Chapter 2

Urban design as spatial policy

A vision of a well-designed town or city has to be delivered, in part, through the spatial policies within development plans at the town and city level. It is fallacious to imagine that the strategic and the more detailed treatments of the physical form of an urban area can be handled as though they were completely separate operations, or to believe that one would determine the other as a simple consequence. The same applies to the separation of physical form and land-use, at least in the short term. Not only do the physical consequence of the pursuit of more strategic spatial objectives need to be spelt out, but an understanding of urban design principles needs to be fed into the preparation of these spatial policies. In other words, although the final presentation of a development plan may proceed from the general to the particular, and from the strategic to the detailed, an understanding of what is desired in physical form is necessary for the formulation of the goals, objectives and locational principles in the plan. Both general design principles and place-specific policies are situated within wider spatial policy.

In other words, planning activities at different spatial scales cannot operate independently of each other. The aspect of policy where this is particularly noticeable is the pursuit of sustainability. Local actions by individuals connect through to phenomena at a global scale, such as climate change, with implications at all the scales in between. Likewise, physical planning cannot be divorced from the pursuit of sustainability and cannot be pursued at a local level in isolation from more strategic spatial policy. It is, for example, connected directly to the provision of transport infrastructure, something that has implications at a regional scale.

This is not just a matter of scale but of time horizon. Urban design is concerned with the physical form and structure of urban areas. This form and structure can persist over very long periods of time, far longer than the uses of land that may, in comparison, seem ephemeral. Urban design initiatives have significance way beyond the informing of short-term negotiations. Physical planning is, therefore, at the heart of spatial planning and so, in consequence, is urban design.

An understanding of design

Establishing a clear and common understanding of what is meant by 'urban design' is needed at the outset. It is a core problem-solving activity that determines the quality of the built environment. Its goal is the meeting of basic human needs for security and sociability. As a process, urban design is a means of organising space. This involves making connections, organising activity, relating to surroundings, integrating with the existing urban pattern and creating visual order. Ultimately, it requires getting development to work.

The overall goal should be making places. A planning authority should envisage, shape and manage change to this end. It should think of places and communities at different spatial levels: the town, the neighbourhood and the street, taking account of the physical and intangible qualities that make a place. The role of urban design in making sense of these qualities is expressed in plans and development decisions. It involves specifying location, linkages, uses, densities and the context for the design of buildings.

In essence, it is important to

- ensure that new development has its own identity – make it *this* place not that place;
- make this character derive from the local landscape and local culture;
- connect one place to another place directly, to make it easy to walk from here to there;
- ensure the placing of buildings helps people to find their way;
- make sure that what is built is fit for the future and can adapt to household, community and lifestyle changes over the years;
- make sure places have diverse uses, diverse people and are active through the day.

In the case of Britain, these qualities are now, fortunately, to be found within the government guidance for practitioners. The publication *By Design* (DETR and CABE, 2000) translated them into a convenient summary of urban design objectives that can inform planning policy of any local planning authority, as set out in Table 2.1. Significantly, *By Design* adds two more objectives to this list. One is about using buildings to enclose space, making buildings lines flow continuously to make streets, containing public space and secluding private areas. The other is about good space, making sure that the spaces between buildings through which people move are useful, safe, visible and pleasant to be in.

Goals, objectives and locational principles

A development plan should be firmly based in the goals of sustainability and quality of life. Principles of spatial organisation can be deduced from these goals and thence more detailed physical planning criteria. Examples of

Table 2.1 Urban design objectives from By Design (DETR and CABE, 2000).

Objectives of urban design	
Character	
A place with its own identity	To promote character in townscape and landscape by responding to and reinforcing locally distinctive patterns of development, landscape and culture
Continuity and enclosure	
A place where public and private spaces are clearly distinguished	To promote the continuity of street frontages and the enclosure of space by development that clearly defines private and public areas
Quality of the public realm	
A place with attractive and successful outdoor areas	To promote public spaces and routes that are attractive, safe, uncluttered and work effectively for all in society, including disabled and elderly people
Ease of movement	
A place that is easy to get to and move through	To promote accessibility and local permeability by making places that connect with each other and are easy to move through, putting people before traffic and integrating land uses and transport
Legibility	
A place that has a clear image and is easy to understand	To promote legibility through development that provides recognisable routes, intersections and landmarks to help people find their way around
Adaptability	
A place that can change easily	To promote adaptability through development that can respond to changing social, technological and economic conditions
Diversity	
A place with variety and choice	To promote diversity and choice through a mix of compatible developments and uses that work together to create viable places that respond to local needs

Source: Reproduced under HMSO PSI licence C2006011221.

goals and objectives developed at Chelmsford* are shown in Table 2.2. The general locational principles to follow from this statement were those shown in Box 2.1. They not only promoted biodiversity, mixed uses and preference for brownfield sites, but, most importantly, also required a sustainable pattern of development based on access to transport nodes and local facilities.

*At Chelmsford, during the period covered by this book, the principal vehicle for spatial policy was the Borough Plan 2001–2011 (CBC, 2001a). It went on deposit in 2001 and thus became, legally, a material consideration for the determination of applications for planning provision. Although it was, unfortunately, withdrawn in 2003 for political reasons, its policies were used in the determination of planning applications for a 2-year period and applied to many of the developments discussed in this book.

Table 2.2 Example of plan goals and objectives.

Goals	Objectives
Social progress that recognises the needs of everyone.	To ensure the provision of types and tenures of dwelling that meet the needs of the whole community, including affordable and special needs housing. To help alleviate poverty and social exclusion in areas of particular need To ensure increased accessibility of services to all sectors of the community, particularly for people who are disabled or older and those in receipt of benefits To encourage a healthy lifestyle To enhance leisure opportunities To reduce crime and the fear of crime
Facilitating the restructuring and enhancement of the local economy.	To ensure the provision of land, buildings and transport systems to respond to the changing character of the local economy
Prudent use of natural resources and protection of the environment.	To protect and encourage biodiversity To be economical with the consumption of land and efficient in the use of land To reduce fossil-fuel-based energy consumption To reduce pollution and waste To conserve and make accessible open green space To enhance the built and landscape heritage
Encourage the provision, co-ordination and integration of all modes of transport in the interests of sustainability, accessibility and safety.	To pursue a co-ordinated transport system to meet the economic and social needs of the town To improve accessibility for all, particularly to jobs, shopping, leisure facilities and services by public transport, walking and cycling To improve safety on the transport network and personal security of users To integrate the transport strategy with the development plan To reduce the adverse environmental impact of transport To reduce the need to travel, especially by car
A high quality of built development for the people of the town.	To ensure urban areas are integrated, accessible, attractive, secure and functional

Source: Chelmsford Borough Council.

They were given detailed substance by the locational principles shown in Box 2.2. Effectively, all major new development was to be contained within 800 m walking-distance of the town centre, or other centres around new, or existing, public transport interchanges, creating what are known as *pedestrian-sheds* (*ped-shed* for short). The transport nodes had to be on an established public transport corridor. There is a high degree of correspondence here to *transit-oriented developments*, to use a term familiar in New Urbanist circles.

Box 2.1   Examples of general locational principles.

Sustainable Locations for New Development
The Council will promote and secure sustainable development throughout the Borough. In allocating land for development, account will be taken of the following sustainability criteria:

1. Making the best use of previously developed land within the urban areas, particularly close to their centres, and using a design-led approach to optimise the potential of individual sites.
2. Creating sustainable patterns of development by relating new development to public transport nodes and local facilities, and encouraging integrated transport initiatives.
3. Encouraging mixed-use development, incorporating housing, retail and business uses and new leisure and recreation opportunities.
4. Protecting and promoting biodiversity in all development proposals.
5. Phasing the release of development sites in order that previously used sites within the urban areas and rural settlements are released ahead of any 'greenfield' sites.

Source: Chelmsford Borough Council.

Box 2.2   Examples of detailed locational principles.

Locating Development to Reduce the Need to Travel
In meeting the requirements for new development allocations in the plan period, and thereafter, the council will require all proposals for major new development to have regard to the need to reduce travel. With that aim, the council will apply the following priority to proposed locations:

Priority-One Locations: Development within the central area of a major urban centre.

Priority-Two Locations: Development within 800 m walking-distance of a major urban centre.

Priority-Three Locations: Development within 800 m of a neighbourhood centre that contains centrally located key facilities, including a public transport interchange with frequent public transport services to a major urban centre along an established public transport corridor.

Planning permission will be refused for development proposals that do not fall within these categories.

Limits on the Size of Major New Mixed-Use 'Greenfield' Developments
The physical extent of major new mixed-use 'greenfield' development will be limited by a comfortable walking-distance of 800 m from the major public transport interchanges and the centrally located key local facilities serving that development.

Source: Chelmsford Borough Council.

Intensity of development

For a wide range of reasons, especially those connected with the pursuit of sustainability, planning policies and arguments in many parts of the world call for higher residential densities. However, high density should not seen as an end in itself. Although fulfilling some important policies, it has its own disadvantages. The higher the density, the costlier is the construction. It is not advantageous, in itself, to have apartments instead of houses. It works against the pursuit of sustainability. In addition, in any urban context there will be limits to the density that can be achieved. It is constrained by housing mix, external space needs and local scale and form.

The term 'high density' can possess a wide range of meanings. There is the 'more than 30 dph' of British government policy since at least 2000 (DETR, 2000a), which would be seen as high in comparison with the density in most existing suburban areas. On the other hand, there is the 100 dph, or more, found in city-centre locations. However, high density is just as much about lifestyle, physical form and sense of neighbourhood. *Intensity* is a better term because it is as much about activity, social interaction, as just a quantitative measure. It is about creating the quality of life and vitality that makes urban living desirable. Density without intensity does not work. It does not feel comfortable, just squeezed. The physical design should deal with the needs of more compact urban living.

The questions addressed at Chelmsford were as follows. What were the barriers to achieving high density? What had to be given so as to raise density? How could planning authorities place a limit on density between 'high' and 'too high'? How could they ensure that the finished product bore out the liveability advantages of high density in theory? The solution was to devise locational principles for different levels of intensity of development. An example is set out in Box 2.3. The principle should be that the intensity of new development should

---

Box 2.3   Example of locational principles for the intensity of development.

Intensity of Development
Planning permission will be granted for development, including change of use, within the urban areas and rural settlements provided:

1. The development optimises the capacity of the site. and
2. The intensity of the proposed development is compatible with the use, intensity, scale and grain of the surrounding area.

Higher-intensity development proposals will be permitted within the central area and neighbourhood policy areas where there is direct and convenient access on foot to local shops, public facilities and bus stops.

The council will assess the quantity and quality of development against the criteria set out in the accompanying tables, as well as other policies and standards in this plan.

Source: Chelmsford Borough Council.

Table 2.3 Character areas representing levels of intensity of development.

	Higher intensity		Lower intensity	
	Level 1	**Level 2**	**Level 3**	**Level 4**
Form	Continuous frontage	Continuous frontage	Mainly continuous frontage	Landscape dominates buildings
Mix	Flats and commercial	More flats than houses	More houses than flats	Houses only
Height	Above four storeys	Up to four storeys	Up to three storeys	Up to two storeys
Parking quantity	Less than one parking space per unit	Approximately one parking space per unit	Above one parking space per unit	Above one parking space per unit
Parking design	Underground, undercroft parking, car clubs	Undercroft, decked-over parking, parking courts, car clubs	Parking squares and courts, on curtilage parking	On-plot parking
Private space	Balconies and shared garden	Balconies and shared garden	Individual and shared gardens	Individual gardens
Local open space	Urban squares	Urban squares	Parks contained by buildings	Parks with rural character
Density	Above 100 dph	40–100 dph	Above 30 dph	Less than 30 dph

Source: Chelmsford Borough Council.

reflect the existing surroundings except where high intensity can be justified, normally because of a high degree of accessibility.

It follows from this treatment of density issues that a plan should link through to more detailed physical design not just by specifying the location of more intensive development but also by giving guidance on the physical nature of the different levels of intensity that should be permitted in different locations. The first step was the identification of *character areas*, where the intensity of development was made explicit through three-dimensional physical parameters. These formed a typology that could be used to structure the locational aspects of two-dimensional spatial policy, as shown by Table 2.3. The physical implications for different levels of intensity of development for use in the development plan were made explicit by the matrix shown in Table 2.4. The *central area* was defined as land within 800 m of railway station or the town centre. *Neighbourhood* policy areas were identified within the plan.

Mix of uses

The objectives set out in Table 2.2 and Box 2.1 make it clear that the spatial policy should explicitly encourage mixed-use development. A plan should not generally zone land for single uses, but outside certain special areas, should assume a use that will be permitted if it satisfies the other policies of the plan. In the suburbs, housing will clearly predominate, but there will be other supporting uses if appropriate. Their appropriateness will be determined by the other design criteria. However, within centres, a mix of uses should be actively sought in all locations. An example of a set of policies for promoting such development is shown in Box 2.4. As with intensity, the policy should not stop there but go on to show expectations for the mix of uses in the central area, neighbourhood policy areas, the rest of the urban areas and defined settlements by means of the matrix shown by Table 2.5.

Within the general mixed-use policy areas, there will still be a need to exercise some control over the mix of type of shops in order to secure economic vitality, a proper service to the public and quality of the public realm. Clearly, though, two-dimensional land-use zoning, with areas designated for primary or secondary shopping, will not do as it cannot handle a mix of uses in three dimensions. Uses of premises above shops should be able to vary, being, say, retail, residential or office uses. A policy that controls the nature of the retail frontage to the public realm is therefore necessary. An example of the approach developed at Chelmsford is shown in Box 2.5. A distinction was made between *primary* and *support* retail frontages primarily to control the proportions of refreshment and financial services uses. The *primary* and *support* retail frontages can be shown on a proposals map by different coloured bands along the frontage of properties, while leaving the predominant notation of the map to indicate mixed-use development. The notation can be extended to show proposed, as well as existing, retail frontages.

Table 2.4 Physical implications of intensity of development.

	Central area	Neighbourhood policy areas	Rest of the urban area	Rural settlements
Quantity of development within a site, determining the intensity of development				
Density range (dph)	40–60	30–60	30–40	30–40
Minimum plot ratio	1.5:1	1.5:1	1:1	None
Height	Between 3 and 6 storeys	Between 3 and 4 storeys	Between 2 and 4 storeys	Between 2 and 3 storeys
Maximum vehicle parking	1 space per dwelling Non-residential parking varies according to type of development	1.5 spaces per dwelling Non-residential parking varies according to type of development	1 space per 1–2 bed dwelling; 2 spaces per 3 bed dwelling; 3 spaces per 4+ bed dwelling Non-residential parking varies according to type of development	1 space per 1–2 bed dwelling; 2 spaces per 3 bed dwelling; 3 spaces per 4+ bed dwellings Non-residential parking varies according to type of development
Public open space	Open space requirements can be partly met by commuted sums in lieu of provision	Open space requirements can be partly met by commuted sums in lieu of provision	47 m^2 per dwelling local, and 25 m^2 per dwelling strategic, open space. Strategic open space requirements can be met by commuted sums in lieu of provision	47 m^2 per dwelling local, and 25 m^2 per dwelling strategic, open space. Strategic open space requirements can be met by commuted sums in lieu of provision
Private amenity space (see also Box 2.9)	Exclusive private area minimum Maximum standards will apply	Exclusive private area minimum Maximum standards will apply	Minimum standards with special case exceptions	Minimum standards with special case exceptions

(Continued)

Table 2.4 (Continued)

	Central area	Neighbourhood policy areas	Rest of the urban area	Rural settlements
Quality of development within a site, determining the intensity of development				
Built form	Continuous frontage defining public realm spaces Minimal private front space	Continuous frontage defining public realm spaces Small front private space Non-residential buildings on street frontages with hidden parking and servicing	Continuous, linked or clustered frontage Small front private space Non-residential buildings on street frontages with hidden parking and servicing	Continuous, linked or clustered frontage Small front private space or garden
Public space form	Urban open spaces, such as squares and pocket parks	Urban open spaces, such as squares and pocket parks	Gardens, squares, playing fields	Greens
Private space	Gardens, patios, balconies, shared courtyards	Gardens, patios, balconies, shared courtyards	Gardens, shared courtyards	Gardens
Parking format	Underground, undercroft, rear parking courts, parking streets, parking squares	Rear parking courts, parking streets, parking squares	On-curtilage, rear parking courts, parking streets, parking squares	On-curtilage, rear parking courts, parking streets, parking squares

Source: Chelmsford Borough Council.

Box 2.4 Example of policies on mixed-use development.

Promoting Mixed-Use Development
Within the central areas within the neighbourhood policy areas, and on appropriate sites within the rural settlements, the council will encourage a mix of complementary and compatible uses in development proposals.

Within the central area and the neighbourhood policy areas the council will

1. Seek to protect existing mixed-use character and will normally refuse permission for single-use proposals replacing multiple uses or where the lack of a mix of uses would undermine the character and function of the area.
2. Seek the inclusion of non-residential accommodation in major redevelopment proposals for residential development.
3. Seek the inclusion of residential accommodation in major redevelopment proposals for non-residential development.
4. Encourage non-residential use within the ground floor frontage of proposed residential development, on streets with an existing predominantly non-residential character.
5. Permit changes of use to residential in upper floors of existing premises, except where it would result in the loss of an arts, community or leisure use.

Within the rest of the urban areas and within the rural settlements, the council will

1. Seek, in major residential developments, the inclusion of appropriate non-residential accommodation for shops, services, community facilities or workspace, located to serve the needs of the enlarged neighbourhood as a whole.
2. Permit non-residential development provided it does not prejudice the amenity, function or character of the area.

Source: Chelmsford Borough Council.

Biodiversity

The objectives set out in Table 2.2 and Box 2.1 also make it clear that the spatial policy should explicitly encourage biodiversity as a general characteristic of development and protect it on sites in addition to those with special protective designations. An example of such a policy for protecting and enhancing biodiversity devised at Chelmsford is shown in Box 2.6.

Design principles and standards

A development plan should make clear how the spatial policies find their expression in more detailed design principles. A set devised at Chelmsford is

Table 2.5 Physical expectations for mixed-use development.

	Expectations for mixed-use development in different locations				
	Central area		Neighbourhood policy areas	Rest of the urban area and rural settlements	
Location	Areas within close proximity to public transport and major public facilities	Areas within 800 m walking-distance of major public transport and central facilities	Neighbourhood centres in close proximity to local shops, community facilities and bus stops to the town centre	Areas within 800 m of a neighbourhood centre and bus routes to town centre	Areas without convenient access to local services
Typical range of activity	Mixed tenure housing Large, medium and small workplaces Major leisure/retail/hotel	Mixed tenure housing Large, medium and small workplaces Small to medium retail units Community facilities Education	Mixed tenure housing Small to medium workplaces Small to medium retail units Community facilities	Mixed tenure housing Small to medium workplaces Community facilities Education	Mixed tenure housing Community facilities Education

Mixed-use form	Mainly vertical mix within schemes. Rich variety of accommodation throughout area Virtually all ground floor accommodation non-residential	Mainly horizontal mix of workspace and residential components Service uses concentrated at key street frontages Close linkages between workplaces and residential	Mainly vertical mix within schemes Virtually all ground floor accommodation non-residential	Mainly single-use employment and community facilities within residential area	Mainly single-use employment and community facilities within residential area Industrial and warehousing units separate from residential areas
Mixed-use policy objectives	Protect existing mixed-use, especially retail, culture and leisure Promote mixed-use in all schemes Encourage residential in upper floors Ground floor non-residential Street level vitality and safety	Residential element in non-residential schemes Non-residential element in residential schemes Define focal locations for shops and services to serve the locality A significant proportion of workplaces Large developments to include community facilities	Protect mixed-use, especially local community facilities Promote mixed-use in all schemes Encourage residential in upper floors Ground floor non-residential Street level vitality and safety	Residential element in non-residential schemes Non-residential element in residential schemes Define focal locations for shops and services to serve the neighbourhood as a whole Strengthen viability of the nearest neighbourhood centre Uses compatible with residential amenity Large developments to include new neighbourhood centre	Residential element in non-residential schemes Non-residential element in residential schemes Define focal locations for shops and services to serve the neighbourhood as a whole Uses compatible with residential amenity Large developments to include new neighbourhood centre

Source: Chelmsford Borough Council.

Box 2.5   Example of policies on retail frontages.

Primary Retail Frontages

Within the primary retail frontages and the new retail frontages defined on the proposals map, the change of use of ground floor retail units to refreshment and financial services uses will only be permitted if the town centre's balance of retail vitality and viability is not likely to be significantly harmed and if all of the following criteria are met:

1. The proportion of refreshment and financial services does not rise above 25%.
2. The number, frontage lengths and distribution of refreshment and financial services uses in the frontage do not create an over concentration of uses detracting from its established retail character.
3. The proposed use will provide a direct service to visiting members of the general public and generate sufficient morning, and afternoon and evening pedestrian activity to avoid creating an area of relative inactivity in the shopping frontages.
4. The subdivision of any unit should not create small 'token' retail units.
5. The proposal does not prejudice the effective use of upper floors retaining any existing separate access to upper floors.
6. The proposal will retain or provide a shop front with a display function and entrances that relate well to the design of the host building and to the street scene and its setting, in terms of its materials, form and proportion.

Retail Support Frontages

Within the retail support frontages and the new retail frontages defined on the proposals map, the change of use of ground floor retail units to refreshment and financial services uses will only be permitted if all the following criteria are met:

1. The proportion of refreshment and financial services units does not rise above 40%.
2. A continuous frontage of 20m or more refreshment and financial services units is not created.
3. The number, frontage lengths and distribution of refreshment and financial services uses in the frontage do not create an over concentration of uses detracting from its established character.
4. The subdivision of any unit should not create small 'token' retail units.
5. The proposal does not prejudice the effective use of upper floors retaining any existing separate access to upper floors.
6. The proposal will retain or provide a shop front with a display function and entrances that relate well to the design of the host building and to the street scene and its setting, in terms of its materials, form and proportion.

Source: Chelmsford Borough Council.

Box 2.6   Example of policies on biodiversity.

Protection of Open Land

Within the urban area, development proposals on land that has not been previously developed will be refused unless

1. The development is reasonably required and ancillary to the function of that land for its existing use.
2. It can be demonstrated that alternative and improved provision will be supplied in an appropriate location.

Protecting Biodiversity within Areas Designated as Having Nature Conservation or Other Scientific Value

The council will promote and secure the enhancement of biodiversity throughout the plan area. Within areas shown on the proposals map as important for their nature conservation or other scientific value, permission will be refused for development that would have a material adverse effect on the ecological, scientific, geological or other value of the area designated.

   The weight to be attached to the harm causing adverse effect will increase with the importance of the designation. Where appropriate, conditions will be imposed or planning obligations sought to protect and enhance the nature conservation interest of the site and to provide appropriate compensatory measures and site management.

Protecting Existing Biodiversity on Non-Designated Sites

Features of nature conservation interest present on a site which has no formal designation will justify the refusal of planning permission where

1. The development will harm the features.
2. The features cannot be satisfactorily transferred to another location.

Where appropriate, conditions or planning obligations may be sought to protect and enhance the nature conservation interest of the site and to provide appropriate compensatory measures and site management.

Source: Chelmsford Borough Council.

set out in Box 2.7. Their overall intention should be to ensure that the development creates a sense of place, respects its context and meets functional needs. Appendices to a plan can be used to handle more detailed standards. Of particular interest here is the handling of garden size. An example from Chelmsford is set out in Table 2.6. Different approaches were set out for the central areas and the rest of the urban areas. In the central areas, as high densities were required, the scale of the provision was modest but, nevertheless, minimum levels of private open space for dwellings were required, as, for example, by provision of large balconies for flats. (A physical manifestation of this policy can be seen at Lockside Marina, described in Chapter 7, page 161.) For the rest of the urban

Box 2.7   Example of policies setting out design principles.

Designing Development to Relate to its Context

All new and extended buildings should relate to their setting to strengthen, enhance or protect local character. Planning permission will be granted provided

1. New development is well connected to and integrated with the wider settlement.
2. The siting, massing and design of proposed development makes an appropriate visual relationship with the form, grain, scale, materials and details of the surrounding area.
3. Building design is specific to the site and its context, respecting while not necessarily replicating local characteristics and consistent within its own chosen style.
4. Proposed development on sites with a high public visibility enhances the image and perception of the area.
5. Development proposals meet relevant design area objectives set out in Supplementary Planning Guidance.

Creating Successful New Places

Development proposals containing one or more new buildings should be designed to create a successful living and working environment and high quality public spaces. Planning permission will be granted provided

1. Building blocks, routes and spaces are clearly inter-related.
2. All functions are integrated into the physical form.
3. The development layout shows the way for pedestrians to move through without obstruction.
4. Public spaces are clearly distinguished from private areas.
5. Individual buildings are seen as part of a group creating a sense of enclosure.
6. Building frontages define streets, squares and green spaces; whether reinforcing an existing space or forming a wholly new space.
7. Building fronts are active with entrances and windows next to public streets and spaces.
8. Vehicle parking and servicing are placed away from street fronts.
9. Outdoor spaces are usable, safe and pleasant.
10. Threats of crime, insecurity or neglect are designed out.
11. Adverse micro-climate effects are avoided.

Existing Site Features

All development proposals must take account of the physical circumstances of the site and its edges. Planning permission will be granted provided

1. The layout of buildings and spaces within the site addresses the constraints and opportunities of the site and its boundary conditions.
2. Existing site features of natural, functional, historic or local character value, existing routes through the site and views in and out are retained and incorporated into a development proposal where there will be a public or environmental benefit to the local area.

Siting of Development to Meet Functional Needs

Proposed development should be sited to ensure that

1. Access to the site is practicable.
2. Circulation within the site and location of entrances are planned to reflect the following modal hierarchy: (i) pedestrians, (ii) people with mobility impairment, (iii) cyclists, (iv) public transport users, (v) powered two-wheelers, (vi) commercial business users, (vii) car-borne shoppers and visitors, (viii) car-borne commuters.
3. Outdoor needs are properly accommodated, including private amenity space, refuse storage, vehicle servicing and parking.
4. Buildings are orientated for satisfactory light, outlook, and privacy.
5. The use or amenity of other properties is safeguarded.

Landscape Design

The council will require that all outdoor spaces are landscape designed as an integral part of a development proposal to enhance the function and character of the spaces and help integrate the development into its surroundings. Planning permission will be granted provided

1. The landscape design relates to the function and character of the spaces and surrounding buildings.
2. Existing trees, shrubs, hedges and water features of landscape value are incorporated alongside new planting.
3. Buildings and paved surfaces are located at a sufficient distance from existing trees and hedges to avoid damage to roots from sub-surface works.
4. Boundary treatments are designed as an integral part of the development.
5. Paving and street furniture are designed for ease of pedestrian and cycle mobility, pedestrian safety and an uncluttered appearance.

Proposed new planting must be properly established and maintained in the long term. Planning conditions will prohibit the start of development until a maintenance and management schedule for new planting is agreed.

High Buildings

Planning permission will be granted for buildings higher than the existing surrounding development, unless the proposed building

1. Is in an unsuitable location for higher intensity development.
2. Interrupts an existing long-range view with specific landscape or built interest.
3. Would harm the scale of a townscape.
4. Is poorly sited in relation to the surrounding pattern of buildings and spaces.
5. Is disproportionately broad or bulky in relation to its height.
6. Lacks human scale and active frontages at ground level.
7. Has an unsightly skyline.
8. Would create an adverse micro-climate.
9. Provides insufficient ancillary space and facilities to support the development.

(*Continued*)

Box 2.7 Continued

Garden Size and Privacy

All new dwellings will be required to have a high degree of privacy and the use of private garden space appropriate for the type of dwelling and its location. The council will grant permission for development provided it complies with its garden size and privacy criteria.

Design of Large Floorspace Non-Residential Uses

Large-scale commercial developments must be designed to contribute to the character and identity of the area. Planning permission will be granted provided

1. The siting and design of a structure takes proper account of site features and context.
2. Building forms directly relate to streets and spaces.
3. Car parks and service bays are placed away from the street and landscape designed in relation to the building.
4. Building mass and long roof lines are scaled down.
5. Entrances, public areas, office accommodation and focal features are provided on key elevations and corners.
6. Materials, colours and signs are designed at the same time as the building form.

Design Statements

For large, complex or sensitive sites, the council will require the submission of an urban design statement containing

1. Evidence of a site and context appraisal.
2. Identification of constraints and opportunities.
3. Design objectives.
4. Consideration of urban design options.
5. The rationale behind the approach to siting and massing.
6. An explanation of proposed elevational and spatial treatments.

Source: Chelmsford Borough Council.

areas, where development was not to be so intensive, proper gardens for houses were required.

The setting out of a council's design principles in its development plan can be reinforced by the adoption of a design guide as planning policy, a process described in the following chapter. In Chelmsford's case, the *Essex guide* (EPOA, 1997), discussed fully in Chapter 3, page 47, did not just cover standards and stylistic matters dealt explicitly with general design principles.

Other policies on physical form

Policies within a development plan should empower a council to specify the mix of sizes of dwellings and regulated the design of extensions to houses.

Table 2.6 Example of garden size criteria.

	Central area and neighbourhood policy areas	Rest of the urban area and rural settlements
Houses with gardens	Minimum garden size will be dictated by privacy and outlook criteria Maximum size: equal to dwelling floorspace All gardens must include a private zone minimum 10 m^2	Minimum size: equal to dwelling floorspace, except for detached houses: minimum size 125 m^2 All gardens must include a private zone minimum 10 m^2
Houses sharing garden space	A private zone minimum 10 m^2 plus minimum 25 m^2 per house shared garden	
Ground floor flats and maisonettes	Ground level private zone minimum 10 m^2, plus use of a shared private space minimum size 200 m^2	Minimum garden area: equal to dwelling floorspace Ground level gardens must include a private zone minimum 10 m^2
Upper storey flats	Use a shared private space minimum size 200 m^2, and/or a balcony at least 3 m^2	Minimum area: equal to dwelling floorspace for each flat, either as dedicated garden, or within a shared garden, minus the size of a balcony multiplied by two
Special cases	Where houses adjoin a substantial area of public open space, the accessibility of public open space combined with the better outlook will justify less private space Where flats adjoin a substantial area of public open space, accessible public open space can take the place of communal space Where buildings perform a clear beneficial role in the layout design, or where infill development restores urban form, gardens may need to be smaller or bigger to fulfil that role In physically constrained sites where development is desirable in the public interest, the achievement of a safe, attractive public realm will take priority over garden size Live–work units – the garden area should equate to the residential floorspace but the external area may be dual use, perhaps for loading or storage for the commercial element, controlled by planning condition Sheltered and special needed housing – the quality of private space will be assessed with regard to the needs of the occupiers	

Source: Chelmsford Borough Council.

Examples are set out in Boxes 2.8 and 2.9. Sporadic and ad hoc back-land development should be controlled and only permitted where a comprehensive design solution can be achieved. An example devised at Chelmsford is shown in Box 2.10.

The integration of affordable housing

One topic where published policy can be very useful in practice is for the provision and integration of affordable housing.

Box 2.8   Example of policy on mix of dwelling types.

Dwelling Mix
On development sites of 0.3 ha or more, or sites capable of accommodating 10 or more dwellings, a mix of dwelling sizes and types will be required, taking into account local circumstances and site characteristics. Exceptions may be made for development of sheltered or supported housing and housing in the central area.

Source: Chelmsford Borough Council.

Box 2.9   Example of policy on extensions to dwellings.

Extensions to Dwellings
Planning permission will be granted for the extension of an existing dwelling provided

1. The roof form reflects or complements the roof form of the existing dwelling and the doors, windows and other detailing reflect the style, size, proportion and rhythm of the existing dwelling.
2. It does not lead to insufficient amenity space being available for the occupiers of the dwelling.
3. It does not result in an extended property which has insufficient off-street parking.
4. It is in keeping with the scale and character of the host building in the street scene generally.
5. It does not prejudice the amenities enjoyed by owners of adjoining residential properties.

Outside the urban area and rural settlements, in addition to these criteria, extensions will only be permitted provided

1. The property to be extended is substantially intact and has a reasonable remaining life.
2. The proposal is well-related and proportionate to the original dwelling.
3. It is not visually intrusive on the skyline or in the open character of the surrounding countryside.
4. It retains sufficient space around the extended building to protect its setting and the amenity and character of the countryside.

Source: Chelmsford Borough Council.

From the 1920s to the 1970s, it was common for developed countries to provide publicly funded housing for rent to those on lower incomes. In Britain, this took the form of estates, often very large ones, constructed and managed by the local council. From the 1980s onwards, the policy changed to providing subsidised rented accommodation managed by independent housing

Box 2.10 Example of policy on back-land development.

Backland Development

Proposals for new residential development within the curtilage of an existing dwelling will be refused unless:

1. The proposal contains adequate arrangements for access and appropriate parking for the existing and proposed development.
2. Adequate garden areas will be retained as a result of the development.
3. Adequate privacy is maintained between existing surrounding development and proposed dwellings and between their gardens.
4. There is no adverse effect upon the character and amenities of the surrounding area.
5. It can be demonstrated that any comprehensive development of the wider area of which it forms part will not be prejudiced.

Source: Chelmsford Borough Council.

associations with the bulk of new provision funded as planning gain from construction of larger schemes for sale. The tenants of the council-managed estates were allowed to buy their houses. Whatever the pros and cons of the move, from the 1980s onwards one improvement was a general reduction in of the spatial separation of housing for social rent, and consequently between income groups, and the stigma associated with appearance of particular estates.

The question for current affordable housing policy was: can such physical differentiation between tenures be eliminated entirely, or at least be made to be of negligible significance? During the mid 1990s, it became clear that, left to their own devices without specific planning intervention, volume house builders would retain spatial separation within sites and physical differentiation between dwellings for different tenures. The experience of the developments considered for planning permission in Chelmsford during 1995–1996, both those described here and many other smaller schemes, was that the house builders would allocate land within the development for sale to a housing association once permission had been obtained. In these circumstances, it was in their financial interest to minimise the land area allocated to affordable housing, which was done by minimising dwelling size, garden size and parking provision, often providing the dwellings in the form of flats. In addition, they wished to place their 'finest' detached dwellings for sale on the most prominent frontage, often near main roads, relegating the affordable housing to remoter parts of the site. Unfortunately, this did not correspond to the needs of those who were seeking social rented accommodation who, within the population as a whole, tended to be larger families needing dwellings with some space, garden and a number of bedrooms. They also needed to be near main roads and public transport. Moreover, the contrast between the detached family housing provided by the house builders in that period and the

appearance of the affordable housing was very conspicuous, accentuating a feeling of stigma.

The ideal situation was one in which the house builder selects a social landlord as a partner at a very early stage of the design process and where the social landlord was fully involved in negotiations and the pursuit of planning permission. The dwellings taken over by the social landlord should be the same as those being offered for sale. In other words, there should be no way of distinguishing them by their outward appearance; the only difference would be one of tenure. The social rented dwellings should be 'pepper potted' throughout the development rather than being concentrated in a single location. The integration should be 'seamless'. If the development was within a town centre, and consequently one of flats, then the affordable housing would also be flats, perhaps sheltered accommodation for the elderly or other groups with special needs. If it was, on the other hand, in a suburban estate of family houses, then the affordable housing should also be family houses.

One question that followed from this was how to respond to the increasing number of flats being constructed in the town centre, as is described in Chapter 7. A proportion of at least 25% affordable housing applied but small flats were not normally the type of dwelling that met the needs of families seeking low-cost rented accommodation. The answer was that it was not just families that were in need and, for some social groups, town-centre flats would be very suitable. One such group were the elderly. Indeed, developers were already providing increasing numbers of flats in town-centre locations for the higher-income elderly. Other groups with particular learning social difficulties, and those who had overcome their challenges and were on their way back into everyday society, could also find such locations suitable.

In Chelmsford from 1997 onwards, the policy of the Borough Plan (CBC, 1997a) required 20–25% of dwellings be affordable. Beyond this, the objectives set out earlier had to be pursued through negotiation. Some developers were more enlightened than others. The practice of selling land afterwards to the social landlord disappeared, and the social landlords were involved at an earlier stage, although often not early enough. Often the developers passed on their views, or what were believed to be their views, without the social landlord being round a table or in separate dialogue with the Borough Council. Over the years, however, progress was definitely made, and the later developments at Chancellor Park, Beaulieu Park and Great Leighs, described in Chapter 5, page 109, were achieving a standard very near to seamless integration. A standard was eventually introduced that not more than 25 socially rented dwellings, or 10% of a scheme, could be located together in any one place. An important step forward was made in 2002 with the approval by the council of supplementary planning guidance on affordable housing that set out clearly in writing all the requirements described earlier. This guidance was subsequently incorporated by the Borough Council into more general guidance on planning agreements CBC, 2005a).