

# GALWAY CLUSTERED HOUSING GUIDELINES

DOCUMENT MANIFESTO



1.1



GALWAY CLUSTERED HOUSING GUIDELINES

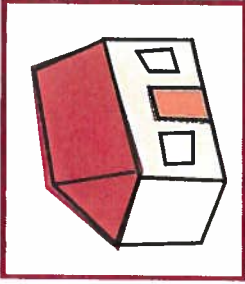
1.2

**Design Guidelines on Clustered Housing**

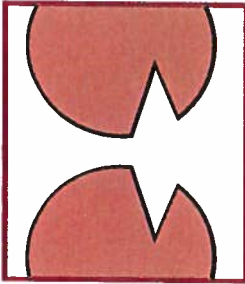
**Why?**

Combine the objectives of Galway County Council and developers to achieve:

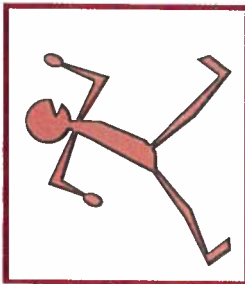
1. High Standard of Design



2. Clear Communication



3. Streamlined Process



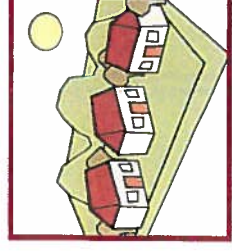
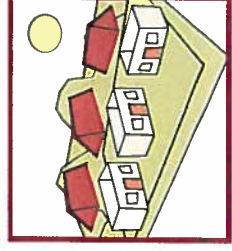
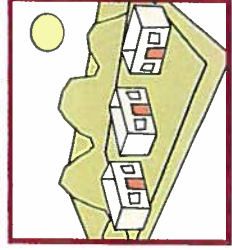
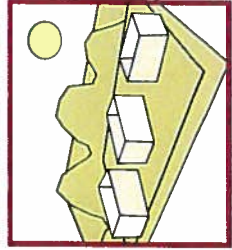
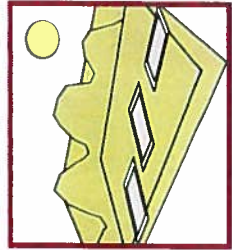
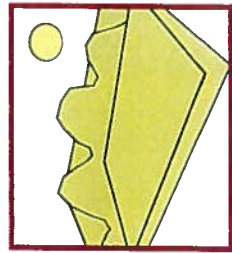
**When?**

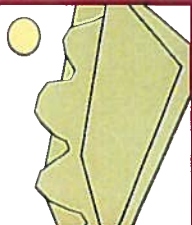
Building more than four houses at a time in Galway County

And

**How?**

Follow the requirements of the Planning Process, set out as key stages of a house construction project

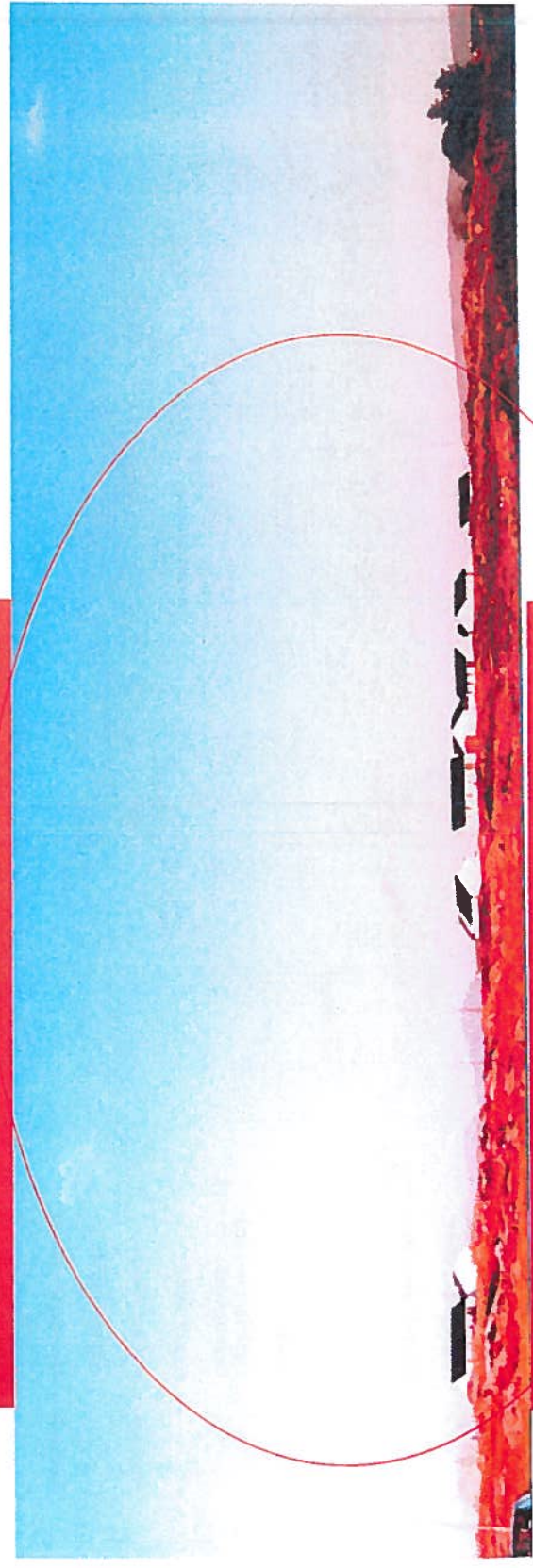




GALWAY CLUSTERED HOUSING GUIDELINES

2.1

GALWAY COUNTY - THE LARGER PICTURE





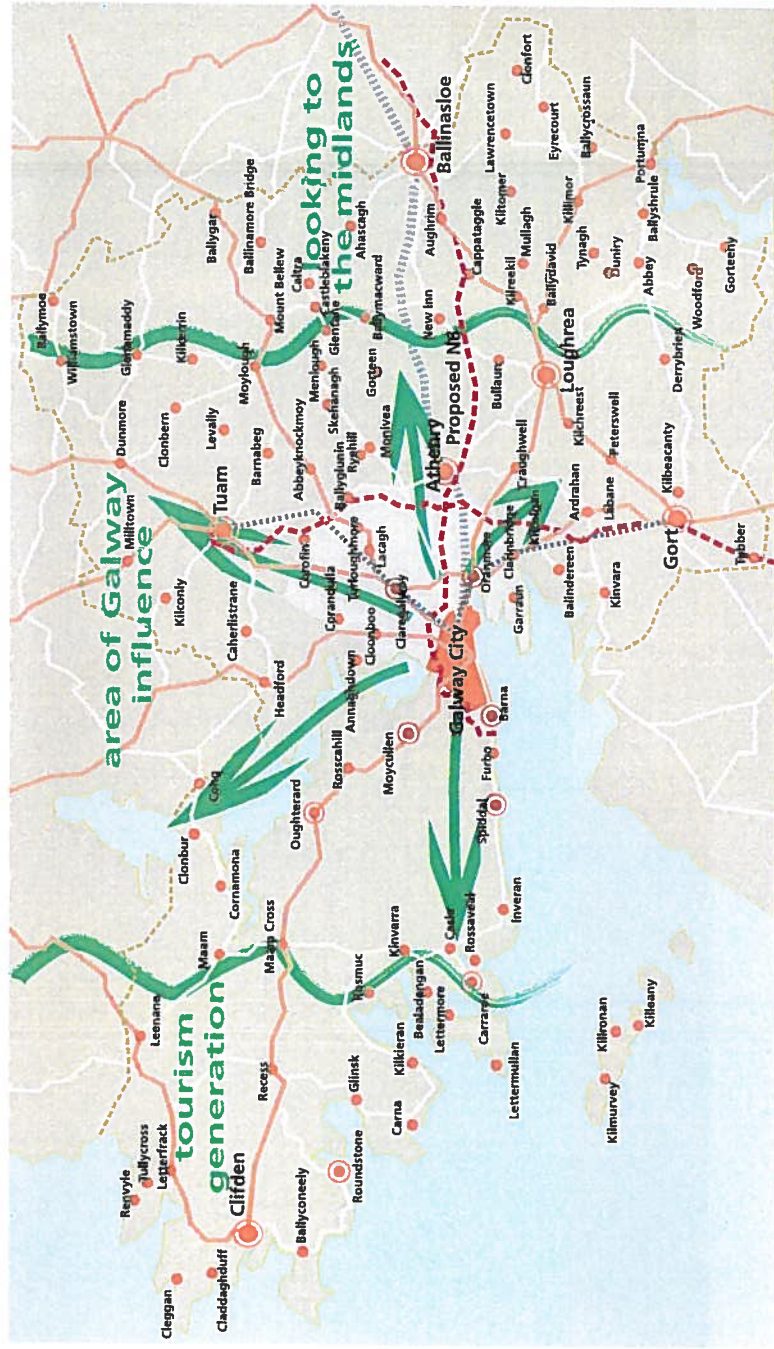
GALWAY CLUSTERED HOUSING GUIDELINES

2.2

Settlement Patterns

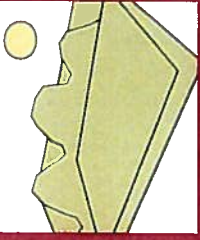
Key questions about the settlement patterns of towns in which development is proposed:

- Is the population growing or in decline?
- Does it have a high or low residential content?
- Does it have high or low density?
- Is it centralised or spread out?
- Is housing primarily one-off or clustered?
- Is there a strong local employment base?
- Do a high percentage of the residents commute to work?
- Is it located on a National Route, Secondary Route or rail line?
- Is it strongly influenced by tourism, Galway City or the Midlands?



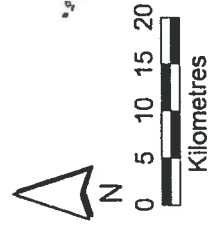
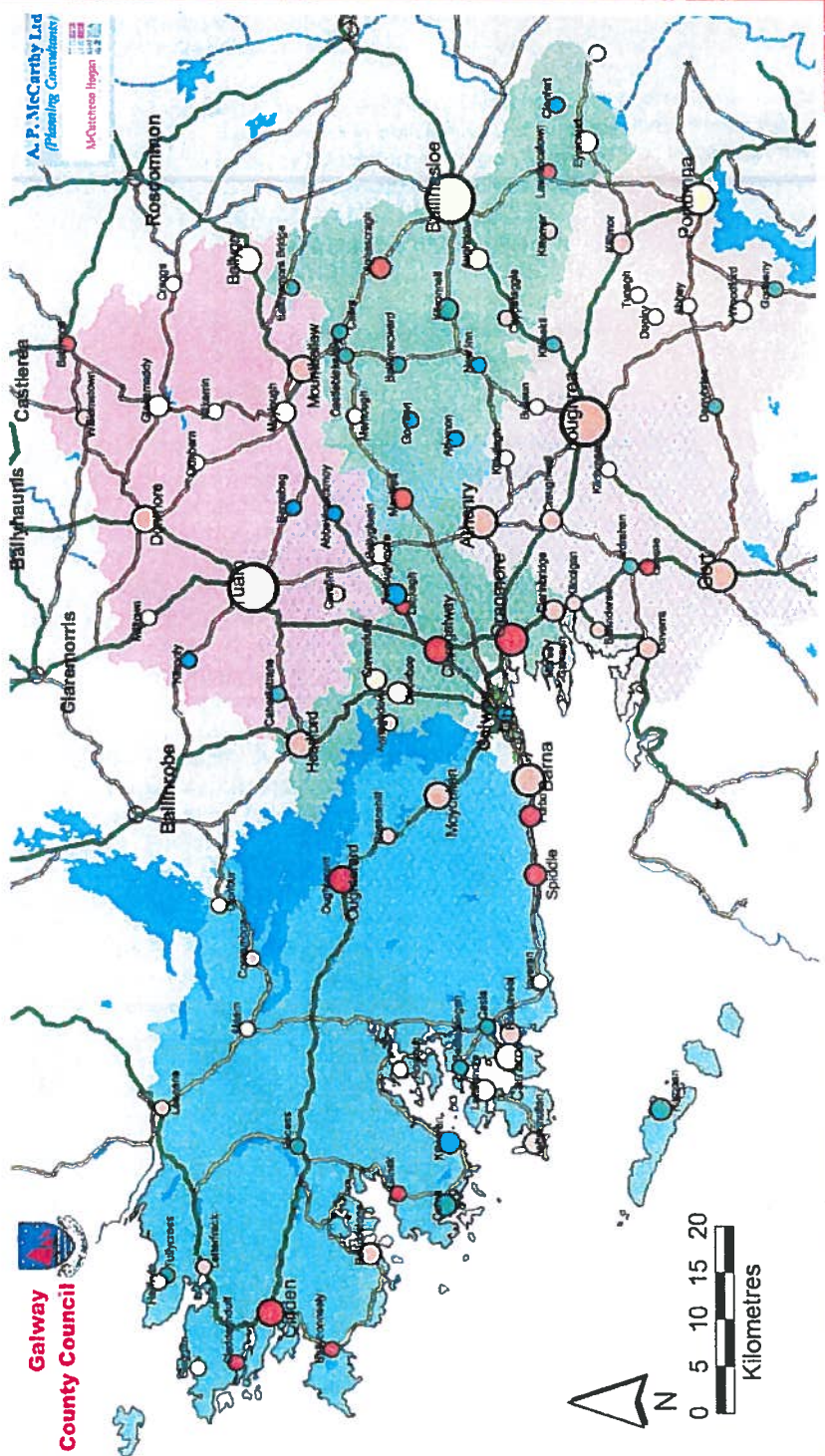
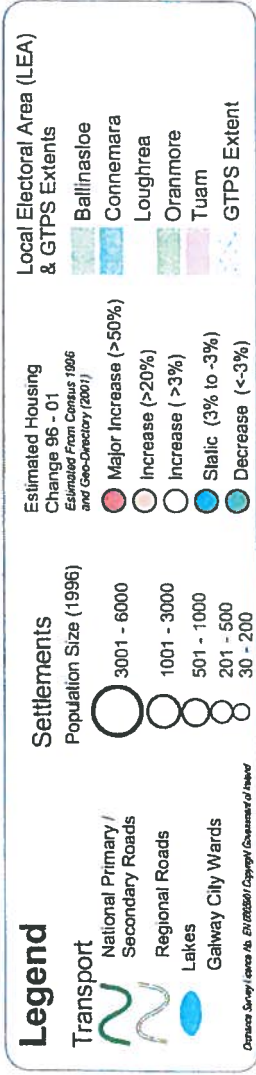
- Principle Towns with Development plans
- Satellite Towns Designated in Galway Development Plan
- Village with Development plan
- Village
- Significant Housing Development since 1996
- County Border
- National Route
- Secondary Route
- New Road Proposals
- Existing Railway (passenger)
- Transport Study Rail Recommendations
- \* As of December 2001

Galway is Ireland's second largest county, with an area of 6,149 km. sq.

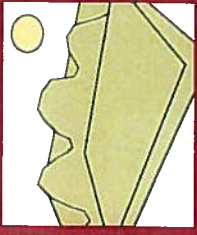


GALWAY CLUSTERED HOUSING GUIDELINES

Housing Changes in Principal Towns and Villages



**Galway County Settlement Strategy**  
 Galway County Council, A. P. McCarthy Ltd., McCutcheon Hogan

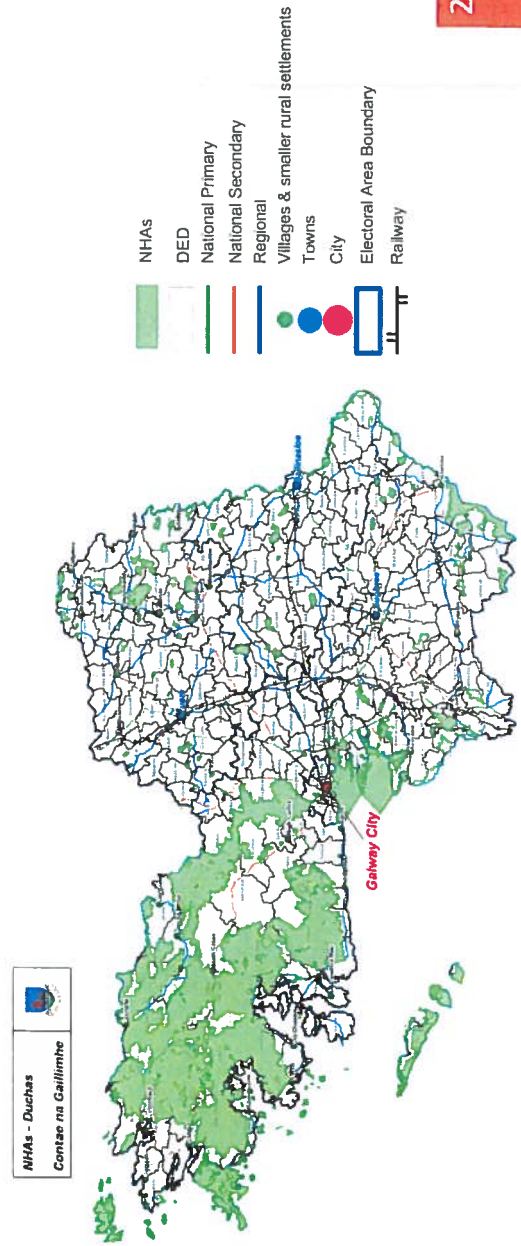


# GALWAY CLUSTERED HOUSING GUIDELINES

2.4

## Key questions about landscape in areas where development is proposed:

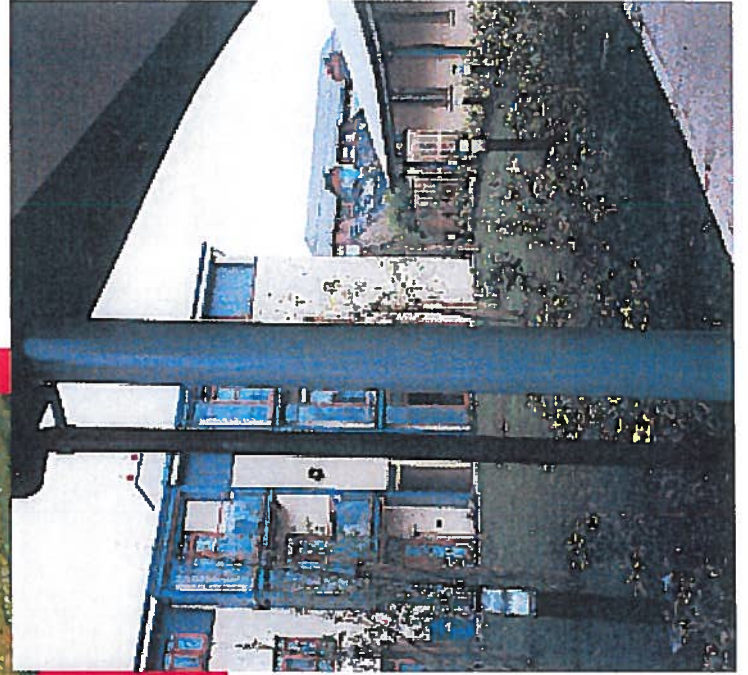
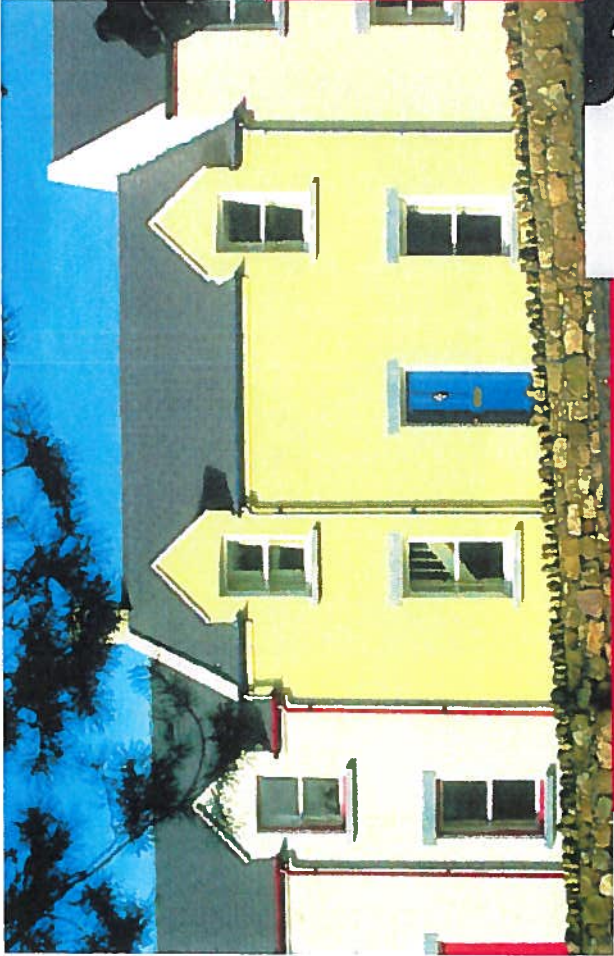
- Is it located in a National Heritage Area (NHA)?
- Is it located in a Special Protected Area (SPA)?
- Is it located on the coast, a lake or a river?
- Is it located in a Special Area of Conservation (SAC)?



Galway's coastline stretches to almost 2,000 km.

## Landscape

WHAT IS CLUSTERED HOUSING?



GALWAY CLUSTERED HOUSING GUIDELINES

# WHAT IS CLUSTERED HOUSING?

Clusters that are well integrated into existing settlements and respectful of the surrounding countryside will be the most desirable places to live, as they can provide:

- easy access to facilities and a pedestrian-oriented environment
- a sense of identity with and belonging to a settlement
- a high quality of housing design and community services provision

**Context:** Town Core

**Key Issue:** design that is appropriate to the streetscape and complements the local mix of uses.



new housing appropriate to the streetscape in Kinvara

**Context:** Town Environs

**Key Issue:** strong connections to the existing settlement.



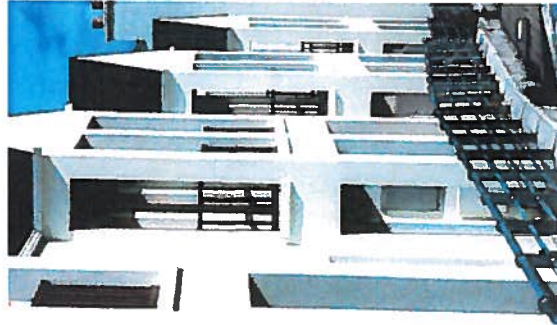
cluster in Lough Derg that contributes positively to the town environment - Murray O'Laoire Architects

**Context:** Town-Rural Edge

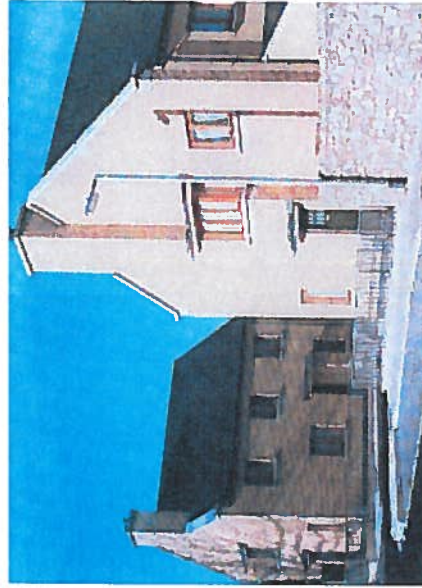
**Key Issue:** sensitivity to the landscape.



cluster well-situated at the town-rural edge in Carraroe



housing that provides street definition in Limerick - Murray O'Laoire Architects



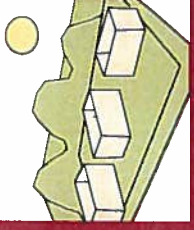
housing in Ballybrack that is well integrated into the existing settlement - National Building Agency



housing that is sensitive to the landscape in Westport - Paul Keogh Architects

## GALWAY CLUSTERED HOUSING GUIDELINES

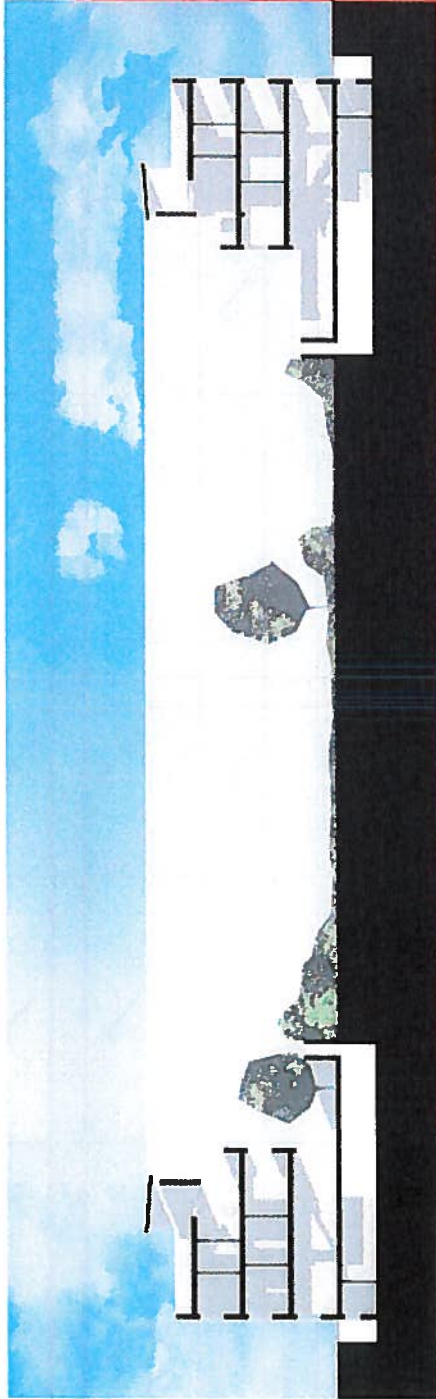




# GALWAY CLUSTERED HOUSING GUIDELINES

4.1

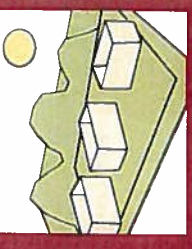
POLICY CONTEXT



# POLICY CONTEXT

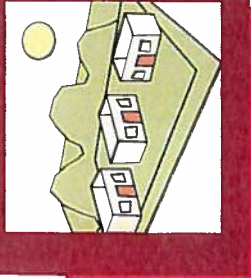
Clustered housing development should be informed by the national and county policy contexts. Below are listed key policy documents that a developer should consult with checkmarks indicate the areas to which they are most relevant.

	Natural Environment	Built Environment	Cultural Environment	Infrastructure	Local Resources
<b>National</b>					
National Development Plan, 2000-2006	✓	✓	✓	✓	✓
Residential Density Guidelines for Planning Authorities, 1999		✓			
National Spatial Strategy, 2002	✓	✓		✓	✓
Sustainable Development: A Strategy for Ireland, 1997	✓	✓		✓	
White Paper on Rural Development	✓	✓			
Draft Landscape and Landscape Assessment Guidelines	✓				
Draft Architectural Heritage Protection Guidelines for Planning Authorities			✓		
Planning and Development Act 2000	✓	✓	✓		
EPA Wastewater Treatment Manuals					✓
Operational Programme for the BMW Region, 2000-2006		✓		✓	✓
Building Regulations		✓			
National Children's Strategy, 2000	✓	✓	✓		✓
<b>County</b>					
Galway County Development Plan	✓	✓	✓	✓	✓
Galway County Housing Strategy, 2001-2006		✓			
Galway Transportation and Planning Study	✓	✓		✓	
Galway County Settlement Strategy	✓	✓		✓	✓
Galway County Landscape Strategy	✓		✓		
The Economic, Social and Cultural Development of Galway - 10 Year Strategy			✓	✓	✓
Town Plans	✓	✓	✓	✓	✓



# GALWAY CLUSTERED HOUSING GUIDELINES

PROCESS



GALWAY CLUSTERED HOUSING GUIDELINES

5.1

- client
- architect

DEVELOPER

PREPARATION

PRE-PLANNING

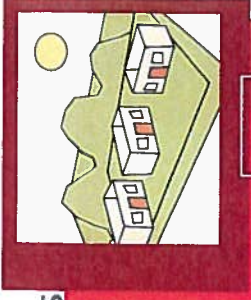
PLANNING APPLICATION

REVIEW AND APPEALS PROCESS



PLANNING AUTHORITY

- forward planning
- housing



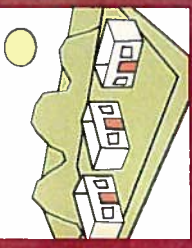
The planning application process entails a sequence of phases both for the developer and the Planning Authority. This document provides guidance for developers as they prepare the planning application for submission and the Planning Authority as they review it. Below are the four preparation stages in making a planning application.

D E V E L O P E R

<p>Review relevant policy documents as per the <b>Policy Context Matrix</b>. (p. 4.2)</p> <p>Assess the <b>suitability of the site</b> for development using the appropriate checklist. (p. 5.2)</p> <p>Consult Contact Centre.*</p>	<p>Conduct a <b>Context Survey</b>, using the appropriate checklist. (p. 5.3)</p> <p>Conduct a <b>Site Survey</b> using the appropriate checklist. (p. 5.4)</p> <p>Prepare <b>Concept Statement</b> (p. 5.5) using the Clustered Housing Design Criteria (pp. 6.1-6.24).</p> <p>Prepare <b>Preliminary Design Scheme</b> using appropriate checklist (p.p. 5.6-5.8) and the Clustered Housing Design Criteria (pp. 6.1-6.24).</p> <p>Meet with Planning Authority.</p>	<p>Compile <b>Planning Application Package</b> using the appropriate checklist. (pp. 5.9)</p> <p>Submission should reflect the checklists and the design criteria provided.</p>	<p>Provide additional information to the Planning Authority, as requested.</p> <p>Appeals considerations should reflect the checklists and the design criteria provided.</p>
<p><b>PREPARATION</b></p> <p>Make information accessible on:</p> <ul style="list-style-type: none"> <li>• Planning application process</li> <li>• Relevant policy documents</li> <li>• Clustered Housing Design Guidelines</li> </ul> <p>Contact Centre advises.</p>	<p><b>PRE-PLANNING</b></p> <p>Meet with developer to review:</p> <ul style="list-style-type: none"> <li>• <b>Context Survey</b></li> <li>• <b>Site Survey</b></li> <li>• <b>Concept Statement</b></li> <li>• <b>Preliminary Design Scheme</b></li> </ul>	<p><b>PLANNING APPLICATION</b></p> <p>Review <b>Planning Application Package</b> with reference to Clustered Housing Design Guidelines.</p>	<p><b>REVIEW AND APPEALS PROCESS</b></p> <p>Request additional information, if required.</p> <p>Issue notice of Intention.</p> <p>Process appeals.</p> <p>Make Final Decision.</p>

P L A N N I N G A U T H O R I T Y

\* The Contact Centre is the preliminary point of contact with the Local Authority



**Preliminary Site Suitability Checklist**

A site suitability checklist is designed to assess the extent to which the development of the proposed site responds to county and national policy. This preliminary assessment will determine whether the site is suitable for development. A concise report (limited to 2 A4 sheets) should be prepared that assesses the site's suitability for development. This should be presented during an initial meeting with the Contact Centre.

**Site Location**

- Does the Development Plan zoning for the Site match the zoning required for the proposed development ?
- Does the Site fall inside the development boundary of the town, generally indicated by the speed limits of the town ?
- How does Galway County Development Plan/Galway Settlement Strategy designate the town in which the site is located ?
- Is the Site located within any National Road Authority new route proposal ?
- Is the Site located on a public transport route ?

**Site Sensitivity**

- Is the Site within a NHA or SAC ? Has / should Dúchas be consulted ?
- Is the Site within a natural wildlife corridor ?
- Under the Galway County Development Plan / Galway Landscape Strategy, into which landscape category does the Site fall ?
- Is the Site located within the Gaeltacht area and thus warrant a Language Impact Statement ?
- Is the site within an Architectural Conservation Area?
- Is there any structure or attendant grounds of a structure listed on the Record of Protected Structures within the boundary of the site? If so, is it proposed to alter the structure or attendant grounds?

**Site Development**

- What, if any, community facility provision is intended in the proposed development?
- Are there any creche or playground facilities required for the proposed development under the National Children's Strategy?
- How will the proposed development accommodate the requirements of Galway County Housing Strategy for the provision of social / affordable housing, or land, or contribution in lieu ?
- How does the applicant intend to deal with site services (water supply, wastewater, etc.) ?
- What is the recommended density for this Site as per the Residential Density Guidelines for Planning Authorities, and what density is proposed for the Site ?
- Is the proposed development to incorporate a mix of uses ? If so, what mix is proposed ?
- What is the calculated requirement for parking? How is parking to be provided in the proposed development?

	yes	no	n/a

The number of households in Galway County is projected to grow by 7,800 households between 2003 and 2009. (County Galway Settlement Strategy, 2002)

## Context Survey Checklist

The Context Survey shows the *existing* environment surrounding the site. This checklist identifies the key areas that the developer should address in assessing its context. The contextual analysis should consist of a sketch of the site in relation to its context with explanatory notes at a scale of not less than 1:1250 and supplemented by a photographic survey.

Have you assessed the following?:

- Built Environment**
- size of town/settlement
- type/function of town/settlement
- shape of town/settlement
- density of surrounding development
- presence and character of other housing clusters
- overall spatial characteristics of town/settlement
- location of site relative to settlement
- important views to, from and across site

### Natural Environment

- topography
- water bodies/seascapes
- geological features
- vegetation
- wildlife habitats
- floodplains

### Cultural Environment

- archeological and heritage sites and monuments
- use of the Irish language

### Infrastructure

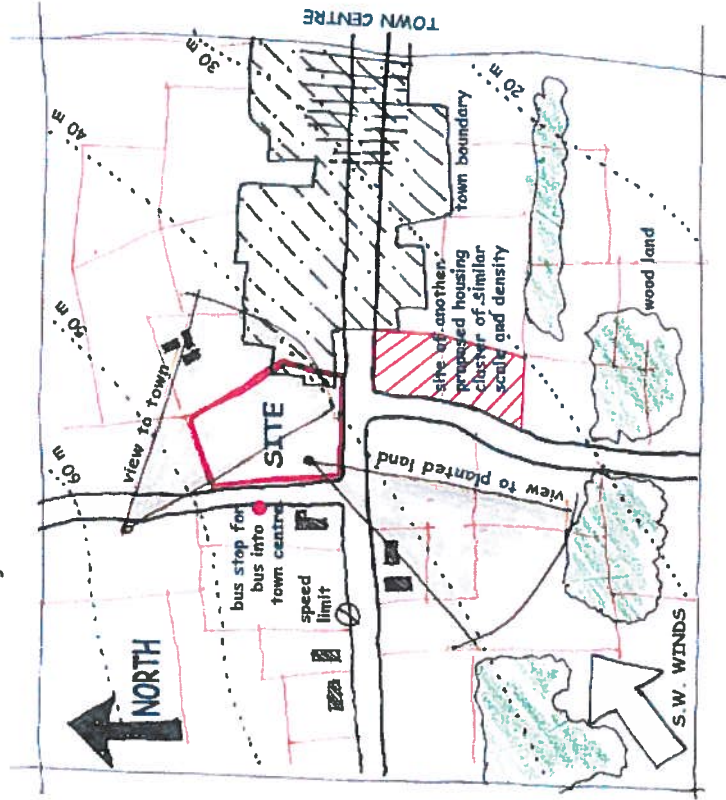
- road network
- public transportation
- water supply
- waste water facilities

### Local Resources

- retail
- schools
- religious and community facilities

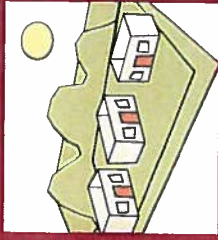
yes no n/a

### Context Survey Sketch



Explanatory notes for the above sketch:

- Medium-density, linear village
- Satellite village to city with high commuter population
- Some retail and community facilities in town
- Site located on major approach road
- Town water supply and waste water facilities adequate to support development



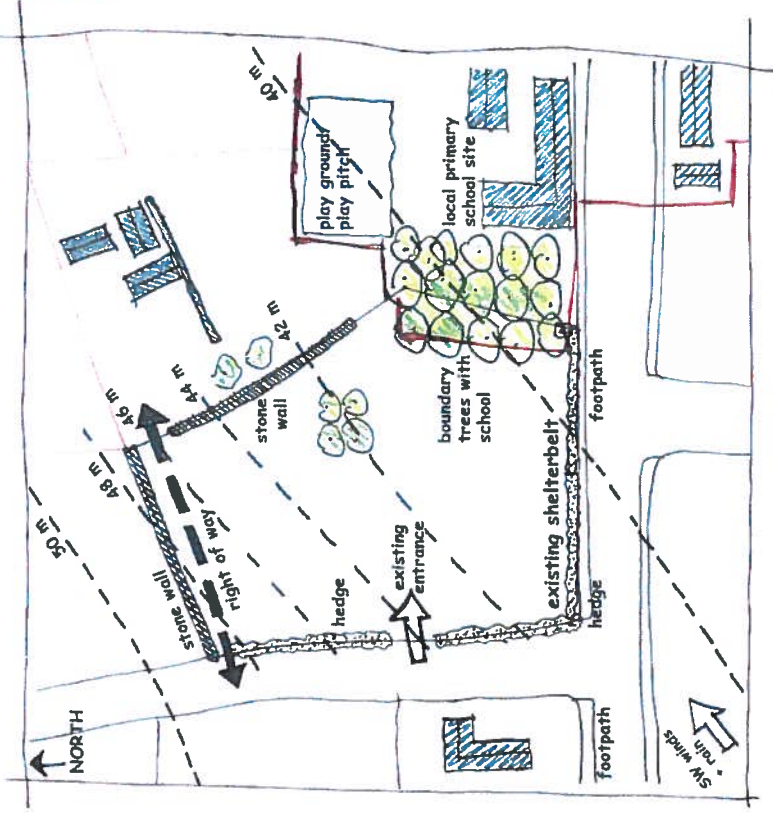
## Site Survey Checklist

A site survey examines the existing visual and physical character of a site. This should be represented by a sketch of the site with explanatory notes at not less than 1:500 and supplemented by photographs. This checklist identifies the key questions that should be addressed in evaluating the site characteristics.

Have you assessed the following?:

	yes	no	n/a
<b>Natural Features</b> <ul style="list-style-type: none"> <li>• slopes (contour and heights)</li> <li>• natural water bodies</li> <li>• geological features</li> </ul>			
<b>Site Features</b> <ul style="list-style-type: none"> <li>• buildings (including identification of protected structures)</li> <li>• walls</li> <li>• pavings</li> <li>• vegetation (type and location)</li> <li>• notable boundary features</li> </ul>			
<b>Connections</b> <ul style="list-style-type: none"> <li>• pathways and entrances to site</li> <li>• existing circulation patterns across and around site</li> <li>• existing or potential focus points within or near the site</li> <li>• way-leaves and easement strips that cannot be built on</li> </ul>			
<b>Microclimate</b> <ul style="list-style-type: none"> <li>• exposure to wind and rain</li> <li>• existing shelter belts from wind and rain</li> <li>• solar paths</li> </ul>			

### Site Survey Sketch



Explanatory notes for the above sketch:

- Slight site slope - highest in north-west and sloping down to south-east
- Hedging along west and south of site
- Stone walls along north and east of site
- Mature birch trees serve as boundaries with school site
- One existing entrance to site
- Wind and rain come from south-west

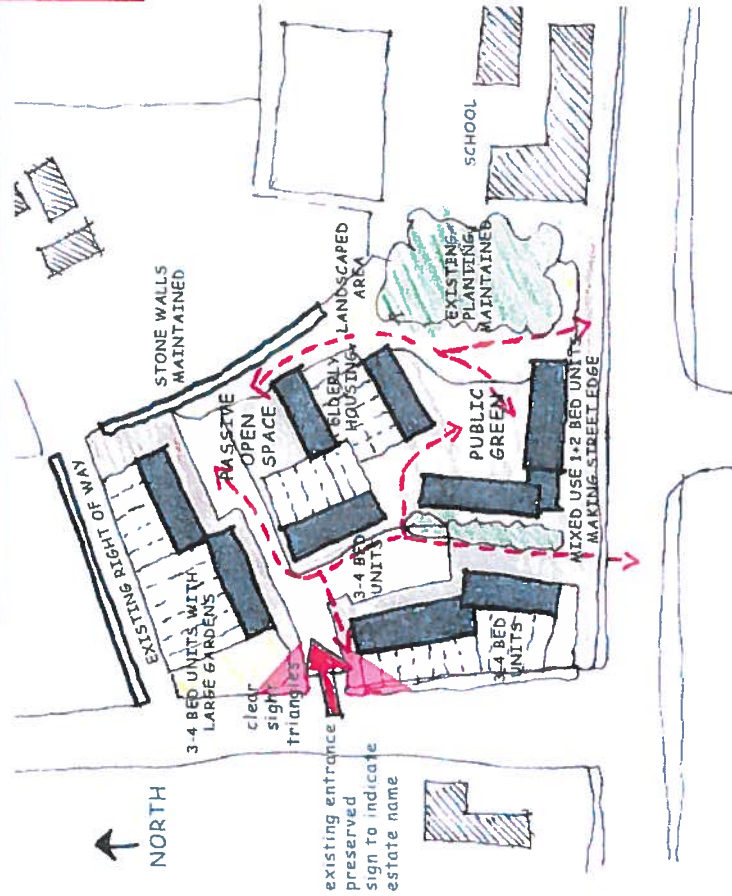
## Concept Statement

The Concept Statement is an initial look at the opportunities for site development. It should address how the design will make the most of both the site and its context by:

- addressing relevant policy, standards and regulations
- explaining design principles and setting out the quality objectives for the development
- showing the overall form of the proposed development

The Concept Statement should reflect the Design Criteria outlined in pages 6.0-6.24. It should include a site plan at a scale of no less than 1:500 and brief explanatory notes that show:

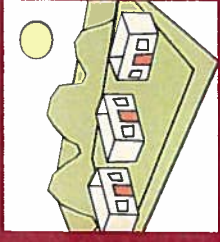
- access points
- primary streets and pedestrian/cycle paths
- major green spaces
- landmarks
- natural features to be retained
- public lighting
- orientation and response to climatic conditions
- views to and from the site
- heritage or building conservation areas with proposed changes (if applicable)
- the cluster name



Explanatory notes for the above sketch:

- Retain existing birch trees to preserve natural barrier with the school and protect from climatic conditions
- Red arrows indicate pedestrian/cycle routes with lighting, provide safe and secure circulation within site and link to the adjoining context
- Public Green serves as an orientating space with landmark (indicated with \*)
- 1 and 2 bedroom units are above retail/office to provide a mix of uses
- Passive Open Space is sheltered and quiet and could have a playground
- Public Open Spaces and pathways are subject to passive surveillance
- The eastern wall and hedging to the South and West are preserved to retain existing site boundary and shelterbelt





### Preliminary Design Scheme Checklist

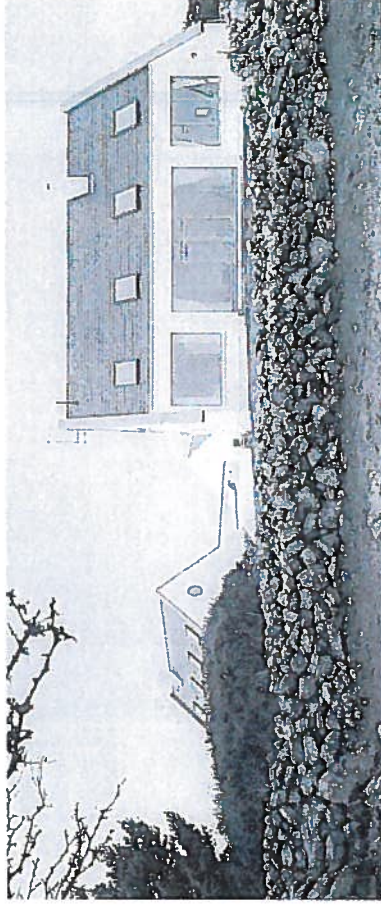
The preliminary design scheme should provide a detailed picture of the site layout and settlement compatibility, public amenities and dwelling design. It should use the **design criteria (pp. 6.1-6.24)** to respond to the following questions and provide the necessary outputs as listed:

#### Layout and Settlement Compatibility

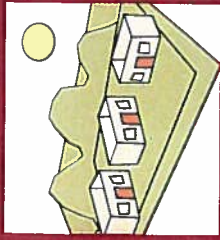
- Does the proposed development fit into the landscape?
- Are natural desire lines and key views to, from and across the site preserved?
- Are pedestrian pathways and cycle routes safe and secure?
- Does the proposed development preserve important existing structures, walls, pavings and planting and build compatibly with them?
- Are the number of entrances to the site limited and clearly defined?
- Does the ratio of road width to building height create a sense of enclosure?
- Is there a hierarchy of distinctive spaces and structures?
- Are dwellings orientated to create a comfortable microclimate?
- Does planting, existing and proposed, provide shelter to open spaces from wind and rain?
- Does the site arrangement adhere to the local pattern of streets, buildings and spaces?
- Is density appropriate for the particular location?
- Do the proposed heights, massing, density and layout respect the existing settlement and the cluster's location relative to it?
- Is there a range of house types?
- Is there an appropriate mix of use within the cluster and/or nearby that provides adequate facilities and resources?
- Is the development phased to minimise physical and visual disruption to adjoining settlements and the natural environment?
- Does the name of the proposed development respect the cultural environment, including the Irish language, if applicable?

To be provided:

- A detailed site plan at 1:500
- Site sections at 1:500



Mincloon - Simon J. Kelly and Partners  
example of clustered housing that respects the West Galway Landscape



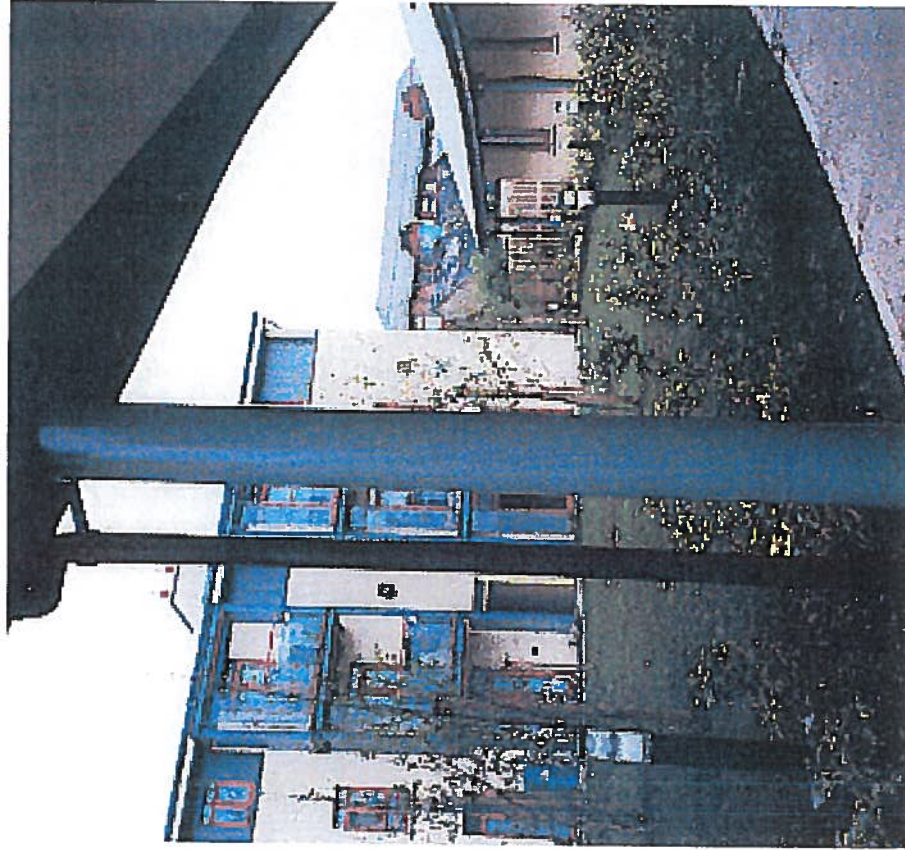
### Preliminary Design Scheme Checklist

#### Quality Public Amenity

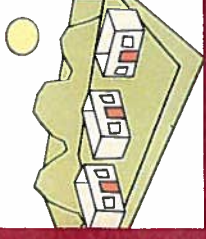
- Are there a variety of open spaces of clear function and character?
- Are open spaces located to take advantage of existing planting, wildlife habitats, water bodies and/ or seascapes?
- Are open spaces well overlooked?
- Is a management structure for the upkeep of public areas in place?
- Are childcare facilities provided, if required?
- Are water and waste water facilities adequate?
- Are recycling facilities and public lighting included?
- Are traffic calming measures and clear sight lines at entrances in place ?
- Are existing way-leaves and easement strips respected?
- Is parking located in such a way that it does not dominate the space between buildings and the road?

To be provided:

- Plans and sections of the proposed open spaces at between 1:100 and 1:500, depending on the size of site



Naas - Kelly and Cogan Architects



### Preliminary Design Scheme Checklist

#### Dwelling Design

- Do materials and detail respect and compliment the local setting while remaining compatible with the contemporary context?
- Is there a range of dwelling layouts to cater to a variety of user profiles?
- Are internal spaces of comfortable proportion, well ventilated and in receipt of adequate natural light throughout the day?
- Is sufficient private open space (that is easily accessible, well sheltered and in receipt of adequate sunlight) provided with each house unit?
- Are supplementary semi-private open spaces provided?
- Does the internal layout of the dwelling allow for adapting and adjusting?
- Does the energy rating of the dwelling correspond with recommended guidelines?

To be provided:

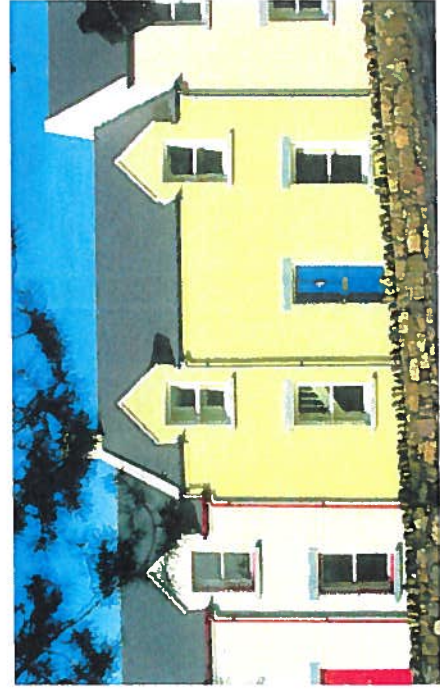
- Plans and sections of each house type at 1:100



Kinsale - Diamond Redfern Anderson  
appropriate cluster to coastal settlement

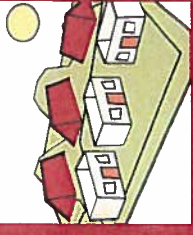


Limerick - Murray O'Laoire Architects



Lough Derg - Murray O'Laoire Architects





## DESIGN CRITERIA

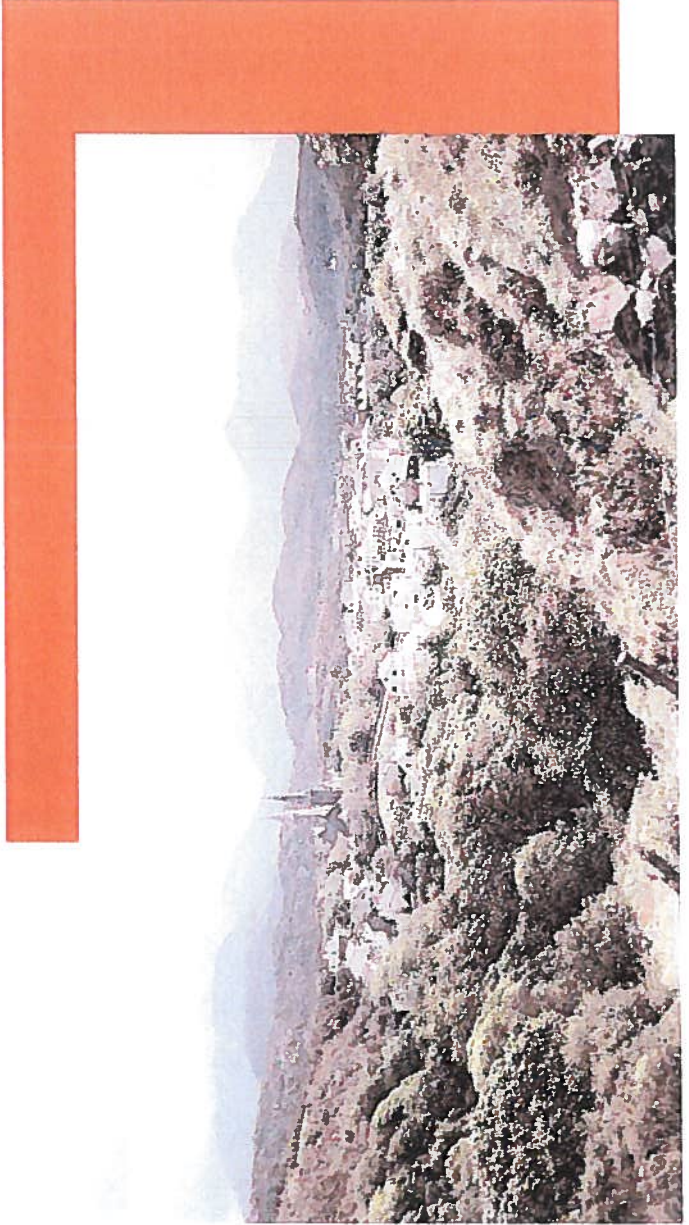
The following section introduces and explains the range of issues which influence the successful design and construction of residential clusters. They are grouped under the following three categories:

### LAYOUT AND SETTLEMENT COMPATIBILITY

### QUALITY OF PUBLIC AMENITY

### DWELLING DESIGN

Compliance with these guidelines will aid the preparation of a development proposal that consciously, deliberately and sensitively integrates itself into its social, physical and cultural context.



## LAYOUT & SETTLEMENT COMPATIBILITY

### Site Topography

Wherever possible, buildings, footpaths, streets, sewers and other watercourses should be aligned to follow slope contours. This allows building profiles to grow out of the ground, minimises cut and fill and enables natural gravity-flow drainage to be utilised.



Roden Street - Murray O Laoire Architects

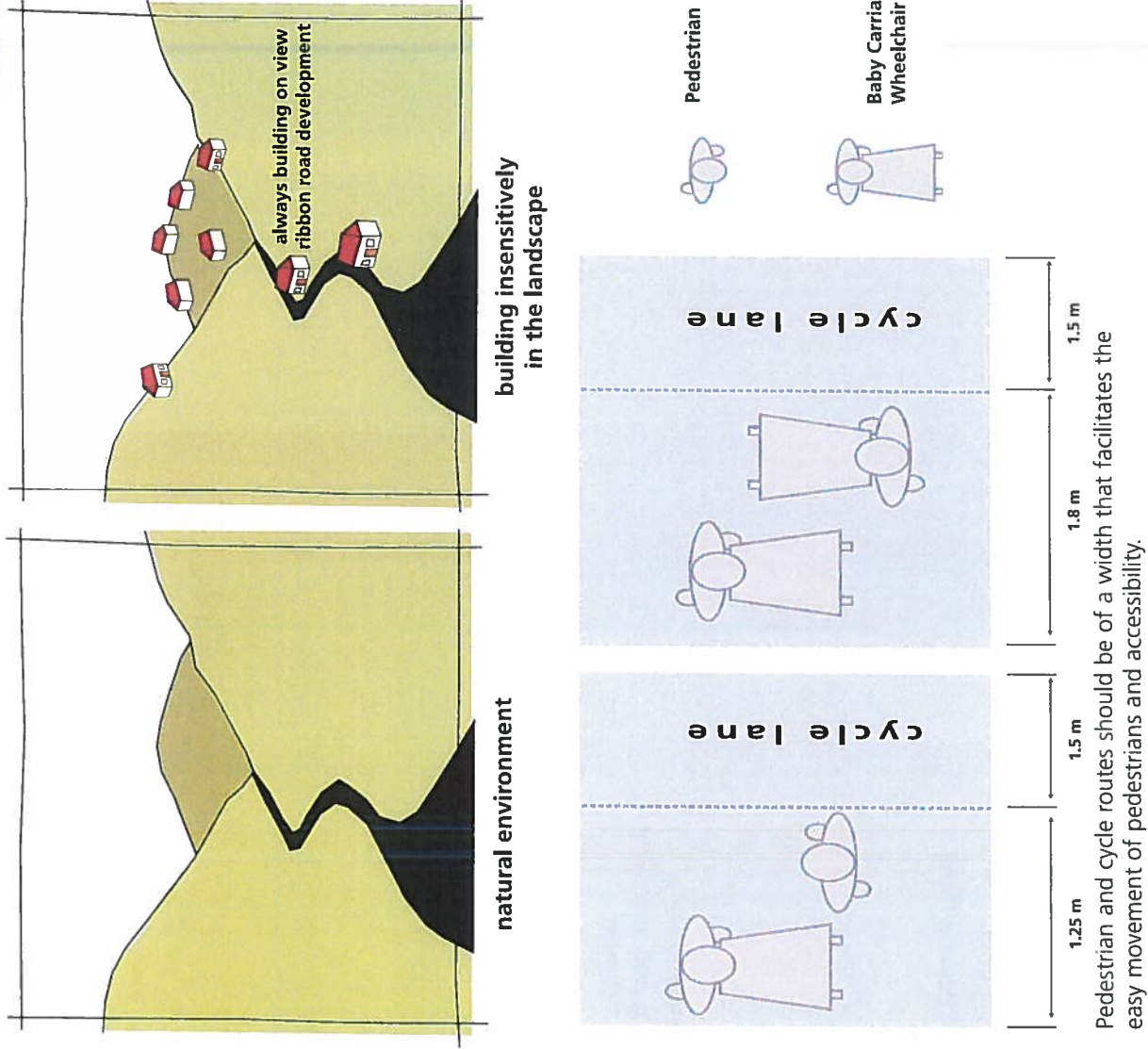
### Connections- Movement- Circulation Patterns

Residential cluster layout should work with and reinforce natural desire lines to destinations within and beyond the site. This can be achieved by formally establishing a network of accessible, safe and secure pedestrian and cycle routes.

## DESIGN CRITERIA

# GALWAY CLUSTERED HOUSING GUIDELINES

6.2



## Continuity and Enclosure

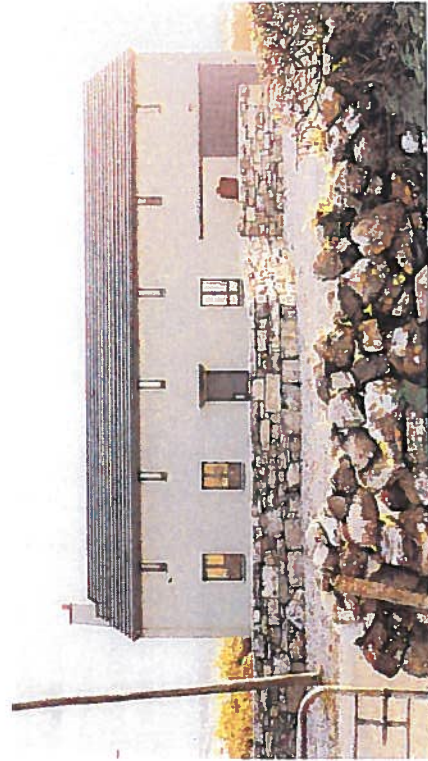
Housing clusters must balance a feeling of continuity with a sense of enclosure.

Continuity assures that the development is well-integrated into its surroundings. It can be achieved by:

- limiting the use and number of entrance roads
- arranging buildings so as to address surrounding public spaces, natural amenities and development
- retaining existing buildings and site features (such as stone walls and pavings) and providing them with a living use
- maintaining a common building line



Creating a sense of enclosure, unity and a common building line - appropriate to town core settlement

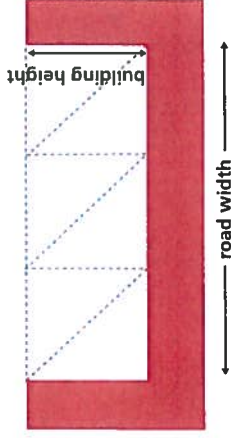


Modern reinterpretation of the vernacular suitable to West Galway successfully retaining and integrating traditional site features - Grafton Architects

## DESIGN CRITERIA

Enclosure helps to create a sense of place in a cluster. It can be achieved by:

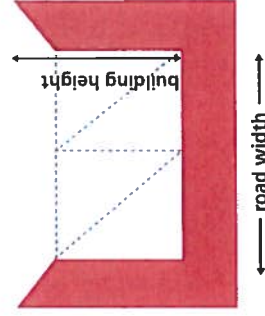
- assuring that building heights and public spaces are appropriately scaled
- providing spatial definition



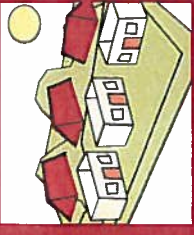
**A 1:3 ratio is generally effective for creating a sense of enclosure**



**Spatial Definition can be created by breaking up road widths, as with a tree canopy**



**Increasing building heights can also create Spatial Definition**



## LAYOUT & SETTLEMENT COMPATIBILITY

### Legibility

New housing clusters should have a legible relationship to their surroundings. They should complement and enhance adjacent buildings, routes and spaces.

Clusters should also be legible internally. They should have a hierarchy of distinctive spaces and buildings and provide orientation points. Users should feel inclined to use the network of routes and open spaces provided.

### Site Context

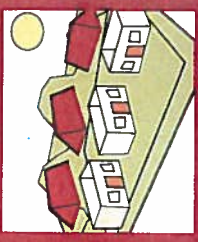
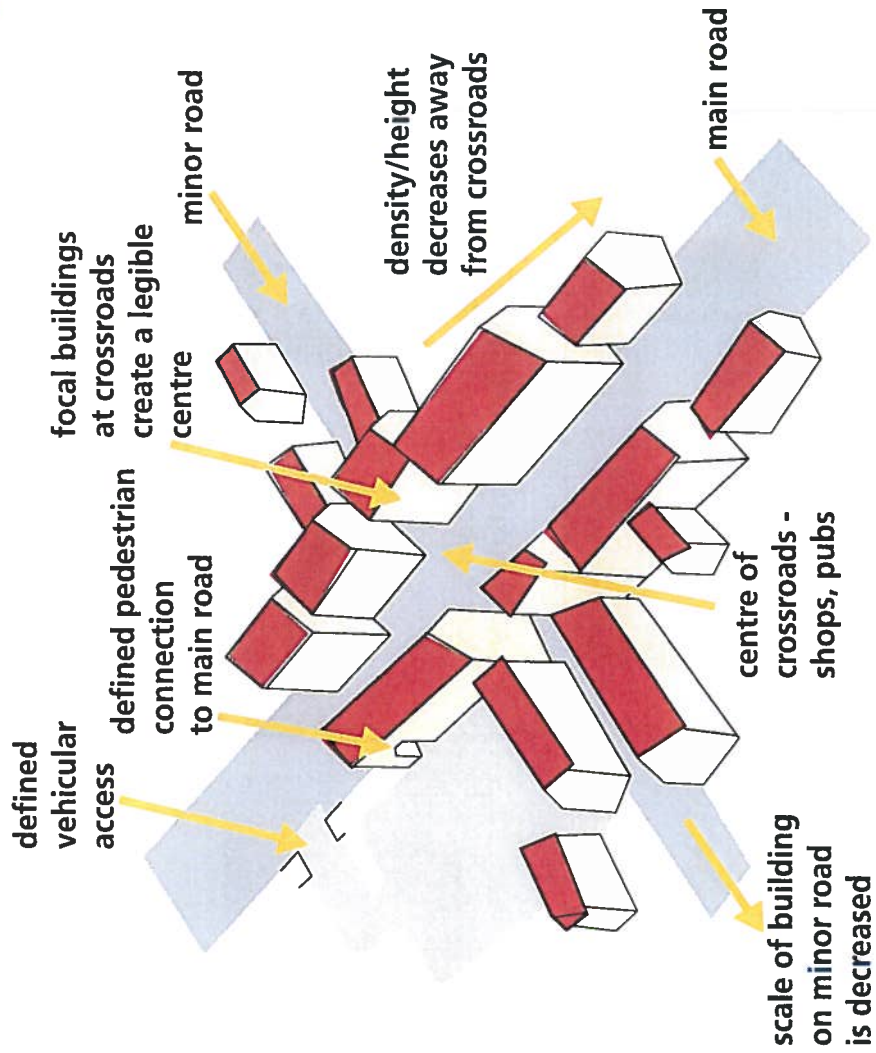
Each town/village has a particular pattern of built area and open space and a hierarchy of circulation networks. This morphology should influence the site layout of a housing cluster to ensure it is compatible with its surroundings, enhancing the enjoyment value and appearance of the physical environment.



roadside cluster, Mount Shannon Housing - Murray O Laoire Architects  
appropriate settlement for edge of town core in East and West Galway

## GALWAY CLUSTERED HOUSING GUIDELINES

6.4





## LAYOUT & SETTLEMENT COMPATIBILITY

### Microclimate (Orientation)

The design and arrangement of buildings on a site results in the creation of a microclimate, influencing the effects of temperature, sunlight and wind movement. Certain orientations and design can enhance comfort on exposed sites and maximise the potential of daylight and solar gain.

#### Sunlight:

To optimise the potential of daylight (thus reducing the need for artificial lighting) and passive solar gain (thus reducing the need for heating) buildings should be orientated within 15-20 degrees of due south, collecting light and heat in an east-west path throughout the day. (30 degrees of due south will give 90-95% efficiency)

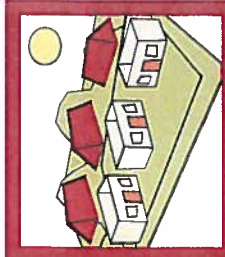
Careful design incorporating photovoltaic modules (that convert solar radiation directly into electricity) and/or active solar panels (that heats water) can ensure that the potential of sunlight is maximised.

#### Wind:

Wind can have both positive and negative impacts on dwelling clusters. Mild breezes can ventilate buildings and improve comfort whereas winter winds can increase heat loss.

The key factor in designing for wind is the site arrangement. A dense and highly integrated pattern of buildings and spaces encourages air movement to smooth over at roof level. In contrast, largely spaced arrangements where winds are forced into open spaces making them potentially uncomfortable.

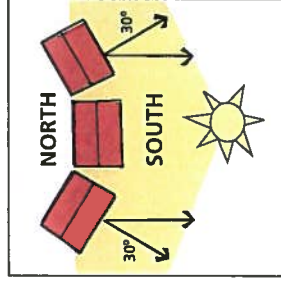
For efficient control of the internal wind patterns, a dwelling is best positioned with gables to the prevailing winds.



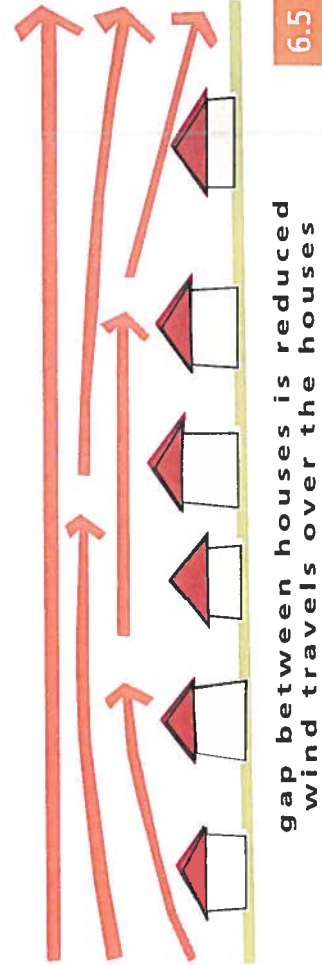
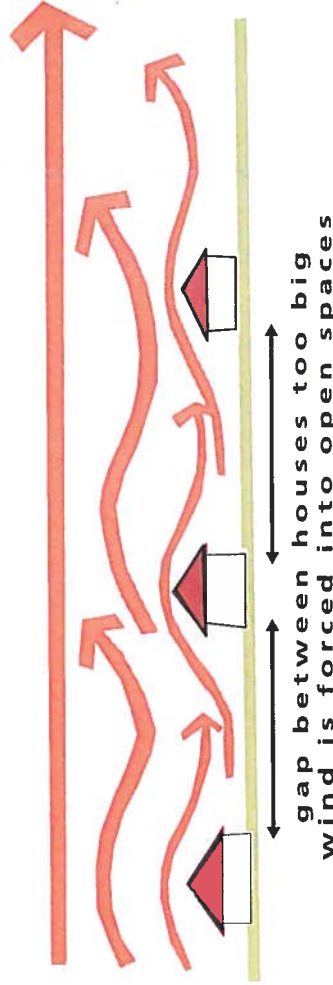
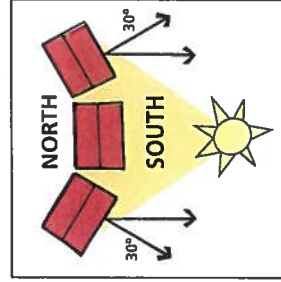
## GALWAY CLUSTERED HOUSING GUIDELINES



SUMMER



WINTER



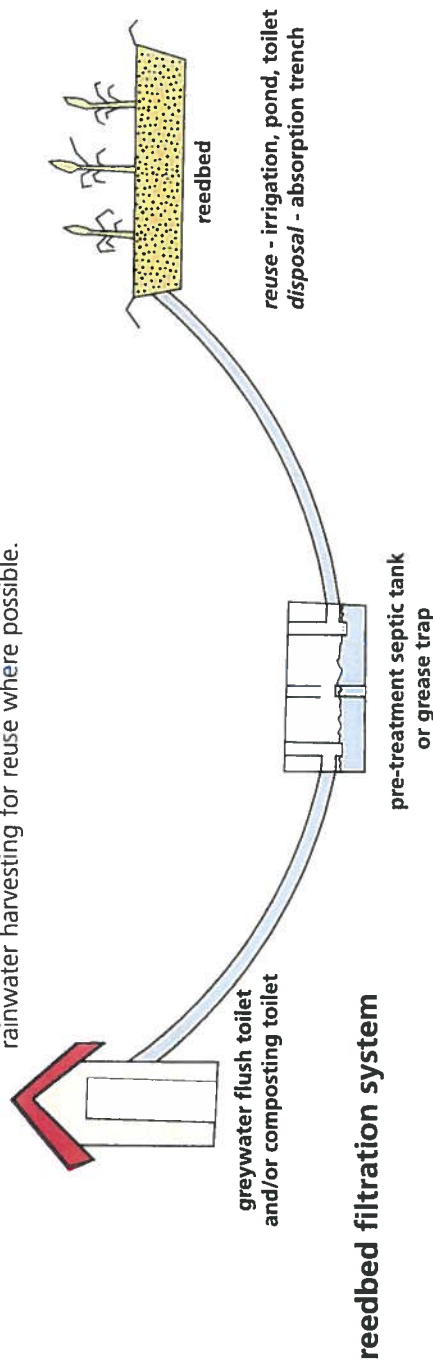
## LAYOUT & SETTLEMENT COMPATIBILITY

### Microclimate (Orientation)

#### *Rainwater run-off:*

Where sufficient land is available, grey water treatment systems, such as reedbed filtration, can reduce the load on the sewage infrastructure and the environment. Such natural systems can form an attractive landscape feature, adding amenity value to a site, as well as providing scale and shelter to open spaces.

Surface water from large developments can overload small watercourses. An attenuation pond may be required. Provision should be made for rainwater harvesting for reuse where possible.



### reedbed filtration system

### Planting

Carefully located planting can serve many different functions. Generally, provision should be made for two trees per dwelling in the proposed housing cluster.



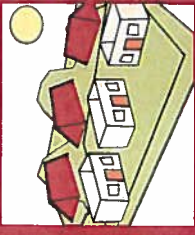
Shelter belt planting can filter the force of winds upwards over the roofs of neighbouring dwellings and open spaces. Equally, it protects from driving rain and provides shade in summer. appropriate settlement for town environs setting in East Galway



Planting can be used to harmonise new buildings with the surroundings, break down the scale of a large site and provide privacy between dwellings.



Planting encourages wildlife and helps to establish a continuity of natural habitats after a site is developed. appropriate settlement for town rural edge in East Galway



## LAYOUT & SETTLEMENT COMPATIBILITY

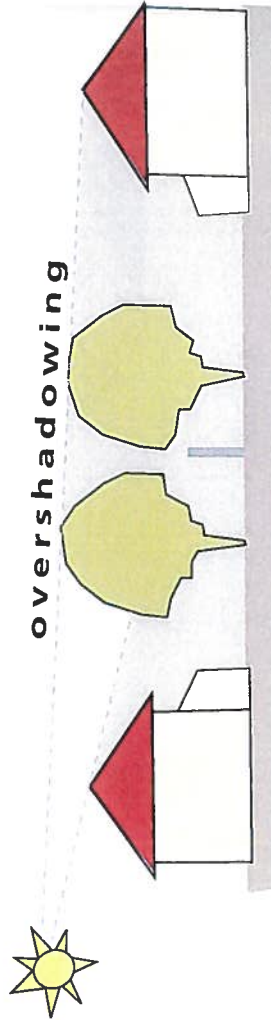
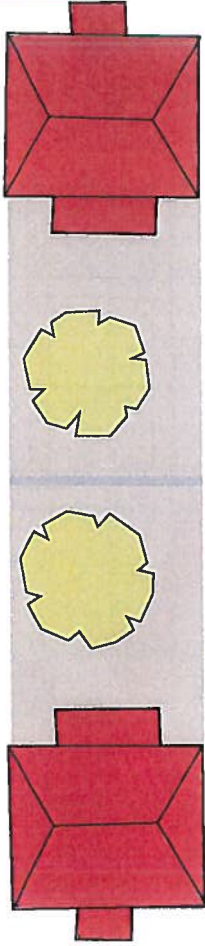
### Overlooking/ Overshadowing

Dwelling layout should strike a balance between overlooking and overshadowing. The overlooking, or passive surveillance, of outdoor spaces increases the safety of the people who use them. At the same time every dwelling should enjoy freedom from overshadowing to prevent undue observation and loss of light.

Appropriate distances between dwellings should depend on a number of factors. The regulatory minimum distance of 22m from facing first floor windows can be reduced by manipulating the design parameters of a house, particularly by the use of side elevations where appropriate.

Planting, particularly in boundary conditions, should also balance the need for privacy with the requirements for light penetration.

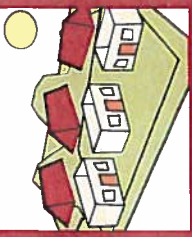
\* 22 m minimum\*  
from first floor  
facing windows



planting too  
high



height of planting  
allows for light penetration



## LAYOUT &amp; SETTLEMENT COMPATIBILITY

## Scale

*Height:*

The appropriate height for a new development depends on the surrounding buildings and spaces. Proposed heights should generally reflect the heights of contextual buildings.

When proposing a building of a higher scale than the surrounding context, the following issues must be addressed:

- the degree of overshadowing
- the degree of overlooking and resulting loss of privacy
- the extent to which there is a disruption in the scale of an existing streetscape or landscape

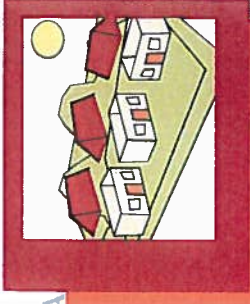
Certain buildings, such as those with civic and community significance, should generally be taller than residential buildings.



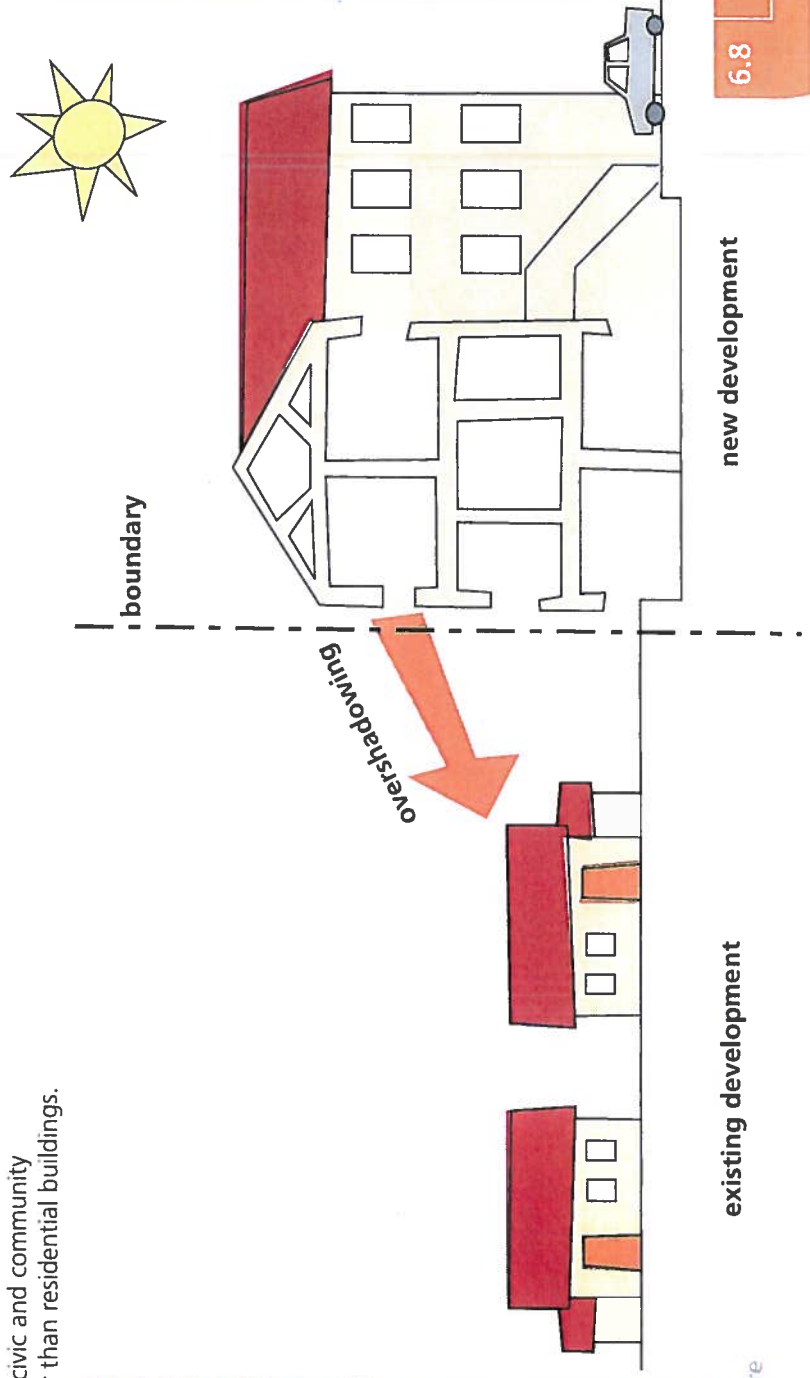
Kelso Apartments - Murray O Laoire Architects

*Massing:*

Massing refers to the combined effect of form and volume. Particular attention should be paid to break down the appearance of large masses. Breaking down massing is important in creating a sense of human scale and contextual continuity. Larger massing should be associated with certain locations, such as, at an entrance, a corner or a public open space.



## GALWAY CLUSTERED HOUSING GUIDELINES



## LAYOUT & SETTLEMENT COMPATIBILITY

### Diversity of Housing Types

New residential developments should include a range of housing types to create a visually interesting aesthetic. The various housing types should be arranged so as to compliment each other the site topography and the context, while providing some contrast in form and scale.

Each residential development should accommodate a number of forms, including:

- detached
- semi-detached
- terrace,
- back-to-back terrace

taller heights to corner sites

coherence of window type and sizes

allowance for views through development

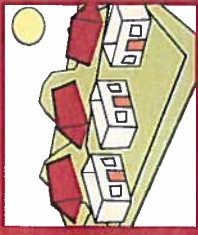
higher development to rear of site

lower development allows views

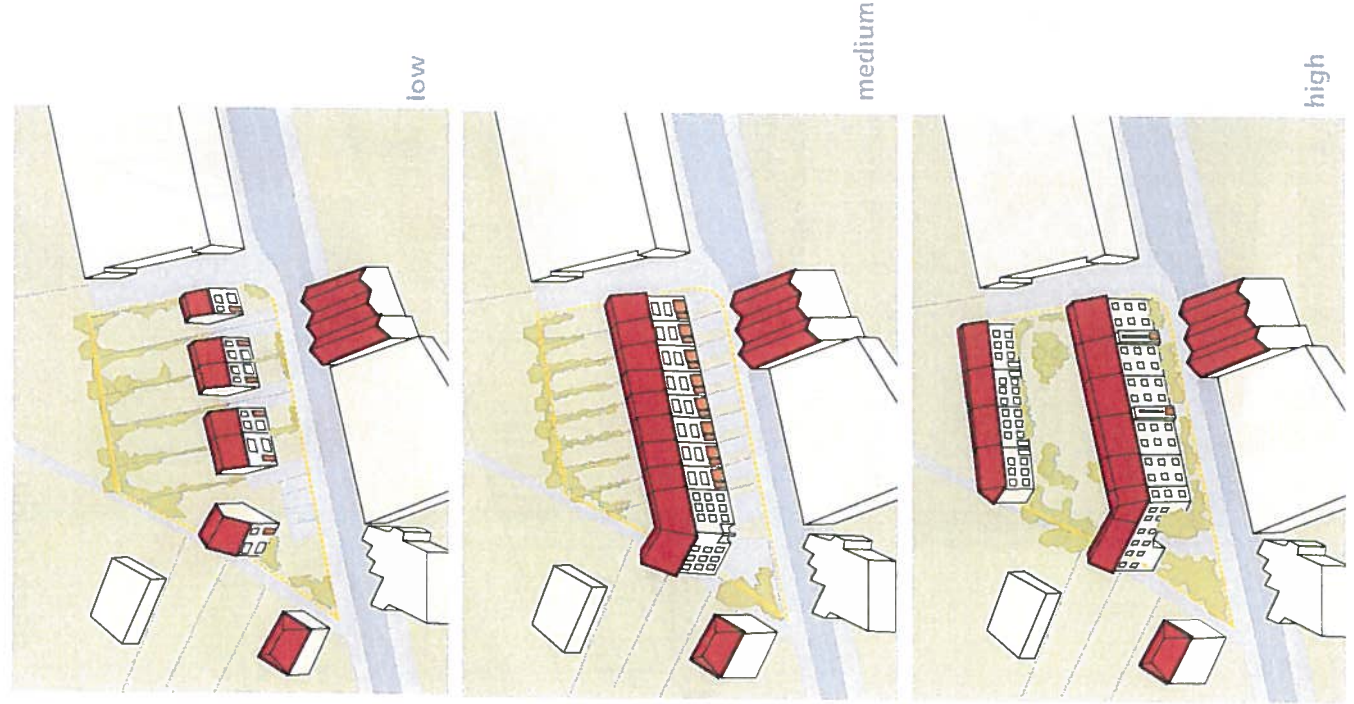
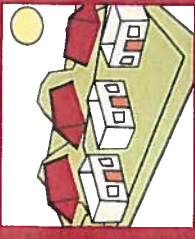
entrance to development framed

south facing amenity areas

views through to road/view



Clondalkin Housing - Murray O Laoire Architects



## LAYOUT & SETTLEMENT COMPATIBILITY

### Density (plot ratio/site coverage/dwellings per hectare )

Plot ratio, dwellings per hectare and site coverage are the three indices used to express density.

Plot ratio expresses the proportion of floor space to the site area. The following ranges are recommended as indicative plot ratios, by *Residential Density, Guidelines for Planning Authorities, 1999*:

- City/ Town Centre/ Brownfield - plot ratio 1.0 - 2.5
- Inner Suburban - plot ratio 0.5 - 1.0
- Outer Suburban
  - In close proximity to public transport - plot ratio 0.35 - 0.5
  - Remote from public transport - plot ratio 0.25 - 0.35

Site coverage is determined by dividing the total ground area covered by buildings by the total ground area within the curtilage of the buildings. A suggested range of 70-80% is usually appropriate to ensure against over-development and provide adequate sunlight.

The dwellings per hectare calculation is the most common method used to estimate the gross or net yield of a residential development. However, it should only be used in conjunction with other planning standards, and with plot ratio in particular, when controlling development form.

The desirable density of a particular cluster is also influenced by other factors, such as the scale and form of existing buildings and the layout and grain of the town/village.

The County Galway Housing Strategy 2001 - 2006 sets out the following:

*'It is the policy of the Authorities to reflect prevailing national policies on development densities in their Development Plans. Furthermore, the Authorities will be mindful of the contextual provision of housing, differentiating between urban town, and urban village and rural settlements.'*

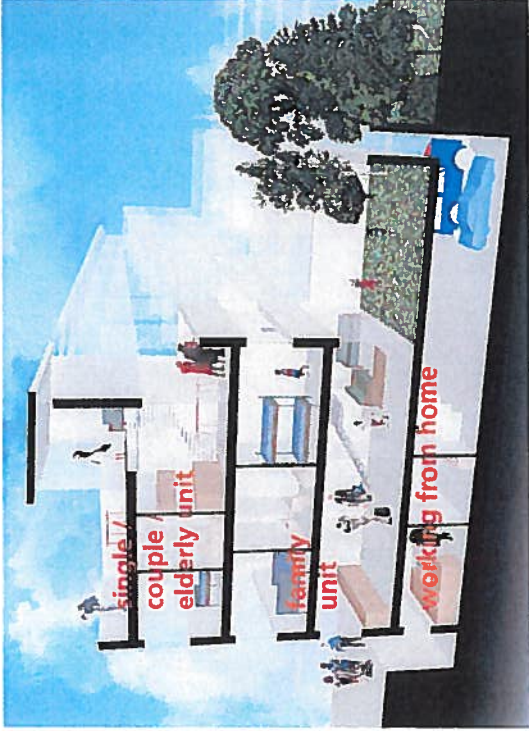
Low, medium and high density settlement responding to the increased building height of the surrounding context

## LAYOUT & SETTLEMENT COMPATIBILITY

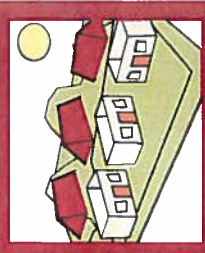
### Mix of use

Where additional uses such as crèches, shops, clinics, workspaces are proposed in a new housing cluster, these facilities should be located so as to compliment the surrounding town/village and adjacent residential developments.

## DESIGN CRITERIA

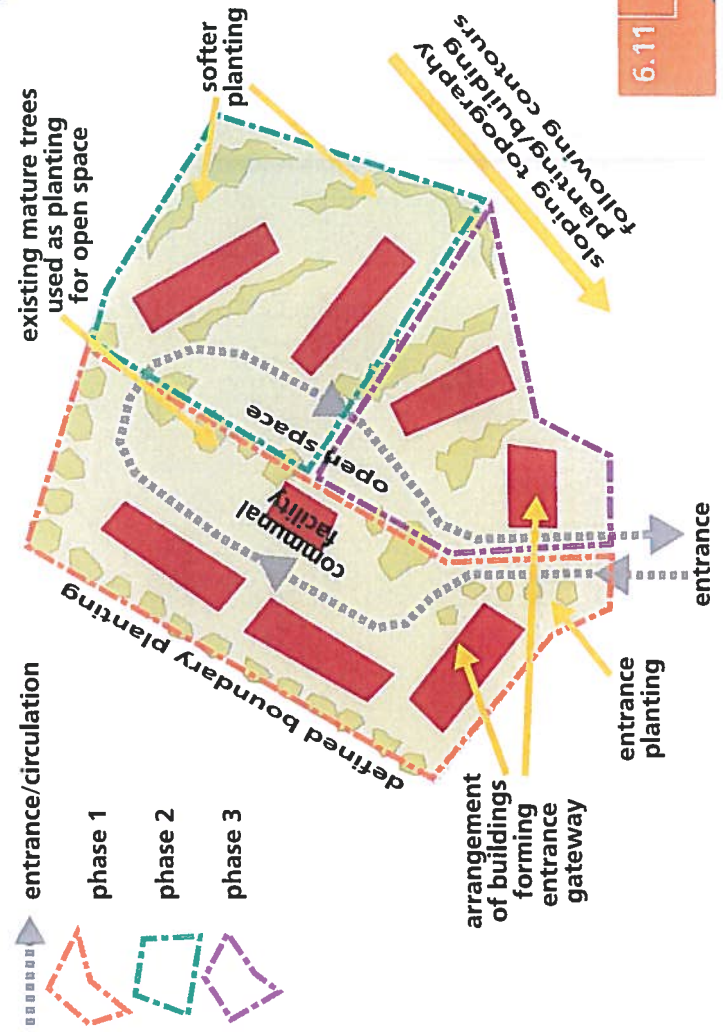


mix of residential use in single dwelling appropriate in town core



# GALWAY CLUSTERED HOUSING GUIDELINES

6.11



### Phasing

Should the site be developed in phases, it is very important to establish an overall master plan for the site. This would allow each phase to be considered in an integrated way, thus contributing to the continuity of the final planned cluster.

The following key elements should be carefully considered in the phasing of the overall master plan:

- entrances
- circulation
- topography/natural features
- open spaces
- services
- communal facilities

## QUALITY OF PUBLIC AMENITY

### Open Spaces

Open spaces should not be located in left over spaces, but should be integrated into the overall site arrangement. As a general guide, the open space to be provided should be 10-15% of the site area.

#### *Natural Qualities:*

To enhance the character of open spaces, they should respect the natural qualities of the site, including:

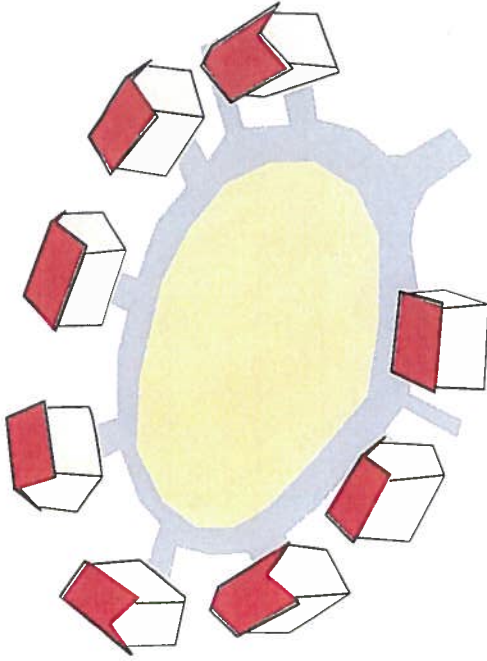
- topography
- the occurrence of water-bodies/seascape
- geological elements
- wildlife habitats

#### *Recreational Needs:*

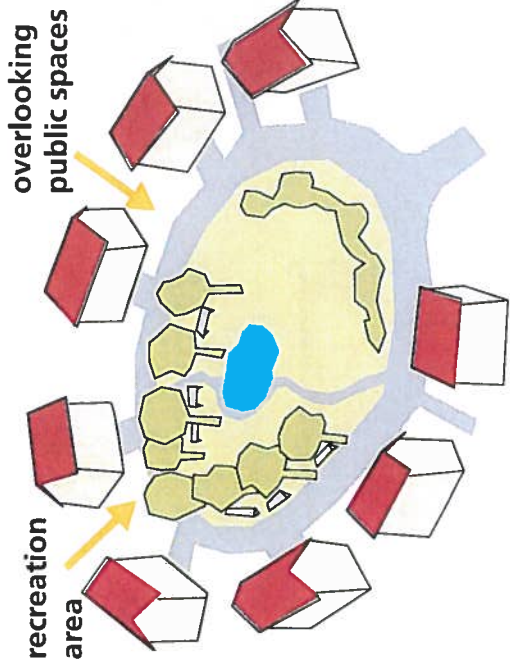
To meet the recreational needs of the residential population, a choice of open spaces should be provided in each development. Critical among them are purposely-designed playgrounds,

sheltered areas for elderly or the very young and landscaped areas along cycle and pedestrian paths. Open spaces should range in:

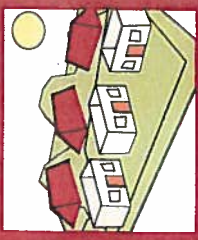
- size
- type of surfacing
- nature of planting
- intended use



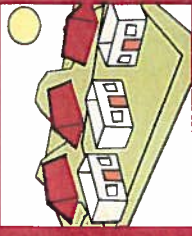
typical open space



positive landscaping







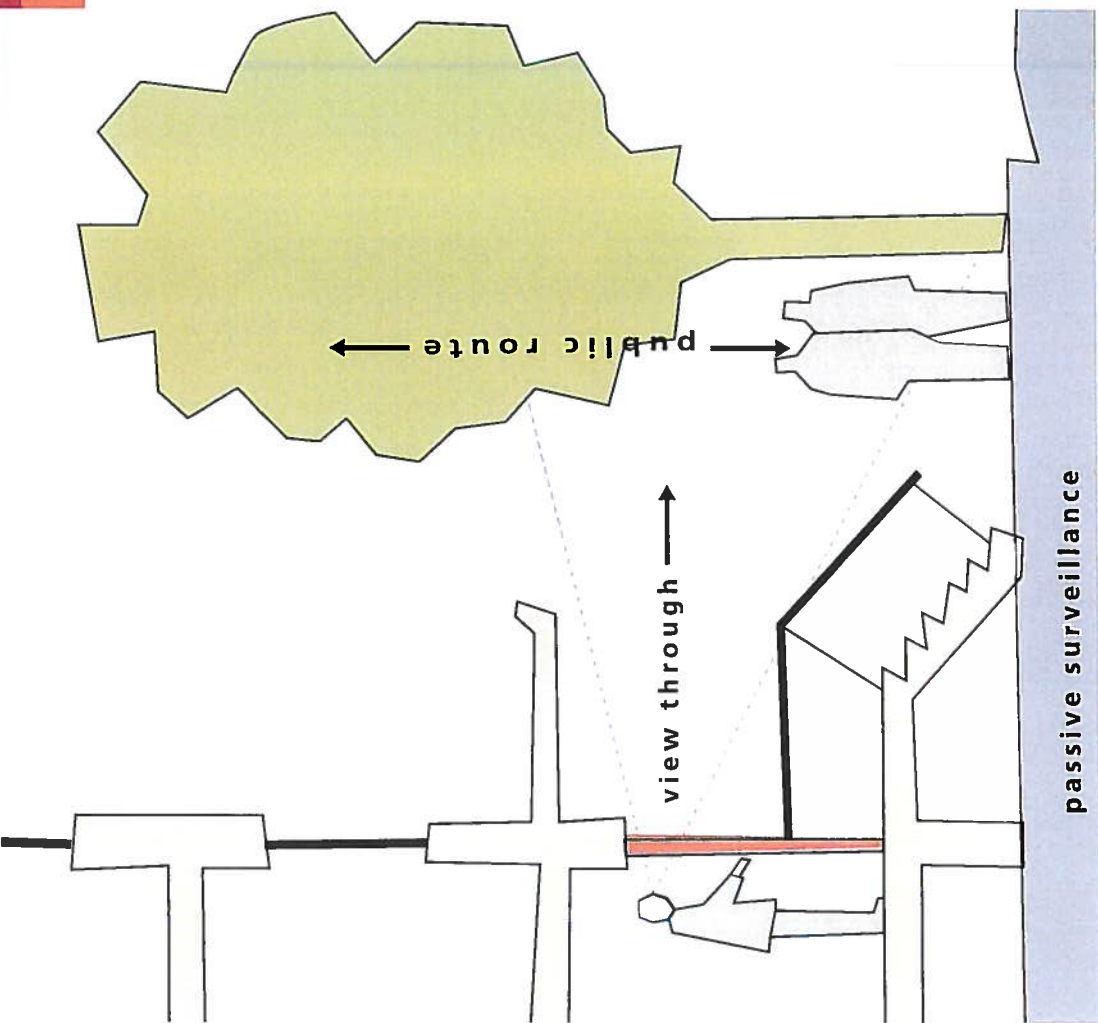
**Open Spaces**

*Safety:*

Open spaces should be adjacent to safe movement paths and living spaces where security is provided by the constant presence of passing people and traffic. Planting should not be so high or dense as to restrict views to and from the spaces. As a general guide, the open space should cover 10-15% of the site.

*Management:*

Before commencing any new development, the management structure of the housing cluster, which provides the maintenance, and upkeep of public areas, should be planned for. Private management, Local Authority management or a combination of both can form this structure. It should be clear, however, how and when the public spaces will be taken in hand by the management company.



## QUALITY OF PUBLIC AMENITY

### Childcare

The provision of childcare facilities including crèches, play groups, childminding and after-school groups should be considered for inclusion in a housing cluster when it is:

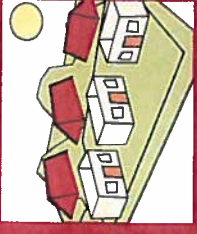
- a cluster of approximately 75 house units or more (for every 75 units, facilities should be able to accommodate 20 children)
- a cluster adjacent to similar housing developments, the approximate total of house units totalling 75 or more
- in the vicinity of schools
- located within an existing built up area, subject to other facility provision
- adjacent to public transport corridors

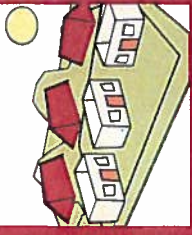
The type or range of facilities will depend on the demographic profile of the surrounding population, existing facilities provision and the projected profile of the new residential community.

For relevant documents, see the appendix.



playspace - Murray O Laoire Architects





## QUALITY OF PUBLIC AMENITY

### Provision for Services

#### *Waste Disposal:*

Recycling facilities should be provided for materials that need centralised collecting and processing such as paper, glass and metals.

Provision should be made in larger clusters for a bring bank location (regional target is one bring bank per 500 population). Bring banks should be located somewhere where there is passive surveillance but where noise won't disturb residents.

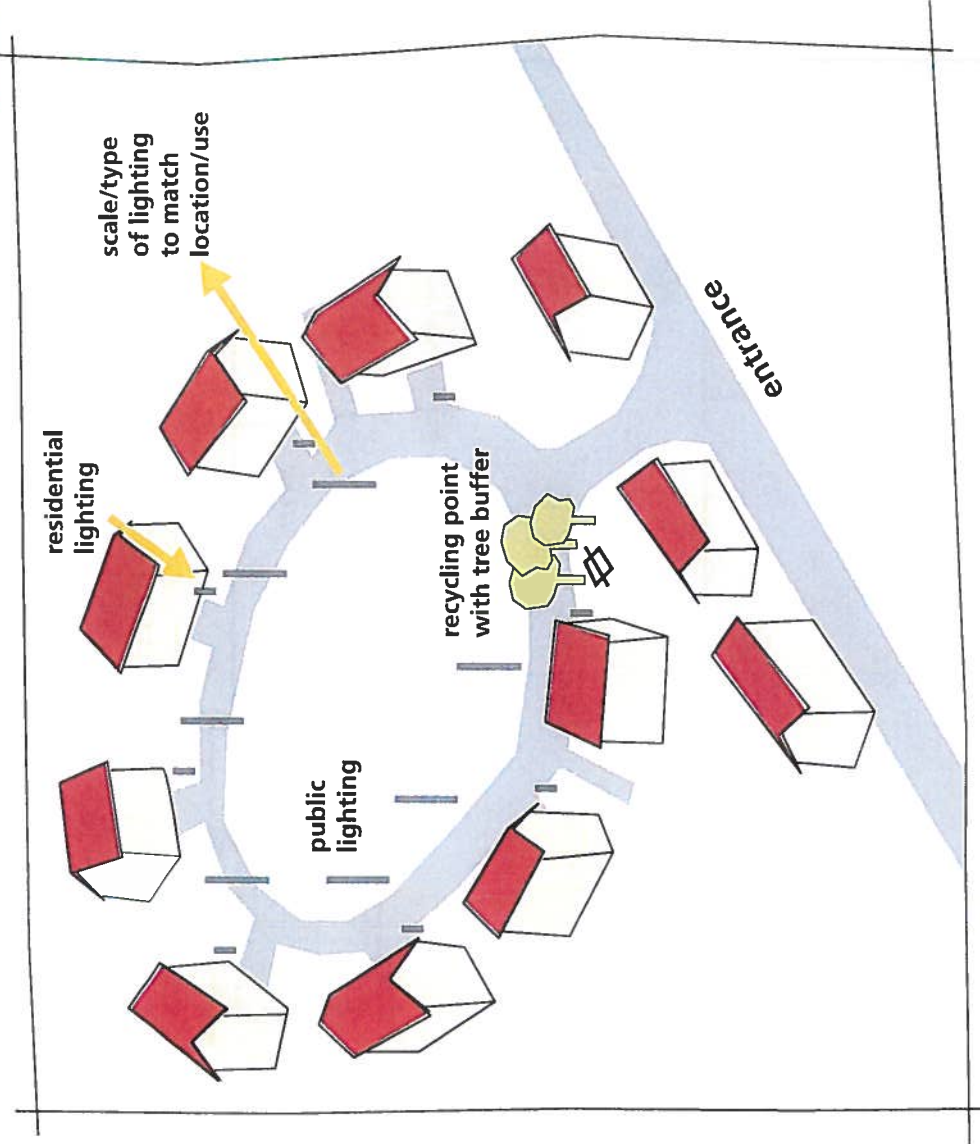
In apartments or high density clusters, provision should be made for storage of segregated waste between collections.

All sewage and surface water infrastructure should be designed in accordance with the Environmental Protection Agency (EPA) Wastewater Treatment Manuals 1996-2000.

#### *Public Lighting:*

Public lighting should be in a position and of a scale that responds to the road network, housing and open spaces.

For relevant documents, see the appendix.



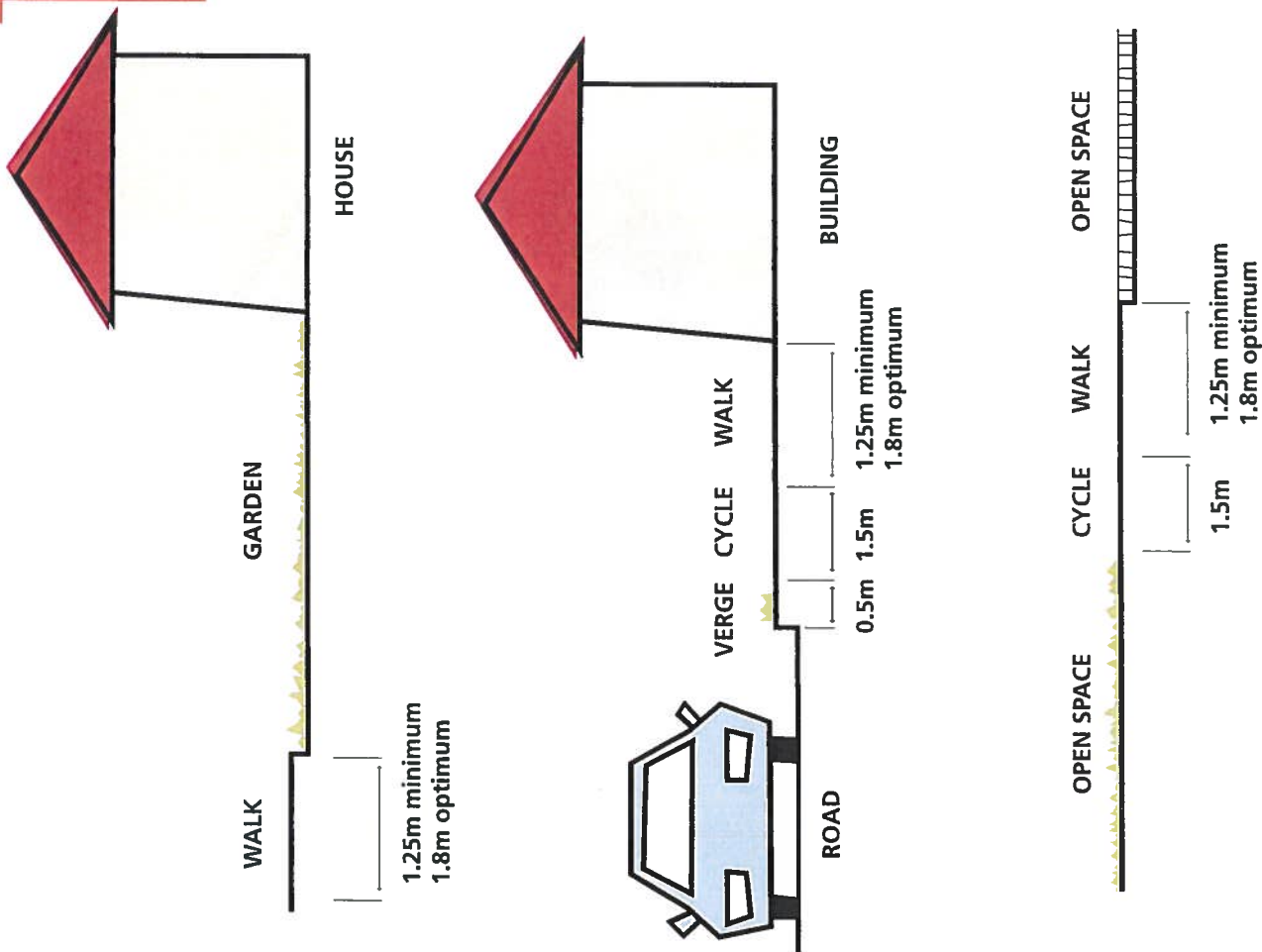
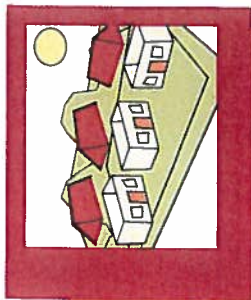
## QUALITY OF PUBLIC AMENITY

### Pedestrian and Cycle Routes

Pedestrian and cycle routes are not only channels for circulation, they are also an integral part of the open-space network. The width and positioning of walking and cycle routes should not adhere to a rigid standard, but should respond to their particular location and function.



Clondalkin Housing - Murray O Laoire Architects



## QUALITY OF PUBLIC AMENITY

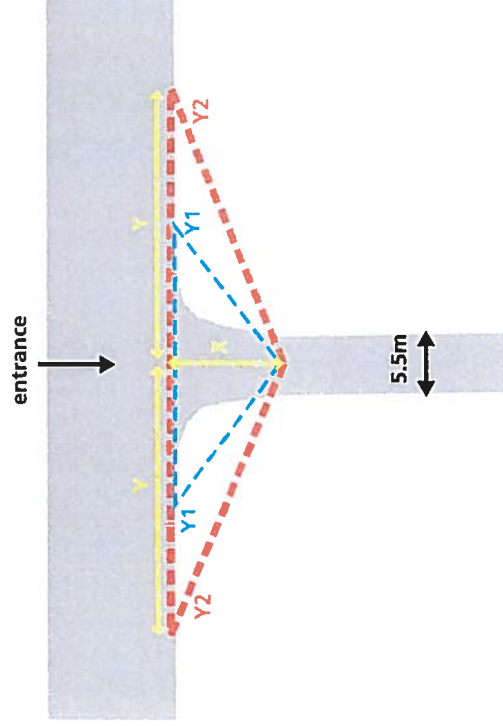
### Traffic calming/road network

By reducing road widths and speeds, new residential clusters can be integrated into the village/town context.

Road safety standards require an area of unobstructed sight, termed "clear sight triangle," when entering from and exiting to a local road to ensure safe access. However, these requirements can create a problem whereby clustered housing is required to be set back for long distances from the road, often leaving large, unsightly "dead" areas between the local road and access to the development.

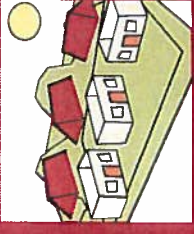
Traffic speeds on local roads should be reduced as they approach residential developments so that the size of the clear sight triangle can also be reduced. Then, planting or building can be brought closer to the main road, enhancing the development's integration into the village/town. Likewise, greater portions of existing structures, such as stone walls, can be preserved.

With reduced speeds, the required width of the access road can also be reduced. It is recommended that it not exceed 5.5m.



This diagram shows two clear sight triangles for roads with traffic travelling at two different speeds. X is set by safety standards at a distance of 4.5 m. Y is determined by traffic speed. Where speed is greater, Y is longer and the clear sight triangle must be larger, as is indicated in red. Where speed is reduced, Y is shorter and the clear sight triangle can be smaller, as is indicated in blue.

Speed of major road (kph)	50	30
Y distance (m)	70	33

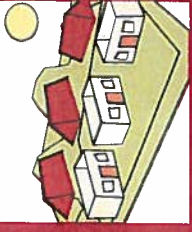
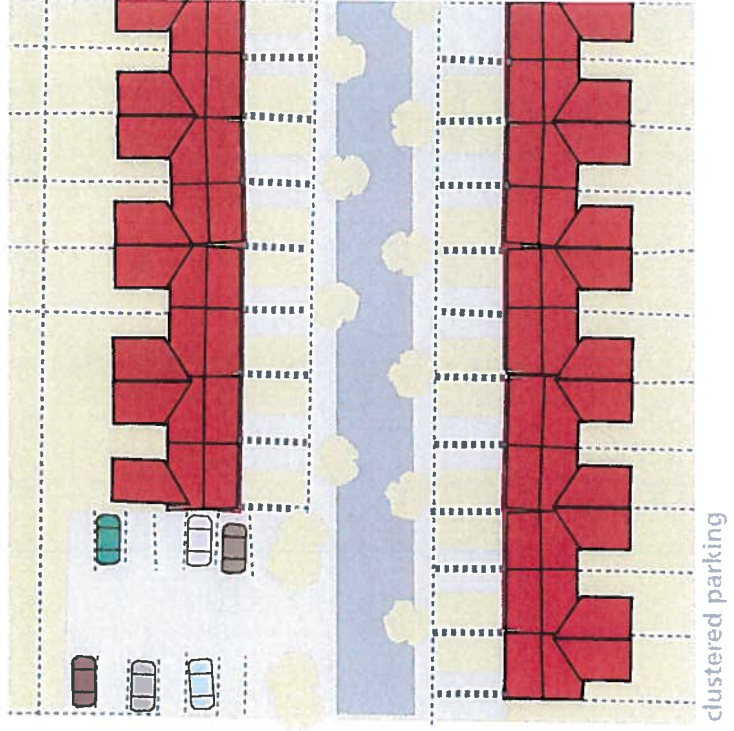
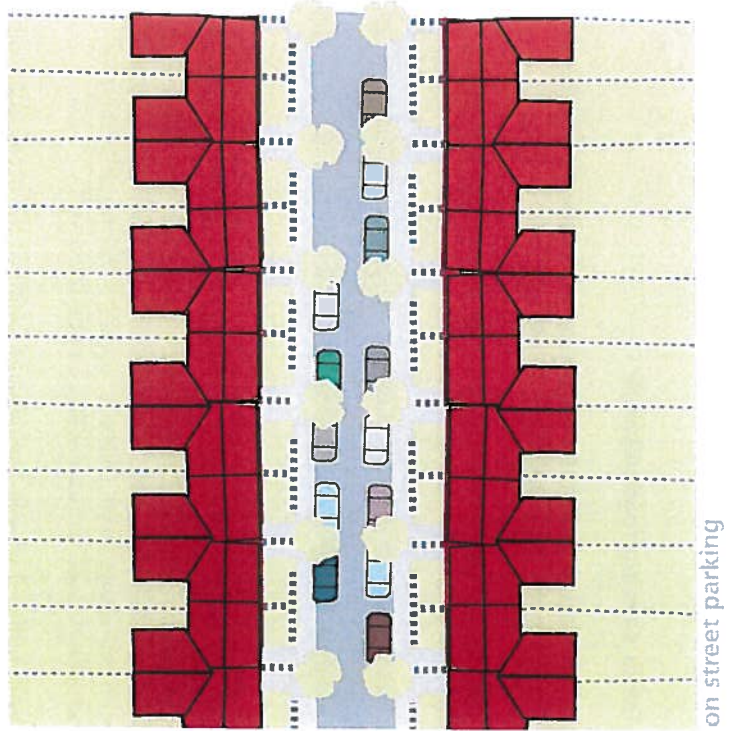


## QUALITY OF PUBLIC AMENITY

### Parking

Cars should not dominate building thresholds. Garages or parking in front of the building line undermines the relationship between the dwelling and the street. On street parking or parking in courtyards/clustered parking can improve the visual and recreational quality of the surroundings. All communal parking areas should be well-lit, open to natural surveillance and have obvious pedestrian routes.

Parking garages attached to dwellings are another way to make sure that cars don't dominate the public realm. Garages should be expressed as a separate volume, either attached or detached, from the dwelling to help blend the buildings into the landscape and break down the overall massing.



## DWELLING DESIGN

### Introduction

The two previous sections; layout settlement compatibility and quality of the public realm, set out the design criteria for the macro issues relating to residential clusters.

This section, dwelling design, concentrates on the opportunities for diversity, adaptability and environmental integration in individual house design. The appearance of a house itself can be viewed on two levels:

#### 1. Materials

Where possible, the materials used for constructing and finishing a dwelling cluster should be indigenous to the area. For example, in Limestone regions limestone should be used above granite and other stone.

Even in the most fragile and exposed landscapes, careful use of more modern materials can be appropriate. If chosen carefully, this can result in buildings that sit sensitively in their landscape. When preparing a palette of alternative materials such as metals, glass and timber, it is important to select those that reinforce the textures and colours of the particular landscape.

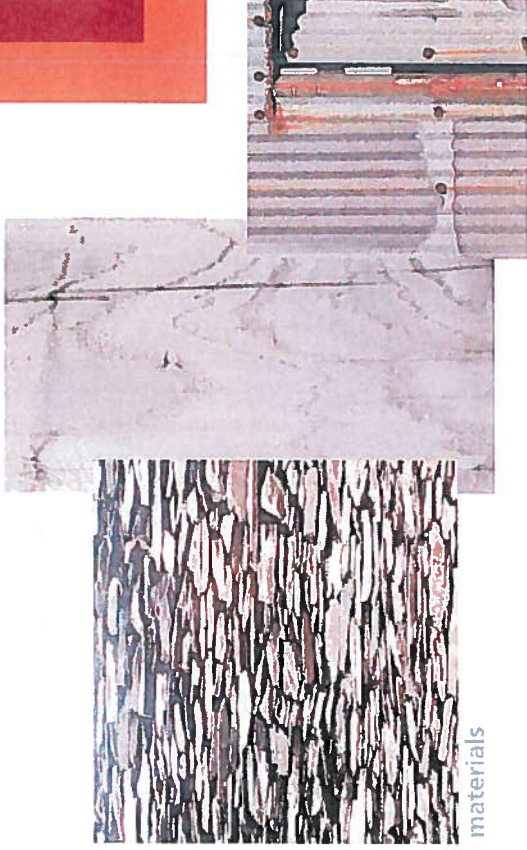
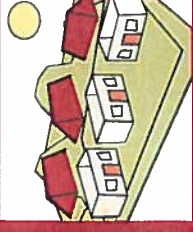
#### 2. Detail

Similarly, modern interventions, materials and details can be respectful of a vernacular style and can express the character of a place more successfully than pastiche reproductions.

The need for such features as clip-on porches, bay windows and ornate fascias can be eliminated with innovative and attentive design and construction efforts.

Large picture windows and other features should be positioned with consideration to orientation, heat loss, shelter, privacy, views and overlooking.

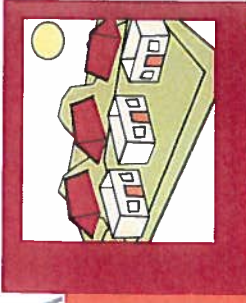
The Irish vernacular example of clustering of ancillary buildings around a sheltered yard or courtyard should be considered as an alternative to the dwelling expressed as a single volume.



materials



traditional cluster form with modern detailing -  
O'Donnell + Toumey Architects  
appropriate clustering in both East and West Galway



GALWAY CLUSTERED HOUSING GUIDELINES

6.20



housing cluster with a range of types - National Building Agency appropriate to town environs in both East and West Galway



residential clusters with a diversity of housing layouts appropriate to town-rural edge in West Galway

DWELLING DESIGN

Diversity of Housing Layouts

Allowing for diversity of housing layouts, both within a housing cluster or vertically through an individual dwelling, can prolong the life of the dwelling for the user and the vitality of the overall residential cluster. On a broader level it also contributes to the following:

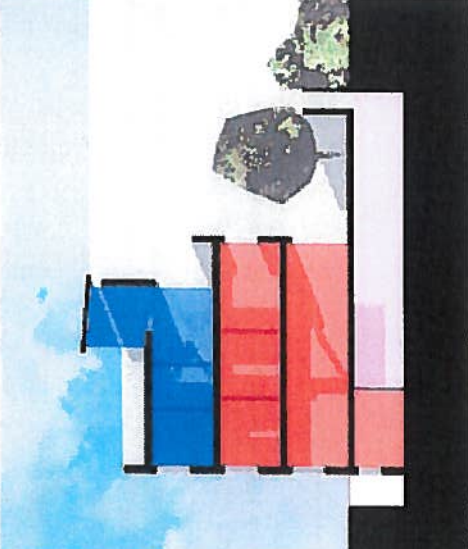
- a quality of life compatible with that of established towns and villages
- reduced resource consumption through the sharing of community resources

This demands a range of houses, suitable for a number of user types, including:

- first time buyers
- single people
- couples
- families
- the elderly
- people who wish to work at home

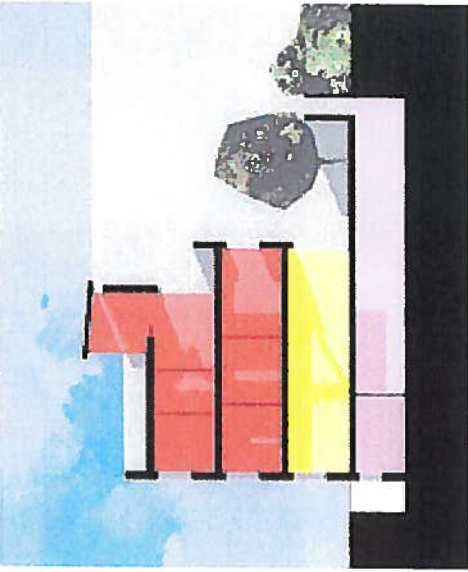
Social housing should also be well-integrated into the development. The County Galway Housing Strategy 2001 - 2006 sets out that '20% of eligible sites which are the subject of new residential development, to be set aside for the development of new social and affordable housing units'

- family
- single / young couple
- car parking / storage



flexible housing units

- family
- elderly - within family
- car parking / storage





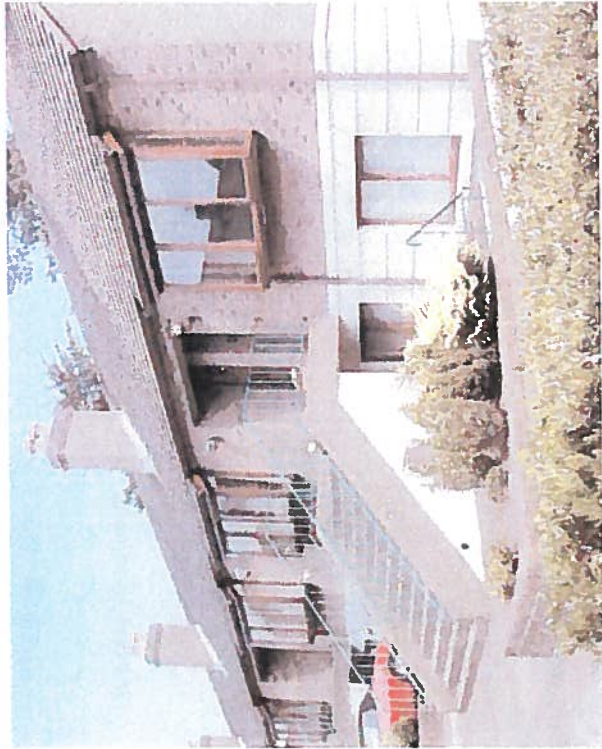
## DWELLING DESIGN

### Internal Space Provision

The sizes of rooms and circulation areas within a residential unit must comply with the minimum space guidelines set out in the following documents:

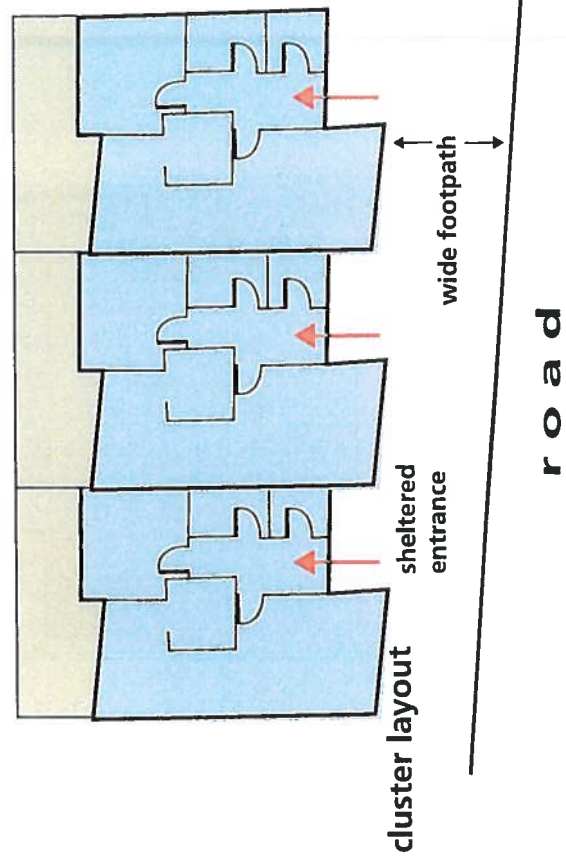
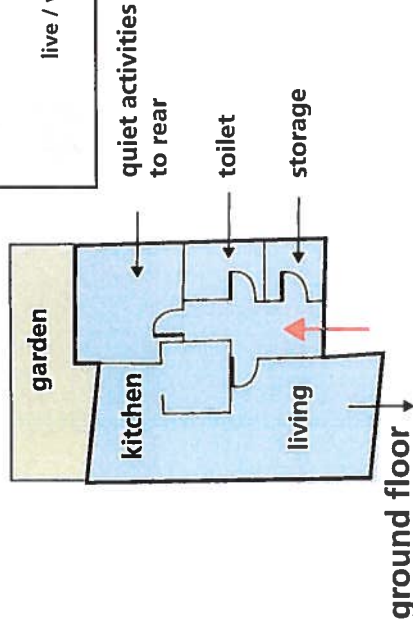
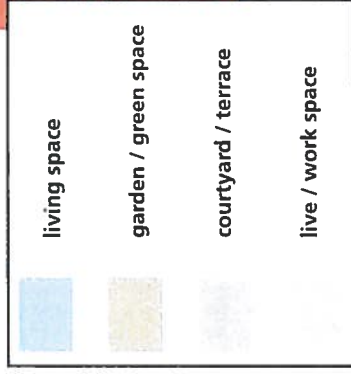
For house design, while specific floor areas are not recommended, houses that are designed to achieve flexibility, adaptability and the potential to expand will likely result in internal layouts that are generous and comfortable living environments.

In each residential cluster, the social housing units must not differ from their private housing counterpart in regard to overall floor area; internal and external finishes; individual room sizes, daylight and ventilation requirements; and flexibility, adaptability and expansion potential.

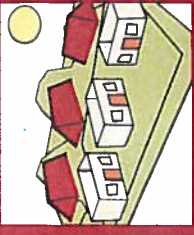


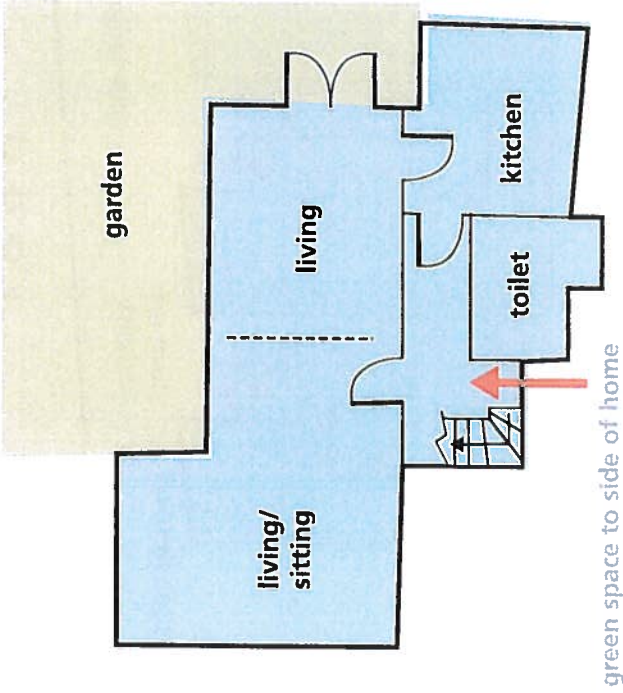
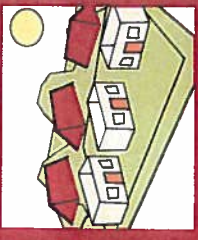
sheltered housing , Rosehill, Limerick -  
Murray O Laoire Architects

## DESIGN CRITERIA



sheltered housing





**DWELLING DESIGN**

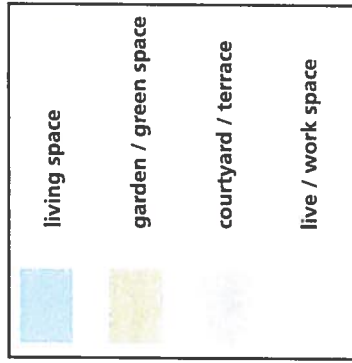
**Private Open Space**

Private open space should compliment the internal arrangement of spaces within the dwelling.

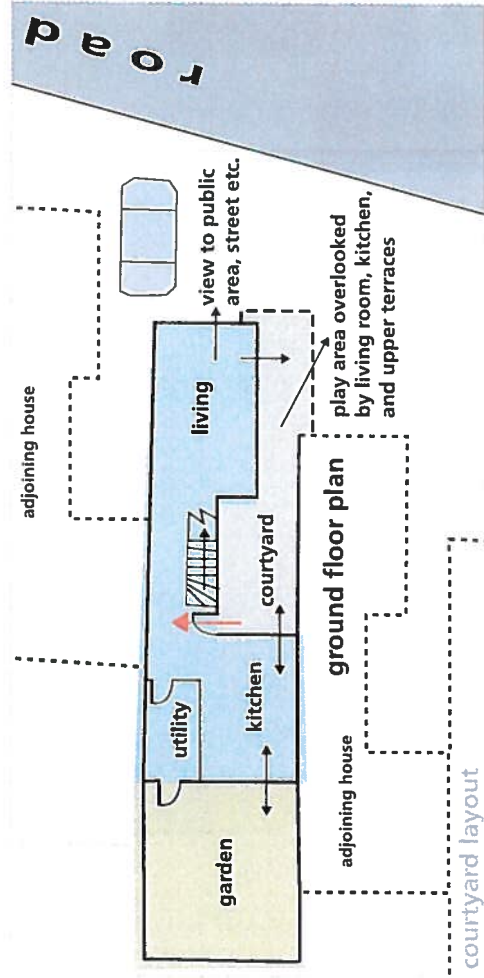
Each residential unit should be provided with private external space that is sheltered, receives sunlight and is not unduly overlooked.

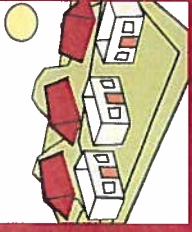
Guideline areas are as follows:

- 3/4/5 bed houses    min 60-70m<sup>2</sup> behind the building line
- 1/2 bed houses     min 50m<sup>2</sup> behind the building line
- 2/3 bed apartment    min 15-20m<sup>2</sup> when unit is in or close to town centre
- 1 bed apartment     min 10m<sup>2</sup> when unit is in or close to town centre
- 2/3 bed apartment    min 20-40m<sup>2</sup> when unit is located at town edge
- 1 bed apartment     min 20m<sup>2</sup> when unit is located at town edge



In cases where a high quality external environment is provided in shared courtyards or gardens, a reduced minimum private area behind the building line can be considered. Terraces, balconies, and courtyard spaces can supplement the standard front and rear garden.





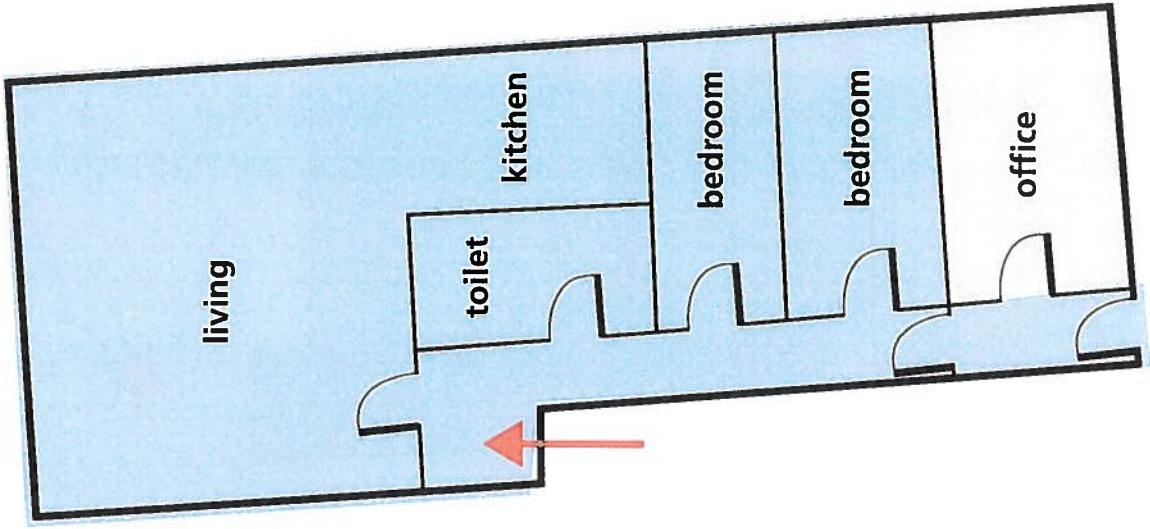
**DWELLING DESIGN**

**Adaptability**

Dwellings should be designed as life-long homes, readily adaptable for the elderly or disabled and flexible to accommodate changes in the functional organisation over time.

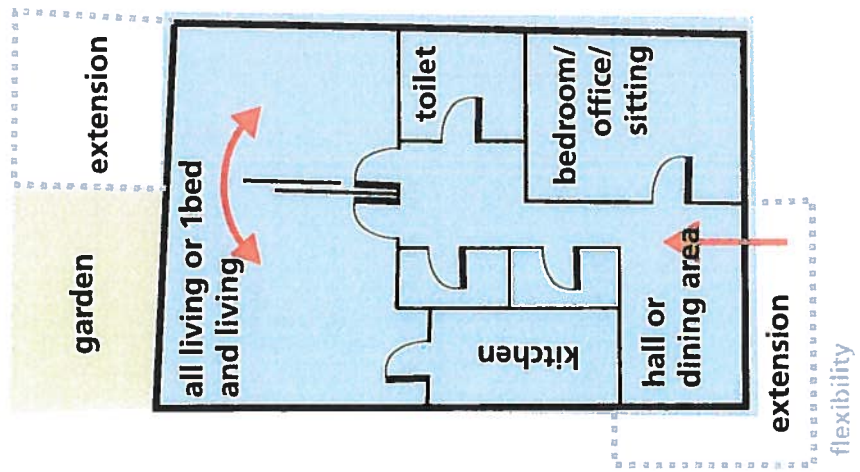
Dwellings should be designed in compliance with the most recent Technical Guidance Documents of the Planning Act

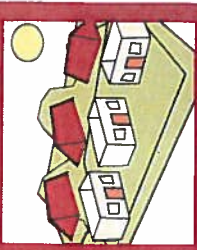
The scope of a dwelling to expand both upwards into attic space and outwards to the rear or side should be considered and incorporated at the design stage.



street

work from home





**DWELLING DESIGN**

**Environmental Design**

**Energy Rating**

Energy ratings for dwelling are designed to aid the life long efficiency of the building and should be incorporated into the design process.

For relevant documents, see appendix.

**Natural Lighting**

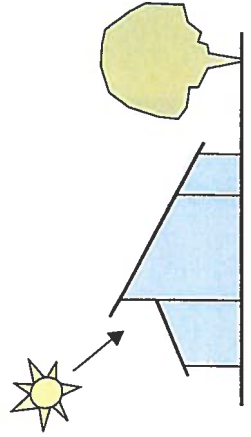
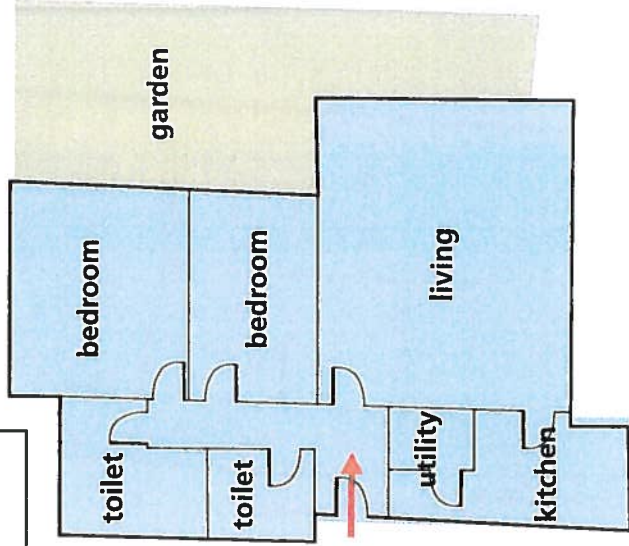
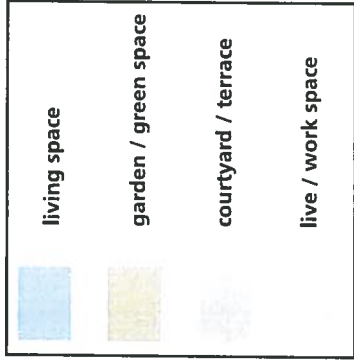
In order to maximise and improve the natural lighting levels in a dwelling, particular attention should be paid to the orientation and layout of each house.

For relevant documents, see appendix.

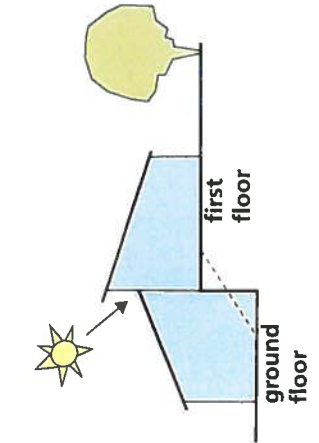
**Natural Ventilation**

At design stage, the relationship of internal rooms to external spaces should be influenced by the requirement to provide adequate ventilation to these rooms.

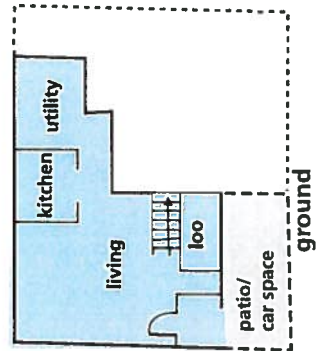
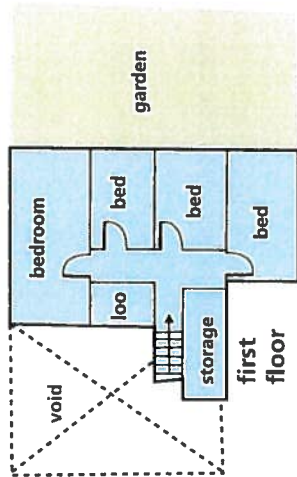
For relevant documents, see appendix.



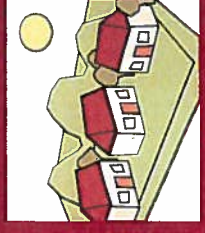
maximising natural light



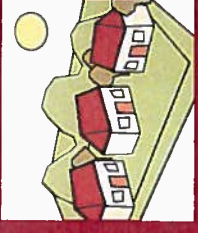
split level



A P P E N D I X



GALWAY CLUSTERED HOUSING GUIDELINES



## References

### *Architectural Heritage Protection Guidelines for Planning Authorities (Draft)*

These Guidelines advise Planning Authorities with regard to Ireland's built heritage. Contact the Department of Arts Heritage Gaeltacht and the Islands at 01-647-3000 or visit their website at [www.gov.ie/eaiga](http://www.gov.ie/eaiga).

### *B.S.8206 Lighting for Buildings, Part 2 1992 Code of Practice for Daylighting*

This document establishes technical standards for residential and non-residential buildings for maximising daylighting. Contact the Government Publications Sale Office at 01-661-3111.

### *Building Regulations*

These regulations establish design and construction standards for buildings to assure the health and safety of those who use them. Contact the Government Publications Sale Office at 01-661-3111.

### *Childcare Facilities: Guidelines for Planning Authorities June 2001*

This document establishes standards for the location and development of childcare facilities in residential and non-residential areas. Contact the Government Publications Sale Office at 01-661-3111 or visit the Department of the Environment and Local Government website at [www.environ.ie/press/minister.html](http://www.environ.ie/press/minister.html).

### *Child Care (Pre-School Services) Regulations, 1996 and Child Care (Pre-School Services) (Amendment) Regulation, 1997 and Explanatory Guide to Requirements and Procedures for Notification and Registration*

These Regulations establish requirements for childcare facilities in housing estates and other areas. Contact the Department of Health and Children at 01-635-4000 or visit their website at [www.doh.ie](http://www.doh.ie).

### *Creating Places: Achieving quality in residential developments*

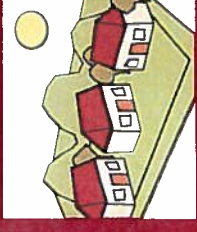
This document provides guidance for the design of high quality, sustainable housing in Northern Ireland. Department of the Environment Transport and the Regions, London. Contact the Corporate Document Services at 0113-399-4040 or visit their website at [www.corpdocs.co.uk](http://www.corpdocs.co.uk).

### *Economic, Social and Cultural Development of Galway - 10 Year Strategy*

This Strategy establishes community and enterprise goals for Galway County. Contact Galway County Council at 091-50-90-00 or visit their website at [www.galway.ie](http://www.galway.ie).

### *Ensuring the Future - A Strategy for Rural Development in Ireland - A White Paper on Rural Development*

This Strategy sets out a vision and a framework for the development of rural communities in Ireland. Contact the Government Publications Sale Office at 01-661-3111 or visit the website at [www.irfgov.ie/daff/publicat/wpaper/contents.htm](http://www.irfgov.ie/daff/publicat/wpaper/contents.htm).



## References

### *EPA Wastewater Treatment Manuals 1996-2000*

These manuals provide technical guidance on the design, operation and maintenance of on-site wastewater treatment. Contact the Environmental Protection Agency at 53-60-600 or visit the website at [www.epa.ie](http://www.epa.ie).

### *Galway County Development Plan (current)*

The County Development Plan outlines the policy framework for future development in Galway County pertaining to objectives in rural and town development, economic development, natural resources, physical infrastructure, social infrastructure, environmental services, heritage and conservation and culture. Contact Galway County Council at 091-50-90-00 or visit their website at [www.galway.ie](http://www.galway.ie).

### *Galway County Housing Strategy 2001-2006*

This Strategy was created in response to Part V of the Planning and Development Act 2000, which required all Planning Authorities to prepare housing strategies by August 2000. The document assesses housing supply and demand trends in Galway County and sets out objectives for output of private, affordable and social housing. Contact Galway County Council at 091-50-90-00 or visit the website at [www.galway.ie](http://www.galway.ie).

### *Galway County Landscape Strategy*

This Strategy assesses the county's landscape characteristics, formulates classifications of landscape types and presents methods of protecting and enhancing the natural environment through planning policy. Contact Galway County Council at 091-50-90-00 or visit their website at [www.galway.ie](http://www.galway.ie).

### *Galway County Settlement Strategy*

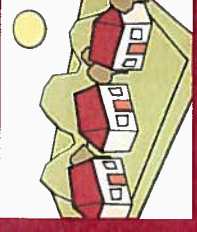
This Strategy examines current settlement patterns in the County and provides a comprehensive analysis of future settlement options. Contact the Galway County Council at 091-50-90-00 or visit their website at [www.galway.ie](http://www.galway.ie).

### *Galway Transportation and Planning Study*

This Study focuses on developing a sustainable settlement structure for Galway County that uses land and energy more efficiently while protecting and enhancing the natural environment. Contact the Galway County Council at 091-50-90-00 or visit their website at [www.galway.ie](http://www.galway.ie).

### *Guidelines on Residential Developments in Urban Renewal Designated Tax Incentives Areas 1995*

These Guidelines set forth standards for the design of residential development in Urban Renewal Tax Incentive Areas. Contact the Government Publications Sale Office at 01-661-3111 or visit the Dept of the Environment website at [www.environ.ie](http://www.environ.ie).



## References

### *Improving the Quality of Housing Layouts in Northern Ireland*

This publication is designed to bring together the goals of developers, urban designers, architects, landscape architects, planners and road engineers to produce a more holistic design-led approach to building high quality housing layouts.

Contact the Corporate Documents Service at 0113-399-4040 or visit their website at [http://www.doeni.gov.uk/planning/Guidance/Improving\\_the\\_Quality\\_of\\_Housing\\_Layouts.pdf](http://www.doeni.gov.uk/planning/Guidance/Improving_the_Quality_of_Housing_Layouts.pdf).

### *Landscape and Landscape Assessment Guidelines (Draft)*

These Guidelines provide guidance to planners and others as to how landscape considerations should be dealt with and indicate specific requirements for Development Plans and for development control. Contact the Government Publications Sale Office at 01-661-3111 or visit the Department of the Environment and Local Government website at [www.environ.ie/plan/landscape.html](http://www.environ.ie/plan/landscape.html).

### *National Children's Strategy 2000*

This strategy sets out objectives to guide children's policy over the next ten years. Contact the Government Publications Sale Office at 01-661-3111 or visit the Department of Health and Children website at <http://www.doh.ie/publications/natchild.html>.

### *National Development Plan 2000-2006*

The National Development Plan establishes key directions of government policy and outlines a programme for Government expenditure. Contact NDP information at 01-639-6280 or visit the website at [www.ndp.ie](http://www.ndp.ie).

### *National Spatial Plan 2002*

This Plan aims to guide balanced economic and spatial growth in Ireland. Contact the Government Publications Sale Office at 01-661-3111 or visit the website [www.irishspatialstrategy.ie](http://www.irishspatialstrategy.ie).

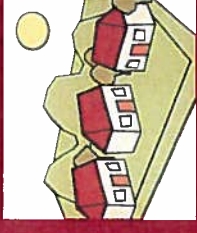
### *Operational Programme for the Border, Midland and Western Region 2000-2006*

Under the National Development Plan, this Programme provides a strategy for development of the region through the four major sub-programmes of Local Infrastructure, Local Enterprise Development, Agriculture and Rural Development and Social Inclusion and Childcare. Contact NDP information at 01-639-6280 or visit the website at [www.ndp.ie](http://www.ndp.ie).

### *Places, Streets and Movement: A Companion guide to Design Bulletin 32 Residential roads and footpaths*

This Guide by the Department of Environment, Transport and the Regions (UK) sets out design standards for car and pedestrian circulation patterns in residential areas. Contact the Corporate Document Services at 44-0113-399-4040 or visit their website at [www.corpdocs.co.uk](http://www.corpdocs.co.uk).





## References

### *Planning and Development Act 2000*

This act provides legislative requirements for planning and development in Ireland. Contact the Government Publications Sale Office at 01-661-3111 or visit the Department of the Environment and Local Government website at [www.environ.ie/devindex.html](http://www.environ.ie/devindex.html).

### *Recommendations for Site Development Works for Housing Estates 1998*

This document provides technical guidance for road construction in residential areas. Contact the Government Publications Sale Office at 01-661-3111 or visit the Department of the Environment and Local Government website at [www.environ.ie/devindex.html](http://www.environ.ie/devindex.html).

### *Residential Density Guidelines for Planning Authorities 1999*

These Guidelines aim to achieve more sustainable development by identifying locations where increased densities should be encouraged and establishing criteria for higher density development. Contact the Government Publications Sale Office at 01-661-3111 or visit the Department of the Environment and Local Government website at [www.environ.ie/press/finaldengl.html](http://www.environ.ie/press/finaldengl.html).

### *Site Layout Planning for Daylight and Sunlight- A Guide to Good Practice*

This document by the Building Research Establishment (UK) aims to establish best practice principles for daylight and sunlight in residential and non-residential buildings. Contact the BRE at 44-01923-6400 or by visiting their website at [www.bre.co.uk](http://www.bre.co.uk).

### *Sustainable Development: A Strategy for Ireland, 1997*

This Strategy provides a comprehensive analysis and framework to allow all aspects of sustainable development to be taken forward systematically. Contact the Government Publications Sale Office at 01-661-3111 or visit the website at [www.environ.ie/environ/env.html#sd](http://www.environ.ie/environ/env.html#sd).

### *TD 41/95 Vehicular Access to All-purpose National Roads*

This National Roads Authority document establishes regulatory dimensional requirements for entrances to and exits from National Roads.

### *Galway County Town Development Plans*

Town Development Plans have been adopted for several towns in Galway County. They outline the principal planning and development objectives for the towns and their environs. Contact Galway County Council at 091-50-90-00 or visit their website at [www.galway.ie](http://www.galway.ie).

### *Urban Design Compendium*

This document provides guidance for developers on achieving high quality urban design in developing and restoring urban areas. Contact English Partnerships at 44-020-7730-9399 or visit their website at [www.englishpartnerships.co.uk](http://www.englishpartnerships.co.uk).

## Glossary

### Accessibility

The ability of people to move around an area and to reach places and facilities, of particular importance for elderly and disabled people and those with young children.

### Adaptability

The flexibility of a building to change to suit the changing needs of the occupant over their lifetime.

### Building form

The shape, scale and appearance of a structure.

### Built environment

The function, design and form of structures in an area.

### Circulation routes

The area in a residential cluster where pedestrian, vehicular and cycle movement takes place.

### Concept statement

An initial look at the opportunities for site development.

### Context

The setting of a site or area, including the surrounding landscape, built environment, activities and land uses.

### Context survey

An examination of the existing environment surrounding a site.

### Continuity

The consistency between adjacent buildings and new developments.

### Cultural environment

An area's sense of its own history and identity, including heritage buildings and sites, language, traditions and lifestyles.

### Curtilage

The attendant grounds of a building.

### Cut and fill

Modification or excavation of the landscape using the excavated material to 'fill' other parts of the site to level the land.

### Density

The number of residential units per hectare, plot ratio or site coverage of a site.

### Desire line

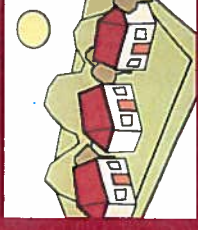
The route which people would choose to use between facilities or places.

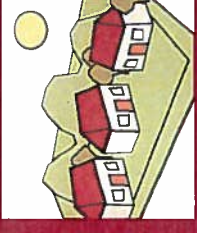
### Enclosure

The use of buildings to create a sense of defined space.

### Energy rating

The evaluation of the energy efficiency of a building.





## Glossary

### External spaces

Open areas used for a variety of activities and interactions.

### Greywater

Any domestic wastewater produced, excluding sewage.

### Human scale

The use of elements which relate well in size to an individual in a way which makes people feel comfortable rather than overwhelmed.

### Infrastructure

Services that are necessary in order for development to occur, including roads and transportation, water and wastewater facilities, waste disposal, recycling services and electricity.

### Legibility

The degree to which the layout of a place can be easily understood and traversed.

### Landmark buildings and spaces

Orienteering place-makers, creating centres of activity within the urban landscape.

### Local resources

Facilities that provide services for the residents of a particular area, including schools, shops, recreational facilities and religious and community centres.

### Massing

The combined effect of the height, bulk and silhouette of a building or group of buildings.

### Master plan

A guiding framework which establishes the overall layout of a development.

### Mix of uses

The variety of activities that occur in a particular area.

### Morphology

The pattern, arrangement and size of buildings and street blocks .

### Natural environment

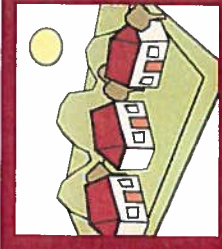
The topography, vegetation, water bodies, geological formations and climate in an area.

### Overlooking

Where the private and public places are subjected to observation by others.

### Overshadowing

Where undue loss of light is caused to places by structures or features that block the sun.



## Glossary

### **Passive solar gain**

The arrangement of rooms in a dwelling such that the benefits of solar heat are maximised.

### **Passive surveillance**

The supervision of spaces and places by the presence of passers-by or overlooking from neighbouring buildings.

### **Photovoltaic modules**

Solar cells that convert the energy contained in sunlight into electrical energy.

### **Plot ratio**

The total amount of floor space in relation (proportionally) to the site area.

### **Plot size**

The size of blocks and resulting permeability of an area.

### **Policy context**

Government guidelines and regulations that form a statutory framework for planning and development.

### **Public space**

Places that are available, without charge, for for everyone to use or see, including streets, squares and parks.

### **Principle town**

The largest of towns and villages in an area with a mix of uses including established commercial and retail facilities and a substantial local employment base.

### **Preliminary site suitability**

An initial look at whether a site is developable and what restrictions the policy context and other factors might place on development.

### **Reed Bed Filtration**

A method of treating greywater to recycle wastes in a sustainable way, using gravel-filled reed beds

### **Satellite town**

Identified in the Galway County Development Plan as a residential settlement that can help support the continued growth of Galway City.

### **Satellite village**

A village designated in the Galway Development Plan as a key supporting residential community for Galway City.

### **Scale**

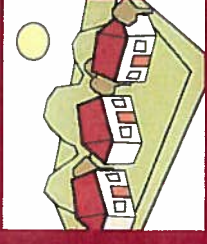
The impression of or size a building in relation to its surroundings.

### **Shelter belt**

Planting that helps to protect areas from the effects of severe climatic conditions.

### **Site arrangement**

The particular placement of buildings, open spaces and circulation routes on a site.



## Glossary

### Site coverage

A calculation made by dividing the total area of ground covered by buildings, by the ground area within the curtilage of the buildings.

### Site survey

An examination of the existing visual and physical character of a site.

### Streetscape

The scale, proportion and character of buildings and features along a street.

### Sustainable

A development which meets present needs without compromising the needs of future generations.

### Topography

A description or representation of natural or man-made features on or of the ground.

### Town core

The centre of a settlement where local resources are concentrated.

### Town Development Plan

A document that provides development policies, strategies and objectives for a town, made in accordance with the requirements of the Local Government (Planning & Development) Acts 1963 to 1993.

### Town-rural edge

The town-rural edge is the outermost boundary of a town where it meets the countryside.

### Town Environs

Town environs are an area still within a town's boundary, but removed from the town centre.

### Urban grain

Urban grain refers to the physical pattern of an area's streets and the size of the urban block.

### Vernacular

A style of building which evolved over time and reflects local building techniques, styles and materials.

### Village

A residential settlement, with some mix of uses.

