Guidelines for Planning Authorities on

Sustainable Residential Development in Urban Areas

(Cities, Towns & Villages)

May 2009

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Minister's Foreword

All built developments, from the small to the large, make an impact on their surroundings. The quality of these developments – and of residential developments in particular – have long-term impacts, both on the communities they house and on the surrounding



neighbourhoods. New developments are far more than simply bricks and mortar. Where they are, how well designed and built they are and how well they knit into the fabric of existing or new communities, are factors which can, in a very real way, colour the lives of people on a daily basis and for future generations.

These statutory guidelines will assist planning authorities, developers, architects and designers in delivering quality residential development. They update and revise the 1999 Guidelines for Planning Authorities on Residential Density and build upon the extensive experience gained over recent years - reflecting the changing economic, social and environmental patterns around the country. Importantly, specific guidance is provided for the first time on residential development for smaller towns and villages, acknowledging that different solutions are required to meet different scales and patterns of development.

The objective is to produce high quality – and crucially – sustainable developments:

- quality homes and neighbourhoods,
- places where people actually want to live, to work and to raise families, and
- places that work and will continue to work and not just for us, but for our children and for our children's children.

That's what sustainability is all about; the integration of schools, community facilities, employment, transport and amenities with the housing development process in a timely, cost-effective way.

These guidelines, together with the accompanying best practice Design Manual, provide a sound basis on which planners, designers and developers can translate ideals of sustainable living into a practical reality. They constitute the new gold standard for sustainable residential development in Ireland.

The forms

John Gormley, T.D.,

Minister for the Environment, Heritage and Local Government.

Chapter 1 National policy objectives

Introduction

- 1.0 Forecast growth in the Irish economy and population indicates that strong demand for housing will continue with the number of homes in Ireland possibly rising from its current level of 1.8 million to over 2.5 million by 2020. With the majority of these houses to be built in urban areas, it is vitally important that this is achieved in a way which supports the development of sustainable, integrated neighbourhoods within our cities, towns and villages. In some cases, residential development will be part of a mixed use scheme, where there will be design challenges in ensuring the amenity of residents, but there are also inherent benefits if these challenges can be met.
- 1.1 The aim of these guidelines is to set out the key planning principles which should be reflected in development plans and local area plans, and which should guide the preparation and assessment of planning applications for residential development in urban areas.
- design manual prepared on behalf of the Department by a team of consultants led by O'Mahony Pike Planning Consultants. The best practice design manual is intended to be read in tandem with these guidelines, because it illustrates how policy principles can be translated into practice by developers and their design teams and by local authority planners. The design manual cites examples of good practice from across the spectrum of development locations, ranging from major brown-field sites to village infill sites. Also, "Green City Guidelines: Advice for the protection and enhancement of biodiversity in medium to high-density urban developments" (2008) are a useful reference for planning authorities and planning professionals.
- 1.3 These guidelines should also be read in conjunction with the Department's planning guidelines on design standards for new apartments (which were published in September 2007). Those

guidelines are also intended to promote sustainable housing, by ensuring that the design and layout of new apartments provide satisfactory accommodation for a variety of household types and sizes – including families with children - over the medium to long term.

Residential density guidelines (1999)

1.4 The Department issued guidelines on residential density to planning authorities in September 1999, which are superseded by these guidelines. Much of the substantive policy content is still relevant and has been carried forward into the current guidelines; in particular, it remains Government policy to encourage more sustainable development through the avoidance of excessive suburbanisation and through the promotion of higher densities in appropriate locations. Some of the detailed aspects of the 1999 guidelines have been clarified in the light of experience of building at higher densities in the intervening years.

Evolution of national policy since 1999

- 1.5 National policy has evolved since 1999, broadening and deepening the concept of sustainability as it applies to residential development in urban areas. Significant policy documents include:
 - (a) The Planning and Development Act 2000, which gave statutory recognition to the concept of sustainable development; the list of possible development plan objectives in the First Schedule illustrates a variety of practical methods of implementing sustainability, such as promoting sustainable settlement and transportation strategies.
 - (b) The National Spatial Strategy 2002-2020, (2002) which established a detailed sustainable development framework for strategic spatial planning, particularly with regard to the location of new housing in urban areas. It set out an evaluation framework (section 5.3) for deciding on the most appropriate locations, and placed emphasis on the creation of living environments of the highest quality through attention to design

- and the integration of amenities. More recently, balanced regional development is one of the major objectives of the National Development Plan 2007-2013, thus creating the link between the NSS and infrastructural investment.
- (c) The NESC report on "Housing in Ireland" (2004) which identified the essential characteristics of a sustainable neighbourhood, including the importance of providing essential facilities within walking distance of new homes. The report emphasised the need for a design-led approach in creating such neighbourhoods.
- (d) The Department's policy statement "Delivering Homes, Sustaining Communities" (2007) which provides the overarching policy framework for an integrated approach to housing and planning. The statement noted that demographic factors will continue to underpin strong demand for housing, which in turn will present considerable challenges for the physical planning of new housing and the provision of associated services. The quality of the housing environment is central to creating a sustainable community. Sustainable neighbourhoods are areas where an efficient use of land, high quality design, and effective integration in the provision of physical and social infrastructure combine to create places people want to live in. Moreover, the development of sustainable neighbourhoods contributes to the provision of attractive and competitive locations that will support NSS objectives for more balanced regional development.

Developing Areas

1.6 The Developing Areas Initiative which falls within the remit of the Minister for Housing, Urban Renewal and Developing Areas aims to ensure greater coordination and integration of service delivery at strategic growth centres. This process aims to bring together the key players at local, regional and central government to agree on and deliver a coherent and feasible programme to accelerate the opening up of key development sites, and will provide further consistency for national policy and investment under key strategies and action plans

such as the National Development Plan 2007-2013, Transport 21, the NSS and Towards 2016, which all emphasise that the roll out of infrastructure should not only match but anticipate development. The Developing Areas process should also assist in the implementation of key Programme for Government commitments to prioritise and align the delivery of essential community and recreational facilities within the development plan process, and to provide the structures and supports for the development of sustainable communities and neighbourhoods.

Climate change and energy efficiency

- 1.7 In the Programme for Government, the Government has set a target of reducing greenhouse gas emissions by 3% per year on average. The National Climate Change Strategy 2007-2012 includes energy efficiency measures aimed at reducing greenhouse gas emissions from residential development. Emissions from the residential sector accounted for just over 10% of total emissions in 2005, based on direct energy consumption for space and water heating. At the level of the individual house, the focus is on construction standards and energy technology; the Building Regulations are steadily enhancing the thermal performance standards of new and refurbished buildings. On a broader scale, sustainable residential development involves settlement patterns that can help minimise transport-related energy consumption and encourage energy-efficient housing layouts.
- 1.8 The Government's energy policy and climate change goals are closely aligned, particularly through the reduction in energy-related greenhouse gas emissions and through accelerating the growth of renewable energy sources. Increased deployment of Combined Heat and Power (CHP) by 2020 is an important objective of the White Paper on Energy (2007). Appropriately designed districts or neighbourhoods may present the necessary critical mass for a CHP scheme.

Sustainable residential development

1.9 The range of relevant national policies summarised above can be distilled into a series of high-level aims for successful and sustainable residential development in urban areas. Housing developers, their design teams, the planning system, and the community they serve, share a common goal to create high quality places which:

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

Universal design

1.10 Developing sustainable neighbourhoods should be guided by the principle of universal design. Universal design is the design of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability. By considering people's diverse needs and abilities throughout the design process, which reflects the life cycle approach, environments that meet the needs of all can be achieved. In this way, sustainable design and universal design are inextricably linked and sustainable design when incorporated from the early stage of planning integrated neighbourhoods, will reduce the need for costly and wasteful retrofits over the medium to long term.

Implementing policy aims

1.11 These high-level aims need to be translated into specific planning / design policy and objectives which can be applied at different scales of residential development, ranging from districts or neighbourhoods within large urban centres, to expansion of smaller towns and villages, and finally down to the level of the individual home and its setting.

Structure of the guidelines

1.12 <u>Chapter 2</u> emphasises the key role of development plans and local area plans in setting out policies and standards for residential development. Chapter 3 sets out the qualities which make for successful places, and shows how design criteria can be applied in the planning process, with particular reference to the design of residential streets. Chapter 4 identifies the key components of sustainable residential development, particularly at the district or neighbourhood scale. Chapter 5 carries forward policy from the 1999 guidelines relating to residential density in cities and larger towns. Chapter 6 provides detailed guidance on development within smaller towns and villages, with particular emphasis on the role of housing. Chapter 7 addresses the issues affecting individual dwellings and their immediate environs – issues which are likely to impact directly on residents' perceptions of quality of life. Finally, Chapter 8 deals with a range of implementation issues. Each of the following chapters contains a checklist at the end; together, these constitute a sustainability toolkit.

Status of the guidelines

1.13 These guidelines are being issued by the Minister for the Environment, Heritage and Local Government under Section 28 of the Planning and Development Act 2000. Planning authorities and An Bord Pleanála are required to have regard to the guidelines in carrying out their functions under the Planning Acts. It is also intended that both the guidelines and the best practice manual will be of assistance to developers and their design teams in preparing residential schemes.

Chapter 2 Role of development plans and local area plans

Introduction

2.0 Planning authorities have a statutory responsibility to plan for the sustainable development of their areas, primarily through the development plan process but also through local area plans. Non-statutory framework plans and site development briefs can supplement but not replace the function of statutory plans. It is important that all of these plans and documents, insofar as they relate to residential development, reflect and amplify the high-level aims set out in chapter 1.

Plan-led approach

- 2.1 The Planning and Development Act 2000 introduced a more tiered and plan-led system, cascading from national strategies to local area plans. The development plan is at the heart of the system, transposing national and regional policies and setting the strategic context for local area plans. The scale, location and nature of major new residential development will be determined by the development plan, including both the settlement strategy and the housing strategy.
- 2.2 Fundamental questions to be addressed at the outset of the planning process include:
 - The amount and type of new housing required to meet the needs of the wider area, including the provision of social and affordable housing, and the range of different dwelling types and sizes, including live-work units;
 - The need to adopt a sequential approach to the zoning of residential lands, extending outwards from the centre of an urban area, as recommended in the development plan guidelines (DoEHLG, 2007);

- Adequate existing public transport capacity available or likely to be available within a reasonable development timescale;
- The relationship and linkages between the area to be (re)developed and established neighbourhoods, including the availability of existing community facilities, and the provision of pedestrian and cycle networks;
- The benefits that mixed-use development can bring
- The need to create an overall design framework for the (re)development area, and the potential for non-statutory guidance – such as design briefs – to supplement the local area plan (see Chapter 3);
- The scale, location and type of public open space (see Chapter 4);
- The setting of appropriate density levels within the area (see Chapter 5);
- Protection and enhancement of biodiversity and the green infrastructure;
- Adaptation to impacts of climate change; and
- The avoidance of natural hazards such as flood risk, and avoidance of increased flood risk for downstream areas¹.

Sequential approach

- 2.3 When land is zoned in a development plan without the benefit of a more detailed local area plan designation, the development plan should identify where practicable the sequential and co-ordinated manner in which zoned lands will be developed, so as to avoid a haphazard and costly approach to the provision of social and physical infrastructure. The sequential approach as set out in the Department's Development Plan Guidelines (DoEHLG, 2007) specifies that zoning shall extend outwards from the centre of an urban area, with undeveloped lands closest to the core and public transport routes being given preference, encouraging infill opportunities, and that areas to be zoned shall be contiguous to existing zoned development lands and that any exception must be clearly justified in the written statement of the development plan.
- 2.4 The provision of water and sewerage investment programmes by planning authorities must also be related to the sequencing of

Planning Guidelines on Flood Risk Management (consultation draft 2008), prepared jointly by this Department and the Office of Public Works, provide detailed guidance on the assessment of flood risk when preparing draft plans and also when determining planning applications.

residential lands and must also be integrated with the provision of public transport, schools, community and leisure facilities etc. This will involve keeping up the close contact with other agencies, which would have occurred during the plan-making period.

Integrated development plan team

2.5 At the strategic level, the development plan is the spatial expression of the county development board (CDB) strategy, and good liaison between the City / County Development Board² and the development plan team is necessary. However, when preparing a development plan, a number of service providers are involved, both internally, e.g. water provision, sewerage provision, and externally, e.g. schools provision, health services, transport services. While these service providers will be consulted through the development plan process, ideally they should be part of an extended development plan team. This would give them an awareness of the role that they will play in the future development of the lands and allow them to begin considering the implications of the development plan proposals for their own investment programmes into the future.

Local area plans

- 2.6 Section 19 1(b) of the Planning and development Act 2000 states that a local area plan (LAP) shall be made in respect of an area which firstly is designated as a town in the most recent population census (and where such a town is not designated as a suburb or environs), which has a population of more than 2,000 people and which is situated within the functional area of a planning authority. Where it is indicated in a development plan that a LAP is to be prepared, an indicative timeframe for its completion should be set out.
- 2.7 In addition, where substantial areas of brownfield or greenfield sites are going to be (re)developed, it is strongly recommended that a local area plan (LAP) be prepared to facilitate the sustainable development of the area and to avoid it being developed in a piecemeal and incoherent fashion over a long period of time. The advantage of using the LAP approach is that as a statutory plan it will have been through the planning process, will have involved local consultation and the

engagement of elected members, and when approved will give a degree of certainty to those involved in the development of the area. In-depth consideration can be given to the planning issues specifically relating to the residential area within the context of the wider strategic objectives, for example, avoidance of flood risk. In preparing a LAP work programme, planning authorities should prioritise those areas with potential for significant (re)development in the short term, in order to provide timely guidance for developers.

LAP design context

- 2.8 The planning of the LAP should progressively move from the role that it plays within the larger geographic context to designing at the detailed level. The first criterion to be considered is the visioning statement, which will outline the guiding principles for the sustainable development of the area. This overarching statement will indicate the degree to which the residential area will be sustainable.
- 2.9 The wider context of the LAP area in relation to access, transport provision, design context as well as physical and social infrastructure should be examined to ensure the integration of the LAP with that context. This will influence the subsequent planning within the LAP area which will relate to detailing of design such as layout, a range of appropriate densities, diversity of uses, housing mix etc. Finally, the environmental and ecological context requires to be appraised and factored in to the design process³.

Phasing

2.10 Some of the larger LAP areas will be developed over a longer period of time, and where this happens it is important that a phasing programme is put in place. The purpose of phasing is to ensure that the physical and social infrastructure required is provided in tandem with the residential development. The phasing programme will indicate the number of phases proposed and the enabling works that are required in each phase before being able to move onto the next phase. The programme will also specify the amount of residential development that should take place in each phase, integrated with the

Planning authorities are reminded of the need to screen draft local area plans for Strategic Environmental Assessment and for Appropriate Assessment.

provision of the appropriate social facilities (such as schools, childcare and health facilities), transport access etc.

Indication of services required

2.11 Where there is a substantial amount of zoning proposed relative to the size of the existing town or village, or where it is felt that the existing physical and social infrastructural services will be inadequate, planning authorities should develop the lands through an LAP and consider indicating, along with the sequencing and phasing parameters, the minimum services that are required for the development of the zoned land, and when these are likely to be provided. This highlights for service providers⁴, developers, future residents, what services are readily available and what is required and when they are likely to be provided. On approval of the plan, the planning authority should take a proactive approach by informing the service providers of the situation, giving clarity to all involved of the role they play in the quality development of the lands. The service providers have now the planning information required to enable them to include the necessary proposals in their work programmes.

Strategic Development Zones

2.12 Strategic Development Zones (SDZ) provide an integrated planning framework and as such are highly suitable for creating sustainable neighbourhoods. They are designated by Government Order, where the site in question is deemed to be of strategic economic or social importance to the State. They have a number of advantages in this regard, including the speedy delivery of residential development following approval of the planning scheme. The creation of a dedicated in-house implementation team by the planning authority is also critical to the success of the SDZ.

Consultations with service providers in connection with the review of a development plan (under section 11(3)(c) of the 2000 Act) can provide a useful basis for identifying their specific needs and potential future role in a developing area.

Box 1: Current Status of SDZs

There are four planning schemes approved for SDZ, Adamstown (South Dublin), Hansfield (Fingal), Clonmagaddon (Co. Meath) and Clonburris in South Dublin. Adamstown, the most advanced to date, integrates the development of the lands with the provision of infrastructure through phasing. Its dedicated in-house team and integrated implementation steering committee have proved very successful in its rollout.

Non-statutory plans

2.13 Some planning authorities may consider preparing framework plans and/or master plans to provide more detailed design guidance for large-scale mixed use development, for example, to indicate an overall structure for a new neighbourhood. On a smaller scale, village design statements may provide useful supplementary guidance where a local area plan would not be feasible⁵. In the case of all such non-statutory documents, the policy context must be set by statutory plans, with the objective of providing detailed design guidance. If it is intended to use such non-statutory documents for development management, planning authorities should incorporate them in the development plan or local area plan for the area by way of variation. In the case of master plans for large development areas, planning authorities should consider whether key components should be incorporated into the development plan or local area plan by way of variation. Where possible, public consultation should be integrated into the preparation on non-statutory frameworks.

Small towns

2.14 Planning authorities shall not consider extensive proposals for new development, including residential development, in smaller towns (in the 2,000 – 5,000 population range) in the absence of an adopted local area plan. An adopted plan is the only effective policy framework within which to consider new development proposals and one that

Planning authorities are reminded of the need to screen draft local area plans for Strategic Environmental Assessment and for Appropriate Assessment.

fits within an overall strategic framework at county and regional levels. In addition, where planning permission for residential development is granted on unzoned land, the provisions of Part V of the Planning and Development Act 2000 cannot operate, thereby militating against the implementation of the Housing Strategy and the effective integration of housing needs.

- 2.15 It is essential that the preparation of development plans and local area plans in such areas properly analyse and address four key issues:
 - (1) **Settlement Hierarchy**: The plan should outline where the town or village fits within the overall county and regional settlement hierarchy and its function into the future. The scale and form of development envisaged should in turn be appropriate to its position.
 - (2) **Urban Form:** The shape and form of the small town or village concerned and in particular patterns of streets should be analysed, especially in terms of how effectively pedestrians, cyclists and vehicular traffic can circulate, and how they are accessible for all. Priority should be given to connectivity for pedestrians and cyclists and the potential for car-free developments should be actively considered. New interventions such as the creation of new streets or infill redevelopment of backlands might be identified. An analysis of urban form can also identify features worthy of integration and/or re-use in new development.
 - (3) Anticipating Future Needs: Distinctive small towns and villages perform different functions and new development might spark the need to strengthen existing functions such as the need for additional retail capacity to facilitate new residential development. In such cases, consideration should be given to how to make adequate provision for such additional retail functions in central locations as well as considering the new residential development that may give rise to such additional requirements.

⁶ See section on Parking in the best practice Urban Design Manual on the Vauban district in Freiburg.

- (4) **Strengthening Community:** Planning for new development needs to carefully take account of the needs of the community in the small town or village in question. Particular attention needs to be paid to planning for future schools needs (see para. 4.2, below). Planning authorities should also phase development in line with the availability of essential social and community infrastructure such as schools, amenities and other facilities.
- (5) Landscape character: Most city and county developments plans now contain a landscape character assessment, which should be referred to in preparing local area plans and non-statutory master plans.

Chapter 2: Checklist

- Does the draft development plan, local area plan or SDZ planning scheme contain policies and objectives which will underpin the creation of sustainable residential development?
- Do they include clear guidance on implementation measures, particularly with regard to the phased and coordinated provision of physical infrastructure, public transport and community facilities?
- Has consideration been given to the formation of an implementation team with a project leader whose task is to oversee the sustainable development of the area (especially Development Areas in Gateways and Hubs)?

Chapter 3 The role of design

Introduction

- 3.0 Ireland's population is projected to grow to around 5.3 million by 20207. The majority of new households formed during that period will need to be accommodated in urban areas, especially in the NSS gateways and hubs. In order that cities and towns achieve the critical mass required to sustain balanced regional development, they must be capable of attracting both people and investment. The quality of new residential development is central to the aim of creating sustainable communities.
- 3.1 This chapter deals generally with the core principles of design and the many strands of place-making, environmental responsibility, social equity and economic viability that are required when creating places of high quality and distinct identity. Design is about creating a vision for an area and then deploying the skills and resources to realise that vision. A key design aim in delivering sustainable communities is the to reduce, as far as possible, the need to travel, particularly by private car, by facilitating mixed-use development and by promoting the efficient use of land and of investment in public transport. Such policies will help to sustain viable local services and employment.
- 3.2 Planning authorities should promote high quality design in their policy documents and in their development management process; practical steps are set out below. Clearly defined policies create more certainty for potential developers and their design teams, and also provide a basis for developing a shared, collaborative approach to pre-application consultations with the planning authority. Design needs to be applied by skilled practitioners, and planning authorities are encouraged to provide suitable training opportunities for relevant staff.
- 3.3 The companion design manual shows how design principles can be applied in the design and layout of new residential developments, at

DoEHLG Circular SP1/07 to local authorities "National Population Projections and Regional Population Targets 2006-2020" (February 2007)

a variety of scales of development and in various settings. In particular, the design manual sets out a series of 12 criteria which should be used at pre-application meetings and in the assessment of planning applications and appeals (see Box 2 below). Many examples of best design practice which are included in the manual have been drawn from recent housing schemes in Ireland.

3.4 Context is the character and setting of the area in which a proposed residential development will be located. Context includes the natural as well as the human history of the area; the capacity of the receiving environment, the form of settlement, buildings and spaces; its ecology and archaeology; its landscape, its location, and the routes which pass through it. A thorough appreciation and assessment of the overall site context is the starting point in designing a distinct place.

Box 2: Best Practice Design Manual criteria

- 1. **Context:** How does the development respond to its surroundings?
- 2. **Connections:** How well is the new neighbourhood / site connected?
- 3. **Inclusivity:** How easily can people use and access the development?
- 4. **Variety:** How does the development promote a good mix of activities?
- 5. **Efficiency:** How does the development make appropriate use of resources, including land?
- 6. **Distinctiveness:** How do the proposals create a sense of place?
- 7. **Layout:** How does the proposal create people-friendly streets and spaces?
- 8. **Public realm:** How safe, secure and enjoyable are the public areas?
- 9. **Adaptability:** How will the buildings cope with change?
- 10. **Privacy / amenity:** How do the buildings provide a high quality amenity?
- 11. **Parking:** How will the parking be secure and attractive?
- 12. **Detailed design:** How well thought through is the building and landscape design?

Note: In relation to criterion no. 3 above, the National Disability Authority's guidance on universal design of the built and external environment should be consulted (www.universaldesign.ie).

The role of design in the planning process

Statutory plans

- 3.5 The planning guidelines on development plans (2007) recommend that planning authorities should set out a strategic vision for their area in the development plan. For plans relating to cities, towns and villages, this vision will include the creation of sustainable, high quality residential environments – attractive, vibrant and safe places which function effectively. In addition to sustainability objectives, development plans for cities and towns should include a range of design principles and policies which respond to local circumstances and which are capable of being expanded in more detail in local area plans and (where appropriate) in non-statutory guidance documents. It is important that plan policies should promote good design which is universal for all, without stifling the creativity of skilled designers; the approach should be to specify the issues to be considered without being overly prescriptive in terms of how performance criteria are achieved. It may be appropriate to specify in the development plan that a design statement (see para. 3.10 below) will be required in the case of certain large-scale or sensitively located developments, so that the applicant can demonstrate how design policies and the issue of accessibility have been taken into account.
- 3.6 Local area plans have a key role in translating overarching development plan policies and objectives at the local level. The public consultation process can help ensure wider understanding of, and support for, strategic development objectives such as the fulfilment of housing strategy aims and the promotion of sustainable development. Local area plans are particularly suited to areas undergoing significant (re)development or where there are sensitive issues. In such cases, local area plans can:
 - define key elements of local character;
 - identify relevant development plan design principles and policies;
 - provide detailed guidance regarding layout, density, massing, height, materials, etc., and indicate minimum/maximum densities (see next chapter); and

- Include indicative layouts to guide the shape and form of future development, leaving individual building design to architects and open space design to landscape architects. The effective integration of green spaces / parks into the overall planning and design process can contribute significantly to achieving high quality places.
- 3.7 Local area plans may also contain 3-dimensional layout proposals for buildings and the spaces between them, as well as design codes which seek to ensure a consistent approach within a development area to the detailed design of public realm elements such as streets and open spaces. 3D computer modelling may provide a useful tool.

Design briefs

3.8 A planning authority should consider preparing design briefs for particularly important, sensitive or large-scale development sites. The brief should describe the site and its context, summarise relevant development plan or local area plan objectives and policies, identify any planning or development constraints, and give some indication as to the type, design and layout of development which the authority would wish to see on the site⁸. Such a brief could be of particular value when a significant development site is being sold, as all potential purchasers will share the same information. A design statement from the developer or design team should be required which addresses the design brief (see 3.10).

Development management

3.9 The design manual criteria provide a robust framework in which proposals for the design of residential development can be discussed between the developer's design team and the planning authority at pre-application consultations. The criteria can be applied to most developments; a systematic analysis of these criteria in relation to a specific proposal will ensure that all key issues are addressed at a formative stage in the design process. Such consultation enables conflicts to be resolved at the outset which might otherwise delay – or even derail – a scheme at a later stage.

Further guidance on the contents of design briefs is provided in the best practice Urban Design Manual.

- 3.10 A number of planning authorities have introduced development plan policies which encourage the use of design statements by developers in relation to certain types of development. A design statement is a short document which enables the applicant to explain why a particular design solution is considered the most suitable for a particular site, especially for larger or more complex forms of development. The statement will usually consist of both text and graphics, but is not intended to duplicate planning application documents. It may be of special value in explaining why the context requires an exceptional rather than a conventional design approach. The statement should address all relevant development plan or local area plan design policies and objectives, and relate them to the site. The wider use of design statements should be promoted by planning authorities.
- 3.11 All designers of residential developments should be encouraged to carry out an appraisal of the distinctive character of the area adjoining the site, and to consider how the design and layout of the proposed development responds to, and preferably enriches, that character9. If, however, the appraisal finds that the adjacent area is characterised by poor design, the design approach to the proposed development may have to be based on first principles. Where a design statement is being submitted with the application, it should include or summarise the character appraisal.
- 3.12 The design criteria set out in the design manual also provide a framework for the systematic appraisal of applications for residential development. High standards of design should be encouraged by planning authorities; a proposed development which barely meets minimum standards should not be accepted. Where proposed development is acceptable in principle from a development plan viewpoint, every effort should be made to resolve any remaining design faults, whether by means of planning conditions (where 3rd party rights would not be affected) or by inviting the applicant to submit modified plans where more significant changes are envisaged. Where the design is of such poor quality as to result in a sub-standard housing environment, permission should be refused; the reasons for refusal should clearly indicate how the layout and design would need

Again, more detailed advice on and examples of site character appraisals is to be found in the Urban Design Manual.

to be improved if permission for a revised application is be considered¹⁰.

Design of residential streets

- 3.13 The UK's "Manual for Streets" (Dept of Communities and Local Government, 2007)¹¹ defines a street as a highway that has important public realm functions beyond the movement of traffic. These functions include place-making, providing access to buildings, parking, and the location of public utilities and public lighting. While it is essential to provide for movement along the street, designers also need to consider the appropriate balance between these different functions, and not treat one in isolation.
- **3.14** The following design principles should influence the layout and design of streets in residential areas:
 - Connectivity and permeability: Convenient access needs to be provided between and within areas, particularly to larger community and commercial facilities and to places of work. Routes within the area should be accessible for everyone and as direct as possible, and for this reason "gated estates" should be discouraged. The design process should consider what levels of permeability are appropriate for different street users, with permeability for pedestrians and cyclists taking precedence over permeability for vehicles. River or canal paths for walkers and cyclists can provide attractive connections within and between areas;
 - <u>Sustainability</u>: Priority should be given to the needs of walking, cycling and public transport, and the need for car-borne trips should be minimised;
 - <u>Safety</u>: Streets, paths and cycle routes should provide for safe access by users of all ages and degrees of personal mobility;
 - <u>Legibility</u>: It should be easy for both residents and visitors to find their way around the area; and

Compensation may not be payable – see Fourth Schedule, Planning and Development Act 2000, reason no. 16.

This Manual is a useful complement to the Traffic Management Guidelines published in 2003 (see Appendix B – Further Reading)

• Sense of place: Streets should contribute to the creation of attractive and lively mixed-use places. In particular, if the ground floors of buildings are interesting and varied with a number of openings onto the street (shops, cafés, etc.), the environment can be inviting and enriching. Streets do not just serve a movement function, and their design should include consideration of appropriate opportunities for resting and enjoyment. Finally, the use of street names with a connection to the area can reinforce a sense of place, as can preservation of older built fabric and evocation of the past in new buildings.

Design process

- 3.15 The design of street layouts must start by considering people movement rather than vehicle movement. This approach ensures greater consideration of pedestrians, cyclists and public transport users. In many instances, all users can comfortably share the same street network. When designing a street layout for a new residential area, designers should assess the need for, and specific roles of:
 - (a) Links to the overall road network in the district or town, including bus services, based on an analysis of the need for such linkages;
 - (b) Access to bus-based and rail-based public transport (where relevant);
 - (c) Direct walking and cycling routes to local facilities such as shops, schools, public transport, and open spaces, together with lighting and landscaping of such routes;
 - (d) Access for people with disabilities;
 - (e) Maximum permeability for pedestrians and cyclists
 - (f) Circulation routes for public service (buses, waste collection) and delivery vehicles within the area;
 - (g) Residential streets with limited through motor traffic;
 - (h) Consideration of provision for low design speeds (such as 30 kph) and facilities for pedestrians and cyclists;
 - (i) The location and amount of parking for cars and cycles; and
 - (j) The planting of appropriate street trees (bearing in mind the location of underground services).

- 3.16 Some streets will have important movement functions whereas for others, considerations of place will be more important. The balance between the various functions of a street will help determine appropriate design speeds, road geometry and the level of adjacent development. It should be acknowledged, however, that the character of streets can change over time and that design has to allow for the capacity to respond to changing circumstances.
- 3.17 When the street layout for a new residential area is being designed as an integral part of a local area plan or a master-plan, it is important that:
 - the functions of various streets are clearly defined;
 - a co-ordinated and multi-disciplinary design approach is adopted between the various parts of the local authority, so that the streets can be taken in charge on completion of the development; and
 - the design approach is also agreed between the local authority and the developer(s) at the earliest possible stage.

Types of street

- **3.18** Streets normally found in residential areas include:
 - (a) Streets with higher traffic volumes, such as those connecting with other areas, or near neighbourhood centres, should be designed accordingly with designated pedestrian crossings. Streets with relatively high numbers of pedestrians are likely to have a significant "sense of place" function. Frontage-free streets (such as distributor roads) are not recommended, as they can be unsafe for pedestrians (especially after dark) and can result in a hostile environment. As busy streets will normally be along main bus routes, safe and convenient access to bus stops will need to be factored into the layout from the outset;
 - (b) Most residential streets as witnessed by many existing streets in cities and towns can successfully combine low to medium traffic movements with a pleasant residential setting, including on-street parking where street widths permit. Some of these

streets will also serve as bus routes. The design of such streets from the outset should limit traffic speeds within the range of 30-50 kph, without the need to resort to the use of remedial measures such as speed ramps. Segregated cycle tracks are not generally required. The design should also allow for the delivery of goods and services (such as waste collection) to dwellings;

- (c) Cul-de-sacs can offer a safe and relatively traffic-free environment. However, if large schemes are dominated by this type of street, it will militate against the economical provision of public transport and result in unnecessarily long walking or cycling distances and lack of permeability within the neighbourhood. While designing streets to prevent through vehicular traffic, connections between cul-de-sac heads should be as short as possible, well lit, and overlooked by dwellings. The design of cul-de-sacs should not facilitate vehicular speeds exceeding 30 kph; and
- (d) "Home Zones" are residential streets in which the road space is shared between drivers and other users and where the wider needs of residents (including pedestrians, cyclists, and children) are emphasised in the design. In these cases, very low traffic speeds allow a sense of place to be prioritised over movement. The street can be designed as an attractive place with distinctive paving, planting, play areas and seating. Shared vehicle / pedestrian surfaces can serve up to 25 dwellings where there is one point of access and up to 50 dwellings where there are two access points. Particular attention should be paid to the design of entry points to shared surfaces; for example, the use of tight kerb radii, ramps at entry points, and distinctive surface materials and colours, will help to emphasise the difference between shared surfaces and other types of street. Consideration should also be given to the needs of blind or visually impaired people who might normally rely on the presence of a footpath kerb.

Chapter 3: Checklist

- Does the development plan include urban design policies which are capable of being expanded in more detail in local area plans?
- Have design briefs being issued and design statements received for particularly important, sensitive or large-scale development sites?
- Have the 12 criteria set out in the companion Best Practice Urban Design Manual been used both in pre-application consultations and in assessing applications?
- Have designers of urban housing schemes carried out a site appraisal prior to preparing a layout?
- Is the standard of design of a sufficiently high standard? If the design would result in a poor quality environment, do the reasons for refusal make it clear how any revised design needs to be improved?
- Does the design of residential streets strike the right balance between the different functions of the street, including a "sense of place"?

Chapter 4 Planning for sustainable neighbourhoods

Introduction

- 4.0 As set out in the first chapter, the principles of sustainable development need to be defined and applied at different geographical levels. This chapter focuses on planning at the district or neighbourhood scale within larger towns and cities, whether on brown-field or green-field sites. Chapters 6 and 7 respectively relate to development at the level of smaller settlements and the immediate environs of individual dwellings.
- 4.1 National policy makes it clear that sustainability is not confined to the physical environment. Sustainability also includes the concept of stable, integrated communities, and planning for such communities must embrace both tangible issues such as the timely provision of school places and the intangible, such as people's perception of what constitutes an attractive, secure environment in which to rear children. Planning objectives at the district / neighbourhood scale can thus be grouped under four main themes:
 - (a) Provision of community facilities;
 - (b) Efficient use of resources;
 - (c) Amenity / quality of life issues; and
 - (d) Conservation of the built and natural environment.

Provision of community facilities

Sustainable neighbourhoods require a range of community facilities, and each district/neighbourhood will need to be considered within its own wider locality, as some facilities may be available in the wider area while others will need to be provided locally. In this context, planning authorities should seek to ensure that facilities for social and cultural use, such as community centres, and personal and community development, such as resource centres, are available

within the wider community. Particular attention, however, should be paid to the efficient and integrated provision of the following community facilities.

(a) Schools

- 4.2 New residential communities can generate a demand for a significant number of new school places, particularly where families are attracted to the area. In such cases, it is vital to the process of supporting sustainable communities that the planning system facilitates the timely provision of new school buildings. Detailed guidance on planning for school provision through the development plan, local area plan and development management processes and the roles, responsibilities and specific actions to be taken in relation to forecasting future demand for school places is available in the Joint Code of Practice on Provision of Schools and the Planning System (August 2008).
- 4.3 No substantial residential development should proceed without an assessment of existing schools capacity or the provision of new school facilities in tandem with the development.
- 4.4 Within the development management process, it is recommended that planning applications for 200+ dwelling units should be accompanied by a report identifying the demand for school places likely to be generated by the proposal and the capacity of existing schools in the vicinity to cater for such demand. In very large-scale residential developments (say, 800+ units), planning authorities must consider whether there is a need to link the phased completion of dwellings with the provision of new school facilities.

(b) Childcare

4.5 The Department's guidelines on childcare facilities (DoEHLG, 2001) emphasise the importance of local assessment of the need to provide such facilities at the development plan or local area plan stage, having regard to the provision of existing facilities in the area. When considering planning applications, in the case of larger housing schemes, the guidelines recommend the provision of one childcare facility (equivalent to a minimum of 20 child places) for every 75 dwelling units. However, the threshold for such provision should be

established having regard to the existing geographical distribution of childcare facilities and the emerging demographic profile of areas, in consultation with city / county childcare committees. The location of childcare facilities should be easily accessible by parents, and the facility may be combined with other appropriate uses, such as places of employment.

(c) Community Centres

Community centres can act as a focus in helping to create a vibrant 4.6 community, and their timely and accessible provision will contribute to the quality of life to be enjoyed by the residents. There are a number of approaches that can be taken by planning authorities to ensure their provision. In South County Dublin in Adamstown, a community facility of 150 sqm is required per 1000 dwellings, in Fingal County Council the approach is to share community facilities with the provision of education facilities, and agreements have been entered into with the Department of Education. A more integrated approach is being pursued by Waterford City Council in Carrickpherish where a number of community facilities are proposed to be shared and provided within a campus style environment. Planning authorities will need to consider the provision of community centres according to the particular circumstances. The spatial planning of community centre provision will occur as a policy at the development plan level following input from the community section of the planning authority and can be further detailed at the LAP level. Consideration should be given to locating community centres beside, near, or integrated with other community facilities to assist in generating / reinforcing the 'genus loci' of the area and to assist in the facilities being accessible to all by walking or using public transport thus promoting a steady stream of patronage which will facilitate the operational viability of the centre. Development contribution schemes can assist with funding new community facilities.

(d) Healthcare facilities

4.7 Planning authorities should consult the Health Services Executive at the development plan drafting stage in relation to the provision of healthcare facilities in major new development areas. In addition consideration should also be given to the variety of residential needs

such as of the elderly and people with disabilities – for example, is there a requirement to provide alternative forms of residential accommodation e.g. nursing homes in the area? In this regard, with our aging population, planning authorities could consider an objective to provide specifically for residential development for independent step-down dwellings for elderly people that benefit from communal and caretaking facilities. Such development would provide alternative residential choices for elderly people not wishing to enter a nursing home and may free up larger family homes in established residential areas.

(e) District/neighbourhood centre uses

4.8 The scale and nature of new retail provision in a new district or neighbourhood will be influenced by the development plan retail strategy. Convenience shops should generally be located centrally within the development but regard should be had to the location of the residential development within the wider area; the provision of new comparison/convenience retail floorspace should not be on such a scale as to undermine existing city / town centre vitality and viability¹². The need to travel can be minimised if other commercial, leisure and community uses, including local employment where appropriate, can be located in close proximity and are well served by public transport.

Efficient use of resources

(a) Efficient use of land

4.9 The amount and types of residential development to be accommodated in a new district or neighbourhood will be guided by the planning authority's housing and settlement strategy. The National Spatial Strategy¹³ sets out an evaluation framework for identifying the most appropriate and sustainable locations for new housing development. Land is a scarce resource and should be used as efficiently as possible; Chapter 5 provides detailed advice on appropriate locations for increased densities in cities and larger towns, while similar guidance in relation to small towns and villages is to be found in Chapter 6.

These issues are further elaborated in the Retail Planning Guidelines for Planning Authorities January 2005

NSS section 5.3

(b) Sustainable travel patterns

4.10 The NSS definition of sustainable development includes "maximising access to and encouraging use of public transport, cycling and walking." Spatial planning has a fundamental role in promoting more sustainable travel patterns and helping to reverse recent trends which have seen a decreasing share of people travelling to work by bus or bicycle or on foot. According to the results of Census 2006, the majority (55%) of primary schoolchildren were driven to school by car, compared with 28% in 1991. Apart from the energy and climate change implications of the increasing use of the car for journeys to work and school, cycling and walking have a role in achieving healthier lifestyles. A significant minority of children aged 5-17 have been found to be overweight or obese, which may lead to type 2 diabetes, respiratory, cardiovascular and orthopaedic problems. Good pedestrian and cycle facilities within residential areas (including adequate public lighting) can facilitate higher levels of physical activity among young people, particularly in relation to school trips, where perceptions about traffic safety among parents and children are a key factor. Higher residential densities within walking distance of public transport facilities (see Chapter 5) can help to sustain the economic viability of such transport. As a general principle, no substantial residential development in the larger settlements, where public transport is available, should proceed without adequate public transport provision, which should be planned at a strategic level in advance of development. In smaller settlements where there is no public transport provision, the emphasis should be on the appropriate location of residential development within the development plan / LAP minimising the need for car journeys and by encouraging through design, walking, and cycling14.

(c) Efficient use of energy

4.11 Residential development accounted for 25% of energy-related carbon dioxide (CO₂) emissions in Ireland in 2005. The planning process – development plans and development management - can help reduce such emissions by promoting sustainable approaches to the design and layout of new development, and by encouraging the use of renewable energy sources where appropriate. Such measures will complement the objectives of the Building Regulations for increased

Secure cycle parking should be provided at schools, train and bus stations, shops and other community facilities.

energy efficiency and conservation; the construction sector should not have to contend with different standards set by individual planning authorities for the environmental performance of buildings.

However, local authorities may wish to encourage voluntary higher standards.

- 4.12 Passive solar design of new housing schemes contributes to a reduction in energy demand and thus in CO₂ emissions. This includes taking maximum advantage of available sunlight, by orientating as many dwellings as possible within 30° of south and by avoiding obstructions which block light reaching windows. The greatest energy savings are achieved when passive solar design principles are also applied to the design of the individual dwelling units (see chapter 7). Passive solar design needs to be integrated with other design objectives of the development to ensure a balanced approach. Where feasible south-facing elevations should not be overshadowed by other buildings or planting; ideally, a distance of 21m between two-storey dwellings is needed to provide reasonable sunlight in winter, due to the low angle of the sun. Higher buildings or taller trees should preferably be located to the north of the site; similarly, car parking and garages should be located to the north of housing where possible.
- 4.13 Trees in shelter belts can protect dwellings from cold winter winds or create sun-traps within a scheme, provided that they do not overshadow south-facing elevations. Appropriate planting or other landscaping measures can provide privacy at the back of footpaths adjoining south-facing living-room windows.
- **4.14** Residential developments offer the potential to benefit from renewable energy sources within the district or even the site. Suitable technologies may include:
 - Small-scale wind energy plants;
 - Combined Heat and Power schemes, particularly in higher density developments and where biomass (e.g. wood pellets) provides the energy source; and district heating, particularly if waste heat from nearby industries can be utilised.

Amenity / quality of life issues

(a) Public open space

Introduction

4.15 Public open space can have a positive impact on physical and mental well being as it provides spaces to meet, interact, exercise and relax. It needs to be appropriately designed, properly located and well maintained to encourage its use. It is one of the key elements in defining the quality of the residential environment. Apart from the direct provision of active and passive recreation, it adds to the sense of identity of a neighbourhood, helps create a community spirit, and can improve the image of an area (especially a regeneration area). Well-designed open space is even more important in higher density residential developments.

Strategic policy approach

- 4.16 While the focus of this chapter is on the district and local levels, the provision of public open space at these levels will be guided by strategic city- or county-wide policies for open space and recreational facilities (both indoor and outdoor), which are based on an assessment of existing resources and user needs, including local play policies for children. Area-wide green space strategies facilitate not only the development of a hierarchy of provision ranging from subregional parks down to pocket parks but also the creation of links or green corridors between parks, river valleys and other amenity spaces. Such strategies should be supported by an audit of existing green spaces within the area.
- 4.17 In new development areas, local area plans should identify the preferred location of larger open spaces including, if considered appropriate, locations in adjoining non-development areas. This may allow playing pitches and larger recreational facilities to be concentrated away from housing areas but easily accessible from them and allow a more flexible approach to open space requirements within housing schemes by way of more casual spaces suitable for smaller children's play, informal kick-about and passive amenity. In

cases where the provision of open space compliant with the quantitative standards is not feasible due to site-specific factors, consideration may be given to addressing the deficit through the provision of on-site indoor recreational facilities by way of a compensating amenity. Development contribution schemes¹⁵ provide a mechanism for funding the provision of larger open spaces within residential areas, whereas smaller public open space should normally be provided as part of housing developments. Such smaller open spaces should be designed and completed to a standard suitable for taking in charge, where the development will be taken in charge by the planning authority.

Recommended qualitative standards

- 4.18 Development plans have tended in the past to emphasise detailed quantitative standards, but there is now an increasing focus on the quality of public open space, which ensures that the reasonable expectations of users are more likely to be fulfilled. Qualitative standards include:
 - **Design:** The layout and facilities particularly in larger parks should be designed to meet a range of user needs, including both active and passive recreation, as identified in the city/county strategy referred to above. Users should feel safe at all times within parks; adequate supervision, passive surveillance, boundary treatment and public lighting contribute to creating a sense of security. Public open spaces should be suitably proportioned; narrow tracts or 'left over spaces' which are difficult to manage should not be acceptable. Materials should be chosen for their durability.
 - Accessibility: Local parks should be located to be within not more than 10 minutes' walk of the majority of homes in the area; district parks should be on public transport routes as well as pedestrian/cycle paths. Playgrounds should be carefully sited within residential areas so that they are both easily accessible and overlooked by dwellings, while not causing a nuisance to nearby residents.
 - **Variety:** A range of open space types should be considered having regard to existing facilities in the area and the functions

- the new spaces are intended to provide. A balance will be required between the provision of active and passive recreational facilities.
- **Shared use:** The potential for maximising the use of open space facilities (such as all-weather pitches) should be explored, for example, by sharing them with nearby schools.
- **Biodiversity:** Public open spaces, especially larger ones, should provide for a range of natural habitats and can facilitate the preservation of flora and fauna.
- **Sustainable Urban Drainage Systems** (see para 4.29) are often used to reduce the impact of urban runoff on the aquatic environment.
- Provision for allotments and community gardens: Allotments are small plots of land which are let (usually by a local authority) to individuals for the cultivation of vegetables and plants. They are of particular value in higher density areas.

Recommended quantitative standards

- 4.19 Most planning authorities include quantitative standards for public open space in their development plans, generally in the range of 2-2.5 hectares per 1,000 population, and allocated according to a hierarchy of spaces. Assessing open space requirements on a population basis can be difficult due to the unpredictability of occupancy rates where often larger houses and apartments are occupied by fewer persons than the number of bed spaces would indicate. Case studies also indicate that, where existing recreational facilities are available close to town and city centres, public open space provision on a strictly population basis is not appropriate. Apartment developments in particular, located in the inner city where bed space rates are normally high, will be unable to achieve public open space standards similar to suburban developments where bed space rates are considerably lower. However, the design of public open spaces in higher density areas is more critical, requires integration with the design concept and may need to be more intensively maintained.
- 4.20 To ensure that there are adequate safeguards in place to avoid overdevelopment and to assist the planning authority in their assessment

of planning applications, in general the following standards are recommended:

- In green-field sites or those sites for which a local area plan is appropriate, public open space should be provided at a minimum rate of 15% of the total site area. This allocation should be in the form of useful open spaces within residential developments and, where appropriate, larger neighbourhood parks to serve the wider community;
- In other cases, such as large infill sites or brown field sites public open space should generally be provided at a minimum rate of 10% of the total site area; and
- In institutional lands and 'windfall' sites which are often characterised by a large private or institutional building set in substantial open lands and which in some cases may be accessible as an amenity to the wider community, any proposals for higher density residential development must take into account the objective of retaining the "open character" of these lands, while at the same time ensuring that an efficient use is made of the land. In these cases, a minimum requirement of 20% of site area should be specified; however, this should be assessed in the context of the quality and provision of existing or proposed open space in the wider area. Whilst the quantum of open space may be increased vis-à-vis other sites, the amount of residential yield should be no less than would be achieved on any comparable residential site. Increasing densities in selected parts of the site subject to the safeguards expressed elsewhere may be necessary to achieve this.
- 4.21 It will be necessary for planning authorities to take a more flexible approach to quantitative open space standards and put greater emphasis on the qualitative standards outlined above. Where residential developments are close to the facilities of city and town centres or in proximity to public parks or coastal and other natural amenities, a relaxation of standards could be considered.

 Alternatively, planning authorities may seek a financial contribution towards public open space or recreational facilities in the wider area in lieu of public open space within the development.

(b) Personal safety

- 4.22 The ability to live with a feeling of comfort and safety in the residential area is an essential component of sustainable communities. The design of the built environment can contribute to this by creating a sense of security and ownership within residential areas. Good design is essential in a residential area in giving a sense of personal safety, e.g. by providing:
 - for the passive surveillance of the street and roads by residents and passers-by; blank facades and areas that are not overlooked should be avoided;
 - a clear demarcation between private and public/communal spaces through appropriate boundary treatment; and
 - clear and direct routes through the area for pedestrians and cyclists with safe edge treatment, maintaining clear sight lines at eye level and clear visibility of the route ahead.

It is acknowledged that in the past, the layout of pedestrian paths often gave rise to anti-social behaviour. However, if paths are designed in such a manner that they do not facilitate such behaviour, e.g. not located between two gable walls or to the rear of dwellings, the pedestrian/cycle path can be very useful in providing a short cut to schools and other facilities.

(c) Traffic safety

- 4.23 Residential roads and streets should be safe for people to drive, to cycle, to walk and in certain situations to play in. International research has shown that appropriate design of the built environment can substantially reduce the risk of pedestrian / vehicle crashes. The introduction of traffic calming measures increases the use of the street by pedestrians and improves child pedestrian safety.
- 4.24 Design features should ensure that wherever possible appropriate traffic speeds and movements should be managed by the arrangements of buildings and spaces, and the appropriate use of surface materials. The aim should be to take account of traffic calming at the design stage so that remedial measures such as speed bumps and chicanes are not required (see para 3.18).

Conservation of the built and natural environment

4.25 Within the context of a sustainable residential area, the focus should be on retaining and enhancing the natural setting and, where appropriate, retaining parts of the built environment that will enhance the proposed development. Landscape, natural features and their ecology are always important. The retention and use of existing natural and built features can give a sense of maturity and of individual place. The ranges of issues involved include retaining landscape features, enhancing biodiversity, planning for flood plains/coastal erosion, maintaining historic buildings and their setting, and using Sustainable Urban Drainage Systems (SUDS).

(a) Natural Environment

4.26 The National Biodiversity Plan 2002 requires planning authorities to prepare local biodiversity plans that promote the conservation and sustainable use of biodiversity. Appropriate objectives from the biodiversity plans should be included in the development plan and implemented at the development management stage. In relating this to sustainable residential development, any proposed zoning or development in or near environmentally sensitive sites (e.g. an SAC, SPA or NHA) should avoid causing any significant adverse impacts on such sites. Expert input may be required. On less sensitive sites care should be taken to integrate existing landscape features, mature trees/ plants into the site. Planning authorities may find the publication 'Green City Guidelines' on the protection and enhancement of biodiversity useful in this regard as it provides practical guidance on this topic, for both the development planning and development management processes.

(b) Historic buildings

4.27 The main issues likely to arise in the context of residential development relate to potential impacts on either protected structures (including curtilages) or architectural conservation areas. Detailed advice is provided in the Architectural Heritage Protection Guidelines issued by the Department in 2004. There is a need to be creative in re-using protected buildings and in making them accessible to people with disabilities, whilst respecting their

Green City Guidelines. Advice for the protection and enhancement of biodiversity in medium to high – density urban developments. UCD Urban Institute Ireland, Dun Laoghaire-Rathdown County Council & Fingal County Council

architectural integrity, as this is the most likely way that they will be properly maintained and retained as part of our cultural heritage.

(c) Flooding risk

- 4.28 The location of major new residential development will be determined by the development plan, and increasingly the impact of climate change and the potential for increased incidences of flooding or increased rates of coastal erosion are factors which must be considered in this process.¹⁷ In addition, at a local level the planning process can further mitigate the potential for flooding by promoting sustainable approaches to urban drainage and through the design and layout of new development.
- 4.29 Residential areas may contain a variety of land uses including dwellings, parking areas, shops, schools and other community facilities. It is thus important when assessing the disposition of uses in a residential layout in areas where there is a potential for flooding to locate the least vulnerable uses in the highest risk areas e.g. waterside locations can be appropriate as amenity, recreational or parking areas in a development. Factoring in flood risk in this manner from the earliest stage in a development can contribute to more effective flood management as well as providing green spaces with consequential social and environmental benefits, thus contributing to a more sustainable form of development.
- **4.30** Flood risk can also be mitigated by improvements in the resilience of building design and construction to the effects of flooding.

(d) Sustainable Urban Drainage Systems (SUDS)

- 4.31 The extent of paved and other hard surface areas reduces the capacity of the soil to absorb run-off and may increase the risk of flash flooding. A sustainable approach to urban drainage encompasses a whole range of sustainable approaches to surface water drainage management including:
 - Source control measures including rainwater recycling and drainage;
 - Infiltration devices to allow water to soak into the ground including individual soak-aways and communal facilities;

The (consultation draft) Guidelines on Flood Risk Management demonstrate how this can be achieved.

- Filter strips and swales (vegetated features that hold and drain water downhill, mimicking natural drainage patterns);
- Filter drains and porous pavements to allow rainwater and runoff to infiltrate into permeable material below ground and provide storage if needed;
- Basins and ponds that can hold excess water after rain and that allow controlled discharge which avoids flooding; and
- Green roofs and rainwater butts.
- 4.32 It is important that discussions take place at the development plan and LAP stages to identify areas where SUDS will or may be required and that prior discussions are held with the developers of these sites at the pre-application stage of development. Planning authorities will normally be able to advise of sensitivities on particular sites that will demand some SUDS measures to be adopted. However, from the initial design phases to subsequent consideration of planning issues and construction, every effort should be made to incorporate the principles of sustainable urban drainage into new development.

Chapter 4: Checklist

- Are the lands proposed for development in accordance with the sequencing priorities set out in the development plan or local area plan?
- Has an assessment of the capacity of existing schools or the need for new school facilities been carried in connection with proposals for substantial residential developments?
- Have the other necessary agencies inputted into the plan/development proposal?
- Is there an appropriate range of community and support facilities, when and where they are needed?
- In the case of higher density schemes, is there adequate existing public transport or will it be provided in tandem with development?
- Will the development:
 - prioritise public transport, cycling and walking, and dissuade the use of cars?
 - ensure accessibility for everyone, including people with disabilities?
 - encourage more efficient use of energy and a reduction in greenhouse gas emissions?
 - include the right quality and quantity of public open space
 - include measures to ensure satisfactory standards of personal safety and traffic safety within the neighbourhood?
 - Present an attractive and well-maintained appearance?
 - Promote social integration and provide for a diverse range of household types, age groups and mix of housing tenures?
 - protect, and where possible enhance, the built and natural heritage?
 - provide for Sustainable Drainage Systems?

Chapter 5 Cities and larger towns

Introduction

- 5.0 The 1999 guidelines on residential density recommended that planning authorities should promote increased residential densities in appropriate locations, including city and larger town centres (defined for the purposes of these guidelines as towns with 5,000 or more people). This recommendation was based on three significant social, economic and environmental considerations, namely:
 - The trend towards smaller average household sizes,
 - The need to encourage the provision of affordable housing, particularly in the greater Dublin area, and
 - The need to reduce CO² emissions by reducing energy consumption and to support a more efficient use of energy in the residential and transport sectors, in line with Ireland's commitments under the Kyoto Protocol.

All three considerations remain relevant and it remains Government policy to promote sustainable patterns of settlement, particularly higher residential densities in locations which are, or will be, served by public transport under the Transport 21 programme. Various methods for measuring residential density are outlined in Appendix A.

Design safeguards

5.1 Firm emphasis must be placed by planning authorities on the importance of qualitative standards in relation to design and layout in order to ensure that the highest quality of residential environment is achieved. Pre-planning discussions with developers will be helpful in achieving a quality environment. The objective should be the achievement of an efficient use of land appropriate to its context, while avoiding the problems of over-development.

- 5.2 Detailed advice on the criteria to be considered in the design and assessment of higher density residential development is provided in the Department's companion design manual. In summary, these factors include:
 - acceptable building heights (see below);
 - avoidance of overlooking and overshadowing;
 - provision of adequate private and public open space, including landscaping where appropriate and safe play spaces;
 - adequate internal space standards in apartments;
 - suitable parking provision close to dwellings; and
 - provision of ancillary facilities, including child care.
- 5.3 Particular sensitivity is required in relation to the design and location of apartment blocks which are higher than existing adjacent residential development. As a general rule, where taller buildings are acceptable in principle, building heights should generally taper down towards the boundaries of a site within an established residential area. Planning authorities in cities and larger towns should also consider whether a buildings heights strategy, involving public consultation as part of a statutory plan process, would provide clearer guidance for potential developers on where, and in what circumstances, taller residential buildings would be appropriate within their areas.

Appropriate locations for increased densities

5.4 Where there is good planning, good management, and the necessary social infrastructure, higher density housing has proven capable of supporting sustainable and inclusive communities. In general, increased densities should be encouraged on residentially zoned lands and particularly in the following locations:

(a) City and town centres

5.5 The increase of population within city or town centres with their range of employment, recreation, educational, commercial and retail uses can help to curtail travel demand; therefore, these locations have the greatest potential for the creation of sustainable patterns of development. Increasing populations in these locations can assist in

regeneration, make more intensive use of existing infrastructure, support local services and employment, encourage affordable housing provision and sustain alternative modes of travel such as walking, cycling and public transport. While a mix of residential and other uses will often be desirable in city and town centres, particular care is needed to ensure that residential amenity is protected. The infilling of "gap" sites will also contribute to the improvement of the architectural form.

- 5.6 In order to maximise inner city and town centre population growth, there should, in principle, be no upper limit on the number of dwellings that may be provided within any town or city centre site, subject to the following safeguards:
 - compliance with the policies and standards of public and private open space adopted by development plans;
 - avoidance of undue adverse impact on the amenities of existing or future adjoining neighbours;
 - good internal space standards of development;
 - conformity with any vision of the urban form of the town or city as expressed in development plans, particularly in relation to height or massing;
 - recognition of the desirability of preserving protected buildings and their settings and of preserving or enhancing the character or appearance of an Architectural Conservation Area; and
 - compliance with plot ratio and site coverage standards adopted in development plans.

(b) 'Brownfield' sites (within city or town centres)

5.7 'Brownfield' lands, which may be defined as "any land which has been subjected to building, engineering or other operations, excluding temporary uses or urban green spaces", generally comprise redundant industrial lands or docks but may also include former barracks, hospitals or even occasionally, obsolete housing areas. Where such significant sites exist and, in particular, are close to existing or future public transport corridors, the opportunity for their re-development to higher densities, subject to the safeguards expressed above or in

accordance with local area plans, should be promoted, as should the potential for car-free developments at these locations.

(c) Public transport corridors

5.8 The State has committed very substantial investment in public transport under the Transport 21 capital programme. To maximise the return on this investment, it is important that land use planning underpins the efficiency of public transport services by sustainable settlement patterns – including higher densities – on lands within existing or planned transport corridors. The phasing of proposed major residential development in tandem with new public transport infrastructure / services (as in the case of the Adamstown Strategic Development Zone) should be considered.

Walking distances from public transport nodes (e.g. stations / halts / bus stops) should be used in defining such corridors. It is recommended that increased densities should be promoted within 500 metres walking distance¹⁸ of a bus stop, or within 1km of a light rail stop or a rail station. The capacity of public transport (e.g. the number of train services during peak hours) should also be taken into consideration in considering appropriate densities. In general, minimum net densities of 50 dwellings per hectare, subject to appropriate design and amenity standards, should be applied within public transport corridors, with the highest densities being located at rail stations / bus stops, and decreasing with distance away from such nodes. Minimum densities should be specified in local area plans, and maximum (rather than minimum) parking standards should reflect proximity to public transport facilities.

(d) Inner suburban / infill

The provision of additional dwellings within inner suburban areas of towns or cities, proximate to existing or due to be improved public transport corridors, has the revitalising areas by utilising the capacity of existing social and physical infrastructure. Such development can be provided either by infill or by sub-division:

(i) Infill residential development

Potential sites may range from small gap infill, unused or derelict land and backland areas, up to larger residual sites or sites assembled from a multiplicity of ownerships. In residential areas whose character is established by their density or architectural form, a balance has to be struck between the reasonable protection of the amenities and privacy of adjoining dwellings, the protection of established character and the need to provide residential infill. The local area plan should set out the planning authority's views with regard to the range of densities acceptable within the area. The design approach should be based on a recognition of the need to protect the amenities of directly adjoining neighbours and the general character of the area and its amenities, i.e. views, architectural quality, civic design etc. Local authority intervention may be needed to facilitate this type of infill development, in particular with regard to the provision of access to backlands.

(ii) Sub-division of dwellings

Many inner suburbs contain large houses on relatively extensive sites whose conversion to multiple dwellings without a dramatic alteration in the public character of the area is achievable. In such areas, particularly those of falling population but which are well served by public transport, their conversion to multiple occupancy should be promoted subject to safeguards regarding internal space standards, private open space and maintenance of the public character of the area. Standards of off-street car parking might be relaxed to encourage the occupation of the dwellings by households owning fewer cars. Special care will be required to protect the integrity of protected buildings.

In other urban and suburban areas, particularly those consisting solely of semi-detached houses, which are proximate to existing or improved public transport corridors, planning authorities should consider policies which would permit more intense residential usage, subject to design safeguards e.g. end houses with more extensive plots and a capacity for limited extension might be appropriate for conversion to multiple dwellings. However, the need to retain green porous spaces¹⁹ within urban areas must be taken into account in drafting such policies.

(e) Institutional lands

5.10 A considerable amount of developable land in suburban locations is in institutional use and/or ownership. Such lands are often characterised by large buildings set in substantial open lands which in some cases may offer a necessary recreational or amenity open space opportunity required by the wider community. In the event that planning authorities permit the development of such lands for residential purposes, it should then be an objective to retain some of the open character of the lands, but this should be assessed in the context of the quality and provision of existing or proposed open space in the area generally. In the development of such lands, average net densities at least in the range of 35-50 dwellings per hectare should prevail and the objective of retaining the open character of the lands achieved by concentrating increased densities in selected parts (say up to 70 dph). The preparation of local area plans setting out targets for density yields, recreational uses and urban form should be considered in advance of development. In the absence of an LAP, any application for development of institutional lands should be accompanied by a masterplan outlining proposals for the entire landholding.

(f) Outer Suburban / 'Greenfield' sites

5.11 These may be defined as open lands on the periphery of cities or larger towns whose development will require the provision of new infrastructure, roads, sewers and ancillary social and commercial facilities, schools, shops, employment and community facilities.

Studies have indicated that whilst the land take of the ancillary facilities remains relatively constant, the greatest efficiency in land usage on such lands will be achieved by providing net residential densities in the general range of 35-50 dwellings per hectare and such densities (involving a variety of housing types where possible) should be encouraged generally. Development at net densities less than 30 dwellings per hectare should generally be discouraged in the interests of land efficiency, particularly on sites in excess of 0.5 hectares.

Provision for lower densities in limited cases

5.12 To facilitate a choice of housing types within areas, <u>limited</u> provision may be made for lower density schemes provided that, within a neighbourhood or district as a whole, average densities achieve any minimum standards recommended above.

Chapter 5: Checklist

- Are residential densities sufficiently high in locations which are, or will be, served by public transport?
- Have proposals for higher densities been accompanied in all cases by high qualitative standards of design and layout?
- Does the design and location of new apartment blocks respect the amenities of existing adjacent housing in terms of sunlight and overlooking?

Chapter 6 Small Towns and Villages

Introduction

- 6.0 Smaller towns and villages are a very important part of Ireland's identity and the distinctiveness and economy of its regions. For the purposes of this chapter, smaller towns and villages are defined as those with a population ranging from 400 to 5,000 persons. Within this overall range, there are those towns ranging in population from:
 - (a) 2000 to 5000 persons and for which Local Area Plans (LAPs) are required under the Planning and Development Act; and
 - (b) 400 to 2000 persons and for which planning authorities may prepare either LAPs or other non-statutory supplementary local development frameworks.
- Many smaller towns and villages, particularly those within easy 6.1 commuting range of the principal cities and towns or in scenic parts have experienced a wave of development in recent years, particularly residential developments. In many cases such development has brought positive benefits in the form of extra housing supply and enhancement of the viability of local shops and public services. However, in some cases, concerns have been raised about the impact of rapid development and expansion on the character of smaller towns and villages through poor design and particularly the impact of large housing estates with a standardised design approach on the character of towns and villages that have developed slowly and organically over time. In other parts of the country, planning authorities face the challenge of strengthening small towns and villages that have been experiencing stagnation or decline in population and economic activity in the face of a wider economic restructuring of rural areas.
- 6.2 In order for small towns and villages to thrive and succeed, their development must strike a balance in meeting the needs and demands of modern life but in a way that is sensitive and responsive

to the past. For example, the development of new building forms and technologies to standardised formats, used on a large scale and added to an existing historic small town or village can work against diversity of design and successful integration between old and new.

General advice

- 6.3 Key overall messages of these guidelines include the following:
 - (a) Development in smaller towns and villages must be plan led A local area plan, within the meaning of the Planning and Development Act 2000, is an essential prerequisite for the proper consideration of development proposals in smaller towns and villages mentioned at 6.0 category a) above. Planning authorities should not consider extensive proposals for new development, including residential development, in these smaller towns and villages in the absence of an adopted local area plan. For towns and villages under 2000 in population, planning authorities can prepare either an LAP or prepare such supplementary local development frameworks as is appropriate and necessary to guide any new development proposals. Guidance on such supplementary frameworks is outlined at 6.5 below.
 - villages Through planning and design, walking and cycling should be preferred over travel by car for local trips. Ireland's small towns and villages have benefited from investment over many years in areas such as water services, schools, shops, libraries, health centres, childcare facilities and other physical and social infrastructure. It is appropriate that the investment in such services is utilised properly through the prioritisation of development that either re-uses brown-field development land such as central area sites and backlands or through the development of acceptable "green-field" sites at suitable locations within the immediate environs of the small town or village concerned. Designs for the development of backlands should seek, where feasible, to maximise permeability for

pedestrians and connectivity to existing streets and roads, rather than creating cul-de-sacs and dead-ends.

(c) Higher densities are appropriate in certain locations Significant enhancement of the scale and density of development in small towns and villages may be appropriate in locations close to Gateways and Hubs designated under the NSS, that are served by existing and/or planned high quality public transport corridors and that have been earmarked for particular development functions in regional planning guidelines and development plans. In other locations, increased densities of development can be acceptable as long as they contribute to the enhancement of town or village form by reinforcing the street pattern or assisting in the redevelopment of backlands. In all cases, special care will be required to protect the architectural and environmental qualities of small towns and villages of special character.

- (d) Offering alternatives to urban generated housing
 In some limited circumstances, notably where pressure for
 development of single homes in rural areas is high, proposals
 for lower densities of development may be considered
 acceptable at locations on serviced land within the environs of
 the town or village in order to offer people, who would
 otherwise seek to develop a house in an unserviced rural area,
 the option to develop in a small town or village where services
 are available and within walking and cycling distance.
- (e) The scale of new residential schemes for development should be in proportion to the pattern and grain of existing development. Because of the scale of smaller towns and villages, it is generally preferable that overall expansion proceeds on the basis of a number of well integrated sites within and around the town/village centre in question rather than focusing on rapid growth driven by one very large site. Above all, it is the function of local area plans and any supplementary local development frameworks to make recommendations regarding the appropriate scale of overall development and any individual new housing schemes and to

match the scale and grain of existing development within an overall development boundary. For example, where a small town or village has grown rapidly in recent years, the LAP might recommend the phased development of a variety of sites over time, subject to a proviso that no one proposal for residential development should increase the existing housing stock²⁰ by more than 10-15% within the lifetime of the development plan or local area plan. For villages of under 400 in population, the typical pattern and grain of existing development suggests that any individual scheme for new housing should not be larger than about 10-12 units²¹ due to an absence of a sufficiently developed local infrastructure such as schools and community facilities to cater for development.

(f) Local authorities have a vital role to play in encouraging development through the provision of essential services, in carrying out local planning functions (see below), in utilising their extensive local knowledge in identifying new development opportunities such as backlands development and harnessing the extensive array of powers available to them under planning, urban renewal and derelict sites legislation in facilitating and encouraging sustainable forms of development.

Getting the form & density of development right - the importance of local planning

- 6.4 Planning authorities must take account of the wider development context in preparing plans for smaller towns and villages.
 - (i) For those towns and villages within the 45minute 1 hour travel time range from major cities and which are experiencing significant levels of new largely commuter-driven development. It is vitally important that planning authorities channel development through their small town and village plans in a way that is consistent with higher level plans such as the development plan of the county they are situated within, any regional planning guidelines that are in force and the National Spatial Strategy in order to build up the critical mass of the key cities and towns.

 $^{^{20}}$ Including permitted and committed development.

²¹ Allowing for more than one scheme.

- (ii) Many smaller towns and villages located more remotely from the main urban centres and or the transport corridors between such centres often face new challenges in sustaining their population and attracting development in the face of a wider process of economic restructuring of the rural economy that they traditionally depended on. New plans for the types of smaller towns and villages mentioned above should encourage interventions designed to open up development opportunities such as town or village centre renewal, redevelopment of derelict sites or the development of mixed use proposals in order to stimulate new economic development.
- (iii) Smaller towns and villages, particularly heritage towns and villages in coastal or other attractive inland locations often find themselves under considerable pressure for tourism driven and/or second home type development. The unique design and built heritage attributes of such locations suggest the need to put in place mechanisms such as Village Design Statements (see below), that either elaborate LAPs or act as supplementary local development frameworks and that accurately profile the key attributes of the town or village concerned, offering advice on how to successfully integrate new development.
- 6.5 As mentioned above, preparation of supplementary local development frameworks might be appropriate in certain circumstances to guide local development in small towns and villages with a population of under 2000. Such non-statutory local development frameworks can be useful where planning authorities are already engaged in preparing a large number of Local Area Plans. The County Development Plan should indicate where such frameworks will be prepared over the lifetime of the plan. Such frameworks must conform with the core settlement and housing strategy elements of the overall county development plan with respect to projected population and development land and they must be prepared, where necessary and appropriate, in consultation with local communities. Village Design Statements are an example of nonstatutory local development frameworks. Such statements are a useful non-statutory innovation in:

- describing what is distinctive about the character of the small town or village in terms of its shape and buildings and its setting in the surrounding countryside;
- drawing up design principles based on conserving distinctive local character and adapting it to, and integrating it within, new development;
- ensuring that new development is effectively managed not prevented, including innovative building and design solutions;
- acting as a focus for local communities to research and analyse their town or village and input into statutory development plans and local area plans.

Village Design Statements and or other supplementary local development frameworks are usually best progressed by way of a partnership between the technical resources of the relevant planning authority and the local knowledge of local communities and elected members and use of external facilitators. If it is intended to use such non-statutory documents for development management, planning authorities should incorporate them in the development plan or local area plan for the area by way of variation.

The Department intends to publish further guidance on LAPs which will address the issue of supplementary local development frameworks and their relationship to city and county development plans and local area plans.

Location and site selection

- 6.6 The National Spatial Strategy (section 5.3) sets the basic criteria in relation to location and site selection tests for new housing development. Identifying the most appropriate and sustainable locations for new housing development should follow this evaluation framework.
- 6.7 Above all, the overall order and sequencing of development of small towns and villages must avoid significant so called "leap-frogging" where development of new residential areas takes place at some remove from the existing contiguous town/village and leading to

discontinuities in terms of footpaths lighting or other services which militates against proper planning and development.

Layout and design considerations

- 6.8 The primary consideration, in respect of layout design and space standards, is that new development relates successfully to the structure of the smaller town or village. In terms of overall scheme design, each residential scheme within a small town or village should be designed to:
 - make the most effective use of the site, having regard to the criteria outlined below;
 - make a positive contribution to its surroundings and take the
 best advantage of its location through the use of site
 topography, i.e. levels, views, context, landscape, design
 orientation (sunlight and daylight), to optimise sustainability;
 - **have a sense of identity and place** appropriate to the character of the existing small town or village and a logical hierarchy of places within the scheme working from streets to semi-private and private areas;
 - **provide for effective connectivity**, especially by pedestrians and cyclists so that over time, small towns and villages become especially amenable to circulation by walking and cycling rather than building up reliance on the car; and
 - include a design approach to public areas such as streets,
 plazas and open spaces that is guided by the best principles of
 passive surveillance to encourage a safe sense of place,
 discourage anti-social behaviour and facilitate effective
 community policing.

Practical examples of schemes where such objectives have been achieved are included in the design manual accompanying these Guidelines.

Density standards

(a) Centrally located sites

- 6.9 Within a given smaller town or village, there can be marked variations in development context which affect the density of development and external space standards needed to take account of those contexts. Because of the variety of contexts and the probability of mixed use developments, it is difficult to be prescriptive about the level of density recommended. However, within centrally located sites, densities of 30-40+ dwellings per hectare for mainly residential schemes may be appropriate or for more mixed use schemes. There is also the potential for schemes of particularly high architectural and design quality to suggest densities higher than the range suggested above.
- 6.10 The emphasis in designing and considering new proposals should be on achieving good quality development that reinforces the existing urban form, makes effective use of premium centrally located land and contributes to a sense of place by strengthening for example the street pattern or creating new streets. While a 22 metre separation distance between opposing above ground floor windows is normally recommended for privacy reasons, this may be impractical and incompatible with infill development. In these cases, innovation and flexibility will essential in the interpretation of standards so that they do not become inflexible obstacles to the achievement of an attractive village and small town character in new development.

(b) Edge of centre sites

6.11 The emphasis will be on achieving successful transition from central areas to areas at the edge of the smaller town or village concerned. Development of such sites tend to be predominantly residential in character and given the transitional nature of such sites, densities to a range of 20-35 dwellings per hectare will be appropriate including a wide variety of housing types from detached dwellings to terraced and apartment style accommodation.

(c) Edge of small town / village

- 6.12 In order to offer an effective alternative to the provision of single houses in surrounding unserviced rural areas, it is appropriate in controlled circumstances to consider proposals for developments with densities of less than 15 20 dwellings per hectare along or inside the edge of smaller towns and villages, as long as such lower density development does not represent more than about 20% of the total new planned housing stock of the small town or village in question. This is to ensure that planned new development in small towns and villages offer a range of housing types, avoiding the trend towards predominantly low density commuter-driven developments around many small towns and villages within the commuter belts of the principal cities and other Gateway locations. Such lower density development also needs to ensure the definition of a strong urban edge that defines a clear distinction between urban and the open countryside.
- 6.13 The quality of new development will also be determined by many other factors additional to the achievement of an appropriate density of development. However, adherence to the guidance outlined above, coupled with effective local planning can offer a positive path forward in managing the process of development of Ireland's distinctive and attractive smaller towns and villages.

Chapter 6: Checklist

- Is the Local Area Plan or supplementary non-statutory planning framework focused on securing development patterns that are sustainable in economic and social development and environmental protection terms, recognising the challenges faced by rural economies in the future?
- Is the scale of development envisaged in terms of future housing, population, retail and employment growth in line with the overall County Development Plan Settlement and Housing Strategies and any Regional Planning Guidelines in force?
- Will the plan ensure a compact and easily walkable town or village creating forms of development that will make walking and cycling, especially for local trips, more attractive than using the car?
- Are the densities being promoted in line with the densities recommended in these guidelines?
- Are adequate arrangements in place to ensure that the scale of new housing development schemes is in proportion to the pattern and grain of existing development?
- Have policies been put in place to ensure that the design, layout and character of new development successfully relates to the local character and heritage of the existing small town or village?

Chapter 7 The home and its setting

Introduction

7.0 Previous chapters have focused on the design and layout of housing schemes or neighbourhoods, and have reiterated the importance of achieving higher residential densities in appropriate locations. It has been shown how well-designed development can contribute significantly to sustainability, and it is of fundamental importance to the acceptability of such development by the public that the quality of design and finish extends also to the individual dwelling and its immediate surroundings. Residents are entitled to expect that their new homes will offer decent levels of amenity, privacy, security and energy efficiency.

Daylight, sunlight and energy efficiency

- 7.1 The orientation of the dwelling and its internal layout can affect levels of daylight and sunlight, and will thus influence not only the amenity of the occupants but the energy demand for heat and light. The efficiency gains derived from passive solar estate layouts (see chapter 4) can be enhanced by designing individual dwellings so that solar collection is maximised, i.e. when living rooms, dining rooms and main bedrooms have a southerly aspect.
- 7.2 Overshadowing will generally only cause problems where buildings of significant height are involved or where new buildings are located very close to adjoining buildings. Planning authorities should require that daylight and shadow projection diagrams be submitted in all such proposals. The recommendations of "Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice" (B.R.E. 1991) or B.S. 8206 "Lighting for Buildings, Part 2 1992: Code of Practice for Daylighting" should be followed in this regard.
- 7.3 It is Government policy to increase the share of energy generated from renewable sources. The Planning Regulations were amended in 2007 to allow the erection or installation of certain micro-renewable technologies within the curtilage of a dwelling without planning

permission in specified circumstances. Part L of the Building Regulations 2005 deals with the conservation of fuel and energy in new buildings; revised Part L standards which came into force in 2008 aim to achieve up to a 40% improvement on current standards. Planning authorities can complement improved building standards by encouraging energy-efficient layouts.

Privacy and security

- 7.4 Privacy is an important element of residential amenity, and contributes towards the sense of security felt by people in their homes. Where ground floor dwellings have little or no front gardens, it is important that "defensible space" is created behind the public footpath, for example, by means of a planting strip, and the design of ground floor windows will need to be carefully considered. Similarly at the rear of dwellings, there should be adequate separation (traditionally about 22 m between 2-storey dwellings) between opposing first floor windows. However, such rules should be applied flexibly: the careful positioning and detailed design of opposing windows can prevent overlooking even with shorter back-to-back distances. Windows serving halls and landings do not require the same degree of privacy as, say, balconies and living rooms.
- 7.5 Designers can also contribute towards better safety by:
 - ensuring clear definition of private, communal and public spaces,
 - preventing unauthorised access to rear gardens by means of suitable boundary treatment,
 - maximising natural surveillance of the street from windows,
 and
 - avoiding blank facades to the public domain.

Car and bicycle parking

7.6 Car parking standards need to be set at realistic levels (having regard, *inter alia*, to proximity to public transport) in order to avoid parked vehicles causing obstruction on residential streets in the evenings or

at weekends. Parking can be provided in an on-curtilage arrangement or in a grouped format depending on the type of layout proposed. In the latter case, it should be well overlooked by adjacent dwellings and appropriately landscaped. Underground parking should be considered in higher density developments and should be well lit and ventilated. It also avoids the visual dominance of large surface car parks. Where possible, designers should seek to create child- and pedestrian-friendly car-free areas, especially in higher density schemes, through the careful location of access streets and parking areas²².

Earlier chapters encouraged the provision of convenient cycle routes within new neighbourhoods; the corollary is that adequate bicycle storage provision needs to be made within, or close to, the dwelling. Cycle parking should be sheltered and secure, and should be located no less conveniently than car parking relative to the dwelling units (if not provided within the dwelling itself).

Private and communal open space

- 7.8 All houses (terraced, semi-detached and detached) should have an area of private open space behind the building line. The area of such private space will be influenced by the separation between buildings (see above) and plot widths. Smaller patio-type rear gardens may be acceptable in more innovative layouts where communal open space in the form of a courtyard is also available. For terraced houses in particular, this can often be more appropriate as it offers a method of accessing the rear of all dwellings (by residents only) and can be visually more attractive than narrow fenced-in gardens.
- 7.9 The provision of adequate and well-designed private open space for apartments²³ is crucial in meeting the amenity needs of residents; in particular, usable outdoor space is a high priority for families. Private open space can be provided in the form of rear gardens or patios for ground floor units, and balconies at upper levels. It is important that in the latter case adequate semi-private or communal open space, in the form of landscaped areas, should also be provided. Roof gardens may offer a satisfactory alternative to courtyard

See section on Parking in the best practice Urban Design Manual, which describes the approach to sustainable, car-free living in the Vauban district of Freiburg, Germany. Experience in Vauban has shown that the siting of grouped car parking at some remove from the housing can lead to a reduction in car ownership rates. See chapter 4, "Communal and private open spaces", in the planning guidelines Design Standards for New Apartments (September 2007). 22

²³

communal open space, provided that climatic and safety factors are fully considered.

Residential density

7.10 Planning authorities should ensure that the <u>cumulative</u> effect of setting specific minimum quantitative standards for parking, private and communal open space, and separation distances between dwellings does not militate against the achievement of the minimum residential densities recommended in Chapters 5 and 6. Qualitative standards should be the real test, and innovative design solutions which achieve good performance standards should be considered on their merits.

Access for all

7.11 Circulation within housing layouts, including access to individual buildings, should have regard to the varying needs of occupants over their lifetimes, including needs associated with mobility difficulties and the normal frailty associated with old age. Innovative dwelling design should be encouraged in order to facilitate the potential future provision of adaptable and accessible accommodation²⁴.

Waste services

7.12 Adequate provision needs to be made for the storage and collection of waste materials, with appropriate reference to the projected level of waste generation, collection frequencies, and types and quantities of receptacles required. If insufficient provision is made, problems of dumping, odour and vermin are likely. Developers should therefore ascertain the relevant local authority requirements for waste management storage and collection at the pre-planning stage. Houses which do not have side passages or pedestrian / vehicular access to rear gardens, should be required to provide a covered / screened area for the storage of wheelie bins to the front of the house²⁵. The Guidelines for Planning Authorities on Design Standards for New Apartments (2007) deal in more detail with shared facilities in multi-unit developments.

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See also para. 1.10 on the principles of universal design More detailed recommendations for communal services in apartment developments, including waste storage areas and drying facilities, are contained in the Design Standards for New Apartments (DoEHLG, 2007).

Chapter 7: Checklist

- In higher density developments, does the quality of design and finish extends also to the individual dwelling and its immediate surroundings?
- Do new homes offer decent levels of amenity, privacy, security and energy efficiency?
- Will the orientation of the dwelling and its internal layout maximise levels of daylight and sunlight, thus influencing not only the amenity of the occupants but the energy demand for heat and light?
- Has privacy been considered in the design of the home?
- Has the design sought, where possible, to create child- and pedestrian-friendly car-free areas, especially in higher density schemes, through the careful location of access streets and parking areas?
- Do all houses (terraced, semi-detached and detached) have an area of private open space behind the building line?
- Has the design been influenced by the principles of universal design (see chapter 1)?
- Has adequate provision been made for the storage and collection of waste materials?

Chapter 8 Implementation

Introduction

8.0 The development plan, the local area plan, the development management process and taking in charge of the area all have a role to play in the creation of sustainable residential areas. The role of forward planning has been outlined in Chapter 2.

Plan implementation teams

- 8.1 Planning authorities should consider the formation of an implementation team with a project leader whose purpose is now to roll out the development plan / local area plan objectives with a particular emphasis on newly developing residential areas, or areas requiring residential redevelopment. While this may have resource implications it will facilitate the overall development plan process. It is suggested that this team will include the relevant internal and external service providers as required for the residential area. An annual implementation programme should be prepared specifying actions, lead agencies, monitoring programme and the timeframes for actions. Consideration should be given to extending the remit of the implementation programme to include a taking-in-charge schedule, which would be applied to each phase of the development.
- 8.2 At the implementation stage, monitoring becomes important as it not only clarifies what has been done and gives an awareness of what is still required, but can also be used to give feedback, for example from initial residents, so that the process is continually informed and the residential development improved, if necessary. A creative and coordinated approach with all service inputs can then be continually developed which will facilitate the provision of social and physical infrastructure.

Funding

8.3 In addition to development contribution schemes which apply to the entire area of the planning authority, there may be a role for special

contributions in funding the provision of public infrastructure and facilities within a particular (re)development area²⁶.

Development Management

8.4 Planning authorities should have an informed and up-to-date website, produce information leaflets, hold agents' meetings etc., giving advice and information for the developer, applicant and general public not only on the planning authorities requirements when lodging an application but on all aspects of the development of sustainable residential development. For example, there should be information on these guidelines, and the accompanying design manual, and any other relevant guidance on design and sustainability, such as information on renewable energy, SUDS etc. This information should be updated as practice changes so that the general public is being informed and availing of good practice at the relevant time.

Pre-application discussions

- 8.5 As indicated in the Development Management Guidelines (DoEHLG, 2007), pre-application discussions should be encouraged, so that there is clarity around sequencing priorities of the development plan, the vision statement and phasing objectives of the local area plan (where applicable), and how they relate to the applicant's land. The role (if any) of non-statutory design briefs or design statements should also be agreed at this stage.
- 8.6 The design manual which accompanies these guidelines sets out a series of criteria which are intended in the first instance to frame the agenda for pre-application consultations. Not all of the criteria will be relevant to a particular development proposal, but consideration of all the criteria will ensure that all major design and layout issues will be addressed in framing the subsequent application.

Assessing an application

8.7 In assessing the application, regard should be given to the relevant policies and development standards contained in the development plan / local area plan. The design criteria set out in the design manual will also provide a useful framework in the assessment of applications, particularly in the light of significant planning issues identified at pre-application meetings.

Taking in Charge

8.8 Planning authority policy on taking in charge should comply with Circular Letter PD 1/08, <u>Taking in Charge of Residential</u>

<u>Developments/ Management Arrangements</u>, which is available from the Department's website at www.environ.ie. Implementation by planning authorities of the requirements set out in the Circular falls within the statutory scope of these Guidelines and is therefore covered by the provisions of Section 28 of the Planning and Development Acts.

Circular Letter PD 1/08 requires each planning authority to develop or update, as appropriate, and implement a policy on taking in charge in accordance with the policy guidance, the main principles of which are as follows:

- Certain core facilities and infrastructure should be taken in charge on request - public roads and footpaths, unallocated surface parking areas, public lighting, public water supply, foul and storm water drainage and public open spaces;
- The matter of taking in charge should be addressed at preplanning application stage and in the planning application the developer should be required clearly to identify the area to be taken in charge in due course;
- Planning authorities should take all necessary measures to ensure proper completion of the development in particular through securing adequate bonds, ongoing inspection of construction and the taking of enforcement action when necessary;
- The procedures for taking in charge should begin promptly on foot of a request by the majority of the residents in the development or by the developer, as appropriate. Protocols, including time frames, must be set out by planning authorities to respond to requests for taking in charge; and

• In relation to older estates, priority must continue to be given to resolving those estates that have been left unfinished or not taken in charge for the longest period.

Monitoring the quality of development

8.9 Quality outcomes are important. Planning authorities which will have devoted significant resources in providing design guidance for residential developments, in arranging pre-application consultations, and in assessing applications need to follow through by ensuring that the quality of completed developments meets development plan objectives. The quality of the finish of the public realm is of particular importance.

Box 3: Example of good practice

South Dublin Co. Council has recorded and detailed the specifications agreed between the Adamstown SDZ developers, the SDZ Planning Team, and the relevant Council works departments in relation to the quality and finish of various elements of the public realm, such as roads, paths, parking bays, public lighting, and open spaces. This work is being documented to form a composite Adamstown Public Realm Design Guide, which means that an appropriate degree of design consistency can be maintained within the area, while avoiding the need to include detailed design matters in lengthy planning conditions and subsequent compliance submissions.

8.10 Where resources permit, planning authorities are recommended to review the built quality of selected new residential developments in their area on an annual basis. Such an outcome review can provide valuable experience to inform the planning and design process, particularly with a view to identifying both successful and unsuccessful design features, and to modifying design policies in the future.

Chapter 8: Checklist

- Has consideration been given to the formation of an implementation team whose focus is to roll out the development plan / local area plan objectives with a particular emphasis on newly developing areas?
- Is the planning authority through its web site, information leaflets etc giving up to date information for the members, developers, applicants and the general public?
- Has the development plan indicated the sequencing within the development plan, phasing objectives of local area plans, and the role of non statutory design briefs or design statements?
- Are pre-application discussions carried out on all major developments?
- Is there a monitoring programme of completed developments to ensure that the development meets the development plan objectives with particular reference to quality of the public realm?

Appendix A: Measuring residential density

The role of density

Density assumptions play an important part in estimating the development land requirements arising from a new dwelling requirement / forecast. Indeed, without an assumption about how many units can be accommodated in a given area, it would be impossible to move from forecast demand to an estimate of how much land will be needed.

While the principle of the approach is straightforward - a site area multiplied by a density assumption to produce an estimate of site capacity - the practical application is more complicated and is dependent in particular on the appropriate definitions of site / development areas, as well as to a lesser extent, on using the correct density measure.

Selecting the appropriate definition of site / development area is important. Where non-residential uses, such as main roads, retail, employment and major open spaces are being planned in conjunction with housing, an allowance needs to be made in the density assumption for the land that will be occupied by such uses which may be upwards of 25% at the neighbourhood or district scale.

At the site-specific level, if density controls are to produce the expected results, a density standard must be carefully related to the area accommodating the development. At different stages in the planning of a new development area, standards and measurement can be refined from an overall density which embraces the full range of uses down to one which includes only the residential component of an individual site. As the focus narrows and the area becomes smaller, the residential density assumption in terms of the number of dwellings per hectare will rise.

Gross and net densities

A gross density measure is best applied to <u>estimating overall land areas</u> required for mixed use developments or for Local Area Plans.

A net site density measure is a more refined estimate than a gross site density measure and includes only those areas which will be developed for housing and directly associated uses. These will include:

- access roads within the site;
- private garden space;
- car parking areas;
- incidental open space and landscaping; and
- children's play areas where these are to be provided.

It therefore excludes:

- major and local distributor roads;
- primary schools, churches, local shopping etc.;
- open spaces serving a wider area; and
- significant landscape buffer strips.

A net density is the most commonly used approach in <u>allocating housing land within Local Area Plans</u> and is appropriate for development on infill sites where the boundaries of the site are clearly defined and where only residential uses are proposed. It is also appropriate where phased development is taking place in a major development area (perhaps spanning different plan periods) and individual housing areas have been identified.

All densities quoted in these guidelines are net densities.

Methods of controlling residential density

Research carried out in the UK and an examination of case studies in Ireland indicate that of the various methods employed for measuring density, dwellings per hectare is the most appropriate measure for estimating development land requirements, making housing land allocations, monitoring completions / take up, and in providing a broad indication of the intensity / form of development envisaged on a site or area. However, dwellings per hectare is not effective in predicting or controlling the built form of development on a site - planning standards or plot ratio are more effective. In large measure the lack of predictability and consistency of the other methods results from the fact that average size of dwellings and average area per habitable room can vary substantially (i.e. terraced townhouses versus large family houses).

Plot ratios can be site specific and vary depending on a range of factors from the site location, the mix of development, the site context, its open

space requirement to the availability of services and infrastructure. Chapters 5 & 6 provide guidance on density standards in Cities & Large Towns and Small Towns & Villages respectively. Planning authorities should refer to these and set plot ratios, appropriate to their area, in Local Area Plans.

Occupancy rates, such as persons or bed spaces per hectare, can be of use when an assessment of the numbers likely to live within a given area is important, e.g. in calculating open space requirements, or where special dwelling sizes – such as housing for the elderly – are likely to be involved.

Appendix B: Further reading / useful websites

References:

Cervero, Robert, 1998. The Transit Metropolis: A Global Inquiry

Crawford, J.H., The Carfree Design Manual

DoEHLG / Dept. of Transport / Dublin Transportation Office, *Traffic Management Guidelines* (2003)

DoEHLG, *Delivering Homes, Sustaining Communities* and associated guidelines *Quality Housing for Sustainable Communities* (both 2007)

DoEHLG, Ireland – National Climate Change Strategy 2007-2012 (2007)

Department of Transport, Communities and Local Government (UK), HMSO, ISBN 978-0-7277-3501-0, Thomas Telford Publishing, 2008. *Manual for Streets*

Duany, Andres, Plater-Zyberk, Elizabeth and Speck, Jeff. 2000. *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream*

English Partnerships / Housing Corporation, *Urban Design Compendium* vols. 1 and 2 (2007)

Essex County Council, Essex Design Guide (publ. 2005 ISBN 1 85281 253 2)

Farr, Douglas 2009. Sustainable Urbanism: Urban Design with Nature

Frank, Lawrence D, Engelke, P. and Schmid, T. *Health and Community Design*. Washington, D.C.: Island Press, 2003.

Frumkin, Howard, Frank, Lawrence, Jackson, Richard Joseph. 2004. *Urban Sprawl and Public Health: Designing, Planning, and Building for Healthy Communities*

Gehl, Jan 2008. Life between Buildings: Using Public Space

Girling, Cynthia and Kellett Ronald 2006. *Skinny Streets and Green Neighborhoods:* Design for Environment and Community

Haughey, Richard M. 2005. *Higher-Density Development: Myth and Fact,* Washington, DC: ULI- the Urban Land Institute.

Jacob, Jane, 1961. The Death and Life of Great American Cities.

Jacobs, Allan B. 1995. Great Streets

Kennedy, Margrit, Kennedy, Declan. *Designing Ecological Settlements: Ecological Planning and Building-Experiences in New Housing and in the Renewal of Existing Housing Quarters in European Countries*

National Heart Alliance, *Physical activity, young people and the physical environment: Summary of evidence* (2006)

Shoup, Donald, 2004, *The High Cost of Free Parking*, American Planning Association

U.S. Environmental Protection Agency, 2006. This is Smart Growth.

UCD Urban Institute Ireland, Dun Laoghaire-Rathdown Co. Council and Fingal Co. Council, *Green City Guidelines: Advice for the protection and enhancement of biodiversity in medium to high-density urban developments* (2008)

Articles / Booklets:

American Institute of Architects. 2005. Livability 101: *What Makes a Community Livable*?

Hannover Kronsberg :model of a sustainable new urban community http://www.aia.org/SiteObjects/files/Liv_G_AIALivability101_physicalhealth.pdf

http://www.hannover.de/data/download/umwelt_bauen/h/han_kron_realisierung_en.pdf

Leyden, Kevin M. 2003. *Social Capital and the Built Environment: The Importance of Walkable Neighborhoods*. American Journal of Public Health. Volume 93: 1546-1551

Saelens, Brian E., J.F. Sallis, J.B. Black, D. Chen. *Neighborhood-Based Differences in Physical Activity: An Environment Scale Evaluation*. American Journal of Public Health 93, no. 9 (2003).

Websites:

All of the Department's planning guidelines are available on www.environ.ie

Adamstown SDZ Planning Scheme: www.adamstown.ie

Bikeability checklist: www.bicyclinginfo.org/cps/checklist.htm

Carfree Development: www.autofrei-wohnen.de and www.carfree.org.uk

Car sharing: Flexcar: www.flexcar.com and Zipcar: www.zipcar.com

Context Sensitive Solutions: <u>www.contextsensitivesolutions.org</u>

Pedestrian and Bicycle Information Center: www.pedbikeinfo.org

Sustainable Energy Ireland: www.sei.ie

Sustainable Urban Drainage Systems (SUDS): www.ciria.org/suds/

Village Design Statements: www.heritagecouncil.ie

Walkability checklist: www.walkinginfo.org/cps/checklist.htm

Walkable Communities: www.walkable.org

Appendix C: Membership of the Steering Group

Representatives of:

Spatial Policy Section, DoEHLG

Planning Inspectorate, DoEHLG

Housing Inspectorate, DoEHLG

An Bord Pleanála

Irish Planning Institute

Irish Home Builders' Association

Louth County Council

Royal Institute of Architects of Ireland

South Dublin County Council