

Crime Prevention Through Environmental Design General Code

March 2008

Contents

ntroduction			ii
Part A - Genera	ıl Requ	uirements	4
Element 1:	Neig	Jhbourhood Design	4
	1.1	Neighbourhood Design	
Element 2:	Use.		4
	2.1	General Code	
Element 3:	Publ	lic Realm	6
	3.1	Open Space and Community (Shared) Areas	
	3.2	Children's Play Areas	7
	3.3	Lighting	7
	3.4	Signs	8
Element 4:	Built	t Form	9
	4.1	Interface between buildings and public realm	
	4.2	Materials and Finish	10
Element 6:	Trav	rel and Access	10
	6.1	Pedestrian Routes, Bicycle Paths and Lanes	
	6.2	Pedestrian Underpasses and Overpasses	
	6.3	Bus Interchange, Bus Stops and Taxi Ranks	
Element 7:	Serv	rices	
	7.1	Automatic Teller Machines (ATMs)	
	7.2	Local Waste Storage Facilities	
	7.3	Local Utility Facilities	
	7.4	Delivery and Storage Facilities	
	7.5	Public Toilets	
	7.6	Public Telephones	

Introduction

This General Code applies to developments across all zones in the ACT, except for development in rural and broadacre zone, and for proposals for single dwellings regardless of the zone.

How to use this code

Please refer to the Territory Plan User Guide, which contains detailed information on the Territory Plan, including the use of assessment codes in the planning and development process.

Purpose of the Code

This Code outlines specific requirements for crime prevention through environmental design (CPTED) for development within the ACT. While all of the Development Codes contain objectives, rules and criteria important to producing safer environments, the purpose of this Code is to provide more explicit direction to ensure that issues of community safety are adequately addressed in decision making for land use and development activities in the ACT.

Terms Used in the Code

There are four key principles of crime prevention through environmental design:

Natural Surveillance: This is intended to limit the opportunity for crime by designing spaces and buildings that foster human activity and interaction as well as overlooking of the environment. Included in the designs are such features as:

- a) clear, direct paths that encourage pedestrian movement through spaces;
- b) streets that allow passing traffic to observe open spaces and car parks;
- c) obvious building entry points, clearly visible from the street and/or pedestrian spaces;
- d) building entrances and windows that look out on to streets, open spaces and parking areas.

Natural access: This is the 'channelling' of the movement of people in the environment either to encourage them into spaces to increase activity and hence increase natural surveillance, or to discourage people from entering areas where it is generally inappropriate for pedestrian movement. It is possible to alter the movement of people through the environment by the use of symbolic and/ or actual barriers. These may take the form of changes in level, gardens, ground markings, lighting, entrances, fences, bollards etc.

Territorial reinforcement: This involves developing and/or maintaining a sense of proprietary for the space or development by the community. If people feel a pride of ownership then there is a greater propensity to take care of the environment and look after those in the community. Territorial reinforcement requires a sense of 'place' and amenity to be established. This is best when it is considered through the whole design process and when there is a clear delineation between private, semi-private and public realm. This delineation may be achieved by changes in level, formal entries, fences, garden beds or signs. Increasing the use of the site by legitimate groups in the community increases the sense of ownership and the legitimate users may take on the role of voluntary custodians of the site.

Target hardening: This is where the property owner or occupier seeks to deter criminal activity by making it as difficult as practicable to steal or vandalise property, or buildings. This includes making the physical security of a site stronger and increasing the perceived risk to an offender. The basis of target hardening is to strengthen the defences of a site to deter the attack and/or delay the success of an attack.

Definitions Used in the Code

Activity centres

The traditional focus for services, employment and social interaction in cities and towns. People shop, work, meet, relax and live in activity centres. Usually well served by public transport, they range in size and intensity from local centres to Group and Town Centres and the City Centre.

Activity generators

Land uses that encourage and intensify use of the public domain – may include outdoor cafes and restaurants, shops and outdoor sporting areas located in open space.

Community safety

The actual and perceived safety existing in any community. 'Actual' safety is measurable and usually expressed as 'a rate of crime'. This may differ from 'perceived' community safety – derived from interviews and attitude surveys.

Crime Prevention Through Environmental Design (CPTED)

An analytical tool used to redesign and modify the built environment to reduce opportunities for crime. CPTED focuses on the effective design and use of the built environment to reduce the incidence and fear of crime and improve quality of life.

Entrapment spots/hiding places

Small confined areas, shielded on three sides by some sort of barrier that may be used by criminal offenders to trap potential victims or conceal themselves.

Escape route

An alternative and safe means of exit.

Legibility

The ease with which visitors are able to see, understand and use an area or development. A 'legible' layout is one that visitors and residents find easy to move through and to use.

Permeable layout

Layout that allows for visible and frequent access routes through an area.

Public spaces/Public Realm

Spaces that are publicly owned and intended for use by the public and spaces that are privately owned but encourage public use free of any rules or constraints of normal public behaviour.

Sightlines

Lines of clear physically uninterrupted sight.

Part A - General Requirements

Element 1: Neighbourhood Design

Intent:

The Development Code for Subdivision, as well as the relevant Precinct Code for an area, address aspects such as the overall urban composition, street layout, location and design of open space, public transport, pedestrian and cycle networks. These aspects are addressed to ensure they are considered in a comprehensive manner and with express intent of establishing safe, accessible Neighbourhoods.

Intent:

Achieving key principles of natural surveillance, natural access control and territorial reinforcement through the establishment of:

- a) easily navigable and legible network of streets
- b) clearly delineated and hierarchy of public open space, community open space (shared areas) and private open space
- c) convenient access for all users across to activity centres

Rules	Criteria	
1.1 Neighbourhood Design		
	C1	
There is no rule applicable.	Design is in accordance with the recommendations of a crime risk assessment as outlined in the ACT Crime Prevention and Urban Design Resource Manual.	

Element 2: Use

Intent:

a) To provide developments with an increased level of safety for its users and the wider community

Rules	Criteria
2.1 General Code	
	C2
There is no applicable rule.	The development described in Table 1 meet the Crime Prevention Through Environmental Design General Code.

Table 1: Development required to meet the Crime Prevention Through Environmental Design General Code.

Airport	Guest house	Residential care accommodation
Ancillary use	Health facility	Restaurant
Aquatic recreation	-	
facility	Hospital	Retirement complex
Boarding house	Hotel	Road
	Indoor entertainment	
Bulky goods retailing	facility	Rural Produce Retailing
Business agency	Indoor recreation facility	Rural Supply retailing
Car park	Mint	Scientific research establishment
Caravan park/camping		
ground	Mobile home park	Service station
Child care centre	Motel	Serviced apartment
Civic administration	Multi-unit housing	Shop
Club	Municipal depot	Special care establishment
Community activity		
centre	Office	Special care hostel
Community theatre	Outdoor recreation facility	Special dwelling
Corrections facility	Parkland	Store
Craft workshop	Pedestrian plaza	Supermarket
Cultural facility	Personal services	Supportive housing
Defence installation	Place of assembly	Take-away food shop
Department Store	Place of worship	Tourist facility
Drink establishment	Playing field	Tourist resort
Drive-in cinema	Produce market	Transport depot
Educational		
establishment	Public agency	Vehicle sales
Emergency services		
facility	Public transport facility	Veterinary hospital
Financial establishment	Railway use	Water based recreation
Funeral parlour	Religious associated use	Zoological facility

Element 3: Public Realm

The Development Code for Subdivision, as well as the relevant Precinct Code for an area, address the design of the public realm. The following rules and criteria are to be generally applied to the design of the public realm and shared community spaces in addition to the relevant Development Code.

Intent:

a) To establish natural surveillance, territorial reinforcement and natural access

Rules	Criteria	
3.1 Open Space and Community (Shared) Areas		
	C3	
There is no rule applicable.	Natural surveillance of open space and community areas is provided by:	
	a) locating to adjacent activity centres;	
	b) encouraging pedestrian (or cyclist) movement through the space;	
	c) ensuring clear site lines from, and between, buildings and open space areas: community areas; and	
	d) designing out any entrapment spaces.	
	C4	
There is no rule applicable.	Natural access is considered, providing clear entry and exit points and a legible, accessible route through the space.	
	C5	
There is no rule applicable.	Planting in public spaces do not obscure views along paths and streets, or to entrances and should not create secluded, hiding areas.	
	C6	
There is no rule applicable.	Selection of plant material are sturdy and in areas of high crime, to make it difficult to snap main growing stems, heavy standard (140-160mm girth) or semi-mature trees (200-270mm girth) should be used to increase their chance of survival.	
	C7	
There is no rule applicable.	Plant material, such as creepers or low hedges may be used to deter to access and limit the opportunity for graffiti on fences and walls.	

	T	
	C8	
There is no rule applicable.	Hard landscape features such as low walls, bollards are used to delineate movement areas from semi-private areas.	
3.2 Children's Play Areas		
	C9	
There is no rule applicable.	Children's play areas are located and designed to to comply with each of the following:	
	a) there is natural surveillance from adjoining areas	
	b) adjacent areas are used by compatible groups	
	c) there are multiple entry/exits	
3.3 Lighting		
	C10	
There is no rule applicable.	Provide a schedule of lighting showing that lighting complies with each of the following:	
	 a) Australian Standard AS1158 Lighting for Roads and Public Spaces Part 1.3: Pedestrian Area (Category P) Lighting – Performance and Design Requirements 	
	b) Australian Standard AS1158: Lighting for Roads and Public Spaces Part 2: Computer Procedures for the Calculations of Light Technical Parameters for Category V and Category P Lighting	
	c) Australian Standard AS3282: The Control of Obtrusive Effects of Outdoor Lighting, in the case of security lighting	
	C11	
There is no rule applicable.	Legitimate users and activities at night are encouraged by lighting:	
	a) spaces evenly and consistently (except where accent/feature lighting is necessary)	
	b) inset spaces, entries/exits and paths	
	c) to reduce the casting of shadows that could hide intruders	
	d) directional signage	
	e) building entries	
	f) exterior to interior spaces evenly to allow for surveillance	

	040	
	C12	
There is no rule applicable.	Areas that are not intended for night time are not lit and are closed off to pedestrians.	
	C13	
There is no rule applicable.	Damage to light fixtures are minimised by selecting vandal-resistant, high mounted light fixtures. All light bulbs are protected with a suitable lantern bowl.	
3.4 Signs		
R14		
A statement is provided that all directional signage will comply with the requirements of AS1742.10 (1991) Manual of Uniform Traffic Control Devices – Pedestrian Control and Protection	This is a mandatory requirement. There is no applicable criterion.	
	C15	
There is no rule applicable	Locate signs so that they comply with each of the following:	
	a) they are clearly visible from a distance at all times	
	b) they are not likely to be obscured by growing vegetation	
	c) they are strategically placed at entrances and near activity centres including bus stops, taxi rank and public facilities	
	C16	
There is no rule applicable.	Provide legible signs for all users:	
	a) specify signs of high contrast, with light lettering on dark backgrounds with non-reflective surfaces;	
	b) signs should be developed as a system with a consistent pattern, based on a hierarchy of most important messages.	

Element 4: Built Form

Intent:

 To ensure the building design, especially in regard to its elevation and façade treatments, contributes to establishing safer environments through the use of appropriate quality material and detailing in the building, maximizing visibility and clearly delineating access and functional areas

Rules	Criteria	
4.1 Interface between buildings and public realm		
	C17	
There is no rule applicable.	Building entrances are easily identified, providing easy access to all users, affording visibility to and from the street and minimising the potential for hiding spots.	
	C18	
There is no rule applicable.	Provide clear sightlines from the building foyer so that occupants can see the nearest pedestrian area/car park before leaving the building.	
	C19	
There is no rule applicable.	Recessed sections in the building elevation/façade are detailed and located so as that there is opportunity for natural surveillance, for spill lighting and the potential for hiding is minimised.	
	C20	
There is no rule applicable.	Buildings are detailed in a manner that deters scaling (climbing) the building to access balconies from the ground and/or access between individual balconies.	
	C21	
There is no rule applicable.	Where buildings are set back from the street and/or pedestrian path, the area is developed to minimise hiding and entrapment spots.	

4.2 Materials and Finish		
	C22	
There is no rule applicable.	Building materials and finishes are of an appropriate quality and detailed in a manner to:	
	a) reduce opportunities for graffiti and vandalism	
	b) facilitate cleaning and replacement	
	c) avoid facilitating illegal access to the building and to services	

Element 6: Travel and Access

Intent:

The Development Code for Subdivision, as well as the relevant Precinct Code for an area, address travel and access. The following rules and criteria are to be generally applied to Travel and Access in conjunction with the relevant Development Code.

- a) To encourage walking and cycling and thereby increase the number of people in the public realm
- b) To optimise the safe use of public transport by providing direct access routes as well as maximizing natural surveillance

Rules	Criteria	
6.1 Pedestrian Routes, Bicycle Paths and Lanes		
	C23	
There is no rule applicable.	Pedestrian Routes, Bicycle Paths and Lanes are designed to maximise opportunities for natural surveillance by:	
	a) maintaining sightlines along paths between destination points	
	b) allowing overlooking from adjacent areas	
	C24	
There is no rule applicable.	Provide direct access routes to buildings streets, car parks and public transport. Signs should be used to assist pedestrians where it is not possible to establish clear sightlines between destinations.	

	C25
There is no rule applicable.	Security of pedestrian routes, bicycle paths and lanes are provided by:
	selecting and lighting 'safe routes' to the standard required for pedestrian areas so that these become the focus of legitimate movement after dark;
	b) ensuring that laneways have more than one entrance to avoid "dead-ends" and entrapment spots, where possible.
	C26
There is no rule applicable.	When planting adjacent to pedestrian /bicycle routes:
	a) ensuring there are open sightlines. Low planting (maximum height 600mm) and high-branching trees (two metres) should be used;
	b) avoiding tall bushes, dense shrubbery and dense clusters of trees, especially immediately adjacent to routes and at predictable stopping points such as road crossings.
R27	
A Statement is provided that pedestrian paths are designed in accordance with AUSTROADS Guide to Traffic Engineering Practice Part 13. – Pedestrians	This is a mandatory requirement. There is no applicable criterion.
R28	
A Statement is provided that Bicycle Paths are designed in accordance with AUSTROADS Guide to Traffic Engineering Practice Part 14. – Bicycles.	This is a mandatory requirement. There is no applicable criterion.

6.2 Pedestrian Underpasses and Overpasses	
	C29
There is no rule applicable.	The use of pedestrian underpasses is to be avoided. Where there is no practical or feasible alternative underpasses are designed:
	wide enough to accommodate both pedestrian and cycle traffic
	b) straight and without recesses
	c) with mirrors so pedestrians can see around corners if there is a turn of 60 degrees or more
	d) with entrances and exits that are visible from shops, homes or other areas of frequent pedestrian traffic
	e) to ensure there is no screening of entries/exits
	f) with signs at each end indicating where it leads and an alternative route to use at night
	C30
There is no rule applicable.	Overpasses are designed to reduce opportunities to throw missiles at cars or pedestrians.
6.3 Bus Interchange, Bus Stops and Taxi Rank	s
	C31
There is no rule applicable.	Locate bus stops and taxi ranks so that:
	a) natural surveillance is possible
	b) there are no walls, landscaping, fences or other structures which block sightlines to bus stops and taxi ranks
	c) they are not located adjacent to vacant land, alleys, car parks or near possible entrapment spots
	d) there are short, safe routes to bus stops and taxi ranks from night-time venues such as cinemas, theatres etc
	C32
There is no rule applicable.	Major bus stops and taxi ranks are well lit and protected from the weather, or adjacent to areas which are well lit or that provide protection from the weather.

	C33
There is no rule applicable.	Directional signage makes it easy to find bus stops or taxi ranks, and provides up-to-date passenger information.
	C34
There is no rule applicable.	Interchanges are located on the same level as significant activity generators to avoid entrapment, increase natural surveillance and provide direct routes of access.

Element 7: Services

Intent:

To provide services that are highly visible and in accessible locations.

Rules	Criteria
7.1 Automatic Teller Machines (ATMs)	
	C35
There is no rule applicable.	Approaches and entrances to ATMs are highly visible and adequately lit so that people cannot loiter, or enter, without being seen.
	C36
There is no rule applicable.	Locations near licensed premises, and bus stops should be avoided to discourage loitering by potential offenders.
	C37
There is no rule applicable.	Where ATMs are enclosed in a vestibule or similar, the vestibule should be securely glazed, adequately and secure from non-legitimate users
	C38
There is no rule applicable.	Use bollards, or other landscaping, to restrict the potential for vehicle incursions.
7.2 Local Waste Storage Facilities	
	C39
There is no rule applicable.	Screening does not provide entrapment or hiding spots and safe access and adequate lighting is provided near the waste storage areas.

7.3 Local Utility Facilities	
	C40
There is no rule applicable.	Air conditioning plants, meter boxes and other service points are mounted within a secure building / enclosure for protection.
7.4 Delivery and Storage Facilities	
	C41
There is no rule applicable.	Ensure that:
	a) Delivery and storage areas are not isolated from the main building
	b) Secure storage areas are provided for shop owners
7.5 Public Toilets	
	C42
There is no rule applicable.	Ensure that:
	Public toilets are located in obvious locations, but not in isolated areas of activity centres
	b) Entrances are highly visible so that people cannot loiter or enter without being seen, particularly for toilets close to Children's' playgrounds
	c) Public seating and telephones are located away from public toilets to avoid opportunities for loitering.
7.6 Public Telephones	
	C43
There is no rule applicable.	Public telephones are located in obvious locations, are well lit and well signposted, eg near bus stops or taxi ranks.