James Marshall & Co

University of Newcastle: Gosford Campus

305 Mann Street Gosford NSW.

CPTED

December 2022

Contents

1. Introduction

James Marshall & Co has been engaged to prepare a Crime Prevention Through Environmental Design (CPTED) assessment in relation to a proposed academic facility at 305 Mann Street Gosford (the former Mitre 10 site) is one of the key sites identified within recent NSW Government planning frameworks. The vision for the proposed mixed use tower campus is to set a high-quality benchmark for other developments and further revitalisation projects throughout the city. An impression of the site is shown in Figure 1.

Figure 1: Impression of the Gosford Campus

The University proposes the campus comprise a building of approximately 3,726 sqm multi-college academic and innovation facility. The vision for the Campus is to create a built environment that is porous and highly welcoming to everyone in the community.

The Campus facility will also include outdoor spaces that enables students to engage and undertake physical activity. Outdoor learning spaces are a feature of the University's campus design philosophy as they encourage connection and activate the campus space generally. The academic offering will support the development of a health, innovation and education campus that delivers future-facing education and training in contemporary, digitally enabled facilities. The building will also feature an Innovation Hub that will support technology intensive start-ups and scale-ups, leveraging the University's experience in developing an Integrated Innovation Network.

A high-level master plan was prepared for the site. The current project includes Stage 1 (only) which comprises the academic facility, carpark and green / open space to remainder of the site.

The Department of Planning and Environment issued its Secretary's Environmental Assessment Requirements (SEARs) which requested that the design integrate CPTED principles into the development in accordance with Crime Prevention and the Assessment of Development Application Guidelines.   Other inputs into the report include consideration of Central Coasts Council's Development Control Plan (DCP)

and other planning instruments, analysis of crime data, review of draft architectural plans issued for the Project and participation of a design workshop (held 29 November) to review and finalise the CPTED report.

2. Safer By Design

2.1 Overview
A CPTED is a crime prevention strategy that focuses on the planning, design and structure of cities and neighbourhoods. It includes the built environment, open space (including passive recreation space), pedestrian and transport corridors, conflicts of land use etc.

In April 2001, the then NSW Department of Infrastructure, Planning and Natural Resources (Department of Planning, Infrastructure and Environment) introduced Crime Prevention Legislative Guidelines to Section 79C (now Section 4,15) of the Environmental Planning and Assessment Act, 1979. These guidelines require consent authorities to ensure that development provides safety and security to users and the community. If a development is thought to present a crime risk, the guidelines can be used to justify modification of the development on the grounds that crime risk cannot be appropriately minimised.

Councils and local police are encouraged to identify the types of development that will 'typically' require a crime risk assessment, and prepare a consultation protocol. Protocols are location (need) based agreements which outline the types of development that will be jointly assessed, how construction will occur and timeframes for consultation. Subject to council direction, development types not listed in local consultation protocols will not require a formal crime risk (CPTED) assessment.

CPTED is a crime prevention strategy that focuses on the planning, design and structure of cities, communities and neighbourhoods. It reduces opportunities for crime by using design and place management principles that reduce the likelihood of essential crime ingredients (law, offender, victim or target, opportunity) from intersecting in time and space.

This is because predatory offenders often make cost benefit assessment of potential victims and locations before committing crime. 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).

2.2 CPTED Principles
CPTED employs four key strategies which are outlined below:

2.2.1 Territorial re-enforcement
Community ownership of public space sends 'signals' to the community. Places that feel owned and cared for are likely to be used, enjoyed and revisited. People who have guardianship or ownership of areas are

more likely to provide effective supervision and are more likely to intervene if crime is taking place, or if there is a risk of crime occurring. Furthermore, criminals rarely commit crime in areas where the risk of detection is high.

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

2.2.2 Surveillance
People feel safe in public areas when they can see and interact with others, particularly people connected with that space, such as shopkeepers or adjoining residents. Criminals are often deterred from committing crime in places that are well supervised.

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

Technical / mechanical surveillance is achieved through mechanical / electronic measures such as CCTV, help points and mirrored building panels. It is commonly used as a 'patch' to supervise isolated, high risk locations.

Formal (or Organised) surveillance is achieved through the tactical positioning of guardians. An example would be the use of the on-site supervisors, e.g. security guards at higher risk locations.

2.2.3 Access control
Access control treatments restrict, channel and encourage people and vehicles into, out of and around the development. Way-finding, desire-lines and formal/informal routes are important crime prevention considerations as they minimise opportunities for people to wander in areas where they are not supposed to. Effective access control can be achieved by using physical and symbolic barriers that channel and group pedestrians into areas, therefore increasing the time and effort required for criminals to commit crime.

Natural access control includes the tactical use of landforms and waterways features, design measures including building configuration, formal and informal pathways, landscaping, fencing and gardens.

Technical / Mechanical access control includes the employment of security hardware.

Formal (or Organised) access control includes on-site guardians such as employed security officers.

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

The proposed development has been assessed against these four principles. Furthermore, personal safety has been considered given the nature of the development.

2.3 Authors Qualifications
The CPTED Report has been undertaken by James Marshall. James has over twenty years' experience in the community development and social planning sector and during this time held a number of senior management roles in both the welfare sector and in local government. With reference to specific experience relating to the undertaking of crime risk assessments and Crime Prevention Through Environmental Design (CPTED). Key examples include;

- McCabe Park, Wollongong (crime risk assessment and subsequent redesign).
- Wollongong City mall (crime risk assessment and redesign as well as policy development).
- Wollongong Youth Centre (crime risk assessment and subsequent redesign).
- Peace Park (Chinaman's Hollow) Cessnock (crime risk assessment in its development phase).
- Cessnock Civic precinct and main street upgrade (crime risk assessment in its development phase).
- Rotary Park, Kurri Kurri (crime risk assessment and redesign).
- ALDI Stores (Kurri Kurri, Taree, Muswellbrook and Mayfield).
- McDonalds Restaurants (Cessnock, Kurri Kurri, Dubbo, Tuncurry).
- Lake Macquarie Yacht Club
- Various aged care residential developments (Morisset, Whitebridge, Cessnock)
- KFC (Hunter Street Newcastle)
- New residential release areas (Dubbo City Council – Keswick Estate)
- Strategic site investigation and risk assessment (McDonald's, ALDI, private developers).
- Various open space assessments (Wollongong City Council, Cessnock City Council, Orange City Council; NSWLPMA).
- Coles Stores (various).
- One Stop Wine Barn (Cessnock).

These projects have involved the facilitation of a consultative approach with Council officers, NSW Police, business owners, users of the areas under review (target group focussed), business chamber representatives etc. James understands the principles behind the crime risk assessment process, including the use of and application of crime statistics as well as the influencing factors of public safety and risk via urban design and use of public space.

James Marshall has also completed approved NSW Police Safer by Design training in 2012 as well as numerous short courses and programs on crime risk assessment and CPTED throughout his career.

3. Crime Characteristics

Reported crime data for the Central Coast Council area for the period 2016 – 2021 showing the ranking in comparison to other NSW Local Government Areas (LGA's) is shown in Table 1. Table 2 shows the crime by premises for 2021.

Table 1: Ranking of Reported Crime for Central Coast Council Area (2016 – 2021)

Reported Crime	Ranking of NSW Local Government Areas (with a population greater than 3,000 people)					
	2016	**2017**	**2018**	**2019**	**2020**	**2021**
Assault – Non DV Related	48	51	52	41	47	50
Assault – DV Related	37	44	48	49	56	57
Robbery	47	35	41	38	34	42
B/E Dwelling	52	63	65	69	60	72
B/E Non-Dwelling	74	74	74	85	80	83
MV Theft	25	31	37	34	42	69
Steal from MV	30	40	47	34	28	50
Steal from Retail Store	40	43	48	30	32	33
Steal from Dwelling	87	73	76	80	85	N/A
Steal from Person	33	25	31	28	25	N/A
Malicious Damage to Property	45	51	57	55	55	58

Source: BOCSAR (October 2022)

Table 2: Crime by Premises

Premises type	Domestic violence related assault	Non-domestic violence related assault	Sexual offences	Robbery	Break and enter non-dwelling	Motor vehicle theft	Steal from motor vehicle	Steal from person	Malicious damage to property
Adult entertainment	0	0	0	0	0	0	0	0	1
Financial institution	0	2	0	0	0	0	0	2	5
Office	0	2	2	0	9	2	2	0	23
Personal services	2	4	3	0	8	0	5	0	24
Retail/wholesale	21	160	14	11	58	19	57	21	153
Carpark	11	23	9	3	2	36	231	2	128
Education	1	81	41	0	35	0	7	0	74
Health	5	58	6	0	6	0	5	1	20
Industrial	0	2	0	0	36	5	19	0	17
Law enforcement	0	11	3	1	1	0	1	0	22
Licensed premises	14	77	13	4	9	1	14	4	51
Marine transport	0	0	0	0	0	0	0	0	2
Outdoor/public place	89	333	62	27	8	120	329	23	356

Recreation	0	14	5	0	23	0	1	0	28
Religious	1	7	4	0	6	0	0	0	7
Residential	1,286	546	496	12	17	219	432	12	1,495
Rural industry	0	1	0	0	1	2	1	0	1
Public transport	5	30	10	2	1	1	2	7	58
Utilities	0	0	0	0	5	0	2	0	6
Vehicle	0	3	1	0	1	0	8	0	2
Firearm premises	0	0	0	0	1	0	0	0	0
Unknown	3	9	97	0	0	3	5	0	1
Total	1,438	1,363	766	60	227	408	1,121	72	2,474

Source: BOCSAR October 2022)

Crime data from the Bureau of Crime Statistics and Research show the following influencing / contributing factors for the crime characteristics:

- Outdoor and public spaces are more likely to be targets for assault, sexual offences, break and enter, theft of motor vehicle, steal from motor vehicle and malicious damage.
- Retail stores are targeted for the highest amount of break and enter.
- Steal from motor vehicle is more likely from a car park.
- Females are more likely to be victims of domestic violence related assault.
- Males are more likely to be victims of non-domestic violence related assault.

The use of 'hot spot' maps shows where crime is concentrated (the higher concentration / number of the incidence of crime appear a darker shade of red). The purpose of this is to identify the areas / locations where crime is more likely to occur, as well as the incidence and type of crime so resources and strategies can be put into place to address specific issues. The hot spot maps for the proposed development site are shown below.
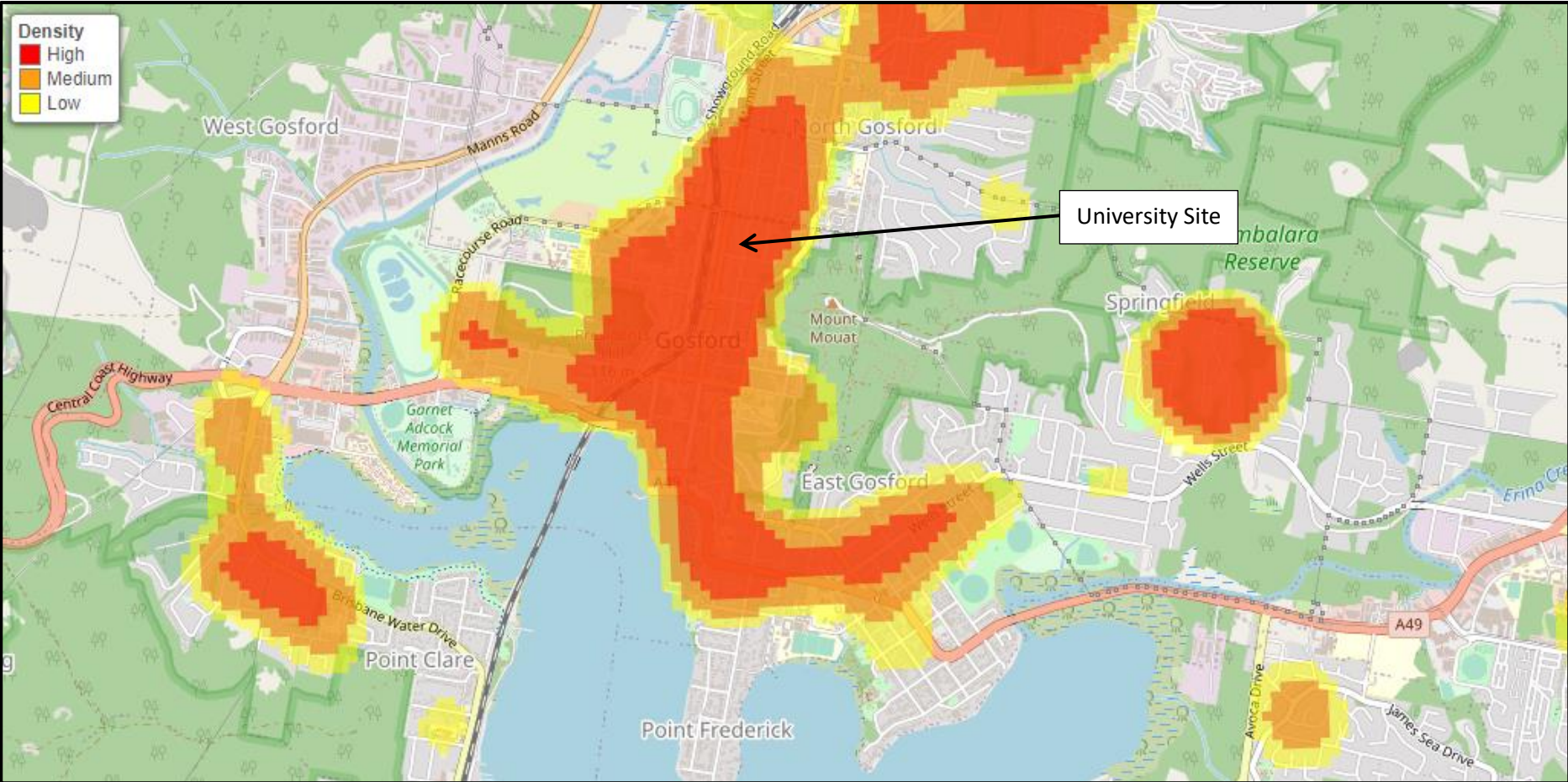
Figure 2: Incidents of Assault (Domestic assault) from July 2021 to June 2022
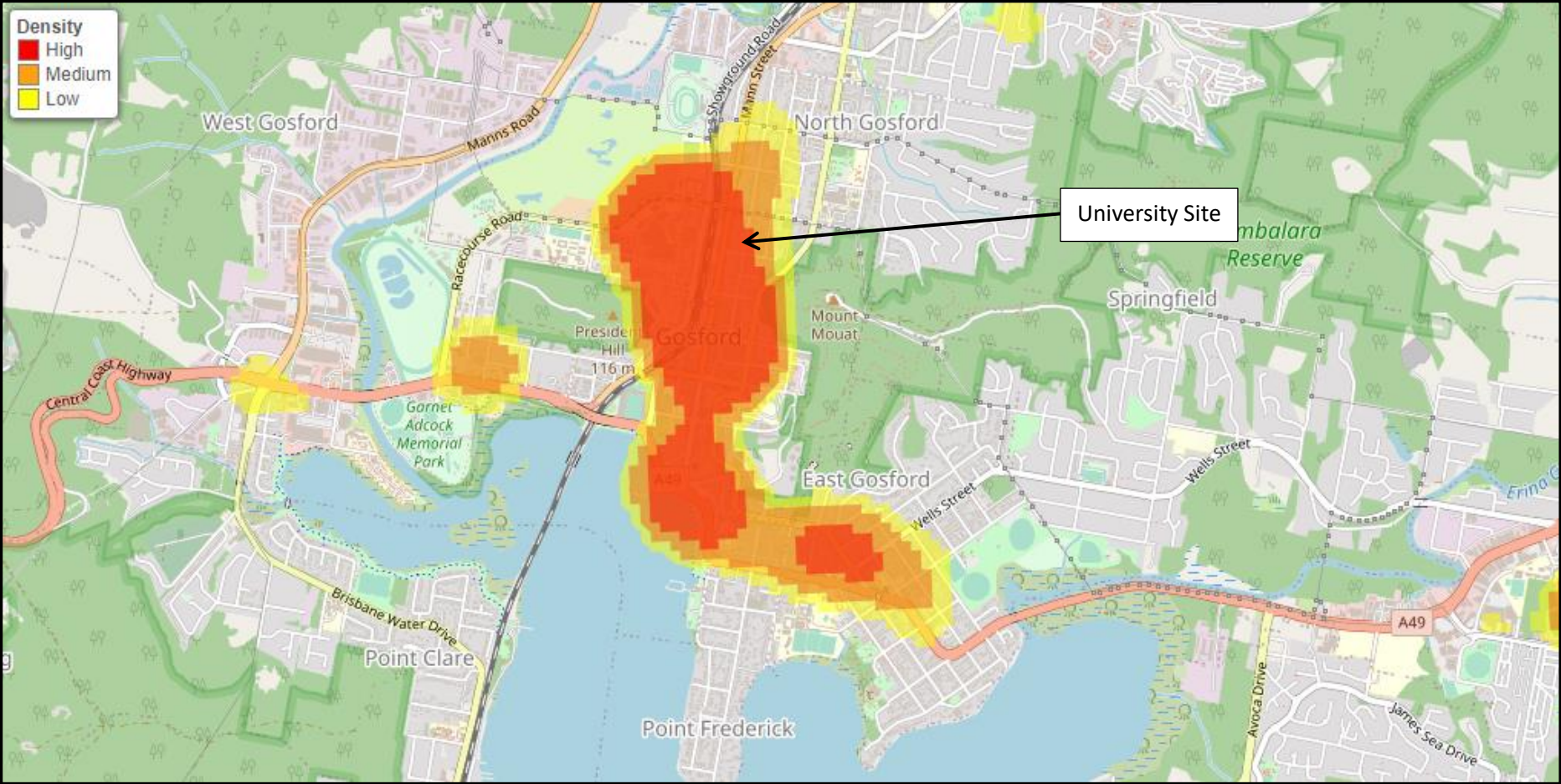
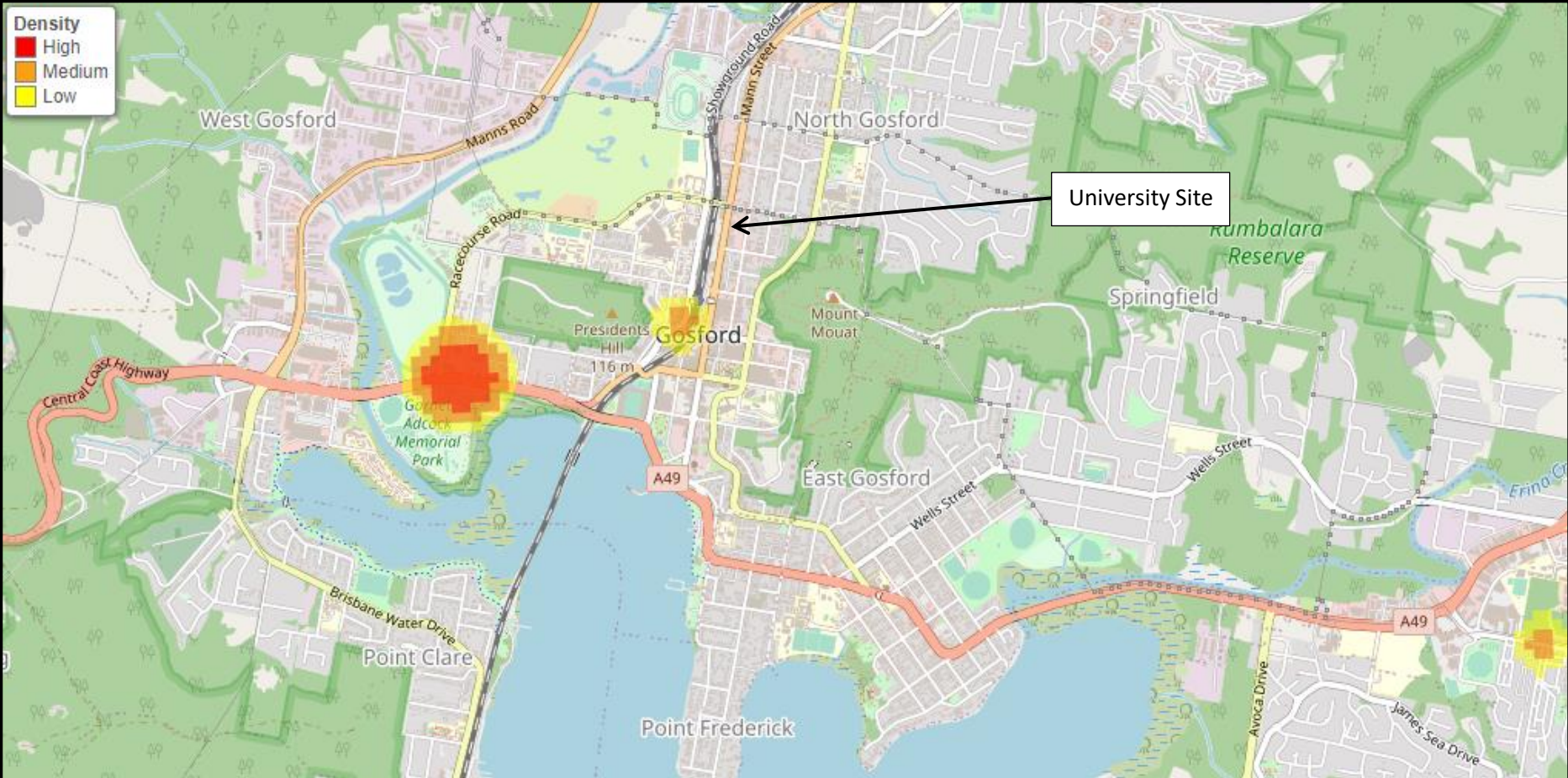**Figure 3: Incidents of Assault (Non-domestic assault) from July 2021 to June 2022**

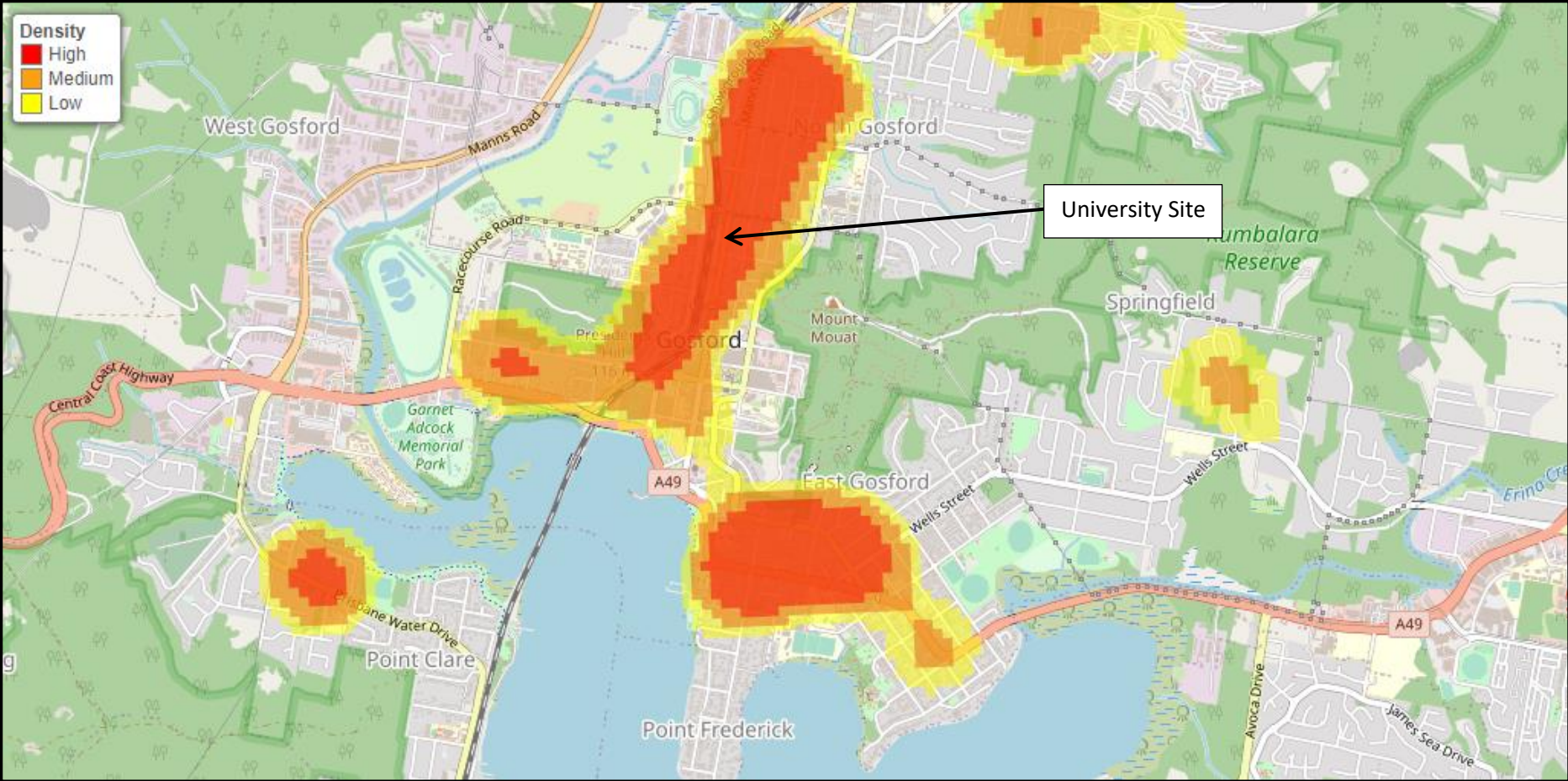**Figure 4: Incidents of Robbery from July 2021 to June 2022**

Figure 5: Incidents of Theft (Break & enter dwelling) from July 2021 to June 2022
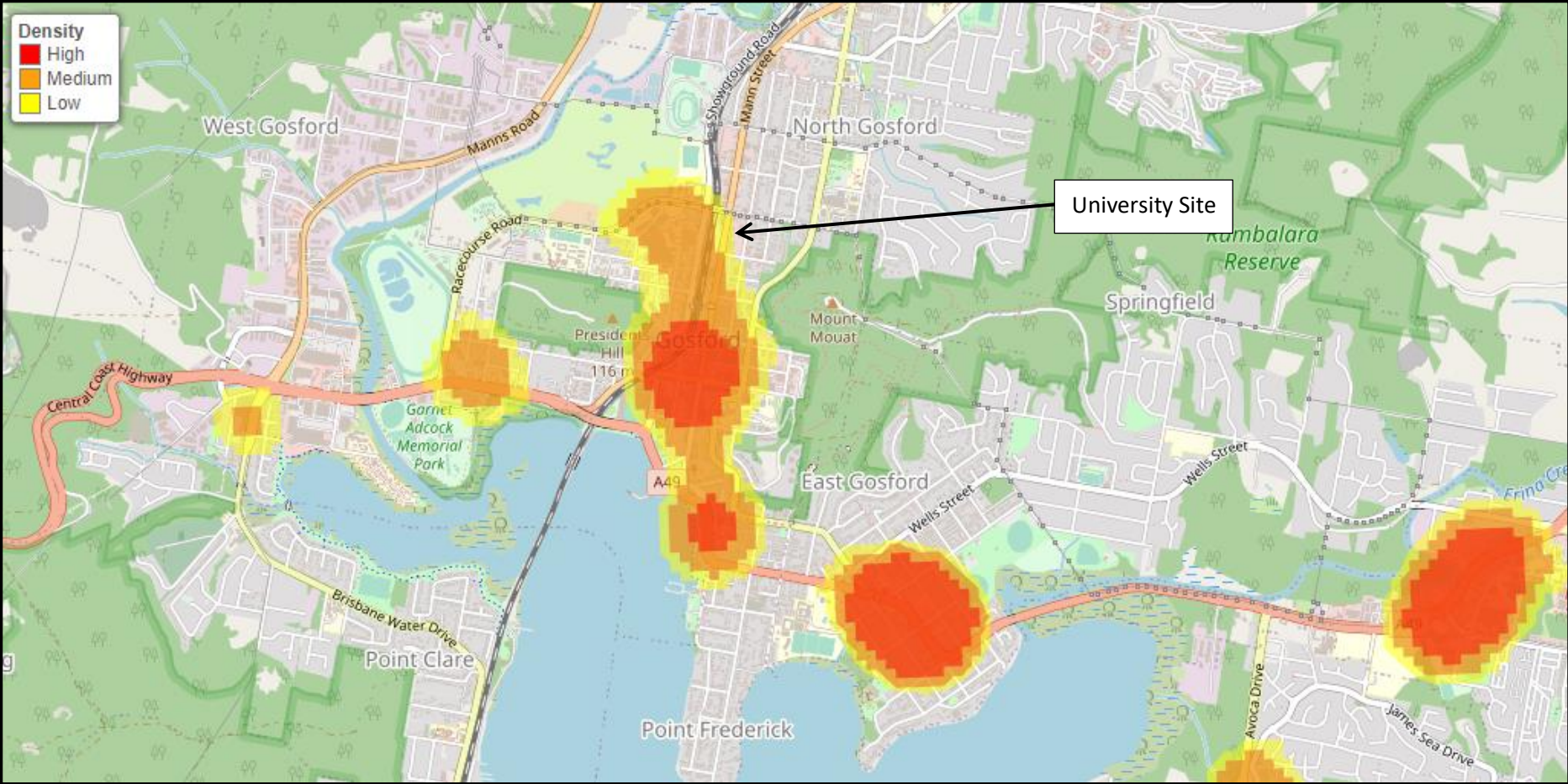
Figure 6: Incidents of Theft (Break & enter non-dwelling) from July 2021 to June 2022
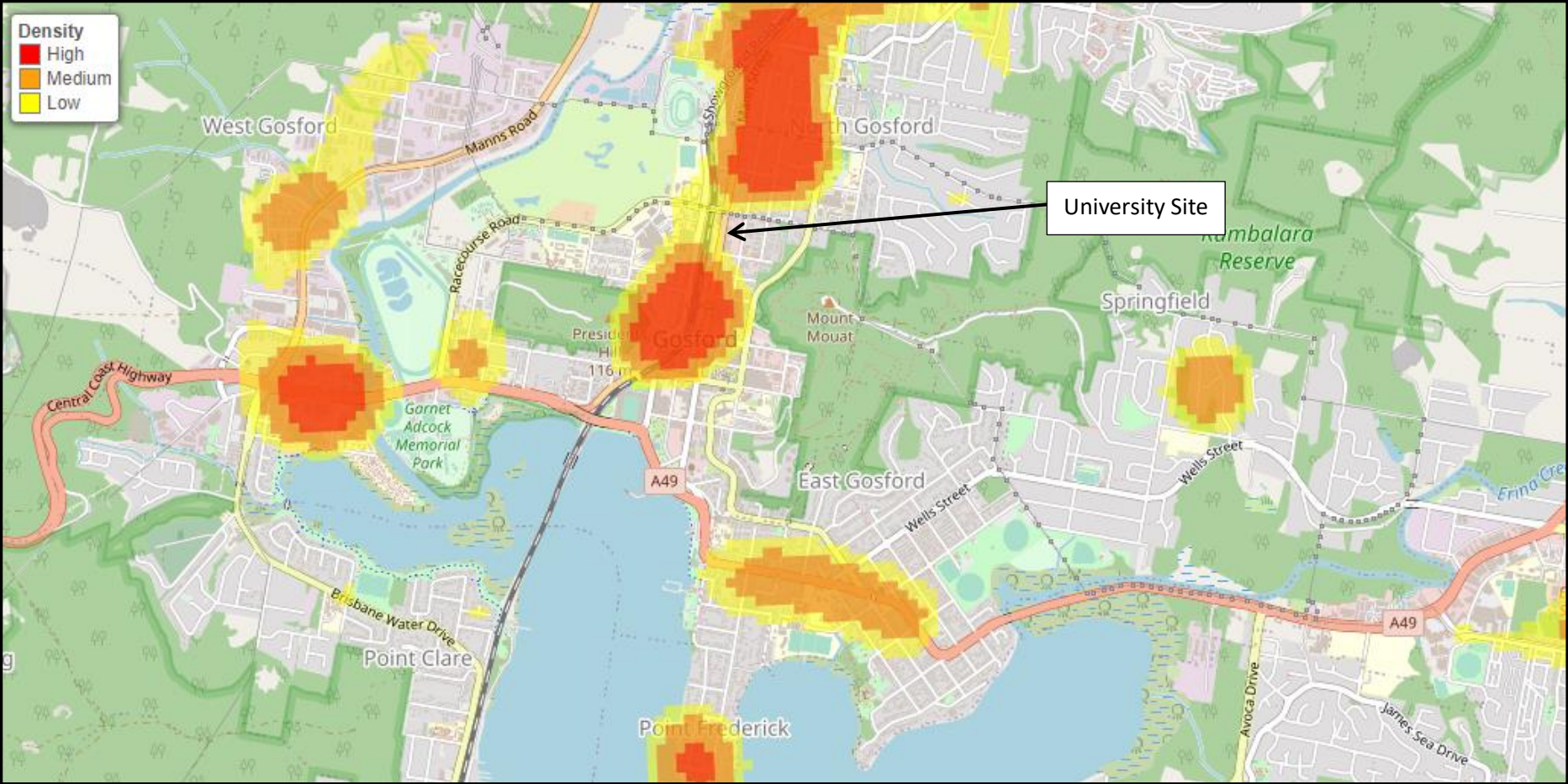
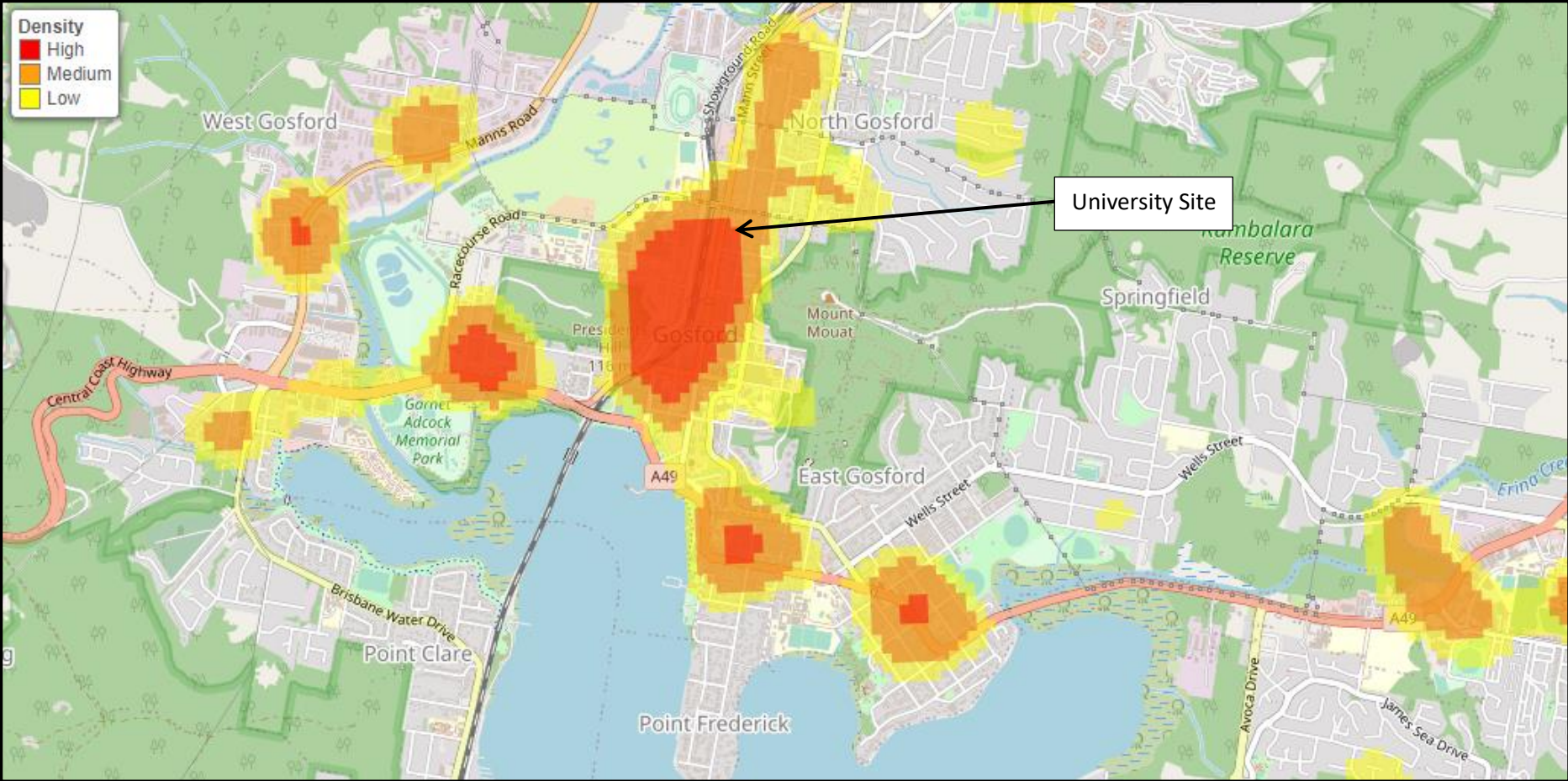**Figure 7: Incidents of Theft (Motor vehicle theft) from July 2021 to June 2022**

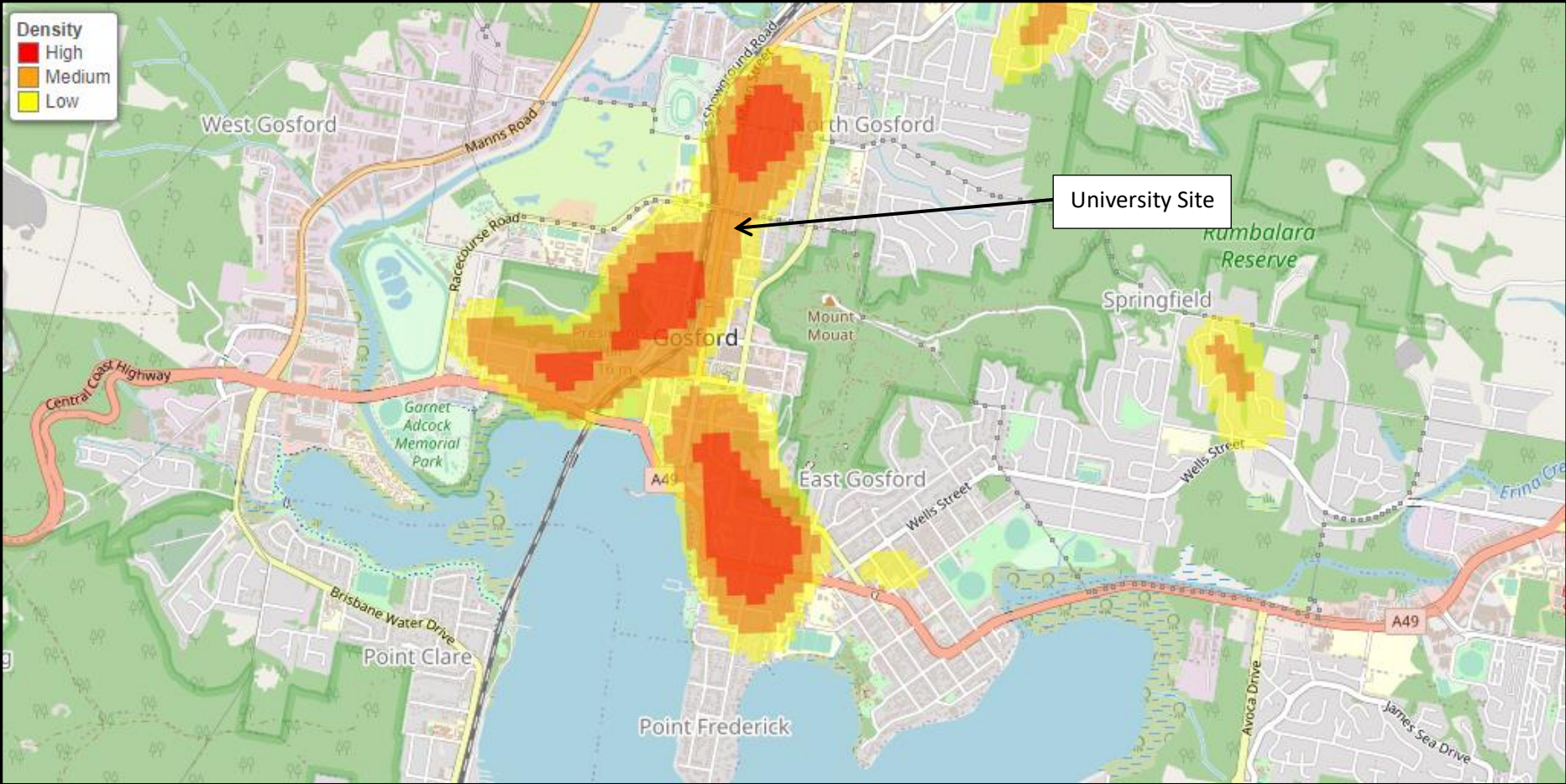**Figure 8: Incidents of Theft (Steal from motor vehicle) from July 2021 to June 2022**

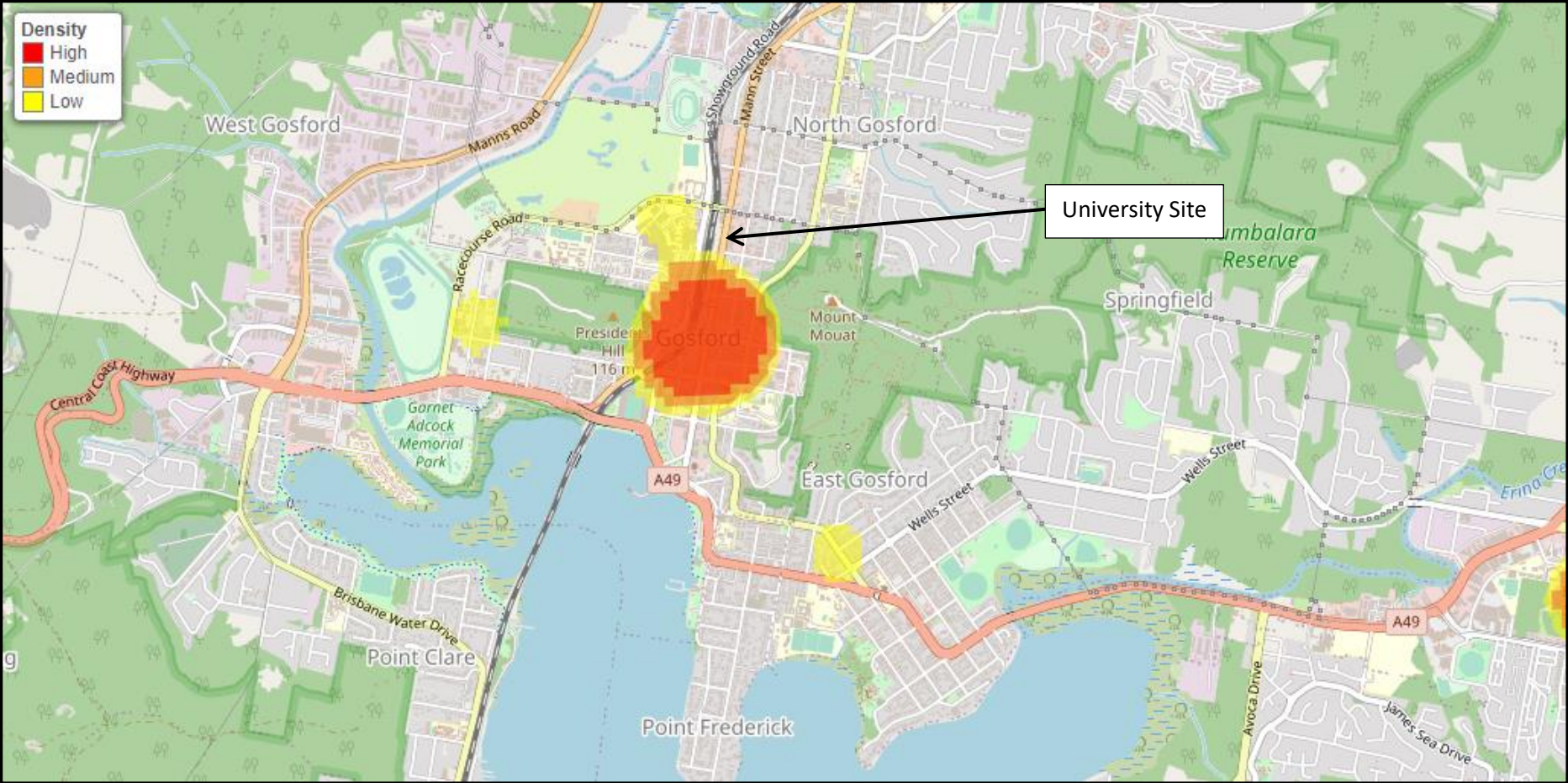**Figure 9: Incidents of Theft (Steal from dwelling) from July 2021 to June 2022**

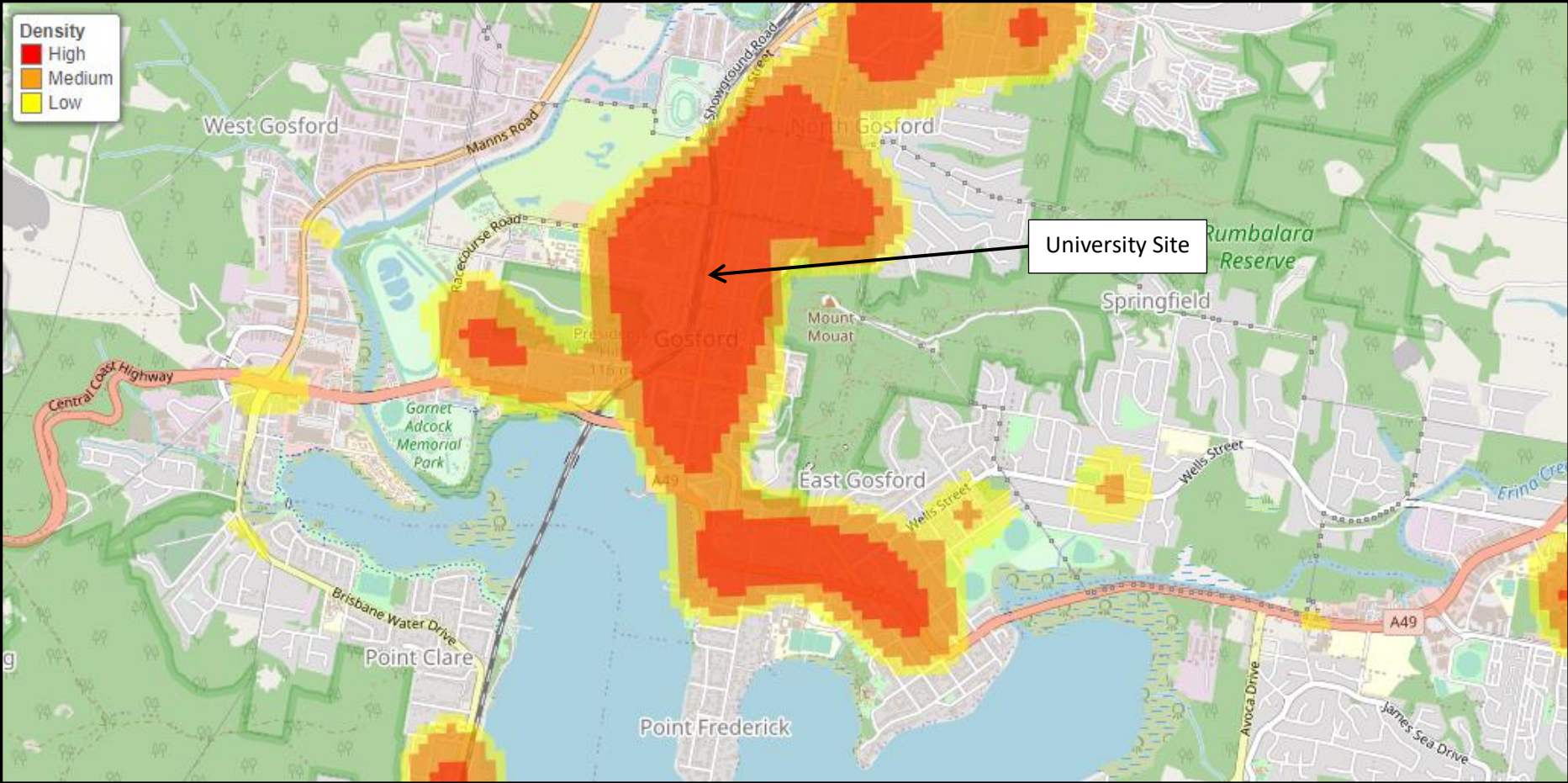**Figure 10: Incidents of Theft (Steal from person) from July 2021 to June 2022**

Figure 11: Incidents of Malicious damage to property from July 2021 to June 2022

4. General CPTED Recommendations

The following are general principles that should be applied to the site.

4.1 Territorial re-enforcement

- Any area that is not publically accessible should be signposted as such and secured.

- Shrub like vegetation can help reinforce the property boundary (i.e. as a marker) but should not be at a height that will inhibit a 'line of sight' throughout the development.

- Heavy vegetation should be avoided at any pedestrian entrance areas as it will inhibit line of sight and natural surveillance.

- Signage should be erected in order to assist with wayfinding.

- Access to areas should be restricted to all prohibited or private spaces and these areas should be signposted.

4.2 Surveillance

- Landscaping should not inhibit natural surveillance (block sight lines) or provide concealment and entrapment opportunities. When selecting and maintaining vegetation, consideration should be given to the possibility of areas becoming entrapment sites in the future.

- Shrubs should not be greater than 1 metre in height and the canopy of tall trees should be higher than 1.8 metres.

- The building design should not inhibit natural surveillance (block sight lines) or provide concealment and entrapment opportunities.

- Australian and New Zealand Lighting Standard 1158.1 – Pedestrian, requires lighting engineers and designers to consider crime risk and fear when selecting lamps and lighting levels.

- CCTV is recommended at the entry / foyer; carpark area and all access points to the building (refer figures below).

4.3 Access control

- All entry points (pedestrian and vehicle) should be clearly signposted to ensure that informal access points are not utilised as this will inhibit surveillance and therefore reduce opportunity for detection.

- Clearly identify the areas that are private / out of bounds.

- Areas that are private or restricted to be accessible only by authorised people.

- Entry doors to have deadlocks, windows to be deadlocked to reduce opportunities for forced entry.

Space / Activity Management

- Installation of 'Park Smarter' signage (or similar) is recommended in car parks to promote vehicle security.

- The area (including gardens, hard walls, fencing) should be well maintained. Any evidence of anti-social behaviour (e.g. graffiti, malicious damage, broken lights etc.) should be cleaned / fixed / replaced within 24 hours.

- The garbage bin area to be secured and kept out of general sight.

- On-site security should be the point of contact for tradespeople so their presence on-site is recorded. It is recommended that tradespeople wear a lanyard (or something similar) to identify them.

5. Site Specific Comments

A security and CPTED workshop was held on Tuesday 29 November to discuss the preliminary plans and CPTED comments. The workshop was attended by representatives from the University of Newcastle, APP, James Marshall & Co and Lyons. Actions and outcomes from the workshop are listed below and to be incorporated into the final plans.

Intercom access for service vehicles. Linked to control room at Callaghan Campus.

Area to be monitored via CCTV

Industry engagement area to be accessible only during events in this location.

Main entry point(s) to be monitored via CCTV.

Access to be restricted out of hours.

Door to be able to be locked if there is a security breach / safety concern during normal teaching hours.

Landscaping in public area not to inhibit line of sight.
Area to be monitored via CCTV
Planting structures to assist secure this area and prevent access into the public areas by vehicles.

Carpark to be secure via roller door. Access for staff and authorised persons only.

Secure access into building at this point (carpark access only).

Glass panel into door enabling vision into / out of car park area.

Carpark to be lit at all times and painted in a light colour to assist with visibility throughout.

Car park to be monitored via CCTV

End of trip area to be accessible by students from within the main foyer area.

Figure 12: Ground Floor and Carpark
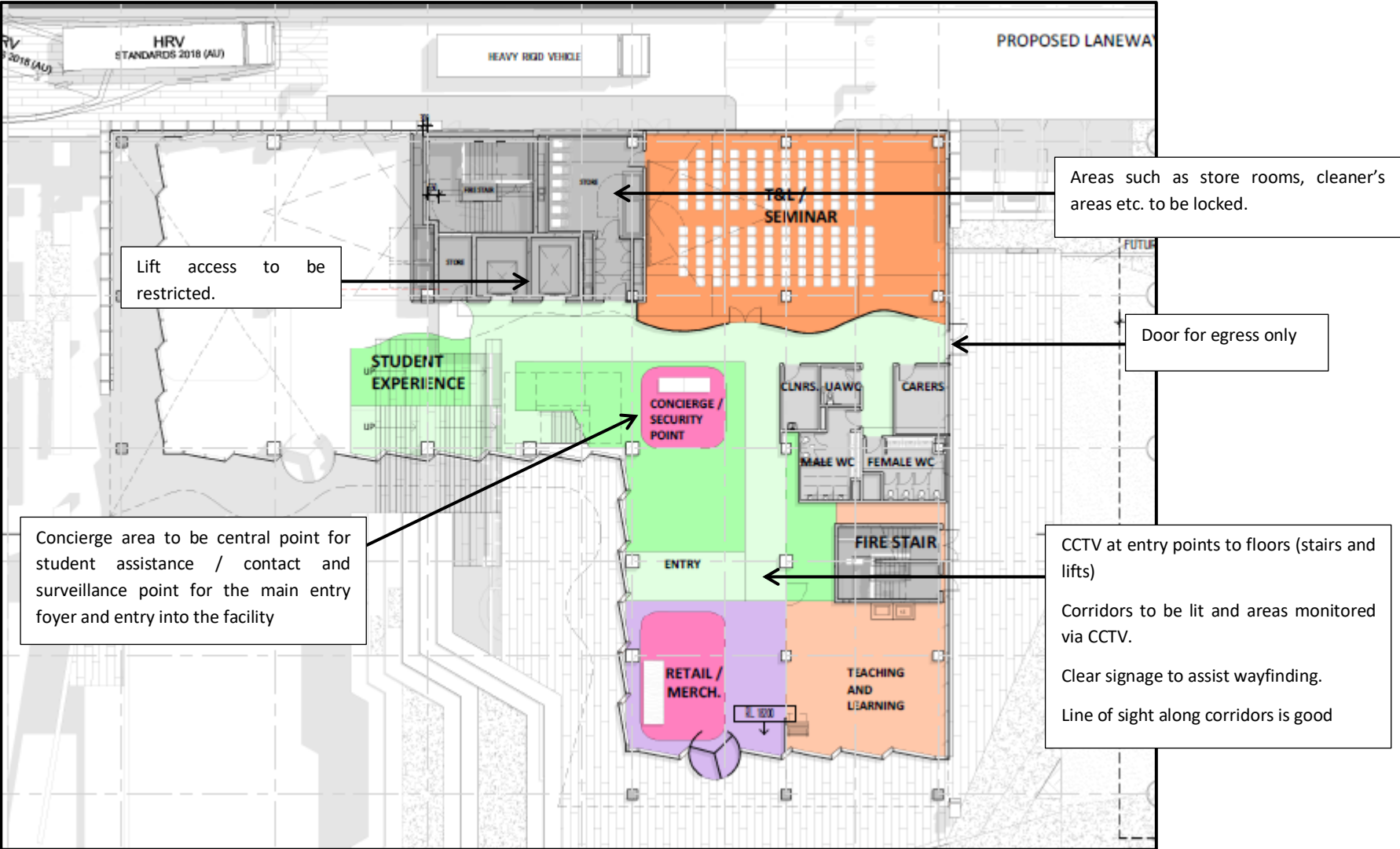
Figure 13: First Floor Area

Within the figure:

HRV STANDARDS 2018 (AU)

HEAVY RIGID VEHICLE

PROPOSED LANEWAY

T&L / SEMINAR

STUDENT EXPERIENCE

CONCIERGE / SECURITY POINT

CLNRS. UAWC

CARERS

MALE WC FEMALE WC

FIRE STAIR

ENTRY

RETAIL / MERCH.

TEACHING AND LEARNING

Callout boxes:

Areas such as store rooms, cleaner's areas etc. to be locked.

Lift access to be restricted.

Door for egress only

Concierge area to be central point for student assistance / contact and surveillance point for the main entry foyer and entry into the facility

CCTV at entry points to floors (stairs and lifts)

Corridors to be lit and areas monitored via CCTV.

Clear signage to assist wayfinding.

Line of sight along corridors is good

Figure 14: Roof Deck Area

Area to be lit and monitored via CCTV.

Area to be secure to prevent access by vehicles.

Planting should not to inhibit line of sight.

Pavilion area to have a permeable roof so it cannot be used for shelter after hours.
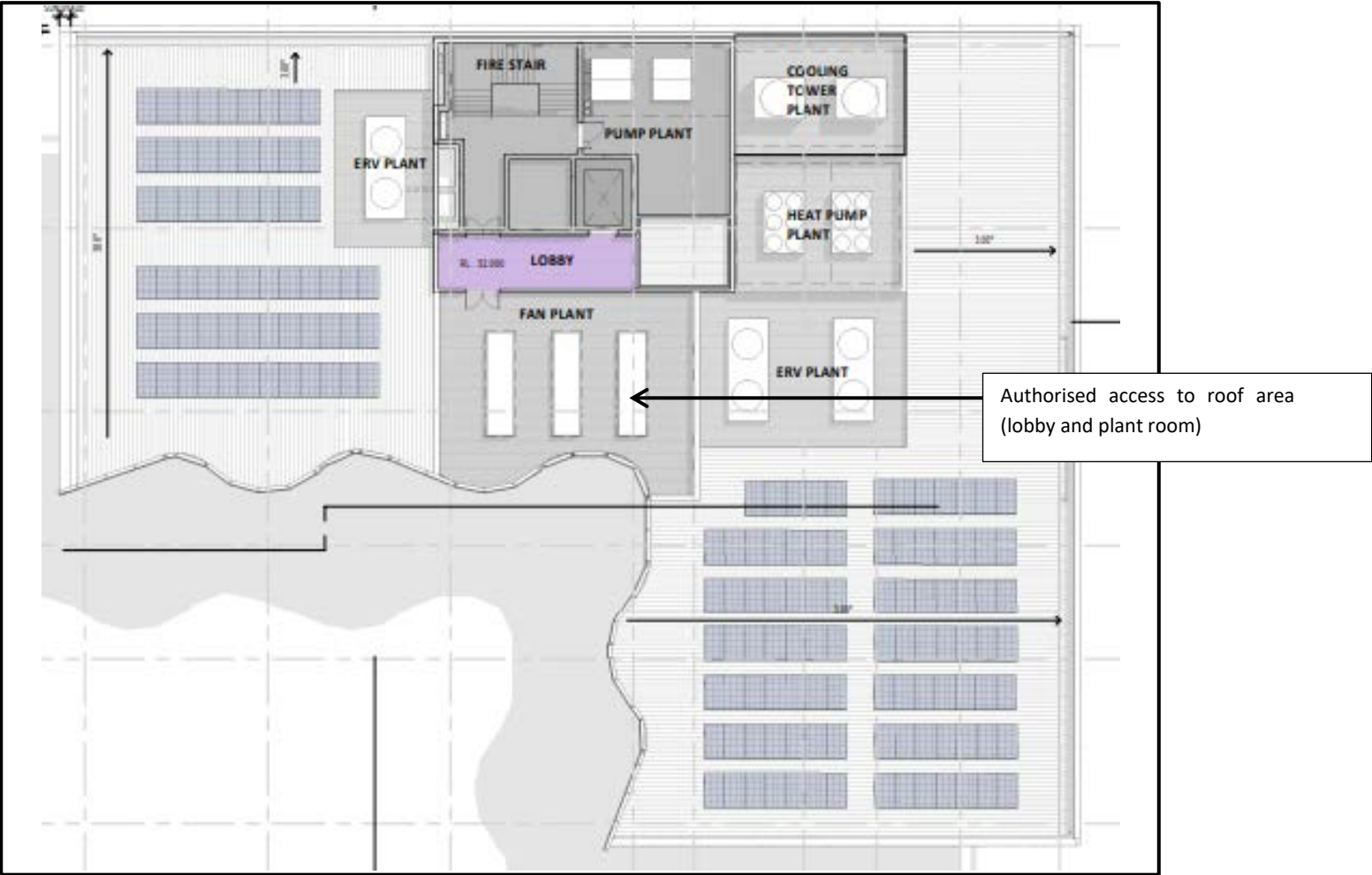
Figure 15: Public Space Area

6. Other Security Measures

The University of Newcastle campus has a comprehensive safety and security program which would be incorporated into the Gosford Campus. This would include, but not be limited to, the following:

- Safety and security to be included in the campus orientation.
- Provision of face-to-face briefings at the commencement of each year.
- Signage and web-based applications to assist with campus specific safety and security measures.
- Leaving the campus and pedestrian safety at night – including travel to motor vehicles and public transport.
- Security shuttle to take to key areas (such as public transport and accommodation services)
- Safety advice including:
  - Personal safety
  - Security of belongings and valuables
  - Engagement with strangers
  - Walking around the campus
  - Bike and vehicle safety
  - Etc.

- Campus based maps and plans showing security locations, help points etc. as per the example in Figure 16.
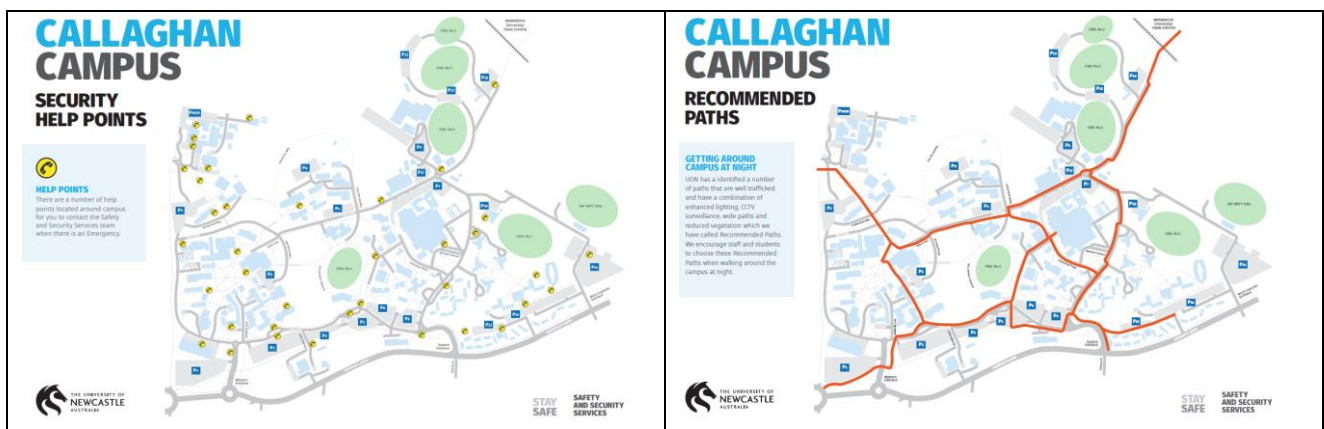

Figure 16: Example of Campus Safety Maps

- Help points identified by logo.
- Security contact numbers.
- Accessible / visible security staff on site during campus hours especially at or near main access points and foyers.

Strategies employed at other campus should be adopted here as the facility is difficult to manage in all areas of CPTED – in particular, access control. It is therefore important to ensure that safety and security measures are accessible and visible when the campus is operating. Safety measures should also be extended to areas beyond the campus to parking areas, transport hubs or if this is not possible have bus stops, taxi ranks etc. located close to the entry of the facility.

7. Conclusion

James Marshall & Co has been engaged to prepare a CPTED assessment in relation to a proposed academic facility at 305 Mann Street Gosford.

The building design is simple and highlights no significant design elements that are contrary to CPTED principles. The main issue facing safety and security relates to access control and safety and security while on site and moving to and from the campus. The principles outlined in this report and outcomes of the security and CPTED workshop will minimise but not eliminate all risk. However, provisions of on-campus safety measures that are outlined in Section 6 will also reinforce safety and security. These principles are well established at other campuses offered by the University of Newcastle, so the implementation of such strategies is not identified as an issue.

The surrounding areas present an element of risk as these areas are outside of the campus precinct. However, it is acknowledged that the development is part of a broader revitalisation of Gosford which is a positive strategy that aligns with CPTED principles.