# Crime Prevention Through Environmental Design Assessment

**BAE Williamtown Precinct Entry Works** 

55C Slades Road, Williamtown

Submitted to Port Stephens Council on behalf of Built



Prepared by Ethos Urban 5 September 2024 | 2230841





'Gura Bulga' Liz Belanjee Cameron

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

'Dagura Buumarri' - translates to Cold

'Dagura Buumarri'

Liz Belanjee Cameron

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

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

In supporting the Uluru Statement from the Heart, we walk with Aboriginal and Torres Strait Islander people in a movement of the Australian people for a better future.

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'Gadalung Djarri' Liz Belanjee Cameron

'Gadalung Djarri' – translates to Hot Red Country. Representing Queensland.

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## 1.0 Introduction

This Crime Prevention Through Environmental Design (CPTED) Assessment has been undertaken to assess the potential opportunities for crime and safety impacts that may be associated with the Development Application (DA) for the BAE Williamtown Precinct Entry Works at Jeffries Circuit. The development is for demolition of a building, construction of site access and a car park with associated security building, gates and fencing and landscaping.

### 1.1 Purpose of this report

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 and International Standard ISO:22341.

## 1.2 Disclaimer

CPTED strategies must work in conjunction with other crime prevention 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 or appropriately qualified person 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.

## 1.3 Policy Context

#### 1.3.1 NSW Department of Planning and Environment Guidelines and NSW Police Force

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.

The Crime Risk Rating considers the development as proposed in the architectural drawings prepared by DesignInc within the site's environment. 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, of the following regulation and assessment principles:
  - 1. Surveillance
  - 2. Lighting / technical supervision
  - 3. Territorial reinforcements
  - 4. Access Control
  - 5. Environmental Maintenance
  - 6. Activity and Space Management
  - 7. Design, Definition and Designation.

## 1.4 Port Stephens Council Development Control Plan

The Port Stephens Council DCP<sup>1</sup> applies to the site. A high-level assessment of the objectives and controls relating to façade measures in Section C2.Df the DCP has been considered.

The Port Stephens Council DCP details the following provisions to assist in reducing opportunities for crime:

- To facilitate development that is safe and secure for pedestrians and contributes to public domain safety by incorporating principles of crime prevention through environmental design (CPTED), such as:
  - Territorial re-enforcement
  - Surveillance
  - Access control
  - Space/activity management
- Development incorporates crime prevention through environmental design (CPTED) principles by providing passive surveillance to public spaces through building design and orientation.

The proposal will comply with measures addressed in Council's DCP by implementing CPTED principles such as access control (through fencing and gates at entrances) and territorial reinforcement through reducing the ambiguity of the existing space by claiming ownership with an intended use.

**Section 5.0** of this report undertakes a detailed assessment with regards to the relevant matters for consideration and exemplifies how the design of the proposed development achieves compliance with the relevant CPTED principles. Further recommendations that satisfy the provisions contained in the Port Stephens Council DCP are detailed in **Section 6.0** of this assessment.

## 1.5 Port Stephens Council Crime Prevention Plan

The Port Stephens Council *Crime Prevention Plan 2017-2020<sup>2</sup>* aims to implement strategies that assist in reducing the impacts of crime within Port Stephens, particularly around the crimes of malicious damage to property (graffiti), steal from motor vehicle, and fraud. Actions outlined in the Plan include:

- Actively pursue CPTED initiatives through the DA planning process.
- Develop a promotional campaign to encourage crime prevention activities, including highlighting the dangers of leaving valuables in cars.

The proposal will comply with actions addressed in Council's Crime Prevention Plan through restricting access to the car park via a boom gate which will decrease theft from vehicles. As the proposed guardhouse is located on the other side of the boom gate, and the site will be highly secured, this will potentially help to reduce the rate of malicious damage to property (graffiti). Further recommendations concurrent with this plan are detailed in **Section 6.0** of this assessment.

<sup>&</sup>lt;sup>1</sup> Port Stephens Council 2015, Port Stephens Development Control Plan 2014

<sup>&</sup>lt;sup>2</sup> Port Stephens Council 2017, <u>Crime Prevention Plan</u>

## 2.0 Site Context

## 2.1 Site Location

The site is within the Port Stephens Council Local Government Area (LGA). The site fronts Jeffries Circuit, Williamtown and includes part of Proposed Lot 100, and Proposed Lot 101, and 102 in Lot 11, DP 1036501, 38 Cabbage Tree Road and part Lot 43, DP 1045602 and Part Lot 103, DP 873512, Williamtown Drive, Williamtown. The site's location is shown at **Figure 1**.



#### Figure 1 Site and immediate context map

Source: Ethos Urban

## 2.2 Existing Context

The existing site is characterised by vacant land covered by asphalt, an industrial warehouse building and atgrade carparking. BAE Systems works with the Australian Defence Force in providing design, manufacturing, upgrading, and support services.





## 2.3 Surrounding Development

The following development surrounds the site:

- North: To the immediate north of the site are the runways associated with Newcastle Airport, as well as the RAAF Base Williamtown. Further development north beyond is eucalypt forest, industrial land at Campvale, then large-lot residential in Medowie.
- **South:** To the immediate south of the site is cleared land for the Astra Aerolab development, a defence and aerospace precinct. Further development south beyond is large-lot residential and agricultural land in Williamtown and Fullerton Cove.
- **East:** To the immediate east of the site are industrial style buildings part of BAE Systems Williamtown, and the Newcastle Airport terminal and carparking. Development further beyond includes Banksia Grove Village (over 50's lifestyle village), Murrook Culture Centre, and Williamtown Leisure Village.
- **West**: To the immediate west is dense eucalypt forest. Further development west beyond is Hunter Region Botanic Gardens and industrial in Heatherbrae.

## 2.4 Crime Risk Rating

A risk assessment of the site in its existing context and form has been undertaken based on a site inspection undertaken on May 9th, 2024. Overall, the Crime Risk Rating assessment rated the site in its context as having a 'Moderate' risk of crime. The reasons for this are:

- Good access control with the site fenced off and gate at front vehicular entrance from public areas including surrounding footpaths and airport carpark.
- A large area of ambiguous space to the site's south and west. The area is quite desolate with multiple empty lots mainly consisting of dirt or gravel, with some areas having overgrown vegetation. The area is part of the Astra Aerolab development, with some roads already built, however the space is currently underutilised.

Key site characteristics which have formed this crime risk rating are expressed in the images contained within **Figure 3** to **Figure 8** below (images source: Built).



Figure 3 South-west corner of airport short stay carpark, looking south-west



Figure 4 Construction site south of site





Figure 5 Pedestrian path along eastern site boundary

Figure 6 Looking south-west towards site



Figure 7 Looking north towards site



Figure 8 Existing site condition

## **3.0 Proposed Development**

The proposal relates to a DA for the BAE Williamtown Precinct Early Works which is submitted to Port Stephens Council pursuant to the provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and seeks consent for the following works:

- A new access road connecting the proposed carpark to 55 and 55C Slades Road (to the North of the site);
- A secure site entrance point, including an exit loop for rejected vehicles;
- New road pavements, line marking and signage;
- New pedestrian footpaths and wayfinding;
- Up to 261 car parking spaces;
- Building pad and demountable office;
- Heavy vehicle access;
- Site security works; and
- Civil works (infrastructure installation).

The site will be a secure site, bounded by a Class 2 fence as required by Defence Standards.

Indicative extracts of the overall site plan is shown in **Figure 9** and the guardhouse buildings floor plan (in red outline in **Figure 9**) is shown in **Figure 10**.







Figure 10Guardhouse and Buildings Demountable Floor PlanSource: Built

## 4.0 Nature of Recorded Crime

## 4.1 BOCSAR Data

Crime statistics obtained from the NSW Bureau of Crime Statistics and Research (BOCSAR) represents criminal incidents recorded by NSW Police. Due to the small population of Williamstown, BOCSAR has limited recorded data and therefore has not reported on two-year crime trends. However **Figure 11 – Figure 16** below shows the site's proximity to crime hotspots (January 2023 – December 2023 data) for crime types relevant to the proposal.

Hotspots indicate areas of 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 that accommodate skewed densities of employment or residential areas with high levels of visitors from outside of the population residence.

The site is near a hotspot in Williamstown for 'motor vehicle theft' and 'steal from motor vehicle' associated with the Newcastle Airport car parks.



#### Figure 11 Hotspot – Break and enter non-dwelling

Source: BOSCAR / Ethos Urban

#### Figure 12 Hotspot – Malicious damage to property

Source: BOSCAR / Ethos Urban





Figure 13 Hotspot – Motor vehicle theft

Source: BOSCAR / Ethos Urban

Figure 14 Hotspot – Non-domestic assault

Source: BOSCAR/ Ethos Urban



#### Figure 15 Hotspot - Steal from motor vehicle

Figure 16 Hotspot – Steal from person

Source: BOSCAR / Ethos Urban

Source: BOSCAR / Ethos Urban

## 4.2 Crime Generators and Attractors

It is important to understand why locations have become hotspots to help identify paths to possible solutions. Ultimately, this will facilitate the crime prevention recommendations expanded upon in **Section 6.0**, which aims to contribute to the reduced likelihood of crime at the site. This understanding will help ensure that the design of the development does not transition into a space that could enable opportunities for crime or enable a design outcome where territorial reinforcement and place management could be eroded.

Therefore, it is important to identify any nearby crime generators or crime attracting nodes that could affect the safety of the site. These nodes are identified and summarised below:

- **Crime generators** places that attract large numbers of people as a result of routine activities (unrelated to crime):
  - **Newcastle Airport:** The airport services approximately 1.3 million passengers per year. This is expected to increase once the airport commences international flights.
  - **Technology Place precinct:** The precinct just south of the airport on Technology Place includes a range of different retail, industrial, services, and a Mercure Hotel. There could be a large number of people within the precinct at any given time.
- Crime attractors places that afford criminal opportunities that are well known to offenders:
  - Williamtown services on Nelson Bay Road/Lavis Lane: A Metro Petroleum service station and McDonald's are located on the corner of Nelson Bay Road and Lavis Lane. The area could attract higher instances of crime and antisocial behaviour such as malicious damage to property (graffiti).
  - **Airport carparks:** The carparks scattered around the airport could provide multiple opportunities for crime including theft from motor vehicle and motor vehicle theft. The carparks are accessible via pedestrian paths and adequate lighting and no physical barriers.

In light of the summary of the nearby crime generators and crime attractors, the site's location within proximity to hotspots with higher levels of crime densities does not necessarily mean it will be significantly 'more' susceptible to crime. The nature of the site operations means it is a highly secured area, which will be carried through to the proposed site entry works and the intention to have secure access at entry points. This will help to dissuade the potential for trespassers and reduce the opportunities for crime or antisocial behaviour.

Therefore, the proposal can produce a space that is collectively well cared for, with a high level of environmental maintenance likely to reduce the likelihood of crime. Further recommendations for the development are set out at **Section 6.0** of this report.

## **5.0 Matters for Consideration**

A potential perpetrator can take advantage of the environment, with access and the opportunity for concealment significantly affecting the actual and perceived safety of an environment. Given the site's location within proximity of nearby hotspots identified in the previous section, the following is an assessment of the proposed development's potential to create opportunities for such crimes.

## 5.1 Surveillance

#### **Principle aim:**

Opportunities for crime can be reduced by providing effective surveillance. Offenders are often deterred from committing a crime in areas with high levels of surveillance – including passive and formal surveillance.

#### Assessment of proposal:

The proposal includes the following passive and formal surveillance opportunities:

- The inclusion of a guardhouse at the vehicle entrance and central to the car park.
- Footpath along the northern side of the car park.
- Existing operations at the north of the site, adjacent and in view of the at grade car park area.
- CCTV cameras proposed along the site perimeter.

### 5.2 Lighting and Technical Supervision

#### **Principle aim:**

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.

#### Assessment of proposal:

The proposal includes the following lighting and technical supervision elements:

- Guardhouse supervision at the vehicle entrance which is staffed 24 hours a day/7 day a week.
- Internal lighting at the guardhouse and demountable buildings and external lighting at the carpark.
- Consistent with the BAE Systems Australia layered security approach, CCTV cameras will be provided at the boundary fence line, all vehicle/pedestrian/aircraft gates and entry points, the Guardhouse and primary intersections throughout the development.

### 5.3 Territorial Reinforcement

#### **Principle aim:**

Areas that are well cared for and display strong ownership cues are less likely to be improperly used than those that do not. In particular, ownership cues are heightened, and fear can be reduced amongst residents and visitors through the personalisation, marking, maintenance and decoration of a building.

#### Assessment of proposal:

Given that the proposal will be secure from public access, the proposal will provide a balanced level of territorial reinforcement that conveys the following ownership cues:

#### Principle aim:

- Fencing along the perimeter of the site.
- Gates located at vehicle and pedestrian entrances.
- Proposed guardhouse at the vehicle entrance boom gate.
- Claiming ownership of an existing ambiguous space.

### 5.4 Environmental Maintenance

#### **Principle aim:**

Vandalism, graffiti and other crimes can induce fear and avoidance of public spaces, particularly amongst the elderly. As such, maintenance of the proposed development and its surrounds is a key crime prevention mechanism.

#### Assessment of proposal:

The proposed development will convey clarity of ownership and display a space that is well cared for by:

- Landscaping at the vehicle entry, along the southern side of the carpark.
- Gates located at vehicle and pedestrian entrances.
- Guardhouse at the vehicle entrance boom gate which is staffed 24 hours a day/7 days a week.
- Claiming ownership of an existing ambiguous space.

### 5.5 Activity and Space Management

#### Principle aim:

The management of space and activity is important to maintaining control over a space and preventing incidents of crime. Space management relates to the supervision, control and the ongoing care of a development, similarly to environmental maintenance.

#### Assessment of proposal:

The nature of the proposal means that activity and space management are not as relevant, however there are some aspects the proposal that shows the design manages space well:

- Somewhat activating a currently underutilised space and including additional landscaping features.
- Providing multiple vehicle driveway crossings to manage visitation purposes to the site (staff, visitors or contractors).
- Locating the guardhouse central to the carpark and near entering vehicles, rather than a more isolated location.
- The guardhouse will be staffed 24/7 which will ensure supervision and control at all times of the day and night.

### 5.6 Access Control

#### **Principle aim:**

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.

#### Assessment of proposal:

The proposed development includes access control measures including:

- Access for different types of vehicles for loading, heavy vehicles and car parking for staff, visitors and contractors.
- A secure site vehicle entrance point, including an exit loop for rejected vehicles.
- Vehicle access will be restricted through the inclusion of a gate at the entrance and guardhouse supervision.
- Boom gate access for vehicles adjacent the proposed guardhouse and demountable buildings.
- Access for BAESA employees is by card access. Visitors/ delivery trucks to be issued with visitors pass and manual entry. Additionally, the guardhouse will be staffed 24/7.
- Clearly marked pedestrian footpaths and crossings, perimeter landscaping and wayfinding directing out of the carpark to the demountables or existing operations adjacent the carpark to the north.

### 5.7 Design, Definition and Designation

#### Principle aim:

A place should reflect its purpose and intent through its design, use of delineation and definition of spaces (such as clear signage).

#### Assessment of proposal:

The proposed development heavily reflects its purpose and intent including:

- Providing clear wayfinding and signage at site entrance points, including at vehicle and pedestrian entrances to help direct to main areas within the site.
- Clear designation of spaces that helps prevent individuals of the public from inadvertently or intentionally accessing these spaces and to make it clear how each space is managed.

## 6.0 Crime Risk Rating and Recommendations

The Crime Risk Rating considers the development as proposed in the architectural plans prepared by DesignInc. Acknowledging the existing and future site context along with the issues discussed in Section 2, 4, and 5, the Crime Risk Assessment Rating of the place was rated within the 'Moderate' category.

A high-level assessment of the proposed development layout using the CPTED principles has found that, with the implementation of the recommendations to be considered in the future context of the site, place would be rated within the 'low' category. The below recommendations are provided to assist in further minimising any opportunities for crime.

#### 6.1.1 Lighting and Technical Supervision

- Provide adequate lighting to high-traffic external areas including the carpark, walkways, and entrances. Explore opportunity for censored lighting to discourage use of space at night when not wanted.
- Lighting types should be of a high quality and be vandal resistant to ensure longevity and allow for less maintenance or replacement. All lighting should be designed and managed in the context of the location to maximise effectiveness. Where recesses and blind corners cannot be avoided, the use of extra lighting and / or mirrors should be considered.

#### 6.1.2 Territorial Reinforcement

- Ensure all areas that should not be accessible to the public are closed off through fencing and/or a gate.
- Display signage as needed around the site boundary indicating unauthorised access.

#### 6.1.3 Environmental Maintenance

- Ensure landscaping is appropriate for the site through species selection. Landscaping should be well maintained so as not to obstruct sightlines and lighting and avoid creating places of concealment/entrapment.
- Implement a rapid removal policy for vandalism repair and the removal of graffiti and all public spaces should be kept clean and tidy.

#### 6.1.4 Access Control

• Display signage in key locations identifying unauthorised access.

#### 6.1.5 Design, Definition and Designation

- Ensure the design of the space isn't too 'fortified', as this may increase the chance for crime and/or antisocial behaviour as it could make the site a target.
- Ensure all areas within the site are well-maintained, including landscaping, showcasing consistent use.