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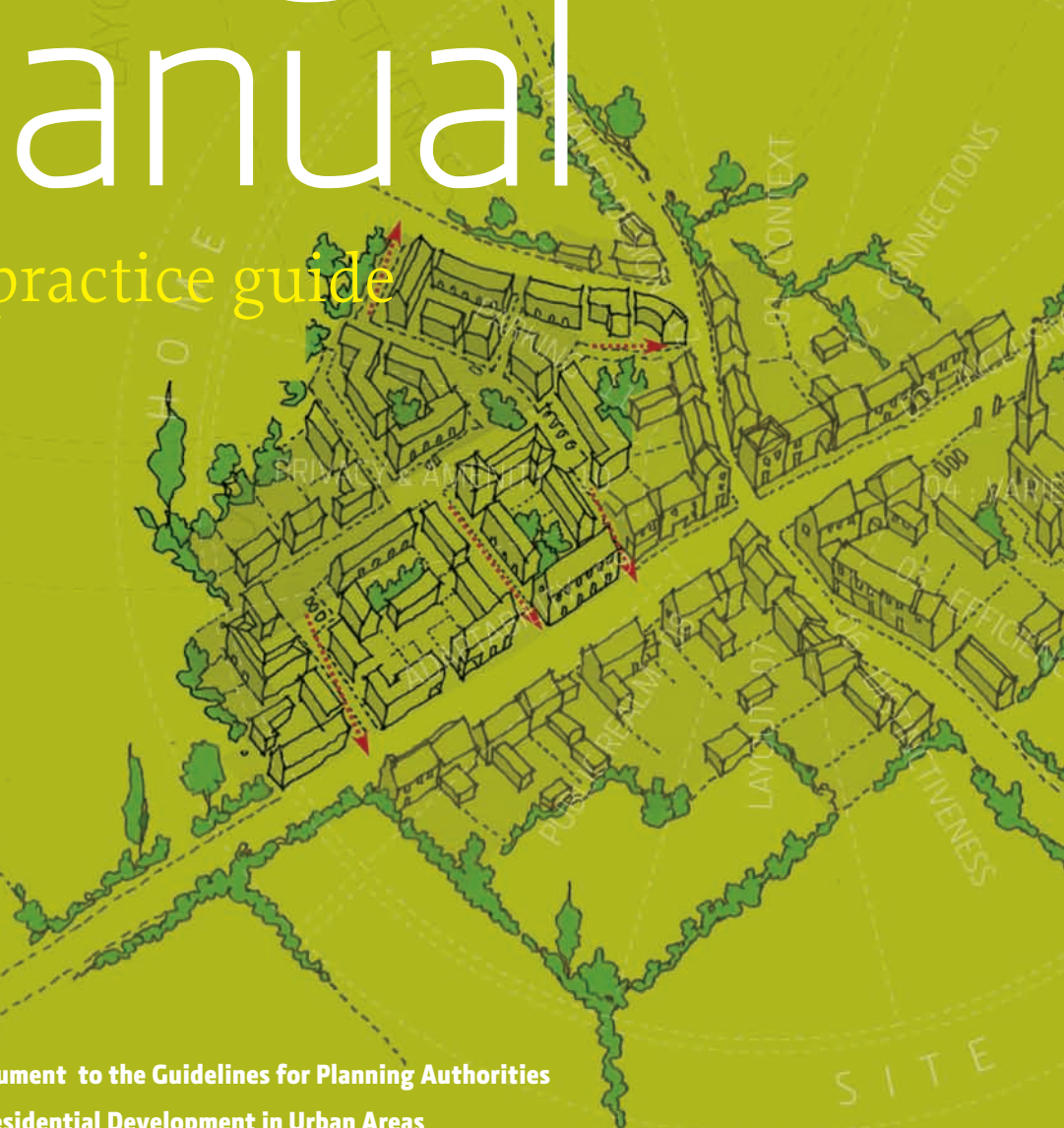


# Urban Design Manual

A best practice guide

May 2009

A companion document to the Guidelines for Planning Authorities  
on Sustainable Residential Development in Urban Areas





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A companion document to the Guidelines for Planning Authorities  
on Sustainable Residential Development in Urban Areas

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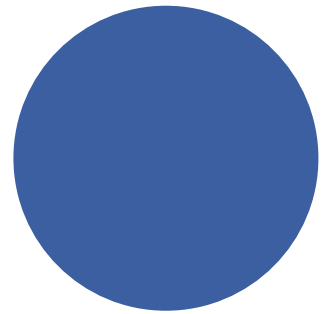
*Zero-G, Communications Design*



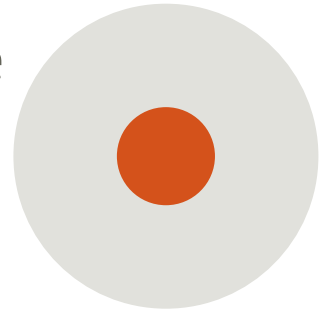
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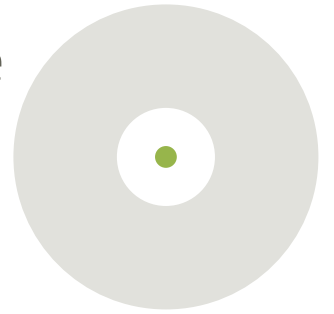
Neighbourhood



Site



Home



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# Foreword

## **Sustainable Residential Development in Urban Areas Urban Design Manual**

I WARMLY WELCOME this Urban Design Manual which is to be used as a companion reference on best practice for the implementation of the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas. The draft Guidelines fit with and cross-reference this Urban Design Manual in such a way that the user can easily visualise the desired outcomes and study potential solutions based on best practice experiences here in Ireland and across Europe.

The adage that ‘a picture paints a thousand words’ is borne out by this Manual as it clearly illustrates the twelve criteria for sustainable residential development in both new locations and within existing urban areas set out in the draft Guidelines. The many illustrations, photographs and diagrams presented in this manual cover the broad range and scales of developments and clearly demonstrate that, through early pre-planning consultations between the key parties, good planning and architectural design and efficient use of space, more compact and higher density at appropriate locations can enhance and enrich an existing urban area and can provide a user-friendly and sustainable environment for its residents.

This is the first time in Ireland that we have produced a complementary Urban Design Manual to illustrate planning guidelines and I am confident that it will be of huge benefit to planners, developers, architects, academics and indeed the general public who have a great interest in the development of their cities, towns and neighbourhoods.

I commend O’Mahony Pike Architects in association with Tribal Planners and Urban Designers who produced this Manual on behalf of the Department and I would like to thank the expert Steering Group, chaired by my Department, which steered the development of the best practice manual in tandem with the draft Guidelines.



John Gormley, T.D.  
*Minister for the Environment,  
Heritage and Local Government*

# Introduction

Well-designed homes in the right locations are fundamental to building strong, sustainable communities. Such communities will ensure Ireland's continued success in attracting and generating investment and improving the quality of life for its residents.

## About this guide

This Design Guide accompanies the Department's guidelines 'Sustainable Residential Development in Urban Areas'. Together with other Department documents listed at the rear, the guidelines provide the policy foundation that underpins this Guide. The two documents are intended to be read together and one complements the other.

This Guide provides best practice advice on the practical implementation of the policies contained in the guidelines. Using both real and illustrative examples, it focuses on creating well-designed sustainable neighbourhoods that will stand the test of time. The Guide will focus on the issues presented in housing schemes in the 30-50 units per hectare density range but will also address some of the specific issues generated by higher and lower density schemes in urban areas.

The examples shown are by no means the only solutions possible or an exhaustive list - there are a number of ways of dealing with any issue, depending on circumstances. Further examples and guidance can be found in other publications, such as the UK Urban Design Compendium for example.

As well as showcasing best practice, this Guide addresses the practical aspects of creating successful neighbourhoods. As many schemes fail because of structural or strategic problems as on matters of layout or detailed design. A successful scheme requires the right decisions to be taken at the right time.

## Background

By publishing this Guide, the Department is signalling a clear commitment to improving the standard of housing design across the country. As this Guide will show, there is a large number of excellent schemes that have recently been built in Ireland. Such schemes show that in a climate of good planning practice, a talented designer and forward thinking developer can create homes and neighbourhoods that delight and inspire.

The Department now wants to build on these success stories and ensure that the communities created in the future are as well designed and sustainable as Ireland's most successful neighbourhoods.

The Planning and Development Act (2000) placed sustainable development at the heart of the statutory planning system for the first time. This means we must now all work hard to ensure that the communities we create are truly sustainable. The Planning and Development Act 2000 has been closely followed by a number of policy statements and strategies that all point to the need to make the neighbourhoods we create more sustainable.

Key amongst these are the Department's Guidelines that this Guide accompanies. The guidelines establish the core policy that is expanded upon in this Guide but are also broader in scope and address strategic issues that are not appropriate to this Guide. As will be shown in more detail below, the format of this document is designed to allow easy cross-reference between the Guidelines and this Guide.



## NESC report Housing in Ireland: Policy and Performance

This 2004 report sought to address the provision of social housing and the quality of neighbourhoods being constructed in Ireland's villages, towns and cities. The report identified the characteristics of a sustainable neighbourhood:

- The centre: each neighbourhood has a clear centre focused on common activities such as commerce, culture and public governance;
- The five-minute walk: residences are rarely more than five minutes walk from the ordinary means of daily life;
- The street network: the street pattern takes the form of a continuous web or grid;
- High amenity green spaces;
- Mixed use, including residential, commercial and other activities; and
- Narrow versatile streets.

## DEHLG: Sustainable Residential Development in Urban Areas

The Department's Guidelines establish a series of high-level aims for successful and sustainable residential development in urban areas:

- Deliver a quality of life which residents and visitors are entitled to expect, in terms of amenity, safety and convenience
- Provide a good range of community and support facilities, where and when they are needed
- Present an attractive, well-maintained appearance, with a distinct sense of place
- Are easy to access and to find one's way around
- Facilitate walking, cycling and public transport, and minimise the need to use cars
- Promote the efficient use of land and of energy, and minimise greenhouse gas emissions
- Promote social integration, and provide accommodation for a diverse range of household types and age groups, and
- Enhance and protect the built and natural heritage.

Housing Location in Urban Areas	Evaluation Considerations
The Asset Test	Are there existing community resources, such as schools etc, with spare capacity?
The Carrying Capacity Test	Is the environmental setting capable of absorbing development in terms of drainage etc?
The Transport Test	Is there potential for reinforcing usage of public transport, walking and cycling?
The Economic Development Test	Is there potential to ensure integration between the location of housing and employment?
The Character Test	Will the proposal reinforce a sense of place and character?
The Community Test	Will the proposal reinforce the integrity and vitality of the local community and services that can be provided?
The Integration Test	Will the proposal aid an integrated approach to catering for the housing needs of all sections of society?

## How to use this guide

This Guide seeks to introduce the core principles of urban design and sustainability insofar as they relate to residential development. These principles have in turn been informed by the qualities of successful places – places that people time and again choose to make their homes.

## Introduction to the 12 Criteria

This Guide is based around 12 Criteria that have been drawn up to encapsulate the range of design considerations for residential development. They are, in essence, a distillation of current policy and guidance and tried and tested principles of good urban design.

The figure to the right shows how the 12 Criteria have been sequenced in a logical order – much like the hours on the face of a clock. The sequence of the criteria reflects the prioritisation and processes adopted by good designers – not moving onto matters of detail until the important structural decisions have been taken. Even though it may often be tempting to start thinking about the architectural details before fundamental criteria of density, layout and connections, it is more important to get these strategic elements right.

The 12 Criteria are sub-divided into three groups: Neighbourhood/Site/Home, reflecting the sequence of spatial scales and order of priorities that is followed in a good design process.

The Criteria have also been designed to permit their application across a wide variety of types of proposals and locations. So, whilst they include criteria relating to issues across the three scales – they are by no means applicable only to developments that include a neighbourhood, site and home element.

The 12 Criteria aim to be memorable and easy to understand by all participants in the planning and development process – no matter what level of design training or understanding they have.

## Structure of the document

The core aim of the Guide is to provide developers, designers and planners with the information and support they need to improve the design quality and sustainability of the development schemes with which they are involved.

The Guide therefore seeks to fulfil a number of different roles. It will need to be useful when developers are selecting a site and briefing their design team; in helping to frame design statements and planning applications; and in helping planning authorities to assess the quality of submitted planning applications.

The central part of this Guide is structured around the 12 Criteria discussed above. The 12 Criteria are divided into three sections – Neighbourhood, Housing Site and Home and each of these sections is preceded with a short introductory chapter that sets out the key considerations at each spatial scale.

Each of the Criteria are illustrated with examples of best practice from Ireland and further afield. These practical examples will demonstrate how good designers have responded to the particular challenges of each Criteria in a variety of relevant contexts.

Amongst the 12 Criteria, certain issues have been identified (in ‘Potential Conflict’ boxes) where it may necessary to find a balance between potentially conflicting design objectives. This does not mean that they require an either/or solution or that poor quality compromises are necessary. It does mean that the issues will have to be considered carefully when balancing the options for a successful design solution.

After the 12 Criteria, the In Practice section shows how the Criteria can be applied through a model design and planning process.

The appendices at the end of the guide include a detailed glossary, further reading and links to informative websites.



→ These icons and box styles are used throughout this best practice guide to highlight policy references, areas of potential conflict and positive indicators of good design and planning.



**RELATED DEHLG POLICY**

Related DEHLG Policy is highlighted throughout this best practice guide by this icon. The numbers reference the relevant section of the policy.

Policy references are taken from *Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas*.



**BALANCING POTENTIAL CONFLICT**

Certain issues have been identified where it may be necessary to find a balance between potentially conflicting design objectives.



**POSITIVE INDICATORS**

When a particular criteria has been appropriately considered and applied it will manifest itself positively within the final scheme.

# The 12 criteria with indicators

## NEIGHBOURHOOD

### 01 CONTEXT How does the development respond to its surroundings?

- The development seems to have evolved naturally as part of its surroundings
- Appropriate increases in density respect the form of buildings and landscape around the site's edges and the amenity enjoyed by neighbouring users
- Form, architecture and landscaping have been informed by the development's place and time
- The development positively contributes to the character and identity of the neighbourhood
- Appropriate responses are made to the nature of specific boundary conditions

### 02 CONNECTIONS How well connected is the new neighbourhood?

- There are attractive routes in and out for pedestrians and cyclists
- The development is located in or close to a mixed-use centre
- The development's layout makes it easy for a bus to serve the scheme
- The layout links to existing movement routes and the places people will want to get to
- Appropriate density, dependent on location, helps support efficient public transport

## SITE

### 05 EFFICIENCY How does the development make appropriate use of resources, including land?

- The proposal looks at the potential of higher density, taking into account appropriate accessibility by public transport and the objectives of good design
- Landscaped areas are designed to provide amenity and biodiversity, protect buildings and spaces from the elements and incorporate sustainable urban drainage systems
- Buildings, gardens and public spaces are laid out to exploit the best solar orientation
- The scheme brings a redundant building or derelict site back into productive use
- Appropriate recycling facilities are provided

### 06 DISTINCTIVENESS How do the proposals create a sense of place?

- The place has recognisable features so that people can describe where they live and form an emotional attachment to the place
- The scheme is a positive addition to the identity of the locality
- The layout makes the most of the opportunities presented by existing buildings, landform and ecological features to create a memorable layout
- The proposal successfully exploits views into and out of the site
- There is a discernable focal point to the scheme, or the proposals reinforce the role of an existing centre

## HOME

### 09 ADAPTABILITY How will the buildings cope with change?

- Designs exploit good practice lessons, such as the knowledge that certain house types are proven to be ideal for adaptation
- The homes are energy-efficient and equipped for challenges anticipated from a changing climate
- Homes can be extended without ruining the character of the types, layout and outdoor space
- The structure of the home and its loose fit design allows for adaptation and subdivision, such as the creation of an annexe or small office
- Space in the roof or garage can be easily converted into living accommodation

### 10 PRIVACY AND AMENITY How does the scheme provide a decent standard of amenity?

- Each home has access to an area of useable private outdoor space
- The design maximises the number of homes enjoying dual aspect
- Homes are designed to prevent sound transmission by appropriate acoustic insulation or layout
- Windows are sited to avoid views into the home from other houses or the street and adequate privacy is affordable to ground floor units.
- The homes are designed to provide adequate storage including space within the home for the sorting and storage of recyclables.

## 03 INCLUSIVITY

### How easily can people use and access the development?

- New homes meet the aspirations of a range of people and households
- Design and layout enable easy access by all
- There is a range of public, communal and/or private amenity spaces and facilities for children of different ages, parents and the elderly
- Areas defined as public open space that have either been taken in charge or privately managed will be clearly defined, accessible and open to all.
- New buildings present a positive aspect to passers by, avoiding unnecessary physical and visual barriers

## 04 VARIETY

### How does the development promote a good mix of activities?

- Activities generated by the development contribute to the quality of life in its locality
- Uses that attract the most people are in the most accessible places
- Neighbouring uses and activities are compatible with each other
- Housing types and tenure add to the choice available in the area
- Opportunities have been taken to provide shops, facilities and services that complement those already available in the neighbourhood

## 07 LAYOUT

### How does the proposal create people friendly streets and spaces?

- Layout aligns routes with desire lines to create a permeable interconnected series of routes that are easy and logical to navigate around.
- The layout focuses activity on the streets by creating active frontages with front doors directly serving the street
- The streets are designed as places instead of roads for cars, helping to create a hierarchy of space with less busy routes having surfaces shared by pedestrians, cyclists and drivers
- Traffic speeds are controlled by design and layout rather than by speed humps
- Block layout places some public spaces in front of building lines as squares or greens, and some semi private space to the back as communal courts

## 08 PUBLIC REALM

### How safe, secure and enjoyable are the public areas?

- All public open space is overlooked by surrounding homes so that this amenity is owned by the residents and safe to use
- The public realm is considered as a usable integrated element in the design of the development
- Children's play areas are sited where they will be overlooked, safe and contribute to the amenities of the neighborhood
- There is a clear definition between public, semi private, and private space
- Roads and parking areas are considered as an integral landscaped element in the design of the public realm.

## 11 PARKING

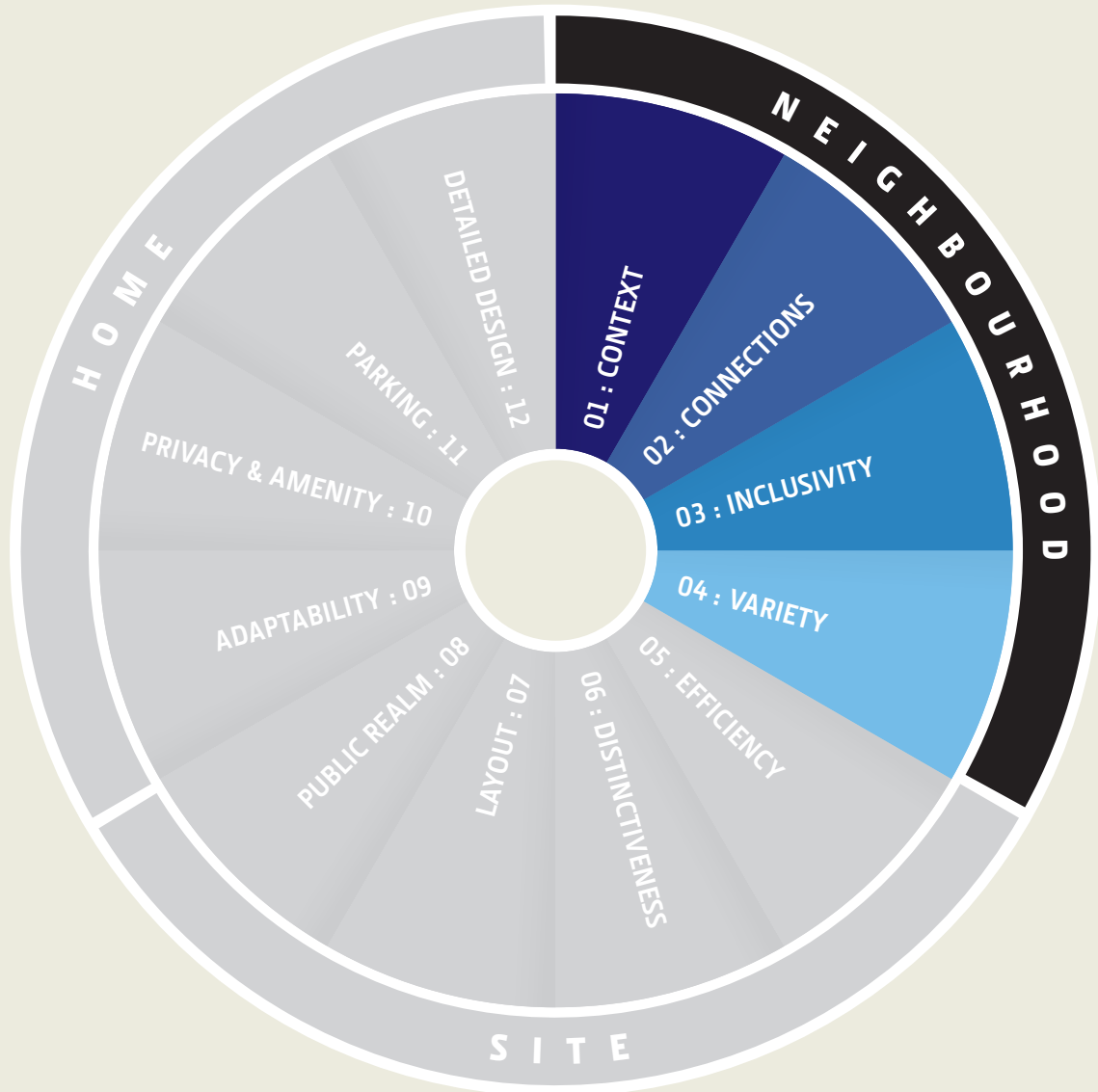
### How will the parking be secure and attractive?

- Appropriate car parking is on-street or within easy reach of the home's front door.
- Parked cars are overlooked by houses, pedestrians and traffic, or stored securely, with a choice of parking appropriate to the situation.
- Parking is provided communally to maximise efficiency and accommodate visitors without the need to provide additional dedicated spaces
- Materials used for parking areas are of similar quality to the rest of the development
- Adequate secure facilities are provided for bicycle storage

## 12 DETAILED DESIGN

### How well thought through is the building and landscape design?

- The materials and external design make a positive contribution to the locality
- The landscape design facilitates the use of the public spaces from the outset
- Design of the buildings and public space will facilitate easy and regular maintenance
- Open car parking areas are considered as an integral element within the public realm design and are treated accordingly
- Care has been taken over the siting of flues, vents and bin stores



## 1 CONTEXT

How does the development respond to its surroundings?

## 2 CONNECTIONS

How well connected is the new neighbourhood?

## 3 INCLUSIVITY

How easily can people use and access the development?

## 4 VARIETY

How does the development promote a good mix of activities?

# Neighbourhood

When asked why they choose to live in a particular location, most people will usually say ‘the area’. People want to live in places where there is a good range of amenities and facilities located within easy reach – such as high quality landscapes and open space, retail and leisure opportunities, good schools and childcare facilities, and good transport links to places that they need to get to. All of these things – and more – constitute a good neighbourhood, the fundamental building block of a sustainable community.

A good neighbourhood is one where people can easily satisfy daily needs whilst feeling safe as they do so. The most successful neighbourhoods are well connected – to employment centres or places people spend their leisure time. They are places where people can live at any stage of their lives – regardless of physical ability or social status. Successful neighbourhoods also tend to have a wide variety of things to do within them and have a strong connection to the area in which they sit – be it historical, cultural or visual.

The following criteria are designed to promote thinking about how a housing development will lead to a successful neighbourhood. In larger developments, the proposal itself may contain many individual neighbourhoods and for smaller scale development, consideration will need to be given to how the proposal contributes towards keeping – or even making – an existing neighbourhood successful.

# 01

## Context

How does the development respond to its surroundings?



**3.4** context

Any new development should improve on the existing situation, and at the same time be sensitive to its context.



**3.6** role of LAPs in defining local character

**3.8** use of design briefs

**3.10** use of design statements

How well a site’s context is understood by the designers of a scheme will perhaps be the most important determinant of how successful

the scheme will ultimately be. Those proposing a scheme will need to communicate their understanding of a site’s context clearly and simply. Demonstrating that the design has undergone a thorough site analysis, context review and appropriate response, will aid the dialogue in the design process between developers, their agents, local authorities and the community.



### RELATED DEHLG POLICY

- 3.4** context

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- 3.6** role of LAPs in defining local character

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- 3.8** use of design briefs

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- 3.10** use of design statements

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- 3.11** site appraisals design of tall apartment blocks

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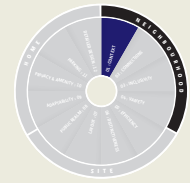
- 5.3** design of tall apartment blocks



### POSITIVE INDICATORS

- The development seems to have evolved naturally as part of its surroundings
- Appropriate increases in density respect the form of buildings and landscape around the site’s edges and the amenity enjoyed by neighbouring users
- Form, architecture and landscaping have been informed by the development’s place and time
- The development positively contributes to the character and identity of the neighbourhood
- Appropriate responses are made to the nature of specific boundary conditions





**✓ The development seems to have evolved naturally as part of its surroundings**

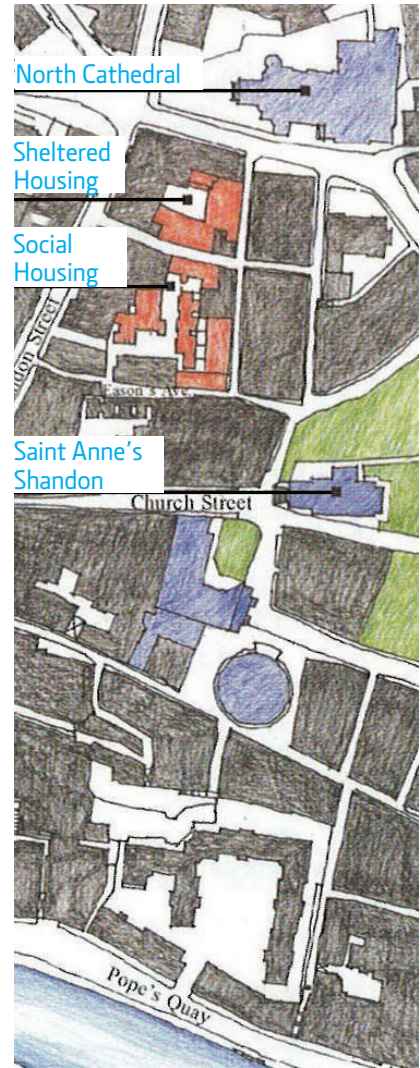
The starting point for the design of any (residential) development is an assessment of its surroundings. This covers existing landscape and buildings, as well as the social and economic needs of the existing communities. Widening out the assessment of the context in this way will help to ensure that the development is of its place and time - and informed by more than just its physical surroundings.

**3.11** site appraisals

One way to deal with the surprise of the new is to show graceful links between the past and the present, whether

landscape or built environment. Some developments exploit topography to do this, others integrate the layout of the new with the existing.

These design drawings for a residential scheme in Shandon in Cork proposed new contemporary buildings. By working within the historic plot widths, street patterns and the scale of roof forms, the overall form of the scheme appears as a natural part of the town's historic development.



NEIGHBOURHOOD



# 01

## Context

### How does the development respond to its surroundings?

**✓ Appropriate increases in density respect the form of buildings and landscape around the site's edges and the amenity enjoyed by neighbouring users**

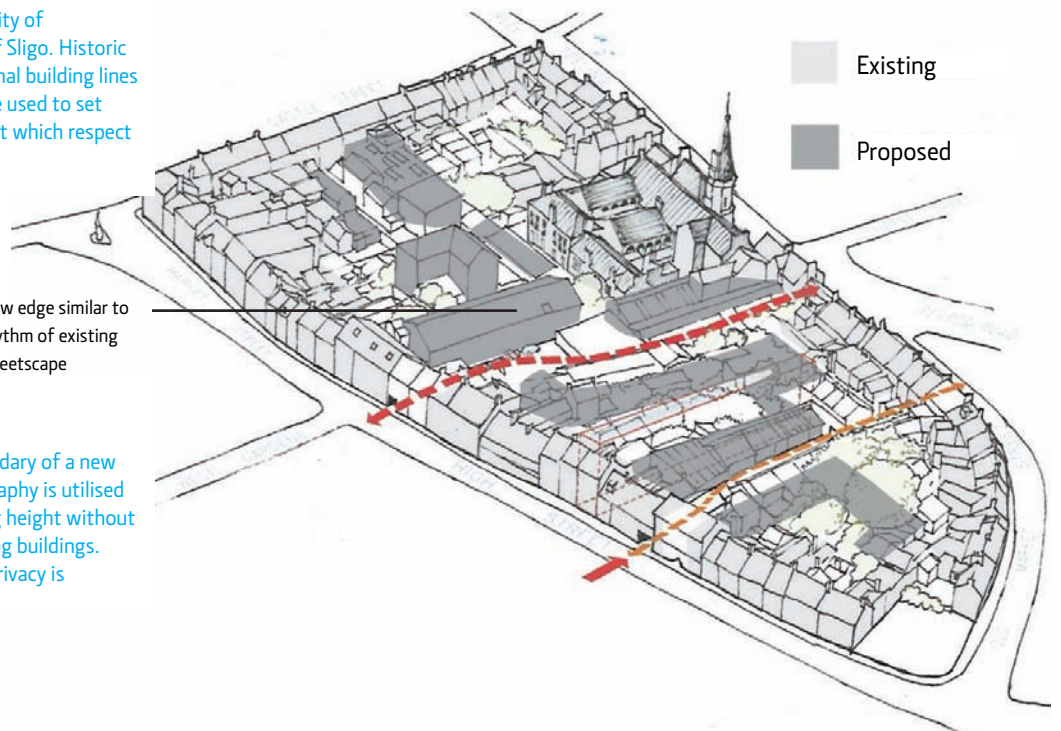
In many cases new development will be more intensive than that which it adjoins. The benefits associated with increasing densities are discussed under Criterion 5.

Any departure in massing should be informed by a consideration of how the amenity of others will be affected, especially views, privacy and rights of light. Where there are existing buildings, newer ones should connect gracefully and if the massing is more intense, show respect for the existing by graduating the change in steps.

At the same time the overall form, scale and massing of the scheme should respond to the existing character of the surrounding buildings and or landscape. Rather than replicating existing scale, opportunities presented by landform or adjacent urban development forms should be exploited to create more intensive development patterns.

**5.3 design of tall apartment blocks**

→ A masterplan for increased density of development in a historic part of Sligo. Historic plot widths and shapes, traditional building lines and appropriate height limits are used to set parameters for new development which respect the surrounding area.



New edge similar to rhythm of existing streetscape

↘ This site section across the boundary of a new development shows how topography is utilised to achieve an increase in building height without significantly impacting on existing buildings. Overshadowing is avoided and privacy is protected.

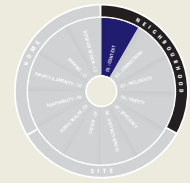


taller buildings set back from the boundary

over-shadowing avoided

proposed development

existing housing



**✓ Form, architecture and landscaping have been informed by the development's place and time**

Proposals should learn from the lessons of the past in terms of form, layout, and even orientation. But they should be interpreted in a way that clearly defines the development as being built in the early 21st Century, and makes use of the latest building technologies. Many historical forms of development are inherently sustainable, as they have evolved, organically, to the need to shelter from the elements.

Existing patterns of development in the surrounding area should be assessed for their potential positive influence on the site.

Other innovative solutions, once considerate of context, can offer variety to the existing built form.

The use of local materials should be encouraged where there is a proud tradition, making a link between Ireland's landscape and its rich diversity of built form

→ While the architectural details of this residential development (right) are contemporary, it acknowledges local tradition through the arrangement of buildings forms. The variety of building heights together with the use of white rendered walls to form enclosures to parking and gardens continues the tradition of clustered farmyard buildings.



↓ Historic patterns of development, such as the cluster of farm buildings below, can be re-interpreted to meet today's needs as an alternative to standard suburban-style layouts.


→ Cluain Padraig, Westport, Co. Mayo. A contemporary design language is handled well to provide clear, liveable spaces.



# 01

## Context

How does the development respond to its surroundings?

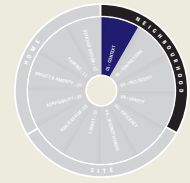
 **The development positively contributes to the character and identity of the neighbourhood**

A new development has to make the most positive contribution possible to its neighbourhood or landscape. The aim of those planning for, designing or building schemes should be to ensure that the development in some way improves on or enhances the existing situation.

A scheme should also be able to identify ways in which the development can add quality to the locality, whether through protection of site features, new amenity, economic confidence or civic pride.

→ This scheme provides a new amenity space which enhances the civic qualities of the town Killorglin, Co. Kerry, in which it is situated by setting buildings back to provide a new, contemporary civic space.





**✓ Appropriate responses are made to the nature of specific boundary conditions**

The analysis of the site’s “edges” will define one specific or a series of character areas. A boundary might be abutting, for example, a road edge, back of pavement, public amenity, landscape feature, private garden or ‘soft’ access point. Design solutions will respond to these conditions by creating, as examples, a secured edge, an integrated public space, an active frontage, an own-door access or a connection, as may be appropriate.

Considered solutions are vital to avoid clashes between the scheme and the surrounding landscape, properties or users.

The boundary treatments should, taken together with the development, enhance the surroundings and add to the interest of the village or town grain.



← The boundary treatments in the scheme to the left respond to a range of surrounding conditions.

New amenity is provided adjacent to an existing green, creating an improved space running across the property boundary.

Gable ends have been used where the site abuts the sides of existing houses, working with existing development to build a streetscape.

Where existing houses back onto the site rear gardens are placed, giving privacy and security.

→ The boundaries of many residential sites will already be defined by existing hedgerows. These are not only important habitats for wildlife but are also a part of the historic fabric and identity of the site. The example to the right utilises the existing hedgerow as a boundary, retaining its character, amenity and ecological value.

New housing



Protected existing hedgerow



Existing road



Existing housing



## 02

## Connections

## How well connected is the new neighbourhood?

Successful neighbourhoods tend to be well connected to places, facilities and amenities that help to support a good quality of life. Such places include high quality open space and landscapes, leisure opportunities, shops – both for convenience and comparison goods, schools, places of worship, health centres and places of employment.

When choosing which area to live in, most people will choose a neighbourhood that permits easy or close access to the places that they need or like to visit on a regular basis. So the quality and sustainability of a neighbourhood can be measured by both how well it is connected to important amenities, and how pleasant, convenient and safe those links are to use.



## RELATED DEHLG POLICY

- |                  |  |
|------------------|--|
| <b>3.13-3.18</b> | design of residential streets                  |
| <b>4.9B</b>      | sustainable travel patterns                    |
| <b>5.8</b>       | higher densities in public transport corridors |



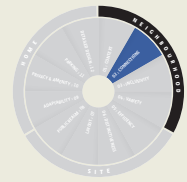
## POSITIVE INDICATORS

- There are attractive routes in and out for pedestrians and cyclists
- The development is located in or close to a mixed-use centre
- The development's layout makes it easy for a bus to serve the scheme
- The layout links to existing movement routes and the places people will want to get to
- Appropriate density, dependent on location, helps support efficient public transport



Existing routes from the centre of Kilkenny are used to form new connections for this proposal in the western environs. Pedestrian and cycle routes are also provided, giving a range of transport alternatives. New development builds around these links.





**✓ There are attractive routes in and out for pedestrians and cyclists**

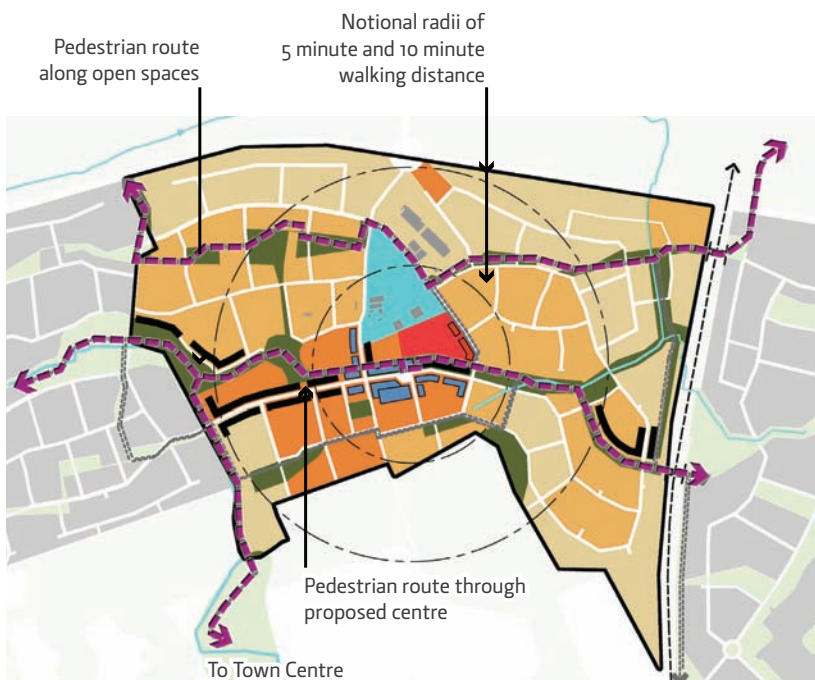
Care needs to be taken with the quality of the links, especially those used by non-motorised forms of transport.

**3.13 – 3.18 design of residential streets**

Walking and cycling are inherently sustainable modes of transport and the design, layout and implementation of the scheme should encourage both. Such an approach will not only reduce emissions that contribute towards climate changes but the encouragement of an active lifestyle will bring wider health benefits to residents.

**4.9B sustainable travel patterns**

Proposals should therefore prioritise the pedestrian and cyclist in the layout and design of the public realm. Criteria 3, 7 and 8 below address how this is done in more detail.



← This plan for a residential district in Drogheda incorporates alternative pedestrian and cycle routes through the scheme, creating options for users. One route runs through landscaped open space, while another runs on-street through a village centre. The arrangement of facilities in the neighbourhood is considered in relation to the length of walking time (5 and 10 minutes).

**! BALANCING POTENTIAL CONFLICT  
PEDESTRIAN CONNECTIONS AND SECURITY**

It is sometimes perceived that the urban design objective of making well-connected, highly permeable places conflicts with the objectives of security and safety.

One view is that pedestrian connections replicate the grain of traditional, tried-and-tested cities and towns and that poorly connected developments create 'gated' enclaves and contribute to social exclusion. There is a contrary view that pedestrian connections encourage antisocial behaviour, providing opportunities for loitering, places for muggers to hide, escape routes for criminals or access for burglars.

Alleys which are not overlooked, or otherwise passively supervised, do provide opportunities for criminal or anti-social activities. However, pedestrian connections should not be avoided purely for reasons of crime prevention. If they are well designed and managed they should not in themselves encourage crime, but safety and crime prevention must be properly considered when designing these places:

- If connections are under-used they may become unsafe. Will there be sufficient activity to justify a connection?
- They should be overlooked by active accommodation to give passive supervision. They should not be flanked by inactive frontages, e.g. back garden walls, which might encourage graffiti, vandalism or other crime. Passing vehicle traffic will also provide some passive supervision.
- There should be good visibility from other areas to minimise opportunities for hiding. For example, wider spaces, such as pocket parks, may be preferable to alley-ways.
- Connections should be sized so that emergency service vehicles (e.g. Garda vehicles) can pass through them as necessary.
- Providing mixed uses will also promote safety by encouraging street activity at different times of day.

## 02

## Connections

How well connected is the new neighbourhood?



**The Development is located in or close to a mixed use centre**

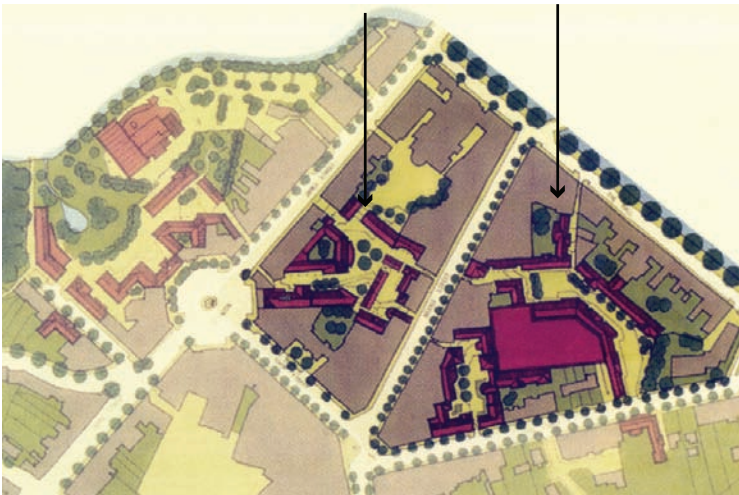
How far people are willing to travel depends to a large extent on how convenient and easy it is for them to do so. Access to facilities should be provided in an inclusive way by providing links that are capable of being used by everyone – including those with limited mobility.

People need access to different things at different stages of their lives and so the most successful neighbourhoods provide good access links to a good range of different facilities and amenities that enable people to stay in the neighbourhood for their whole lives.

Since cars are responsible for a large proportion of the national carbon outputs and consume valuable resources, the most sustainable location for new housing development is in or near to existing centres. By siting new homes in existing cities, towns or large villages, such developments can support a reduction in travel demand since everyday facilities – and in many cases places of work – are located within easy walking or cycling distance (e.g. a 5-10 minute or 400-800m walk) from the home.

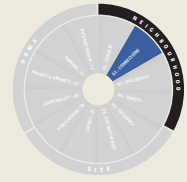
New development within urban blocks

Existing terraces forming streets



This proposal sites a residential scheme, together with other compatible uses, in backlands sites in the town of Westport, Co. Mayo. The new development benefits from existing routes and transport and the proximity to the facilities of the town allows for walking or cycling as an alternative to vehicle use.





## ✓ The Development's layout makes it easy for a bus to serve the scheme

On larger schemes, it may be appropriate for an existing bus route to be re-routed into the development. Doing this means that all homes on the development will be located within a reasonable walking distance of a bus stop, ensuring a good level of take up. It will also mean that the new development will be well integrated into the existing settlement and will be seen as a natural extension of the settlement.

Designers should identify the proposed route of the bus service, the location or proposed stops and indicate the extent of 5 minute walking time distances from each of the stops.

The proposed bus route will need to be designed to a standard commensurate with its intended use and adequate space around each of the bus stops will need to be provided to ensure that people congregating there will not be a nuisance to nearby residents.

In areas of planned growth which are not currently served by a regular bus service, designers should explore the potential for designing a scheme to facilitate the routing of a bus service through the development in the future.

→ In this scheme, a route for buses has been incorporated through the centre of the development, adjacent to the mixed-use centre and higher density apartment blocks. Bus stops have been located close to the centre and a railway station. The routes split in two in order to avoid a single wider route.



# 02

## Connections

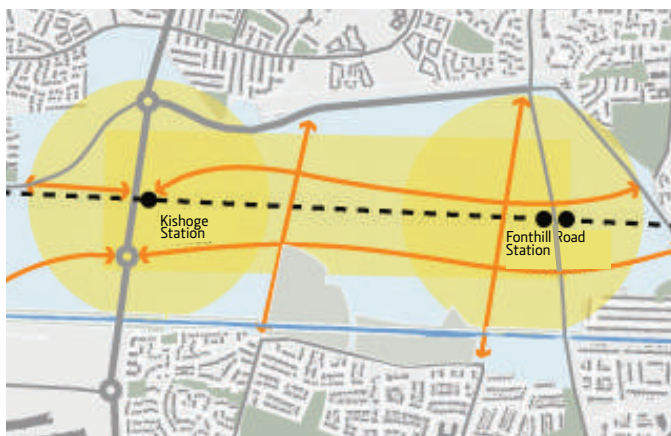
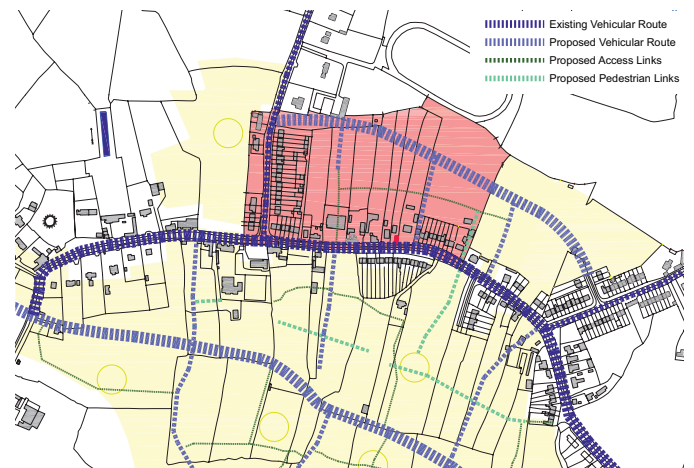
How well connected is the new neighbourhood?

**✓ The layout links to existing movement routes and the places people want to get to**

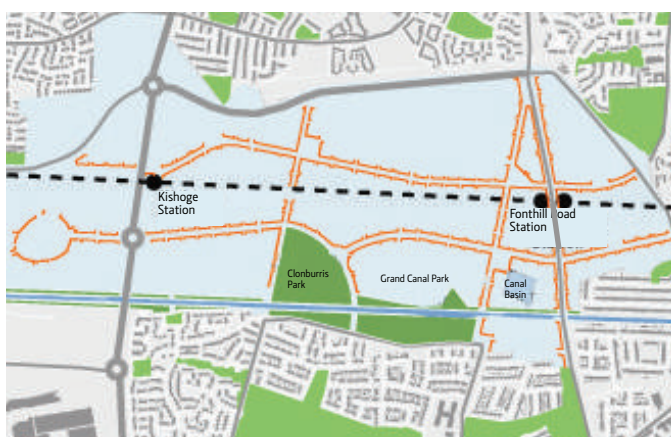
Planning authorities should consider what steps they can take to enable connections with existing developments and networks around the site, with the aim of better integrating new developments.

Building on the assessment of the desire lines carried out for Criteria 1, designers and developers should also identify key movement routes through the site and how through routes can be incorporated into a scheme in a way that does not result in unnecessary disturbance or nuisance to the residents of both the new scheme and adjoining developments – both existing and proposed. Both should work to ensure that these connections are made in a way that will not result in calls for them to be closed in the future.

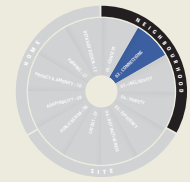
When designing a new neighbourhood – or considering an insertion into an existing area, the core objective should be the provision of high quality, direct, safe and secure routes that connect with existing movement networks and follow key desire lines



↑ This residential development, planned as an extension of an existing village, proposes connections which integrate the scheme into existing roads with secondary streets connecting to the village main street. A pedestrian link provides an alternative route through the scheme and connects to the village centre, facilitating direct walking access to local amenities.



The proposed SDZ planning scheme and local area plan for Clonburris, Co. Dublin. Existing well-used routes have been identified together with new connections which residents will require (above). These routes are incorporated into the layout of the streets.



**✓ Appropriate density, dependent on location, helps support efficient public transport**

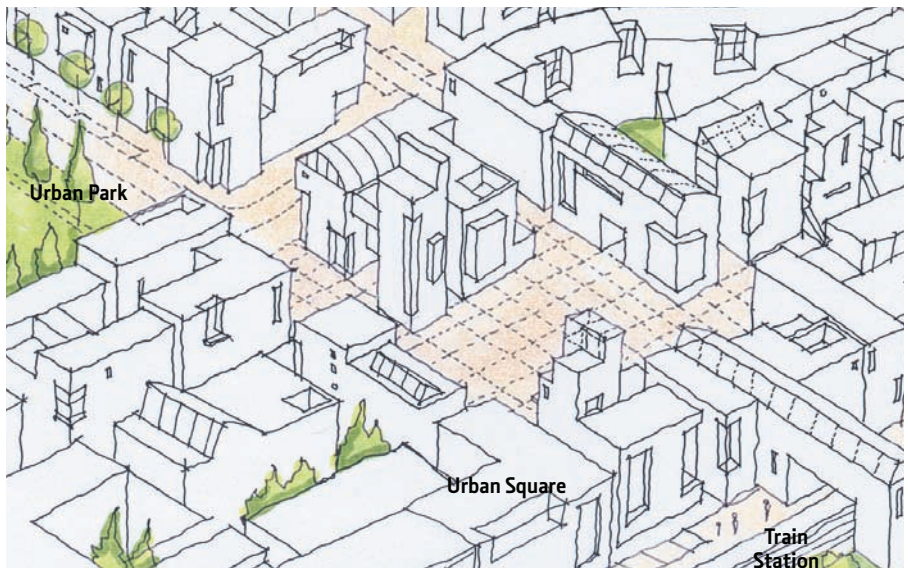
Prioritising use of public transport over private cars is a primary departmental objective. The sequential approach to the development of zoned lands set out in the Draft Guidelines gives preference to lands closest to the core and public transport routes. In order for a public transport system to operate effectively, it will need to serve routes with an adequate carrying capacity of passengers. Low density districts often find it difficult to support a good public transport system.

Interchanges between modes are important in ensuring good take up of public transport. These facilities should be of a high design quality and robustly constructed to stand the test of time and withstand vandalism. Cycle storage facilities at interchanges are also a good way of encouraging high take up of sustainable modes of transport.

 **5.8** higher densities in public transport corridors

One of the main arguments in favour of higher density residential development is their ability to support more sustainable transport modes. Additionally, higher density developments can help to create more compact settlement patterns that help to support walking and cycling.

NEIGHBOURHOOD



← This scheme places higher density housing, together with a mix of other uses, adjacent to an existing train station. The space beside the station becomes a civic focus, incorporating a square and a park & ride facility.



Public transport routes provide opportunities for 'village centre' facilities.

## 03

## Inclusivity

### How easily can people use and access the development?

Inclusive design is defined as that which meets the needs of all users, regardless of age, gender, race or sensory and mobility abilities. In its broadest sense, it also means creating places that can be enjoyed by people from all cultural and socio-economic backgrounds.



**1.10** universal design

The debate has moved on from simply designing for people with disabilities and recognises that – in

some way - all of us will experience difficulty in negotiating the built environment. Rather than making provision for different groups in different ways – for example by providing steps for the able bodied and ramped access for wheelchair users - inclusive design promotes an approach which allows all people to use space in the same way – and on equal terms.



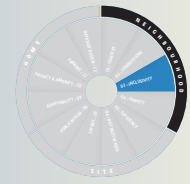
#### RELATED DEHLG POLICY

<b>1.10</b>	universal design
<b>3.14</b>	connectivity and permeability
<b>4.2 – 4.7</b>	community facilities
<b>4.14 – 4.20</b>	public open space
<b>4.21</b>	personal safety
<b>7.4 – 7.5</b>	privacy and security
<b>7.11</b>	access for all



#### POSITIVE INDICATORS

- New homes meet the aspirations of a range of people and households
- Design and layout enable easy access by all
- There is a range of public, communal and/or private amenity spaces and facilities for children of different ages, parents and the elderly
- Areas defined as public open space that have either been taken in charge or privately managed will be clearly defined, accessible and open to all.
- New buildings present a positive aspect to passers by avoiding unnecessary physical and visual barriers



**✓ New homes meet the aspirations of a range of people and households**

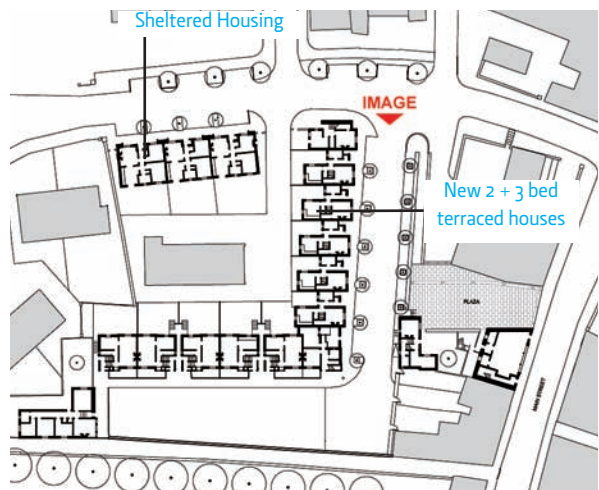
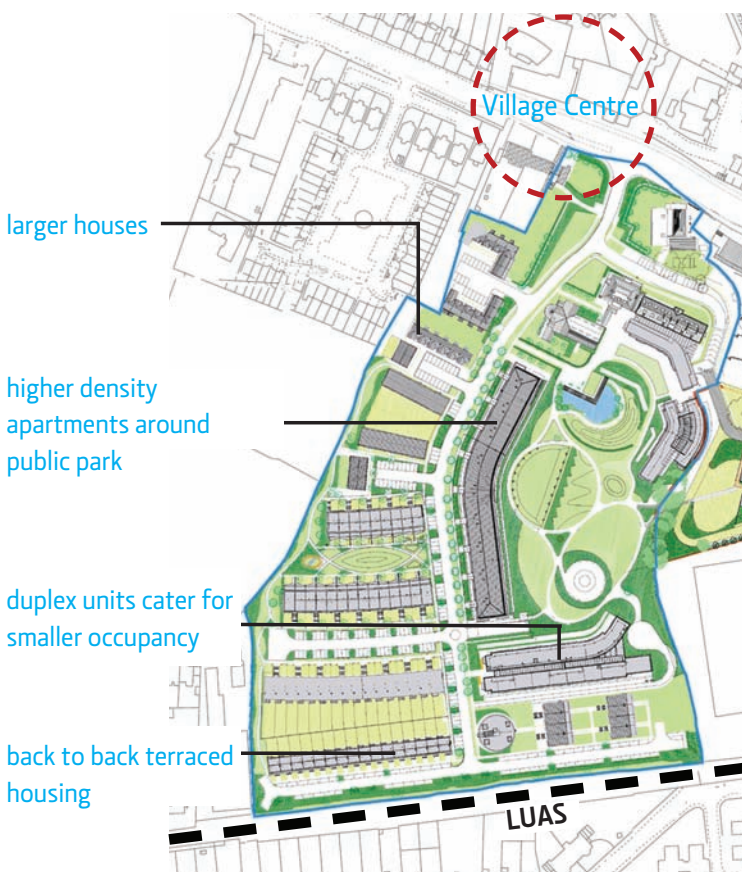
For a residential development to be considered inclusive, it should include provision for housing of different types, sizes and tenures. Providing this choice will enable people from different backgrounds to benefit from the opportunity afforded by the development, and will help to create a balanced, sustainable community.

On larger developments, the overall mix should be selected to create a mixed neighbourhood that can support a variety of people through all stages of their lives. On smaller infill developments, the mix of housing should ensure that, taken with the existing homes, the overall mix in the neighbourhood is conducive to maintaining a healthy balanced community.



NEIGHBOURHOOD

↑ This infill housing development in Ballyhaunis, Co. Mayo includes a number of sheltered housing dwellings, allowing these units to be integrated into the broader residential neighbourhood.  
↓



**4.2 – 4.7** community facilities

← In the residential scheme at Milltown Co. Dublin, a mix of housing sizes and forms is provided which covers a range of demographics and is appropriate for the suburban context. Houses with gardens could suit families with children or older residents. Apartments are more suited to smaller or single-person households or residents with access difficulties.

# 03

## Inclusivity How easily can people use and access the development?

### ✔ Design and layout enable easy access by all

The housing scheme should be a benefit to the whole community. As well as ensuring all public areas are designed for inclusive access, a proportion of the dwellings should be designed so that they can be adapted to suit peoples' changing access needs. The aspirations of Part M, i.e. providing wheelchair accessible toilet and washing facilities on the ground floor, means people will not be forced to move out of the area if they begin to experience access difficulties. Removing clutter in the public realm, avoiding barriers and unnecessary changes

 **7.11** access for all

in level will help aid accessible environments. <sup>1</sup>

(1) See *Building Regulations, Technical Guidance Document M. Further examples of best practice include the UK 'Lifetime Homes' guidance.*



↑ The design of this scheme in Gorey, Co. Wexford integrates accessible sheltered housing with an accessible public space.

Potential for future direct connection between bathroom and main bedroom

Location for future lift between living room and main bedroom

Potential to form bathroom on ground floor

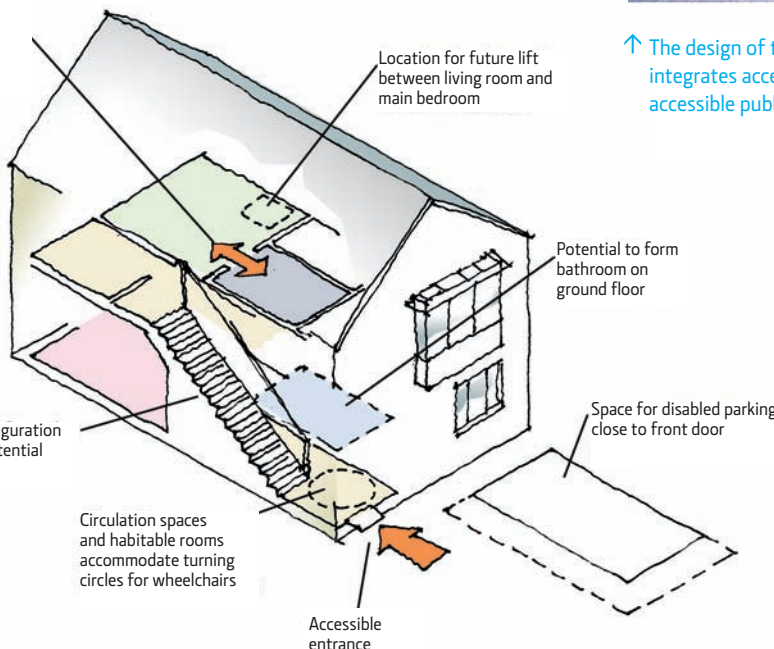
Space for disabled parking close to front door

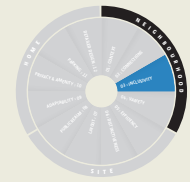
Stair configuration to suit potential stair lift

Circulation spaces and habitable rooms accommodate turning circles for wheelchairs

Accessible entrance

← Diagram showing some features of a dwelling designed to allow potential adaptation for disabled needs.





**✓ There is a range of public, communal and/ or private amenity spaces and facilities for children of different ages, parents and the elderly**

The amenities and facilities created by the development should be designed so that all members of society can use them. Children should be provided with safe areas to play in but facilities should also be provided for teens and older people to congregate without causing nuisance to other groups.

This objective can be achieved by providing such areas in well trafficked, central areas of the neighbourhood rather than trying to hide them.

One of the key aims for the development should be the bringing together of different groups on neutral territory where they can all intermingle safely and securely.

 **4.14 – 4.20** public open spaces



Diverse public spaces provided as part of the masterplan for Pelletstown, South County Dublin ranging from larger formal spaces with a civic character for walking and sitting; formal and informal games areas for adults and youths; smaller semi-private spaces with good passive supervision suitable for younger children's play.

1. The development facilitates safe public access along canal amenity.
2. A public park organised around landscape feature overlooked by higher density elements.
3. Dedicated sports facilities are provided.
4. Communal Courts are also included in the development.



A fully public space with seating area directly off a street in Hammarby Sjöstad, Stockholm. A semi-private space is visible behind, with fully private spaces beyond that.



# 03

## Inclusivity How easily can people use and access the development?

**✓ Areas defined as public open space that have either been taken in charge or privately managed will be clearly defined, accessible and open to all.**

The positive aspects of new development should be emphasised in the layout and design of the scheme and there should be no

**4.2 – 4.7** community facilities

barriers to the amenities associated with the development being used by all.

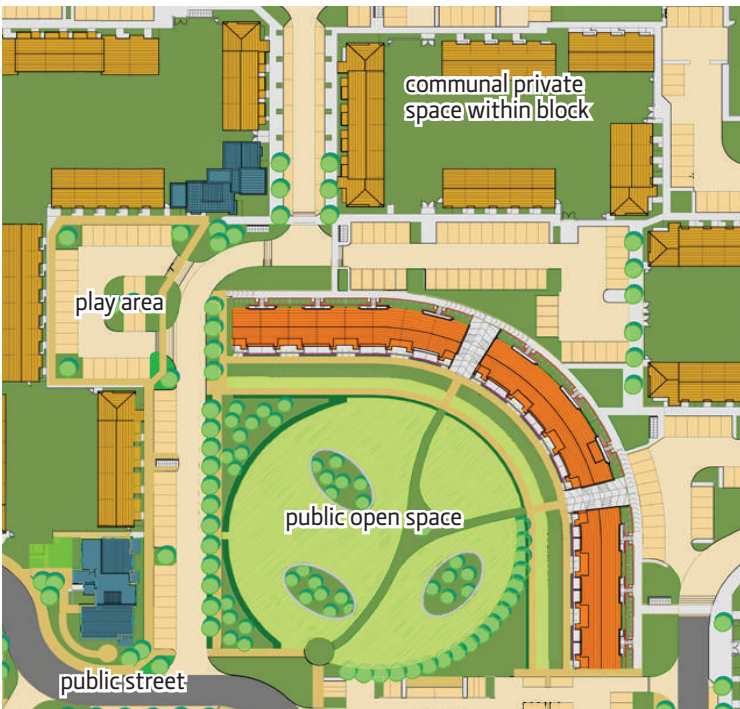
The layout and design of the development should therefore provide a clear distinction between public, communal and private areas. By doing this, those visiting or passing through the development are made to feel welcome in the public areas of the site, but prevented from entering communal or private areas. Perimeter blocks are a well tested and popular way of ensuring a

**7.4 – 7.5** privacy and security  
**4.21** personal safety

good distinction between public and private or communal open space.

Additionally, all opportunities must be taken to reinforce public access to the development through the design of the development. This builds on the previous two criteria and means that the development should sit well in its surrounding area – rather than being seen as being apart – and the development should be well connected and movement routes integrated.

**3.14** connectivity and permeability

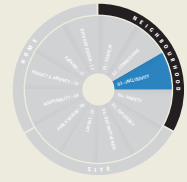


↑ The plan above shows amenity spaces arranged in a hierarchy of public to private spaces. The main green in the centre is fully public, set off a public road; a communal courtyard provides shared private space to apartments while fully private gardens are provided to houses.



In this instance, siting amenity space at the edge of the site and open to existing streets creates a new public space, with a sense that it is accessible to all.





**✓ New buildings present a positive aspect to passers by, avoiding unnecessary physical and visual barriers**

The scheme design should be inviting and encourage law abiding people into the neighbourhood where they can contribute to the vitality and security of the development.

Developments should not try to deal with perceived social problems by turning their backs on adjoining neighbourhoods. There have been many recent instances of new housing developments being gated to prevent public access to within. These are widely seen as being detrimental to the creation of long-term sustainable communities. As well as the more recent phenomenon of physical barriers, new housing estates have for some time now attempted to create their own prestigious context by employing a number of devices which put up psychological barriers between new and old.



↑ Attractive routes through schemes, as above, promote public access and amenity.



← Front doors are presented to a public road in this apartment scheme in Milltown, Dublin. Front doors generate activity on the street while a degree of privacy is given to ground floor apartments through landscaping, without the need for visual barriers.



↑ The edge of this scheme has been set out in a way which presents an open frontage. Houses face towards the road, including using special corner units which avoid blank gables. Open spaces allow long view-lines into the site, while the well over-looked spaces help give a sense of neighbourhood identity.

NEIGHBOURHOOD

## 04

**Variety**

How does the development promote a good mix of activities?

The most successful - and sustainable - communities are the ones that contain a good variety of things to do, see and enjoy. For larger scale developments, this means providing a good mix of uses, housing, facilities and amenities that help to engender a successful community. For smaller infill developments, it means ensuring that the proposed uses and housing types complement those that already exist so that a balance is struck.

**RELATED DEHLG POLICY**

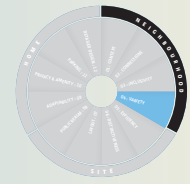
- |                  |                      |
|------------------|----------------------|
| <b>3.14</b>      | sense of people      |
| <b>4.2 – 4.7</b> | community facilities |

**POSITIVE INDICATORS**

- Activities generated by the development contribute to the quality of life in its locality
- Uses that attract the most people are in the most accessible places
- Neighbouring uses and activities are compatible with each other
- Housing types and tenure add to the choice available in the area
- Opportunities have been taken to provide shops, facilities and services that complement those already available in the neighbourhood



← Design proposal for a mixed-use centre at Pelletstown, Dublin.



**✓ Activities generated by the development contribute to the quality of life in its locality**

When creating mixed use development, designers, planners and developers should focus on how their decisions will affect the user experience of the neighbourhood. Additionally, care should be taken when siting non-residential uses within the development. Whilst some facilities can draw people into the site and make for a vibrant neighbourhood, other uses located in the same location may prove to be a nuisance to residents.

As part of creating a vibrant neighbourhood, developers should incorporate adaptable building designs which permit people to work or start a business from their home.

**⚖️ 3.14 sense of place**

NEIGHBOURHOOD



← A residential scheme in Groningen, Netherlands, which incorporates retail uses complementing the activity of the surrounding area.



← In order to build a sense of community the BedZed carbon neutral scheme in London includes live/work units, allowing residents to develop businesses where they live. The scheme also facilitates varied uses and includes a medical centre and cafe. ↑

## 04

## Variety

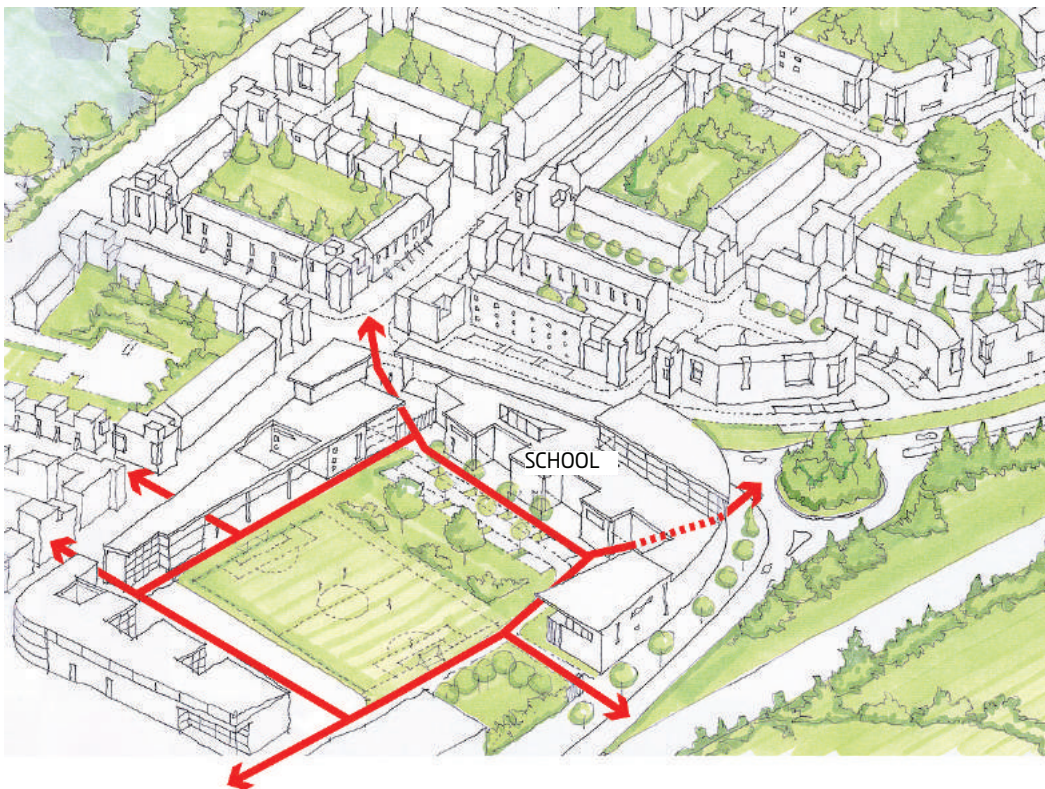
How does the development promote a good mix of activities?



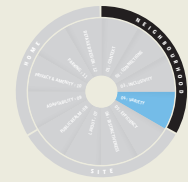
**Uses that attract the most people are in the most accessible places**

Uses such as health centres, nurseries and schools should be sited in locations that are accessible from all parts of the development – and surrounding areas - by safe, secure and pleasant walking routes.

A development that is well connected to a good range of facilities within walking distance may be able to demonstrate that there is no need for any non-residential uses within the development site. Conversely, a well-connected development may be able to attract people to facilities and amenities on the site if it is located near areas that are currently poorly served by such supporting uses.



This design sketch for a suburban development shows an early description of how connectivity to the school uses and park are to be made.

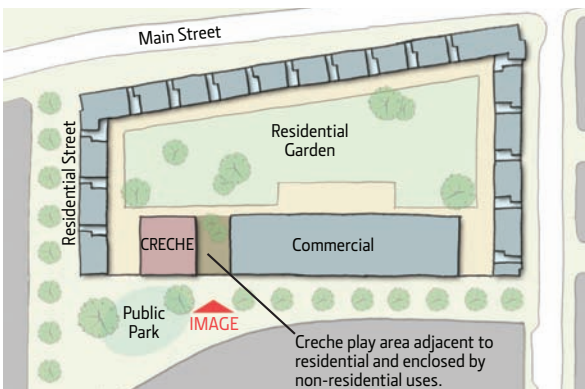


**✓ Neighbouring uses and activities are compatible with each other**

Whilst some facilities can draw people into the site and make for a vibrant neighbourhood, certain uses located in the same location may prove to be a nuisance to residents.

Some of the adverse affects of incompatible neighbouring uses can be mitigated through design – for example by not placing flues serving commercial kitchens near to opening windows or providing high levels of sound insulation in nearby residential units.

Additionally, thought should be given to how commercial uses are placed in relation to each other to help create a vibrant neighbourhood centre.



↑ In this example from Charlottehaven in Copenhagen, apartment buildings form a courtyard which accommodates a crèche, creating a protected outdoor space for this private use.



**BALANCING POTENTIAL CONFLICT REQUIREMENTS OF ADJACENT USES**

There is often a perceived conflict between the desire to create mixed-use areas and the avoidance of nuisance between different uses. For example, consultations frequently bring up the issue of the different requirements of car parking for retail vs. residential.

The potential for conflict between different uses need not by itself be a basis for avoiding integrated, mixed-use developments. Solutions may be achieved through a combination of design and management measures defined at planning stage. Examples of issues include:

- Noise. Where noisy uses are to be placed close to residential, e.g. cafes, management controls may be specified at planning stage to mitigate problems e.g. restrictions on retail deliveries at night in residential blocks. Levels of sound insulation in excess of the minimum standards may also be specified for dwellings.
- Nuisance. Designs of mixed use blocks should ensure that the by-products of commercial uses are properly considered. For example,

commercial extract vents should discharge away from opening windows and preferably at high level. They should be easily accessible for maintenance and should not be unsightly.

- Tenure. Where different uses are proposed in the same block, commercial viability and leasing arrangements should be studied. For example, a residential use above retail should be sufficiently independent in terms of access cores and outdoor space that it does not restrict the redevelopment or conversion of commercial units over time.
- Parking. Retail uses will require provision of enough parking spaces to avoid informal parking which may be a nuisance to residents. Management measures (e.g. time limits) may be set out at planning stage to discourage commuter parking. Synergies between different uses may be possible e.g. office users may have spaces during the day which could be shared with a hotel use during the night.



↑ This mixed use proposal places apartments at second floor above an active street of shops and cafes. A first floor of offices provides a 'buffer' to the noisier restaurant uses. A set back at second floor gives further privacy.

## 04

**Variety**

How does the development promote a good mix of activities?

**✓ Housing types and tenure add to the choice available in the area**

A successful neighbourhood will be one that houses a wide range of people from differing social and income groups. In this way people are able to live in the same neighbourhood through all stages of their life, should they so choose.

Mixed communities can be created by providing a range of unit types and tenures. Mixed tenure developments should be 'tenure blind' meaning that affordable units should be physically indistinguishable from that built for sale or rent at market prices.

A neighbourhood with a good mix of unit types will feature both flats and houses of varying sizes. Both tenure mix and housing types should be underpinned by a good understanding of both the existing social mix in the neighbourhood and the saleability of different types of housing provided.



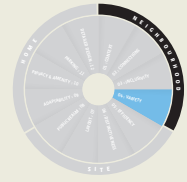
↑ This development at Islandbridge in Dublin provides accommodation for senior citizens, supplementing the variety of housing available to the local community.



↑ The canal-side apartment scheme above at Abbott's Wharf, London, is an example of a 'tenure-blind' development. It is not possible to distinguish between blocks housing private or affordable dwellings from their external appearance.



↑ As part of the regeneration of Ballymun in Dublin, new apartment buildings have been integrated with existing houses, to provide a variety of sizes and complement the existing residential stock.



**✓ Opportunities have been taken to provide shops, facilities and services that complement those already available in the neighbourhood**

The uses created in a development proposal will need to complement their context. It is important that an assessment of existing uses in the locality be carried out and consideration given to how those existing uses will be affected by the development; what new supporting uses and facilities may be required to support the new development and how these will be provided.

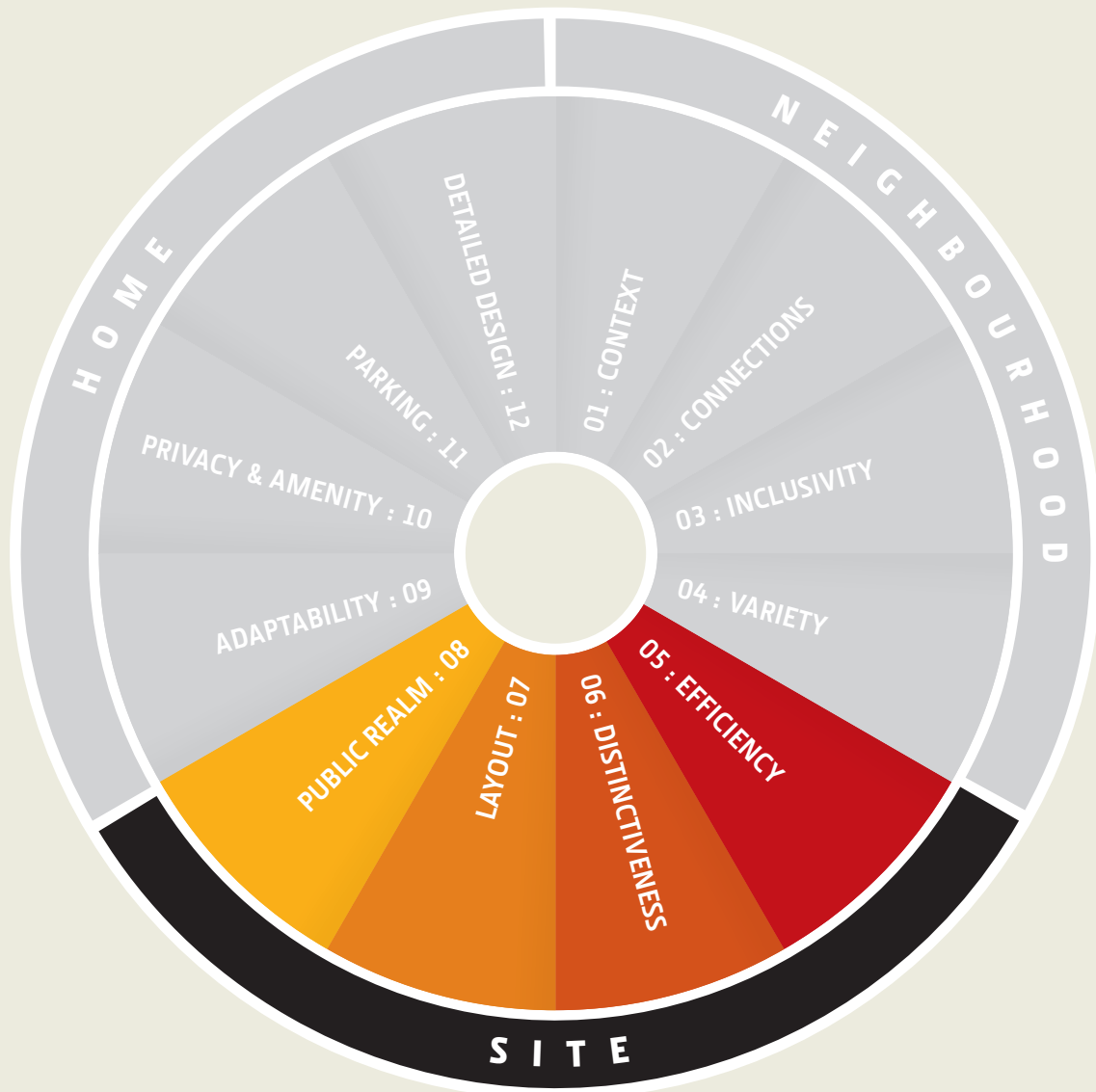
**4.2 – 4.7 community facilities**

NEIGHBOURHOOD

New village square surrounded by mixed uses



→ This development provides connections to existing uses in a village through streets and parks. It also supports existing facilities with new activities missing from the area e.g. a village park and a crèche.



**5 EFFICIENCY**

How does the development make appropriate use of resources, including land?

**6 DISTINCTIVENESS**

How do the proposals create a sense of place?

**7 LAYOUT**

How does the proposal create people friendly streets and spaces?

**8 PUBLIC REALM**

How safe, secure and enjoyable are the public areas?



# Housing site

Having found a neighbourhood in which they might wish to live, most people, when looking for a home, will then consider what particular streets or blocks they prefer. Although often not well defined, this spatial scale can often make a huge difference in people's quality of life. It is this scale that people tend to think of when thinking about their home.

It is also at this spatial scale that good urban design becomes more readily apparent, since decisions taken here will affect the end-user experience more directly than neighbourhood level design.

Site design will need to consider how to manipulate the layout, public realm and intensity of development to create compact, strong, distinctive and successful communities. Design considerations at this scale will build on decisions taken at the neighbourhood level and address the orientation and alignment of streets, blocks and spaces, public safety and security, landform and landscape design, the distinction between public and private space and development densities.

Also important at this scale is the need to create places that foster a strong sense of belonging and ownership in those that live there.

Through careful attention to layout, siting and development densities, designers can help to create compact communities that have low energy demands in use. In this way, designers are able to build on the good planning decisions taken at the higher spatial scale and put in place the fundamental building blocks for the creation of strong, sustainable communities.


# 05

## Efficiency

How does the development make appropriate use of resources, including land?

High-level Government policy in the shape of the NSS and the Climate Change Strategy establishes the importance of reducing the energy requirements and greenhouse gas emissions associated with residential development.

There are two main strands to designing places for climate change – mitigation and adaptation. This Criterion seeks to cover mitigation, which addresses how places can be designed to reduce the impact of

 **1.7 – 1.8** national policies on climate and energy efficiency development on climate change.

This means reducing the energy requirements of new homes. A balance will often need to be struck between the energy embodied in new homes – the energy used in manufacturing and transporting materials as well as that used on site, their likely lifespan and the energy that will be needed to run the homes over their lifetime.

Designers will need to pay close attention to the types of dwelling being constructed and be able to demonstrate how materials selection and sourcing have been selected to contribute towards the mitigation of potentially climate changing effects. Providing homes that are energy efficient in terms of construction and use requires a great deal of thought – and can increase construction costs. However, investment

 **4.8 – 4.13** efficient use of resources will need to be made now to ensure that the houses we build grow into sustainable, successful communities.



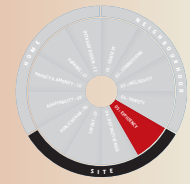
### RELATED DEHLG POLICY

- 1.7 – 1.8** national policies on climate change and energy efficiency
- 4.8 – 4.13** efficient use of resources
- 4.25** biodiversity
- 4.27** flood risk
- 4.30 – 4.31** SUDS
- 5.4 – 5.11** increased densities in towns and cities
- 6.9 – 6.12** densities in small towns and villages
- 7.1 - 7.3** daylight, sunlight and energy efficiency



### POSITIVE INDICATORS

- The proposal looks at the potential of higher density, taking into account appropriate accessibility by public transport and the objectives of good design
- Landscaped areas are designed to provide amenity and biodiversity, protect buildings and spaces from the elements and incorporate sustainable urban drainage systems
- Buildings, gardens and public spaces are laid out to exploit the best solar orientation
- The scheme brings a redundant building or derelict site back into productive use
- Appropriate recycling facilities are provided

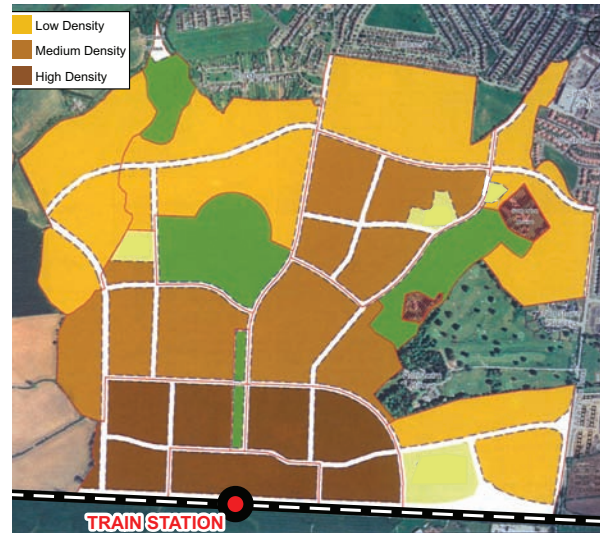


**✓ The proposal looks at the potential of higher density, taking into account appropriate accessibility by public transport and the objectives of good design**

As well as providing homes that are low energy, truly sustainable new housing should make good use of land by increasing densities – where such sites are easily accessible by public transport. Even the most energy efficient homes will not be considered sustainable by most measures if they can only be accessed by the private car. Efforts should also be made to ensure that the location of developments permits access by walking and cycling.

Increasing densities near to public transport hubs can significantly reduce reliance on the car and at the same time reduce demand for lower density developments that are less efficient in their use of land.

Achieving efficiencies in land use should be considered in tandem with the objective of creating well-designed neighbourhoods that are pleasant to live in. Good urban design, whilst increasing densities, should also provide good quality, liveable homes.



↑ Adamstown, west Dublin. Higher density development is planned closer to public transport.

SITE

**5.4 – 5.11** increased density in towns and cities  
**6.9 – 6.12** densities in small towns and villages

↓ In design proposals for the same scheme, the highest density areas are given an urban character to promote a sense of place. Houses and apartments (left) are arranged around a podium courtyard over retail uses, creating active frontages to the street (below).



## 05

## Efficiency

How does the development make appropriate use of resources, including land?



**Landscaped areas are designed to provide amenity and biodiversity, protect buildings and spaces from the elements and incorporate sustainable urban drainage systems**

Sustainable Urban Drainage Systems, or SUDS, turns traditional drainage practice on its head. SUDS employs a wide range of techniques to increase the length of time it takes for rainwater run off to reach a watercourse – bringing benefits in terms of preventing low-level pollution from entering watercourses and reducing the likelihood of serious flooding following storm events.

As well as bringing significant operational benefits, the network of constructed attenuation ponds, ditches and swales used by SUDS can create an attractive wetland setting for homes as well as enhancing biodiversity.



4.25

biodiversity

4.27

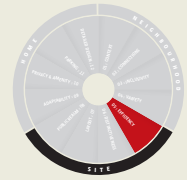
flood risk

4.30 – 4.31

SUDS



↑ In this scheme, sustainable drainage is integrated as an amenity within a public space, creating a local landmark and a focus for recreation.



**✓ Buildings, gardens and public spaces are laid out to exploit the best solar orientation**

Emerging technologies such as CHP (Combined Heat and Power) and renewable power generation mean that home comforts can be provided in a way that helps to reduce the environmental impact of new housing. Higher density housing schemes can often lead to increased efficiencies since they can more easily accommodate a CHP system.

Whilst new technologies can help to provide homes with heating and lighting in increasingly energy efficient ways, use of such technologies should be used alongside measures to reduce the demand for artificial heating and lighting. This means that designers will need to consider how the homes can be designed to make the best use of passive warmth and light provided by the sun through solar orientation. As well as orientating homes to take advantage of solar gain, areas of open space should also be sited to take advantage of sunlight, communal or district CHP and renewable power generation.

**7.1 – 7.3** daylight, sunlight and energy efficiency

→ 'BedZed' residential scheme, London. The site layout is planned to optimise orientation for solar gain.



**BALANCING POTENTIAL CONFLICT**  
**SOLAR ORIENTATION AND HIGH DENSITY DEVELOPMENTS**

The objective of providing a layout which optimises solar orientation can sometimes conflict with other objectives of urban design.

For example an urban design objective of creating enclosed courtyard blocks may not facilitate a layout optimised for solar orientation which would generally favour a north-south orientation with little enclosure.

The design of a layout should have solar orientation as one of its key considerations. However, the requirements of good urban form (such as creating well defined public or semi-public spaces) should still be an important objective of the layout design.

When orientation of blocks is developed, orientation should not unnecessarily conflict with the topography of the site or the boundary conditions e.g. a scheme of east-west terraces may produce a series of gable-end walls where a boundary frontage may be more appropriate.

Where single-aspect dwellings are proposed (for example in perimeter apartment blocks) they should not be directly north facing and should get direct sunlight at some point during the day.

Where design standards are to be used (such as the UK document *Site Layout Planning for Daylight and Sunlight*, published by the BRE), it should be acknowledged that for higher density proposals in urban areas it may not be possible to achieve the specified criteria, and standards may need to be adjusted locally to recognise the need for appropriate heights or street widths.

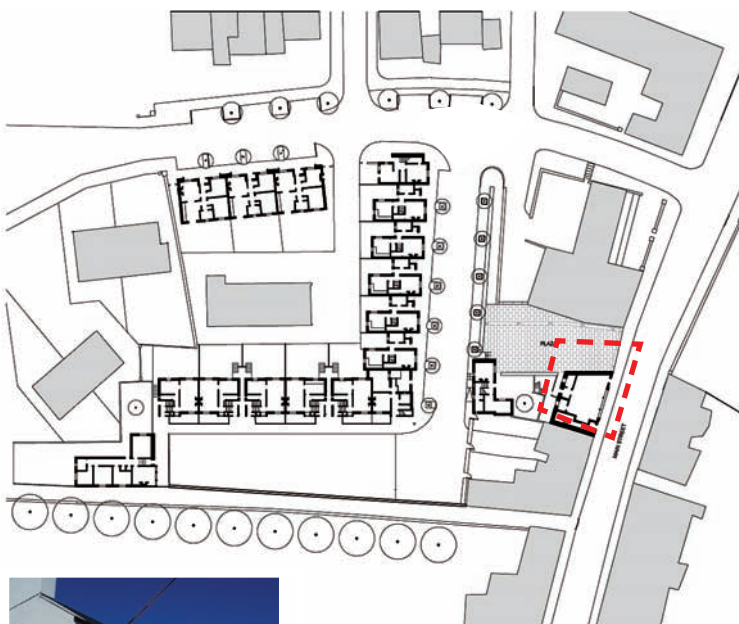
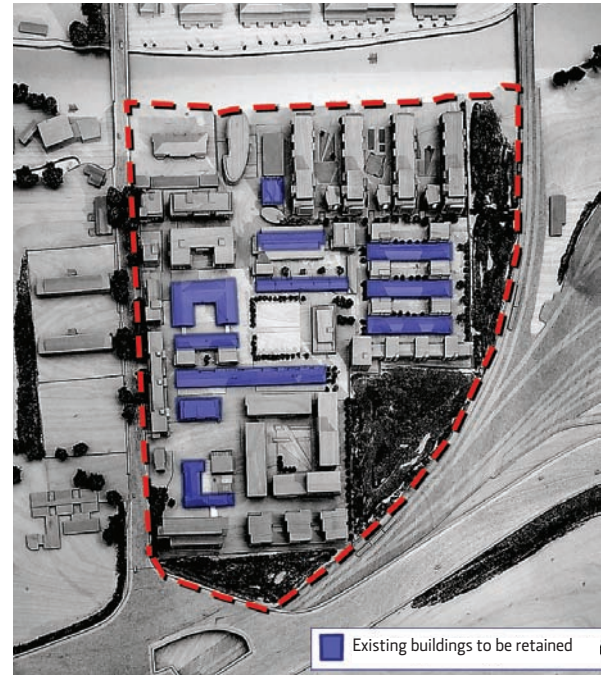
# 05

## Efficiency

How does the development make appropriate use of resources, including land?

- ✓ The scheme brings a redundant building or derelict site back into productive use

Existing buildings will contain embodied energy that will be mostly wasted if that building is demolished rather than being brought back into life. The conversion of an existing building to high-density development may often be more acceptable than a similarly high density new build – since the existing building will be an accepted part of the built environment. Existing buildings and previously developed sites are often better situated in relation to public transport and key facilities than sites that have not been developed before.

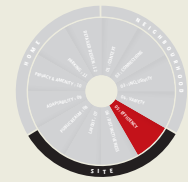


Existing site



This residential development in Ballyhaunis Co. Mayo retains an existing building which becomes a feature in the new development and connects the scheme with the existing buildings of the town.

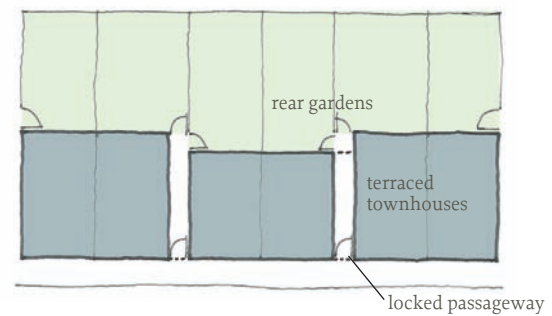
Redundant as a military barracks, the Clancy Quay scheme makes efficient use of a previously developed site and buildings in a well-positioned location in Dublin. Existing buildings are adapted to provide new accommodation and are integrated with new development to give an urban structure and identity to the scheme.



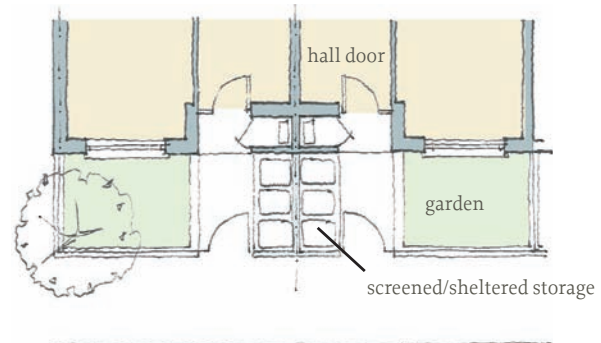
**✓ Appropriate recycling facilities are provided**

Housing developments should include adequate provision for recycling facilities, both inside the home and around the site. This means that homes need to be provided with areas where materials can be sorted and stored prior to collection for recycling, and bin stores will often need to contain room for 2, 3 or more bins per dwelling, unless communal recycling is provided. Additionally, areas within the public realm will need to be set aside for extensive recycling facilities and such facilities will need to be provided in locations that are easily accessible by all residents, while not causing a nuisance.

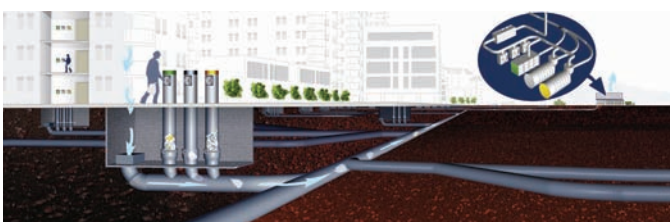
Examples of strategies for storing recycling and waste at the front or rear of houses in higher density schemes:



Access provided to rear gardens via private passageways through the terrace at ground level.



Storage integrated with entrances and front gardens to houses, as in this example of a terraced townhouse.



An alternative system of managing waste at the Hammarby development, Stockholm. Bags of waste and recycling are deposited in chutes in communal areas. These are then collected via pneumatic tubes running underground which remove the necessity for bin trucks to operate within the site. The chutes have been designed as attractive, highly visible elements in accessible public spaces to encourage their use and to discourage misuse or abuse through passive supervision.



Note that where bin stores are in a prominent position they should be well designed, so that they do not adversely impact the image of the dwelling, as in this scheme in Enniskerry, Co. Wicklow.

SITE

## 06

**Distinctiveness**

How do the proposals create a sense of place?

Each successful community has a distinct and special character. That is not to say that each community should compete with or try to upstage the rest – some of the most successful areas have a quiet and easy charm. Nonetheless, each successful neighbourhood will have its own *raison d'être* that makes people choose to live there over other places.

Much of an area's character will be derived from elements considered in the other 11 Criteria, including – but not limited to – the variety of uses, layout and architecture. But these must come together in such a way as to make the neighbourhood memorable.

**RELATED DEHLG POLICY**

**3.0 – 3.2** importance of urban design

**3.8 – 3.11** design briefs and design statements

**4.24** conservation of the built and natural environment

**4.26** historic buildings

**6.3 – 6.8** small towns and villages

**POSITIVE INDICATORS**

- The place has recognisable features so that people can describe where they live and form an emotional attachment to the place
- The scheme is a positive addition to the identity of the locality
- The layout makes the most of the opportunities presented by existing buildings, landform and ecological features to create a memorable layout
- The proposal successfully exploits views into and out of the site
- There is a discernable focal point to the scheme, or the proposals reinforce the role of an existing centre





**✓ The place has recognisable features so that people can describe where they live and form an emotional attachment to the place**

Key to the success of a neighbourhood are features which are particular to that place and which encourage people to call a place home. It is no coincidence that the Italian word for devotion to a town, *campanilismo*, is derived from the word ‘*campanile*’ (a bell tower), a distinctive element in the built environment.

As well as helping people to form an attachment to a place, landmarks or easily recognisable features will ensure a place is easy to locate and navigate around by someone who has never been there before. Being able to successfully orientate their way around an area is a key determinant in people’s sense of personal security and safety.

Such features can include public art, landscaped areas, public buildings such as a library or community centre and even bars and restaurants. Additionally, interesting urban design and architecture will also have a role in helping an area to form a strong identity.

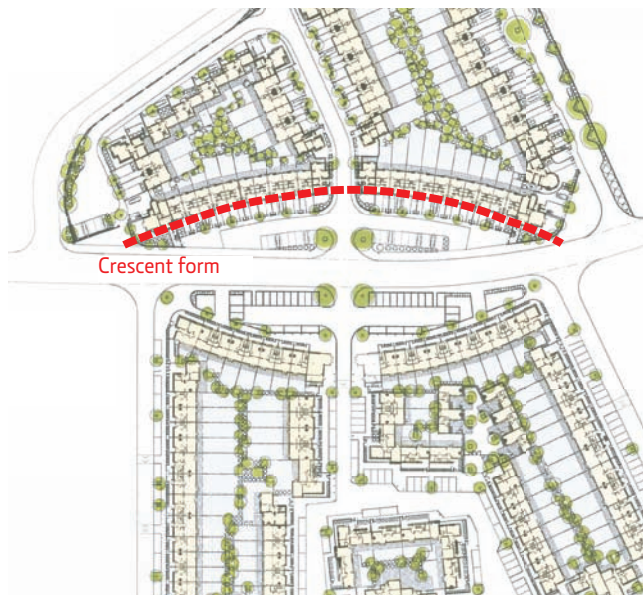


In Lanesboro, Co. Westmeath, the entrance road to the estate takes its line from the Church spire, whilst an attractive and unusual circular feature house makes a new local landmark



SITE

**3.0 – 3.2** importance of urban design  
**3.8 – 3.11** design briefs and design statements



This scheme successfully uses a combination of interesting urban design and striking architectural forms to create a memorable place at Balgaddy in suburban Dublin. The crescent plan stands out from the surrounding streets while well-executed, colourful detailing builds on this to create a memorable place.

## 06

**Distinctiveness**

How do the proposals create a sense of place?



**The scheme is a positive addition to the identity of the locality**

All new development should aim to improve upon and enhance the area in which it sits. So as well as having a distinct identity in themselves, schemes should make a positive contribution to the wider identity of the local area.

This means that while developments should respond to local character and identity, they should not unthinkingly copy surrounding development forms and detail. Instead, developments can add to identity through initiatives such as the sensitive re-use of existing buildings and landscape features, creatively utilising forms and materials which are common to the local area, reinforcing local culture through both detailed design and careful mix of uses.

It should be recognised however, that there will be many areas that do not currently have a positive identity and in such situations it may be appropriate to create a new sense of place through high quality architecture, landscaping, urban design and the arrangement of uses throughout the site.

New developments which create or enhance a strong sense of place tend to have evolved through a rigorous design process which included good community involvement – learning from and incorporating local knowledge, experience and culture. There is also a role for the study of historical development patterns and forms but designers should not forget that the objective is to move forward – not back.



Good quality architecture and landscaping have been an important element in the regeneration of Ballymun in Dublin. The visible change from very poor quality, low-density towers to higher quality, higher density houses has helped to change perceptions of the district as a residential neighbourhood.





**✓ The layout makes the most of the opportunities presented by existing buildings, landform and ecological features to create a memorable layout**

Many sites will contain features that can help to lend a scheme identity. Such features might include an existing building, natural or pre-existing landscaped features – including along boundaries, topography or movement routes. The removal of such features will serve to erode a site’s cultural and historical context and may result in significant opposition to the development from local community groups.

As well as helping to generate local support for development, retaining existing features can help to increase development value on a site as buyers often respond well to a development with strong natural, cultural or historical connections.

The challenge of integrating features into a scheme will often result in a high quality creative response to layout design. Additionally, since no two sites will contain the same existing features, then their incorporation into the final scheme will ensure that the development is in itself distinctive and memorable



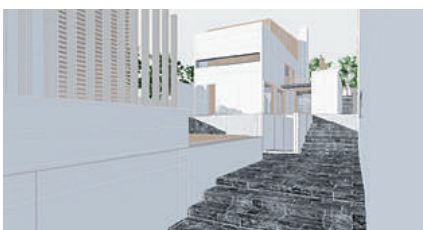
↑ Re-using and integrating existing buildings (in this case the stone bonded warehouses characteristic of the area) are an important part of proposals for the redevelopment of the south docks of Cork.



↑ This scheme makes use of a waterside location to produce a landmark with a high level of amenity for residents at Baltinglass, Co. Wicklow.

**4.24** conservation of the built and natural environment  
**4.26** historic buildings

SITE SECTION



This proposal for a site overlooking the sea at Dalkey, Co. Dublin, exploits a difficult topography to create a memorable pedestrian space, taking advantage of panoramic views through the development.

SITE

# 06

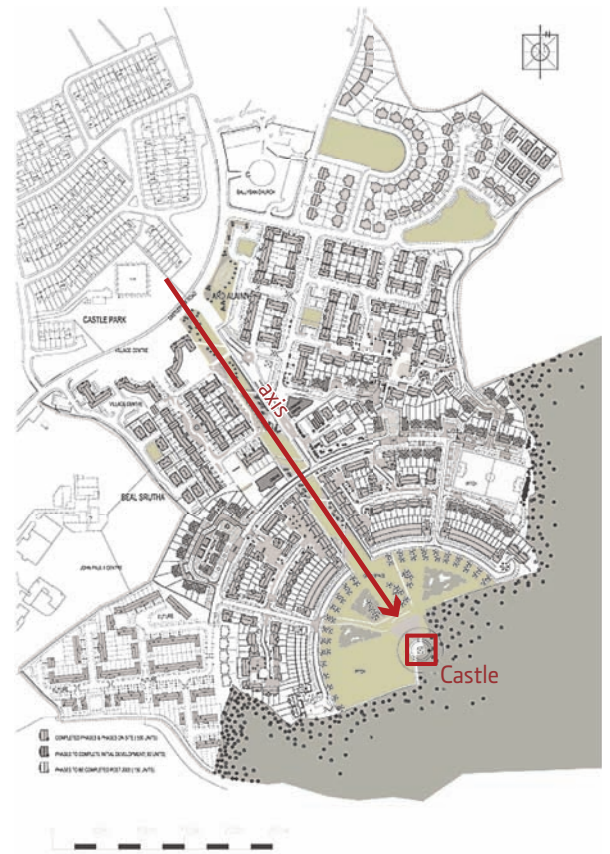
## Distinctiveness How do the proposals create a sense of place?

**✓ The proposal successfully exploits views into and out of the site**

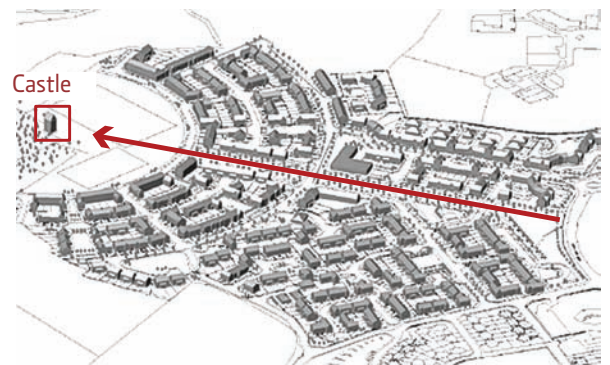
Alongside making physical connections between the site and its surroundings, it is important to make visual connections between the scheme and neighbouring development and landscape.

Views into the site can help to create strong connections between existing areas of development and new and help to reduce a sense of separateness or social division. Where the new development is of sufficient quality, creating a strong visual connection will help to ensure that the benefits of new development in terms of providing a new positive identity and sense of place are spread out into existing areas. Creating views out of the site will also help to give the new development a strong sense of local identity and place.

These visual connections can be created through the use of axial movement routes that bisect the site, through leaving strategic ‘gaps’ in the urban form, or through the varying of building heights and exploitation of topography – for example creating public green open space on high ground.



Cloontuskert, Co. Roscommon: a strong sense of place is imparted by the axial entrance to the scheme focusing on a primary school and health centre

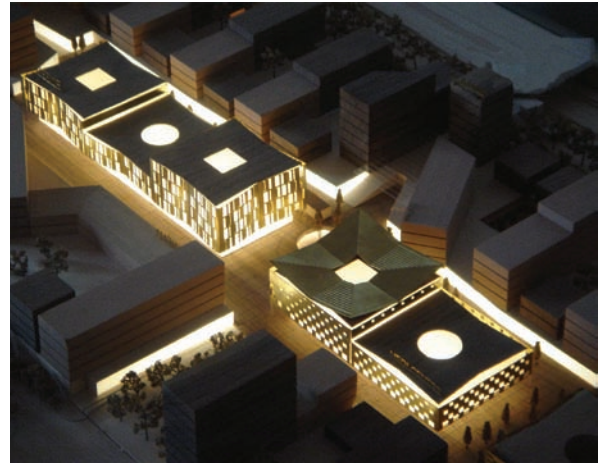


An axial route at a residential development at Merlin Park in Galway exploits a castle to give a unique, local identity to the site.



**✓ There is a discernable focal point to the scheme, or the proposals reinforce the role of an existing centre**

The creation of focal points within the development site can be a good way to introduce identity, and has been used by town and city builders for centuries. Such centres can vary in size depending on the size of community they serve but they all share certain things in common. They tend to have an area of usable open space – often a hard landscaped square which is surrounded by active uses – convenience stores, restaurants and cafés for example. They are almost always located at a key intersection within the layout of the development – where through traffic can result in passing trade and increase activities within the space.



**6.3 – 6.8** small towns and villages

↑ Proposals for a high density residential development at Adamstown, Co. Dublin, include a distinctive district centre, bringing an intensity of mix and uses necessary to help generate identity.



↑ Masterplan for Prosperous, Co. Kildare, proposing growth around a protected centre. Orange areas indicate the potential sites for housing, while green areas denote a proposal for interconnected, peripheral green spaces.

## 07

**Layout****How does the proposal create people friendly streets and spaces?**

How the site is laid out is one of the key determinants of successful places. The layout of a neighbourhood can help to determine an area's character and sense of place – the same buildings arranged differently will have a very different feel to each other - its safety and security and how well it works. Many of the mistakes that are attributed to bad planning are often errors of layout – for instance, a dead end that does not connect with the route to the school, or a lonely footpath that is a haven for crime and anti-social behaviour.

The layout of a site can affect a scheme's sustainability in a number of key ways, including solar orientation, permitting the provision of Sustainable Drainage Systems, and encouraging residents to walk and cycle in preference to using the car.

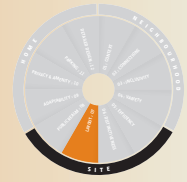
**RELATED DEHLG POLICY**

**3.13 – 3.18** design of residential streets

**4.17 – 4.20** public open space standards

**POSITIVE INDICATORS**

- Layout aligns routes with desire lines to create a permeable interconnected series of routes that are easy and logical to navigate around.
- The layout focuses activity on the streets by creating active frontages with front doors directly serving the street
- The streets are designed as places instead of roads for cars, helping to create a hierarchy of space with less busy routes having surfaces shared by pedestrians, cyclists and drivers
- Traffic speeds are controlled by design and layout rather than by speed humps
- Block layout places some public spaces in front of building lines as squares or greens, and some semi private space to the back as communal courts



**✓ Layout aligns routes with desire lines to create a permeable interconnected series of routes that are easy and logical to navigate around.**

The design layout arrives from a considered response to site and brief. The grid system favoured by city builders from Rome to Dublin is a rational interpretation of an efficient and legible urban structure that has proved very robust. But grids do not have to be orthogonal. More recognisably organic layouts such as those seen in small rural towns are on first inspection very different from grid-iron layouts, but they tend to perform a very similar function.

In the same way that grid structures seek to connect two points with a straight line, the roads and lanes which meander though the countryside and towns of Ireland follow key desire lines - connecting two points in the most efficient way possible taking into account climate, terrain and obstructions. This has often resulted in interesting, varied and picturesque organic layouts.

Whether a scheme has an orthogonal or organic layout will depend to a large extent on the character of or sense of place that is being sought and the existing networks that are being connected into. It is however crucial that all developments follow desire lines that traverse and link the site. By plotting the key desire lines on a plan of the site, the urban designer will be laying the foundations of the overall urban structure of the development.

The alignment of some of the routes may need to be altered to achieve usable development blocks, and care should be taken to ensure the right number of routes through the site. Too many, and some of the routes will be under-utilised and invite anti-social behaviour – too few and the routes will be over-trafficked which can create nuisance to nearby residents.

**3.13 – 3.18 design of residential streets**



↑ Direct connections between existing streets, bridges, landmarks and secondary public spaces underlie the street structure for this masterplan for the south docks in Cork city, above.



↑ A more organic response may be appropriate to relate to the topography, as seen in this example of the Drumlin areas of Co Louth.

## 07

## Layout

## How does the proposal create people friendly streets and spaces?

Creating a permeable network of direct routes will help to increase the sustainability of the development since longer than necessary pedestrian and cycle routes will discourage use (leading to more car journeys) and will also serve to minimise the length of car journeys.

Culs-de-sac have for some time been a popular location for a home – as they are often perceived to engender stronger and safer communities. The response is often to create layouts that seek to maximise the amount of dwellings accessed via a cul-de-sac. This however, has tended to create layouts with poor levels of permeability. The key is to keep pedestrian links short and supervised.

However, there may be instances where a cul-de-sac or residential court is an appropriate solution, for example where the objective is to prevent rat running, or to create intimate enclosures of dwellings that add to the character, distinctiveness and variety of a development.

The benefits of a cul-de-sac layout can be achieved within a highly permeable, well-connected residential development. The two main design solutions are

a) residential court arranged around communal area of open space including parking; and b) no-through-road for vehicles which permits pedestrian and cycle through access.

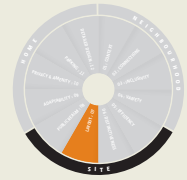
It should be noted that culs-de-sac with pedestrian connections at the end can act against the objectives of crime-prevention since such routes often provide criminals with a choice of escape routes.

The residential court is able to create an intimate and safe environment through the pedestrian dominated amenity space at its centre. Although each of the dwellings has a garden to the rear, these are relatively small private sitting areas since each home also benefits from the communally provided space within the court.

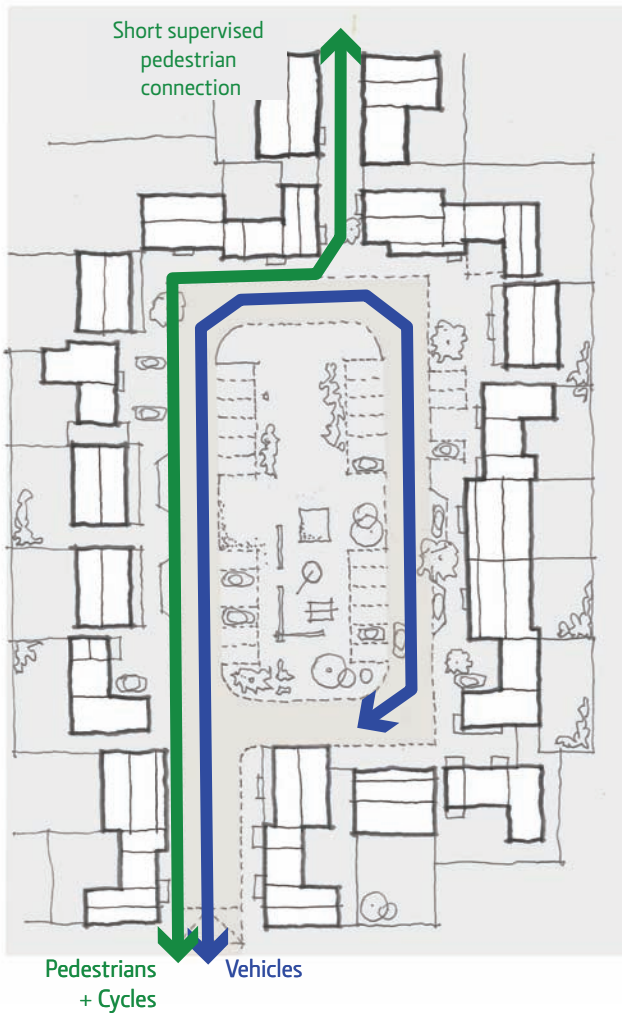
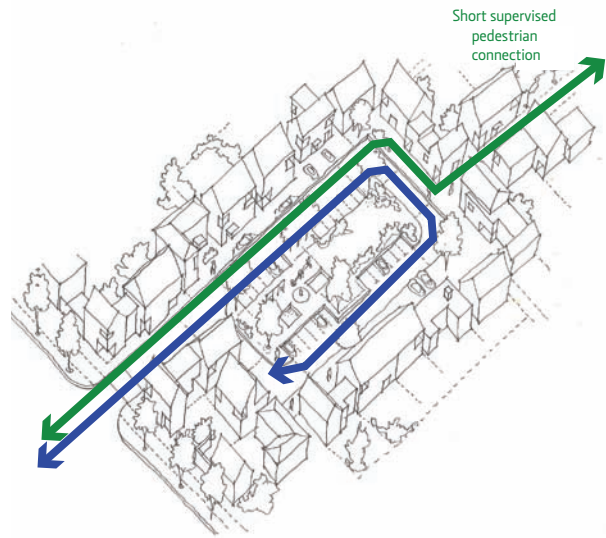


Above and left: Example of a cul-de-sac treated as a residential courtyard.





Similarly, a no-through road operating as a vehicular cul-de-sac permits a well connected and highly permeable layout for pedestrians and cyclists, but controls vehicle movement within the site. Such blockages to road traffic have often been retrofitted into existing neighbourhoods and can do the job of restricting cars very well.



A no-through road allowing a continuous pedestrian and cycling route but restricting vehicle movement. It is important that the pedestrian/cycle only route should still be treated as a street with good overlooking and active frontages.



## 07

## Layout

### How does the proposal create people friendly streets and spaces?

#### The layout focuses activity on the streets by creating active frontages with front doors directly serving the street

Successful neighbourhoods tend to have streets that people feel comfortable being in – where they feel safe and secure. Much personal safety – both real and perceived – derives from overlooking, or natural surveillance. Natural surveillance can be provided by overlooking from nearby homes, other pedestrians, and passing cars and cyclists.

The layout of the site can contribute towards creating a good level of natural surveillance by creating streets that are the focus of activity in the development. This means orientating buildings towards the street and ensuring that as many homes as possible have direct access from it.

When designing a layout for a new development, practitioners should give adequate thought to the location and orientation of entrances to the homes – even though the buildings will have not been designed yet.

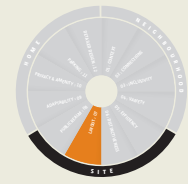
On-street activity can also be aided by ensuring good connections both outside the site (as set out under Criterion 2) and within.



→  
Having front doors facing streets directly brings greater activity and improves passive supervision.



Front door retail uses with doors to residential and commercial uses above provide active frontage and a human scale to streets as in this mixed-use scheme in Killorglin, Co. Kerry.



**✓ The streets are designed as places instead of roads for cars, helping to create a hierarchy of space with less busy routes having surfaces shared by pedestrians, cyclists and drivers**

A well laid out development is one where people who live there are encouraged to walk and cycle in preference to using the private car for short journeys. As well as increasing the sustainability of the development, encouraging people to walk will bring significant benefits in terms of on-street activity.

On the whole, this means integrating pedestrian, cycle and vehicular facilities along the same routes. Whilst many have recommended segregating pedestrian, cycle and car traffic in order to reduce the likelihood of accidents arising – it is now commonly accepted that such layouts tend to discourage pedestrian activity.

Although routes will be integrated – each mode will often need to have its own space to ensure pedestrian and cyclist safety. So, a key movement corridor will integrate the roadway, pedestrian pavement and cycle routes in a way that balances road user safety with personal safety and security.

In the parts of the development with low levels of motorised traffic, such as mews lanes or culs-de-sac, it will often be appropriate to design the street as a shared surface. Shared surfaces are well used in continental Europe – in particular in Holland where they have been developed from the concept of Woonerf or Home Zone.

**3.13 – 3.18 design of residential streets**



Buildings to back of pavement, parking and planting, generate a people orientated street. Adamstown, Co Dublin.



Activity on a shared surface street at Furry Hill, Dun Laoghaire Rathdown County Council. Removing cars and their associated design requirements (kerbs, barriers, markings) signals clearly that this is a street designed for people and allows for relaxed activity by residents.

SITE

## 07

## Layout

How does the proposal create people friendly streets and spaces?

✓ Traffic speeds are controlled by design and layout rather than by speed humps

The concept of shared space was developed by the Dutch engineer Hans Monderman and seeks to affect the behaviour of the road user – be they a driver, cyclist or pedestrian – by the design of the road and the presence of other users. This differs from Home Zones in that there is less reliance on signage and traffic calming measures.

Key to the creation of Shared Spaces is the removal of the distinction between roadway and pavement. The resultant blurring between the two encourages people to exercise their natural caution and results in slower traffic speeds and a safer environment for pedestrians and drivers alike.

Traffic speeds can also be affected by restricting forward visibility of the driver so that they are not encouraged to pick up speeds by a view of the open road. Methods of doing this vary however and the introduction of unnecessary chicanes or turns in the road can make the routes seem over-engineered or contrived.

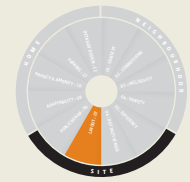
Other 'softer' methods of reducing traffic speeds that have been derived as part of the Shared Space philosophy include the removal of traffic lights and formal junction markings, encouraging higher levels of on-street parking.<sup>1</sup>

(1) See [www.shared-space.org](http://www.shared-space.org) for further information on the European Commission sponsored project featuring a wide range of innovative projects.



↑ Rather than relying on speed bumps, this design drawing for a development at Merlin Park in Galway uses layout to control traffic speeds with an indirect route, parking layouts and making clear thresholds into a 'home zone' street.

→ The schematic layout above and below shows buildings used to create a clear, simple range of spaces. Frontages address public spaces and streets while perimeter blocks enclose and control shared private spaces for residents only.

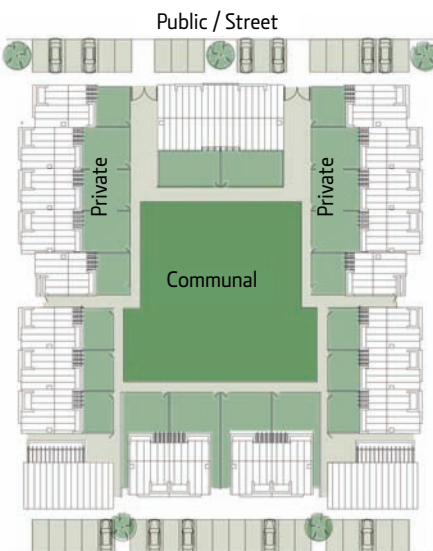


**✓ Block layout places some public spaces in front of building lines as squares or greens, and some semi-private space to the back as communal courts**

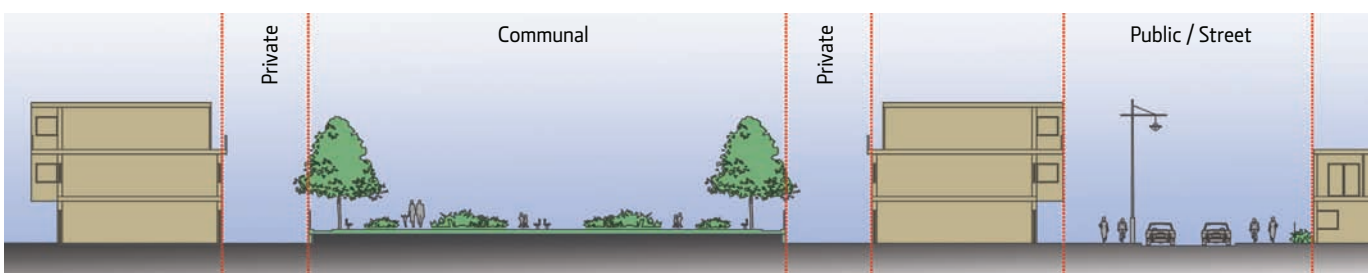
When designing the layout of a site, care should be taken to arrange the roads, blocks and open space in such a way as to provide a clear distinction between private, semi-private and public space. Core to this is the idea of defensible space as formulated by Oscar Newman and Alice Coleman. Designing for defensible space means building homes where people feel safe (territoriality), creating public spaces that are well overlooked (natural surveillance), creating a place that does not invite criminal or anti-social behaviour (image) and local activities or uses (milieu).

A building form that exhibits a very clear distinction between public and private space is the perimeter block. The perimeter block works by entirely enclosing the private or communal gardens at the centre with buildings so that access to these spaces is restricted to those who live there. This makes it very secure and – when the space within is used communally – can foster community cohesion. Additionally, this building form will create a good sense of enclosure and overlooking into the streets – helping to make the public realm safer.

**4.17 – 4.20 public open space standards**



→ Example of a semi-private shared space to the rear of houses at Kill, Co. Kildare.



SITE

## 08

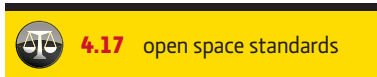
**Public Realm**

How safe, secure and enjoyable are the public areas?

The most successful neighbourhoods contain streets, squares, parks and public gardens that are as good quality – if not better, than the private buildings and spaces within the neighbourhood. A neighbourhood with poor quality public spaces will rarely be improved by even the highest quality architecture – whilst a neighbourhood of ordinary buildings can be transformed through improvements to the public realm.

The public areas are also a key determinant of the image that people form of the quality of a development as a whole. Visitors to a housing development will often spend as much time in the public realm of a development as they do in the private zone – and the quality of such spaces will form the impression of the place that they take away with them.

Studies<sup>1</sup> have demonstrated that houses that are located near to good quality parks and public green space often sell for more than equivalent houses that do not have access to similar facilities. This reflects the value that home buyers place on such amenities.



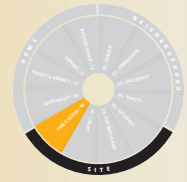
(1) see *Does Money Grow on Trees?* published by the UK Commission for Architecture and the Built Environment

**RELATED DEHLG POLICY**

<b>3.18</b>	types of street
<b>4.17</b>	open space standards
<b>4.21 – 4.23</b>	personal safety and traffic safety
<b>7.4 – 7.5</b>	privacy and security
<b>7.8 – 7.9</b>	communal open space

**POSITIVE INDICATORS**

- All public open space is overlooked by surrounding homes so that this amenity is owned by the residents and safe to use
- The public realm is considered as a usable integrated element in the design of the development
- Children's play areas are sited where they will be overlooked, safe and contribute to the amenities of the neighborhood
- There is a clear definition between public, semi-private, and private space
- Roads and parking areas are considered as an integral landscaped element in the design of the public realm.



**✓ All public open space is overlooked by surrounding homes so that this amenity is owned by the residents and safe to use**

All areas of open space should be designed to be inviting, safe and conveniently located for people's homes. Designers should therefore locate open space in areas where they will be directly overlooked by people when inside their home.

As well as creating a good level of natural surveillance so that users of the open space feel comfortable and safe, creating a strong relationship between the private home and public space will mean that residents will be encouraged to feel a strong sense of ownership over the public realm. This strong sense of ownership will reinforce the safety and security of the public realm by ensuring that anti-social behaviour will not go unchallenged. Additionally, it will lead to the public spaces being better maintained.

A central amenity space overlooked by terraces of houses at Zaan Eiland, Rotterdam, allows children to play safely



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## Public Realm

How safe, secure and enjoyable are the public areas?



**The public realm is considered as a usable integrated element in the design of the development**

The approach to areas of public open space described above should also be applied to all publicly accessible areas of the development – particularly areas of hard landscaping such as streets, squares and courts. A user centred approach – that considers the needs of all users, but with a particular emphasis on the needs of pedestrians – will ensure that the elements that are found in the most successful neighbourhoods are replicated in the new development.

When considering the layout, landscape design, and materials used within the public realm, designers should consider how their decisions would affect the experience of the user of the development.

All publicly accessible areas should be overlooked by other people who would be able to intervene in order to prevent crime and maintain public safety. This natural surveillance might be from the windows of nearby houses which open out onto the street, other law-abiding people using the space, and even drivers of passing vehicles. The feeling of safety generated by high levels of natural surveillance in public areas will encourage further use and participation in public life – which will itself reinforce high levels of natural surveillance.

More detailed guidance on designing safe public spaces can be found in publications such as *Designing out Anti-Social Behaviour* (South Dublin County Council) and *Safer Places* (UK Home Office).



**4.21 – 4.23** personal safety and traffic safety

A space well-integrated with housing makes a focus for recreation and improves safety and security.



**BALANCING POTENTIAL CONFLICT  
HIGH QUALITY OPEN SPACE & MANAGEMENT**

The desire to create interesting, active and ecologically rich public amenity spaces can be seen to conflict with the desire to minimise maintenance costs where resources are scarce or to avoid liability from risk of accidents.

Concerns of maintenance costs and risk management need not preclude varied and interesting design if the issues are considered and adequate measures put in place at planning stage.

- Designers should ensure that landscaping is self-maintaining as much as possible and does not require frequent pruning, weeding or cleaning. This may impact on selection of plant species or surface materials. More 'natural' landscaping, such as reed beds or woodlands, may require less maintenance than more formal looking planting.
- Where a local authority does not have the resources to take in charge public spaces it may be necessary to set up an estate management company to carry out landscape maintenance. While this is already a requirement for apartment schemes it is not common practice for developments of houses. A high quality design should be beneficial to residents and improved residential values may offset maintenance costs if these are controlled.
- Adequate safety precautions should be taken during design to reduce risk of accidents. For example, attenuation ponds may be designed so that the public are not encouraged to occupy the edges by routing footpaths away from the water or by use of deterrent landscaping. Where this is not possible, safety barriers may be used.







**✓ Children's play areas are sited where they will be overlooked, safe and contribute to the amenities of the neighborhood**

Of all the different types of public realm, children's play areas tend to be the most contentious. All people will agree that it is vitally important that play areas are safe for children to use and that parents should feel comfortable about allowing older children to use the space without direct supervision. However, many play areas are badly located in areas where their use may cause nuisance to immediately adjoining residents.

As with all public areas, a key ingredient in making children's play areas safe to use is overlooking. Ensuring that play can be indirectly supervised by parents and other responsible guardians will mean that the play areas are both safe to use and – perhaps just as importantly - make parents comfortable about allowing their children to use the facility. Overlooking can be provided from within nearby homes or – more effectively - by other users of the surrounding public spaces.

As stated above, play areas located immediately adjacent to homes can affect residents' peaceful enjoyment of their homes. This is perhaps exacerbated by the tendency to site play areas in quieter areas of the development where there is a greater perception of safety. However, siting play areas in such locations – whilst reducing the likelihood of road traffic accidents – does mean that opportunities for natural surveillance from other users of the public realm are lost.

The ideal location for a children's play area would therefore be in a central area of the development that is well used by pedestrians but where traffic speeds are well managed to an acceptable minimum. The play area should be overlooked by nearby homes that are near enough for effective passive surveillance but far enough to prevent noise transmission above what would normally be expected in a busier part of the site.



↑ Children's play areas overlooked by housing provide a degree of security. The open layout of these two cases avoid the problem of acoustic nuisance which can occur in dense courtyard conditions.

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How safe, secure and enjoyable are the public areas?

✓ There is a clear definition between public, semi-private, and private space

The concept of defensible space formulated by Oscar Newman has been introduced in the previous Criterion relating to layout. It is also an extremely important consideration in the design and management of the public realm.

There are many examples of development where boundaries of public and private space have been deliberately blurred in an attempt to encourage greater level of communal life amongst residents. This noble aim has worked in some situations but in others has created tensions between owners of land that is regularly trespassed, and users of the public realm who are unclear about which areas are out of bounds.

Creating a sense of ownership and privacy in the communal spaces of a residential scheme encourages their regular use, and will help foster a pride in both the private and public realms.



7.4 – 7.5 privacy and security



In this sketch design, semi-private space shared by the dwellings is clearly separated from the public streets, either completely enclosed by terraces or separated by railings.



Private areas should be well delineated and should include at least one area for sitting out without being directly overlooked. On the whole this means that rear gardens should be bounded by a wall or fence of sufficient height to prevent people from looking in. Front garden areas and balconies will naturally expect a lower level of privacy – as part of helping to provide a good level of passive surveillance over nearby public realm – but should nonetheless clearly demarcate private space from public through provision of low planting, walls or semi-transparent boundary treatments such as railings.



↳ In Ballymun, poorly defined public and private space had been a problem of the original scheme. This scheme which forms part of the current regeneration clearly delineates defensible front gardens facing onto well overlooked public roads, with private gardens to the rear.

↑ This development in Dalkey, Co. Dublin encloses a public square while providing walled, private gardens to the rear.



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**7.8 – 7.9** communal open space

Public spaces, on the other hand, should be defined as

being public by their lack of restriction of access. In most situations this means that there should be easy access between and visual links to, for example, streets and green space. The exception to this is where play areas are located near to fast moving traffic where children will need to be prevented from running out into traffic.

In semi-private spaces where access is restricted to a small group of people, such as communal courtyards within perimeter blocks, the opportunity exists for a less stringent approach to defining private space. Since all users of the communal space should be aware of ownership boundaries, significant benefits can arise from encouraging residents to have a greater sense of ownership over communal areas.

Private open spaces at Adamstown, South County Dublin, add character to this communal space but are well separated, giving privacy and a degree of security. Good overlooking of the communal space helps foster a sense of ownership.





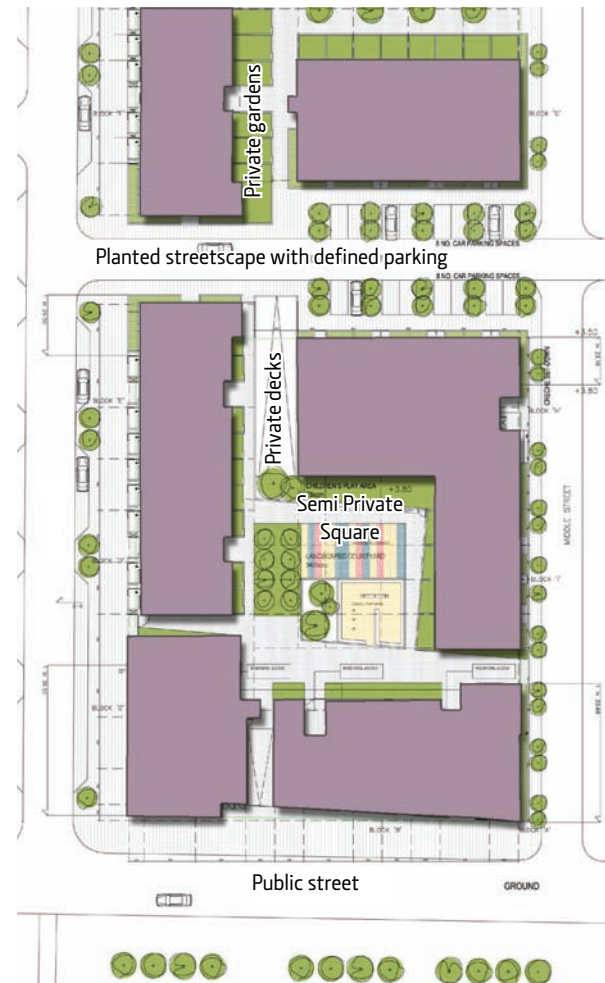
**✓ Roads and parking areas are considered as an integral landscaped element in the design of the public realm**

As described under Criterion 7, the philosophy behind Shared Spaces regards the car as a natural part of our streetscape which, with appropriate design and controlled speeds, need not conflict with the objective of creating pedestrian-friendly, attractive streets.

Many existing streets in cities and towns show how low to medium traffic movements can be combined with a pleasant residential setting, including on-street parking where street widths permit.

Aside from well-trafficked routes where car speeds will need to be higher, the public realm should be designed to accommodate cars as the guests of other users. This means that the focus of designers when making decisions about materials and landscaping of roads should be on the creation of attractive pedestrian friendly areas that are able to accommodate vehicular traffic moving at slow speeds. Traffic speed should be controlled through the layout of buildings and spaces rather than with remedial measures such as speed ramps or chicanes.

Parking areas should also be integrated into the design and layout of the slower movement routes in recognition that areas of parked cars can also serve to slow traffic.



**3.18 types of street**



↑ Clear consideration and definition of streets and parking areas in Hanover Quay.

← In Newcastle, South County Dublin, parking is treated as part of the landscaping in order to build the feel of a residential courtyard rather than a communal car park. The detail treatment (e.g. low kerbs and cobble paving) helps build the sense that this space has been designed for the needs of residents rather than cars.