Appendix 9: Building Height Strategy
Building Height Strategy
(A) Background and Analysis

1. Introduction and Context..............................................5
2. Understanding Building Heights..................................10
3. Building Height in Dún Laoghaire Rathdown.............14

(B) Building Heights Strategy

4. Policy Approach.............................................................21
5. General Principles.........................................................29
6. Landmark Buildings......................................................32

Contents
Contents

(A) Background and Analysis

1. Introduction and Context..............................................5
2. Understanding Building Heights..................................10
3. Building Height in Dún Laoghaire Rathdown..............14

(B) Building Heights Strategy

4. Policy Approach.............................................................21
5. General Principles.........................................................29
6. Landmark Buildings......................................................32
1. Introduction and Context

The Planning Department proposed an amended strategy as part of the 2010 Draft Plan, following a period of public consultation. This study set out a proposed strategy for assessing building heights, but without the need to resort to prescriptive benchmark heights.

However, recent and proposed development has tended to be higher - often in the region of four to six storeys. In the larger development sites such as Stepaside, Carrickmines, Cherrywood, Sandyford and along the N11 corridor heights greater than six storeys have been permitted. This trend reflects the change in the 2010-2016 County Development Plan review process, which commenced in early 2008, offered a timely opportunity to reassess the County – with a series of relatively prescriptive 'benchmark heights' recommended (including conditions where upward and downward modifiers may apply) for various nodes and transport corridors.

At the conclusion of the Development Plan review process, the Members decided to adopt the revised Building Heights Strategy referred to above as an integral part of the Plan, but with the understanding that the issue would be revisited with a view to revising and refining the Strategy further, possibly by accommodating Sandyford, UCD Belfield and Cherrywood.

While the Strategy was noted by the Council, it was never formally adopted by way of a Variation to the County Development Plan. This resulted in a situation where many anomalies existed throughout the County – for example, a recommended benchmark height of 4 storeys for places such as Mount Merrion, Foxrock and Shankill, with potential local adverse effects on living conditions, private gardens and public spaces. Inappropriately planned, designed and/or located tall buildings can detract significantly from the quality of a residential environment and from the robustness and continuing relevance (or otherwise) of the statutory/non-statutory planning framework.

The 2010 County Development Plan Framework Plan recommended a benchmark height seldom exceeds two to three storeys, and in some small pockets even single storey development prevails. During the immediate post-war development boom, residential and retail developments generally continued to exceed the prescribed benchmark heights, for example the Parkview apartments in Stepaside (a six storey development in an area with a four storey benchmark) and Harbour Square, Dun Laoghaire (an eight storey development in an area up to seven storeys but these were the exception rather than the norm, and their impact remained local.

It follows that the location, siting and orientation needs to be carefully managed. Tall buildings can mark points of significant activity such as central places, create fine landmarks, highlight civic buildings and emphasise the heritage of the County and general residential amenities while encouraging higher densities of quality where appropriate in important transport connections or nodes. On the other hand, tall buildings can be especially incompatible in areas of historic buildings, architectural conservation areas, natural heritage areas and areas imbued with significant views and skylines, and the greater their height, the broader their impact tends to be.

The Strategy was noted by the Council, but was never formally adopted by way of a Variation to the County Development Plan. This resulted in a situation where many anomalies existed throughout the County – for example, a recommended benchmark height of 4 storeys for places such as Mount Merrion, Foxrock and Shankill, with potential local adverse effects on living conditions, private gardens and public spaces. Inappropriately planned, designed and/or located tall buildings can detract significantly from the quality of a residential environment and from the robustness and continuing relevance (or otherwise) of the statutory/non-statutory planning framework.

While the Strategy was noted by the Council, it was never formally adopted by way of a Variation to the County Development Plan. This resulted in a situation where many anomalies existed throughout the County – for example, a recommended benchmark height of 4 storeys for places such as Mount Merrion, Foxrock and Shankill, with potential local adverse effects on living conditions, private gardens and public spaces. Inappropriately planned, designed and/or located tall buildings can detract significantly from the quality of a residential environment and from the robustness and continuing relevance (or otherwise) of the statutory/non-statutory planning framework.
1. Introduction and Context

1.1 Context

An initial County-wide Building Heights Strategy was prepared for Dún Laoghaire Rathdown in late 2006, by UK-based consultants Urban Initiatives, following a period of public consultation. This study set out a proposed strategy for assessing building heights based primarily on the spatial strategy or urban hierarchy of the County – with a series of relatively prescriptive ‘benchmark heights’ recommended (including conditions where upward and downward modifiers may apply) for various nodes and transport corridors, based on their relative position in the hierarchy. The Strategy also recommended that those specific areas of the County where tall buildings (or ‘District Landmarks’) could be accommodated were Sandyford, UCD Belfield and Cherrywood. While the Strategy was noted by the Council, it was never formally adopted by way of a Variation to the County Development Plan.

The 2010-2016 County Development Plan review process, which commenced in early 2008, offered a timely opportunity to reassess the robustness and continuing relevance (or otherwise) of the Urban Initiatives Strategy. It was considered by the Development Plan Team that while the Strategy had certain merits, and provided a thorough analysis of the issues surrounding building height, a major shortcoming of the document was the use of overly prescriptive ‘benchmark heights’ for every area of the County. Benchmark heights were defined in the Strategy as “the general recommended height for each zone” and that there was a “presumption that development should be constructed to the Benchmark Height”. This resulted in a situation where many anomalies existed throughout the County – for example, a recommended benchmark height of 4 storeys for places such as Mount Merrion, Foxrock and Shankill, with potential local landmarks up to 7 storeys. Conversely, there were other areas of the County where existing constructed development, which had integrated reasonably successfully into its environment, actually exceeded the prescribed benchmark heights, for example the Parkview apartments in Stepaside (a six storey development in an area with a four storey benchmark) and Harbour Square, Dun Laoghaire (an eight storey development in an area with a four storey benchmark).

The Planning Department proposed an amended strategy as part of the 2010 Draft County Development Plan. This Strategy, published as Appendix I of the Draft Plan, sought to establish a considered, principles-based approach to the assessment of building heights, but without the need to resort to prescriptive benchmark heights.

At the conclusion of the Development Plan review process, the Members decided to adopt the revised Building Heights Strategy referred to above as an integral part of the Plan, but with the understanding that the issue would be revisited with a view to revising and refining the Strategy further, possibly by way of a Variation to the Plan.

This document sets out a proposed Strategy for discussion. It sets out a broad strategy for building height based on the accepted urban hierarchy of the County and focuses on the role of Local Plans (Local Area Plans/Urban Framework Plans/Strategic Development Zones) for delivering detailed policy on building height. It also proposes a more generic policy for assessing building height in areas which may not be covered by a Local Area Plan or other similar statutory/non-statutory planning framework.

This strategy may be referred to as the Building Heights Strategy 2010-2016. On the adoption of this strategy, Appendix I of the County Development Plan shall cease to have effect.

1.2 Why do we need a Strategy?

Dún Laoghaire-Rathdown is essentially a low-rise county. The prevailing building height seldom exceeds two to three storeys, and in some small pockets even single storey development prevails. During the immediate post-war development boom, residential and retail developments generally continued to follow a two to three storey template. A limited number of higher developments were scattered around the County with heights of up to seven storeys but these were the exception rather than the norm, and their impact remained local.

However, recent and proposed development has tended to be higher - often in the region of four to six storeys. In the larger development sites such as Stepaside, Carrickmines, Cherrywood, Sandyford and along the N11 corridor heights greater than six storeys have been permitted. This trend reflects the change in national policy, driven by the Residential Density Guidelines (1999) and the subsequent Sustainable Residential Development in Urban Areas (2008) which required local authorities to promote higher residential densities in appropriate locations.

Tall buildings can mark points of significant activity such as central places, create fine landmarks, highlight civic buildings and emphasise important transport connections or nodes. On the other hand, they can sometimes overshadow, overlook and dominate their immediate surroundings and have potential adverse effects on living conditions, private gardens and public spaces. Inappropriately planned, designed and/or located tall buildings can detract significantly from the quality of a residential environment and/or the public realm. Tall buildings can be especially incompatible in areas of historic buildings, architectural conservation areas, natural heritage areas and areas imbued with significant views and skylines, and the greater their height, the broader their impact tends to be. It follows that the location, string and orientation needs to be carefully managed.

The aim of this Strategy is to ensure the protection of the built heritage of the County and general residential amenities while encouraging higher densities of quality where appropriate in accordance with national legislation and to ensure a plan-led approach to the assessment of taller buildings in the County.
1.3 High Building Strategies in Europe

This section analyses how different European cities have managed building heights and regulated tall buildings. Case studies examined include Berlin, Paris, Vienna, Dublin, London, Bristol and Rotterdam. The control of building heights has been a recurrent theme in European urban planning throughout history for a variety of reasons including the protection of amenities, land value and city image. Buildings of exceptional height are likely to have a greater impact on their context than other buildings. Tall buildings can harm important views or landmarks and may overshadow, overlook and dominate their surroundings. On the other hand, tall buildings can constitute important landmarks and provide geographical or cultural orientation points, which may contribute to a local identity.

How do other European cities manage building heights and regulate tall buildings? When comparing current planning policies to guide and control building heights in different European cities (Paris, Berlin, Vienna, Bristol, London, Dublin and Rotterdam) it becomes clear that there are three different approaches:

1. Maximum Building Height
2. Area Specific Guidance (‘Pre-designed’ zoning)
3. Criteria Based Assessment.

1.3.1 Maximum Building Height

Establishing a maximum building height was a common policy in 19th century Europe and is still used in many European cities today. Building height was restricted, for example, in Paris to a maximum of 20 metres (m) in streets wider than 20m in 1859, a regulation which is still enforced to the present day. Similarly, Berlin has defined a maximum eaves height of 22m dating from the 19th century and allowing for five storeys and a setback. Vienna has set out a maximum eaves height of 26m (also developed during the 19th century) and Bristol, in its recent Tall Building Strategy, has adopted a maximum building height of 27m. Likewise Islington (London) has established a maximum building height of 30 metres - allowing for 8 storeys and a setback. It should be noted, however, that all case studies assessed allow for exceptional landmark buildings, such as the Potsdamer Platz in Berlin which house towers of 60-70 m.

Establishing a maximum height to control building height is a common practice in urban planning and ensures a homogenous height over large areas of the urban fabric. Due to its clarity and simplicity this tool, which is usually statutory, provides certainty for developers, planners and the public. Its disadvantages are lack of flexibility and lack of adaptation to changing economic circumstances and requirements over time.

1.3.2 Area Specific Guidance

Area Specific Guidance

Another approach focuses on establishing area specific guidance on building height and tall buildings. This method identifies zones with similar characteristics and requirements and defines the degree to which each zone is suitable for the development of tall buildings. Area specific guidance usually identifies, in map-based form, locations which are appropriate, sensitive or inappropriate for tall buildings. Often map based plans are assisted by specific policies and guidance, such as general objectives as well as suggested and/or maximum heights for each defined zone. Area specific guidance usually forms a component part of the statutory local area plan and/or development plan covering any given area.

The area-based approach recognises the value of different character areas within the urban fabric and aims to protect and enhance the overall city image. Due to its statutory character and its clarity, this instrument provides certainty for developers, planners and the public. It allows for tall buildings on specific sites as well as restricting high-rise schemes in sensitive areas. A disadvantage is that, on its own, it is insufficient to ensure design excellence, a fundamental prerequisite for tall buildings due to their strong and lasting impact on their surroundings.

1.3.3 Criteria Based Assessment

Criteria based assessment is an advisory tool to evaluate the design excellence as well as the reasoned justification of a tall building proposal.

Criteria based approaches can be established through a set of assessment criteria. Planning authorities would normally require applicants of tall building proposals to comprehensively address these criteria in their planning submissions. Another option is to evaluate tall building proposals through Design Reviews and Expert Panels. These 'Panels' usually comprise a mix of highly regarded architects, urban designers, planners, traffic engineers, economists, and ecologists as well as public sector representatives and stakeholders. Their purpose is to debate and assess the design.
excellence of an individual project as well as the benefits and justification for a tall building in a specific location. This method has been successfully used in Rotterdam, where each tall building is evaluated by an expert panel in regard to innovation, flexibility, energy saving, sense of place, climatic design, expression and durability. The Irish development management system is, however, highly formal, with tight statutory time scales and processes. It is unclear how such a system could legally accommodate a ‘Design Review/Expert Panel’ approach.

To complement its already implemented area-based approach and ensure consistent design quality, the Royal Borough of Kensington and Chelsea has set out a series of additional requirements for tall building applications. In addition to the normal requirements, planning applications for tall buildings in Kensington and Chelsea must consist of:

1. A design statement including development context, development objectives, urban design principles, height and massing, density, building line, materials, details, existing and proposed land and building uses, ground floor uses and treatment of roof top crown. The design statement has to show that the proposed building would be of exceptional design quality.

2. An environmental impact assessment study to show the impact of the building on the context, especially on conservation areas and significant views. This should be done through accurate visual modelling of proposals – photomontages or three-dimensional computer models (buildings fully rendered) – from relevant assessment points defined by the council. Proposals should be shown in daylight and night light conditions.

3. A public realm strategy and contribution to public spaces.

4. A tall building statement, including benefits and justifications – such as regeneration, sustainability and city image – for a tall building on the proposed site.

5. An economic statement including the business case for a tall building, numbers of jobs and impact upon regeneration objectives.

6. An impact assessment study evaluating the effects of the building on the local environment and microclimate (wind tunnel studies, sun path studies, shadowing, privacy and overlooking, pedestrian comfort analysis, etc.).

7. A movement statement and traffic impact assessment including car parking, pedestrian movement and public transport needs.

8. A building services strategy including building systems and enclosure, energy consumption and efficiency, lighting (day and night time), telecommunications and maintenance. The strategy has to show that the proposed tall building would have an environmentally sensitive design.

9. An evaluation to demonstrate whether a similar level of density can be provided in an alternative and low-rise urban form.

Criteria based assessments for tall buildings provide more flexibility and have the advantage of adapting more readily to changes in the economic climate and development practice. On the other hand, this advisory tool, on its own, lacks an overall spatial vision and city image. Criteria based assessments generally provide less certainty for developers, planners and the public.

### 1.3.4 Combination of Approaches

A comparison of building height regulations in seven European cities shows that in the majority of the case studies a mix of statutory (Maximum Building Height, Area Specific Guidance) and advisory (List of Criteria Assessment) tools is being used.

However, there are clear differences as to which is the main instrument to guide building heights and regulate tall buildings. Whilst tall buildings in Rotterdam are primarily controlled by Expert Panels, building heights in Berlin, Paris and Vienna are restricted in the first place by a maximum building or eaves height. Similarly, Islington controls the development of tall buildings primarily by setting out a maximum building height of 30m. Recent schemes in the UK complement area specific guidance with a List of Criteria Assessment for tall building applications (Bristol, Royal Borough of Kensington and Chelsea). Some cities, such as Bristol, support their area specific guidance and list of assessment criteria by further setting out a suggested maximum height.

The research clearly demonstrates that area specific guidance – including suggested predominant and exceptional maximum height – can often be improved if used in combination with a list of assessment criteria and/or design reviews in order to control building heights, promote a coherent city image and ensure high quality design. A Building Height Strategy employing this mix of mandatory and advisory criteria is considered to be best suited to Dún Laoghaire-Rathdown.

<table>
<thead>
<tr>
<th>Maximum Building Height / Eaves Height</th>
<th>Area Specific Guidance</th>
<th>Criteria Based Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paris</td>
<td>✓ [20]</td>
<td>✓</td>
</tr>
<tr>
<td>Berlin</td>
<td>✓ [22]</td>
<td>✓</td>
</tr>
<tr>
<td>Vienna</td>
<td>✓ [26]</td>
<td>✓</td>
</tr>
<tr>
<td>Bristol</td>
<td>✓ [27]</td>
<td>✓</td>
</tr>
<tr>
<td>Islington (London)</td>
<td>✓ [30]</td>
<td>✓</td>
</tr>
<tr>
<td>RBKC (London)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dublin (central)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Rotterdam</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Planning Instruments to regulate building height and tall buildings in various European Cities
1.4 Building Height Policy in Ireland

1.4.1 Dublin City Council
The Dublin City Development Plan 2011 – 2017 was made by Dublin City Council in November 2010. Building height policy is driven primarily through the Local Area Plan programme. The Development Plan defines three categories of height for the city: low-rise, mid-rise and high-rise.

The City Plan identifies four areas with potential for tall or ‘high-rise’ buildings (50m plus: 12 storey office/16 storey residential): Docklands Cluster, Connolly, Heuston Area and George’s Quay. Nine further areas are identified with potential to accommodate buildings of up to 50m in height (defined as ‘Mid-Rise’) – Phibsborough, Grangegorman, Digital Hub, North Fringe, Clonscbaugh Industrial Estate, Ballymun, Palletstown, Park West / Cherry Orchard and Naas Road Lands. Policy is also included for areas defined as ‘low-rise’, which is effectively the remainder of the City area. A key policy was added to the Plan at amendment stage: “For all areas in the Development Plan identified as either mid-rise or high-rise, a Local Area Plan shall be prepared. In high-rise areas, the Local Area Plan shall determine the maximum height of buildings. All areas shall remain low-rise until a Local Area Plan is approved.”

1.4.2 Cork City Council
Policy on building height is included in the recently adopted South Dublin County Development Plan (2011). The Plan adopts essentially an ‘area specific guidance’ approach, drawing a distinction between town centre/district centre zones where taller buildings may be permissible, and other more suburban areas of the County.

“The layout of new higher-density residential developments immediately adjoining areas of existing one and two storey housing should seek to ensure a gradual change in building heights with no significant marked increase in building height in close proximity to existing housing. In particular new housing outside of town centre and district centre locations which are located immediately next to or backing onto existing one and two storey housing and sharing a common rear or side garden boundary should have no more than two storeys in height except in cases where the distance between opposing rear windows in the existing and new residential buildings is greater than 35 metres.”

The Plan goes on to state that: “The height of buildings should be determined by the following: The height of surrounding development and the formation of a cohesive streetscape pattern. In general, perimeter blocks should be three to five stories in height including a top floor setback. Deviations from these standards may be considered within designated town, district and local centres (where appropriate) and where there is high quality public transport (Luas and Rail) where amenities can be maintained.” With regards to the issue of defining tall buildings, the Plan uses the following definition: “A high building is one that exceeds five storeys (15 metres approximately) or is significantly higher than neighbouring or surrounding development.”
Belgard Square, Tallaght. 13 Storey Residential Scheme

1.4.4 Fingal County Council

The Fingal County Development Plan 2011 - 2017 will be finalised in March 2011. Somewhat surprisingly, the most recent Draft does not include specific policy on building height. It is proposed that Masterplans and ‘Urban Centre Strategies’ will be prepared for the various urban nodes throughout the County and that these plans should "set out a policy framework within which key design factors, such as scale, massing, height, form, materials, conservation issues and linkages can be judged".

Figure 1. Building Height Policy: Dublin City Development Plan 2011

1.4 Building Height Policy in Ireland

1.4.1 Dublin City Council

The Dublin City Development Plan 2011 – 2017 was made by Dublin City Council in November 2010. Building height policy is driven primarily through the Local Area Plan programme. The Development Plan defines three categories of height for the city: low-rise, mid-rise and high-rise.

The City Plan identifies four areas with potential for tall or ‘high-rise’ buildings (50m plus: 12 storey office/16 storey residential):

- Docklands Cluster,
- Connolly,
- Heuston Area and
- George’s Quay.

Nine further areas are identified with potential to accommodate buildings of up to 50m in height (defined as ‘Mid-Rise’ –

- Phibsborough,
- Grangegorman,
- Digital Hub,
- North Fringe,
- Clonshaugh Industrial Estate,
- Ballymun,
- Pelletstown,
- Park West / Cherry Orchard and
- Naas Road Lands.

Policy is also included for areas defined as ‘low-rise’, which is effectively the remainder of the City area. A key policy was added to the Plan at amendment stage: “For all areas in the Development Plan identified as either mid-rise or high-rise, a Local Area Plan shall be prepared. In high-rise areas, the Local Area Plan shall determine the maximum height of buildings. All areas shall remain low-rise until a Local Area Plan is approved.”

1.4.2 Cork City Council

The tallest residential building in Ireland is located in Cork City. The Elysian Tower stands at 17 storeys (81 metres). Policy in the Cork City Development Plan (2009) on building height is as follows:

Within the context of Cork City the following building height categories can be identified:

- Low-rise buildings - these are 1-3 storeys in height;
- Medium-rise buildings - these are less than 32 metres in height (4-9 storeys approximately). Buildings which are taller than the general building height in any area will be considered “taller” even where they are less than 10 storeys;
- Tall buildings - these will be buildings of 32 metres or higher (The approximate equivalent of a 10 storey building with a commercial ground floor and residential in the remaining floors).

The City Council will aim to protect the special character of Cork by directing tall buildings to development areas which have been identified as having potential for tall buildings. These are:

- Docklands;
- North Blackpool (location to be determined in a Local Area Plan to be prepared for North Blackpool);
- South Mahon.

1.4.3 South Dublin County Council

Policy on building height is included in the recently adopted South Dublin County Development Plan (2011). The Plan adopts essentially an ‘area specific guidance’ approach, drawing a distinction between town centre/district centre zones where taller buildings may be permissible, and other more suburban areas of the County.

“The layout of new higher-density residential developments immediately adjoining areas of existing one and two storey housing should seek to ensure a gradual change in building heights with no significant marked increase in building height in close proximity to existing housing. In particular new housing outside of town centre and district centre ... located immediately next to or backing onto existing one and two storey housing and sharing a common rear or side garden boundary should have no more than two storeys in height except in cases where the...”

The Plan goes on to state that:

“The height of buildings should be determined by the following: The height of surrounding development and the formation of a cohesive streetscape pattern. In general, perimeter blocks should be three to five storeys in height including a top floor setback. Deviations from these standards may be considered within designated town, district and local centres (where appropriate) and where there is high quality public transport (Luas and Rail) where amenities can be maintained.”

With regards to the issue of defining tall buildings, the Plan uses the following definition:

“A high building is one that exceeds five storeys (15 metres approximately) or is significantly higher than neighbouring or surrounding development.”
2. Understanding Building Height

2.1 Introduction

Building heights can be expressed in terms of overall height, number of floors, height of parapet or ridge, height relative to particular landmarks or a ratio of building height to street or space width.

Building heights significantly define the character of cities or quarters. Whilst some cities and quarters are characterised by low-rise buildings, others are defined by its high-rise structures. Furthermore, cities or quarters can have a homogenous and uniform building height or present a diversity or range of building heights. ‘High Building’ or ‘Tall Building’ is a very relative term and one that is commonly used with a lack of precision or discretion. A six-storey building might, for example, be a tall building in a predominantly two-storey suburban area, but of a common height in a metropolitan city centre. It is imperative that any objective analysis of tall buildings must, therefore, be considered in relation to their local context.

2.1.1 Density and Height

Generally, ‘High Buildings’ or ‘Higher Buildings’ are defined as buildings which are higher than the overall building height in any given area, whilst ‘Tall Buildings’ are defined as buildings that are significantly higher than their surroundings and/or have a considerable impact on the skyline. ‘Higher Buildings’ can sometimes act as local or district landmarks, whilst ‘Tall buildings’ may perform a function as strategic or citywide landmarks.

Density is the amount of development on a given piece of land. Density defines the intensity of development and together with the mix of uses influences a place’s viability and vitality. The density of a development can be expressed in terms of plot ratio, number of inhabitants, number of dwellings or number of habitable rooms.
2. Understanding Building Height

2.1 Introduction

Building heights can be expressed in terms of overall height, number of floors, height of parapet or ridge, height relative to particular landmarks or a ratio of building height to street or space width.

Building heights significantly define the character of cities or quarters. Whilst some cities and quarters are characterised by low-rise buildings, others are defined by its high-rise structures. Furthermore, cities or quarters can have a homogenous and uniform building height or present a diversity or range of building heights. 'High Building' or 'Tall Building' is a very relative term and one that is commonly used with a lack of precision or discretion. A six-storey building might, for example, be a tall building in a predominantly two-storey suburban area, but of a common height in a metropolitan city centre. It is imperative that any objective analysis of tall buildings must, therefore, be considered in relation to their local context.

2.1.1 Density and Height

Generally, ‘High Buildings’ or ‘Higher Buildings’ are defined as buildings which are higher than the overall building height in any given area, whilst ‘Tall Buildings’ are defined as buildings that are significantly higher than their surroundings and/or have a considerable impact on the skyline. ‘Higher Buildings’ can sometimes act as local or district landmarks, whilst ‘Tall buildings’ may perform a function as strategic or citywide landmarks.

Density is the amount of development on a given piece of land. Density defines the intensity of development and together with the mix of uses influences a place’s viability and vitality. The density of a development can be expressed in terms of plot ratio, number of inhabitants, number of dwellings or number of habitable rooms.
Building height, footprint, form, site coverage and compactness determine the density of an area. However, high density does not necessarily require high-rise buildings; tall buildings are only one possible model for high density. Compact and low-rise development forms such as terraces, urban blocks and apartments built around garden squares can likewise achieve relatively high densities (see diagram on page 11). Lower-rise buildings have several advantages over high-rise structures. They have the advantage of being able to provide large floor plates, whilst tall buildings can usually only offer floor plates of relatively shallow depth (although this is not always the case). Large floor plates are often more suited to a wide range of office functions and are increasingly in demand by large organisations occupying the same building to facilitate internal communication. Furthermore, low-rise buildings would normally cost considerably less to construct and maintain than high-rise buildings and are generally more energy efficient.

2.2 Arguments FOR Higher Buildings and Tall Buildings

In an urban design context there are three main arguments for the development of tall buildings: sustainability and density, city image and urban regeneration.

2.2.1 Sustainability and Density

The sustainability approach seeks to combine high-density development juxtaposed to good social facilities to minimise the need for travel, and with high quality public transport provision to limit the use of the private car. With the need to promote the principle of sustainable growth, high density, mixed-use development requires to be facilitated and encouraged in town centres and around major transport interchanges and nodes. As stated previously in this section, high density does not necessarily require the provision of tall buildings. High densities can also be achieved through low and medium-rise compact development forms.

2.2.2 City Image

The city image approach is concerned with the status, legibility, appearance and perception of a city. Landmarks are easy to see and recognise, provide geographical or cultural orientation points, can give meaning and may contribute positively to a local identity. Landmarks can consist of natural geographical elements such as hills, trees or waterways, or of man-made high structures, such as spires, towers and tall buildings. Obvious historic examples of using height for this purpose would be St Paul’s Cathedral in London or the Eiffel Tower in Paris.

2.2.3 Landmarking

Tall buildings can create attractive landmarks and enhance the character of an area. They can mark strategic spots, such as important transport nodes, gateways, end points of significant axial views or relevant inflection points along waterfronts. Tall buildings can also emphasize important connections, such as major transport corridors and waterways. Depending on their size and location they can perform as city-wide or local landmarks. It has to be noted, however, that in order to perform their role as landmarks, the number of tall buildings in any given area needs to be relatively few and sparse. Furthermore, landmarks need to be of outstanding design quality due to their high visibility. Landmarks are often located in financial districts - the ‘Gherkin’ in the City of London denoting the primacy of the commercial quarter of the City.

2.2.4 Landmarks along Waterfronts

Views to and from the waterfront are especially significant because the openness of water spaces allows for relatively long-distance views. Landmarks of cultural and social significance can, in certain circumstances, enhance a waterfront, offering orientation points and pleasing views from sea and land. Examples would include the London Eye and the Millennium Dome at Greenwich, London or the extensive harbourfront developments in Rotterdam. However, there are a number of adverse effects that poorly designed and sited tall buildings can have when located adjacent to water spaces. These include overshadowing, wind turbulence and the potential creation of a ‘visual canyon’.

2.2.5 Tall Buildings along Major Transit Corridors

Major corridors function as key access and transit corridors. Thus, buildings along major corridors have a disproportionately strong presence. Tall buildings are often located along major corridors for reasons of accessibility or prestige. Such buildings can help the legibility of the city by expressing the hierarchy of the street, marking specific points and dividing the corridor into recognisable segments. Nevertheless, the hierarchy of a corridor may also be emphasised through other means than height, such as quality building or public space design.

2.2.6 Landmarks that Enhance Borders and Gateways

Individual tall buildings or clusters can, in appropriate circumstances, enhance the borders and entrance routes of cities and quarters and emphasise gateways. An example would be the buildings at La Defense in Paris, located at the westernmost extremity of Paris’ 10km long historical axis.

2.2.7 Tall Buildings that Enhance a Particular (Public) Use

Landmarks can also express a particular use. Tall buildings are a very dominant building form and have a significant impact on the skyline. It is for this reason that local and strategic landmarks should preferably be buildings of public use, such as culture, education, leisure, health, etc. Many of the earliest examples of tall buildings were, of course, symbols of religious devotion. Tall buildings create an opportunity for magnificent views from the top floors. To facilitate these views to a wider public, tall buildings should include public spaces on their top floors.

2.2.8 The ‘World City’ argument

It has been argued that ‘World Cities’ have to represent their status through clusters of tall buildings, which dominate the skyline. Proponents furthermore argue that in order to maintain their leading role, ‘global cities’ need to be proactive in the provision of
Building height, footprint, form, site coverage and compactness determine the density of an area. However, high density does not necessarily require high-rise buildings; tall buildings are only one possible model for high density. Compact and low-rise densities (see diagram on page 11). Lower-rise buildings have geographical or cultural orientation points, can give meaning and may mark specific points and dividing the corridor into recognisable advantage of being able to provide large floor plates, whilst tall geographical elements such as hills, trees or waterways, or of man-made high structures, such as spires, towers and tall buildings. Obvious historic examples are the Eiffel Tower in Paris.

2.2.4 Landmarks along Waterfronts
The sustainability approach seeks to combine high-density openness of water spaces allows for relatively long-distance views. Landmarks need for travel, and with high quality public transport provision to limit the use of the private car. With the need to promote the principle of sustainable growth, high density, mixed-use and urban regeneration.

Examples would include the London Eye and the Millennium Dome at Canary Wharf. The regeneration of the Canary Wharf district on the Isle of Dogs in East London, which now contains some of the tallest buildings in Europe, would be an obvious example of this approach. Nevertheless, there is no evidence that high-rise buildings, on their own, act as a catalyst for regeneration. Confidence in regeneration should be signalled through quality urban design and public realm improvement rather than tall buildings per se and needs to be underpinned by significant physical and community infrastructure investment as well as robust long-term regeneration strategies and policies.

2.3 Arguments AGAINST Higher Buildings and Tall Buildings

In residential environments, all building design needs to pay particular attention to privacy, amenity and overshadowing. Poorly planned, designed and located tall buildings can detract significantly from the quality of a residential environment. Tall buildings may overshadow, overlook and dominate their immediate surroundings and can have adverse effects on living conditions, private gardens, patios and public spaces.

2.3.5 Tall Buildings and Costs
Tall buildings cost more to construct and maintain per unit of floor area than low rise buildings, due to their increased wind loadings and heavier frames, their vertical transportation requirements and the larger capacities of plant and distribution systems together with the increased pressures/hydraulic brakes that are required to deal with the increased vertical distances.
Historically, Dún Laoghaire-Rathdown has generally been perceived primarily as a low-rise county. The prevailing building height seldom exceeds two to three storeys, and in some localised areas even single storey development prevails. Historically, the only outstanding highpoints were church spires and a few towers of fortifications, castles and mansions. During the post-war development boom, new residential and retail developments remained mostly around two to three storeys - Stillorgan Shopping Centre being a typical example of the time. Only a few higher developments were developed and these tended to be somewhat randomly scattered around the County. They included a number of university buildings, a few office and apartment developments and also a shopping centre in Dún Laoghaire. Heights for these developments however remained relatively moderate, with maximum heights of up to six-seven storeys.

As single developments they were rather the exception than the norm, and their impact remained local. From the 1980s onwards however, a number of larger scale developments were realised across the County. These were of similar height, generally up to four-five storeys. The development boom which gathered pace at the end of the 1990's provided an even greater focus on building height. New developments coming forward generally were of an urban scale and promoted an average height of seldom less than four storeys, often ranging between four and six storeys but very occasionally higher.

Broadly, there are two types of site where these kinds of development are promoted. The first group comprises smaller infill sites within the established fabric of the built-up urban or suburban area, in which the proposed development can often exceed the average height of its immediate surroundings. In some cases, such developments - which may be only two storeys higher than the surrounds - can help to create new localised high points which are contextually acceptable, may set the standard for future, more intensive development in the surrounding area, and can assist in the establishment of attractive local landmarks. On the other hand, certain developments - if out of context - may appear jarring, detract from the legibility of an urban area, appear out of scale compared with their surroundings and may have a particularly detrimental effect where their location does not coincide with a central place or node.

In situations where infill development is proposed, any consideration should focus on whether such an alteration to the prevailing character is desirable and/or can be satisfactorily ‘absorbed’ into the local context. Preferably, policy guidelines should be in place against which individual developments of this nature can be assessed. Without firm regulation or guidance, ad hoc raising of building heights could ultimately lead to a weakened urban form and could create a fragmented and less meaningful pattern of development. On the other hand, the right policy context will enable some locationally favoured places to transform themselves in an appropriate way to accommodate larger scale development with higher densities and good streets and spaces.

The second group consists of the development of larger greenfield or brownfield sites, including Stepaside, Carrickmines, Dundrum, Cherrywood and Sandyford. In these areas overall development height is increased. The development of these areas is guided by some form of a masterplan, (or will be the subject of a masterplan in the near future) and these plans tend to offer a consistent and relatively prescriptive policy approach to height. Sandyford, for example, where a former low-rise industrial estate is undergoing rapid transformation, has the most varied height-pattern in the County. Historically, the development pattern consisted of one and two-storey factories/warehouses and three to four-storey office developments, but recently, heights have increased substantially, in some instances. Newer office developments generally range up to six storeys but a single permitted mixed-use development has reached a height of up to seventeen storeys.

The remainder of Section 3 provides a number of specific area-based examples to demonstrate the evolving pattern of building height in Dún Laoghaire-Rathdown.
Building Height in Dún Laoghaire-Rathdown

Historically, Dún Laoghaire-Rathdown has generally been perceived primarily as a low-rise county. The prevailing building height seldom exceeds two to three storeys, and in some localised areas even single storey development prevails. Historically, the only outstanding highpoints were church spires and a few towers of fortifications, castles and mansions. During the post-war development boom, new residential and retail developments remained mostly around two to three storeys - Stillorgan Shopping Centre being a typical example of the time. Only a few higher developments were developed and these tended to be somewhat randomly scattered around the County. They included a number of university buildings, a few office and apartment developments and also a shopping centre in Dún Laoghaire. Heights for these developments however remained relatively moderate, with maximum heights of up to six-seven storeys.

As single developments they were rather the exception than the norm, and their impact remained local. From the 1980s onwards however, a number of larger scale developments were realised across the County. These were of similar height, generally up to four-five storeys. The development boom which gathered pace at the end of the 1990's provided an even greater focus on building height. New developments coming forward generally were of an urban scale and promoted an average height of seldom less than four storeys, often ranging between four and six storeys but very occasionally higher.

Broadly, there are two types of site where these kinds of development are promoted. The first group comprises smaller infill sites within the established fabric of the built-up urban or suburban area, in which the proposed development can often exceed the average height of its immediate surroundings. In some cases, such developments - which may be only two storeys higher than the surrounds - can help to create new localised high points which are contextually acceptable, may set the standard for future, more intensive development in the surrounding area, and can assist in the establishment of attractive local landmarks. On the other hand, certain developments - if out of context - may appear jarring, detract from the legibility of an urban area, appear out of scale compared with their surroundings and may have a particularly detrimental effect where their location does not coincide with a central place or node.

In situations where infill development is proposed, any consideration should focus on whether such an alteration to the prevailing character is desirable and/or can be satisfactorily ‘absorbed’ into the local context. Preferably, policy guidelines should be in place against which individual developments of this nature can be assessed. Without firm regulation or guidance, ad hoc raising of building heights could ultimately lead to a weakened urban form and could create a fragmented and less meaningful pattern of development. On the other hand, the right policy context will enable some locationally favoured places to transform themselves in an appropriate way to accommodate larger scale development with higher densities and good streets and spaces.

The second group consists of the development of larger greenfield or brownfield sites, including Stepaside, Carrickmines, Dundrum, Cherrywood and Sandyford. In these areas overall development height is increased. The development of these areas is guided by some form of a masterplan, (or will be the subject of a masterplan in the near future) and these plans tend to offer a consistent and relatively prescriptive policy approach to height.

Sandyford, for example, where a former low-rise industrial estate is undergoing rapid transformation, has the most varied height-pattern in the County. Historically, the development pattern consisted of one and two-storey factories/warehouses and three to four-storey office developments, but recently, heights have increased substantially, in some instances. Newer office developments generally range up to six storeys but a single permitted mixed-use development has reached a height of up to seventeen storeys.

The remainder of Section 3 provides a number of specific area-based examples to demonstrate the evolving pattern of building height in Dún Laoghaire-Rathdown.
3.1 Sandyford Business District

Sandyford has probably been the most significant area of change and growth within the County over the last decade or so. The District has seen incremental redevelopment from a previously low density, low rise manufacturing and warehousing industrial estate to a high density mixed-use urban area, albeit that it still lacks a coherent centre.

The Sandyford Urban Framework Plan (SUFP) sets building height limits across Sandyford Business District. The building height limits have been established through a considered assessment of location and character of an area and proposed land use. At strategically identified locations, the SUFP allows for the design of buildings or elements of buildings to exceed the generally permitted building height by one or two storeys.

The stated building height limits in the SUFP do not represent a 'target' height for each site - it is essential that any building makes a positive contribution to the built form of the area. It is intended that building height shall therefore, be determined by how it responds to its surrounding environment and be informed by: location; the function of the building in informing the streetscape; impact on open space and public realm (in particular shadow impact), impact on adjoining properties; views into the area and long distance vistas.

It is an objective of the (SUFP) Building Height Strategy to:

1. Ensure that Sandyford Business District is developed in accordance with height limits set out in Map 3 of the SUFP (see page 25) subject to the building making a positive contribution to the built form as set out above.

2. Require applicants to include with their proposals an analysis of the impact of the height and positioning of buildings on:
   - Immediate and surrounding environment
   - Adjoining structures
   - Open spaces
   - Public realm (including impact on streets, spaces, pedestrian and cycle routes, identified green routes, and with particular emphasis on shadow impact)
   - Views and vistas.

3. Consider additional heights over the height limits as indicated in locations identified on Map 3 of the Plan. On sites other than the Blackthorn Road site, increase in building height shall be limited to one to two storeys above the height limit.
3.2 Dún Laoghaire

The coastal County town of Dún Laoghaire is designated as a Major Town Centre. Dun Laoghaire is generally characterised by its 19th century grid layout, narrow plot widths and well-defined and enclosed streets. However, there is a contrast between the relatively small grain, individually owned buildings and some relatively recent large developments of lower architectural quality with uninspiring facades and poorly defined public spaces - the Dun Laoghaire Shopping Centre being the most obvious example. The town centre area also incorporates a number of parcels of underdeveloped land, such as surface car parking, backland sites and underutilised institutional sites.

Traditional building height within the area are typically 2-4 storeys, with some post-war developments of about 4-5 storey. More recent schemes extend up to a maximum of 7 storey. Generally only the spires of St. Michael’s Church and Mariner’s Church and the tower of the County Hall rise above this urban skyline.

In advance of a formal Local Area Plan being prepared for the Town, an Urban Structure Plan has been included as part of the County Development Plan as an interim measure to help guide development and provide a clear and coherent vision. For the core area of the town, the Plan continues to acknowledge the importance of St. Michael’s and Mariners Church spires as an important focal points both in the town and when viewed from the piers and Dublin Bay.

It is an objective of the Urban Structure Plan that this hierarchical relationship between long established landmark buildings and new infill development be preserved and maintained.

The Urban Structure Plan also aims to ensure that new development should be contextual, should seek to re-establish streetscapes, should be appropriately scaled and be rich in materials and details consistent with the existing typology of the Town Centre. It may be entirely appropriate, however, to provide landmark buildings at key strategic points throughout the Town Centre. Notwithstanding, the Plan states that “There is, however, no implication that a ‘landmark building’ should be interpreted as having to be a building higher than its surroundings.”

The Victorian-era floor-to-ceiling heights of many of the terraces along the shorefront of Dún Laoghaire results in a built form that can be significantly taller than modern apartment schemes (see figure below).
3.3 Public Transport Corridors

The N11, owing to its width, strategic importance, and public transport facilities, has the potential to become an attractive urban corridor enclosed by taller buildings of high quality, at locations which are also proximate to social and community infrastructure.

The N11 corridor has seen a pattern of taller apartment schemes constructed at key corner sites along its route through the County. As such schemes are restricted from taking access directly from the N11, corner sites at junctions between the N11 and the larger side roads have been the most common location for intensification of development. These developments have tended to range from 3 to 7 storeys. The width of the corridor, at over 40 metres, provides an opportunity for taller buildings to enclose this space.

The higher residential densities that have been realised in this area in the last few years were as a result of policies in the 2004 County Development Plan which promoted higher densities within a 500 metre catchment of a QBC and also allowed for consideration of higher densities on large development sites, in excess of 0.5ha.

There are other road/public transport corridors in the County which have seen a greater intensity of development, for the same reasons as the N11 corridor – the Wyckham Bypass, the Blackrock Bypass and along the Luas Line B/B1.
The N11, owing to its width, strategic importance, and public transport facilities, has the potential to become an attractive urban corridor enclosed by taller buildings of high quality, at locations which are also proximate to social and community infrastructure. The N11 corridor has seen a pattern of taller apartment schemes constructed at key corner sites along its route through the County. As such schemes are restricted from taking access directly from the N11, corner sites at junctions between the N11 and the larger side roads have been the most common location for intensification of development. These developments have tended to range from 3 to 7 storeys. The width of the corridor, at over 40 metres, provides an opportunity for taller buildings to enclose this space.

The higher residential densities that have been realised in this area in the last few years were as a result of policies in the 2004 County Development Plan which promoted higher densities within a 500 metre catchment of a QBC and also allowed for consideration of higher densities on large development sites, in excess of 0.5ha. There are other road/public transport corridors in the County which have seen a greater intensity of development, for the same reasons as the N11 corridor – the Wyckham Bypass, the Blackrock Bypass and along the Luas Line B/B1. Wyckham Bypass - Buildings Taller than 5 Storeys.

Apartments Wyckham Bypass, Dundrum
Apartments Wyckham Bypass, Stillorgan Dual Carriageway
3.4 Suburban Infill

There has been a discernable pattern of gradually increasing residential densities in 'infill' sites within the built up area of the County over the last decade or so. Many of these infill developments have been at a higher density and with a taller building height profile than the prevailing local low rise context. This pattern of development has been driven in response both to the Government document "Residential Density Guidelines" (1999) and through policies contained in the 2004 County Development Plan which encouraged higher densities, particularly on large development sites, in excess of 0.5ha in area.

Many of the examples of this form of development are located on prominent corner sites, or on sites with frontage onto a wide road. While there was certainly some initial scepticism regarding how well such schemes would ‘knit’ or be absorbed into their suburban context, it is considered that, by and large, this new urban form has been integrated successfully into its context and has succeeded in achieving higher residential densities on key sites.

Pictured opposite are some examples of corner site infill schemes.

The general approach in terms of building heights in these sites has been to taper height from a high point in the centre of the site down to the site boundaries where the height of adjacent buildings can often be lower.
3.5 Recent Developments

In the last two or three years, following the rapid decline in the property market, there has been virtually no development pressure for taller buildings in the County. In fact, the opposite has applied. Developers have been resubmitting scaled-down proposals on sites for which planning permission has already been granted for higher density developments. In some cases, such development proposals have been in conflict with National Guidelines on residential density, which seek to achieve higher residential density development proximate to public transport, for example.

Whilst the County Development Plan (2010-2016) was framed in the context of the population and housing projections contained in the most recent Regional Planning Guidelines (2010-2022), it is clear that these targets are unlikely to be met in the short to medium term. The pronounced slowdown in construction activity and the evidence of an excess supply of apartments in the County are likely to lead to a continued lack of demand for increased residential densities and increased building height which may, in turn, have implications for the implementation of the Regional Planning Guidelines.

In conclusion, it is worth noting that the context within which the Building Heights Strategy is being currently framed is a property market that shows absolutely no evidence of seeking increased building heights, in the manner that was evident in recent years.
4. Policy Approach

Within the Shanganagh 'node', the Plan notes that development in the Shanganagh Castle site will be predominantly residential in character and will comprise two-storey buildings only along the northern edge of the lands reflecting the scale of the existing adjacent development of the Castle Farm estate. The rest of the site will be formed by residential development, which will vary in height from 3 to 4-storeys marked occasionally by 5-storeys where appropriate. Subject to the discretion of the Planning Authority, development may be modified down from the benchmark height (Downward Modifiers) in circumstances of consideration to be 'self-selecting' by virtue of their status as either Major Town Centres/growth areas, major employment locations or a setting of a listed building, or an area of particular character, or a planning or social objective.

Further guidance is given in relation to downward modifiers and transitional zones. Building height shall be graded so they are lower in close proximity to residential areas. Transitional Zones allow for a gradual transition of densities and height. Section 15.2 of the County Development Plan deals with Transitional Zonal areas and therefore a Transitional Zone of 25 metres will be applied to development in Stillorgan District area.

While no reference is made to recommended building height, the Plan is accompanied by a Design Guide, the aim of which is to revive/recreate the traditional rural settlement pattern and house the landscape. This implied conservative approach to building height is also evident in that all new developments within designated rural clusters must aim to emulate this historic settlement structure. All new developments within the Plan area will have to be appropriately integrated with the existing character and quality of the village.

Within the Shanganagh Castle site, the Plan notes that building height in the County will be generally not be considered outside of these locations. Furthermore, the appropriate vehicle for identifying the specific sites within these centres that have potential for accommodating higher buildings will be through the planning system, matching the criteria of the plan. Notwithstanding the policy approach, it is acknowledged that some development on the Shopping Centre Overflow Car Park and Millhouse Car Park "will be restricted to a height of not exceeding 4 storeys."

In summary, the Plan notes that "The height of buildings will range in the area) can realistically only be accommodated only in a number of key centres in the County – specifically Sandyford, Cherrywood, Woodbrook. Higher buildings will be centred on the neighbourhood square where one slim development of significance up to seven floors may be considered."

Major Town Centres/growth areas, major employment locations or a setting of a listed building, or an area of particular character, or a planning or social objective.

Guidance is provided on recommended building heights in the various nodes throughout the Plan. In the Glenamuck 'node', "heights permitted would generally range from 2/3 storeys with four storey elements adjacent to major road alignments in other locations."

In contrast, within the Kiltiernan 'node', recommended heights range from 2-4 storeys. The Glencullen Local Area Plan (2008) prioritises the maintenance of the existing design guidelines in Woodbrook and the Woodbrook/Shanganagh Local Area Plan (2006) states that in the Woodbrook 'node', residential blocks will be used to achieve a low/medium rise compact urban form - 3-4 floors high rising to 4-5 floors around the 'main street' with a variety of heights along the golf course boundary edge.

Stillorgan Local Area Plan (2007) This section sets out a proposed policy approach for the assessment of building height in the County. It is based on a general benchmark building height of 5 storeys. The Plan also states that development on the Shopping Centre Overflow Car Park and Millhouse Car Park "will be restricted to a height of not exceeding 4 storeys."
4 Policy Approach

This section sets out a proposed policy approach for the assessment of building height in the County. It is based on a rationale that tall buildings (which can be defined as a building which is significantly taller than the prevailing building height for the area) can realistically only be accommodated only in a number of key centres in the County – specifically Sandyford, Cherrywood, Dundrum, Dún Laoghaire and UCD Belfield. These centres are considered to be 'self-selecting' by virtue of their status as either Major Town Centres/growth areas, major employment locations or in the case of UCD, a major national institution. Taller buildings will generally not be considered outside of these locations. Furthermore, the appropriate vehicle for identifying the specific sites within these centres that have potential for accommodating building height are statutory (and non-statutory) local plans – be they Local Area Plans, Framework Plans or SDZ's. It follows that it would not be appropriate to consider planning applications for tall buildings on a site in advance of the adoption of a local plan for an area.

This section demonstrates quite unequivocally the extensive area of the County which is covered by either an explicit or implicit building height policy, extant or planned. A new generic Building Height Policy (Section 4.8) is proposed for those residual areas of the County not covered by an existing policy or plan based height criteria.

4.1 Local Plans and Building Height Policy

The development of a building height strategy for the County must acknowledge that a significant area of the County is either already 'covered' by area-based plan policy on building height, or will be the subject of forthcoming local plans. There are also a number of non-statutory plans guiding development in the County. This section sets out in detail the existing and planned local plan policy base guiding future building height in those specific parts of the County.

4.1.1 Stillorgan Local Area Plan (2007)

The Plan outlines specific benchmark heights for various sites and land parcels but establishes a general benchmark building height of 5 storeys. The Plan also states that development on the Shopping Centre Overflow Car Park and Millhouse Car Park "will be restricted to a height of not exceeding 4 storeys." Further guidance is given in relation to downward modifiers and transitional zones, viz:

"Subject to the discretion of the Planning Authority, development may be modified down from the benchmark height (Downward Modifiers) in circumstances of exceptional local sensitivity where new development would significantly harm:

a. residential living conditions through overlooking or overshadowing,
b. a setting of a listed building,
c. an area of particular character,
d. a planning or social objective.

Building height shall be graded so they are lower in close proximity to residential areas. Transitional Zones allow for a gradual transition of densities and height. Section 15.2 of the County Development Plan deals with Transitional Zonal areas and therefore a Transitional Zone of 25 metres will be applied to development in Stillorgan District Centre and Neighbourhood Centre."P35

4.1.2 Kiltiernan/Glenamuck Local Area Plan (2007)

Guidance is provided on recommended building heights in the various nodes throughout the Plan. In the Glenamuck 'node', "heights permitted would generally range from 3-5 storeys, which would be compatible with existing permitted heights in the area." In contrast, within the Kiltiernan 'node', recommended heights range from "2/3 storeys with four storey elements adjacent to major road alignments" and "2-4 storeys" in other locations.

4.1.3 Woodbrook/Shanganagh Local Area Plan (2006)

The Plan states that in the Woodbrook 'node', residential blocks will be used to achieve a low/medium rise compact urban form - 3-4 floors high rising to 4-5 floors around the 'main street' with a variety of heights along the golf course boundary edge.

Within the Shanganagh 'node', the Plan notes that development in the Shanganagh Castle site will be predominantly residential in character and will comprise two storey buildings only along the northern edge of the lands reflecting the scale of the existing adjacent development of the Castle Farm estate. The rest of the site will be formed by residential development, which will vary in height from 3 to 4-storeys marked occasionally by 5-storeys where appropriate.

In summary, the Plan notes that "The height of buildings will range between 2 and 5 floors in Shanganagh Castle and 2 and 5 floors in Woodbrook. Higher buildings will be centred on the neighbourhood square where one slim development of significance up to seven floors may be considered"("P31) "

4.1.4 Glencullen Local Area Plan (2008)

While no reference is made to recommended building height, the Plan is accompanied by a Design Guide, the aim of which is to revive/recreate the traditional rural settlement pattern and house design characteristic of the area while minimising the impact on the landscape. This implied conservative approach to building height is also evident in that all new developments within designated rural clusters must aim to emulate this historic settlement pattern, and within the village core, new developments will have to be appropriately integrated with the existing settlement structure. All new developments within the Plan area will have to comply with the following general principles:

• Must demonstrate good integration within the wider landscape;
• Must demonstrate good integration within the existing settlement pattern; i.e. sympathetically designed in harmony with the scale and character of the village core and/or rural cluster and not adversely affecting the character of same. This includes attention to building location, orientation and relationship to nearby
would be unsustainable to continue to develop 1/2/3 storey buildings and that "it is therefore conceivable that 8-10 storey residential developments for student accommodation or 6 storey educational building be considered in the future."
The Masterplan also suggests that "key sites for higher density landmark buildings should be designated based on visual impact, importance and urban priority. For example the 'Gateway' project and completion of the Science Block could accommodate such a landmark building".

4.1.8 Forthcoming Local Plans
There are a range of local plans to be completed during the lifetime of the County Development Plan (2010) which will provide guidance on building height. Two of the major plans to be produced during the lifetime of the County Development Plan – the Sandyford Urban Framework Plan and the Cherrywood Strategic Development Zone Planning Scheme – have already been the subject of considerable preliminary work and will provide detailed and comprehensive guidance on building height – to a very fine grain, on a block by block basis in some instances. Plans include:

- Sandyford Urban Framework Plan
- Cherrywood Strategic Development Zone
- Dún Laoghaire Local Area Plan
- Blackrock Local Area Plan
- Sallynoggin Local Area Plan
- Goatstown Local Area Plan
- Rathmichael/Ferndale Road Local Area Plan
- Old Conna Local Area Plan.

4.1.5 Deansgrange Local Area Plan (2010)
The Plan includes a fine grain of detail on appropriate building height (including 'benchmark heights'), within the various zones and distinct sub-areas of the Deansgrange Local Area Plan. The Plan also provides for "modifiers" to the benchmark heights set out in instances where, for example, development would create urban design benefits in terms of improving the overall legibility and the character of the area. Specific policy on building height is set out as follows:

"In order to afford a level of guidance within the plan area, an assessment of appropriate benchmark heights for Deansgrange Neighbourhood Centre Area and Deansgrange Business Park is set out in Drawing B – Building Heights. This drawing should be read in conjunction with Appendix B, which sets out an assessment of appropriate building heights within the plan area. Any development proposals, which deviate from the guidance set out in Appendix B, would in addition to normal planning application requirements, have to submit an architectural design statement that addresses development context, development objectives, urban design principles, scale, massing and materials. The Planning Authority would have to be satisfied that proposals would enhance the visual character of the area and that residential amenities of existing homes would be safeguarded."

Other non-statutory documents provide guidance for areas of the County on development standards, as outlined below.

4.1.6 Stepaside Action Area Plan (2000)
The Stepaside Action Area Plan was adopted by the Council in 2000 and has continued to guide development in the area over the last decade. Planning permission has now been granted for most of the major development sites in the area generally in accordance with the Plan and a significant proportion of these have been developed. There are, however, a number of significant development sites still to commence. While the Plan did not set benchmark or recommended building height, minimum residential densities were identified for various development parcels. Suggested building heights were included for 'focal point' sites adjacent to core centres and distributor roads, generally up to four storeys. Effectively, the basis of the Plan and the extant planning permissions for the few remaining development sites set a framework for building height in the area.

4.1.7 UCD Masterplan (2005)
The UCD Campus Development Plan 2005-2010-2015 sets out aims and priorities for the future direction of the University. This Plan includes a vision for world-class architecture, a network of pedestrian walkways and a transformation of the academic infrastructure to reflect the ambitions of a leading European university. The Masterplan has been noted by the Council and is referenced in the County Development Plan (2010) (SLO 5). The Masterplan refers to proposed future building heights noting that "it
would be unsustainable to continue to develop 1/2/3 storey buildings” and that “it is therefore conceivable that 8-10 storey residential developments for student accommodation or 6 storey educational building be considered in the future”. The Masterplan also suggests that “key sites for higher density landmark buildings should be designated based on visual impact, importance and urban priority. For example the ‘Gateway’ project and completion of the Science Block could accommodate such a landmark building”.

4.1.8 Forthcoming Local Plans
There are a range of local plans to be completed during the lifetime of the County Development Plan (2010) which will provide guidance on building height. Two of the major plans to be produced during the lifetime of the County Development Plan – the Sandyford Urban Framework Plan and the Cherrywood Strategic Development Zone Planning Scheme – have already been the subject of considerable preliminary work and will provide detailed and comprehensive guidance on building height – to a very fine grain, on a block by block basis in some instances. Plans include:

- Sandyford Urban Framework Plan
- Cherrywood Strategic Development Zone
- Dún Laoghaire Local Area Plan
- Blackrock Local Area Plan
- Sallymoggin Local Area Plan
- Goatstown Local Area Plan
- Rathmichael/Ferns Road Local Area Plan
- Old Conna Local Area Plan.

4.1.5 Deansgrange Local Area Plan (2010)
The Plan includes a fine grain of detail on appropriate building height (including ‘benchmark heights’), within the various zones and distinct sub-areas of the Deansgrange Local Area Plan. The Plan also provides for “modifiers” to the benchmark heights set out in instances where, for example, development would create urban design benefits in terms of improving the overall legibility and the character of the area. Specific policy on building height is set out as follows:

In order to afford a level of guidance within the plan area, an assessment of appropriate benchmark heights for Deansgrange Neighbourhood Centre Area and Deansgrange Business Park is set out in Appendix B, which sets out an assessment of appropriate building heights within the plan area. Any development proposals, which deviate from the guidance set out in Appendix B, would in addition to normal planning application requirements, have to submit an architectural design statement that addresses development context, development objectives, urban design principles, scale, massing and materials. The Planning Authority would have to be satisfied that proposals would enhance the visual character of the area and that residential amenities of existing homes would be safeguarded.

Other non-statutory documents provide guidance for areas of the County on development standards, as outlined below.

4.1.6 Stepaside Action Area Plan (2000)
The Stepaside Action Area Plan was adopted by the Council in 2000 and has continued to guide development in the area over the last decade. Planning permission has now been granted for most of the major development sites in the area generally in accordance with the Plan and a significant proportion of these have been developed. There are, however, a number of significant development sites still to commence. While the Plan did not set benchmark or recommended building height, minimum residential densities were identified for various development parcels. Suggested building heights were included for ‘focal point’ sites adjacent to core centres and distributor roads, generally up to four storeys. Effectively, the basis of the Plan and the extant planning permissions for the few remaining development sites set a framework for building height in the area.

4.1.7 UCD Masterplan (2005)
The UCD Campus Development Plan 2005-2010-2015 sets out aims and priorities for the future direction of the University. This Plan includes a vision for world-class architecture, a network of pedestrian walkways and a transformation of the academic infrastructure to reflect the ambitions of a leading European university. The Masterplan has been noted by the Council and is referenced in the County Development Plan (2010) (SLO 5). The Masterplan refers to proposed future building heights noting that “it...”
4.2 Local Area Plan Boundaries
The various Local Area Plans, Sandyford UFP and Cherrywood SDZ boundaries encompass a significant area of the County. Dún Laoghaire-Rathdown County measures c.12,700ha in area. The LAP areas total c.2,400ha in extent, roughly 19% of the total area of the County. The boundaries encompass both adopted and forthcoming Local Area Plans as set out in the 2010-2016 County Development Plan. The adopted LAPs incorporate specific policies guiding development in relation to building height. The forthcoming local plans will likewise include specific policy on building height. From a strategic perspective, the only areas where any cogent case can be made for taller buildings in the County is within the boundaries of certain local plan areas and UCD. It is considered that these local plans are the most appropriate vehicle for providing the kind of fine-grained analysis which can determine if taller buildings are appropriate or not to any given location.

4.3 Non Statutory Plans
There are two significant areas of the County covered by non-statutory plans – the Stepaside Action Area Plan area and the UCD Masterplan area. These areas comprise c.500ha, almost 4% of the overall area of the County. As noted previously, the policy base outlined in the UCD Masterplan (2005), and referenced in the 2010-2016 County Development Plan, should be used to guide development on the campus. Specific building height ranges are outlined in the Masterplan. The construction of housing and/or educational development to the heights referred to in the Masterplan will be subject to ensuring that they do not have a detrimental impact on residential amenity of locations situated outside UCD campus. The Stepaside Action Area Plan (2000), while substantially implemented, still provides guidance on development standards and height for the area while the number of extant but as yet undeveloped planning permissions provides a framework for future building height in the area.

4.4 Architectural Conservation Areas
There are 8 Architectural Conservation Areas (ACAs) and 27 Candidate ACAs. These comprise approximately c.300 hectares in area, 2% of the area of the County. Policy AR8: Architectural Conservation Areas (ACA) states that it is Council policy to protect the special character of places, areas, groups of structures or townscapes, which have been designated as Architectural Conservation Areas. While the purpose of a designation is to protect and enhance the special character of an area, it is important to stress that this does not preclude any appropriate forms of new development. It should be noted that there are also c.2000 protected structures in the County and a range of archaeological sites of interest which must also be considered when assessing development proposals.
4.5 Amenity Zones

The ‘Amenity Zones’ of the County correspond with the Objectives ‘G’, ‘GB’ and ‘B’. These areas of the County have the most restrictive zoning provisions. The County Development Plan notes in relation to High Amenity lands, for example, that “Within zoned High Amenity areas the Council will generally resist any development not related directly to the area’s amenity potential or its existing use for agriculture, mountain or hill farming.” The ‘Amenity Zones’ encompass c.5200 ha in area – in excess of 40% of the total landmass of the County. While the study does not propose that there should be no development in the mountain foothills, this area of the County, by virtue of its sensitivity, is clearly inappropriate for any form of intrusive development of inappropriate scale, height and massing. In addition, the Wind Energy Development Guidelines for the County (Appendix E of the CDP), does not identify potential for wind energy infrastructure of any sort in the Amenity Zones.

4.6 Open Space Zones

There is a significant quantum of land zoned Objective ‘F’, “To preserve and provide for open space with ancillary active recreational amenities” - c.1300ha or 11% of the County landmass. County Development Plan policies that govern development in the ‘F’ zones are among the most restrictive in the Plan. Residential and mainstream employment uses are not permitted in ‘F’ zoned lands - effectively negating the possibility of taller buildings in the lands.

4.7 Areas of Control (Cumulative)

Overall, the areas of the County either covered by an existing or forthcoming local plan, or Architectural Conservation Area is significant. When combined with the area comprising the foothills of the Dublin Mountains and the Open Space Zones, some 75% of the County’s area can be said to have an either explicit or implicit building height policy.
4.8 Policy for Residual Suburban Areas not included within Cumulative Areas of Control

As demonstrated in the previous sections, the majority of the County's landmass (c. 75%) is subject to some form of building height policy and control - either implicit or explicit. This section specifically focuses on all of those residual suburban areas not already included within the boundaries the cumulative control area identified in Section 4.7.

Areas covered by this policy will include, for example, the overly suburban areas of Kilmacud, Mount Merrion, Booterstown, Ballintee and Foxrock and so on. A general recommended height of two storeys will apply. An additional floor of occupied roofspace above this height may also be acceptable but only within the terms laid out in this document.

Apartments or town-house type developments or commercial developments in the established commercial core of these areas to a maximum of 3-4 storeys may be permitted in appropriate locations - for example on prominent corner sites, on large redevelopment sites or adjacent to key public transport nodes - providing they have no detrimental effect on existing character and residential amenity.

This maximum height (3-4 storeys) for certain developments clearly cannot apply in every circumstance. There will be situations where a minor modification up or down in height could be considered. The factors that may allow for this are known as 'Upward or Downward Modifiers'. There will be occasions where the criteria for Upward and Downward Modifiers overlap and could be contradictory, for instance where in close proximity to both a DART station yet within the Coastal Fringe. In this kind of eventuality a development's height requires to be considered on its own merits on a case-by-case basis. The presumption is that any increase or decrease in height where 'Upward or Downward Modifiers' apply will normally be one floor or possibly two.

In certain exceptional circumstances, a case may be made for additional height, for example in significant commercial or employment zones such as Nutgrove or Carrickmines, which are not areas covered by a Local Area Plan but which may be subject to development proposals. Particular importance will be placed on Item 1 (opposite) on the list of downward modifiers, where it applies.

4.8.1 Upward Modifiers

Upward Modifiers where Upward Modifiers may apply where:

a. The development would create urban design benefits, for example:
   • It would enclose main public or green spaces to their benefit,
   • It would enclose a main street or mark a major cross-roads and/or transport interchange to the benefit of the legibility, appearance or character of the area,
   • It would beneficially frame an important view.

b. The development would provide major planning gain, such as:
   • Significant improvements to the public realm,
   • The provision or significant enhancement of a public transport interchange,
   • The provision of new or improved transport infrastructure.

c. The development would have civic, social or cultural importance, for example:
   • It would provide new facilities or enhance existing facilities in such fields as culture, education, leisure or health,
   • It would provide or enhance public space or social facilities especially in areas where such facilities are deficient,
   • It would enable important cultural, historic or archaeological sites, landscape and natural features or trees to be retained and enhanced.

d. The built environment or topography would permit higher development without damaging the appearance or character of the area, for example:
   • In an area where the location or scale of existing buildings would allow the recommended height to be exceeded with little or no demonstrable impact on its surroundings.

4. A planning or social objective, such as the need to provide particular:
   • Residential living conditions through overlooking,
   • A general recommended height of two storeys will apply. An additional floor of occupied roofspace above this height may also be acceptable but only within the terms laid out in this document.

5. An area of particular character. These include:
   (i) Coastal Fringe
   • Significant improvements to the public realm,
   • The provision or significant enhancement of a public transport interchange,
   • The provision of new or improved transport infrastructure.
   (ii) Architectural Conservation Areas
   • The development would create urban design benefits, for example:
     • It would enclose main public or green spaces to their benefit,
     • It would enclose a main street or mark a major cross-roads and/or transport interchange to the benefit of the legibility, appearance or character of the area,
     • It would beneficially frame an important view.
   • The development would provide major planning gain, such as:
     • Significant improvements to the public realm,
     • The provision or significant enhancement of a public transport interchange,
     • The provision of new or improved transport infrastructure.
   • The development would have civic, social or cultural importance, for example:
     • It would provide new facilities or enhance existing facilities in such fields as culture, education, leisure or health,
     • It would provide or enhance public space or social facilities especially in areas where such facilities are deficient,
     • It would enable important cultural, historic or archaeological sites, landscape and natural features or trees to be retained and enhanced.
   • The built environment or topography would permit higher development without damaging the appearance or character of the area, for example:
     • In an area where the location or scale of existing buildings would allow the recommended height to be exceeded with little or no demonstrable impact on its surroundings.

f. A development would contribute to the promotion of higher densities in areas with exceptional public transport accessibility, whilst retaining and enhancing high quality residential environments. (Areas with exceptional public transport accessibility are defined as areas within a 500m walkband on either side of the Luas corridor, a 500m walkband around the DART stations, a 500m walkband on either side of the N11 and 100m walkband on either side of a QBC). Densities should be higher adjacent to these corridors and nodes and grade down towards neighbouring areas so that they are lower in close proximity to residential areas.

The size of a site, e.g. 0.5ha or more, could set its own context for development and may have potential for greater building height away from boundaries with existing residential development.

The overall positive benefits of a development proposal would need to be of such a significance as to clearly demonstrate to the satisfaction of the Planning Authority that additional height is justified. It will be necessary, therefore, for a development proposal to meet more than one 'Upward Modifier' criteria
4.8.2 Downward Modifiers

Downward Modifiers may apply where a proposed development would adversely affect:

1. Residential living conditions through overlooking, overshadowing or excessive bulk and scale.

2. An Architectural Conservation Area (or candidate ACA) or the setting of a protected structure.

It is Council policy to protect its outstanding architectural heritage through Architectural Conservation Areas. Key objectives are to enhance and protect architectural conservation areas, heritage sites, Protected Structures and their settings. New developments should respond to local character and protect and enhance the built heritage, and new buildings should not have an adverse effect in terms of scale, height, massing, alignment and materials. New buildings in an Architectural Conservation Area should preserve and enhance the character and appearance of the area. In many cases this may mean that building heights should reflect the prevailing height of the surrounding area, however, this does not imply that increased height will not be considered. Landmarks may sometimes add to the character of an Architectural Conservation Area, but landmarks of significant additional height will not normally be appropriate.


A key objective is to protect important views identified in the Development Plan and to prevent inappropriate development from harming their character. In addition there are many local views and prospects - from the sea front, from the higher lands, along streets, which are locally important and should not be adversely affected by development.

4. A planning or social objective, such as the need to provide particular types of housing, employment or social facility in an area.

5. An area of particular character. These include:

(i) Coastal Fringe

Most of the County's outstanding architectural heritage is located along the coast. In particular, the high quality building stock in Booterstown, Blackrock, Monkstown, Dún Laoghaire, Dalkey and Killiney has created a unique waterfront of high architectural and historical value. Views from the Irish Sea and East Pier capture the remarkable coastline with its historic seafront developments.

In order to retain and protect this outstanding coastline and its distinct skyline, this Building Height Strategy sets a 500m ‘Coastal Fringe Zone’ following the coastline. Where development is proposed within this zone which would exceed the height of its immediate surroundings, an urban design study and impact assessment study may be required to demonstrate that the scheme will not harm and will protect the particular character of the coastline including, where appropriate, views from the sea pier.

(ii) Mountain Foothills

The County comprises areas of exceptional natural beauty, including outstanding upland ‘high amenity’ areas south and west of the M50. It is Council policy to minimise the consumption of natural non-renewable resources, including land, and to protect the quality of the landscape and open space. Therefore, the Council will strictly control the further expansion of the suburbs into rural and high amenity areas. Care should be taken to protect the image of the Dublin Mountains particularly from being spoiled by intrusive development of inappropriate scale, height and massing.

As a general rule, as topography rises the scale, height and massing of development should be reduced. development should be frequently subdivided and relate to topography. Where development is proposed which would exceed the height of its surroundings, an urban design study and impact assessment study may be required to demonstrate that the scheme will not harm the setting of the mountain foothills and the image of Dublin Mountains.
To protect the residential amenities of the County, much of the County consists of fairly low density, low-rise suburban residential areas. Increased densities and heights should not detract from residents' living conditions, should avoid significant loss of privacy and light, and the scale and bulk of new development should have regard to its setting. The challenge for this strategy is to achieve sustainable densities without adverse impacts on residential amenities (caused by excessive building height).

5. General Principles

This section sets out the principles, which the Planning Authority will use in assessing appropriate building heights throughout the county. To protect the County’s built heritage and natural areas of exceptional beauty, Dún Laoghaire-Rathdown comprises natural areas of exceptional beauty, including 17km of coastline as well as outstanding upland areas. The County also has an exceptional built heritage, both archaeological and architectural, with the highest concentration of Protected Structures outside of the Dublin City Area. In order to protect the County’s built and natural heritage, building heights should have regard to the qualities of buildings and areas of architectural and historic interest and important views and prospects.

To promote higher densities and allow for increased building heights around public transport nodes and centres of activity, with the need for sustainable growth, high density, mixed-use development should be promoted in centres of activity and around transport nodes. This may mean increased building heights in appropriate locations, although high density does not necessarily require the provision of tall buildings. High-density development can also be achieved through low to medium-rise compact development forms such as terraces, urban blocks and apartments built around garden squares. There is a case often made, in urban design terms, that as residential buildings rise higher than c.5 storeys, the loss of contact between residents and the public realm below prevents meaningful supervision and interaction.

Cairnsfort, Stepaside
5. General Principles

This section sets out the principles, which the Planning Authority will use in assessing appropriate building heights throughout the county.

To protect the residential amenities of the County

Much of the County consists of fairly low density, low-rise suburban residential areas. Increased densities and heights should not detract from residents’ living conditions, should avoid significant loss of privacy and light, and the scale and bulk of new development should have regard to its setting. The challenge for this strategy is to achieve sustainable densities without adverse impacts on residential amenities (caused by excessive building height).

To protect the County’s built heritage and natural areas of exceptional beauty

Dún Laoghaire-Rathdown comprises natural areas of exceptional beauty, including 17km of coastline as well as outstanding upland areas. The County also has an exceptional built heritage, both archaeological and architectural, with the highest concentration of Protected Structures outside of the Dublin City Area. In order to protect the County’s built and natural heritage, building heights should have regard to the qualities of buildings and areas of architectural and historic interest and important views and prospects.

To promote higher densities and allow for increased building heights around public transport nodes and centres of activity

With the need for sustainable growth, high density, mixed-use development should be promoted in centres of activity and around transport nodes. This may mean increased building heights in appropriate locations, although high density does not necessarily require the provision of tall buildings. High-density development can also be achieved through low to medium-rise compact development forms such as terraces, urban blocks and apartments built around garden squares. There is a case often made, in urban design terms, that as residential buildings rise higher than c.5 storeys, the loss of contact between residents and the public realm below prevents meaningful supervision and interaction.
To encourage higher densities and also to allow for increased building heights at appropriate locations along public corridors

Higher densities and mixed-use development should be promoted along strategic public transport corridors in order to support sustainable development patterns. Increased building height at key locations, particularly junctions along major transport corridors, helps the legibility of the County. However, the hierarchy of a corridor may also be emphasised through other means than height, such as quality building, continuity and enclosure, or public space design.

To promote higher density though in-fill development

Higher densities should be promoted through the redevelopment of vacant or underused land and sites in sustainable locations throughout the County and through appropriate infilling. The aim should be to provide additional new housing near centres and existing public transport infrastructure, whilst preserving open space at the edge of the County. Building heights may be increased in suitable locations, depending on the context of the site, but such development needs to have regard to such factors as the character of the surrounding area and the living conditions of residents.

To allow for landmark buildings in the right places

Landmark buildings attract people, help orientation and contribute to local identity. Generally, landmark buildings are higher than their surroundings but they may be created through other means than height, such as quality building or public space design. However, landmarks should relate to the scale of a given node. Landmark buildings normally need to be sparse in a given area in order to be able to perform their role as landmarks, although a close cluster of taller buildings can combine to form a single landmark in wider urban views. The appropriateness and location of landmark buildings will only be considered during the Local Area Plan/Urban Framework Plan or Strategic Development Zone processes.
To encourage higher densities and also to allow for increased building heights at appropriate locations along public corridors, higher densities and mixed-use development should be promoted along strategic public transport corridors in order to support sustainable development patterns. Increased building heights at key locations, particularly junctions along major transport corridors, help the legibility of the County. However, the hierarchy of a corridor may also be emphasised through other means than height, such as quality building, continuity and enclosure, or public space design.

To promote higher density through infill development, higher densities should be promoted through the redevelopment of vacant or underused land and sites in sustainable locations throughout the County and through appropriate infilling. The aim should be to provide additional new housing near centres and existing public transport infrastructure, while preserving open space at the edge of the County. Building heights may be increased in suitable locations, depending on the context of the site, but such development needs to have regard to such factors as the character of the surrounding area and the living conditions of residents.

To allow for landmark buildings in the right places, landmark buildings attract people, help orientation and contribute to local identity. Generally, landmark buildings are higher than their surroundings but they may be created through other means than height, such as quality building or public space design. However, landmarks should relate to the scale of a given node. Landmark buildings normally need to be sparse in a given area in order to be able to perform their role as landmarks, although a close cluster of taller buildings can combine to form a single landmark in wider urban views. The appropriateness and location of landmark buildings will only be considered during the Local Area Plan/Urban Framework Plan or Strategic Development Zone processes.
6. Landmark Buildings

A landmark building is a single outstanding building which is either taller or of a more notable design than its neighbours.

Generally, landmark buildings are higher than their surroundings but they may be created through other means than height, such as quality building or public space design.

The identification of sites for landmark buildings will only be conducted through the Local Area Plan/Strategic Development Zone/Urban Framework Plan/Development Plan Variation process.

The main determining factor in setting heights will not be the heights established in recent and proposed developments. Rather it will be the need to create a good piece of urban development with attractive streets that knit successfully with the surrounding area. The important factors which determine height will be the impact on adjacent residential amenities, the proportions of the building in relation to the street space, the creation of a good sense of enclosure, the provision of active ground floor street frontages and a legible, permeable and sustainable layout. In the best European examples, good street scale and enclosure in central locations is achieved with buildings of four to seven storeys in height. There may be scope for landmark buildings to mark the main centres or centres within the area. The issue of landmark buildings must be a secondary consideration to getting the streets, spaces, frontages, buildings and overall functioning of the place right.

Each LAP/SDZ/UFP may state a requirement for some or all of the following documents to be included within any application for a Landmark Building within their area:

a. A design statement to include (i) an urban design study that shows the benefits and impact on the local and wider urban context for a landmark building on the proposed site, including justifications, the impact on the county-image, the benefits to the public, its contribution to regeneration, sustainability and transport; and (ii) an architectural design statement that addresses development context, development objectives, urban design principles, scale and massing, density, materials, details, lighting (day and night time) existing and proposed land and building uses, ground floor uses, treatment of roof top/crown, ground floor treatment and public realm strategy.

b. An impact assessment study to illustrate the impact on the context, especially on residential amenities, conservation areas and significant views. This should be done through accurate visual modelling of proposals — photomontages or three-dimensional computer models (buildings fully rendered) — from relevant assessment points defined by the Council. Proposals should be shown in daylight and nightlight conditions. The micro-climate impact of the development on the surrounding environment (streets, public spaces and existing development) should be tested in regards to wind funnelling, overshadowing and sun-reflection. This should be done through the testing of accurate physical and three-dimensional computer models, conducting wind tunnel studies, sun-path studies, as well as using other suitable impact simulation methods. Impacts on privacy and overlooking of existing properties should be tested with the help of section analysis and three-dimensional computer models.

c. A movement statement (traffic impact assessment including car parking, pedestrian movement and public transport needs).

d. A building services strategy including building systems and enclosure, energy consumption and efficiency, lighting (day and night time), and telecommunications.

e. Where the development would have a significant environmental impact, an Environmental Impact Statement will be required. This will include the impact assessment and movement statements referred to above, in addition to any other necessary studies.