

building constructions

CRIME RISK ASSESSMENT REPORT



**Mixed Use & Residential
Development**

**Dudley Road & Kopa Street,
Whitebridge**

15 August 2014

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1. INTRODUCTION AND BACKGROUND

1.1 PURPOSE

This crime risk assessment reviews the proposed redevelopment of land at Kopa St and Dudley Rd, Whitebridge for a mixed use and residential development against the principles of Crime Prevention Through Environmental Design (CPTED). It assesses the development plans and where necessary, provides recommendations for additional measures to reduce the potential for crime either through modifying the design or implementing ongoing operational measures.

1.2 SITE

The site is approximately 2.4 hectares with a frontage to Dudley Rd (south) of 83 metres and Kopa St (north) of 118 metres. It comprises the following land:

Lot	D.P.
1 - 3	436503
1 - 3	349377
4	663765
2 - 3	26039

Whitebridge is east of the Pacific Highway in the north eastern corner of Lake Macquarie Local Government Area. It adjoins the suburbs of Dudley, Kahibah, Charlestown and Gateshead. The general locality is characterised by low to medium density residential with the density typically increasing toward Charlestown regional centre approximately 3 kilometres west of the site. The surrounding locality contains native bushland, including Glenrock State Recreation Area, Awabakal Nature Reserve. There is remnant vegetation south of the site bounded by Oakdale Rd, and also along Waran Rd to the north-west. A location plan and aerial photo are provided below.

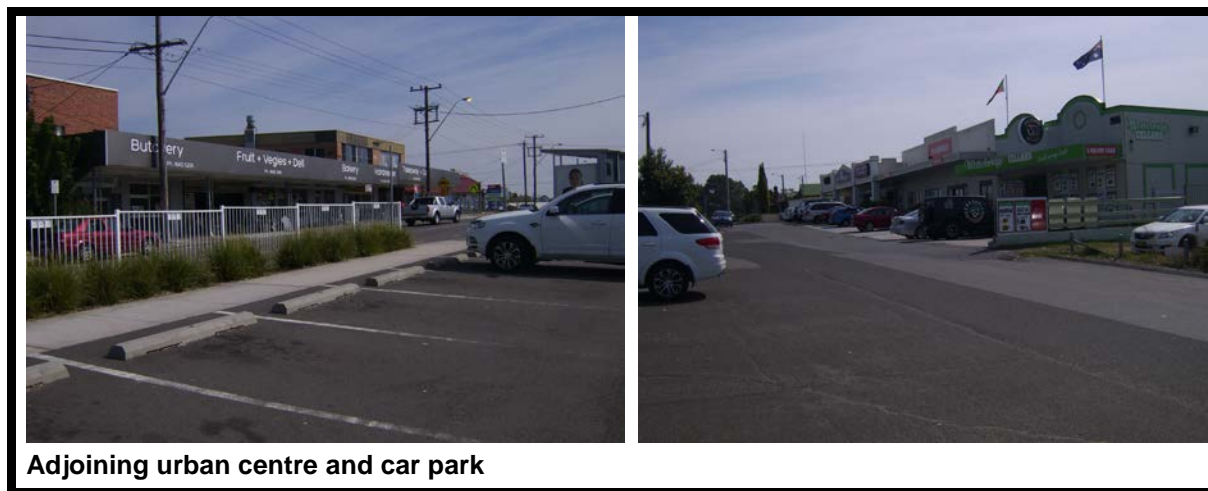




Land immediately north and on the opposite side of Kopa St is residential through to Lonus Ave, and conservation where it adjoins the Fernleigh Track. Residential land is largely cleared while the conservation land contains remnant vegetation adjacent to the Fernleigh Track. This is an extension of the corridor along the boundary of the site.

South and on the opposite side of Dudley Rd is vacant land that was part of the former East Charlestown bypass corridor that adjoins remnant vegetation to the south. Council has identified the land for conservation through its planning controls. Adjoining and to the southwest on Dudley Rd is the Whitebridge urban centre. It contains a small supermarket, pharmacy, newsagency and small businesses including food and retail premises. There is a public car park on the northern side of Dudley Rd between the carriageway and shop frontages. The west-northwestern site boundary adjoins residential land containing primarily detached houses that front Lonus Ave. Opposite these houses is a child care centre, local playground, junior cricket oval and tennis courts. Land to the east-southeast contains the Fernleigh Track recreational pathway, beyond which is residential development fronting Station and Hudson Sts.





Adjoining urban centre and car park

1.3 PROPOSED DEVELOPMENT

The proposal is for removal of the existing dwelling houses and construction of a mixed use building on Dudley Rd commercial area and residential development on the balance of the site. Vehicle access is to be off Kopa St only with pedestrian access from both Kopa St and Dudley Rd. Roads and paths are to be dedicated to Council as public infrastructure. There will be landscaping and a public pathway in the corridor adjoining the Fernleigh Track.

2. CRIME RISK ASSESSMENT

2.1 METHODOLOGY

The methodology for the conduct of this crime risk assessment is based upon the Safer By Design program provided by the NSW Police Force. It involved:

- Reviewing crime statistics for the local area;
- Undertaking a site inspection;
- Liaising with the project design team;
- Assessing the design against Safer By Design / CPTED principles; and
- Recommending any additional crime mitigation measures that can be employed in the design or future operation of the project.

The assessment is based on information contained in the development application detailed in the following:

- Statement of Environmental Effects (SNL Building).
- Design reports and drawings (Smith & Tzannes).
- Landscape Drawings and Report (Mansfield Urban).

These documents were assessed against the Safer By Design program, including CPTED principles. Having regard to the setting, scale and context, any recommendations in the report are measures that may further mitigate the risk of crime. These measures alone however, cannot eliminate the risk of crime and no guarantee is given or implied that the implementation of any measures identified in this report will render the development free from criminal activity. It is also noted the proposal may be subject to amendment that could affect recommendations of the report and any changes should be reviewed for their impact on the crime and safety risk.

2.2 RISK CONTEXT

2.2.1 Overview

The risk context for the proposed development has been developed from a review of crime statistical data (NSW Bureau of Crime Statistics and Research, Recorded Crime Statistics 2008-2012); observations made during the site inspection; and assessment of the proposal. In considering statistical information it must be noted that only reported offences are captured. Often offences will be unreported and not reflected in the findings. The type of criminal offences most likely to be committed (or attempted) in or around a typical medium density residential development and urban centre include:

- Break enter and steal from dwelling / non-dwelling.
- Theft of / from motor vehicle.
- Assault and / or robbery (with or without a weapon).
- Stealing.
- Malicious damage.
- Assault – non-domestic and domestic violence related.

Other offences (homicide, drug offences, sexual assault etc) may be possible but are less likely given the demographics of the area and the nature of proposed uses.

During the site inspection there was little evidence of malicious damage within the existing centre. Shops and the public domain were generally well maintained and were noted as having high levels of activity throughout the day. It is noted a local shop owner was the subject of a robbery without a weapon in May 2014. Statistically this appears to be an isolated incident. A review of the media reports did indicate that the incident occurred at the rear of the commercial premises. The proposed development mitigates this by providing access from the street frontage only. Access points will be lit to further mitigate the opportunity for a similar incident in the development.

2.2.2 Crime Statistics

The NSW Bureau of Crime Statistics and Research monitors and reports crime statistics in NSW. It provides analysis and evaluation on a number of crime categories and geographic locales. The most recent report of NSW Recorded Crime Statistics, 2008 – 2012 provides statistical data for the 24 and 60 month period trends, including records by local government area. State-wide the rates were stable for violent and property offences for the 60 month period, with downward trends in the following categories:

- Robbery without a weapon (-11.0%)
- Malicious damage to property (-9.8%)
- Break and enter non-dwelling (-8.3%)
- Motor vehicle theft (-7.1%)
- Robbery with a weapon not a firearm (-6.9%)
- Steal from motor vehicle (-5.0%)
- Assault – non-domestic violence related (-4.8%)

Upward trends were recorded in:

- Arson (14.4%)
- Sexual assault (2.6%)
- Steal from retail store (2.4%)

- Fraud (2.1%)
- Indecent assault, act of indecency and other sexual offences (2.1%)
- Assault – domestic violence related (1.7%)
- Drug related offences (various %)

Of the 154 Local Government Areas in NSW, Lake Macquarie ranked top 20 for only 1 of the 17 major offences - motor vehicle theft (12). Of the other major offences it ranged from 22 to 77. Of these 17 major offences Lake Macquarie recorded increases in:

- Fraud (10.5%)
- Steal from retail store (8.1%)
- Break and enter – dwelling (6.5%)
- Steal from motor vehicle (5.4%)
- Sexual assault (5%)

Reductions were in break and enter – non-dwelling (3.8%) and malicious damage to property (-5.0%).

All other rates were stable.

While suburb specific rates were not available, complementing BOSCAR information is the Lake Macquarie City Council Crime Prevention Plan 2009 – 2011. It identified the top four crime priorities within the LGA as:

- Steal from motor vehicle;
- Non-domestic violence assault (alcohol related);
- Domestic violence assaults; and
- Malicious damage.

Whitebridge was not in the top 4 for any category. Charlestown recorded a top 4 rating for steal from motor vehicles and malicious damage which most likely reflects it being a regional centre. This has not been inferred as an indication of greater potential for these activities in Whitebridge.

The following are the most likely offences for which specific mitigation measures should be designed and implemented for the proposed development:

- Steal from retail store - associated with new commercial floor space;
- Break and enter dwelling – given the number of dwellings and access from the Fernleigh Track and neighbourhood centre; and
- Steal from motor vehicle – given the increase in vehicles.

2.2.3 Site Opportunity

The site adjoins Whitebridge urban centre and the Fernleigh Track, both of which generate high levels of activity. This may increase the risk of opportunity crime with people travelling through the site between these locations. Previously there was no fencing and no constructed movement network through the site, but access from Kopa St and Dudley Rd did occur on an informal basis. It was a shortcut between the shops, Fernleigh Track, Kopa St and Dudley Rd but there were no properties or infrastructure that presented as a target for opportunistic crime. The proposed development will change this, introducing private structures and providing public roads and parking. These factors may increase the risk of opportunistic crime.

Although formal pedestrian access is provided to the urban centre via Station St and Kopa St / Lonus Ave, public roads and pathways will encourage and formalise movement paths through the site. This will increase the potential for opportunity crime. Surveillance and access control is required to mitigate the risk. Recommendations for mitigating the risk are discussed further in this report.

2.3 CPTED PRINCIPLES

Design alone cannot eliminate the risk of crime. However, application of the principles and strategies of Safer By Design, including the outcomes identified in this report, will mitigate the risk of offences for the proposed development. In considering mitigation strategies and remedial actions there are four basic CPTED principles:

- surveillance,
- access control,
- territorial reinforcement, and
- activity and space management.

This section assesses the proposed development against these principles.

2.3.1 Surveillance

Good surveillance reduces the attractiveness of potential targets by increasing the risk of detection. This can be achieved through a combination of technical and natural surveillance including sightlines, lighting, CCTV monitoring, and guardians of space. Assessment of the development identified the following:

- Building orientation and floor plans provide generally good natural surveillance of the public street network, open space and communal areas. Living areas and habitable rooms overlook streets and communal areas. Glazing along the commercial space will promote surveillance of the car park and Dudley Rd. This will improve conditions whereby the existing shops on the northern side of the road have limited visibility due to the use of opaque window coverings, internal layouts, and the type of land uses. Land use and fit out of the commercial spaces should maintain visibility through windows, establish internal layouts that promote passive surveillance of the street, activate the streetscape, and promote activity within the centre.
- The public park is visible from adjoining dwellings, particularly those directly fronting the park. It is also on a direct sightline for vehicles entering the site and will be visible from the surrounding pedestrian network.
- The pedestrian and vehicle network provides opportunity for passive surveillance of public spaces and the entrance to private dwellings. Lighting and landscaping should maintain sightlines and illuminate potential concealment areas.
- The urban space fronting Dudley Rd is overlooked by the commercial and some residential spaces. Any outdoor dining would improve guardianship and surveillance. It adjoins the car park and Dudley Rd, both of which have a generally high level of activity. The link between the internal road and urban centre improves activity and passive surveillance, further reducing the potential for crime. The residential development above street level improves surveillance of the urban centre beyond business hours.
- Visitor and on street parking is well located. It adjoins the residential and commercial areas that provide passive surveillance of parked vehicles. Safety and security can be improved by ensuring parking is appropriately lit and that landscaping maintains sightlines and limits concealment.

- Pedestrian access to dwellings is generally well located where it can be seen from public spaces or adjoining private development.
- Basement parking areas will be concealed from the surrounding street network. Individual garaging limits passive surveillance within the basement. Surveillance could be improved with CCTV but this is unlikely to be regularly monitored. Limitations in surveillance should be compensated with improved access control and ensuring design and lighting promote visibility and limit concealment opportunities.

2.3.2 Access control

Access control reduces crime risk by attracting, channelling or restricting movement. This can occur through natural, technical or organised control such as landscaping, physical barriers, signage, security control etc.

Commercial. The commercial space presents as a target for malicious damage, break and enter, robbery etc. The level of attraction will be partly dictated by the uses that occupy these spaces. Access and servicing is from Dudley Rd only, with the existing loading bay and a new loading zone at the western edge. This is considered appropriate and is consistent with adjoining commercial buildings. The front access creates good separation between commercial and residential areas. This is also an area of high activity that will promote surveillance.

The waste area is accessed from Dudley Rd with a small foyer separating this from access to the residential area at the rear. It is important the separating doors in the foyer are controlled with a coded or key locked system to prevent unauthorised access.

Residential. The following are identified as contributing to or requiring access control for the residential components:

- Entry to the environmental corridor should be channelled and contained to the path to limit damage to the drainage system and landscaped areas. The chain wire fence at the boundary should be retained for safety and environmental purposes, restricting informal access directly onto the Fernleigh Track.
- Vehicular and pedestrian entrances to the site should be signposted with street names and directional signs to provide wayfinding to public areas and surrounding facilities. Access limitations should be identified, such as the private driveway on Lot 1, adjacent to Lot 13.
- Access control should be provided to buildings including locks on doors, windows and external gates. Controlled access (code, key, intercom) should be considered for other non-public areas such as basement parking and circulation areas for the mixed use and residential strata development.
- Façade treatment and landscaping should limit opportunity for 'ladders' that might assist gaining entry to buildings. This can be achieved by minimising horizontal slats or climbable building elements and locating climbable vegetation an appropriate distance from buildings to avoid people using it to access upper level balconies and windows. Alternatively, plant varieties should not allow / support climbing.
- The development is likely to improve the security of lots fronting Lonus Ave by limiting the uncontrolled access to the rear of these sites.
- Private dwellings will have boundary fencing per the landscape and architectural plans to delineate private spaces and restrict access.

2.3.3 Territorial reinforcement

Territorial reinforcement establishes a hierarchy of spaces that identifies and aligns the design, definition and designation of areas. This can be achieved by measures including design for use; territorial markers to reinforce designation of; and environmental maintenance to promote ownership and use of spaces.

The development will provide the following:

- Clearly defined site boundaries using fencing, landscaping and signage.
- Designated visitor parking.
- Areas for specific uses – park and urban space; pedestrian pathways; landscaped corridor; drainage infrastructure etc - should be well landscaped, lit, and maintained to promote a sense of ownership.
- Transition between private and public spaces delineated by fencing, landscaping, signage, edge and surface treatments.
- Maintenance plans for the strata sites to ensure timely repair of damaged property, lighting, and removal of graffiti.

Good environmental maintenance will promote a sense of ownership, increase use of these areas, and help deter crime by increasing the perceived risk of detection.

2.3.4 Activity and space management

Activity and space management, while identified at the design stage through allocation of uses, are dependent on management and enforcement. The allocation of space is considered appropriate for the nature and scale of the development and includes private, communal and public areas. Management and maintenance plans need to reinforce access to and use of designated areas, including community activities to utilise the urban space.

The proposal has designed activity into the development by designating spaces – urban space, park, and movement network etc. Signage and good management will promote activity to assist natural surveillance, guardianship, and crime mitigation.

2.4 SPECIFIC DESIGN ELEMENTS

2.4.1 Dwelling design

The design of dwellings has provided appropriate orientation and floor plans to provide passive surveillance. All dwellings / buildings should have key locked doors and consideration should be given to key locked ground floor windows. Locking windows should be able to be locked in closed or semi-open position to facilitate ventilation while maintaining security. Front entrances should be fitted with peep holes (or similar measure to ensure visibility), lockable security screen doors, or side windows to allow identification of visitors from a secure environment.

2.4.2 Lighting

Lighting enables individuals to see and respond to their environment increasing the risk of detection for those engaged in criminal activity and heightening awareness for people who may be the target of crime. When combined with surveillance and access control, lighting is an important element in crime mitigation. Although generally detailed during construction the following general principles should apply:

- Vehicular and pedestrian access should have continuous illumination.
- Communal areas should be lit to promote surveillance, aid identification, and mitigate potential entrapment or hiding areas.

- Residential lighting is to be directed toward approaches to buildings rather than illuminating observers or vantage points (windows and doors).
- Timers should be used for public areas and activation based lighting for private / semi-public areas.
- The design and location of external lighting should mitigate the likelihood of malicious damage.

Construction and occupation should reinforce lighting through the following measures:

- Ensuring vegetation is designed and managed to avoid reduction in the effectiveness of lighting.
- Ensuring lighting is maintained, including timely repair of any malicious damage.
- Using low energy consumption lighting that is energy efficient but maintains safety and security.
- Using sensor activated lighting in less frequented areas.

2.4.3 Access

Access to the site should be clearly signposted and any restrictions nominated. Bollards should be used if necessary to prevent vehicle access from Dudley Rd. For the pedestrian path in the corridor, landscaping and fencing should be used to channel and restrict movement to the path.

Access to the residential areas of the mixed use development should be controlled using a coded / keyed system. An intercom may be required for visitor access to the strata / missed use development.

2.4.4 Car Parking

Access to basement parking should be controlled. Individual garaging is to be closed in and access to the basement parking areas should be controlled at the main entrance. Basement areas should be well lit and have light coloured finishes to assist light reflection and visibility. Parking, particularly visitor parking, should be delineated using signage, marker paint, reflective devices, surface treatments etc. Designation of use will remove any excuse for unauthorised access.

2.4.5 Fencing

Fencing to adjoining properties on Lonus Ave is to be retained or replaced as required. The chain wire fence along the Fernleigh Track boundary should be retained for safety and security, particularly noting the steep grades in some areas. It will also restrict escape routes for anyone who may be involved in criminal activity. As discussed elsewhere in this report, the corridor should be designed to contain access to the pathway. An open fence or landscaping would restrict access and mitigate malicious damage.

Dwellings will have perimeter fencing for delineation, privacy and security. Remaining areas can incorporate fencing, landscaping or other treatments to delineate spaces.

2.4.6 Landscaping

Inappropriate location, growth, height, spread, or maintenance of landscaping can significantly reduce natural surveillance and provide concealment opportunities. The following general principles should be considered:

- Plants should be selected, sited and maintained where they will not reduce the effectiveness of lighting or interpretation of signage. Such measures include using low hedges, shrubs, ground covers and creepers in combination with high canopy species to maintain sight lines.

- Maintenance should promote natural surveillance with pruning of low branches to approximately 2 metres high, and the pruning of ground cover and hedges at around waist height.
- Vegetation type and location should limit the ability for natural 'ladders' to gain access to upper building levels or to scale fencing.

The proposed landscaping (Mansfield Urban) was assessed and considered appropriate to mitigate crime and safety, while providing ecological benefits and maintaining the amenity and privacy of residents.

3. RECOMMENDATIONS

Following a review of the site context and the design the development is deemed to have a low risk of crime. It integrates measures to mitigate the risk of crime including:

- access control using fencing, locks and signage;
- surveillance through appropriate floor plans, open space, parking, landscaping and lighting; and
- territorial reinforcement through the appropriate delineation of spaces; and
- activity and space management through the designation of private and public areas and the provision of opportunities to promote and manage activities in public spaces.

No immediate or significant changes are considered necessary to ensure an appropriate level of safety and security is obtained, particularly given the low risk of crime that currently exists. Where necessary the consent authority may provide conditions of consent to ensure the provision of crime and safety measures identified in this report or elsewhere through the assessment. Completion of a post-construction review is recommended to confirm the implementation of measures and identify additional suitable measures.

4. CONCLUSION

The proposed development has been assessed as having a low risk of crime. The crime risk is further mitigated through surveillance and access control measures incorporated into the design and development. These can be reinforced with activity and space management during the operation and management of the site. Open space and public areas can be observed from commercial spaces, private living areas, and pedestrian / vehicular routes within the site. Natural surveillance can be augmented by technical means if required.

Territorial reinforcement and natural access control are incorporated through the fencing, movement hierarchy and landscape strategy. These define private from public areas and manage pedestrian movement through and within the site. An appropriate lighting strategy and provision of signage should be detailed in construction documentation. This will enhance the territorial reinforcement. The use of public areas will help promote a sense of community ownership, increase passive surveillance, and further reduce crime opportunities.

This assessment of the crime risk context and review against Safer By Design identified that the proposed development has been designed to appropriately mitigate the risk of crime.

5. REFERENCES

- Guidelines for Section 79C of the *Environmental Planning and Assessment Act 1979* – Department of Urban Affairs and Planning 2001
- Safer By Design program – NSW Police January 2012
- NSW Recorded Crime Statistics 2008-2012
- Lake Macquarie City Council, Development Control Plan No 1, Section 2.7.9 – Safety and Security
- Lake Macquarie City Council, Community Crime Prevention Plan 2009 – 2011
- Newcastle Herald Articles, 26 May 2014

APPENDIX 1

Annotated Site Plan - Crime Risk Assessment