site are:

- The site is adjacent to parkland and a laneway which are sometimes associated with being more susceptible to anti social behaviour and/or crime.
- The existing condition of the Neringah Hospital building, loading dock and adjacent car park areas appear to be dated and may be perceived to show a lack of investment and care into its upkeep and maintenance.
- Some existing components of the site are capable of providing hiding places or having areas of concealment that are devoid of opportunities for overlooking.
- Access control and security measures across the site, such as into the basement, are not always utilised.
- The site includes, and is adjacent to, vacant land which can sometimes be susceptible to criminal activity.

## 3.0 The proposed development

The proposal relates to an SSDA for 2-12 Neringah Avenue South, Wahroonga for the purposes of delivering additional community health services, seniors housing, as well as upgraded palliative care facilities that will contribute to the broader operation of Neringah Hospital. Specifically, the SSDA proposes:

- Site preparation works comprising:
  - Demolition of the Neringah Hospital building, kiosk, and existing at-grade car parks;
  - Clearing of nominated vegetation on the proposed development areas;
  - Bulk earthworks including basement excavation; and
  - Remediation works where necessary across the site.
- Construction and use of an integrated seniors housing and health services facility across two buildings ranging from 4-5 storeys above ground, comprising:
  - 2 basement levels containing 145 car parking spaces and service dock;
  - 12 residential aged care facility beds (extension to existing Stage 1 provision);
  - 18 palliative care hospice beds (Schedule 3 health services facility);
  - Community healthcare services, including outpatient palliative care, centre for positive aging and Hammond at Home;
  - 57 seniors housing dwellings;
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- Ground level and on-building landscaping works, including the provision of a through site pedestrian link connecting Archdale Park and Balcombe Park;
- Public domain works, specifically, regrading of part of the pedestrian walkway known as 'Archdale Walk' to provide accessible connection; and
- Extension and augmentation of infrastructure and services as required.

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

A photomontage of the proposed development is shown at **Figure 16** and a site layout plan is shown at **Figure 16**.



**Figure 15** Photomontage of the proposed development

Source: Bickerton Masters





**Figure 16** Proposed site plan

Source: Bickerton Masters

### 3.1 Access

Vehicular access for resident, staff and visitor parking is proposed to be consolidated to one central entry located south of the through site link. This entry point provides access to the basement, which spans Lower Ground, Basement 1 and Basement 2. The northern vehicular access point, which currently serves the surface car park, will become an access point to the services and loading facilities, with no authorised access to general traffic proposed.

Vehicle access to the centre of the site (opposite Archdale Park) will be removed to facilitate the construction of the pedestrian-only through site link. Access at the southern end will be retained for service access to the substation, though will remain secured by locked gates.

Pedestrian access into the site will be facilitated via the proposed centralised 'green spine' which terminates opposite Archdale Walk and provides a direct sightline from the site through to Archdale Walk. Although it will be authorised for private usage only, the centralised green spine will form a through-site link for residents and visitors. The green spine will also act as new public domain space outside the proposed neighbourhood amenity spaces.



## 4.0 Nature of recorded crime

Crime statistics obtained from the NSW Bureau of Crime Statistics and Research (BOCSAR) represents criminal incidents recorded by NSW Police. A review of the local statistics over the 12 months to March 2022<sup>1</sup> found that the most commonly occurring crimes relevant to within the suburb of Wahroonga were:

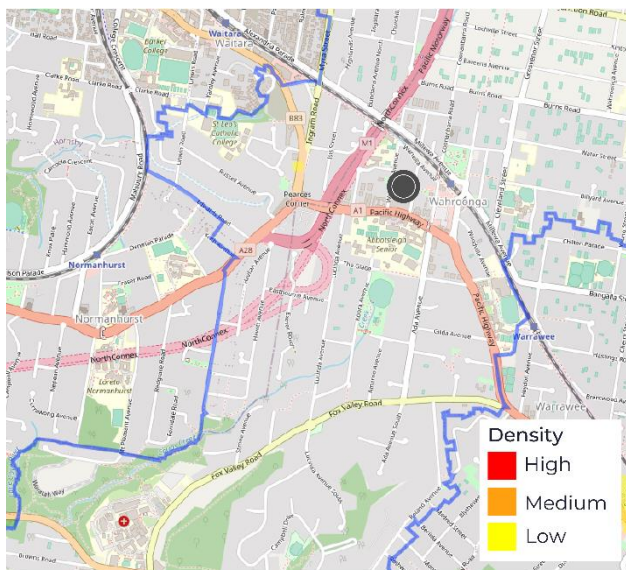
- Non-domestic assault;
- Domestic assault;
- Robbery (without a weapon);
- Theft (Break and enter dwelling and break and enter non-dwelling)
- Steal from person;
- Steal from retail store;
- Steal from motor vehicle;
- Malicious damage to property;
- Motor vehicle theft

The frequency of the above crimes in the suburb of Wahroonga, between March 2019 and March 2022 are detailed in **Table 2** below.

**Table 2** *Crime Statistics Wahroonga between March 2019 and March 2022*

Crime	Incidents year from March 2019	Rate per 100,000 persons	Incidents year from March 2020	Rate per 100,000 persons	Incidents year from March 2021	Rate per 100,000 persons	Incidents year from March 2022	Rate per 100,000 persons	2019-2022 Trend	Rate per 100,000 Category
Assault – domestic violence related	25	136.7	28	153.3	18	98.5	23	125.9	Stable	Very Low
Assault – non-domestic violence related	23	125.7	25	136.9	15	82.1	15	82.1	Stable	Very Low
Break and enter – dwelling	41	224.1	44	240.8	35	191.5	10	54.7	Stable	Low
Break and enter – non-dwelling	4	21.9	6	32.9	5	27.4	3	16.4	Stable	Very Low
Steal from motor vehicle	31	169.5	30	164.2	36	197	17	93	Stable	Very Low
Steal from retail store	1	5.5	6	32.9	5	24.7	2	10.9	Stable	Very Low
Steal from dwelling	17	93	14	76.6	19	104	7	38.3	Stable	Very Low
Steal from person	1	5.5	1	5.5	1	5.5	0	0	Stable	Very Low
Motor vehicle theft	6	32.8	6	32.8	10	54.7	7	38.3	Stable	Very Low
Malicious damage to property	41	224.2	35	191.6	30	164.2	23	125.9	Stable	Very Low

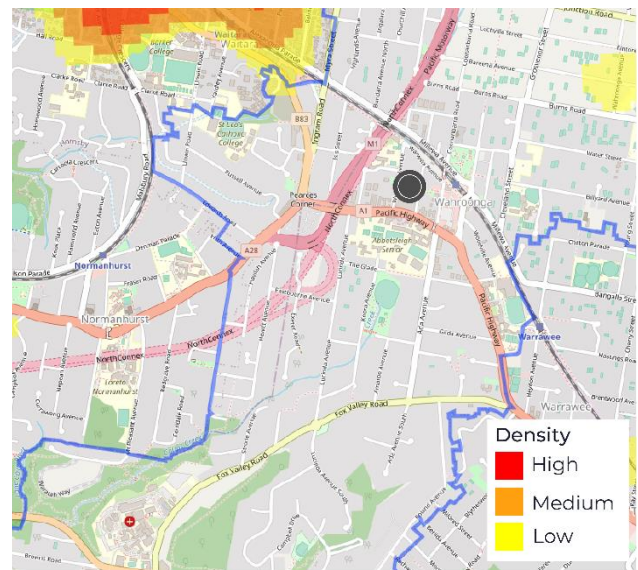
<sup>1</sup> The most recent crime data available in relation all crimes affecting the suburb of Wahroonga between March 2021 to March 2022.



● The Site Non domestic assault

**Figure 17 Non domestic assault hotspot map**

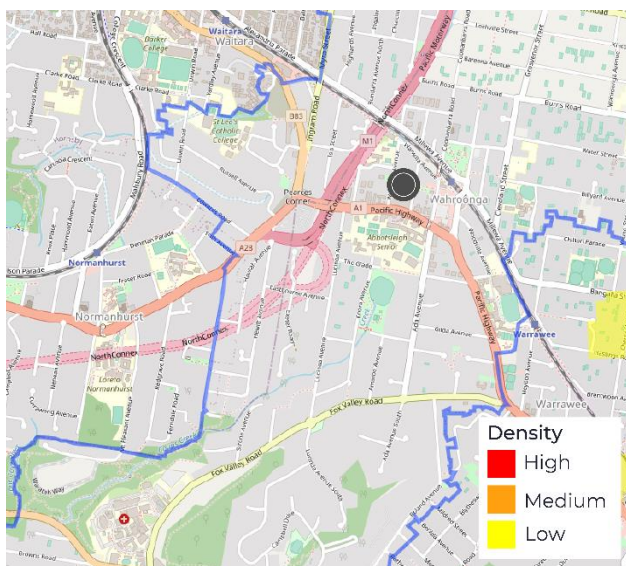
Source: BOSCAR



● The Site Domestic assault

**Figure 18 Domestic assault hotspot map**

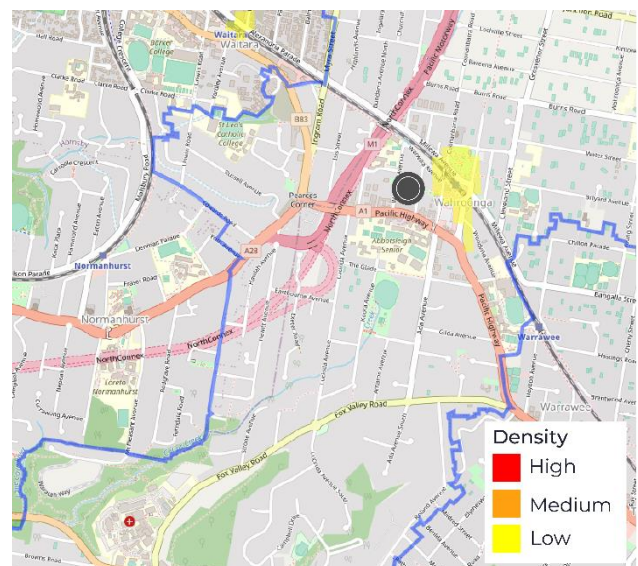
Source: BOSCAR



● The Site Theft (Break and enter dwelling)

**Figure 19 Theft (Break and enter dwelling) hotspot map**

Source: BOSCAR

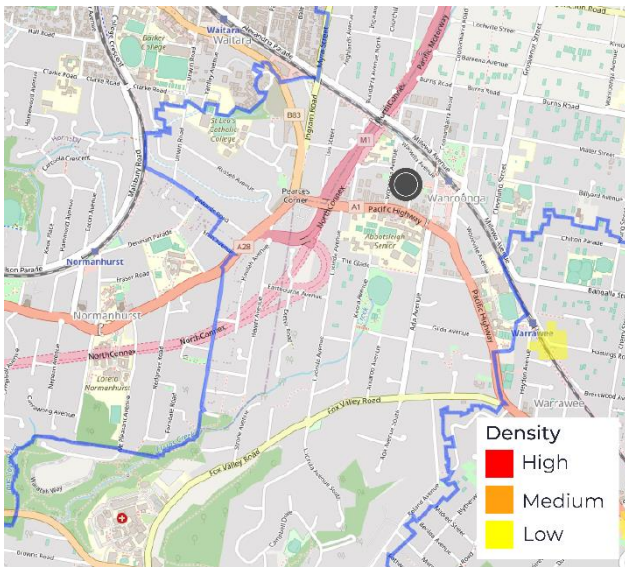


● The Site Theft (Break and enter non dwelling)

**Figure 20 Theft (Break and enter non dwelling) hotspot map**

Source: BOSCAR

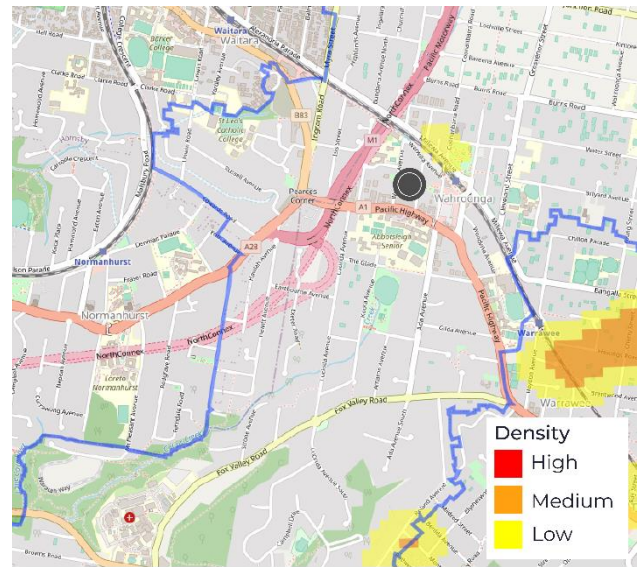




● The Site      Steal from person

**Figure 21** *Steal from person hotspot map*

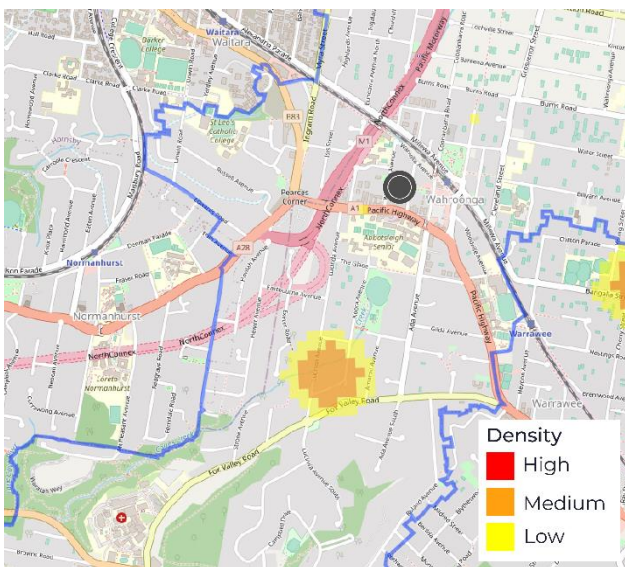
Source: BOSCAR



● The Site      Steal from motor vehicle

**Figure 22** *Steal from motor vehicle hotspot map*

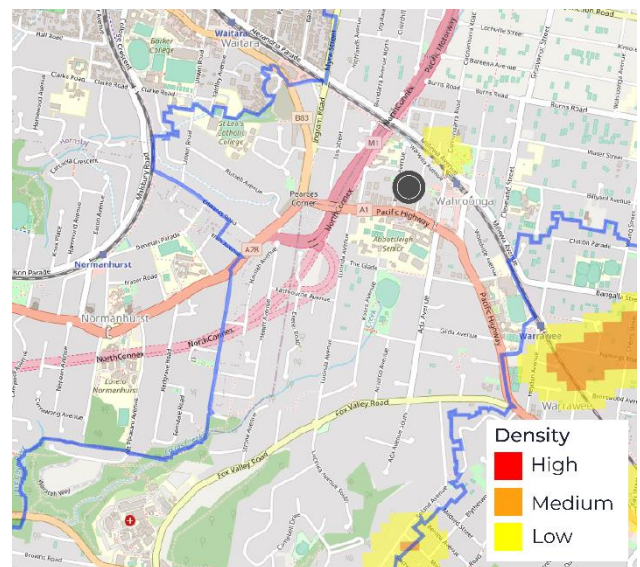
Source: BOSCAR



● The Site      Motor vehicle theft

**Figure 23** *Motor vehicle theft hotspot map*

Source: BOSCAR



● The Site      Malicious damage to property

**Figure 24** *Malicious damage to property hotspot map*

Source: BOSCAR

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 residents and visitors in the area and thus may not accurately reflect the risk of victimisation in locations.

There are no hotspots that concern the proposal, though 'break and enter non-dwelling', 'steal from motor vehicle' and 'malicious damage to property' represent the most proximate instances of crime. Recommendations relating to CCTV coverage of the site is provided in **Section 6.1**. Analysis of the BOSCAR crime trends of the locality in **Table 1** suggests that crime rates are stable and overall, very low. The design, layout and access points of the designed development for the site have also been carefully reviewed in line with CPTED principles to reduce the opportunity for incidents of robbery, break and enter risk or damage to properties.

## 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 locational context relative to the hotspots identified in **Section 4.0** 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 surveillance. The surveillance principle indicates that offenders are often deterred from committing a crime in areas with high levels of surveillance. From a design perspective, deterrence of crime can be achieved by providing:

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

#### 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 street interface is split between Lower Ground, Ground and Level 1 in line with the natural slope of the site.

At the northern and southern ends of the proposed development, self-contained dwellings are positioned to front Neringah Avenue South, with habitable spaces oriented to the streetscape in this location. This creates opportunities for overlooking between the development and the streetscape and integrates the development with its surrounding residential context. Neighbourhood amenity space will host a retail (food and beverage) use located at the corner of Neringah Avenue South, creating further opportunities for activation and natural surveillance within the precinct.

The proposed development further assists in activating the site by co-locating other amenity based spaces, including a Chapel, hair salon, pool and gym, which will all address the proposed green spine within the site. Usage of these spaces will enable the activation of these places, promoting human and social activity on site, exemplifying effective guardianship.

Activation of place is a key component for a well-functioning community that has a strong sense of place and feeling of safety. The green spine facilitates a clear direct path to facilitate pedestrian activity, integrating with the existing pedestrian environment as it confluences at Archdale walk. The spine will also benefit from numerous lobby entrances and windows orientated to face the space and its role as a private through-site link delineates private from public areas and eliminates opportunities for entrapment.

It is noted that all new landscaping where appropriate should be selected to maintain sight lines and minimise concealment opportunities, particular along the green spine. As such, planting should be selected that provides for high canopies and low shrubs in order to keep sightlines open. This is important along the edges of all pedestrian pathways.

Furthermore, to improve a sense of community ownership across the site and to enable passive resident interaction and social activity, it is recommended that where possible, the ground level seniors housing courtyards and/or private frontage areas do not have high fencing or landscaped elements that encloses them. This in turn will encourage natural surveillance and effective guardianship of the place.

#### 5.1.2 Basement

The proposed development includes 3 levels of basement, including Lower Ground, the southern half of which will be dedicated to parking. The basement is likely to be frequented by employed personnel on a regular basis as it will accommodate staff parking and loading facilities and will serve a crucial purpose to the functionality of the wider site.

The design of the basement is simple in layout and provides direct lines of sight between car parking spaces and the lift lobbies, enabling short routes in and out of this space. The design of the basement has been reviewed and is considered to provide an outcome that minimises any areas that could create areas of concealment or potential hiding spaces. The loading and services dock is fully separated from the remainder of the basement which allows it to become a delineated and formally supervised space.

Despite the proposal including these provisions, which contribute to good opportunities for overlooking and increasing informal and formal guardians on site, it is recommended CCTV, in conjunction with adequate illumination, be installed throughout the basement and ground floor areas to improve surveillance even further. Refer to the recommendations provided in **Section 6.1**.

## 5.2 Lighting and Technical Supervision

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

High quality lighting throughout all publicly accessible areas should be adequate to permit facial recognition, long sight lines and reduce dark shadowing which in turn will help reduce opportunity for predatory crime. Publicly accessible areas with low natural surveillance can attract loitering and anti-social behaviour after hours. As such, an external lighting strategy is recommended and should include minimum lighting lux and uniformity levels for different parts of the proposed development.

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 development. 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

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

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

- The palliative care and centre for positive ageing lobbies are proposed at the ground floor level and will incorporate a partially glazed façade with a reception space that will be highly visible from the green spine, showcasing activation of the space through formal guardians such as reception staff; and
- The Neringah Avenue South and green spine frontages will be activated by the inclusions of various neighbourhood amenity spaces and residential frontages, providing strong casual surveillance and territorial reinforcement cues signifying ownership and management of space.

Suitable way finding signage throughout the development 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

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

Environmental maintenance and territorial reinforcement are co-dependent in achieving a safer space and are integral in achieving optimal natural surveillance.

As shown within the Architectural Plans prepared by Bickerton Masters, 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

Similar to environmental maintenance, there is a strong association between activity and space management, and the fear or perceived fear of crime. Unlike environmental maintenance, this principle endeavours to manage the more dynamic activity and use of space. Knowing where and how to enter, exit and find assistance within public places can impact on perceptions of safety.

The perceived image of an area can impact upon feelings of safety and danger, influence local confidence and individual decisions to either withdraw or engage in community life within public places. The proposed development will greatly enhance the perceived accessibility and management of the site.

The management of the publicly accessible frontages and open space will be a key element in preventing the opportunity for crime and will also have a bearing on amenity with regard to restricting noise and light spill into seniors housing apartments and the rooms of the palliative care facility. Furthermore, effective guardianship plays a critical role in the safety and perceived safety of the proposed development. The ability of HammondCare to manage and organise on-going activities, events and initiatives etc for future residents improves the sense of community ownership and effective guardianship of public and common spaces.

It is in the interest of management of the site to ensure that the overall development is well managed and any damage or vandalism is repaired rapidly. It is recommended that a comprehensive and all-inclusive Plan of Management (PoM) is created to manage the different components of the proposal, including the Neighbourhood Amenities, palliative care and seniors living apartments.

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. Recommendations relating to activity and space management are provided in **Section 6.1**.

## 5.6 Access Control

Access control strategies restrict, channel and encourage the movement of people and vehicles into and through designated areas. Unauthorised entry is reduced by physical and technical barriers, as they increase the effort required to commit a crime. The proposed development includes multiple types of access, these include:

- Primary – access to all public areas, including to the green spine from the existing public domain and streetscapes.
- Secondary – access to semi-public areas, including palliative care and residential care lobbies, and Neighbourhood Amenities.
- Vehicle – i.e access for vehicles for loading and car parking within the proposed development, accessed from Neringah Avenue South.

As with territorial reinforcement, it is important to maintain that the proposed development be free of physical access control measures that appear to fortify an environment. While appearing to fortify the proposed development is



considered inappropriate, areas within the proposed development such as the seniors residential lobby space and basement areas that are nominated for private uses only may require provisions that increase access control measures. In this case, secure security swipe access cards are recommended to prevent unwanted persons from accessing these spaces.

## **5.7 Design, Definition and Designation**

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

To further delineate the varying uses provided by the development, it is recommended that clear signage to indicate entry points and facilitate wayfinding be provided to help convey how each space should be used. In particular clear wayfinding signage should be provided at key entrance points to each use proposed at the ground floor, including Neighbourhood Amenities and lobby areas. This same provision should be extended to areas within the basement also.

Clear wayfinding signage should be provided at the entrance points of the service dock, 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.

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

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

## 6.0 Crime risk rating and recommendation

The Crime Risk Rating considers the development as proposed in architectural drawings prepared by Bickerton Masters. Acknowledging the existing and future site context along with the issues discussed in **Sections 3.1** and **5.0**, the Crime Risk Assessment Rating of the place was rated within the 'moderate' category. This category was granted due to the site's existing conditions.

An assessment of the specific development area using the CPTED principles has found that, with the implementation of the recommendations, the rating could be improved to sit within the 'low' category. We note the levels of crime as indicated in **Section 4.0** hotspot mapping of this report are a reflection of the local area and urban environment rather than the existing development. However, the development has the opportunity to improve the safety and security of the site through the implementation of the below recommendations.

### 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 opportunities for concealment are minimised by seeking to reduce any alcoves and recesses throughout building exteriors.
- Ensure circulation spaces (internal publicly accessible areas / lobby curtilage, basement ingress/egress) 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 (especially within front of house areas) and the public domain.
- Where possible all new landscaping should ensure that sightlines are achieved. In this regard, proposed vegetation, shrubs and trees should not (as far as possible) impede sightlines for pedestrians and should be regularly maintained to minimise concealment opportunities throughout the site

#### 6.1.2 Lighting and Technical Supervision

- A CCTV network is essential for anywhere that is able to be traversed by public persons or semi-public persons, including the green spine, back of house areas and within the basement. The CCTV network is to be designed in consultation with a suitably qualified security consultant with a Class 2A licence under the *Security Industry Act 1997* who can provide specific advice on the placement, installation, monitoring and maintenance of the CCTV network.
- The CCTV network should endeavour to ensure blackspots of coverage are not created.
- The CCTV network strategy should be partnered with the internal and external lighting strategy to ensure facial recognition is achieved in all lighting conditions 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.
- As a guide exterior lighting should maintain a minimum of 20 Lux and also should have a minimum uniformity level of 0.4 Uo.
- A minimum Lux of 40 with a minimum uniformity level of 0.4 Uo is recommended in the basement car park levels, permitting facial recognition and visibility into a parked vehicle. Additionally, the materiality of the basements ceilings should complement lighting, ensuring the brightness of the lighting is not reduced. Suggestions to achieve this may include rendering the ceiling or walls as white, or similar.

#### 6.1.3 Territorial Reinforcement

- Maintain that future building entrances are highly visible from the streetscape frontages, and avoid any entrapment areas associated with entries.
- Display CCTV security notice signs to convey that the site is under constant surveillance (if applicable).

- Clearly delineate between publicly and privately accessible areas via passive boundaries that do not appear to over fortify an environment. High fencing is discouraged in these areas.
- Provide signage throughout the precinct to direct pedestrian movements and deter loitering where it is not designated.
- Ensure that pathways within lobbies and the green spine are unobstructed at all times to avoid blind spots.

#### **6.1.4 Environmental Maintenance**

- Ensure an effective and prompt response to environmental maintenance for the development is clearly specified though a Plan of Management (or the like). Environmental maintenance should acknowledge the principles of CPTED and ensure general building maintenance and cleanliness is maintained throughout the precinct.
- Ensure mechanisms are in place to facilitate the on-going maintenance of the building, including the implementation of a rapid removal policy for vandalism repair and the removal of graffiti.
- Consistently manage vegetation so that sight lines are maintained and opportunities for concealment are minimised.

#### **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.
- Ensure the effective management of the proposed development is articulated through a Plan of Management (or similar). This is particularly important for areas that experience a cross-over with governance and responsibility such as the self-contained dwellings, the residential aged care bed spaces or the future medical centre space.
- 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 via vehicle or as a pedestrian.
- Provide security doors at an appropriate locations to prevent unauthorised individuals from entering restricted areas not intended for public use (such as within the back of house retail basement areas, or areas where there is residential sensitivity, including residential waste rooms, as well as loading dock).

#### **6.1.7 Design, Definition and Designation**

- Security, personnel and/or employees of the hospital are advised to do routine parole / occupy the publicly accessible areas visibly and regularly to minimise opportunities for anti-social behaviour.
- Provide wayfinding signage where appropriate to reinforce perceptions of safety and legibility and clearly define uses and directions (to be usable at night time).
- “Park Smarter” signage is recommended to be displayed in the unsecured car parking areas to remind people to secure their vehicles. Ensure that parking for emergency vehicle parking remains clearly signed.