

JAMES MARSHALL & CO

CPTED Assessment

Proposed Multi-dwelling Housing Development:

119 Springfield Drive Lochinvar NSW.

1. Introduction

James Marshall & Co has been engaged to prepare a Crime Prevention Through Environmental Design (CPTED) report for the proposed multi dwelling housing development, comprising 31 dwellings, associated works, and strata subdivision into 31 lots at 113 Springfield Drive Lochinvar NSW. The proposed development includes the following:

- 31 dwellings (comprising 3 one bedroom dwellings and 28 two bedroom dwellings), each with private courtyard
- Associated car parking
- The one bedroom dwellings are classified as being accessible to people with disabilities
- Communal open space area comprising:
 - BBQ area
 - Play equipment
 - Seating

The indicative site plan is shown in Figure 1; and location and existing land-use character in Figure 2.

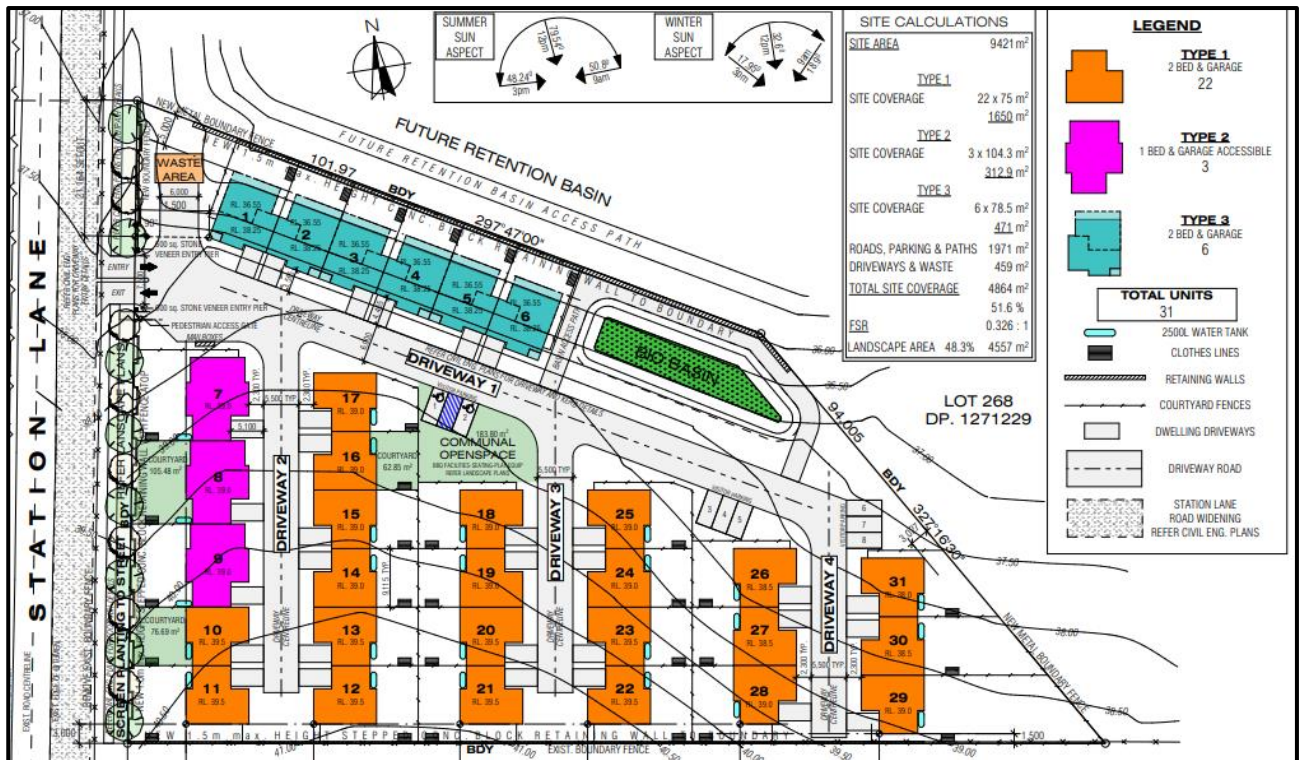


Figure 1: Indicative Site plan

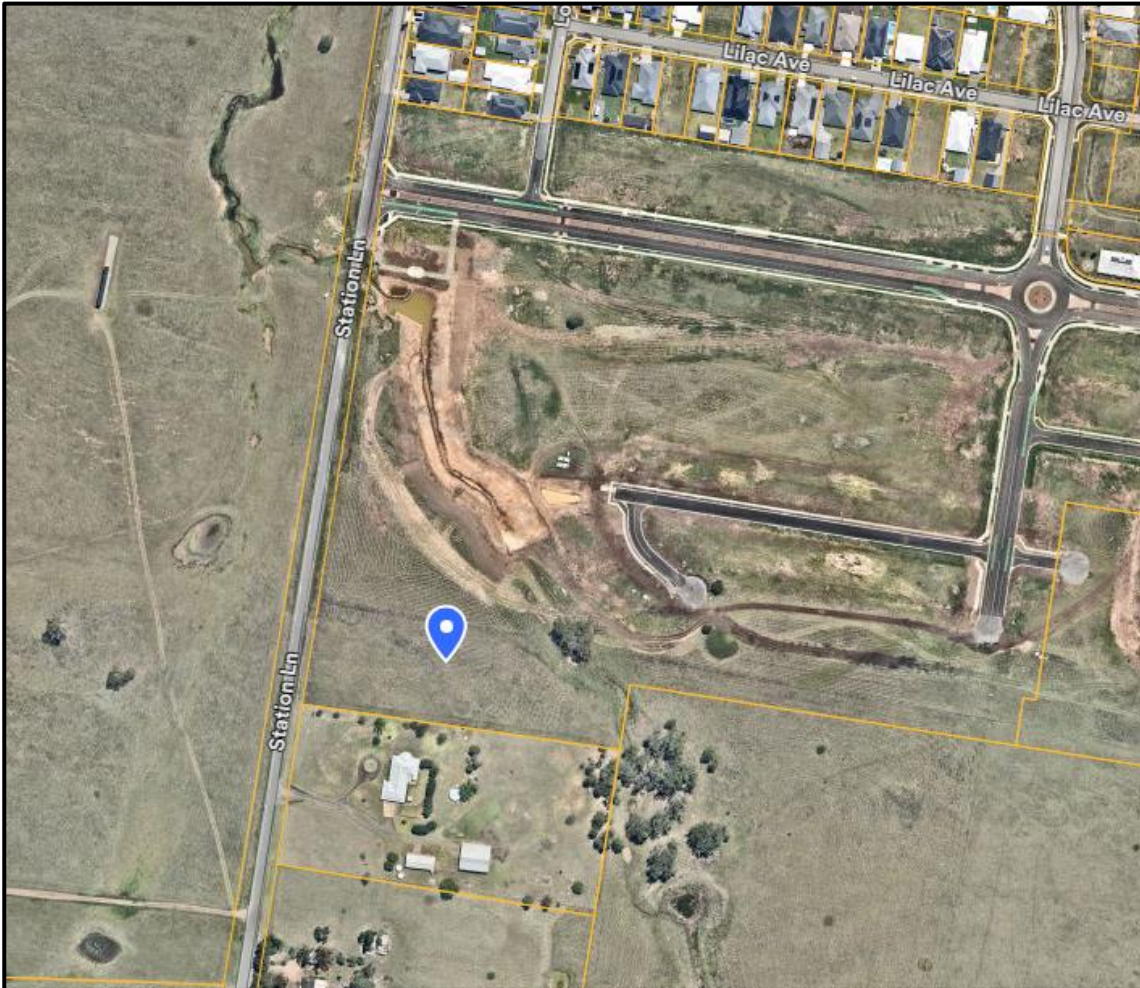


Figure 2: Aerial of the site (Nearmap, 26 February 2024)

The CPTED assessment aims to ensure environmental factors take into account potential crime risk factors to promote safety amongst residents living in the proposed facility and is prepared in accordance with:

- NSW government publication Crime Prevention and the Assessment of Development Applications – Guidelines Under Section 4.15 of the EP and A Act.
- Maitland Development Control Plan (DCP) 2011: Part C Design Guidelines (C12: Crime Prevention through Environmental Design (CPTED)).
- This report also makes reference to the Maitland Community Safety Plan 2013 – 2016.

This CPTED assessment has incorporated the following methodology:

- Site visit and land use assessment of the proposed development site and surrounding area.
- Assessment of plans for the proposed development using Safer by Design principles.
- Assessment of crime statistics/data for Maitland City and area surrounding the development site.

The methodology involves both a broader strategic assessment of the LGA's crime characteristics as well as the localised site characteristics; allowing for an assessment whether the development is likely to contribute to an increased incidence of crime (or perceived) if it is approved. The recommendations made in this report are consistent with Safer by Design principles.

2. Safer By Design

2.1 Overview

In April 2001, the then NSW Department of Infrastructure, Planning and Natural Resources (Department of Planning 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.

Crime Prevention Through Environmental Design (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.

3. Area Analysis

3.1 Site Characteristics

Lochinvar is located along the New England Highway in the Lower Hunter Valley to the west of Maitland. Located in close proximity to the New England Highway, the Great Northern rail corridor and the F3 link, Lochinvar has a strategic position in the region for urban development.

The site is located within the Lochinvar Urban Release Area (URA), which forms part of the Western Maitland growth area within the Hunter Regional Plan 2041. The URA is identified as a regionally significant growth area within the Greater Newcastle District for accommodating housing supply to cater for population targets. As part of Western Maitland, the URA in its entirety is expected to house more than 30,000 people over the next 20 years.

The study area is within cleared, slightly undulating land where development can be contained within a defined landscape without the need to sprawl into visually and agriculturally significant areas. Lochinvar is also in close proximity to the expanding industrial area of Rutherford providing an employment area accessible by public transport. Similarly, a number of regional transport corridors converge in the Lochinvar area, making opportunities for inter and intra-regional commuting. The presence of existing facilities and services and the ability to extend these into suitable adjoining areas is a key feature of Lochinvar resulting in cost-effective and resource-efficient development to promote affordable housing.

The Maitland DCP states that the Lochinvar URA comprises a total of 650 hectares of land, with an approximate residential yield of 5,000 lots. As stated above the Lochinvar URA reinforces the area as being regionally significant and a key site to achieve the dwelling targets for population growth in the Lower Hunter.

With the above in mind, Lochinvar is undergoing change. Residential development is underway and infrastructure to support the increasing population can be seen with upgraded road infrastructure, community facilities and areas undergoing site preparation works. There is new educational infrastructure and existing school facilities have been expanded.

The 2021 ABS Census records a population of 1,095 people. The median age of the population is 40 years. There are 318 families and 439 dwellings. The 2016 ABS Census recorded a population of 748 people with a media age of 45 years. There were 229 families and 296 dwellings.

As further residential development takes place, the population characteristics will obviously continue to change and it is expected that there will be more families and the median age is likely to decrease. Services and facilities will therefore need to cater for the population (i.e. provided within the local community).

3.2 Maitland City Council Community Safety Plan 2013 - 2016

The Maitland Community Safety Plan 2013 – 2016 is the only found source of crime data held by Council. However, the intent of the Plan remains relevant. Community safety refers to both crime and the perception of crime that can affect people's quality of life and the many aspects of community life including trusting neighbours; the willingness of residents to move freely about the community; resident's sense of safety; use of public transport and the use of community facilities and public spaces for recreation and entertainment.

3.3 Maitland City Development Control Plan (DCP)

The Maitland City DCP identifies specific requirements for community safety and safer by design principles. These are outlined in Part C12. The development requirements set out on the DCP are:

- The security of buildings and public spaces is achieved through the application of Crime Prevention through Environmental Design principles.
- Territorial reinforcement is achieved through good quality, well maintained buildings and spaces and the delineation of public and private areas.
- Good natural surveillance is achieved by the position of buildings and the orientation of uses toward public areas.

- Landscaping and lighting contribute to the safety of an area.
- Mechanical surveillance (e.g. CCTV) is only used where passive surveillance cannot be achieved or in isolated, high risk areas.
- Way-finding, desire lines and formal/informal routes are reinforced by physical and symbolic barriers that channel and group pedestrians into areas.
- Activity in public spaces is promoted by providing and maintaining high-quality public areas and promoting a diversity of uses that encourage activity throughout the day and night.
- Perception of crime is minimised by maintenance of public areas and the rapid response to vandalism and graffiti.

The following developments are identified as requiring a Crime Prevention through Environmental Design assessment that is prepared by an accredited person.

- Mixed use residential/commercial development
- Medium and high density residential development
- Subdivisions involving newly developing areas
- Parks and open space or publicly accessible areas
- Community uses
- Sport, recreation and entertainment areas
- Other high use areas or developments where crime may be an issue.

3.4. Crime Characteristics

Crime characteristics and LGA rankings for the Maitland LGA are shown in Table 1. Table 2 shows Crime by Premises (within the Maitland LGA) and Hotspot maps are also used to illustrate the location of crime in the area.

Table 1: NSW LGA Ranking of Reported Crime for Maitland City 2013 – 2023

Reported Crime	Rank 2011 - 2023										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Assault - non-domestic violence related	76	83	67	53	54	47	46	-	53	41	51
Assault - domestic violence related	40	51	27	23	31	29	41	-	45	31	31
Robbery	40	24	33	33	40	28	73	-	25	29	44
Break and enter - dwelling	39	61	48	36	37	34	49	-	44	51	46
Break and enter - non-dwelling	61	91	40	55	52	55	39	-	58	65	42
Motor vehicle theft	24	34	38	13	16	27	22	-	41	37	36
Steal from motor vehicle	29	23	12	7	14	25	30	-	34	20	21
Steal from retail store	48	30	53	25	19	8	11	-	12	20	19
Malicious damage to property	48	49	51	42	36	46	37	-	43	45	49

Source: BOCSAR (April 2024)

Table 2: Crime and Premises Type

<i>Premises type</i>	<i>Domestic violence related assault</i>	<i>Non-domestic violence related assault</i>	<i>Sexual offences</i>	<i>Robbery</i>	<i>Break and enter non-dwelling</i>	<i>Motor vehicle theft</i>	<i>Steal from motor vehicle</i>	<i>Steal from person</i>	<i>Malicious damage to property</i>
Adult entertainment	0	0	0	0	1	0	0	0	0
Financial institution	0	1	0	0	0	0	0	0	0
Office	1	2	0	0	3	0	1	0	4
Personal services	0	0	2	0	9	0	0	0	7
Retail/wholesale	5	61	8	4	57	10	24	4	61
Carpark	1	3	0	1	2	12	99	0	32
Education	5	61	30	0	19	1	0	1	29
Health	2	7	1	0	7	1	0	0	8
Industrial	0	5	0	0	34	10	13	0	13
Law enforcement	2	1	0	0	0	0	0	0	2
Licensed premises	6	29	3	1	2	2	6	1	18
Marine transport	0	0	0	0	0	0	0	0	0
Outdoor/public place	36	62	16	6	6	46	136	4	69
Recreation	0	6	0	1	15	4	2	1	15
Religious	0	0	0	0	4	0	2	0	5
Residential	644	173	227	4	0	145	221	5	453
Rural industry	0	0	0	0	0	1	0	0	0
Public transport	4	13	2	1	2	0	7	5	37
Utilities	0	1	0	0	3	0	1	0	1
Vehicle	3	4	2	0	0	0	0	0	0
Firearm premises	0	0	0	0	0	0	0	0	0
Unknown	0	3	1	0	0	1	3	0	0
Total	709	432	292	18	164	233	515	21	754

Source: BOCSAR (April 2024)

3.5 Location of Crime

The concentration of crime in the LGA has been mapped and shown as 'hot spots' (meaning the higher concentration / number of the incidence of crime appear a darker shade of red).

The available hot spot maps for Maitland LGA, with the general area of the development highlighted, are shown below. It should be noted that common crime trends will be influenced by the land use characteristics. For example, there will be a higher rate of alcohol related offences in areas where there is a concentration of late night trading liquor outlets, there may be a higher incidence of malicious damage in areas where there is less surveillance, and there will be a higher incidence of break and enter (dwelling) in residential areas.

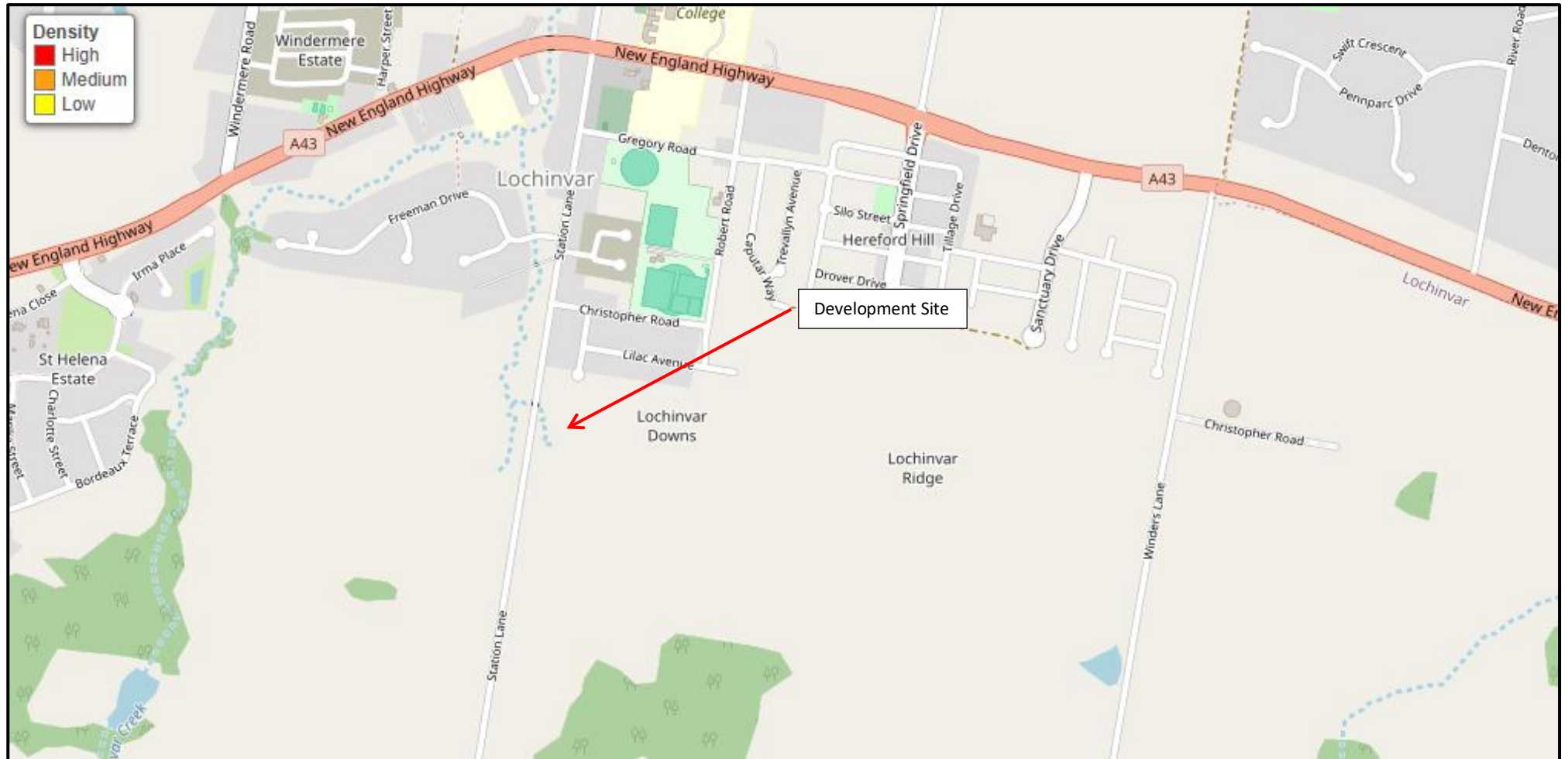


Figure 3: Incidents of Assault (Domestic assault) from July 2022 to June 2023

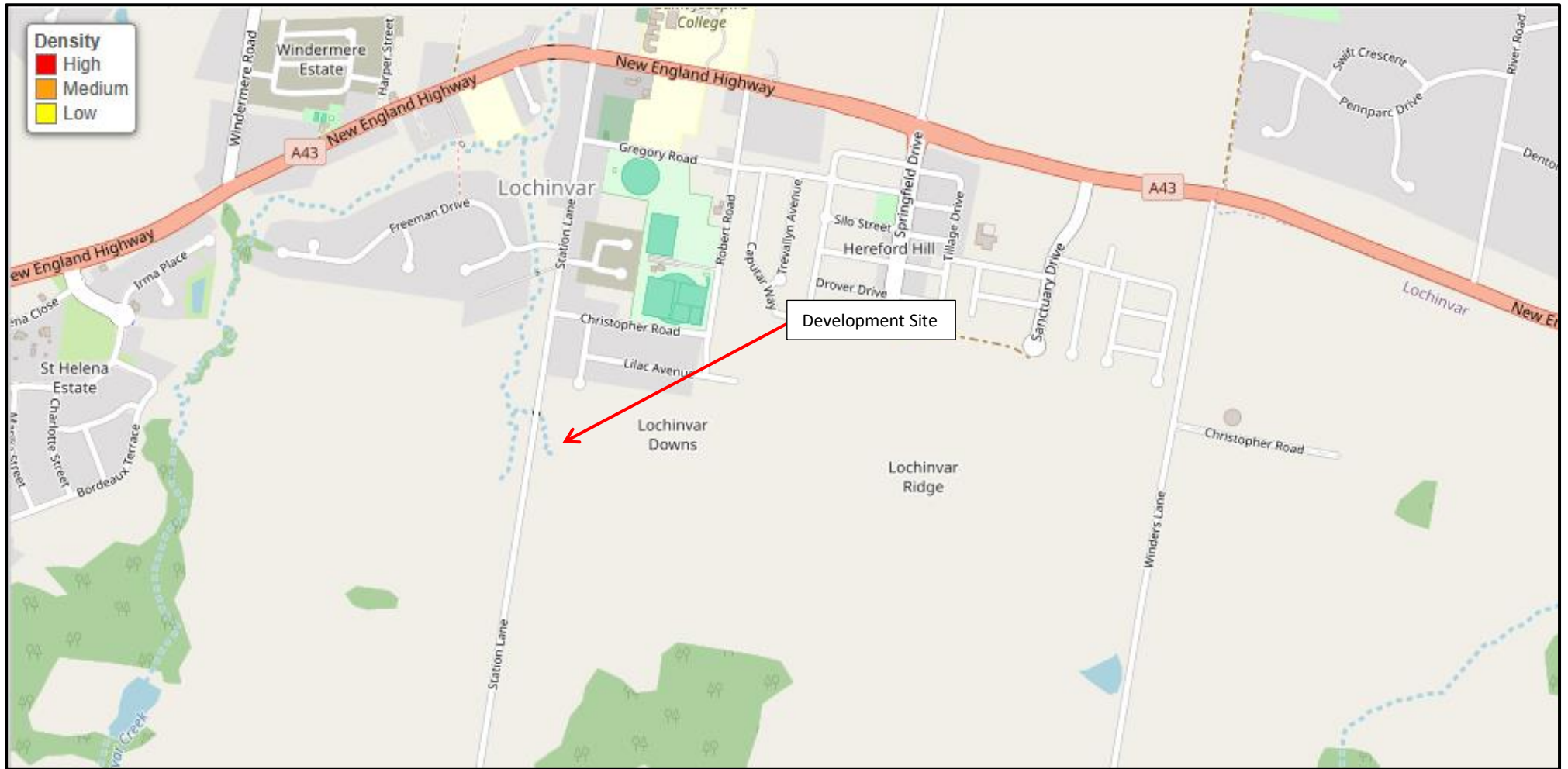


Figure 4: Incidents of Assault (Non-domestic assault) from July 2022 to June 2023

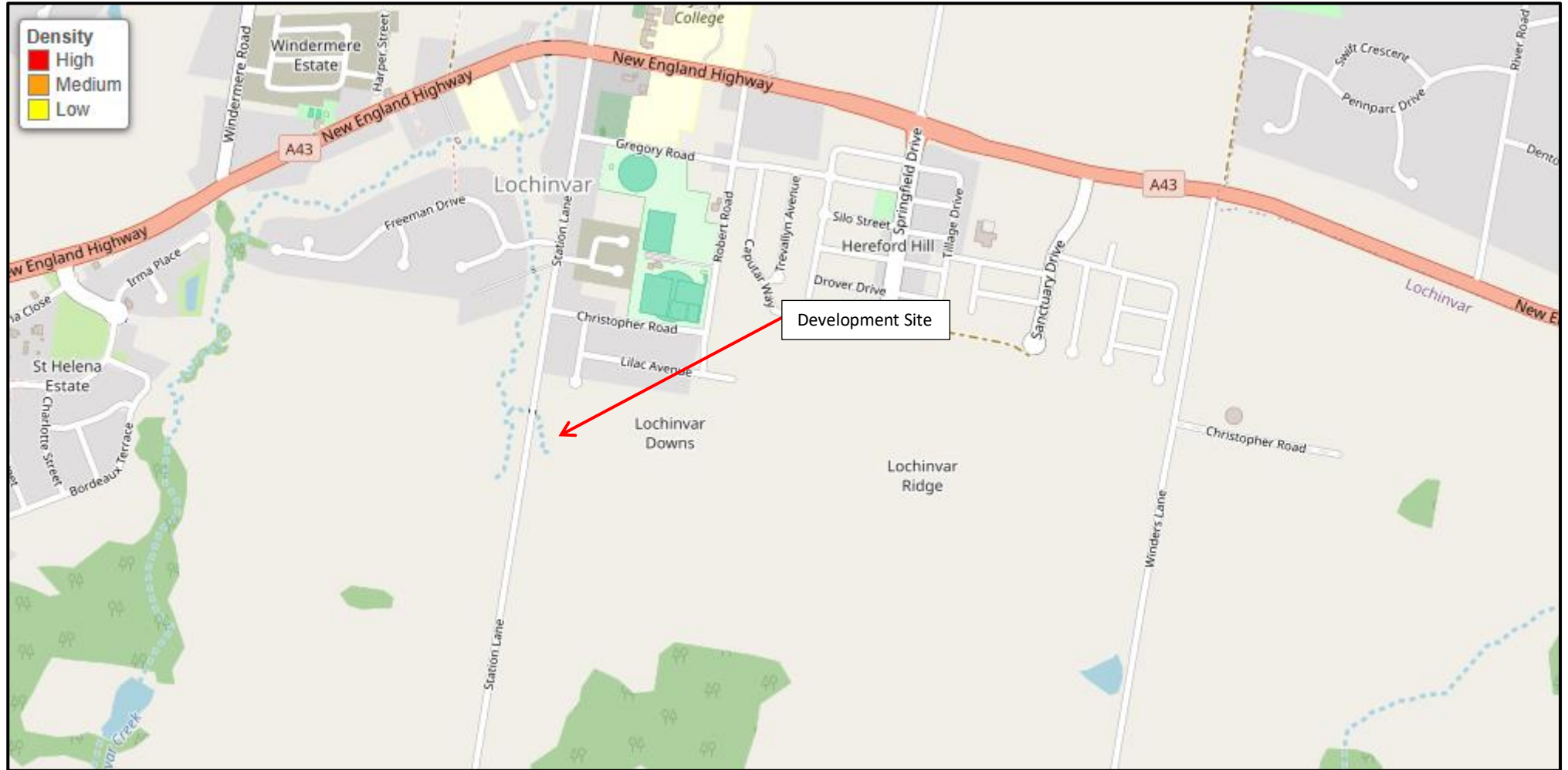


Figure 5: Incidents of Robbery from July 2022 to June 2023

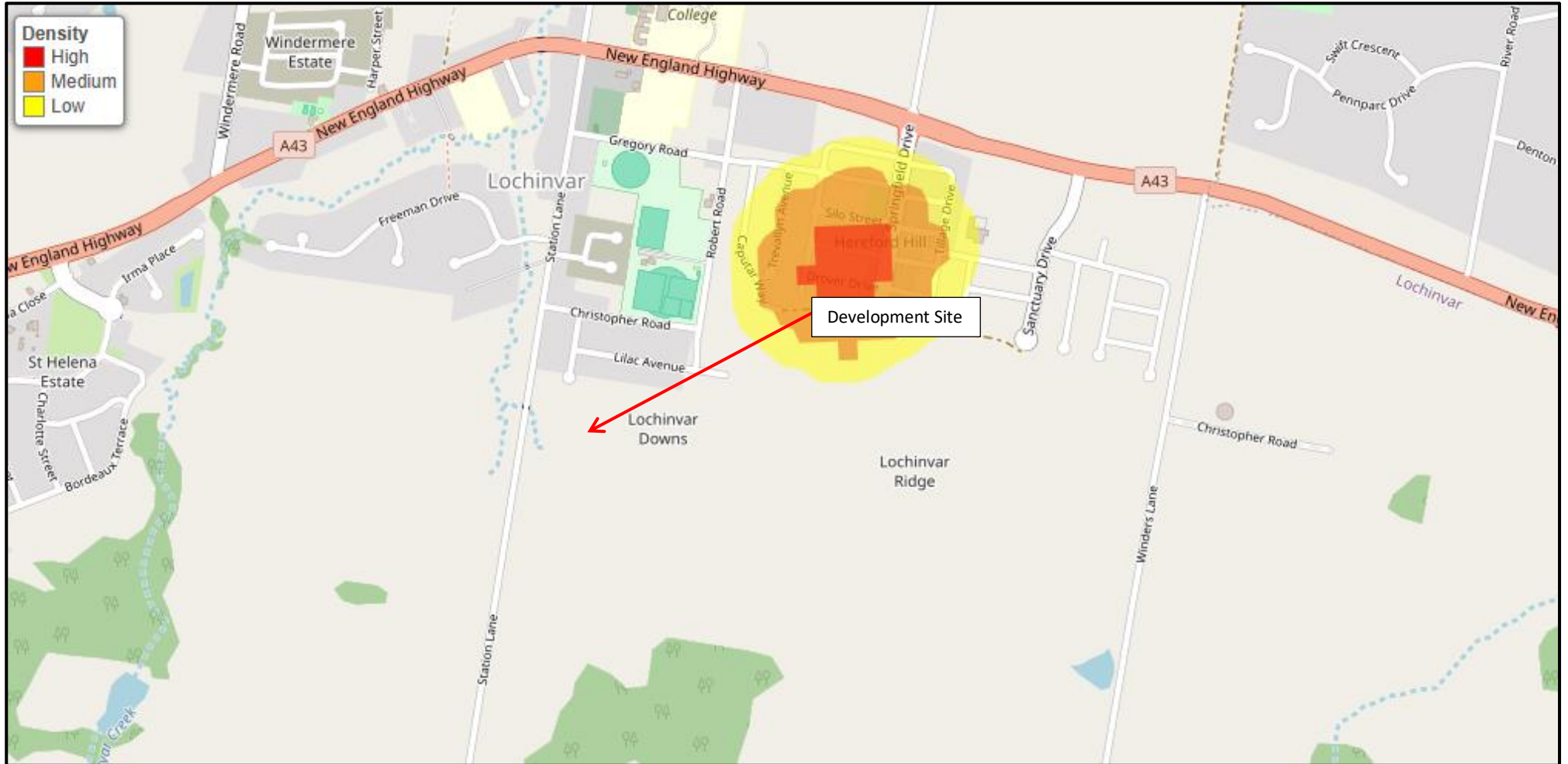


Figure 6: Incidents of Theft (Break & enter dwelling) from July 2022 to June 2023

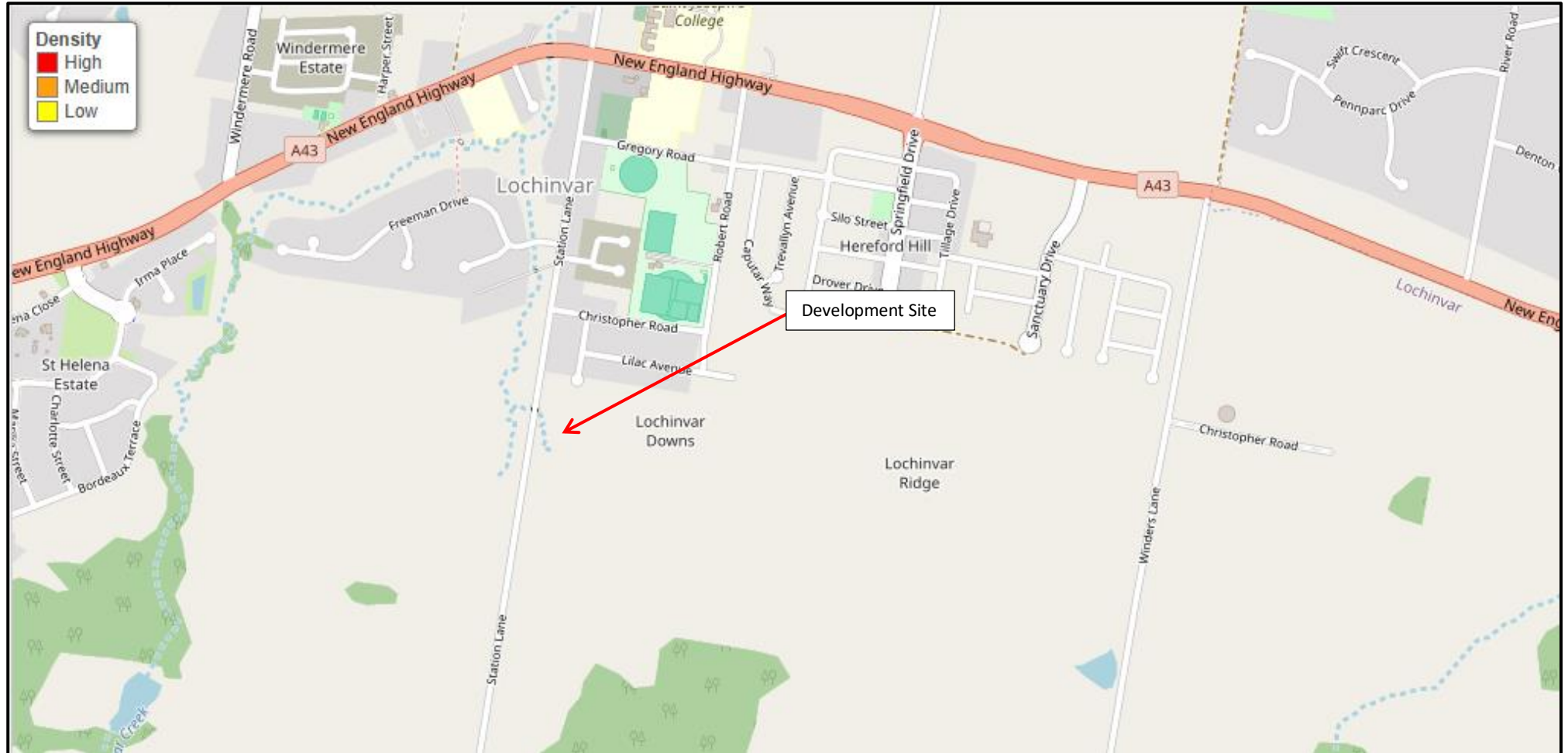


Figure 7: Incidents of Theft (Break & enter non-dwelling) from July 2022 to June 2023

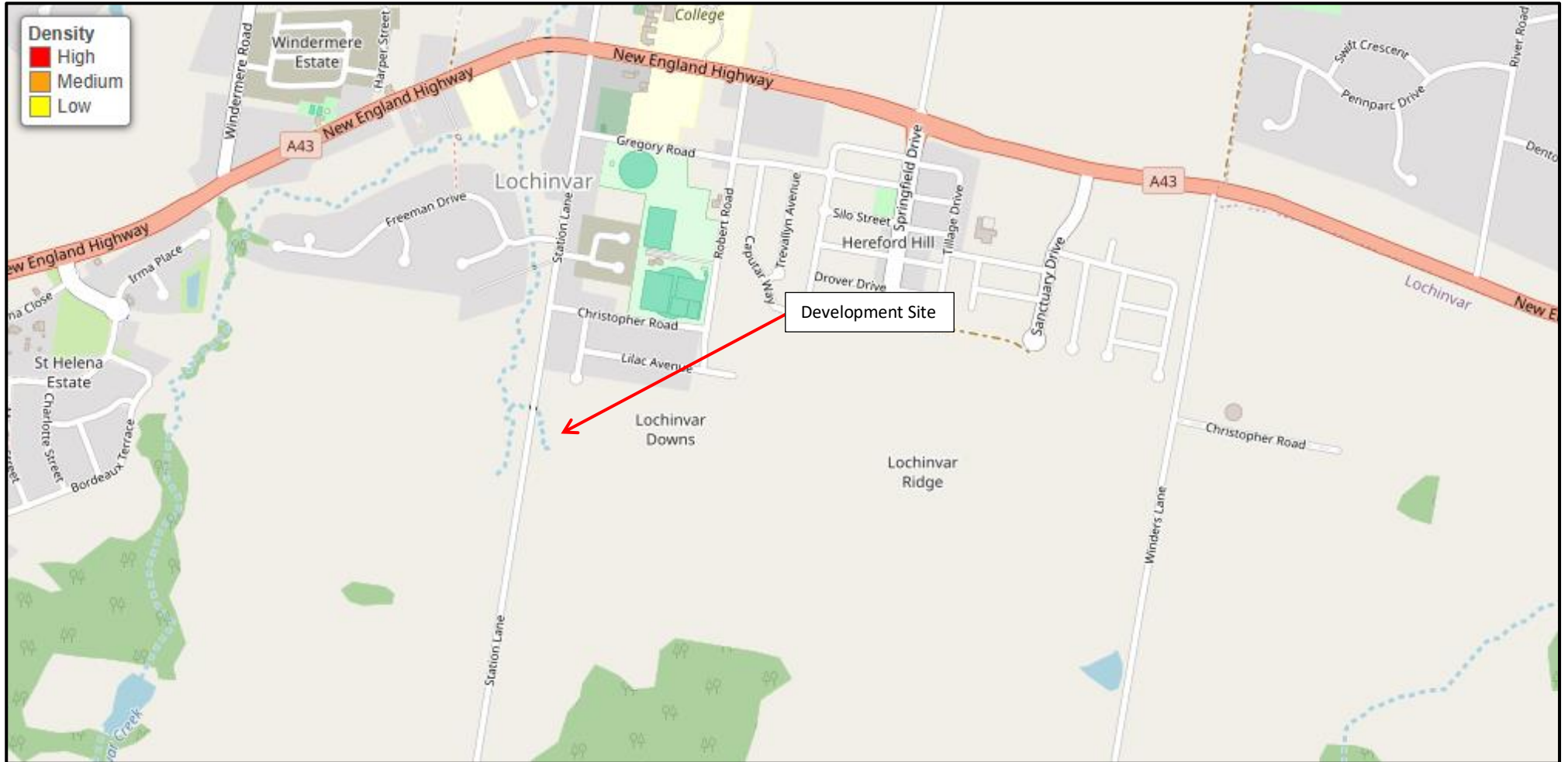


Figure 8: Incidents of Theft (Motor vehicle theft) from July 2022 to June 2023

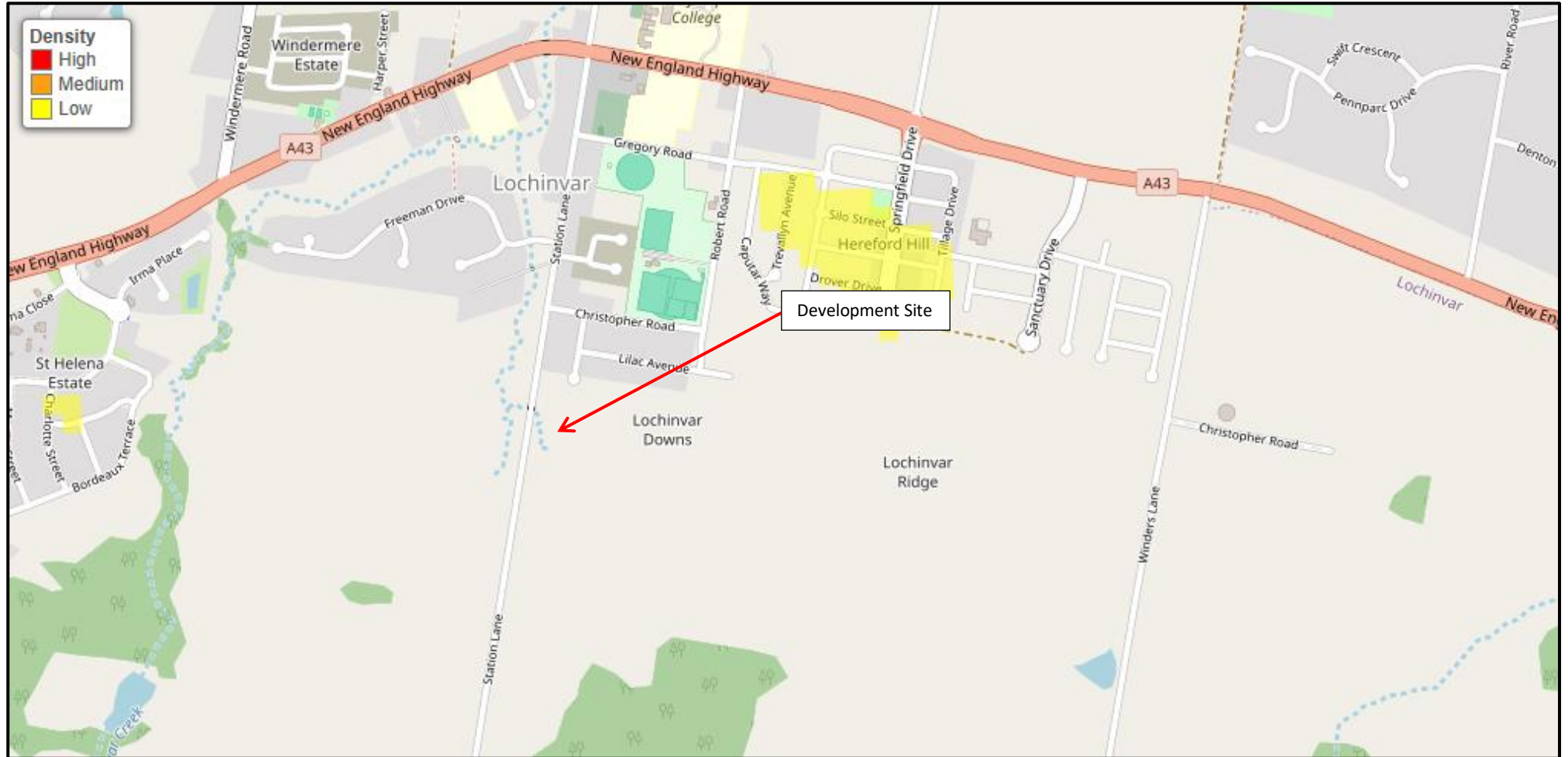


Figure 9: Incidents of Theft (Steal from motor vehicle) from July 2022 to June 2023

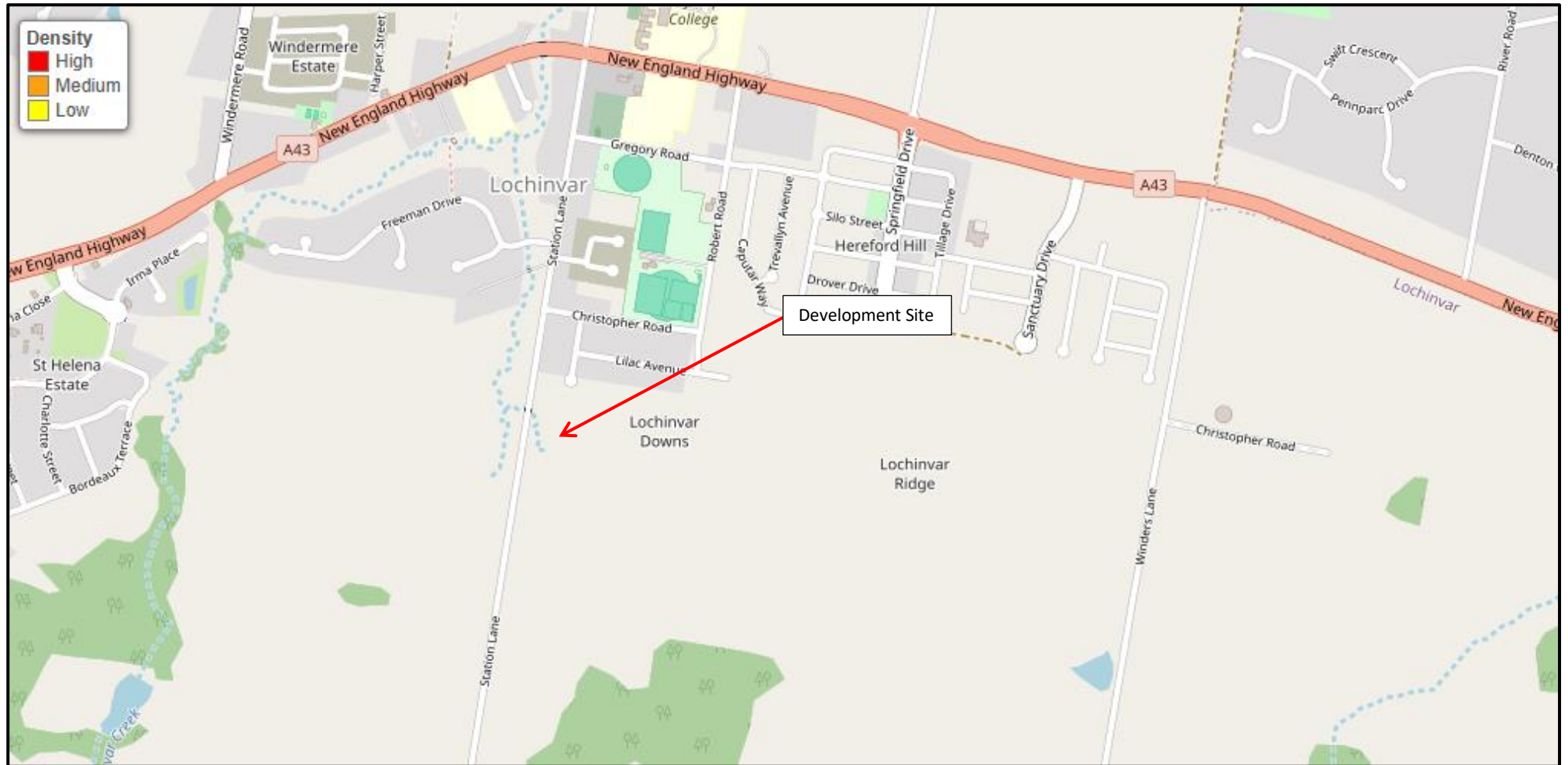


Figure 10: Incidents of Theft (Steal from dwelling) from July 2022 to June 2023

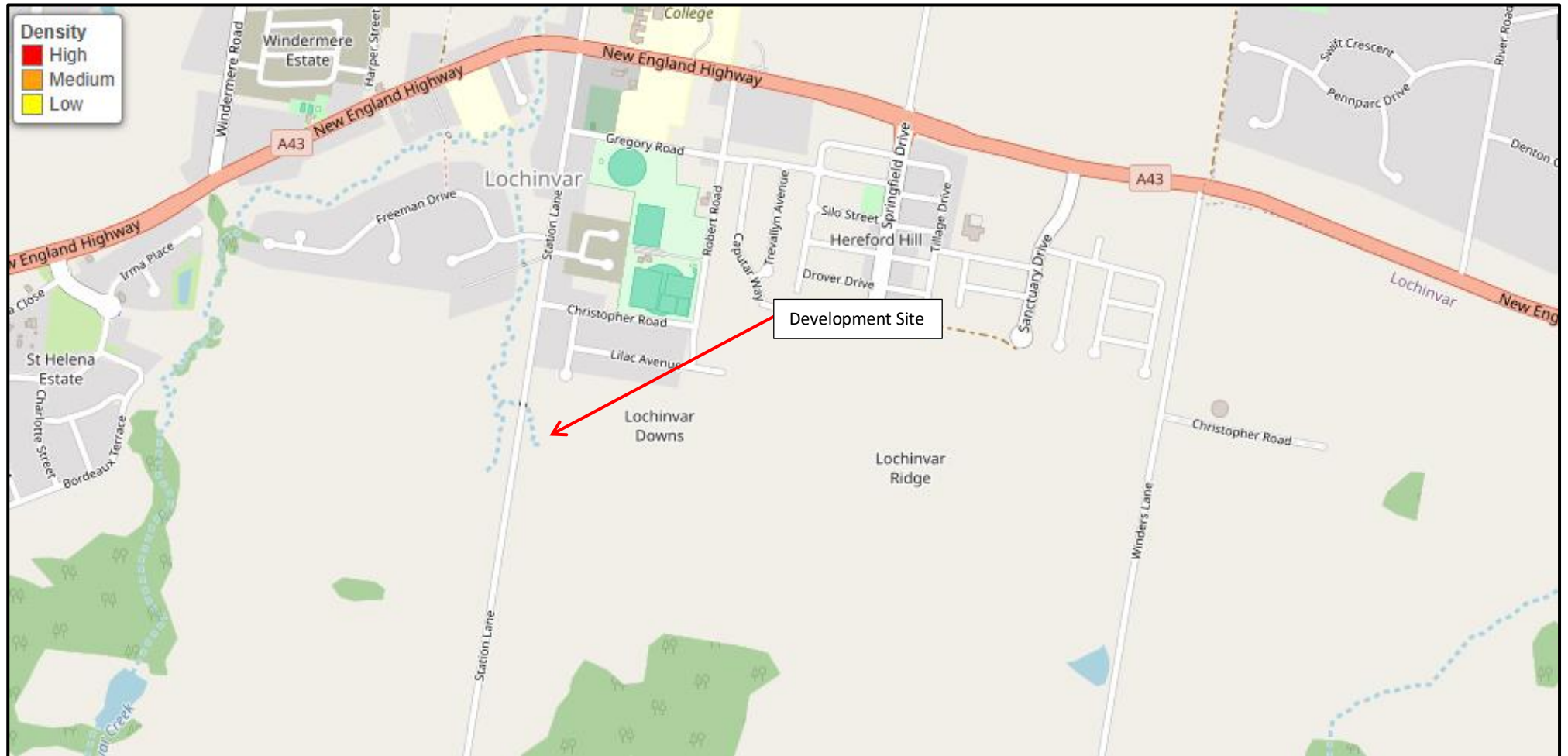


Figure 11: Incidents of Theft (Steal from person) from July 2022 to June 2023

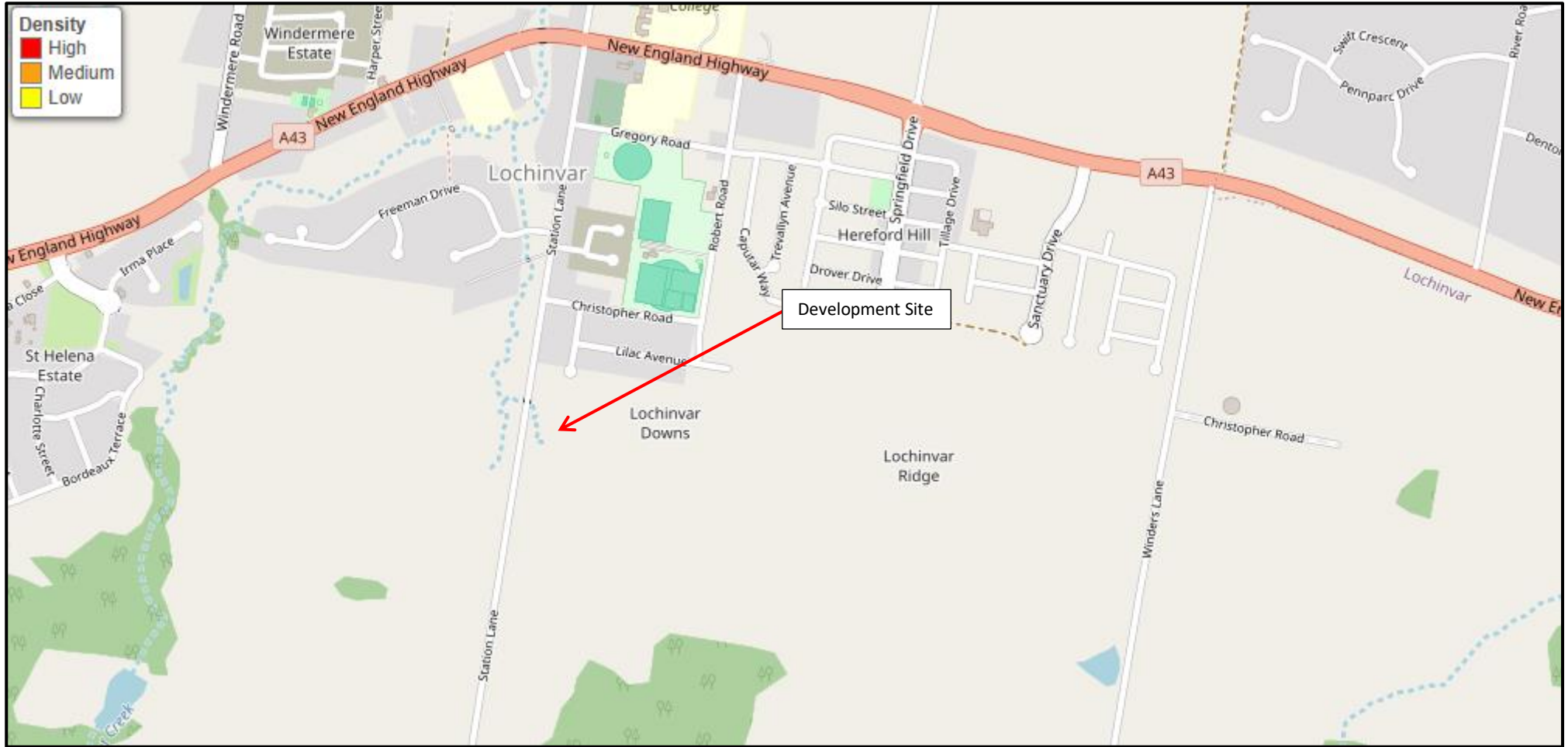


Figure 12: Incidents of Malicious damage to property from July 2022 to June 2023

Crime data from the Bureau of Crime Statistics and Research show the following general 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.
- Stealing 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.

4. General Recommendations

The following are general CPTED principles are recommended for the proposed site:

4.1 Territorial re-enforcement

- The provision of a fence on all boundaries that adjoins a private property (or non-associated property) is noted and this will secure the perimeter of the site and each individual property.
- Signage at entry points into the site should be erected and clearly identify direction of travel, visitor parking etc.
- Clearly signpost any area in the site where access is prohibited or is private.

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. Heavy vegetation should also be avoided at the entrance areas of all the buildings throughout the site so as not to provide concealment opportunities and inhibit line of sight. 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. It is recommended that the setback of entry foyers and door recess be a maximum of 1 metre.
- 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.

4.3 Access control

- All entry points (pedestrian and vehicle) should be clearly signposted and identify the area as being private property.
- Trees should not be planted close to any buildings as it creates a 'natural ladder' to the roof of any building.

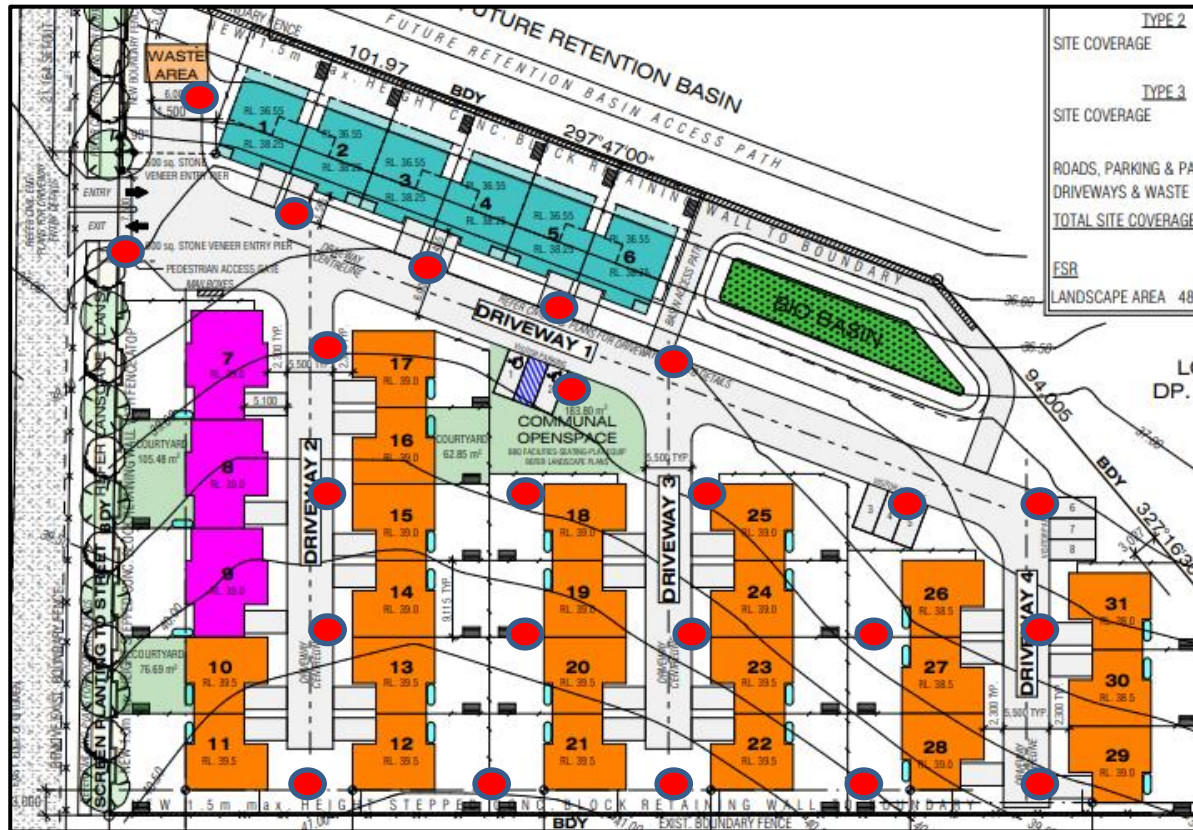
4.4 Space / Activity Management

- Directional signage is to be provided throughout the development. The signage is to be clear and legible to aid 'way finding' throughout the development, especially for visitors and emergency vehicles.
- The central community space should have clear expectations of users and hours of use etc. to ensure activity does not adversely impact on residents.

- Installation of 'Park Smarter' signage (or similar) is recommended to minimise opportunity for theft from vehicles, in particular the visitors car parking areas.
- The area (including gardens, 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. A maintenance plan should be developed for the site.
- Regular walk through to ensure the site is kept clean and also monitor the grounds.
- The garbage bin area to be secured.

5 Design Layout Comments

The following comments relate to the design of the proposed facility.



It is recommended that the vegetation is such that it does not obscure line of sight into the entry or access points to dwellings otherwise natural surveillance is not possible and the area is somewhat obscured.

Pedestrian access points to be clearly marked.

Residential windows overlook the driveway / parking which is consistent with CPTED

Park Smarter signage to be installed at visitor parking areas.

All bins to be secured.

Low intensity lighting (e.g. bollard lighting) shall be provided to all shared pedestrian paths, parking areas and building entries. Indicative locations marked with ●

Figure 13: Design Comments

6. Conclusion

James Marshall & Co has been engaged to prepare a Crime Prevention Through Environmental Design (CPTED) report for the proposed multi dwelling housing development at 113 Springfield Drive Lochinvar NSW. The proposed includes the following:

- 31 dwellings (comprising 3 one bedroom dwellings and 28 two bedroom dwellings), each with private courtyard
- Associated car parking
- The one bedroom dwellings are classified as being accessible to people with disabilities
- Communal open space area comprising:
 - BBQ area
 - Play equipment
 - Seating

The incidences of crime in Lochinvar are generally low and the area does not necessarily pose a crime risk at present. The area is undergoing growth so as the population increases, general crime occurrences is expected to increase (break and enter dwelling; malicious damage etc.). On that basis the CPTED recommendations have taken these potential future crime characteristics into account.

With the adoption of the strategies outlined in this report, the crime risk for the proposed development is considered to be low.