

Appendix 4: Crime Prevention through Design

4.0 Crime Prevention through Design

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Crime, and Crime Prevention, is an issue which concerns and affects everyone. Law-abiding citizens, however, may find it difficult to understand how and why criminals commit crime and how this can be prevented. In Building and Environmental design, this lack of sufficient understanding of the criminal can unwittingly lead to the creation of opportunities, which the criminal readily exploits.

Through designing out crime, modern preventative policing seeks to deter the opportunist criminal, whose decision whether or not to commit crime is usually influenced by two main factors:

1. The physical opportunity, and
2. The probability of being caught

Crime Prevention through Environmental Design (CPTED) is the creation, through effective design, of a physical environment conducive to the overall security of the community. This is achieved, through the establishment of 'defensible space' by extending the citizen's area of territorial concern from private through to public space whilst encouraging a sense of collective responsibility.

The Key Principles of CPTED are –

- Territoriality (Defined Areas of Influence)
- Collective Responsibility, and
- Detailed Security Design

Territoriality

The levels of crime and anti-social behaviour in a residential area are influenced by the degree of psychological control the residents can exert over the area.

Defensible Space

At the heart of this preventative concept of territoriality, is a theory first put forward by an American architect / criminologist. This proposes that all human beings need a degree of space around them which they can defend and over which they can exercise some form of territorial control. This 'defensible space' is particularly important in buildings and other parts of the designed environment, e.g. footpaths, car parks, park and ride facilities etc. The theory put forward is that the

designed environment can be divided into a hierarchy of different types of space ranging from entirely private to public.

Private Space is that area of space under the total control of the occupant and not visually or physically accessible to the public e.g. the inside of a house or private office.

Semi-Private Space is that area of space under control of the occupant, but which is visually and physically accessible to the public e.g. front garden of a house or an office reception.

Semi-Public Space is that area of space under control or within the area of responsibility of a specific group of occupants and which is accessible to the public e.g. hallways and lobbies of high rise flats, common recreational and parking areas of multiple housing complexes and office car parks.

Public Space is that area of space to which the public has access by right e.g. a public road.

To create this feeling of territoriality, consideration should be given to:-

- Maximising surveillance opportunities – good lighting, CCTV etc.
- Providing shared access routes
- Designing an appropriate pedestrian network

Collective Responsibility

Development design should not only extend the occupiers' influence over the public space - it should also create a feeling of responsibility. Central to the concept of collective responsibility is the idea of problem ownership. If users of an area are only concerned with their own private interests, and ignore crime and behaviour which does not affect them personally, crime becomes easier to commit. In an area where there is a high degree of social cohesion, a crime against one is seen as a crime against all. The community becomes more observant, which in turn makes it more difficult for the criminal to operate.

Detailed Security Design

Detailed Security Design is very much an integral part of Crime Prevention through Environmental Design. Detailed Security Design incorporates any measure, which can influence the criminal's decision whether or not to commit crime, e.g. landscaping, good lighting,

modern CCTV, natural surveillance and building design. Detailed Security Design also includes 'target hardening' measures which is a term used to describe physical features which will resist crime or deter the criminal e.g. locks, bolts, shutters, grilles and ironmongery.

Stages of Design

In providing a solution for any given design problem, it is important to be in full possession of all the relevant facts, which could ultimately determine the success of the design. Designing out crime, calls for the same approach. To evaluate fully the security issues which potentially affect any development, there are four main steps to be considered.

Stage 1: The Crime Profile

Profile on local crime trends – (provided by Garda Crime Prevention Officer)

Stage 2: The Crime Risk

Profile on anticipated crime risks and the probable impact on both the proposed development and its environs (based on type of building/area etc).

Stage 3: Detailed Evaluation

Identifying where the security of the development may be compromised.

Stage 4: The Design Proposal

A package of measures commensurate with the crime risk to the development will be produced.

Some General Examples of Crime Prevention through Environmental Design Principles

Layout of Footpaths:

Pedestrian routes should be designed to ensure that they are visually open, direct, well used and health and safety proofed. They should not undermine the defensible space of all stops and underground stops. Design features can help to identify the acceptable routes through an area, thereby encouraging their use, and in doing so enhancing the feeling of safety. Where it is desirable to limit access / use to residents and their legitimate visitors, appropriate design features may be used.

Footpath Design:

Routes for pedestrians, cyclists and vehicles etc. should not be segregated from one another. Networks of separate footpaths to unsupervised areas facilitate

crime and anti-social behaviour and should be avoided. Public footpaths should not run to the rear of, and provide access to gardens, rear yards or dwellings as these have been proven to generate crime. Where a segregated footpath is unavoidable, for example a public right of way, designers should consider making the footpath a focus of the development and ensure that it is:

- as straight as possible
- wide
- well lit
- devoid of potential hiding places
- overlooked by surrounding buildings and activities

Where isolated footpaths are unavoidable, and where space permits, they should be at least 3 metres wide (to allow people to pass without infringing personal space), with at least 2 metre verge on either side.

Seating Next to a Footpath:

Before placing seating (or any structure capable of being used for seating) next to a footpath, always consider the context in terms of the physical and social environment. Seating can be a valuable amenity or a focus for anti-social behaviour. In some areas there may not be a problem, in others seating may have to be provided only very judiciously. On the same footpath seating at one point may be a focus for trouble. Whereas at a different point on the same footpath, perhaps with better natural surveillance, it may be trouble-free. Where existing seating appears to be a problem, relocation is often an option worth considering. The following specific points should be considered:

- Who is most likely to be using the footpath? For example, is it likely to be used by older people? Can it be made more/less attractive to certain groups of users by the way it is designed?
- Is the footpath required simply as a means for travelling from one place to another without stopping?
- Is it the intention to encourage stopping and social interaction at particular points along the footpath?
- Would seating encourage or attract inappropriate loiterers such as drinkers or drug users?
- Is vandal-resistant seating necessary?
- Should seating be placed right next to the footpath or set at the back of the verge?

Lighting of Footpaths:

The need for lighting will be determined by local circumstances. Good lighting prevents crime and incidents of public order / vandalism and security is further enhanced if it is matched with a high degree of natural surveillance from surrounding buildings where reaction to an incident can be expected i.e. a witness calls the police, or the footpath is well used. It is important that the landscape architect and lighting engineer co-ordinate their plans. This will help avoid problems such as conflict between lighting and tree canopies

Communal Areas:

Communal areas such as playgrounds and seating areas have the potential to generate crime, the fear of crime, and anti-social behaviour. They should be designed to allow supervision from nearby dwellings with safe routes for users to come and go. Boundaries between public and private space should be clearly defined and open spaces must have features which prevent unauthorised vehicular access. Communal spaces as described above should not immediately lie alongside residential buildings.

The provision of open, public amenity space, as an integral part of new residential developments, should make a valuable contribution towards the quality of the development and the character of the neighbourhood. In order to do this it must be carefully located and designed to suit its intended purpose – mere residential space unwanted by the developer is very unlikely to be suitable. In particular:

- The open space must be designed with due regard for natural surveillance.
- Adequate mechanisms and resources must be put in place to ensure its satisfactory future management.
- Care should be taken to ensure that a lone dwelling will not be adversely affected by the location of the amenity space.
- Positioning amenity/play space to the rear of dwellings can increase the potential for crime and complaints arising from increased noise and nuisance.

Side and Rear Boundaries:

Vulnerable areas, such as side and rear gardens, need more robust defensive barriers by using walls or fencing to a minimum height of 1.8m. There may be circumstances in which more open fencing is required

to allow for greater surveillance. Trellis-topped fencing can be useful in such circumstances. Additional deterrent features such as increasing the height of fencing or planting thorny shrubs may be considered as an alternative.

Rear Access Paths/Laneways:

It is preferable that paths / laneways are not placed at the rear of properties. Research studying the distribution of burglary in terraced housing with rear laneways has shown that up to 85% of entries occurred at the back of the house. They also encourage anti-social behaviour and cause serious litter problems. If they are essential to allow residents access to the rear of properties then they must be gated. The street lighting should be designed to ensure that the gates are well illuminated. The gates should have a key operated lock and have anti-climb features. The minimum height of gates should be 2m.

Climbing Aids:

Boundary walls, bins and fuel stores, low flat roofs or balconies should be designed so as not to provide climbing aids to gain access to properties.

Car Parking:

With many developments now being designed with parking and underground parking, the following points should be considered at the design stage;

- Vehicular access points are electronically controlled, the use of a simple pole barrier is not acceptable as they do not restrict pedestrian access.
- External pedestrian entrances are kept separate from vehicular access points and gained internally via locked stairwells.
- Parking spaces should be arranged in straight rows to avoid blind spots.
- Support pillars should be as slim as possible within structural requirements.
- Ensure that external pedestrian entrances and routes to them have good natural surveillance and that any adjacent landscaping is low level.
- Maximise natural surveillance into and out of lifts, preferably with a vision panel.
- Good lighting is essential. There should be minimum colour distortion, no shadowed areas or pools of darkness. Bright coloured walls and ceilings should be used throughout.
- Access and exit points should be clear, well signed and lit.

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- All proposals for underground parking should incorporate modern CCTV systems. Developers should install good quality, high resolution, recorded CCTV and help points.

CCTV

Consider drawing up a 'Memo of Understanding' with relevant stakeholders to include An Garda Síochána, to cover clear protocols on issues relating to:

- The retrieval of CCTV footage for crime investigation and detection purposes.
- The potential use of CCTV feeds to local Garda Stations

▼ Burnt out houses at Salvia Court, Keyes Park, Southill

