



BORG Manufacturing and Oberon Council

Crime Prevention through Environmental Design Assessment

Oberon Sports Complex

July 2022

ENGINEERING PLANNING SURVEYING CERTIFICATION



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1 Introduction

1.1 Overview

The purpose of this report is to consider the potential crime risk generated by the proposed Recreation Facility (Outdoor) that will include a sporting complex and ancillary registered club facilities. The assessment will then identify proactive and preventative building design measures to minimise opportunities for crime.

The report has been prepared in accordance with the Crime Prevention Through Environmental Design (CPTED) guidelines prepared by the NSW Police in conjunction with the Department of Planning.

Crime Prevention through Environmental Design (CPTED) provides a clear approach to crime prevention and focus on the 'planning, design and structure of cities and neighbourhoods'. The main aims of the policy are to:

- Increase the perception of risk to criminals by increasing the possibility of detection, challenge and capture;
- Increase the effort required to commit crime by increasing the time, energy or resources which need to be expended;
- Reduce the potential rewards of crime by minimising, removing or concealing 'crime benefits'; and
- Remove conditions that create confusion about required norms of behaviour.

The NSW Police guidelines provide four key principles in limiting crime through design. These are:

- 1. Surveillance;
- 2. Access control;
- 3. Territorial re-enforcement; and
- 4. Space/activity management.

We have undertaken a desktop assessment of the site and architectural plans against the above guidelines. This report recommends design principles for the recreational facility to reduce the potential for crime.

1.2 Site and Locality

The real property address is Lot 2 DP 1073827 and Lot 5 DP 2364 located at 31 O'Connell Road, Oberon.

The subject site is located at the corner of Albion Street and O'Connell Road and is currently vacant. No formal vehicular access is currently provided to the site.

Refer to Figure 1 for an aerial view of the site and immediately surrounding development.

The site is zoned RU6 Transition pursuant to Oberon Local Environmental Plan 2013 as shown in Figure 2.

Surrounding development includes:

- To the north: Albion Street and further to large industrial holdings including Boral and Borg manufacturing plants;
- To the east: Vacant open space under the same address (31 O'Connell Road) and further to the Oberon Museum:
- To the west: O'Connell Road, industrial holdings including Howards Auto Electrical and further to large lot rural residential development; and

• To the south: Adjoining the subject site in the south is residential development orientated to Scotia Avenue.



Figure 1: Aerial imagery of the site (Nearmap, 2022)



Figure 2: Extract from zoning map (ePlanning, 2022)

2 Crime Statistics

The NSW Bureau of Crime Statistics and Research provides an overview of the crime profile during the previous calendar year. The data can assist in identifying specific crimes prevalent in an area and guide design to limit the recurrence of anti-social behaviour.

The following table identifies the threat levels in the Oberon suburb and Oberon LGA for crimes relevant to the proposed recreation facility development. BOCSAR data ranks crime rates out of 5 levels with one being the lowest and five being the highest.

As shown in Table 1, the Oberon suburb exhibits relatively comparative levels of most relevant crimes in comparison to the Oberon LGA. The Oberon LGA exhibits higher levels of Non Domestic Assault, Malicious Damage to Property and Liquor Offence crimes which are relevant to the recreation facility proposed.

Table 1: Crime Levels in Oberon and the Oberon LGA

	Crime Type by Location	
Level of Crime	Oberon (suburb)	Oberon LGA
HIGHEST LEVEL CRIME	No relevant crimes	No relevant crimes
HIGH LEVEL CRIME	No relevant crimes	No relevant crimes
MEDIUM LEVEL CRIME	No relevant crimes	Liquor Offences Non Domestic Assault
LOW LEVEL CRIME	No relevant crimes	Malicious Damage to Property
LOWEST LEVEL CRIME	Robbery Break & Enter (Non Dwelling) Steal from Motor Vehicle Steal from Person Malicious Damage to Property Disorderly Conduct Liquor Offences Betting & Gaming Offences Non Domestic Assault	Robbery Break & Enter (Non Dwelling) Steal from Motor Vehicle Disorderly Conduct Betting & Gaming Offences

Please note, a review of BOSCAR hotspot mapping confirms that the Oberon suburb and LGA do not exhibit any hotspot rated areas or incidents. Therefore, hotspot mapping has not been included in this report.

Noting the lowest incidence of all relevant crimes in the Oberon suburb, BRS confirm the subject site and suburb of Oberon are suitable for the proposed development. Refer to site specific CPTED recommendations in Section 4 which will assist in the mitigation of relevant crimes identified in Table 1.

3 Proposed Development

The proposed development incorporates construction of a recreation facility outdoor comprising the following works:

- Sports clubhouse including an ancillary registered club, grandstand and associated facilities;
- 2 x multi-purpose grassed fields;
- 3 x netball courts;
- 1 x Hockey field;
- Children's playground;
- Pedestrian footpath traversing the perimeter of the site with fitness stations; and
- Road and carparks.

Refer to an extract of the proposed Site Masterplan in Figure 3 and specific elements of the proposal discussed in more detail in headings below.



Figure 3: Extract from proposed Site Masterplan (Crawford Architects, 2021)

Registered Club

The proposal incorporates the development of an ancillary sporting clubhouse with lower ground level training rooms, canteen, store rooms and associated sporting club amenities and Ground floor registered club facilities.

The registered club will house the Oberon Leagues Club and will be licensed to serve alcohol. From information derived from the Noise Impact Assessment prepared by Spectrum Acoustics (2020) and submitted with the DA, the club may be in use, at times, between the hours of 10am to 12am, seven days

a week.

An extract from the Ground Floor plan is provided at Figure 4 identifying CPTED design principles integrated within the proposal.

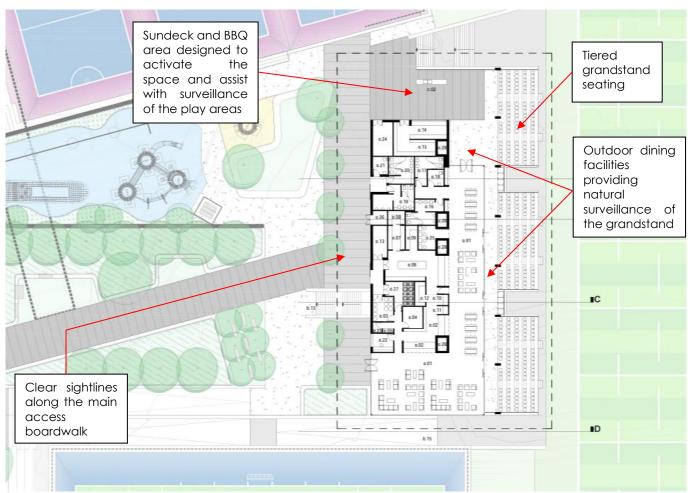


Figure 4: Extract from Ground Floor Plan (Crawford Architects, 2021)

Car Parking and Access

Vehicular access to the site will be provided from O'Connell Road with a new internal access road to be constructed in the south west of the site.

Pedestrian and cyclist access will be provided off Albion Street at the north eastern corner of the site.

Parking will be provided for vehicles in a formal car park and informal overflow area orientated to O'Connell Road as shown in Figure 5 below.

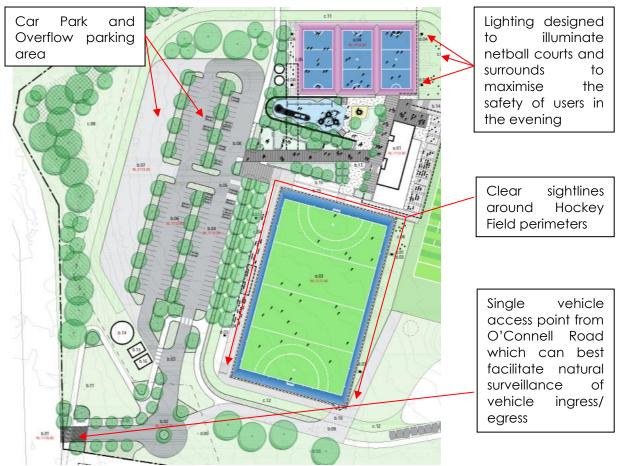


Figure 5: Extract from Detail Masterplan (Crawford Architects, 2021)

Perimeter Pedestrian Path and Fitness Stations

Proposed landscape design incorporates a perimeter pedestrian path with a series of fitness stations designed to activate site perimeters as shown in Figure 6. The fitness stations are positioned to the north and east of the multi-purpose turfed fields and will function as public assets for the use of the local community.

Fitness equipment is designed to mitigate any opportunity for offender concealment. Refer to CPTED lighting recommendations for these areas in Section 4.1.



Figure 6: Extract from Architectural Plans (Crawford Architectural, 2021)

Landscaping

Proposed landscaping has been designed to provide high quality spaces that ensure users of the space are comfortable and aware of their surroundings. Wayfinding has been achieved through integration of clearly defined pedestrian pathways, signage and lighting which will illuminate spaces in accordance with the Australian standards for Lighting of roads and public spaces.

Figure 7 below identifies the planting mix proposed and the appropriate balance between taller shade trees for amenity and more compact ground covering and shrub planting that facilitates sightlines along pedestrian thoroughfares.



Figure 7: Extract from Concept Imagery (Crawford Architects, 2021)

4 **CPTED Principles**

4.1 Surveillance

The Crime Prevention and the Assessment of Development Applications states that 'the attractiveness of crime targets can be reduced by providing opportunities for effective surveillance, both natural and technical'.

From a design perspective, 'deterrence' can be achieved by:

- clear sightlines between public and private places;
- effective lighting of public places; and
- landscaping that makes places attractive but does not provide offenders with a place to hide or entrap victims.

Positive surveillance features of the development include:

- Architectural design that capitalises on existing site topography sloping from the O'Connell Road
 frontage in the west down to sporting facilities in the east of the site. The proposed design creates
 a natural amphitheatre that easily facilitates surveillance of site perimeters;
- Opportunities for passive surveillance of site perimeters, access driveway and car parking is provided from main pedestrian pathways;
- Clear sightlines facilitated by suitable canopy height to pedestrian pathways, outdoor fitness stations and sporting fields;
- Internal access points and foyers are clearly visible from pedestrian thoroughfares and areas of congregation to ensure persons entering and existing the venue can be easily identified; and
- Clubhouse building incorporates external windows, doors, balconies and tiered seating that address the complex facilities and encourage clear lines of sight between public and semiprivate spaces.

Table 2 lists potential 'surveillance' issues and recommended strategies to minimise crime risk.

Table 2: Surveillance issues and recommendations

Surveillance Issues	Recommendation
Perimeter	 Minimise density of planting around perimeters and pedestrian pathways to maintain clear sightlines. The area shall be well lit at night in accordance with the Australian Standard for lighting in commercial areas. Consideration should be given to the installation of Closed Circuit TV (CCTV) – refer further in CCTV discussions below.
Entrances	 The area shall be well lit at night in accordance with the Australian Standard for lighting in public / commercial areas. Entrances should be well defined and clearly sign posted, particularly in any areas that are not intended to be publicly accessible. Consideration should be given to the use of sensor lights in some areas. Glazing should continue to allow natural surveillance of lobby areas and pedestrian access points from within and outside the premises.
Car Parking	• Minimise density of planting at human scale level in the car parking area to maintain clear sightlines.

Surveillance Issues	Recommendation
	 The car parking area should be well lit at night in accordance with the Australian Standard for lighting in public / commercial areas. Consideration should be given to the installation of Closed Circuit TV (CCTV) to facilitate another layer of technical surveillance. Signage should clearly identify the presence of CCTV in the car park.
Formal Surveillance	 Formal security personnel should be provided to assist with the management of the registered club premises, particularly for weekends and larger events within the precinct. Consider using the security for the patrol of the perimeter pedestrian pathway and fitness stations. Signage should clearly identify the potential presence of security within the precinct.
Positioning of CCTV cameras	 Position CCTV at places where the offender/s is most likely to have to pass or want to access, such as building entry/exit points, storerooms or areas where high value items are kept. Explore opportunities to install CCTV within the perimeter pedestrian pathway and fitness stations. CCTV should be Clearly visible to deter potential offenders. Placed at a height that captures a full view of the offenders face whilst not being obscured by other interferences. In areas where image capture will not be compromised by insufficient lighting.
Lighting	 Lighting should be vandal resistant. Lighting should satisfy the relevant Australian standard and provide adequate illumination to facilitate CCTV capture.
Landscaping	 Vegetation should be low (below 700mm) in areas where offenders could easily hide. Monthly landscape audits should be undertaken to ensure planting is maintained to best facilitate surveillance within the site. Foliage density should be maintained to promote more active surveillance from users of the space, where possible.
General Recommendations	 Signs should be erected in areas which are restricted, prohibited or under surveillance to discourage criminal or antisocial activity. This should include stairways and any areas to be secured for semi private use by sporting clubs. Minimise posters on premise windows (where possible) to ensure visibility to and from the streetscape and ovals are maintained. Access should be controlled to the registered club venue from an area that is well lit, easily identifiable via CCTV and located within close proximity to congregation points to facilitate additional surveillance.

4.2 Access Control

Access Control can be defined as physical and symbolic barriers that are used to 'attract, channel or restrict the movement of people'.

Effective access control can be achieved by creating:

- landscapes and physical locations that channel and group pedestrians into target areas;
- public spaces which attract, rather than discourage people from gathering; and
- restricted access to internal areas or high-risk areas (like car parks or other visited areas). This is often achieved through the use of physical barriers.

Noting that the precinct is largely intended to function as a publicly accessible recreation facility, positive access control elements of the clubhouse and semi-private facilities include:

- Site visitors will be channelled within a pedestrian entry boardwalk from the car park to the registered club entry which will facilitate strong security presence.
- All semi private facilities, including lower ground level club change rooms, showers and storage facilities, to be secured via key lock or swipe card technology to prevent unauthorised access.
- High quality architectural entry design to best maximise control of access to private or semi-private spaces.

Table 3 lists potential 'access control' issues and recommended strategies to minimise crime risk.

Table 3: Access control issues and recommendations

Access Control Issues	Recommendation
Perimeter	 Perimeter areas should be regularly inspected by the security contractor. Install lighting to perimeter areas which can function as an active deterrent to potential offenders who don't want to be seen.
Signage	 Provide clearly identifiable signage identifying the nature of the registered club and government regulations associated with access and supervision by adults. Provide signage identifying areas that are restricted or semi-private for use by club members only.
Ram raids	 Bollards, large rocks or planter boxes should be installed at entrances to prevent ram raids. If provided, ATM's should be located within the registered club to minimise ram raid risk.
Landscaping	 Avoid planting large trees adjacent to buildings to prevent use of ''natural ladders'' for access to roofs and windows.
General Matters for Consideration	 Ensure that staff members are aware of security and armed robbery procedures and processes should an event occur. This routine should be regularly practiced and management should be comfortable taking control in these situations. Consider alarming any emergency exits that are required to be kept closed so that staff are alerted immediately if someone enters through these areas. Entry to toilets should be clearly visible to avoid concealment and opportunities for inappropriate or illegal behaviour. Make use of signage and stickers promoting security measures such as time delay locks and CCTV surveillance.

Access Control Issues	Recommendation	
	 Fully secure all external doors and windows with good quality locking devices. Make sure they are regularly maintained. All doors should be of solid construction and well fitted. 	

4.3 Territorial Reinforcement

Territorial reinforcement can be achieved by enhancing 'community ownership of public space' as it sends positive signals and reduces opportunities for crime.

Effective territorial reinforcement and community ownership can be achieved by creating:

- design that encourages people to gather in public space and to feel some responsibility for its use and condition;
- design with clear transitions and boundaries between public and private space; and
- clear design cues on who is to use space and what it is to be used for.

Care is needed to ensure that territorial reinforcement is not achieved by making public spaces private spaces, through gates and enclosures.

Positive territorial reinforcement aspects of the proposal include:

- Architecturally designed masterplan that promotes community interaction and a responsibility of users for the area;
- The entrance design to the precinct and registered club facility provides a clear demarcation between public and semi- private space;
- Clear design cues associated with Bar which delineate these spaces and identify who they are to be used by.

Table 4 identifies potential 'territorial reinforcement issues and recommended strategies to minimise crime risk.

Table 4: Territorial reinforcement issues and recommendations

Territorial Reinforcement Issues	Recommendations
Creating a sense of place/ownership	 Clear distinction should be provided in landscaping and paving to identify separation between public and semi- private spaces. Where this isn't possible, signage should delineate between publicly accessible and semi-private entry points.
Way Finding	 Provide clear signage that identifies building entry points and who they are to be used by. Signage is recommended to be installed at foyer entries and primary pedestrian points identifying a masterplan map to enable staff and users of the development to locate certain areas. Clearly identify entry and exit points, especially in car parks where way finding may be more difficult.
General Recommendations	 Consider installation of a monitored security alarm system. Prominently display any signs indicating the presence of a security system / security personnel throughout the club precinct, through site link, car parking and open space.

Territorial Reinforcement Issues	Recommendations
	• Signage should indicate the continual surveillance of the premises and any other security measures present to reinforce this.

4.4 Space Management

Space management 'ensures that space is appropriately utilized and well cared for'. Strategies include activity coordination, site cleanliness, rapid repair of vandalism and graffiti and the replacement of decayed physical elements.

Table 5 lists potential 'space management' recommendations to minimise crime risk. The objective should be to minimise the perception of urban decay by maintaining clean and undamaged areas to minimise the fear of crime and avoidance behaviour.

Table 5: Space management issues and recommendations

Space Management Issues	Recommendations
Waste storage	 Garbage bins and waste storage receptacles / areas should be regularly emptied to prevent overflowing rubbish.
Graffiti	 Remove graffiti as quickly as possible to minimise potential for cumulative graffiti and vandalism actions.
	 Shrub planting should be included to prevent graffiti on blank walls.
Toilets	 Toilets should be regularly maintained and kept clean at all times. Install vandal resistant lighting where appropriate. Lighting should be consistent and even to maximise visibility. Consider installing vandal proof mirrors in communal or commercial facilities. Toilets located with access by the public should be lockable after hours to prevent potential antisocial behaviour.
Lighting & Fixture Repair	 The management regime should ensure that lighting and fixtures are repaired as soon as possible after any lighting failure or lighting / fixture damage.
Cleanliness and Maintenance	 The site is kept clean and tidy at all times. Clear all building perimeters of rubbish and potential climbing aids. Maintain well-built and adequately secured doors, gates and
	fences as applicable.

5 Conclusion

Our assessment of the proposal in accordance with the CPTED principles confirms that the development can be managed to minimise the potential risk of crime and a re-design of the proposal is not required.

The recommended strategies are summarised as follows:

Surveillance

- Lighting: Entrances, internal stairways and boardwalks, car parks and perimeters should be well lit at night;
- Natural Surveillance: Promote natural surveillance via glazing overlooking sporting fields, seating and perimeter pedestrian pathways;
- Landscaping: Maintain clear sight lines along pedestrian pathways, car park and building entry points;
- CCTV: Consider opportunities for the installation of CCTV security measures to the car park, pedestrian pathways, main building entry points and fitness stations within perimeter pathway infrastructure; and
- Formal Surveillance: Consider opportunities for security personnel to assist with the management of the registered club premises, particularly for weekends and larger events within the precinct.

Access Control

- Designated Key Card Access: Key/ swipe card access should maintain restricted access to any commercial premises that are not intended to be publicly accessible
- Landscaping: Planting should be maintained adjacent to upper levels to prevent the vegetation being used as a "ladder";
- Signage: Provide signage identifying restricted and monitored areas, including club facilities and age sensitive bar entry points; and
- Security: Ensure use of high quality locking systems, reinforced glass, signage and stickers identifying CCTV and areas proposed for secure access.

Territorial Reinforcement

- Landscaping: Engage a landscape contractor to maintain perimeter landscaping to ensure the public to semi private landscape delineation can be easily observed;
- Alarm: Consideration should be given to the installation of an alarm and dedicated CCTV system throughout the registered club premise; and
- Signage: Provide signage to any visitors to the site which outline access control measures, emergency evacuation measures and procedures to assist in an emergency.

Space Management

• Implementation of an on-going maintenance plan for waste, vandalism, toilets, community facilities, landscaping, fencing and lighting.

This report can be relied on as guide for security management across the site.