



Department of Planning,
Lands and Heritage



Safer Places by Design

Crime Prevention through Environmental Design

Planning Guidelines

Draft for public consultation
December 2021



The Department of Planning, Lands and Heritage acknowledges the traditional owners and custodians of this land. We pay our respect to Elders past and present, their descendants who are with us today, and those who will follow in their footsteps

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Yagan Square, Development WA

Contents

PART 1 - INTRODUCTION

1.1 Introduction.....	5
1.2 Purpose.....	5
1.3 Application.....	5
1.4 Related State Planning Policies.....	6
1.5 Who should use the Guidelines?	6

PART 2 - CPTED PRINCIPLES

2.1 CPTED and good design.....	9
2.2 CPTED and high-risk scenarios.....	9
2.3 Principle structure.....	10
PRINCIPLE 1	
Surveillance	11
PRINCIPLE 2	
Territorial definition.....	18
PRINCIPLE 3	
Access control.....	25
PRINCIPLE 4	
Space management.....	31

PART 3 - CPTED PROCESS

3.1 CPTED Process.....	37
STEP 1. Identify risk.....	39
STEP 2. Inform the brief	40
STEP 3. Design development and CPTED statement....	41
STEP 4. CPTED assessment	43
STEP 5. Deliver and evaluate	44

PART 4 - SAFER PLACE SCENARIOS

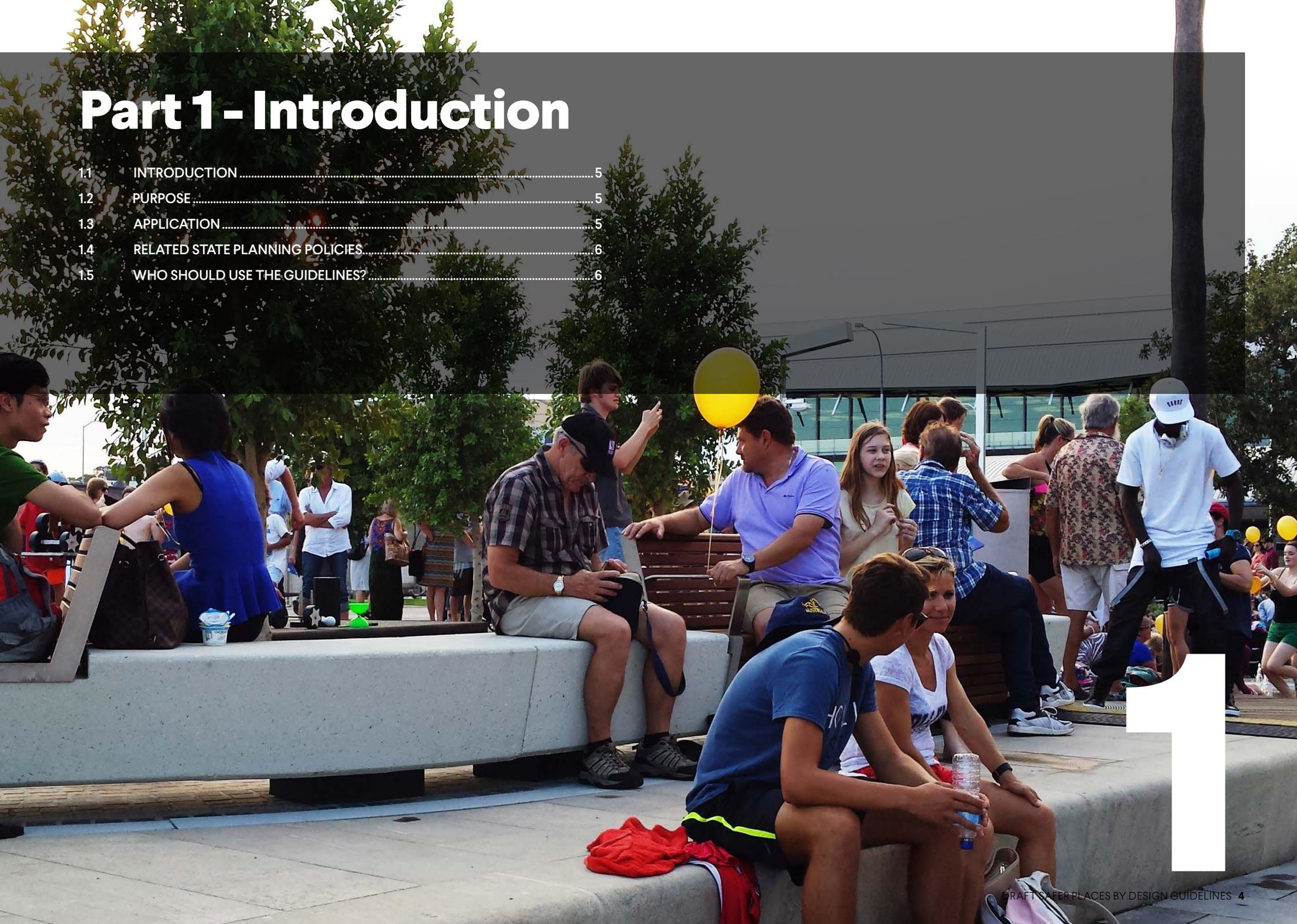
4.1 Neighbourhoods and precincts	46
4.2 Residential and mixed use streets	48
4.3 Public spaces	50
4.4 Activity centres	52
4.5 Public transport hubs.....	54
4.6 Pedestrian and cycling networks.....	56
4.7 Pedestrian access ways.....	58
4.8 Community infrastructure	60
4.9 Car parking.....	62
4.10 Crowded places.....	64

APPENDICES

A1 Useful contacts.....	67
A2 Crime risk influences	68
A3 CPTED statement checklists	71
Definitions	76
References and further reading	78
Photo credits.....	79

Part 1 - Introduction

1.1	INTRODUCTION	5
1.2	PURPOSE	5
1.3	APPLICATION	5
1.4	RELATED STATE PLANNING POLICIES	6
1.5	WHO SHOULD USE THE GUIDELINES?	6



Introduction

1.1 Introduction

Safer Places by Design (the Guidelines) supports the creation of well-designed built environments through the principles of ‘crime prevention through environmental design’ (CPTED).

CPTED is the application of best practice principles and processes to the design of the built environment to minimise crime and fear of crime for enhanced community safety. The use of CPTED supports high quality design outcomes to create safer environments, and great places for community enjoyment.

While the risk of crime can be influenced by a range of factors and is not simply prevented through well designed places alone, CPTED is an important tool with proven benefits. To be most effective, CPTED needs to be considered as part of a holistic crime prevention strategy incorporating social, environmental and community development considerations that together contribute towards improved community wellbeing and liveability.

The Guidelines recommend principles and processes to integrate CPTED responses into private and public developments and planning frameworks to create safer places and spaces. They encourage early implementation of CPTED into planning proposals based on location specific crime risk influences. The Guidelines also consider how good urban design can support safer environments for various types of crime - from graffiti and incidences of anti-social behaviour, through to violent extremism and terrorism.

1.2 Purpose

Safer Places by Design aims to provide a practical resource to assist designers, planners, developers, decision-makers, landowners and community in the application of CPTED principles to the design and development of places in the built environment, within the context of the Western Australian (WA) planning system.

The Guidelines aim to:

1. promote the value of good design in delivering vibrant, attractive and safe public environments
2. encourage integration of CPTED thinking into the design, functional brief, implementation and evaluation of development projects of varying scales and complexity
3. promote incorporation of CPTED considerations into the preparation of planning documents, such as schemes, structure plans (standard and precinct), planning policies and design guidelines
4. inform design review and assessment of development applications and other planning proposals
5. raise stakeholder awareness of crime prevention and safety as it relates to the built environment.

1.3 Application

The Guidelines apply to the planning, assessment and delivery of all development in WA, from planning new communities and redevelopment within existing communities, through to infrastructure projects and individual building design. The Guidelines can also be used to include CPTED considerations in relevant planning documents, including planning strategies, schemes, structure plans and policies.

The Guidelines are designed to be used to achieve CPTED responses that are tailored to each site and context, rather than applied as generic rules to every situation.

The Guidelines deal primarily with the physical aspects of CPTED in the built environment. While the importance of management practices, such as security staffing and surveillance systems, as well as the role of social and cultural influences, such as police and community partnerships, are recognised, these considerations are beyond the scope of the Guidelines.

CPTED continues to evolve in response to new challenges and changing public expectations, including those around sustainability, latest technologies and rising threats such as terrorism and cyber-crime. These Guidelines aim to incorporate the latest thinking and evolution in CPTED, however, as CPTED is a dynamic field, the most up-to-date research and advice should always be sought. More information is included in Appendix A1: Useful contacts.

1.4 Related State Planning Policies

The Western Australian Planning Commission’s (WAPC) State Planning Policy 7.0 Design of the Built Environment (SPP 7.0) provides a framework to promote quality design across WA. The policy identifies ten principles of good design that are applied to create a consistent framework for informing and assessing development design quality across WA. CPTED relates to all ten principles, but particularly the principle of ‘safety’:

Safety: *Good design optimises safety and security, minimising the risk of personal harm and supporting safe behaviour and use.* (WAPC, 2019)

The *Safer Places by Design* are to be considered in conjunction with SPP 7.0 to enable CPTED principles to be integrated into design and assessment processes to manage crime risk.

The *Safer Places by Design* should also be read in conjunction with other relevant WAPC policies. This may entail WAPC policies making direct reference to the *Safer Places by Design*, or WAPC policies incorporating relevant CPTED considerations and requirements, having regard to the objectives and principles of these Guidelines. Key policies that should be considered in conjunction with *Safer Places by Design* include, but are not confined to:

Liveable Neighbourhoods Operational Policy

SPP 3.2: *Aboriginal Settlements*

SPP 4.2: *Activity Centres*

SPP 7.2: *Precinct Design Guidelines*

SPP 7.3: *Residential Design Codes: Volumes 1 and 2*

Related legislation and standards

Safer Places by Design should be read in conjunction with relevant legislation including the *National Construction Code* (NCC), the *Disability Discrimination Act 1992*, and other relevant Australian Standards. Further information can be found in Appendix A1: Useful contacts.

1.5 Who should use the Guidelines?

Safer Places by Design provides a resource for the following key user groups.



Decision-makers/Approval authorities

These Guidelines can assist planners, designers, elected members and others operating in local and State government decision-making agencies in both the formulation of planning documents/framework, and assessment of planning and development proposals.

Formulation of Planning Documents:

The Guidelines and/or related CPTED considerations should be considered and incorporated as appropriate when preparing planning documents, including local planning strategies, schemes, policies, structure plans and local development plans.

Assessment of Planning and Development Proposals:

State and local government decision-making agencies should refer to the Guidelines to assist with the assessment of a range of development proposals and planning documents. Design review panels should apply the Guidelines to improve a project’s safety outcomes.

Benefits include:

- Integration of CPTED considerations early in decision-making processes
- Better development outcomes, including reductions in crime levels, improved perceptions of safety and use of public areas



Developers, designers and related professionals

Public and private developers (and project teams) are encouraged to use the Guidelines to integrate CPTED into the design of all project types, including infrastructure works, landscaping, subdivision, and public and private buildings.

Achieving good outcomes may require expertise from a range of design-related professionals, including architects, landscape architects, planners, urban designers, lighting engineers, structural engineers, mechanical engineers, building surveyors and specialist CPTED assessors.

Benefits include:

- Better understanding of and responsiveness to local crime risk and changing demographics
- Implementation of a holistic approach to the design of safer places and spaces
- Better development outcomes through early engagement and informed design decisions



Development owners and operators

Owners and operators of developments have a duty of care to protect the people accessing and using their spaces from danger and potential threats. Owners and operators are encouraged to be familiar with CPTED approaches outlined in the Guidelines, including counter-terrorism (CT) strategies where relevant.

Owners and operators are encouraged to apply CPTED thinking from the outset of a project - at tender and project brief stages, where the largest benefits to a project can be achieved. It is also the responsibility of owners and operators to implement and review CPTED strategies for effectiveness.

Benefits include:

- Safer and better designed places for customers and employees
- Integration of CPTED considerations early in decision-making processes reduces the risk of costly add-ons at a later stage



Community organisations

A range of community stakeholders, including residents and community groups, can have an interest in and support the implementation of effective CPTED strategies. Forming strategic, ongoing partnerships with local organisations, such as property owners, police and community groups, can support a consistent and coordinated approach to help understand risk and formulate responses that enhance safety.

These Guidelines can be used to inform communities about the principles and processes of CPTED and to encourage community participation in the creation and maintenance of safe environments.

Benefits include:

- Opportunities to contribute to design processes for safer places and spaces
- Improved perceptions of safety and connection to neighbourhood
- Fewer incidences of crime
- Stronger neighbourhood relationships and sense of belonging



WA Police Force and security personnel

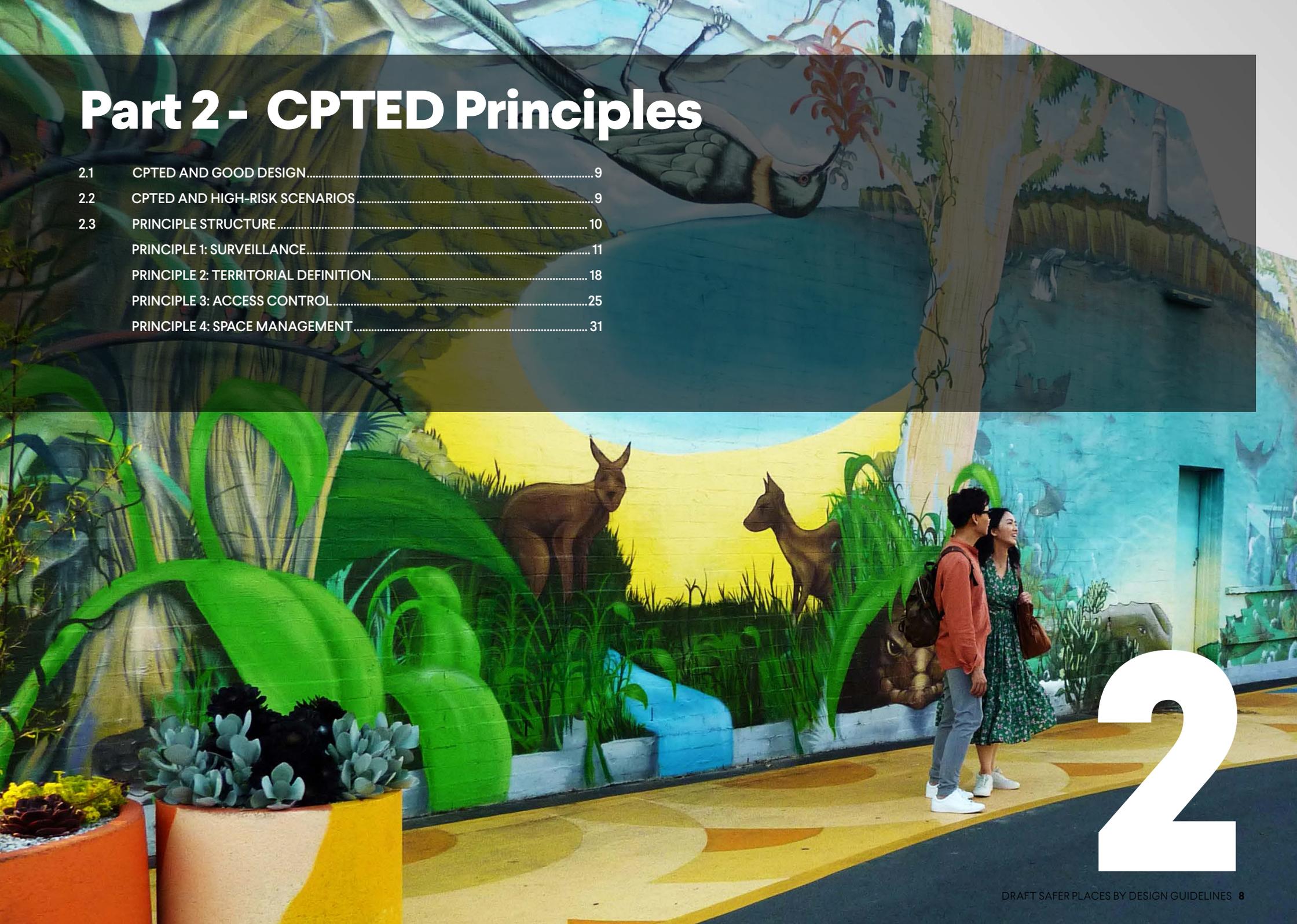
The Guidelines provide a reference for police and others involved in crime prevention to promote practical, effective and holistic CPTED approaches for the design and management of safer places.

Benefits include:

- Opportunity to contribute to meaningful crime prevention strategies
- Closer relationship between design/ planning and law enforcement agencies

Part 2 - CPTED Principles

2.1	CPTED AND GOOD DESIGN	9
2.2	CPTED AND HIGH-RISK SCENARIOS	9
2.3	PRINCIPLE STRUCTURE	10
	PRINCIPLE 1: SURVEILLANCE	11
	PRINCIPLE 2: TERRITORIAL DEFINITION	18
	PRINCIPLE 3: ACCESS CONTROL	25
	PRINCIPLE 4: SPACE MANAGEMENT	31



2

CPTED Principles

2.1 CPTED and good design

When places are well designed, they perform better and create positive experiences for users. Great places are spaces that people want to spend time in. They are inclusive and accessible to all. When a mix of people have access to spaces, participation increases along with perceptions of safety. For example, places that cater for both the elderly and younger people, will bring people together, supporting passive surveillance and a stronger sense of inclusion, connection and belonging.

Incorporating CPTED approaches at the outset of the design process is the best way to support the creation of great spaces. The design of a development project can create inviting spaces that people want to spend time in and that positively influence behaviour. This supports safer outcomes and reduces the need for costly modifications at later stages.

2.2 CPTED and high-risk scenarios

The CPTED principles include key considerations for those areas or projects that are deemed to be at 'high risk' to threats from terrorism and violent extremism, with the aim of assisting in reducing the opportunity for these hostile acts.

High risk scenarios include places that are more vulnerable to severe threats including terrorism and violent extremism. This may be due to the scale or type of development project or land use, a target location, or where a terrorist or crime threat has been identified. Locations such as critical infrastructure and crowded places (see Definitions) can be high-risk targets.

Even though the probability of a hostile or terrorist incident is low compared to other crimes; the impact can be devastating. Terrorists are prone to seek targets where they are least expected and where defences are ill-prepared. While intelligence gathering, surveillance and police presence are key tools, the last line of defence is often barriers and security checks. These responses can impact amenity, be inconvenient and increase perceptions of crime. Responses to a terrorist threat should aim to be sympathetic to the local environment, and not contribute to heightened perceptions of threats.

To maximise effectiveness, responses to high-risk scenarios should be considered early in the design process to support integrated design solutions and be holistic and appropriate to the level of threat. It is important that designs consider the needs of normal users so that spaces can perform well and be pleasant to be in, while also responding to identified risks.

Responses to high-risk scenarios should factor in other relevant considerations, such as current and future security measures, along with organisational processes, including understanding how internal teams and support agencies (e.g. police) will respond to incidents. Some responses may be temporary, for example measures introduced for large events, while others may be permanent. Given that threats can change very quickly, designs often need to be adaptable and scalable.

A suitably qualified professional may be required to assist with appropriate CPTED responses and/or CPTED assessment during planning assessment. This may involve design expertise, including architects, landscape architects and urban designers. However, in some situations it may be necessary to engage specialist CPTED expertise and risk advisors, as well as consult with the WA Police Force Protective Security Unit.

Reference should be made to the WA Police Force Counter Terrorism (WAPFCT) Unit and Australian National Security for advice on current terrorism threat and national advice. These can be found at <https://www.police.wa.gov.au/Your-Safety/Counter-terrorism> and <https://www.nationalsecurity.gov.au/Media-and-publications/Publications/Pages/default.aspx>. Further information is available in A1: Useful contacts.

2.3 Principle structure

For the purpose of the Guidelines, CPTED is organised into four principles that support well-designed, safer places.

Each Principle is accompanied by the following supporting information:

- **Intent** - explains the intended outcome of the principle and why it is important
- **Objectives** - states the objectives to achieve the desired outcome of that principle
- **Considerations** - identifies how the principle objectives may be achieved through appropriate design responses (including additional considerations for high-risk scenarios – see below)
- **Avoid** - outlines design responses to be avoided

Part 3: CPTED Process, explains how these principles, objectives and considerations can be applied to a five-step process that begins with context understanding and concludes with project delivery and evaluation.

The expectation is for the **Objectives** accompanying each **Principle** to be addressed through tailored application of the **Considerations**, having regard to the nature and scale of the proposal at hand, its site context, and the local crime risk profile.

This is conducive to a site-specific and performance-based approach that allows for common sense solutions, whereby practitioners can apply the **Objectives** and **Considerations** as applicable to their respective proposals.

Reference can also be made to Part 4: Safer Place Scenarios, which illustrate how these principles, objectives and considerations can be applied in specific situations.

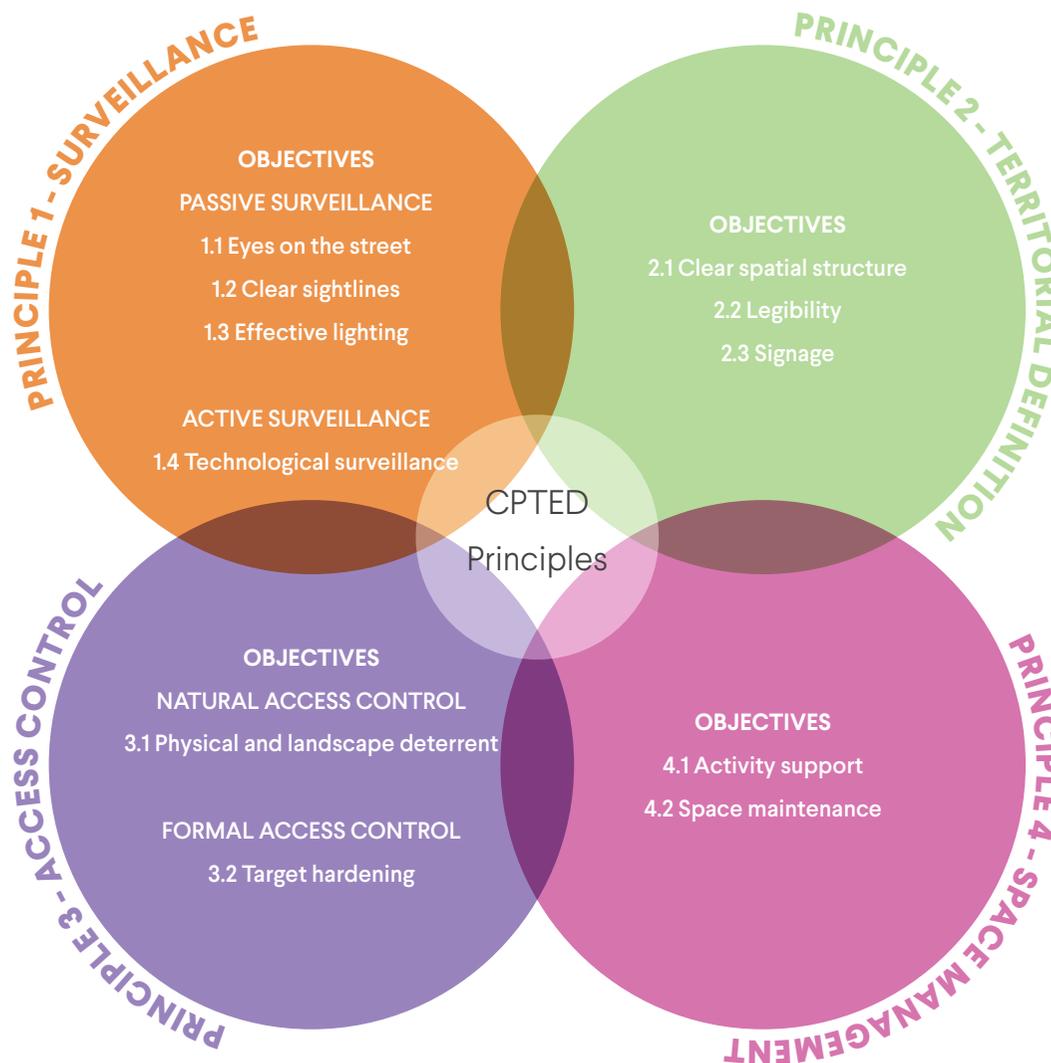


Figure 2.1 CPTED Principles



Principle 1: Surveillance

Intent

‘To see and be seen’. The design of an environment should maximise the number of people using a space to encourage good passive surveillance. Effective surveillance can make crime targets less attractive.

Why?

Criminals do not want to be observed. An environment that feels overlooked, with physical features, activities and good passive surveillance, discourages crime and anti-social behaviour. Perceptions of safety and security for users also increases.

Design focus

The built environment design should maximise opportunities for appropriate passive surveillance, with active surveillance measures (such as CCTV and security patrols) employed only where passive surveillance is not achievable or sufficient to prevent anti-social or criminal activity.

OBJECTIVES

PASSIVE SURVEILLANCE

1.1 Eyes on the Street

1.2 Clear Sightlines

1.3 Effective Lighting

ACTIVE SURVEILLANCE

1.4 Technological Surveillance

Active surveillance:

Where passive surveillance alone is deemed insufficient to deter anti-social or criminal activity, surveillance can be supplemented by the installation of active, technological systems, like CCTV and electronic monitoring. Technological advancements such as georeferencing and movement detection offer sophisticated systems that can be integrated into the design of higher-risk environments.

Public spaces and transitional spaces between public and private development may become a target for crime and may benefit from the installation of technological surveillance. This may include areas concealed from view, and/or which experience regular periods of isolation or inactivity, such as car parks, playgrounds, public spaces in commercial areas that are accessible after business hours, elevators and narrow accessways.

In addition to the above measures, a CPTED surveillance response can be supplemented by an organisational security response. This includes consideration to the ongoing management of places with visible security presence, regular patrols and clear communication lines between security personnel.

OBJECTIVE 1.1 Eyes on the street

The design of publicly accessible spaces provides opportunities for passive surveillance

CONSIDERATIONS

- C1.1.1 Facilitate passive surveillance from adjacent land uses by orienting buildings and openings (windows, terraces, balconies) to appropriately overlook streets and public places (consider secondary street frontages/laneways as well)
- C1.1.2 Encourage a mix of complementary land uses to extend the hours of surveillance
- C1.1.3 Encourage activity generators (e.g. shop fronts, promotions, events) at ground level to increase the passive surveillance by users of the public spaces
- C1.1.4 Balance passive surveillance with privacy and noise considerations
- C1.1.5 Intensify movement activity by co-locating pedestrian paths and transport routes
- C1.1.6 Locate major uses (anchors) to support safe pedestrian routes between locations

High risk scenarios

For high risk scenarios, passive surveillance can be used as a key strategy to assist detecting potential danger.

- C1.1.7 Maximise passive surveillance opportunities in high risk locations wherever possible – consider clear sightlines and vantage points for observation of unusual or suspicious activity
- C1.1.8 Increase public attention to potential threats by communication design techniques (e.g. use of signage with catchy reminders such as “If you see something, say something”)

AVOID

- Compromising privacy to private spaces – e.g. avoid visually permeable fencing to private outdoor spaces fronting public space–these may be screened later with temporary, low quality materials
- Blank walls to streets and public open space
- Footpaths and accessways with no overlooking
- Public access to the sides of a building
- Underused and segregated streets and footpaths

- Roll down shutters, tall fencing and landscaping that prevents surveillance
- Screening of windows to main-street retail environments with painted advertising, opaque glazing, window treatments and the like

Passive Surveillance

Eyes on the street

- passive surveillance facilitated from balcony, alfresco seating and shop frontages
- complimentary land uses extending the hours of surveillance
- co-locating pedestrian, cyclists and public transport intensify movement activity

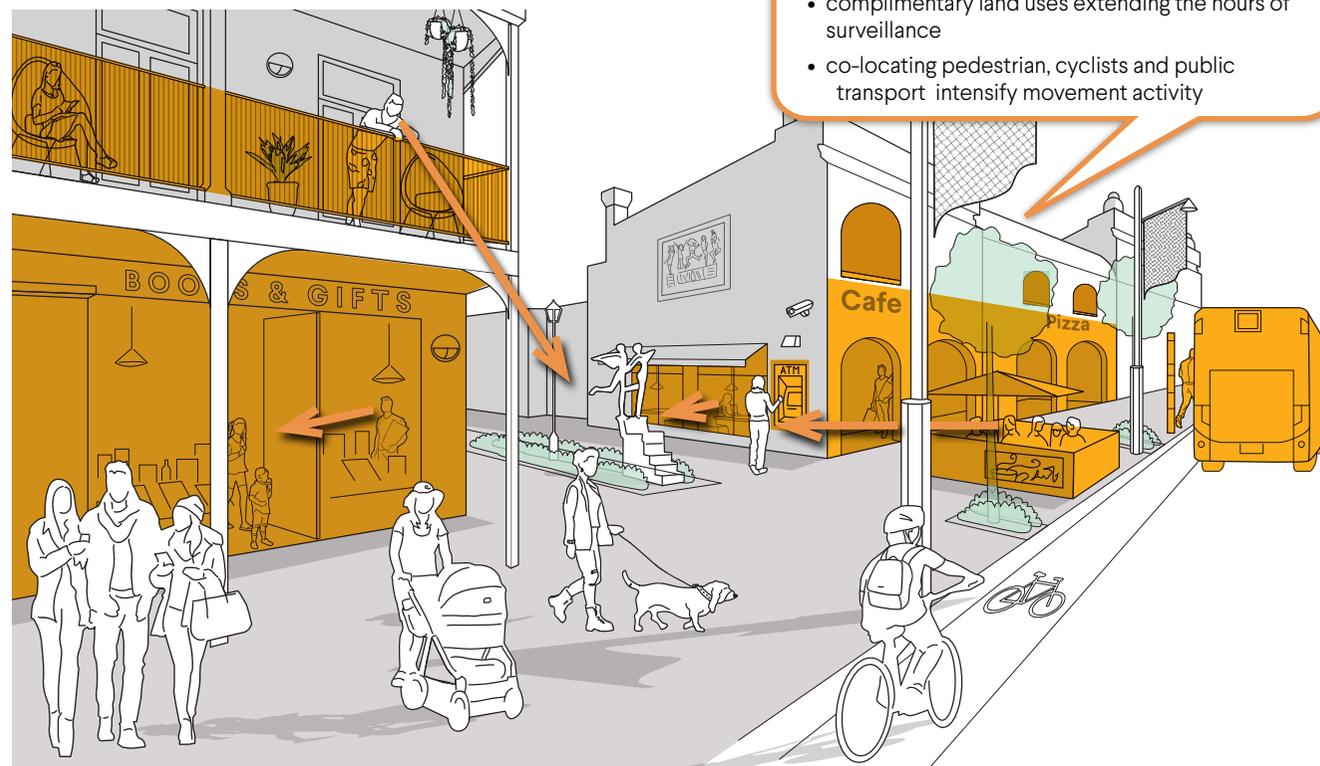


Figure 2.2 Eyes on the street

OBJECTIVE 1.2 Clear sightlines

The design of the environment provides opportunities for passive surveillance through unimpeded sightlines to, and within publicly accessible areas

CONSIDERATIONS

- C1.2.1 Locate design and landscaping features to maintain sightlines from surrounding buildings to public areas, particularly to walkways, seating and play areas
- C1.2.2 Locate footpaths and cycleways in view of adjacent active land uses and active frontages
- C1.2.3 Maintain unimpeded sightlines along footpaths and accessways to building entrances and exits, and to potential crime target areas such as ATMs and public toilets; avoiding areas of concealment
- C1.2.4 Support surveillance and sightlines with visually permeable fences and barriers, with landscape features such as well-maintained, low level planting and cleared understorey to trees as appropriate
- C1.2.5 Design laneways to enable clear sightlines from one end to the other
- C1.2.6 Use mirrors/reflective surfaces and clear glazing to assist users see around corners, or to improve visibility where pedestrian routes are not straight
- C1.2.7 Ensure design features do not conceal unlawful access and activity

AVOID

- Blind spots caused by changes in direction, gradient or level which may impede sightlines, especially on pathways, stairs or enclosed spaces
- Landscape materials that can act as a visual barrier
- Compromising privacy
- Level changes that obscure public areas
- Dense shrubs and trees that block sightlines and create hidden areas
- Routes that could create entrapment spots

Passive Surveillance

Clear sightlines

- planting is kept low to enable viewing
- unimpeded sightlines from walkways to building entrances and ATM
- laneway has clear sightlines from end to end
- shop windows are not obscured for example with posters, and facilitate viewing in both directions

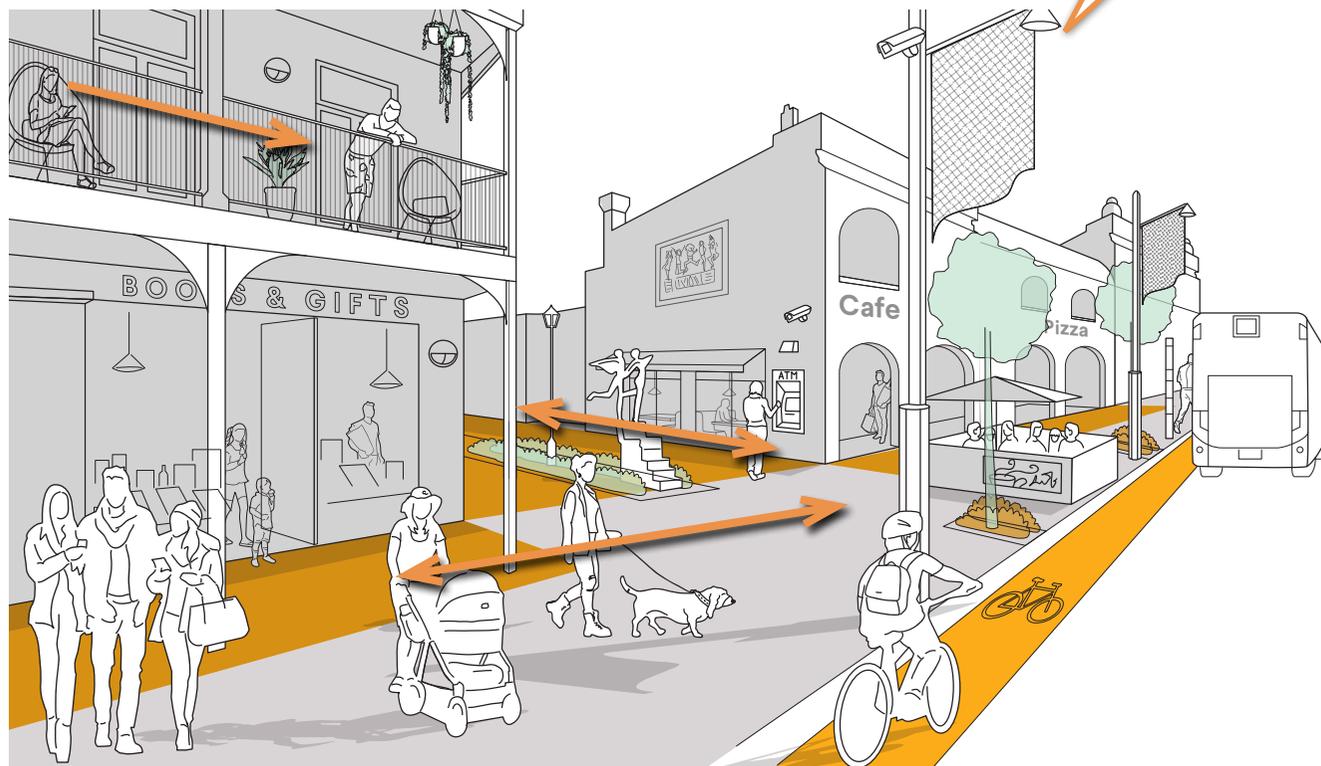


Figure 2.3 Clear sightlines

OBJECTIVE 1.3 Effective lighting

Lighting design supports good surveillance, raises perceptions of safety and deters offending

CONSIDERATIONS

- C1.3.1 Maximise opportunities for natural light penetration into public areas and for even well-lit spaces through careful building orientation and design
- C1.3.2 Provide effective lighting for CPTED measures while preventing/negating light spill
- C1.3.3 Create a lighting strategy that supports passive surveillance of public areas:
 - Light pedestrian routes and spaces
 - Use lighting to enhance visibility at both ends and along the length of pedestrian routes
 - Focus lighting on areas that are intended for night-time uses
 - Ensure alcoves, recessed areas and entrances/exits are well lit
 - Use lighting to facilitate good interior to exterior surveillance
- C1.3.4 Design a lighting scheme that will:
 - Reduce contrast and shadow to avoid hiding places
 - Allow for eyes to gradually adjust to changing light levels
 - Highlight wayfinding signage and pathways
 - Consider the appeal of fixtures to vandals and theft
 - Combine footpath and entrance lighting wherever possible
- C1.3.4 Provide lighting at a range of heights for a range of surveillance points, avoiding glare from up-lights where possible
- C1.2.5 Consider using movement-sensored lighting where appropriate
- C1.3.6 Ensure sufficient light coverage if one fixture fails
- C1.3.7 Ensure the light fixtures are capable of being maintained and promptly fixed if broken

AVOID

- Dark spots
- Alcoves or recessed doorways
- Light pollution
- Lighting areas not intended for use after dark
- Unshielded lighting at eye level
- Locating lighting in areas shielded by vegetation, awnings or other barriers
- Placement of lighting fixtures that support climbing

Passive Surveillance

Effective lighting

- road, footpaths and laneway are well-lit
- recessed area in laneway (potential entrapment space) is sufficiently lit
- lighting provided along footpaths and building entries



Figure 2.4 Effective lighting

OBJECTIVE 1.4 Technological surveillance

Surveillance of higher-risk or vulnerable areas is increased through technological measures

Active Surveillance

(see note pg 12)

CONSIDERATIONS

C1.4.1 Consider the most effective locations for positioning CCTV cameras in relation to lighting, obstructions and sightlines to maximise observations within the field of vision.

Effective CCTV depends on:

- Complete visual coverage of the area (saturation cover)
- Clear sightlines from the cameras (no blind spots)
- 24/7 monitoring
- Fast guardianship response

C1.4.2 Promote the presence of CCTV with clearly visible signage and consideration to legal obligations

C1.4.3 Consider using temporary/mobile CCTV to respond to emerging situations or crime hot spots

C1.4.4 The use of CCTV may be appropriate for pedestrian access ways close to commercial areas

High risk scenarios

In high risk scenarios, more visible patrols and use of sophisticated technological surveillance devices may be necessary. This may include, for example, CCTV, automatic number plate readers (ANPR), facial recognition devices, robotic security guards and security drones.

C1.4.4 Provide technological surveillance devices to increase surveillance to prevent or deter offending

C1.4.5 Be aware that targets under camera surveillance may sometimes become more attractive to terrorists if they seek to gain media attention

AVOID

- Compromising privacy
- Overuse of technological surveillance as a substitute for good environmental design
- Sightlines of CCTV being blocked by overgrown trees or other obstacles

Technological surveillance

- CCTV cameras are used in strategic locations



Figure 2.5 Technological surveillance

Surveillance examples



Photo 2.1 Overgrown planting is not desirable as it may create areas of concealment. Planting should be kept low.



Photo 2.2 Well maintained low hedging without areas of concealment.



Photo 2.3 Major openings to dwellings provide passive surveillance to the public realm.



Photo 2.4 A bend at the end of this PAW affects the ability to see through to the other side. This impacts visibility and wayfinding.



Photo 2.5 A recess for a back gate along a PAW can create a hidden or entrapment space.



Photo 2.6 Dwellings with narrow lot frontages are dominated by garage doors. The lack of windows reduces opportunity for passive surveillance.

Surveillance examples



Photo 2.7 Additional surveillance provided through CCTV cameras.



Photo 2.8 Good surveillance from upper floor windows to this laneway.



Photo 2.9 Good passive surveillance to the street is provided by active frontages and first floor windows.



Photo 2.10 Mixed use buildings sited close to playground provide passive surveillance. Spot lighting on the building (arrowed) provides an additional safety measure.



Photo 2.11 Lighting extends the safe useable hours for active and passive recreation for local residents. This supports after-hours activity as a focal point for the community.

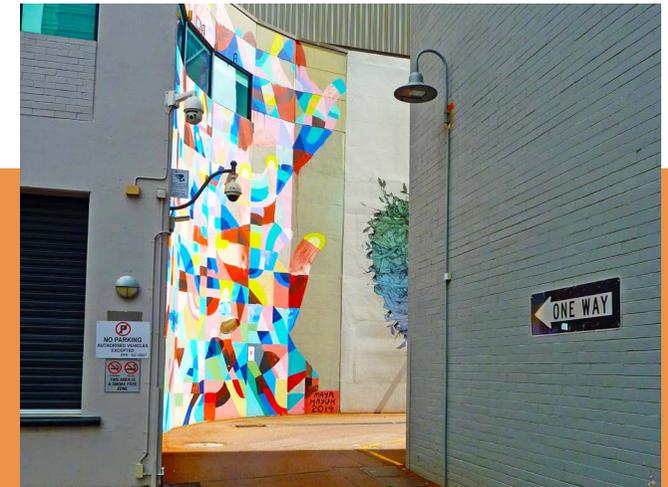


Photo 2.12 CCTV cameras and lighting improve safety for laneways that have both day and nighttime uses.

OBJECTIVES

2.1 Clear spatial structure

2.2 Legibility

2.3 Signage

Principle 2: Territorial Definition

Intent

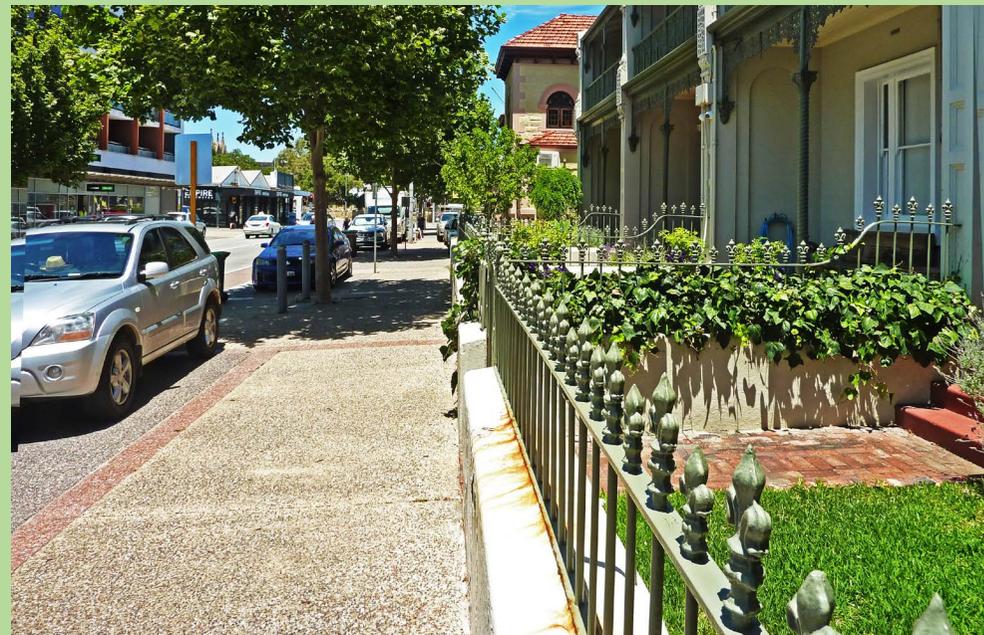
Clear boundaries promote a sense of community 'ownership' of a space. Territorial definition can help by defining the boundary of a space and the level of protection it is given.

Why?

People are inclined to protect their own space, be it as individuals or a community, and have a certain respect for the space of others. People can become territorial over regularly used routes and public areas, recognising and challenging inappropriate behaviour.

Design focus

Approaches to territorial definition should be sensitively integrated to avoid creating spaces that are hostile, excluding or unwelcoming. Visual cues, like changes in level, vegetation, paving materials and low fences can assist by indicating a space's intended use while still being welcoming.



OBJECTIVE 2.1 Clear spatial structure

Clearly define the ownership of a space (public and private spaces, as well as transitional spaces in between)

CONSIDERATIONS

- C2.1.1 Create a clear distinction between public and private space, as well as transitional spaces between public and private through physical and symbolic boundary markers and clear layering of spaces
- Clearly define and design for the appropriate use of a space and apply landscape treatments to design out undesired uses. Visual cues of spatial control like walkways, changes in surface treatments, bollards, fencing, soft and hard landscaping can assist in this regard, which can be augmented with signage where needed
 - Provide enough separation between the private and public realm so that occupants do not feel overexposed, resulting in excessive screening
- C2.1.2 Create a sense of safety, security and pride in a place:
- Identify potential users of the space and involve them in the design and decision-making process where possible to engender a sense of ownership e.g. in public parks and civic buildings
 - Plan and design communities with supporting facilities and land uses
 - Create an attractive, legible, well-orientated, and well-maintained development.
- C2.1.3 Design clearly legible building entrances. For example, shared residential entries for apartments should be welcoming places and easy to locate
- C2.1.4 Integrate public buildings into the wider public realm

- C2.1.5 In mixed use developments, separate the public, commercial and semi-public spaces from private residential areas, using:
- Separate entries and levels
 - Changes in landscape and building response, e.g. colour, floor treatment, materials, design features
 - Signage

High risk scenarios

For high risk scenarios, additional measures may be required with territory defined through 'perimeter defence' and 'stand-off distances' (see Definitions). It is more effective and less expensive to consider these measures at the design stage than retrofitting.

For high risk scenarios consider the following elevated responses:

- C2.1.6 Use of perimeter defence to limit or block unauthorised access into a protected site, using the three 'Ds' approach where appropriate:
- Deter:** use a mix of physical deterrents or barriers, integrated into the overall design where possible (e.g. fences, lighting, bollards, warning signs)
 - Detect:** maximise passive surveillance opportunities and install appropriate surveillance measures such as surveillance camera technology
 - Delay:** use physical barriers to slow down the intrusion such as gates and interior locking doors

Territorial definition

- C2.1.2 Provide an enforceable 'stand-off distance' (see Definitions) to address potential security threats (such as improvised explosive devices (see Definitions) at the perimeter of a site or development:
- Reducing potential damage through calculating blast effects and distances
 - Consider 'stand-off' as a key component of a tiered response which includes security surveillance (staff and CCTV), traffic management, and communication

Territorial definition

AVOID

- The creation of small, unusable areas of land and open space that are difficult to maintain and susceptible to neglect
- The use of excessive physical barriers, that are not integrated into design elements

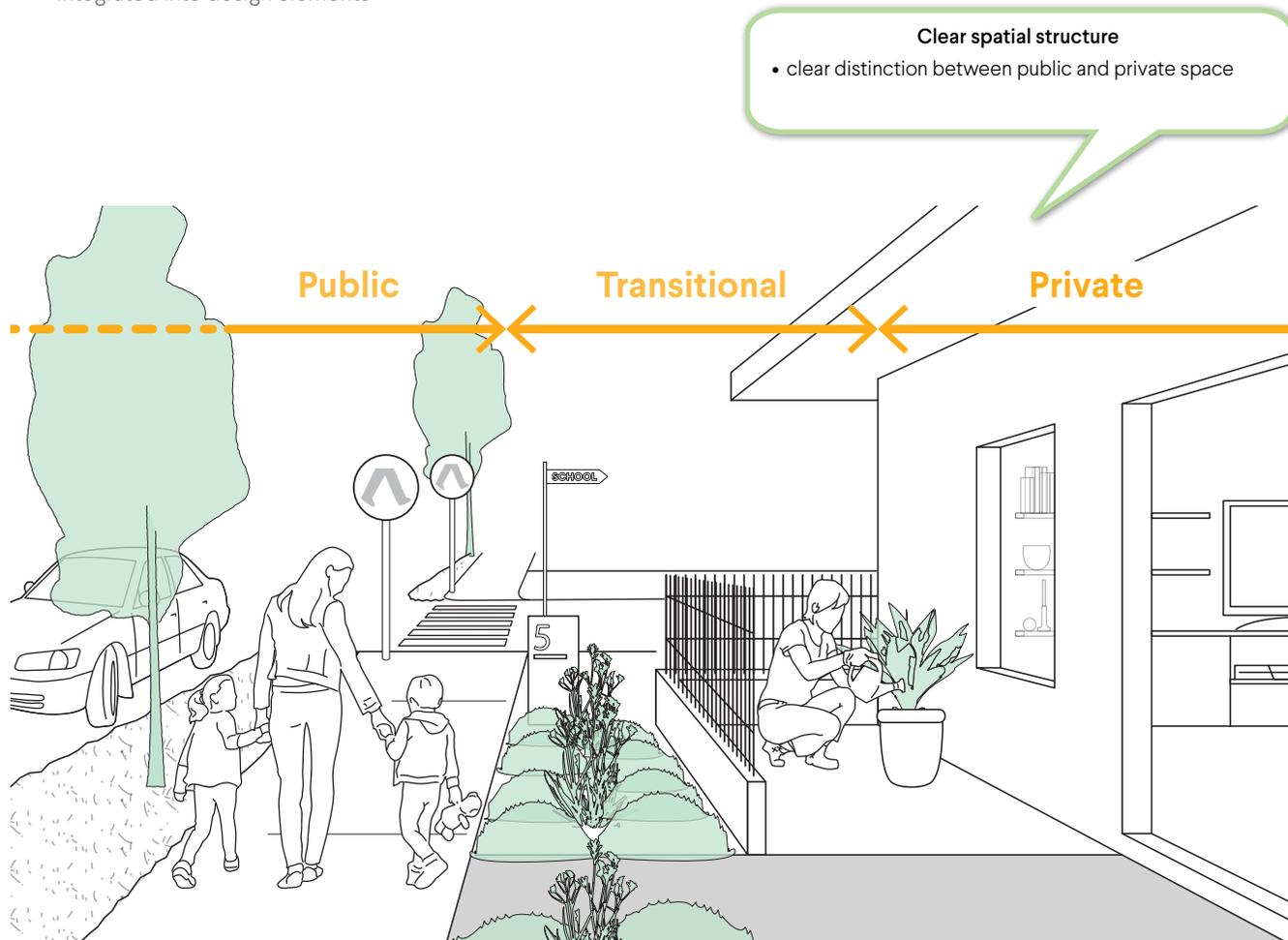


Figure 2.6 Clear spatial structure



Photo 2.13 Transitional areas define space between private and public zones.

OBJECTIVE 2.2 Legibility

A legible land use spatial structure is provided that assists wayfinding, orientation and connection to support safe opportunities for social interaction and recreation.

CONSIDERATIONS

- C2.2.1 Ensure land use spatial structure and movement network is responsive to topography, local context and land uses and is designed to achieve good connectivity
- C2.2.2 Design a legible street network – a grid or modified grid pattern layout that provides route choice is usually preferred compared to a curvilinear arrangement
- C2.2.3 Avoid creating new pedestrian accessways, however where proposed ensure they are purposefully designed with the cul-de-sac network
- C2.2.4 Link public open spaces with residential areas to encourage pedestrian movement and active transport
- C2.2.5 Reduce any conflict between uses, particularly in mixed use developments or between public and private uses
- C2.2.6 Ensure pedestrian and cyclist routes support easy wayfinding. This can be assisted by using different paving materials or patterns
- C2.2.7 Locate bus stops, taxi stands and other services in areas that are highly visible and safe
- C2.2.8 Create landmarks and focal points or use unique local elements or colours to aid wayfinding
- C2.2.9 Ensure signage is strategically located to compliment legibility
- C2.2.10 Ensure entrances and exits to a place or building are clearly presented to users
- C2.2.11 Locate movement networks on primary routes and shared spaces
- C2.2.12 Ensure public open space is well defined and purposeful

AVOID

- Isolated corners, entrapment spaces and culs-de-sac with poorly designed public access ways (PAWs)
- Isolated pockets of small, unusable land and open space as they are difficult to maintain and do not facilitate recreation

Territorial definition

Legibility

- private and public zones are clearly defined
- clear urban structure promotes safe and efficient movement of vehicles, cyclists and pedestrians
- the pedestrian route supports easy wayfinding



Figure 2.7 Legibility

OBJECTIVE 2.3 Signage

Signage supports legibility and wayfinding while communicating the intended use of space

CONSIDERATIONS

C2.3.1 Use signage to:

- communicate ownership of the space and desired behaviours
- display assistance (including after-hours information) and how to report crime
- support wayfinding, with directional maps and signposts to communicate the location of safe places and routes

C2.3.2 Placement and design of signage should consider the following:

- clarity of information – consider scale, language, symbols, concise messaging
- provide QR code on signage for easier and instant access to more detailed information
- be legible, well-lit and appropriately positioned to benefit all users: children, the elderly, people with disability
- regular and strategic positioning (e.g. at crossing points and entrances) so that the message is not missed
- enough lighting for to see and be seen at night
- ease of maintenance and prompt repair if damaged

AVOID

- Conflicts with planting, landscape or building features that may obscure the signage
- Proliferation of signage that may create a confusing or unattractive environment
- That is of poor quality, susceptible to vandalism, or unable to be adequately maintained
- Poorly located signage that may impact on visual sightlines
- Placing signage or other objects in the line of vision from installed or planned CCTV

Territorial definition

Signage

- nearby destinations are clearly signed for pedestrians, cyclists and vehicular links
- pedestrian movement is prioritised to encourage walking



Figure 2.8 Signage

Territorial definition examples



Photo 2.14 Transitional areas define space between private and public zones. 'Target hardening' (see objective 3.2) is also in place with the provision of security gate.



Photo 2.15 A purposefully designed and well defined public open space is a favourite place for both the young and the old.



Photo 2.16 Well-designed signage assists wayfinding, provides information and enhances legibility and amenity of the urban environment.



Photo 2.17 Signage may combine directions, maps, information and artwork and make a pleasant entry statement to a public space.

Territorial definition examples



Photo 2.18 Paving pattern helps to distinguish public footpath from transition space next to the dwellings.



Photo 2.19 Clear demarcation of pedestrian and cyclist movement supports shared use. The different paving and colour enhance legibility.



Photo 2.20 Good delineation between private (left) and public (right) entries.



Photo 2.21 Changes in level define the transition space from public to private.

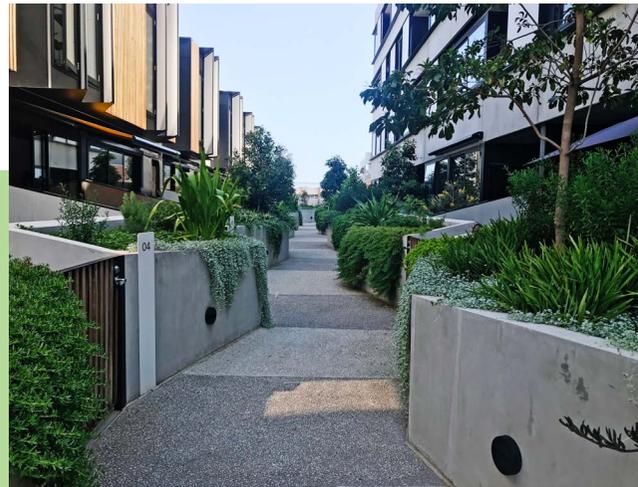


Photo 2.22 Well defined public, private and transitional space with good surveillance from elevated doors and windows.



Photo 2.23 Clear territorial definition - the low fencing and planting allows visual interaction between private and public territories.



OBJECTIVES

NATURAL ACCESS CONTROL

3.1 Physical and landscape deterrent

FORMAL ACCESS CONTROL

3.2 Target hardening

Principle 3: Access control

Intent

Design for access control should attract people and vehicles to some places and restrict them from others. Access control should limit opportunity for high risk scenarios such as hostile vehicles.

Why?

Access control reduces the opportunity for crime, increases the effort needed to commit crime, and makes inappropriate access obvious to surrounding 'eyes on the street'.

Design focus

The built environment should maximise opportunity for natural access control, with formal access control measures employed where natural control is unachievable or insufficient to prevent anti-social or criminal activity. Entrances, landscaping, lighting and fences can guide appropriate access along designated paths while deterring access to potential crime targets (such as doors and windows).

Natural and formal access control

Natural access control uses physical or symbolic barriers in the environment to facilitate normal and appropriate access, or to channel or restrict the movement of people. Formal access control uses organised, electronic and mechanical measures to further control access to potential targets or restricted areas.

The design of the environment should maximise opportunities for natural access control, with formal access control measures employed where natural control is unachievable or insufficient to prevent anti-social or criminal activity.

OBJECTIVE 3.1 Physical and landscape deterrent

The design of the physical environment directs pedestrian movement through the public realm away from potential targets or risk and into areas with good surveillance

CONSIDERATIONS

- C3.1.1 Consider opportunities to integrate the following urban design elements to support visual continuity and enhance the environment, while improving security:
- Reinforced planters and street furniture
 - Reinforced sculptures
 - Water features
- C3.1.2 Landforms, trees and hedges incorporate landscape features such as changes in surfaces and vegetation to guide movement in the public realm, such as:
- ‘defensive’ planting, e.g. spiky or barrier planting, to restrict access to vulnerable areas, like ground floor windows
 - lighting, pavement surfaces, pavement markings and vegetation to provide visual cues of approved routes or transition in ownership from public to private realm
 - ramps, steps and changes in ground level to control access
- C3.1.3 Ensure landscaping responses used to define boundaries allow good surveillance (e.g. low walls, low vegetation, visually permeable fencing)
- C3.1.4 Incorporate physical features into the urban design, such as bollards, to deter vehicle access to restricted, vulnerable or high-risk areas
- C3.1.5 For staged developments, ensure that appropriate level of access is given for each stage
- C3.1.6 Minimise the number of public entrances and exits within high risk locations

AVOID

- Conflicts with other design objectives, such as universal access and fire access
- Back lanes with poor surveillance or lighting
- Culs-de-sac linked by pedestrian routes unless part of a wider open space connection with surveillance
- Obscuring sightlines and natural surveillance

Natural access control

- Creating a fortified environment that evokes a sense of fear, such as unsightly concrete structures
- Blocking natural surveillance with boundary walls and fences
- Creating conflicts between hostile vehicle mitigation and safe pedestrian access and egress when providing temporary protection (such as during an event)

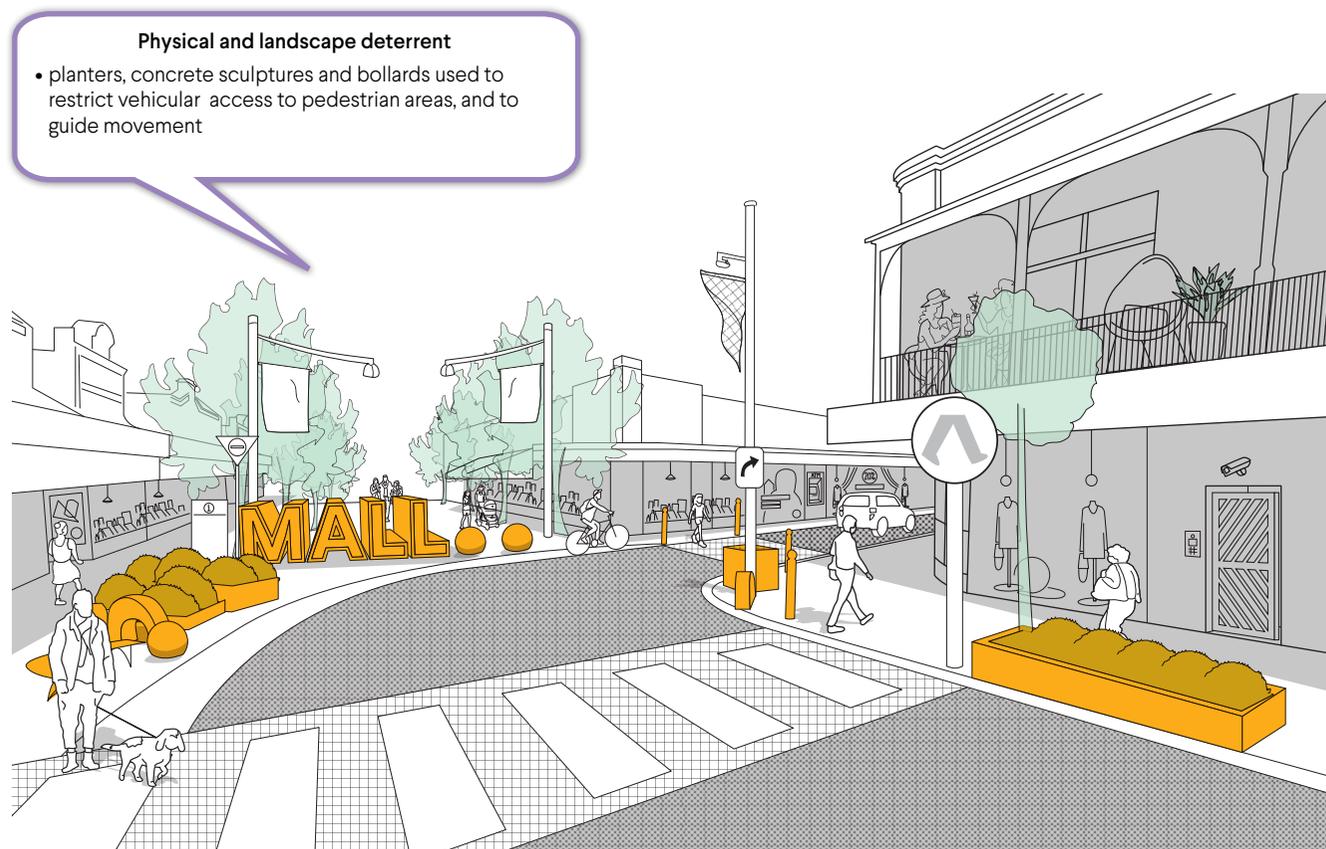


Figure 2.9 Physical and landscape deterrent

OBJECTIVE 3.2 Target hardening

For higher risk targets, incorporate 'obvious and visual' deterrent measures into the design; limit access with gates, locks and security doors

CONSIDERATIONS

- C3.2.1 Provide layered security measures through multiple design responses
- C3.2.2 Use mechanical access control to inhibit access to possible crime targets such as security bars, deadlocks, security shutters, turnstiles and access gates
- C3.3.3 Ensure the design allows for the required level of organised control (e.g. security personnel) at entrances or highly visible locations to deter criminal and anti-social behaviour
- C3.3.4 Integrate into the design electronic (computer) systems to control access such as number plate and face recognition
- C3.3.5 Select the appropriate vehicle security barriers
- C3.3.6 For pedestrian routes consider climbing plants on walls to hinder attempts to access adjacent property

High risk scenarios

In high risk situations, including potential terrorist targets (e.g. critical infrastructure, crowded places), more specific target hardening and formal access control measures may be required.

Consideration should be given to the possible methods of attack, which can include hostile vehicles and improvised explosive devices i.e.:

- Driving into an unprotected crowd at speed
- Parking a vehicle with an explosive device
- Entering an area via a controlled access point via deception or by ramming a barrier

For situations like these, the following elevated responses may be appropriate:

- C3.2.7 Mitigate hostile vehicles and improvised explosive devices using stand-off, access and approach controls (See Definitions), and use of barriers

Formal access control

Stand-off (See Definitions)

- C3.2.8 Prevent vehicular access by locating parking outside the stand-off perimeter, noting that an exception may be required for emergency vehicles
- C3.2.9 When retrofitting existing sites, use site features (such as reinforced planter-boxes or seats) to create stand-off distances

Access and Approach Control (See Definitions)

- C3.2.10 Consider changes in traffic management and road design to reduce vehicle speeds and minimise the risk of a vehicle borne attack:
 - Vehicle exclusion areas
 - Design access roads for reduce speeds e.g. right-angle approaches, inclines
 - Use traffic calming devices such as speed humps, bends and chicanes
- C3.2.11 Design separate service access roads, loading bays and entrances from main entrance to minimise potential risk
- C3.2.12 Consider access for authorised vehicles only, or time-based separation between vehicles and pedestrians
- C3.2.13 Deploy detection technology to alert security when restricted areas are breached

Formal access control

Barrier control (See Definitions)

- C3.2.14 Use bollards in various designs appropriate to the situation. In an emergency, when introducing temporary physical barriers between pedestrians and vehicles (including hostile vehicles), target hardening may be applied, for example use of jersey barriers as a short-term solution
- C3.2.15 Consider using natural barriers (e.g. raised levels, land form manipulation and other landscaping techniques) in appropriate places, before resorting to the installation of bollards

Target hardening

- Additional security measures such as camera, digital lock and security door may be used, i.e. 'target hardening' to make unauthorised access more difficult for intruders.



Figure 2.10 Target hardening

AVOID

- Creating unintended consequences from formal access control measures. For example, placing barriers in awkward locations that may limit people's safe egress from a site



Photo 2.24 Security gates when integrated into the design can contribute positively to a sense of place.

Access control examples



Photo 2.25 Experian Data Centre by Sheppard Robson. A reed-bed moat with ditch and wall prevents access to the building clearly defining the public-private realm boundary. (Image courtesy of Designing out Crime -Design Council UK)

Photo 2.26 Planters, seats, bollards and signs form a functional and less obtrusive safety barrier to the entrance of this shopping area.



Photo 2.27 The side entrance of the Perth RAC Arena indoor stadium incorporates vehicle mitigation measures in the design, using large planters as bollards to provide barrier and protect the crowd when there is a performance.

Photo 2.28 Water feature (moat like) and landscaping as part of the security defence system in the new US Embassy, London. (Image courtesy Kieran Timberlake/Matthew Krissel)

Access control examples



Photo 2.29 Hardened planters prevent vehicular access (Image source: Marshalls of London - marshalls.co.uk)



Photo 2.30 Sculptural bollards (Image source: Left - Australian National Botanic Gardens - by Simon Taylor. Right - Cambridge University Library - <https://www.geograph.org.uk/photo/4196933>)



Photo 2.31 Combination of bollards, planters, seats, signage and sculptural stones enhance the safety of this space.



Photo 2.32 Sculptural street furniture: 'Accoya Bollard' at RMIT by Openwork (photo credit: Peter Bennetts. Image source: landscapeaustralia.com)



Photo 2.33 Low bollards and semi-structural bollards are used to protect the entrance of this indoor stadium.

OBJECTIVES

4.1 Activity support

4.2 Space maintenance

Principle 4: Space management

Intent

Public places should appear owned and well-cared for. Effective management and regular maintenance are necessary to ensure the continued use of spaces for their intended purpose. The presence of people improves surveillance and perceptions of safety.

Why?

Well-maintained public spaces improve our perception of safety and supports our desire to spend time in these places, sustaining appropriate activity

Design focus

A built environment response should include robust materials and finishes to minimise servicing and maintenance.



OBJECTIVE 4.1 Activity support

The design of the physical environment increases levels of activity, supporting appropriate uses and passive surveillance

CONSIDERATIONS

- C4.1.1 The design of a place should reinforce the intended use and deter anti-social and criminal activities
- C4.1.2 Encourage ground level activity generators (See Definitions) that support the intended use, increase casual surveillance and reduce opportunity for criminal activity – e.g. cafes, public seating areas and community facilities
- C4.1.3 Encourage movement generators that support the intended use and provide surveillance without creating barriers
- C4.1.4 Locate uses such as children’s playgrounds, ATMs, and bus stops, close to locations where other users are likely to congregate (e.g. cafe, shopping areas), to increase passive surveillance
- C4.1.5 Locate pedestrian routes adjacent to active uses such as playgrounds and public open space. Activity generators close to pedestrian access ways can act as a source of surveillance and guardianship, or as a source of potential crime and anti-social behaviour. This depends on users, purpose, time of day and the location.
- C4.1.6 Encourage and locate after-hour activity-generating businesses (e.g. fast-food stalls, food trucks, wine bars) in vulnerable but not high-risk areas for activation

AVOID

- Encouraging negative interactions through conflicting uses or activities. For example, a liquor store adjacent to a playground

Space management

Activity support

- range of complimentary uses occurring in the same place
- windows overlook public areas with minimal visual barriers

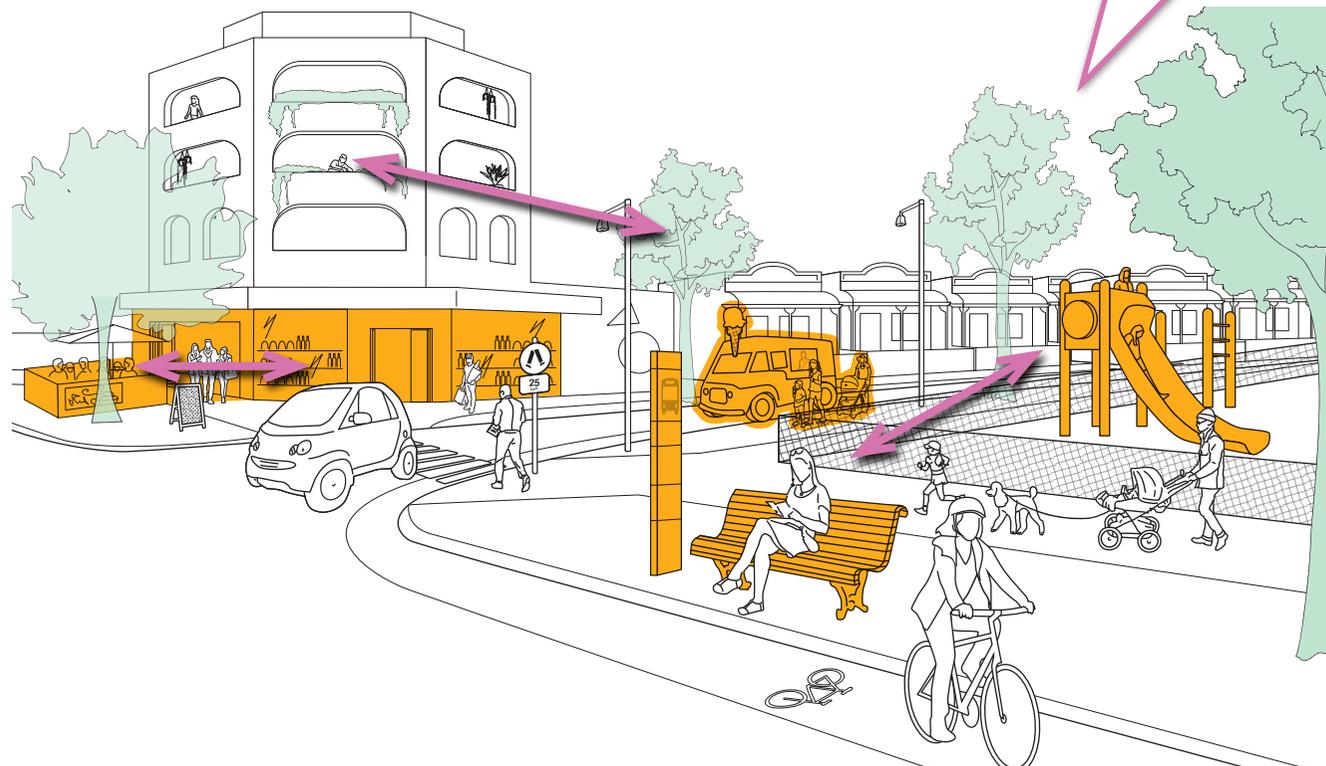


Figure 2.11 Activity support

OBJECTIVE 4.2 Space maintenance

A well-maintained physical environment appears to be owned and cared for. This discourages vandalism and anti-social behaviour

CONSIDERATIONS

- C4.2.1 Consider the life-cycle and whole-of-life cost of the development to ensure ongoing maintenance requirements can be met including:
 - cleaning and promptly maintaining vandalised equipment or damaged infrastructure, such as lighting
 - a regular maintenance program for public spaces
- C4.2.2 Reduce opportunities for graffiti and vandalism e.g. use robust and resistant materials and minimise blank walls
- C4.2.3 Designs should ensure robust materials and finishes minimise maintenance
- C4.2.4 Ensure walking surfaces are even and well-maintained to signal that pedestrian access is managed as a priority
- C4.2.5 Ensure areas requiring servicing and maintenance have appropriate access
- C4.2.6 Create opportunities for informal and formal surveillance to support the reporting of damage

AVOID

- Ambiguity of ownership and responsibility
- Spaces that are difficult to maintain, such as fragmented spaces and areas with low quality finishes

Space management

Space maintenance

- robust material used to minimise maintenance
- opportunities for passive surveillance to support the reporting of damage

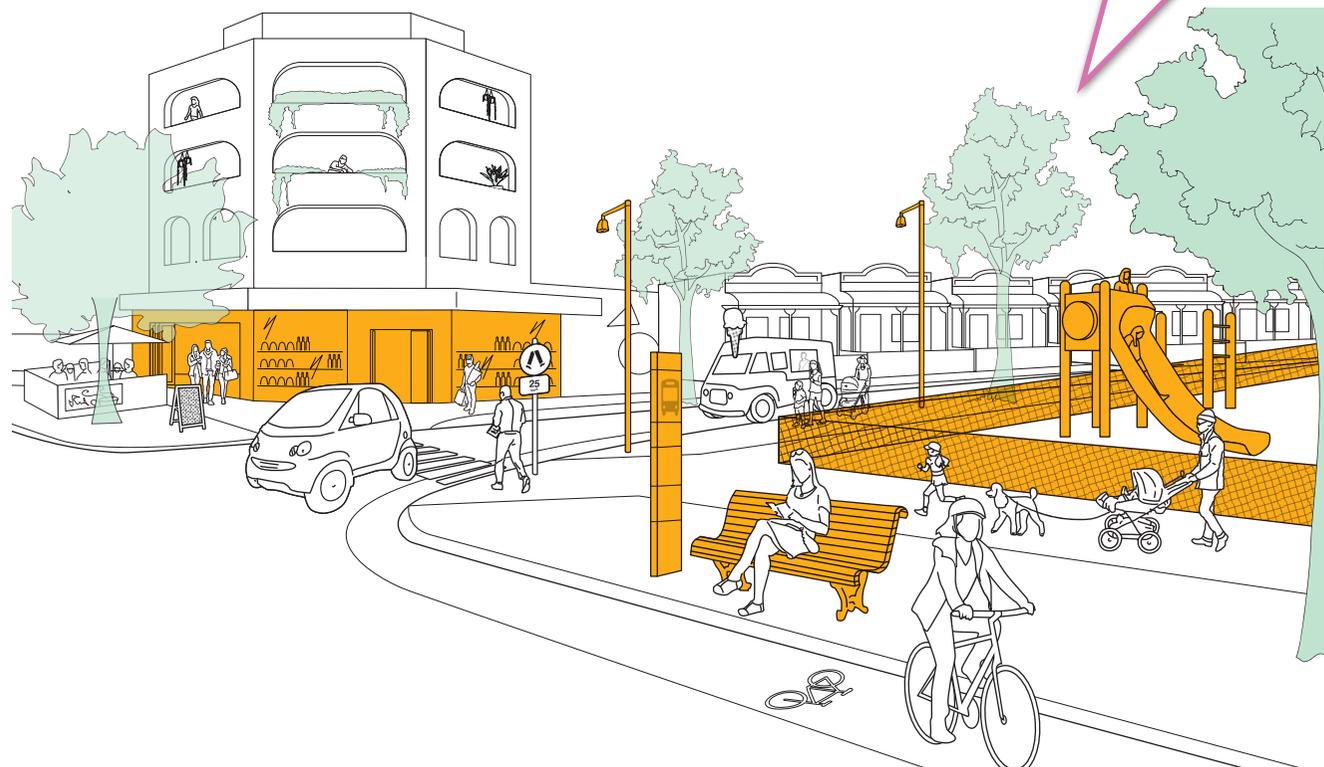


Figure 2.12 Space maintenance

Space management examples



Photo 2.34 High quality, well maintained and active space in a residential area. The public open space has very good surveillance from surrounding areas.



Photo 2.35 Murals and artworks help to minimise graffiti. Building on the right attracts graffiti while other buildings with murals in this laneway are left untouched.



Photo 2.36 WaterCorp’s initiative “Splash of Colour” brightens up pump stations and waste water assets all over WA with artworks by local artists working with community groups. This instills a sense of community ownership, helps to minimise vandalism and shows a well-maintained public asset.



Photo 2.37 Artworks on the footpath, planter and wall brighten up this stretch of road, and discourages graffiti.

Space management examples



Photo 2.38 A pleasantly landscaped and well-maintained laneway with good lighting helps to create a safer place.



Photo 2.39 A well maintained landscaped area discourages vandalism. Creepers on structure minimises the visual impact of services and prevent graffiti.



Photo 2.40 Inclusion of ground level retails increases levels of activity, supporting appropriate uses and passive surveillance.



Photo 2.41 Public transport and footpath adjacent to a public open space activates the area and provides surveillance without creating barrier.



Photo 2.42 A pleasant walking environment increases levels of activity, supporting passive surveillance.

Part 3 - CPTED Process

3.1 CPTED PROCESS	37
STEP 1 IDENTIFY RISK	39
STEP 2 INFORM THE BRIEF	40
STEP 3 DESIGN DEVELOPMENT AND CPTED STATEMENT	41
STEP 4 CPTED ASSESSMENT	43
STEP 5 DELIVER AND EVALUATE	44



3

CPTED process

3.1 CPTED process

The CPTED process can be readily integrated into a typical design, assessment and decision-making process for development proposals. The process is not intended to produce a 'tick-box' response for proposals but address CPTED principles in a well-considered way having regard to project type and local environment.

The process is deliberately flexible so that it can be applied to all projects irrespective of size and complexity. The process applies to planning proposals, including private/public developments, subdivisions, structure plans and local development plans.

This section outlines a recommended five-step process for integrating CPTED into project design, assessment and delivery. The steps allow CPTED to be considered holistically as a risk-based approach, whereby the design responds to site specific considerations, including local crime risk, intended function and use, and design objectives. The process encourages CPTED to be addressed early at project briefing stage. Consideration of CPTED throughout the planning, design and construction phases supports a cost-effective approach, which can address (sometimes competing) design objectives to facilitate integrated design outcomes. Additionally, this approach allows justification of responses during reporting and assessment.

Involving community and other relevant stakeholders in the CPTED process can help improve safety outcomes. When preparing the project brief, consultation helps clarify crime risks and perceptions of crime; during design development it informs project responses; and during implementation it may help to garner community involvement and partnerships to support safer spaces. Further information on engagement strategies for community consultation can be found in the WAPC Planning Engagement Toolkit for Western Australia (DPLH, 2021 (in draft))



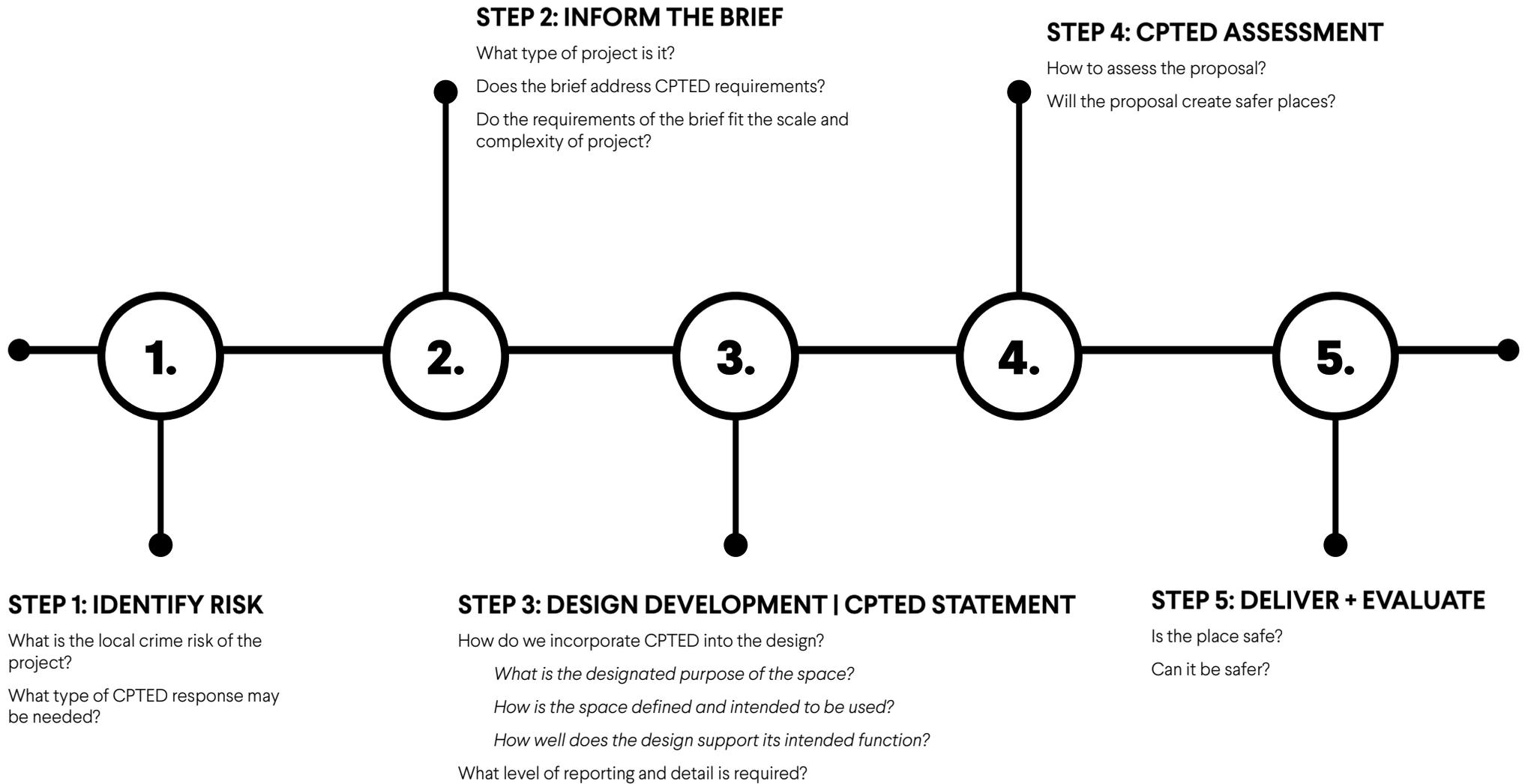


Figure 3.1 The 5-Step CPTED Process

1. Identify risk

*What is the local crime risk of the project?
What type of CPTED response may be needed?*

What it is

The project team should identify, analyse and evaluate the crime risk of a development project. Findings from investigations into the site and its surrounds can inform design decisions and the scale of CPTED response.

Who is involved

Proponent (and project team).

Communication and consultation

During this step it is recommended relevant stakeholders be consulted. This may include local and State government, community and law enforcement agencies. Regardless of scale, consultation should always aim to capture the people who use or will be using the development. Understanding activities, crime patterns and any safety issues relating to the location allows design responses to be site-specific.

Guidance

Each project has its own unique physical and social context. The project team should identify local crime risk and design responses to site-specific issues, avoiding a 'cookie-cutter' application of CPTED principles.

Consideration can be given to the following six crime risk influences (see table 3.1)

For more information on how to go about understanding the local crime risk, see Appendix A2 Crime Risk Influences. A checklist is also provided (Appendix A3 - Checklist 1: Crime Risk Level) to assist proponents to determine if the identified crime risk presents a high or low risk.

Where a proposal may constitute a high crime risk or high-risk scenario, consultation with a decision-maker/approval authority is advised. Where a discrepancy may arise, the decision-maker/approval authority should use discretion to determine the level of risk.

Table 3.1 Crime risk influences

Crime risk influence	Description
1. Crime statistics	What level of crime is occurring in the area and how is the threat of crime perceived?
2. Local community profile	What are the characteristics of the local community, including demographics and access to opportunities, and how could this affect crime levels?
3. Local geographical context	What land uses, activities and forms of development are located nearby and how may this affect crime levels?
4. Site observations	What do observations of the site and its surrounds tell about existing and the potential for crime?
5. Influence of the new development	What impact could new development or a change of land use have on crime or anti-social behaviour in the location?
6. High risk targets	Could the proposal become a high-risk target for terrorism or violent extremism?

2. Inform the brief

*What type of project is it?
Does the brief address CPTED requirements?
Do the requirements of the brief fit the scale
and complexity of project?*

What it is

Identifying development project scale and complexity assists in determining if a basic or high-level CPTED statement and assessment is required.

The desired safety outcomes for the type of development project and its identified crime risk will inform the project brief and scope. Ideally consider CPTED from the project outset - making good design decisions early in the process can save costs and time later.

Who is involved

Proponent (and project team).

Government agencies when preparing briefs for public tender.

Guidance

For more information on how to define project type, scale and complexity refer to Appendix A3 – Checklist 2: Type of Proposal. This checklist defines simple and large/complex development projects with some example projects. Defining the project type establishes the level of CPTED statement and planning assessment required.

At the early design stages it is useful to consider how the objectives and considerations of the CPTED principles outlined in Part 2 can be applied to inform the brief so that it is tailored to the requirements of the project. Including CPTED considerations in the project brief and scope sets the priorities of CPTED strategies to inform the development of the design. The brief should articulate that CPTED responses should be integrated and complement the project design and not compromise good outcomes. Responses should be proportional to the identified level of risk and project type.

Table 3.2 provides an example approach to applying CPTED considerations.

Table 3.2 Example CPTED Brief Scoping

Crime type/ threat ¹	CPTED principle	CPTED objective	Considerations for design brief and design development
e.g. Risk of burglary (high, secure fences to neighbouring houses)	Principle 1: Surveillance Principle 2: Territorial Definition	Objective 1.2 Clear sightlines The design of the environment provides opportunities for passive surveillance through unimpeded sightlines to, and within publicly accessible areas Objective 2.1: Clear Spatial Structure Clearly define the ownership of a space (public and private spaces, as well as transitional spaces in between)	<ul style="list-style-type: none"> Maintain clear sightlines to points of ingress/egress, and from within the project area looking out, with well-considered door and window placement Plant/tree selection to support passive surveillance and maintain sightlines Define the development site using landscape, street furniture, changes in paving and surface treatments
e.g. Risk of hostile vehicle attack for a crowded place	Principle 2: Territorial Definition Principle 3: Access Control	Objective 2.1: Clear Spatial Structure Clearly define the ownership of a space (public and private spaces, as well as transitional spaces in between) Objective 3.1: Physical and landscape deterrent The design of the physical environment directs pedestrian movement through the public realm away from potential targets or risk and into areas with good surveillance Objective 3.2: Target Hardening For higher risk targets, incorporate 'obvious and visual' deterrent measures into the design; limit access with gates, locks and security doors.	<ul style="list-style-type: none"> Clearly define the perimeter of the site. Use urban design elements such as natural landforms, artwork instead of fences/walling Is a security checkpoint required? If so, where? What is the required stand-off? Consider natural landforms and public art as a physical deterrent and barrier for hostile vehicles Consider access paths for potential hostile vehicles –consider bends, chicanes or inclines to deter and delay Provide choice of egress points and consider how people will move comfortably through the space – particularly when at capacity Avoid areas that may cause bottle-necks and dead-ends Consider a tiered response that includes security surveillance

¹ Crime types as identified through identify risk (Step 1)

3. Design development and CPTED statement

What it is

Design development

The project team can select and define specific CPTED responses for the implementation of CPTED into the project design. This should meet the requirements of the brief, including if relevant addressing required CT strategies. As the design progresses, responses should be proportionate to the identified risk and project type and navigate competing design imperatives. Applying CPTED responses to the design should be an iterative process, drawing on specialist advice as needed.

CPTED Statement

Documenting the CPTED process and response will take the form of either a basic or high-level CPTED statement. Documenting the process allows the project team to identify outstanding issues and allows decision-makers/approval authorities to determine whether the proposal meets safety and security requirements. Responses should have regard to the objectives and considerations of the CPTED principles, providing a rationale and justification for design responses.

Who is involved

Proponent (and project team). Input from a CPTED specialist may be required for large/complex projects identified as having a high crime risk or for high risk scenarios.

Communication and consultation

It may be beneficial to engage with relevant stakeholders such as community, property managers and law enforcement agencies at this stage to resolve design issues and inform design decisions. Early engagement with decision-makers can also help identify issues upfront, reducing assessment and decision-making timeframes later. It can also clarify the level of CPTED reporting required with the application.

Guidance

Design Development

Applying the three 'Ds', Designation, Definition, and Design (Crowe, 2000) can help designers in applying the CPTED principles to ensure development serves its intended purpose and is conducive to acceptable behaviours and safety.

Designate: Designate the purpose of the space: its function and degree of public or private access

Is there a clearly designated purpose(s) for the space?
Is there any potential use/user conflicts?

Define: Define the spatial, social, cultural and legal boundaries for behaviour within the space

Is the space clearly defined?
Does the space clearly belong to someone/some group?
Is there any conflict or confusion between purpose and definition?

Design: Design to support and control the desired behaviour and discourage unwanted behaviours

Does the design support the intended use of the space?
Does the design encourage people to use the site? Does it facilitate access control and promote surveillance?

Conflict Resolution in Design Development:

Given the interrelated nature of the CPTED principle objectives, addressing one objective may in some instances compromise another. For example, addressing an objective for safe lighting (O1.3) may result in excessive glare and contrast that compromises passive surveillance (O1.1). A successful CPTED response will find solutions to manage or resolve these conflicts to benefit the project and its users.

Furthermore, while CPTED principles aim to create safer environments, they should not compromise the ability of a development to satisfy other planning and design requirements. Where conflicts occur, a common-sense approach should prevail to decide the priority design outcomes, while addressing CPTED objectives as far as is possible. Areas where conflict can arise may relate to considerations such as universal access; road noise abatement; bushfire risk management; and objectives to achieve walkability, liveability, passive surveillance, and sustainability goals.

Avoid creating negative CPTED outcomes such as excessive target hardening that can lead to hostile environments, or exclusionary design that unintentionally restricts access for some members of the community.

3.

CPTED Statement

Appendix A3: CPTED Statement Checklists should be used to determine what level of reporting is required, as well as when and what to include in the statement. See Table 3.3 for overview of checklists.

A basic CPTED statement may be as short as a simple paragraph outlining crime risk and chosen CPTED measures, while a high level CPTED statement includes more detailed analysis of crime risk, response, conflicts and detailed drawings and supporting material. For more information refer to Appendix A3 – Checklist 3: Basic and High Level CPTED Statement Requirements.

*How do we incorporate CPTED into the design?
 What is the designated purpose of the space?
 How is the space defined and intended to be used?
 How well does the design support its intended function?
 What level of reporting and detail is required?*

Table 3.3 CPTED statement checklist overview

Checklist	Name	Description
Checklist 1	Crime Risk Level	use to record identified level of risk (see Appendix A2: Crime Risk Influences)
Checklist 2	Type of Proposal	refer to this checklist to determine complexity of a proposal – simple or large/complex project type
Checklist 3	Basic and High Level CPTED Statement Requirements	refer to this checklist for information on basic and high-level CPTED reporting requirements
Checklist 4	Chosen CPTED Measures	use to demonstrate to the decision-makers how a proposal addresses the CPTED principles in response to identified risk factors

4. CPTED assessment

*How do we assess the proposal?
Will the proposal create safer places?*

What it is

An assessment of the proposed development to determine whether safety and security requirements have been satisfactorily addressed.

Who is involved

Decision-makers, including local government or State Government and design review panels.

Communication and consultation

Project teams should discuss with decision-makers the level of information they will require for the assessment prior to lodging an application.

Upon receipt of the application and prior to a decision being made, a decision-maker may need to consult with the community and other stakeholders, as well as hold further discussions with the proponent.

Guidance

A CPTED assessment will fall into two types. Where the type of proposal has been identified as simple then a basic level review would be appropriate. Where a project has been identified as having complex risk factors or the project type is identified as large/complex, then a high-level review is required. (refer Appendix A3 – Checklist 2: Type of Proposal)

The decision-maker would need to be satisfied that the proposal demonstrates an adequate response to support safer design outcomes for the identified level of crime risk and type of proposal. There is no 'tick-box' solution to assessment - each assessment should deliver a tailored review that has regard to the following:

- whether the level of CPTED reporting provided with the application is adequate
- whether the responses to CPTED principles and objectives are sufficient
- whether any unintended consequences could arise from CPTED approaches
- whether there are any design conflicts or non-conformance with other planning requirements that need to be resolved.

In some cases, the CPTED statement may include complex information or responses to risk, whereby it may be appropriate for the decision-maker to seek CPTED expertise to assist with their assessment.



5. Deliver and evaluate

*Is the place safe?
Can it be safer?*

What it is

The CPTED approaches outlined in the approved CPTED statement should be implemented. However, it is only through completed and occupied projects that success can be evaluated. The creation of safer places is not static. For example, changes to patterns of use, functions, and perceptions of a place may affect how well it performs. Evaluation is necessary to ensure places continue to be safe over time.

Who is involved

The proponent and project teams can implement CPTED during design and construction. However, it is usually local governments, WA Police, business owners and community who play a role in monitoring and evaluating CPTED outcomes.

Guidance

Implementing CPTED successfully relies on delivering the design responses as approved by the decision-maker. For some development projects, creating a maintenance or management plan can help to prevent crime and perceived crime as the development ages.

Evaluation timeframes should be realistic and responses persistent, noting that positive outcomes may take some time to deliver. Indicators of success should be simple and capable of being satisfied. As part of the evaluation process, regular site checks may be undertaken to consider things like whether management and maintenance plans have been implemented, and whether technological responses, such as CCTV surveillance, are operating effectively.



Part 4 - Safer Place Scenarios

4.1	NEIGHBOURHOODS AND PRECINCTS	46
4.2	RESIDENTIAL AND MIXED USE STREETS.....	48
4.3	PUBLIC SPACES.....	50
4.4	ACTIVITY CENTRES.....	52
4.5	PUBLIC TRANSPORT HUBS	54
4.6	PEDESTRIAN AND CYCLING NETWORKS.....	56
4.7	PEDESTRIAN ACCESS WAYS.....	58
4.8	COMMUNITY INFRASTRUCTURE	60
4.9	CAR PARKING.....	62
4.10	CROWDED PLACES	64

This section provides CPTED guidance for the above specific land use and development scenarios.

Each Safer Place Scenario is accompanied by an annotated illustration, demonstrating key considerations which address CPTED principles for the situation/scenario.

The responses demonstrated are not all-encompassing nor intended to provide final solutions, as each place and project will warrant a specific response tailored to its location and context.

4

4.1 Neighbourhoods and precincts

Safe design of neighbourhoods and precincts includes all greenfield and urban infill (brownfield) development for residential and mixed use land uses.

Commercial development and development around activity centres is addressed separately in 'Safer design of activity centres'.

*Designing a well connected network of streets and providing street-level character can make a neighbourhood, or precinct a **safe, attractive and desirable** location*

*This encourages **active uses** and can in turn can enhance **community health, safety and wellbeing***

Principle 1: Surveillance

- 1 Buildings overlook public streets, pedestrian paths and parks
- 2 Ancillary dwellings over garages (Fonzie flats) overlook laneways
- 3 Windows, verandas, porches and balconies to street fronts
- 4 Houses on corner sites address both street frontages
- 5 Adequate street lighting supports day-time and night-time use

Principle 2: Territorial definition

- 6 Movement network is legible and easy to navigate, with good sightlines, vistas and visual cues
- 7 Local and neighbourhood centres integrate housing, shopping and civic spaces, avoiding separation of land uses
- 8 Park edges are defined by public streets, avoiding where possible direct frontage to residential lots

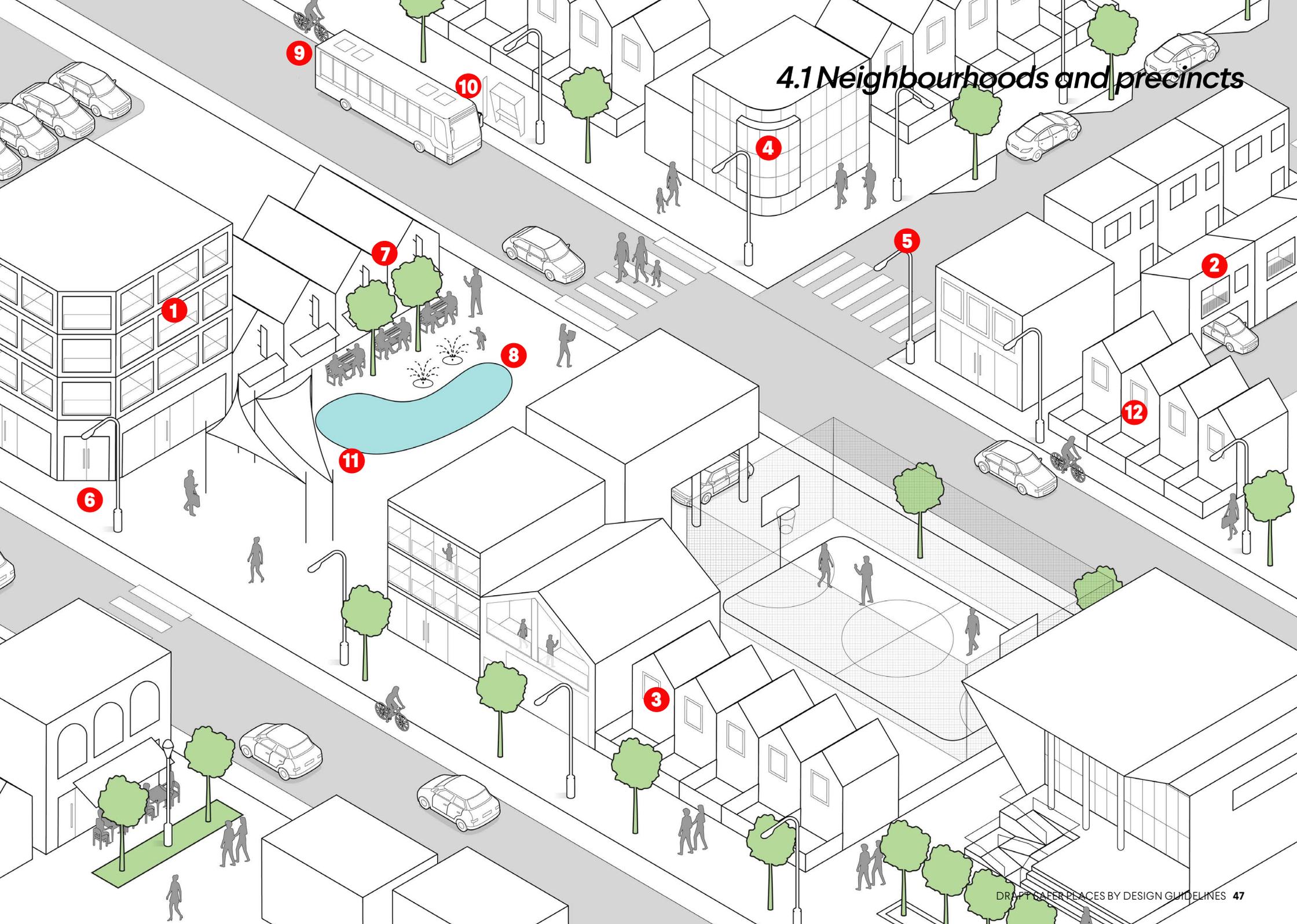
Principle 3: Access control

- 9 Movement network offers good connectivity for pedestrians, cyclists and vehicles both within the neighbourhood and with adjoining areas
- 10 Public transport services are supported by residential densities and land-uses. Routes and stops are legible and attractive for users

Principle 4: Space management

- 11 High quality public spaces provide interest, including landscaping, canopy structures, shaded and seating areas along pedestrian routes
- 12 A range of housing types provide for a diverse community

4.1 Neighbourhoods and precincts



4.2 Residential and mixed use streets

Safer design of residential and mixed use streets considers the interface between private development and public spaces. The careful design of the transition between public and private space assists in defining ownership.

Passive surveillance from residences to public spaces are key to ensuring these spaces are well used and feel safe.

*Planning for more **urban and compact buildings**, with a **mix of land uses**, accessible public open spaces and a **range of housing types** encourages active communities and safer **walkable streets***

Principle 1: Surveillance

- 1 Balconies facing street maximise passive surveillance opportunities from upper and lower level residences
- 2 Low shrubs and high canopy trees support clear sightlines and passive surveillance from many viewpoints in the public realm
- 3 Visually permeable fencing and low planting facilitates passive surveillance from ground floor residences
- 4 Adequate street lighting– separate from tree canopies
- 5 CCTV at a secured resident entrance provides additional security
- 6 Street parking is located close to building entrances to support accessibility

Principle 2: Territorial definition

- 7 Private gardens are clearly defined by low fencing and landscaping
- 8 Residential address is clearly displayed and well lit

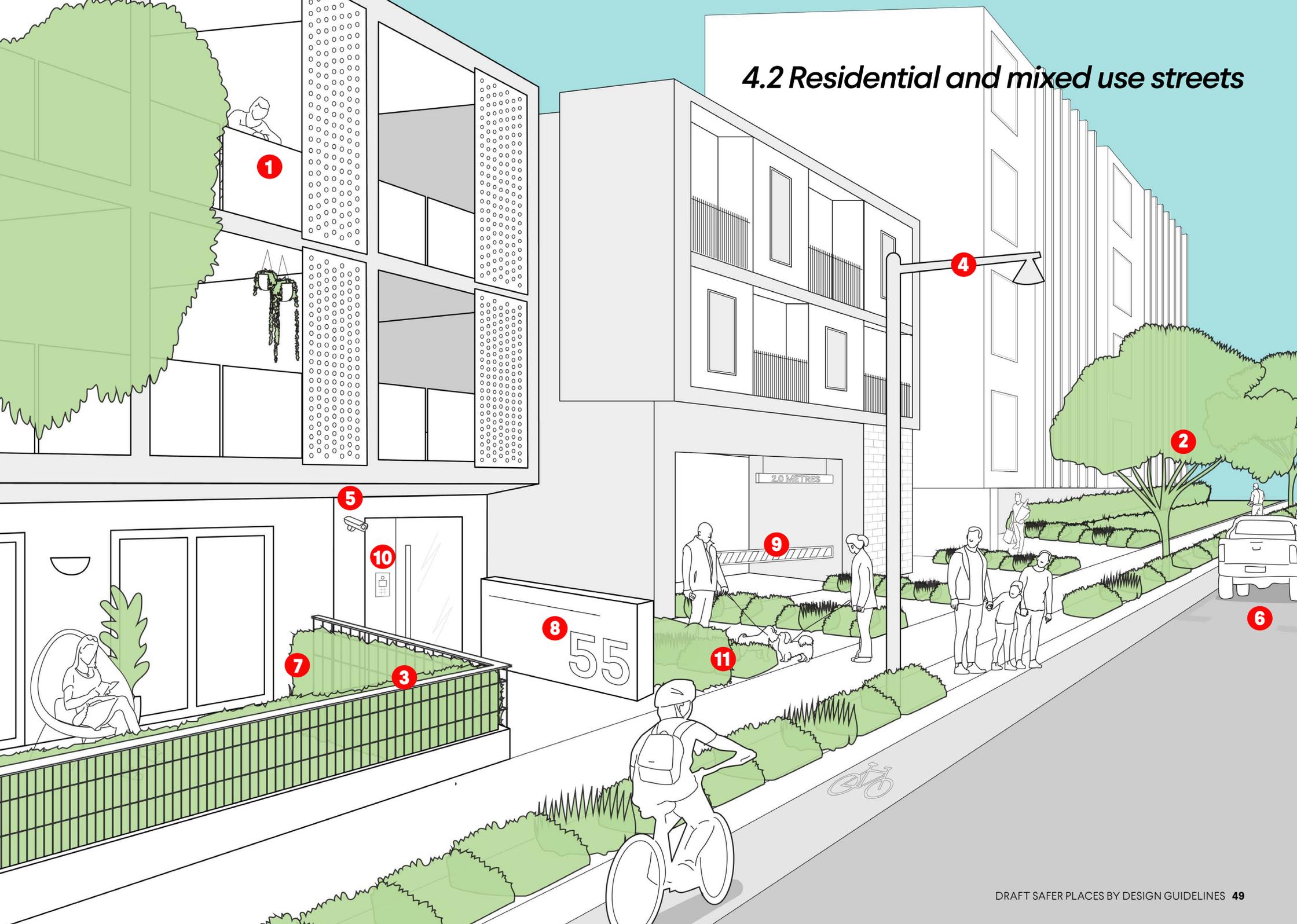
Principle 3: Access control

- 9 Secure access to private car parking enhances safety of residents and commercial tenants
- 10 Residential entries are secure

Principle 4: Space management

- 11 Well-maintained landscaping demonstrates a sense of ownership and defines transitional areas between public and private zones

4.2 Residential and mixed use streets



4.3 Public spaces

Safe design of the public realm includes streets, plazas, parks, community spaces, sports grounds, civic spaces and other community spaces. It also encompasses the facilities within these spaces including public toilets, playgrounds and community facilities.

The safety of public spaces is related to the design of the spaces and the ability to provide surveillance, sightlines, legibility and protection from entrapment. Design also plays a key role in encouraging people to use a place and deter offending.

*Design public spaces to be **locally site responsive, accessible and functional**. Public spaces should meet the needs of **community** and encourage **neighbourly interaction***

Principle 1: Surveillance

- 1 Passive surveillance provided by adjacent land uses
- 2 Clear sightlines provided through landscaping
- 3 Provision of street, walkway and park lighting encourages day and night-time use
- 4 Footpaths are legible, have good surveillance and are free from entrapments

Principle 2: Territorial definition

- 5 Clear signage and wayfinding

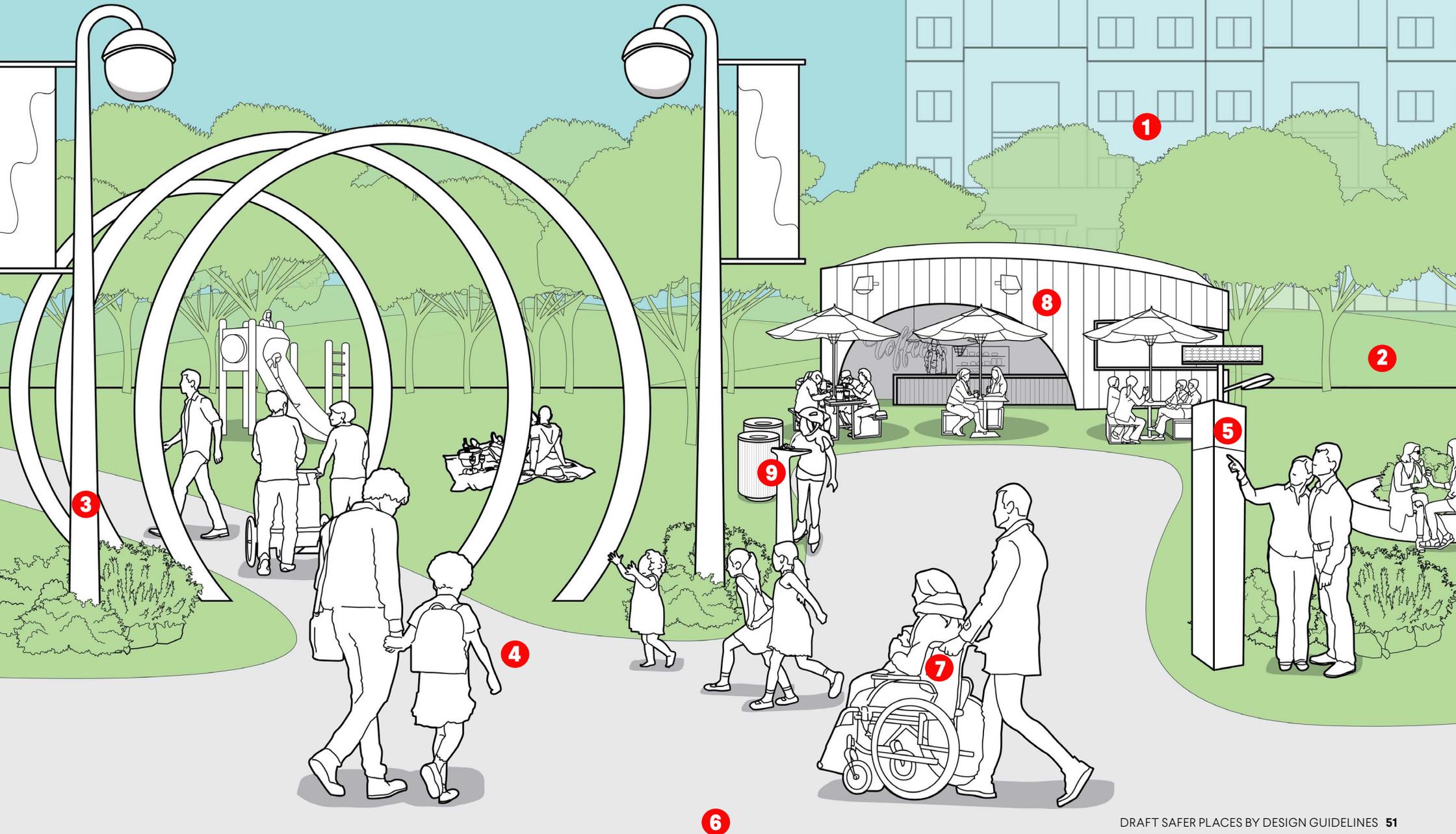
Principle 3: Access control

- 6 Multiple exit and entry points are easy to navigate
- 7 Designed for diversity

Principle 4: Space management

- 8 Adjacent active uses such as a café provide additional activity and surveillance
- 9 Facilities and landscaping is of a high quality and well maintained

4.3 Public spaces



4.4 Activity centres

The design and mix of uses in activity centres contribute to vitality and appropriate use.

Centres can have two lives – a day life and a night life. Land uses which bring people into these areas in the evening and weekends can increase safety and perception of safety.

Activity centres in this context include commercial, retail and mixed use areas and can range in scale from local centres through to major city centres.

*Activity centres encourage **easy access** to a range of **goods, services and amenities**, supported by public transport and an interconnected street network. Design should support **day and night-time activity***

Principle 1: Surveillance

- 1 Balconies and windows overlooking the street support passive surveillance
- 2 Shop fronts with transparent glass windows create good sightlines to and from the shops
- 3 Tree canopy and shrubs are kept low/high and do not to block sightlines
- 4 Streets and active areas are well-lit to support night-time activity

Principle 2: Territorial definition

- 5 Consistent building setbacks avoid areas of concealment
- 6 Clear and easy access to public transport and parking facilities
- 7 Well-connected, legible and safe pedestrian walkway system

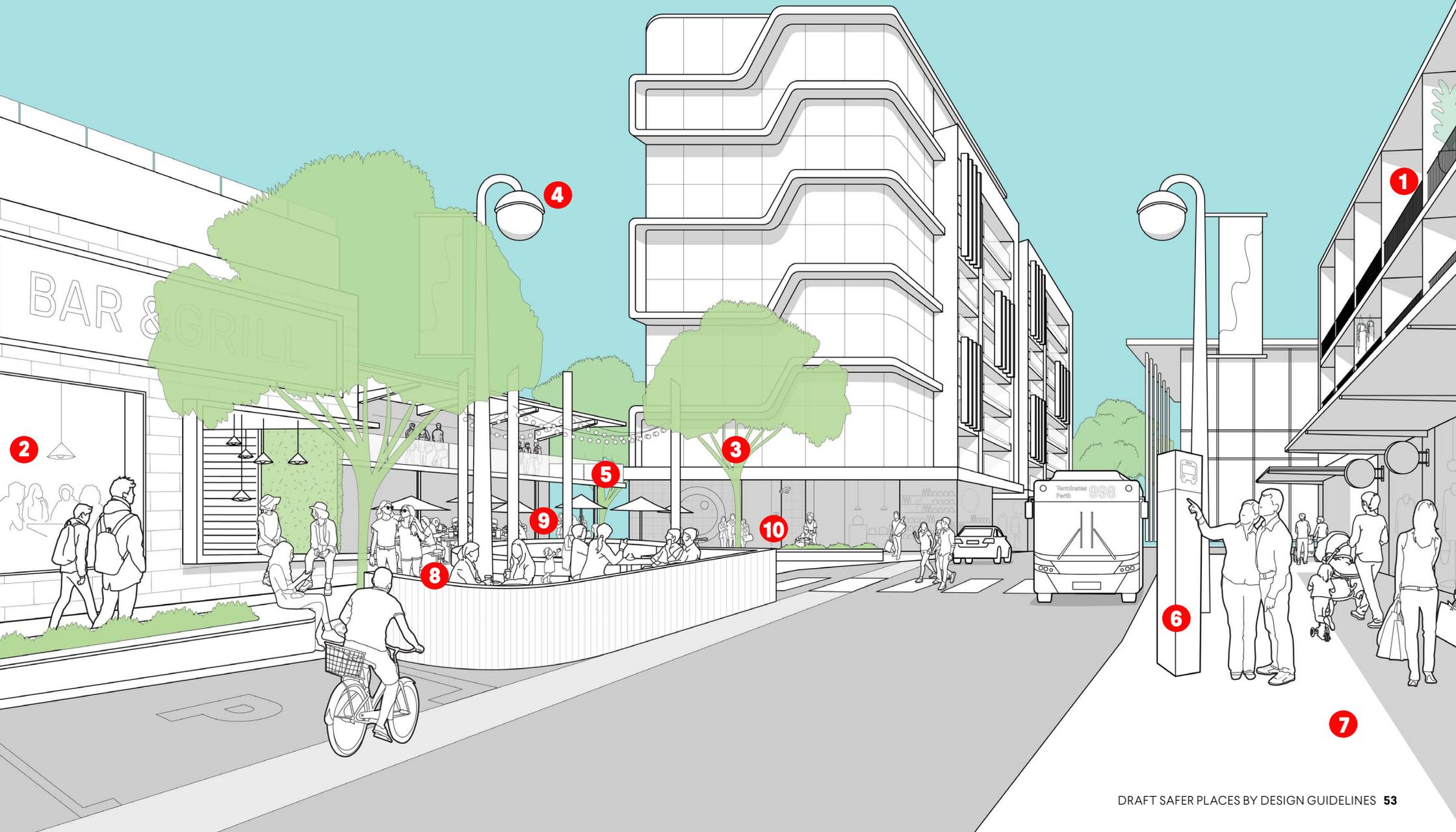
Principle 3: Access control

- 8 Seating and planter boxes provide a physical deterrent for vehicular access to footpaths

Principle 4: Space management

- 9 Varied activities, including residential and a mix of retail and entertainment uses ensure the centre is activated at different times of the day and night
- 10 High quality public realm designed to be of appropriate human scale

4.4 Activity centres



4.5 Public transport hubs

Safety at public transport hubs is essential to assure users, support patronage, and minimise crime and fear of crime.

Designing for safer public transport hubs minimises anti-social behaviour, improves passenger security and perceptions of public transport generally.

*Design public transport hubs to improve efficiency and provide **safe, direct access** for residents and visitors. This contributes to better perceptions and use of public transport*

Principle 1: Surveillance

- 1 Neighbouring residences provide passive surveillance to bus stop and station
- 2 Good sightlines through the station and bus interchange
- 3 Low shrubs and high canopy trees provide clear sightlines
- 4 Signage assists wayfinding
- 5 Telephones, ATMs are located adjacent to active frontages
- 6 CCTV provided to bus interchange – area at higher risk during night-time use

Principle 2: Territorial definition

- 7 Adjacent bus and train access provides convenience and reduced walking distances
- 8 Low walls provide a buffer between public and private areas

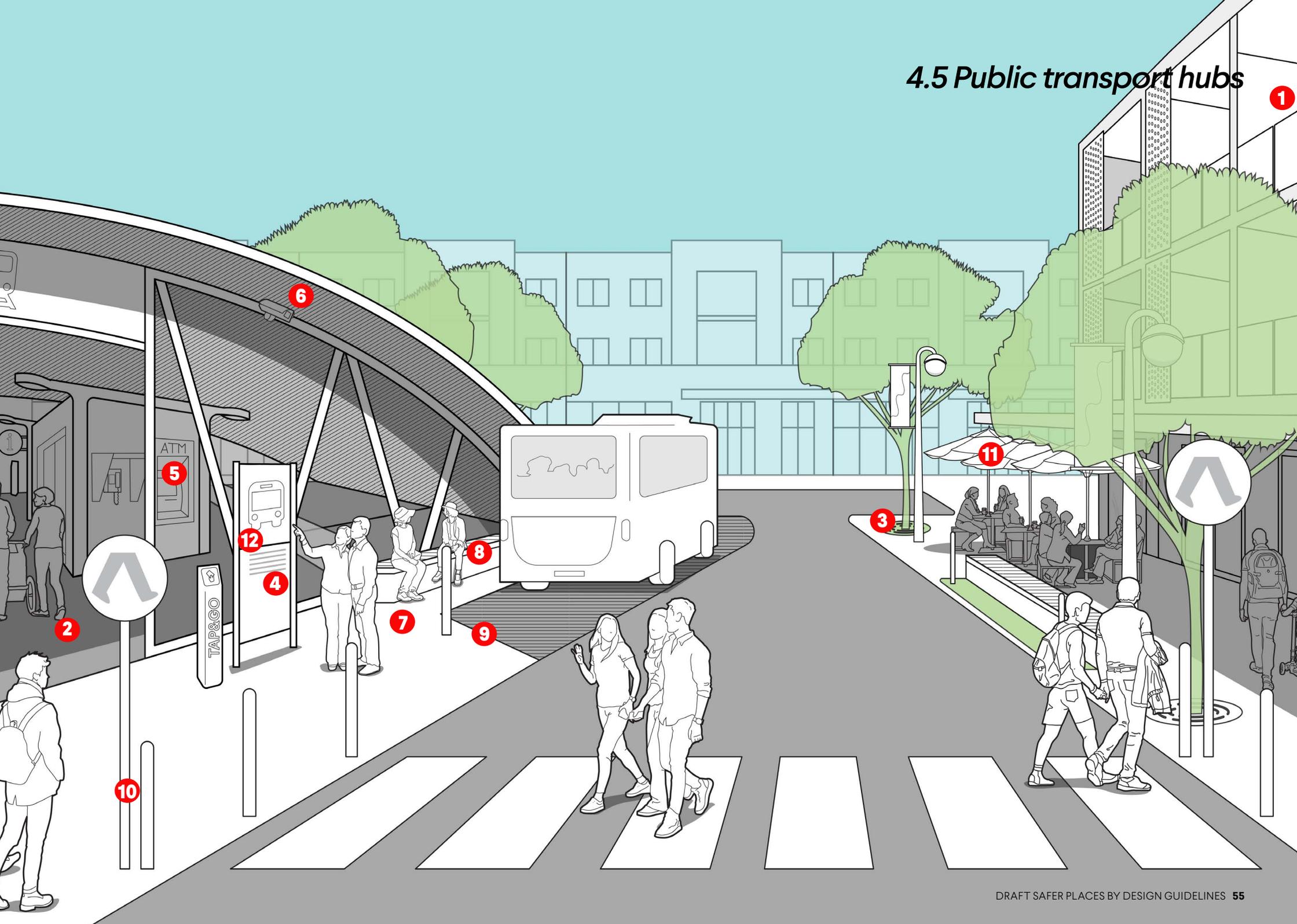
Principle 3: Access control

- 9 Change in paving colour provides visual cues between pedestrian and vehicular realm
- 10 Bollards prevent vehicular access to station ticketing and pedestrian entries

Principle 4: Space management

- 11 Station is located adjacent to areas of activity such as cafes and shops
- 12 Signage is high quality and vandal-proof

4.5 Public transport hubs



4.6 Pedestrian and cycling networks

The design of spaces can influence our perceptions of an area and user preferences. For example, a pedestrian and cycling route that is perceived to be safe will often be regularly used, whereas routes and paths perceived as unsafe will deter public use.

Pedestrian paths include footpaths, roadside walkways, underpasses, overpasses, stairs, steps and pedestrian access ways (PAWs). For further information for PAWs see Scenario 4.7 Pedestrian Access Ways .

*Pedestrian and cycling networks should be **safe, efficient and pleasant** and encourage walking and cycling*

Principle 1: Surveillance

- 1 Footpaths, cycle paths and vehicle routes are close to each other to maximise activity and passive surveillance
- 2 Low shrubs and high canopy trees provide clear sightlines
- 3 Passive surveillance provided by adjacent buildings
- 4 Adequate lighting supports safe night-time use

Principle 2: Territorial definition

- 5 The pedestrian and cycling route is wide enough to allow pedestrians/cyclists to pass each other easily
- 6 The boundaries between the public space and private space are clearly defined and robustly fenced

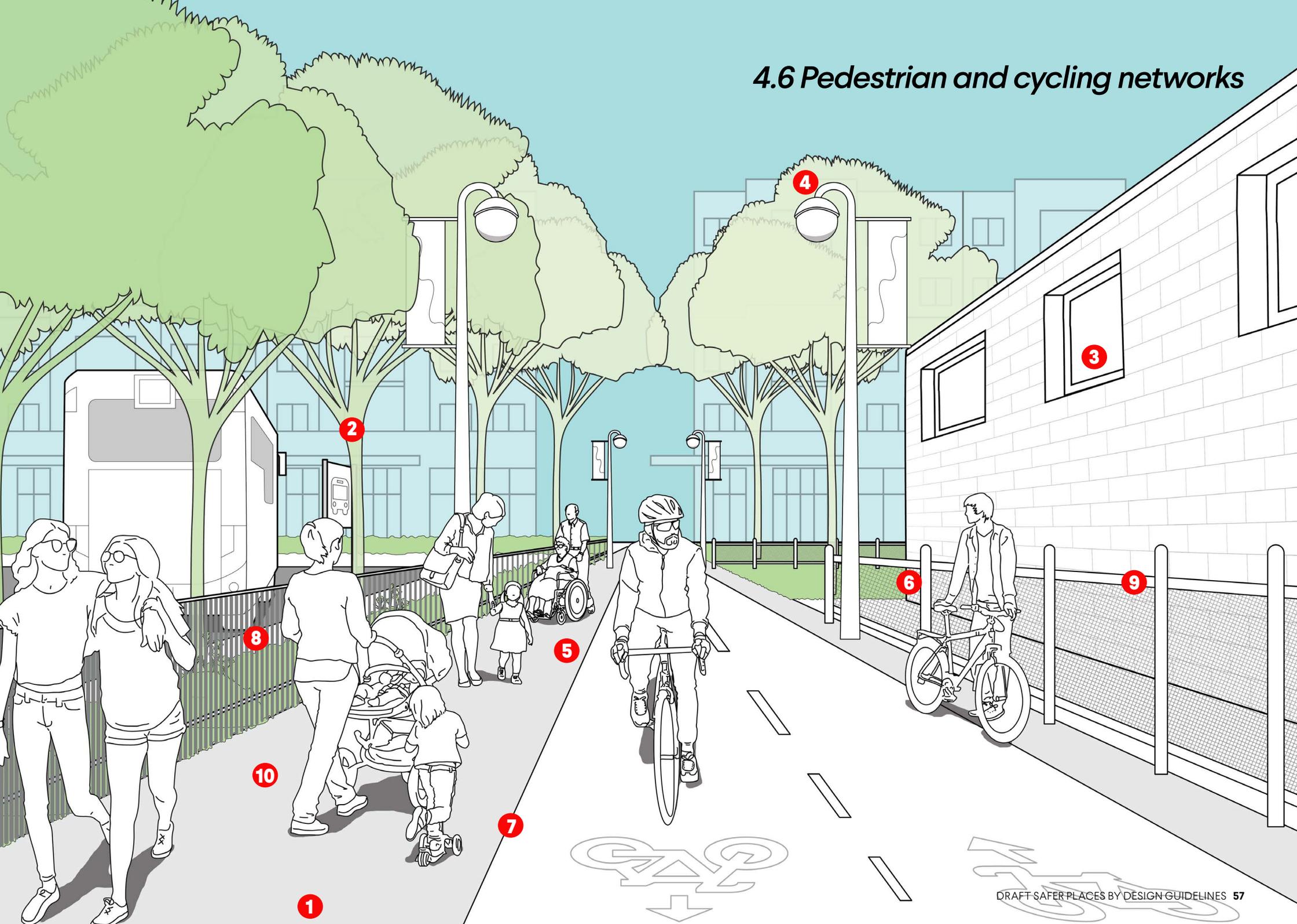
Principle 3: Access control

- 7 Different paving materials, patterns and colours provides clear demarcation of use
- 8 Low fencing and landscaping demarcates vehicular routes from pedestrian routes
- 9 High, visually permeable fencing to private space restricts access while providing surveillance

Principle 4: Space management

- 10 Paving is level and trip-free to support pedestrian movement

4.6 Pedestrian and cycling networks



4.7 Pedestrian Access Ways

Pedestrian access ways (PAWs) are an effective way to improve connectivity through a neighbourhood. However, contemporary planning often discourages the creation of new PAWs as they can be identified as targets for crime and anti-social behaviour.

Where PAWs are being planned for they should be designed to integrate into the public realm network to support better surveillance to reduce crime and perception of crime. Where existing PAWs are being retrofitted they should first be assessed to determine appropriate responses.

For more information on CPTED in pedestrian access ways and for the procedure for their closure refer – Reducing Crime and Anti-Social Behaviour in Pedestrian Access Ways Planning Guidelines (WAPC, 2009) and Procedure for the Closure of Pedestrian Access Ways Planning Guidelines (WAPC, 2009)

Pedestrian access ways should be interconnected and support safe efficient movement

Principle 1: Surveillance

- 1 The access way is short and straight to improve visibility, wayfinding and security
- 2 Adequate lighting is used to enhance safe night-time movement
- 3 The access way is overlooked and has clear sightlines at its ingress/egress point and along its route
- 4 There are no entrapment points along the length of the access way

Principle 2: Territorial definition

- 5 The access way is located adjacent to public open space. Providing landscaped public open space reduces the sense of ownership from neighbours as they aren't directly abutting the access way
- 6 The boundaries between the public space and private space are clearly defined and robustly fenced

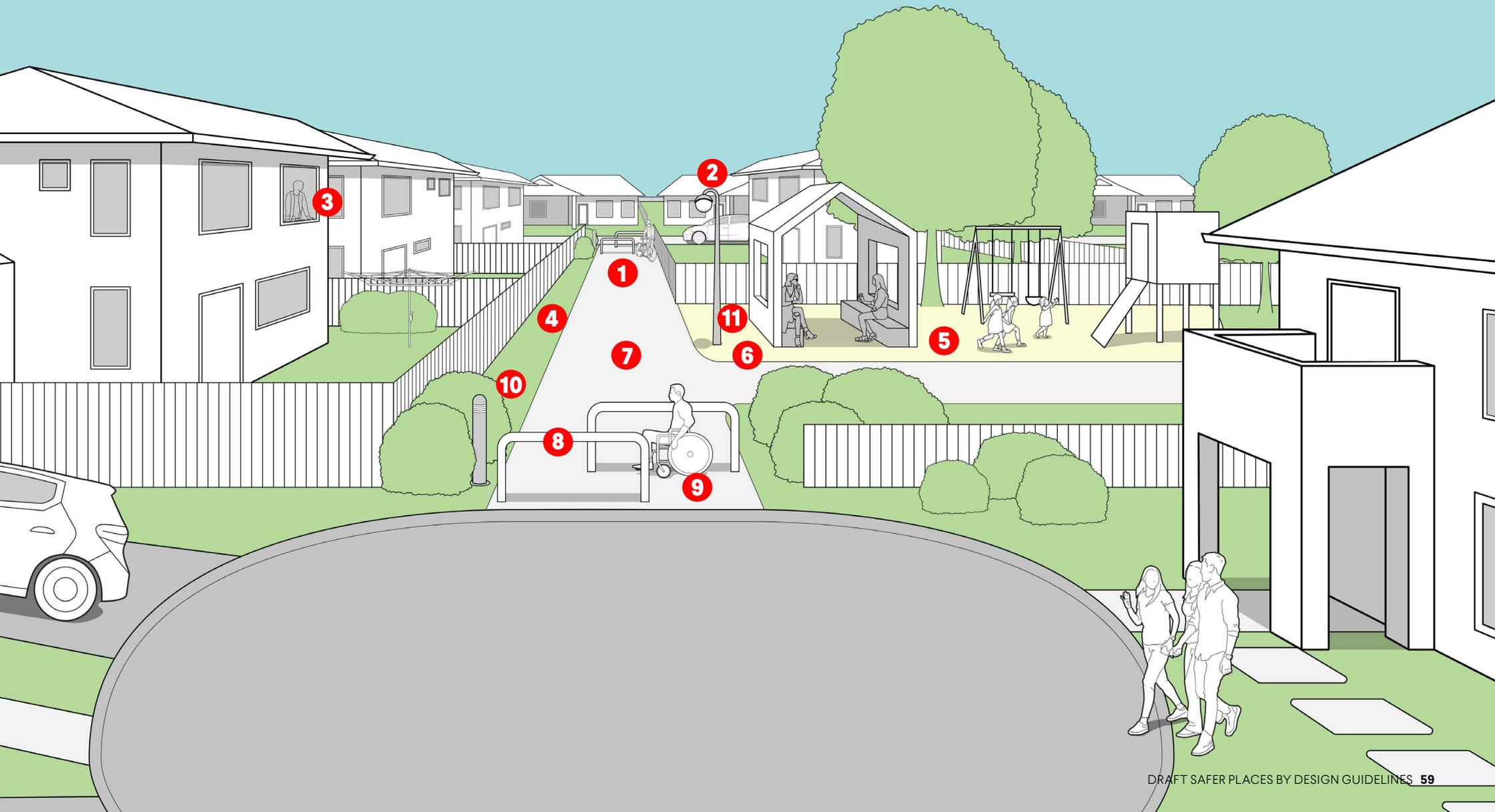
Principle 3: Access control

- 7 The access way is wide enough to allow pedestrians to pass each other easily
- 8 Bollards discourage motor vehicle entry
- 9 The access way is designed for universal access and to be a part of the cycling network

Principle 4: Space management

- 10 The access way is appropriately maintained
- 11 Use of high-quality materials and rough surfaces minimise maintenance and opportunity for graffiti

4.7 Pedestrian access ways



4.8 Community infrastructure

Many larger institutions have their own campuses or precincts, and CPTED design responses need to cover both the internal layout and the interface with the exterior. Most of the time these campuses are used as a quasi-public space and designs should take this into consideration.

*Community infrastructure in this Guide is focused on the **physical facilities, places and spaces** that are accessed by the community for **active citizenship, social interaction, recreation and physical activity**. This includes a broad range of facilities such as **community hubs, health, education, justice, arts, culture and recreational**.*

Principle 1: Surveillance

- 1 Footpaths and cycle routes are located adjacent to uses that provide surveillance such as entries, cafes/libraries
- 2 Upper and lower level passive surveillance
- 3 Pedestrian routes are well-lit and have good sightlines from building entrances
- 4 Pedestrian routes and cycle paths are co-located
- 5 Low planting and high canopy trees provide good sightlines and amenity

Principle 2: Territorial definition

- 6 Building entries are clearly legible
- 7 Adequate signage assists wayfinding
- 8 Feature lighting supports legibility and wayfinding

Principle 3: Access control

- 9 Landscaping provides natural access control for pedestrian and vehicles

Principle 4: Space management

- 10 Landscaping is well maintained

4.8 Community infrastructure



4.9 Car parking

Improving the general amenity of a car park can enhance feelings of safety. For example, introducing features which attract people to the area, co-locating with highly frequented land uses (such as shops or cafes), and enabling good passive surveillance through the location of pathways and entries can make it more attractive and increase pedestrian movement through the space.

CPTED responses for car parks can be most effective when aligned with other interventions, such as active surveillance and management strategies.

*Improving **surveillance** of and **guardianship** over parking facilities, as well as **controlling access into and out of facilities**, can make parking areas much less attractive to potential perpetrators.*

Principle 1: Surveillance

- 1 Car parking can be seen from the public realm
- 2 Lighting of multi-storey car parks is adequate and uniformly distributed to avoid deep shadows
- 3 CCTV and other means of additional security measures enhance safety
- 4 Car parking is located adjacent to active land uses

Principle 2: Territorial definition

- 5 Pedestrian routes in car park are legible and support safe movement
- 6 Signage is located at strategic locations to assist orientation and wayfinding

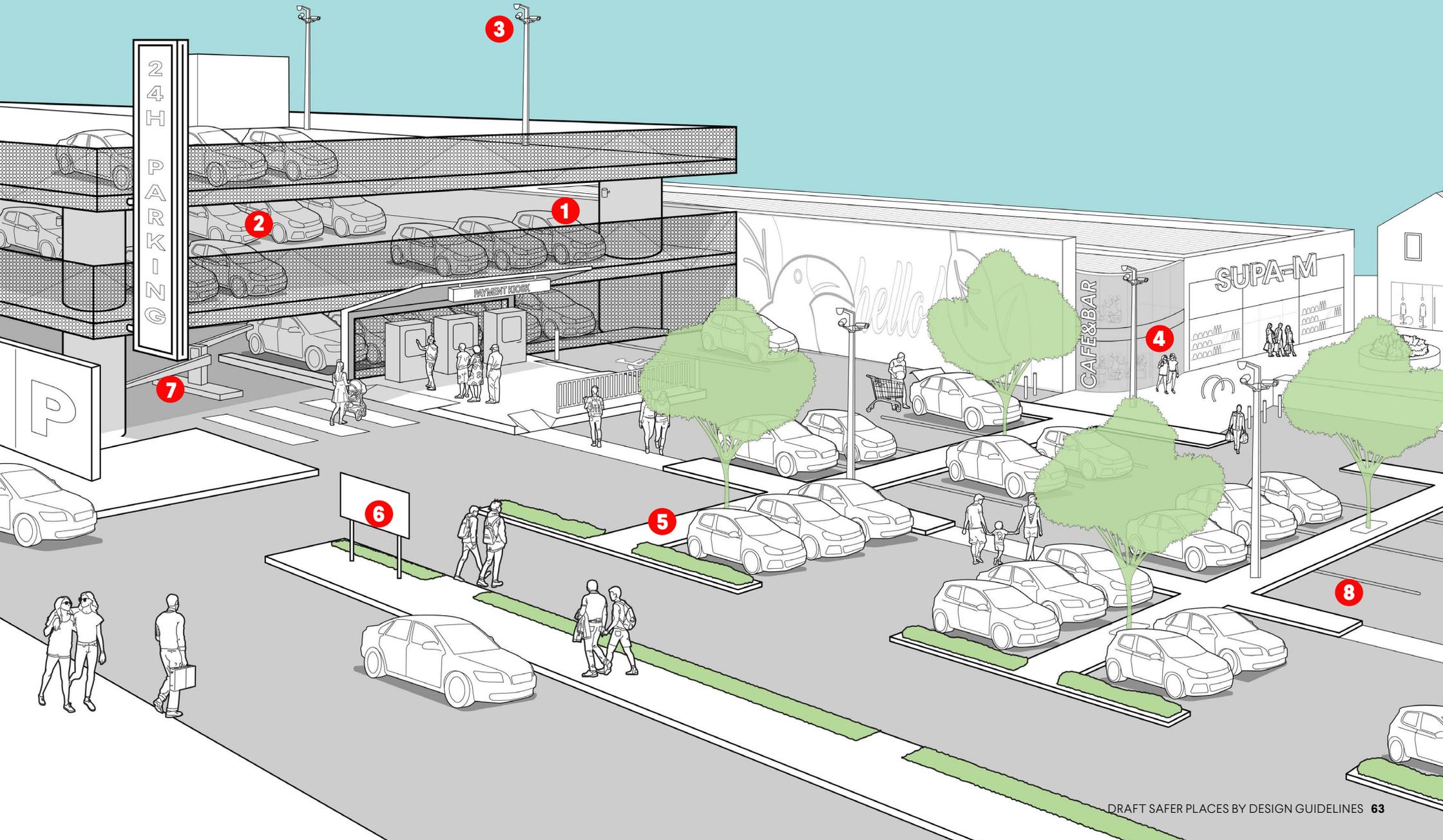
Principle 3: Access control

- 7 Entry is gated and draws awareness to non-permissible use

Principle 4: Space management

- 8 Car parking is well maintained, clean and free of rubbish

4.9 Car parking



4.10 Crowded places

Crowded places can include places that draw large volumes of people on a regular basis, such as a town square and malls, or places that are designed to hold events such as fairgrounds, sporting arenas and concert venues.

Crowded places are considered high risk target locations and attractive to would be attackers. Careful planning is of prime importance to ensure responses are calibrated to the risk level. Bespoke solutions and a combination of approaches tailored to context and place may be required to actively attract people to a space that is safe and secure.

*Crowded places can pose a broad range of **security challenges** for their owners and operators*

*Terrorists and other criminals have, and will continue to, see crowded places as **attractive targets** for attacks*

Principle 1: Surveillance

- 1 Clear sightlines between entry and gated areas
- 2 Lighting and CCTV designed to be located at (temporary) security checkpoint

Principle 2: Territorial definition

- 3 Strategically placed signage aids wayfinding, legibility and assists to prevent overcrowding
- 4 Clearly defined ingress/egress point and internal access ways

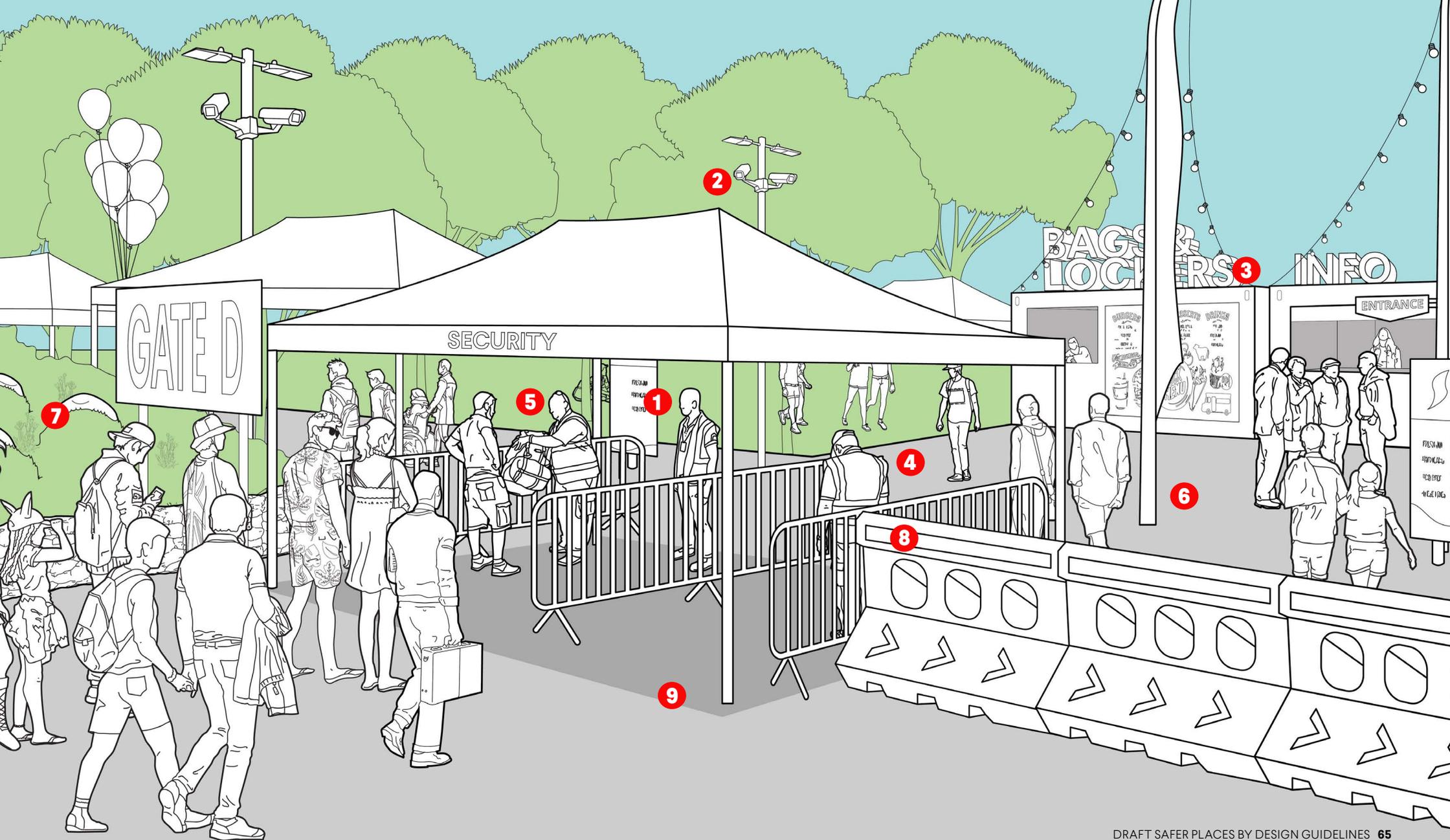
Principle 3: Access control

- 5 Security checkpoint at entry prevent illegitimate use
- 6 Stand-off distance between checkpoint and main entry
- 7 Natural land form (landscaped hill) used as a barrier

Principle 4: Space management

- 8 Fencing is stable and robust
- 9 Area is kept clean and free of rubbish

4.10 Crowded places



Appendices

A1	USEFUL CONTACTS	67
A2	CRIME RISK INFLUENCES	68
A3	CPTED STATEMENT CHECKLISTS.....	71
	CHECKLIST 1 - CRIME RISK LEVEL	72
	CHECKLIST 2 - TYPES OF PROPOSALS	73
	CHECKLIST 3 - BASIC AND HIGH LEVEL CPTED STATEMENT REQUIREMENTS	74
	CHECKLIST 4 - CHOSEN CPTED MEASURES.....	75
	DEFINITIONS	76
	REFERENCES AND FURTHER READING.....	78
	PHOTO CREDITS	79



A1 Useful contacts

Australian Bureau of Statistics

Australia's national statistical agency and an official source of independent, reliable information. We tell the real story of Australia, its economy and its people by bringing life and meaning to numbers

<https://www.abs.gov.au/>

Australian Institute for Disaster Resilience

The National Institute for disaster risk reduction and resilience. We collaborate across sectors to strengthen the resilience of Australian communities to disasters

<https://www.aidr.org.au/>

Australian National Security

Resource to Australian national security measures for terrorist attack, including publications and other resources

Publications by the Australia-New Zealand Counter-Terrorism Committee (ANZCTC): <https://www.nationalsecurity.gov.au/Media-and-publications>

Department of Home Affairs – national security

Responsible for national security and law enforcement policy, emergency management, counter terrorism policy and coordination, critical infrastructure protection and countering violent extremism programs along with other initiatives

<https://www.homeaffairs.gov.au/about-us/our-portfolios/national-security>

International CPTED Association (ICA) (Canada)

The ICA promotes the use of CPTED globally and supports local organizations, practitioners and communities that utilise CPTED principles to create safer communities and environments

<https://www.cpted.net/>

Secured by Design (UK)

Secured by Design is the official police security initiative in the UK that works to improve the security of buildings and their immediate surroundings to provide safe places to live, work, shop and visit

Design guidance reference

<https://www.securedbydesign.com/guidance/design-guides>

WA Police Force

The Western Australia Police Force is responsible for policing the world's largest single police jurisdiction, covering Western Australia's 2.5 million square kilometres with over 150 police stations across 8 metropolitan and 7 regional districts

[WA Police Force Crime Prevention and Community Liaison Unit](#)

<https://www.police.wa.gov.au/Our-Community/Crime-Prevention-and-Community-Liaison>

[WA Police Force Crime Prevention Publications for Businesses and Homeowners](#)

<https://www.police.wa.gov.au/Our-Community/Publications>

[WA Police Force Crime Statistics](#)

<https://www.police.wa.gov.au/Crime/CrimeStatistics#/>

[WA Police Force Protective Security Unit](#)

<https://www.police.wa.gov.au/Your-Safety/Counter-terrorism>

A2 Crime risk influences

The below table provides a guide to site and context analysis when establishing level of crime risk for a development project. A simple development project may need less analysis to inform level of crime risk than a large scale/complex project.

1. Crime statistics: actual and perceived

Aim: to understand the actual and perceived risk of crime in the local area.

Crime data provides insights into the location, frequency and type of crimes occurring in a given area. Perceptions of crime risk should also be considered, as perceptions may not always align with crime data. Below are sources that can be accessed to establish actual and perceived crime levels.

Sources of crime statistics

Crime statistics by suburb are available on the Western Australian Police Force website: www.police.wa.gov.au/Crime/CrimeStatistics#/

Local police stations may be able to provide location specific information on crime trends, crime generators and anti-social activity in the area.

Data may be sourced from local government Community Safety Crime Prevention Plans (where available) and from local government personnel, including security, rangers and community development officers.

For locations with a very high crime rates, crime hotspot mapping may indicate definitive locations of risk.

Perceived crime risks

A safety audit (See Definitions) of the site and its immediate surrounds will help understand perceptions of crime and safety by providing an opportunity:

- for neighbouring residents, local community, businesses, and visitors, to record their sense of safety and identify factors that influence perceptions
- to observe the surroundings for evidence of anti-social behaviour and target hardening that may indicate crime risk.

Take note of the type of threats, as different forms of crime may require a different CPTED response. e.g. stealing from cars and pedestrians - focus on surveillance, street lighting, sightlines.

2. Community profile

Aim: to understand the implications of local community profile on crime risk and anti-social behaviour.

There are broad causal factors for crime in a locality such as high unemployment levels, family breakdown, poverty, lack of community facilities and programs, and displacement factors. In addition, research has consistently indicated crime is more prevalent in societies where there is greater disparity in the quality of life of its citizens (Kawachi, Levine, Miller, Lasch, & Amick, 1994).

Australian Bureau of Statistics data

Australian Bureau of Statistics (ABS) Census data provides demographic indicators for profiling local communities. Particular attention should be given to the safety needs of vulnerable groups like women, children, elderly, physically impaired. www.abs.gov.au/census

SEIFA, developed by the ABS, ranks areas in Australia according to relative socio-economic advantage and disadvantage. www.abs.gov.au/websitedbs/censushome.nsf/home/seifa

Social capital

Understand how community groups and activities contribute to community connectedness, local sense of place and well cared for spaces. The social capital of a community can assist in promoting community respect for and protection of the local neighbourhood and the people within it.

A2 Crime risk influences (cont.)

3. Local geographical context

Aim: to identify the potential sources of criminal and anti-social activity nearby, both in terms of potential crime generators and attractors.

This will be influenced by the siting of land uses, activities, and routes to, through and around the site. (Cozens, Love, & Davern, 2019)

Nearby land uses and activities	Identify land uses and activities around the site that have potential to attract crime. For example, liquor stores can be associated with higher levels of assault and robbery. (Brantingham & Brantingham, 1998) Studies have also highlighted higher rates of crime and anti-social behaviours associated with transit routes and stations.
Displacement	Displacement occurs when criminal activity moves in as a result of redevelopment or revitalisation. Identifying or predicting displacement can allow it to be managed as part of the design process.
Contextual design elements	Identify any issues with existing or nearby buildings such as blank walls and entrapment spots. Also consider unsafe routes where there are no alternatives, like walled or fenced pedestrian accessways or where the potential for crime or the perceived risk is high.

4. Observations

Aim: to observe how the existing site and its immediate surrounds influences the potential for crime and anti-social behaviour.

Site safety audit

Carry out site observational or a safety audit of the site, ideally at different times of the day and night. Consider:

- Surveillance opportunities
- Sightlines
- Lighting levels and placement
- Territorial reinforcement
- Access controls including security personnel
- Technological surveillance
- Routine activities in and around the site and established behavioural patterns
- Management and maintenance

In conducting these observations, be aware of the influence that existing land uses and building configurations may have on local crime, and the potential for existing CPTED measures to lower crime risk.

A2 Crime Risk Influences (cont.)

5. Influence of the proposal

Aim: to understand the potential impact of new development and land use change on criminal and anti-social activity in and around the development site.

The crime context assessment should consider the impact of the development on the local incidence of and perceptions of crime. The form of development, type of land use, and user groups attracted to the site, will influence local crime risk. This assessment should consider the influence of the development both during construction and on completion.

Potential of project to generate crime

To establish the crime generation potential of the proposal, the following considerations may be relevant:

- What is the anticipated demographic of the new community?
- What are the expected tenancies of the building(s)?
- Will the development change the way the local community uses the existing public spaces, such as alteration to established pedestrian routes?
- Will the development bring more people to the area?
- Consider also the implications of project staging on crime risk.

Potential of project to reduce crime

Consideration should be given to ways in which the proposal could improve the safety of the local neighbourhood and support activity in public areas.

- Can the development improve surveillance of public spaces and areas of transition between public and private spaces?
- Can the development contribute to better definition of private and public space?

6. High risk targets

Aim: to understand the level of terrorism threat associated with the project.

Terrorism presents a risk to public access buildings, public open spaces and high-risk targets.

Terrorist targets

Crowded places and locations that are accessed by large numbers of people on a predictable basis are potential targets for a terrorist attack and include:

- places of mass gathering
- transport hubs
- sport stadiums
- open spaces in cities.

Other areas considered high risk:

- prominent structures, such as places of national heritage value
- buildings with a political or religious significance
- places likely to attract tourists, or theatre or club goers
- strategic and regional infrastructure.

Reference should be made to the WA Police Force Counter Terrorism (WAPFCT) Unit and Australian National Security for advice on current terrorism threat and national advice.

A3 CPTED statement checklists

The following CPTED statement checklists are provided:

Checklist	Name	Description
Checklist 1	Crime Risk Level	Based on information in Step 1 of Part 3: CPTED Process, use to determine whether the level of crime risk is high or low
Checklist 2	Type of Proposal	To determine if the proposal is 'simple' or 'large/complex'
Checklist 3	Basic and High Level CPTED Statement Requirements	A checklist outlining the requirements for a 'basic' and 'high-level CPTED statement
Checklist 4	Chosen CPTED Measures	A checklist to identify how the project responds to the CPTED principles and objectives

A3 CPTED Statement Checklists (cont.)

Checklist 1: Crime risk level

(refer Part 3 – CPTED Process, Step 1 Identify Risk)

When to use: Based on information gathered in Part 3: Step 1 Identify Risk use the below checklist to determine whether each of the crime risk influences presents a high or low level of risk.

Where the risk of a terrorist incident is thought to be 'high' (i.e. in the case of a target location such as a crowded place or critical infrastructure), engagement with the decision-maker/approval authority is recommended.

Crime risk influence	Level of risk (low/high)	Comments/Justification
Crime statistics		
Local community profile		
Local geographical context		
Site observations		
Influence of the new development		
High risk targets		

A3 CPTED Statement Checklists (cont.)

Checklist 2: Type of proposal

Identifying development project scale and complexity assists in determining if a basic or high-level CPTED statement and assessment is required.

When to use – apply criteria and refer to example projects to establish if project is simple or large/complex (refer Part 3: CPTED Process – Step 4 and 5)

Simple development projects	Statement level required	Example projects	Large/complex development projects	Statement level required	Example projects
Where the following apply: <ul style="list-style-type: none"> • minor development or change of use is proposed • simple arrangement of buildings and spaces • non-contentious building uses are proposed • development delivery is uncomplicated, requiring straightforward CPTED strategies 	Basic level CPTED statement	Bus stops Small scale residential development Small scale car parking areas Small shops and businesses Small parks	Where the following apply: <ul style="list-style-type: none"> • significant development or change of use is proposed • there is a complex arrangement of buildings, access routes and spaces • complex building uses are proposed • development will be staged and require different CPTED strategies 	High level CPTED statement	Airport and associated services Bulky goods showrooms Entertainment districts Hospitals Hotels Liquor stores Mixed use developments Nightclubs Retail Centres and Malls Supermarkets Small bars Taverns Transport hubs Crowded places Critical infrastructure Complex public open spaces Structure plans (precinct or standard)

A3 CPTED Statement Checklists (cont.)

Checklist 3: Basic and high level CPTED statement requirements

When to use: Use checklist to confirm the requirements of either the basic or high level CPTED statement as applicable to your project.

The level of detail required for the CPTED statement depends on the risk factors identified and the project type. The higher the risk factor the more comprehensive the reporting required.

Statement type	Proponent requirements
Basic level CPTED statement	<p data-bbox="1442 347 1960 371">(See Appendix A3 checklists for more information)</p> <ul style="list-style-type: none"> <li data-bbox="1442 422 2116 534">❑ Identified Crime Risks. This may be a basic review of primary crime risks from crime statistics, observations, and local geographical context. (see Appendix A2: Crime Risk Influences) <li data-bbox="1442 547 2116 630">❑ Chosen CPTED measures to address the primary risk, noting why, where and how they will be integrated in the design. (see Appendix A3 - Checklist 4) <p data-bbox="1442 647 2094 703">The statement may require more detail where the crime risk has been identified as high, or where required by a decision-maker.</p>
High level CPTED statement (includes more detailed CPTED analysis)	<p data-bbox="1442 788 2116 844">A statement which draws on a wide-range of data and information to generate a detailed understanding of:</p> <ul style="list-style-type: none"> <li data-bbox="1442 855 2116 938">❑ Identified Crime Risks. This may include a detailed analysis of site and context depending on type of project and level of risk. (see Appendix A2: Crime Risk Influences) <li data-bbox="1442 951 2116 1034">❑ Chosen CPTED measures to address identified risks, noting why, where and how they will be integrated in the design. (see Appendix A3 - Checklist 4) <li data-bbox="1442 1046 1937 1070">❑ Identified design conflicts and resolutions. <li data-bbox="1442 1083 2128 1249">❑ Marked up drawings and support material to describe the design features of the site and local environment that contribute to making a safer place. Ensure to describe intended specifications of variable elements, e.g. tree species and size, lighting lux/spill, CCTV type, materials and reinforcement and maintenance standards <li data-bbox="1442 1262 2116 1286">❑ ANZCTC Crowded Places Self-Assessment where relevant. <p data-bbox="1442 1305 2128 1388">The statement may also address ongoing operational requirements including security staffing levels, CCTV management and monitoring, maintenance scheduled and lighting controls.</p> <p data-bbox="1442 1407 1960 1431">Post-occupancy monitoring is strongly encouraged.</p>

A3 CPTED Statement Checklists (cont.)

Checklist 4: Chosen CPTED measures

When to use: For low and high-level CPTED statements to identify how the proposal responds to CPTED principles and considerations. CPTED responses should consider the project location, crime risks, purpose, function, use and any competing design objectives. This checklist is intended to guide consideration of the CPTED measures and not as a tick-box outcome.

Principle	Objective	CPTED measures used <small>(and competing design resolution if applicable)</small>
Principle 1: Surveillance	<ul style="list-style-type: none"> <input type="checkbox"/> Eyes on the street <input type="checkbox"/> Clear sightlines <input type="checkbox"/> Effective lighting <input type="checkbox"/> Technological surveillance 	
Principle 2: Territorial Definition	<ul style="list-style-type: none"> <input type="checkbox"/> Clear spatial structure <input type="checkbox"/> Signage <input type="checkbox"/> Legibility 	
Principle 3: Access Control	<ul style="list-style-type: none"> <input type="checkbox"/> Physical and landscape deterrents <input type="checkbox"/> Target hardening 	
Principle 4: Space Management	<ul style="list-style-type: none"> <input type="checkbox"/> Activity support <input type="checkbox"/> Space maintenance 	

Definitions

ACCESS AND APPROACH CONTROL - one of the measures to improve safety of a building or location from hostile acts. Where stand-off distances are unable to be achieved, the impact of a hostile vehicle or improvised explosive device can be mitigated and/or reduced by controlling the vehicle's access and approach. Traffic calming techniques such as bends, chicanes (a serpentine curve), right-angled approaches, inclines or speed bumps may be used to reduce vehicle speeds and subsequent severity of impact.

ACTIVE FRONTAGE - building frontage which contains uses that promote activity on the street.

ACTIVE SURVEILLANCE - surveillance through technology and management, such as CCTV and security patrols.

ACTIVITY GENERATORS - features and land uses that attract people, activity and surveillance opportunities, such as picnic areas, cafes, recreation facilities and public seating areas.

ANZCTC - Australia-New Zealand Counter-terrorism Committee.

BARRIER CONTROL - barrier control is a direct and effective way to reduce the impact of hostile vehicle. This takes the form of bollards in various designs; however, if incorporated poorly these can be unsightly and contribute to the perception of a hostile environment. Other approaches include designing natural barriers (e.g. raised levels, land form manipulation and other landscaping techniques).

BLAST MITIGATION - strategies to reduce the impact of bomb blasts and explosions (improvised explosive devices), collectively known as blast mitigation. Primarily these include providing stand-off distance, the use of blast proof materials, blast-proof building design and installation of blast shields. Blast mitigation works to minimise the risk to people and property.

BLIND SPOTS - areas where vision ahead or around is restricted

CCTV - closed Circuit Television, video systems whose access to viewing is private.

COMMUNITY SAFETY AND CRIME PREVENTION PARTNERSHIP - Community Safety and Crime Prevention Partnership (CSCPP) agreements are one of the main ways the WA Police Force works with local governments. The WA Police Force's Crime Prevention and Community Liaison Unit helps local governments collaborate with community partners, such as schools, housing providers, and youth services, to create a plan that will guide local responses to reduce crime and other anti-social activity

CRITICAL INFRASTRUCTURE - critical infrastructure includes, but is not limited to, essential services such as energy, communications, water, transport (ports, rail etc), health, food supply, banking and finance, information technology infrastructure. It is deemed 'critical' because if destroyed, degraded or rendered unavailable, it would have significant wider social and economic impacts on the community, including disruptions to business and government services, or compromised national defence and security.

CROWDED PLACES - crowded places are locations visited by high volumes of people on a predictable basis, such as for sporting events, major tourist attractions (e.g. historical buildings and theme parks) and festivals. These locations can be at risk of a terrorist incident or violent extremism from a range of modes of attack including hostile vehicles and improvised explosive devices.

DISPLACEMENT - occurs where crime is moved away or drawn into new locations, or displaced in time, or to different crime types or crime targets/victims.

ENTRAPMENT - places where people can hide or where there are no alternative exit/exits if confronted.

HOTSPOTS - locations where there is an existing higher than average crime rate.

HOSTILE VEHICLE - a hostile vehicle is one that is out of control or whose driver intends to access an unauthorised or restricted area to cause damage to buildings or structures, death or injury to people, disruptions to business, or generate publicity for a cause. Damage is caused by driving the vehicle(s) at speed (using the vehicle as a weapon) or the vehicle may be used to carry an explosive device to detonate in a chosen location.

IMPROVISED EXPLOSIVE DEVICE (IED) - an improvised explosive device is a bomb constructed in an improvised manner and deployed in a non-conventional military way. It can be used as a roadside bomb and in heavy terrorist actions. Typically IEDs can be either person-borne or vehicle-borne.

LEGIBILITY - the ability of people who are unfamiliar with an area to find their way.

MITIGATION - measures taken before, during, or after a crime event to decrease or eliminate its impact on people, property or a location.

NATURAL SURVEILLANCE - see passive surveillance.

PASSIVE SURVEILLANCE - also known as "natural/informal surveillance", passive surveillance is the incidental or informal surveillance of a location through overlooking from neighbouring uses ('eyes on the street'). This approach relies on clear sightlines, lighting and considered urban design to avoid the creation of hidden or isolated spaces.

PERIMETER DEFENCE - measures to limit or block the unauthorised access of individuals across the perimeter of a site. Due to the nature of their size, and access and egress points, perimeters can create numerous opportunities for undetected attack.

Definitions (cont.)

PUBLIC REALM - public spaces including streets, public open space and other areas used by and accessible to the community.

PUBLIC SPACES - includes open spaces and the green network, that is: recreation spaces, sport spaces, nature spaces and foreshore reserves, as well as streetscapes, civic squares, piazzas, plazas and paved open pedestrian spaces.

SAFETY AUDIT - knowledge gathering of qualitative perspectives from community participants to identify the perceived safety of an area, to identify community safety issues and possible solutions.

SIGHTLINES - the line of sight between the viewer and viewed.

STAND-OFF - stand-off is used as a counter-terrorism measure to reduce the damage to people and assets caused by a hostile vehicle or blast. Stand-off is the maximum possible distance that can be kept between an asset and a hostile vehicle, or the minimum distance or tolerance between an improvised explosive device (including a vehicle borne explosive device) and its target.

TARGET - targets in a terrorist attack can be categorised as people, physical assets, information and processes

TARGET HARDENING - the use of elevated security measures in higher crime risk areas, or to provide protection for higher value assets. Target hardening aims to delay an offence and allow sufficient time for a protective response to occur. Measures may include the use of resilient materials, structural reinforcement and securing openings.

TERRITORIAL DEFINITION OR TERRITORIAL

REINFORCEMENT - making clear the boundaries between public spaces, semi-public spaces, semi-private spaces and private spaces.

TERRORIST ACT - an act or threat committed with the intention of advancing a political, ideological or religious cause, and which is intended to coerce or intimidate an Australian government, a foreign government, or sections of the public. It aims to cause serious physical harm or death to people or serious damage to property, creates a serious risk to the health and safety of the public, or seriously interferes with, disrupts, or destroys, an electronic system.

URBAN DESIGN - a design-based approach to shaping built environments and optimising the performance and efficiency of neighbourhoods, towns and cities, paying attention to the way spatial structures work, the interface between public and private realms and natural environment, cultural values, integrated movement systems and built form.

VULNERABLE GROUPS - individuals, or groups of people who are likely to perceive themselves or be perceived as being unsafe or insecure or at risk of violence in the community, or at risk of committing crimes and being exposed to the criminal justice system.

References and further reading

References

Brantingham, P., & Brantingham, P. 1998, Environmental Criminology: From Theory to Urban Planning Practice. *Studies on Crime and Crime Prevention*, vol.7, pp.31-60.

Crowe, T. 2000, Crime Prevention through Environmental Design. *Application of Architectural Design and Space Management Concepts* (Second Edition), p.39.

Department Planning Lands and Heritage, 2021, *Draft Planning Engagement Toolkit for Western Australia*. WAPC.

Kawachi, I. et al 1994, *Income Inequality and Life Expectancy; theory, research and policy*. Boston: New England Medical Center.

Western Australian Planning Commission, 2019, State Planning Policy 7.0 *Design of the Built Environment*, Government of Western Australia

Further reading

Armitage, Rachel and Monchuk, Leanne, 2009, "1999 to 2009: Re-evaluating Secured by Design Ten Years On". In: International Design Out Crime Conference, December, 2009, Perth, Australia. (Unpublished) This version is available at <http://eprints.hud.ac.uk/id/eprint/23962/>

Atlas, R. 2008, *21st Century Security and CPTED: Designing for Critical Infrastructure Protection and Crime Prevention* (Second Edition), CRC Press.

Clarke, R. 1995, Situational Crime Prevention. *Crime and Justice*, 19, 91-150.

Community Development and Justice Standing Committee, 2019, Report No. 5 No Time for Complacency; Final report for the inquiry into the protection of crowded places in Western Australia from terrorist attacks. *Western Australian Legislative Committee* (p. p.43). Perth: Presented by Mr P.A Katsambalis, MLA.

Cozens, Paul and Hillier, David, 2008, *The Shape of Things to Come: New Urbanism, the Grid and the Cul-De-Sac*. *International Planning Studies* 13 (1): 51-73.

Cozens, P., & Love, T. 2009, "Manipulating Permeability as a Process for Controlling Crime: Balancing Security and Sustainability in Local Contexts". *Built Environment* (1978-), 35(3), 346-365.

Cozens, P. and Love, T. 2015, "A Review and Current Status of Crime Prevention through Environmental Design (CPTED)" *Journal of Planning Literature*. 30(4), pp. 393-412.

Cozens, Paul. 2016, *Think Crime! Using Evidence, Theory and Crime Prevention Through Environmental Design (CPTED) for Planning Safer Cities*. 2nd Edition

Cozens P. and Love, T. 2016/7, "Crime Prevention Through Environmental Design (CPTED) Introducing and Learning from the "Dark Side"" *Oxford Research Encyclopaedia of Criminology and Criminal Justice*.

Cozens, Paul, Terence Love, and Brent Davern, 2019, "Geographical Juxtaposition: A New Direction in CPTED" *Social Sciences* 8, no. 9: 252.

Crowe, T. 2000, *Crime Prevention Through Environmental Design* (2nd Edition), Butterworth-Heinemann, Florida

Home Office, Design Council, 2011, *Designing out Crime, A Designer's Guide*, United Kingdom. https://www.designcouncil.org.uk/sites/default/files/asset/document/designersGuide_digital_0_0.pdf

Houser, K. A., McCord, E. S., & Sorg, E. T. 2019, The Multilevel Impacts of Proximate Crime Generators and Attractors on Individual-Level Perceptions of Crime Risk. *Crime & Delinquency*, 65(13), (1798-1822) <https://doi.org/10.1177/0011128718763129>

International Standard Organisation, 2021, *ISO 22341 Security and resilience – Protective security – Guidelines for Crime Prevention through Environmental Design*, Switzerland: ISO.

Paulsen, D. 2012, *Crime and Planning: Building Socially Sustainable Communities*, Routledge.

Parliament of Victoria, 2013, *Inquiry into the Application of Safer By Design Principles and Crime Prevention Through Environmental Design (CPTED) Final Report*, Drugs and Crime Prevention Committee, Victoria.

Schneider, R.H. and Kitchen, Ted, 2007, *Crime Prevention and the Built Environment*. Routledge, London.

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