

2. Development and Design

2. Development and Design

Local Plan Aim

To seek high standards of design and quality of development throughout the Borough.

Key Objectives

1. To raise the overall standard of the quality of design and development within the Borough.
2. To create new places of interest and character which add to the quality of the built form.
3. To achieve a greater presence of mixed-use development in a range of settings and locations.
4. To achieve a high degree of accessibility and permeability in the design of new development by means other than the car.
5. To ensure the role of the car is integral but not dominant in the design process and solution.
6. To create a Green Grid network of inter-linking, high quality open space and landscape within Kent Thameside.
7. To enable people with impaired mobility to readily gain access between and to public places, including buildings.
8. To enhance and preserve the best of existing landscape wherever possible and ensure that new habitat creation fully respects local landscape qualities where appropriate.
9. To achieve design solutions which maximise water and energy conservation and minimise pollution.
10. To minimise opportunities for criminal and anti-social activity through the adoption of good design.
11. To provide distinctive public art in the local environment, giving special identity to places and enhancing local pride through community involvement in the creation and siting of works of art.
12. To protect areas of wildlife and ecological value and, wherever possible, to ensure that new habitat creation contributes to the objectives of the Kent Biodiversity Action Plan.

2.1 Introduction

- 2.1.1 A key objective of the Thames Gateway Planning Framework is the need to achieve a high standard of quality in all forms of design and development. The ability to meet that objective in Kent Thameside will depend as much upon the physical linkages and spaces between buildings, choice of materials, siting, scale and mass, open space and landscaping, safety and accessibility as the architectural style of new buildings. The need for good design applies equally to the existing communities, particularly in sensitive locations such as conservation areas, and to the major development sites within the Borough. Good urban design can reinforce a sense of community and local pride, create a sense of place, reduce crime, encourage investment and generally improve the quality of life. Above all, it is an integral element of the regeneration of the area.
- 2.1.2 The siting and design of development can contribute to sustainability. For example, the orientation of the buildings, and the materials and methods used in construction, can help to save energy and demand for water, while a design which allows for flexibility of uses can help to lengthen the life of a building.
- 2.1.3 The Kent Association of Local Authorities has published a revised Kent Design Guide, replacing the original Kent Design published in 1995. The Guide seeks to promote innovation, quality and sustainability within new development, and to raise awareness of design and environmental issues. It has been adopted by local authorities as supplementary planning guidance and is a material consideration in the determination of planning applications throughout Kent.
- 2.1.4 The scale of growth in Kent Thameside offers the opportunity to establish a new standard of quality in design that reflects the growing strategic importance of the area. An attractive

built environment in the urban areas is an essential component of a good quality of life. Recent developments in Dartford that embody high quality design include Bluewater, Ingress Park, Greenhithe and the Beadles Car Showroom. Improving the overall quality of urban design in Dartford is a long-term goal and it will take time for a new standard to be recognised. However, the Plan can directly influence the design of new development and encourage developers to ensure design criteria is a vital component in development proposals.

2.2 Public Transport Orientated Development

- 2.2.1 If development is to be planned in a sustainable manner, the proportion of trips made on public transport will need to increase substantially. The scale of development cannot be sustained if there is no significant switch from the private car to other forms of sustainable transport. For this to occur, it is essential that as many people as possible should live as close as possible to public transport routes in order to encourage public transport patronage. The services and facilities they require to meet their day to day needs should be focused on public transport nodes and routes. All development which is likely to generate a material increase in movement and trips should, therefore, be designed with accessibility to public transport - trains, buses and the proposed Fastrack system - integral to the layout and design.

Walking Distance

- 2.2.2 Development proposals likely to either generate or attract large numbers of trips should be within easy walking distance of a good (or potentially good) public transport service. A distance of 400 metres is the maximum considered to be convenient to encourage people to use public transport. Higher intensity activities, such as leisure and employment uses, will be required to be located a maximum of 300 metres from public transport stops. At the same time, the quality and degree of safety of the walk, affected by physical barriers and traffic intimidation and gradients must be taken into account. In general, a 1m difference in levels should be considered to be equivalent to 10m horizontal distance (source: "Sustainable Settlements", 1995).

Densities

- 2.2.3 Reflecting the desirability of living close to a stop on a high quality public transport route, both residential and commercial densities on all sites should generally increase towards the stop. However, as well as proximity to a stop, the qualitative aspects of public transport will also be important considerations in determining appropriate densities, for example the frequency of service and the variety of destinations served. Within existing neighbourhoods, densities of development will also need to take account of the density of existing development to maintain the character of the area, while at the same time, maximising the density. Policy DD1 relates the guidance on densities set out in PPG3 to these public transport considerations.

Permeability

- 2.2.4 To be successful, the design and form of any large development proposal will need to consider at the outset all forms of movement and the ability of people to gain access to and from the development. A key design principle for large development sites is "permeability" - the extent to which an environment allows people access through it, from place to place. Footpaths, cycleways, bridleways, streets and landscaped areas (both green corridors and managed open space) can serve to develop a sense of belonging and a sense of place. The degree of permeability should be highest around the public transport stop.

Priorities for Access and the Role of the Car

- 2.2.5 Movement other than by car needs to be a readily available option for people. In designing residential layouts, therefore, a geometric, gridiron layout will encourage greater ease of movement compared to culs-de-sac which are primarily designed to accommodate the car.
- 2.2.6 In seeking a degree of permeability, care must be taken to avoid unintentionally creating "rat-runs" through residential areas. The role of the car, therefore, needs to be considered in the design and layout. A clear definition of the route hierarchy, the scale and location of parking provision and the provision of traffic calming measures by design to create safe environments for pedestrians and cyclists all need to be taken into account at the earliest stages in the design process, not added as an afterthought. Key considerations of traffic calming by design range from smaller corner radii rather than wide sweeping curves at junctions, to the massing of buildings close to the highway and the retention of existing landscape features such as hedgerows.

Creation of Urban Space

- 2.2.7 In order to encourage walking, the street scene needs to be designed at a pedestrian scale by means of enclosing space by buildings. In particular, the height to width ratio, balance of static spaces (such as courtyards and squares) and dynamic spaces (such as alleyways and footpaths) and length of spaces must be designed to be of visual interest. In order to reinforce visual character, define spaces and promote pedestrian movement, most public spaces should be fronted by buildings and their entrances. Buildings should be sufficiently high to help define and partially enclose the space.
- 2.2.8 The continuity of a pedestrian route needs to be emphasised by minimising breaks in the built frontage. At the same time, the overall design needs to strike a balance between diversity and unity and between formality and informality to achieve a degree of contrast.

Non-Designated Parking

- 2.2.9 In its end form, the development should be served by very good public transport with limited parking provision. In the early years, when the public transport service is being developed, a flexible approach to car parking will be adopted, with sufficient parking provided within the curtilage of individual buildings supplemented by "non-designated" shared parking. The long term aim will be the reduction of non-designated parking and the redevelopment of some parking areas for more beneficial uses, in accordance with an agreed Parking Strategy. Removal of non-designated parking will be linked to improvements in public transport provision and implementation of Travel Plans, through planning obligations.

Phasing of Development

- 2.2.10 Early development should be concentrated around Fastrack stations. This will act as a stimulus to public transport travel at an early stage in the development process. To maximise the potential of a public transport orientated development, preferred locations for particular uses will need to be identified at an early stage, taking full account of accessibility and the density of particular uses.
- 2.2.11 Opportunities for public transport orientated development in Dartford fall into four categories:
- the six major development sites;
 - other large development sites within the existing built-up area, particularly within or on the edge of Dartford Town Centre, which could be served by public transport;
 - around stations on the North Kent Railway Line; and
 - along the safeguarded route of the proposed Fastrack public transport network.

DD1 Public Transport Orientated Development

Public transport orientated development proposals will be required in the following locations:

- 1. the major development sites at Ebbsfleet, Ingress Park, North Dartford, Stone Castle, Eastern Quarry and Swanscombe Peninsula;**
- 2. other large development sites within the existing built-up area with the potential to be served by public transport;**
- 3. potential development sites at or in close proximity to stations on the North Kent Railway Line;**
- 4. potential development sites along the route of the proposed Fastrack public transport system.**

At these sites, development will only be permitted if all the following criteria are met:

- a) a compact form of development centred around a good public transport service with all residential development to be within reasonable access of a public transport stop;**
- b) a general residential density of between 30 and 50 dwellings per hectare;**
 - ii) an average residential density of 50 dwellings per hectare within convenient walking distance of good quality public transport service;**
 - iii) a higher residential density in areas of particularly good public transport accessibility, such as the town centre;**
- c) a high degree of permeability for walking and cycling;**
- d) a clear and functional street hierarchy;**
- e) a design layout which, where appropriate, gives priority for public transport over the car, including uninterrupted public transport through routes;**
- f) the creation of high quality urban space which encourages walking and passive recreation;**
- g) the provision of “non-designated” parking in the early stages of development;**
- h) early phasing of development close to the public transport service; and**
- i) specified locations identified for community uses.**

2.3 Mixed-Use Urban Villages and Walkable Neighbourhoods

2.3.1 There is now widespread recognition of the need for an ‘urban renaissance’, not only in a physical sense, but also by encouraging the development of more balanced urban communities with good social and educational facilities. Our towns need to be made more attractive for people to live as well as work, so as to provide a pleasant living environment.

2.3.2 New development incorporating new or improved social and community facilities, innovative design and good access for those walking, cycling or using public transport can help improve the quality of urban life. For the urban lifestyle to be attractive, the positive attributes of living in towns - good accessibility to places of work, shops and other amenities, and the vibrancy of urban activity - must be enhanced, and the negative aspects - traffic congestion and pollution, a fear of crime, and a poor environment - need to be addressed.

2.3.3 These issues do not lie solely within the remit of land use planning, but improvements to the physical environment through the planning process can influence them all. To meet the ‘urban renaissance’ challenge, the concept of the urban village is gaining increasingly widespread acceptance. The ‘urban village’ ideal is expressed in a development form that is economically, environmentally and socially sustainable.

Principles and Characteristics of Mixed-Use Urban Villages and Walkable Neighbourhoods

PPG1 sets out the key characteristics of “urban villages”. These are:

- compactness;

- a mixture of uses and dwelling types, including affordable housing;
- a range of employment, leisure and community facilities;
- appropriate infrastructure and services;
- high standards of urban design;
- access to public open space and green spaces; and
- ready access to public transport.

The PPG goes on to state that there is no universal blueprint for the model urban village. Instead, local authorities are encouraged to define the key elements appropriate in the local context. In Kent Thameside, the key elements that will be sought on those sites identified as suitable for either a mixed-use urban village or a walkable neighbourhood are:

- a village centre providing a focus and sense of place for social and economic activity and accessible from its hinterland by foot and bicycle and include as a basic minimum:
 - a primary school;
 - a convenience store;
 - some employment compatible with residential areas;
 - a network of open spaces including safe and convenient toddler play spaces;
 - attractive safe and direct cycle and pedestrian routes which permeate to all parts of the urban village and connect with surrounding areas;
 - high level of permeability, enabling all parts of the neighbourhood to be within a 10 minute walk and for each neighbourhood centre to be within a 5-10 minute walk of the neighbourhood it serves;
 - other, less direct routes for general road traffic which discourage through traffic;
 - fast and direct public transport routes with priority over other traffic throughout the village; excellent accessibility to public transport; and good public transport links between the village centre and facilities elsewhere.

Other community facilities might include

- a community health centre;
- other convenience shopping facilities; and
- a leisure facility.

Built form should embrace the public transport orientated development concept where the overall guiding principle is that development becomes more concentrated in areas of greatest public transport accessibility and quality (eg. frequency of service and range of destinations served).

2.3.4 A planning brief and a comprehensive master plan will be an essential pre-condition of planning permission for an urban village. The master plan will present an overall vision and layout for the village although it need not necessarily include details of individual buildings. This will be the case particularly where more than one developer is involved. It will also need to specify both external and internal linkages.

Urban Villages

2.3.5 The Urban Villages Forum considers that a site of around 100 acres or 40 hectares with the capacity to accommodate around 1,500 dwellings is the norm for a typical mixed-use urban village. RPG9a specifically identifies Eastern Quarry and Swanscombe Peninsula as opportunities for new urban villages. However, the scale and characteristics of other major development sites within Kent Thameside suggests that there may be opportunities to create similar forms of new communities. For example, outline planning permission has been granted in principle (subject to a Section 106 Agreement) for a new commercial centre at Ebbsfleet surrounding the proposed Channel Tunnel Rail Link International Station. The permission will allow for up to 3,200 dwellings and some 500,000 sq m of commercial floorspace in a form that encompasses many of the attributes of an urban village. When completed, Ingress Park, Greenhithe will be a major riverside mixed-use urban village development. It provides the opportunity for the new village centre to be shared with the

proposed urban village at the adjoining site of Swanscombe Peninsula West. Further details about the form of development required at these sites are set out in the Major Development Sites chapter.

- 2.3.5a A range of community facilities will be sought to meet the needs of the new communities. The timing and scale of these facilities, which may include community halls, health centres and places of worship, will be determined by the application of policies in the Community Facilities chapter and the guidelines at Appendix 14. New retail floorspace should be of a scale appropriate to the needs of the new communities and which would complement existing district and local centres.

DD2 Mixed-Use Urban Villages

Development proposals at the following locations will be expected to incorporate the principles and characteristics of a mixed-use urban village:

- 1. Eastern Quarry**
- 2. Ebbsfleet**
- 3. Swanscombe Peninsula West**
- 4. Ingress Park,**
- 5. North Dartford**

Proposals should meet the following criteria:

- a) provide a mix of housing types and tenures, including affordable housing, to meet local housing needs;**
- b) seek to build sustainable communities by incorporating social, educational, shopping, recreational and the necessary community facilities or by expanding existing local facilities;**
- c) provide local and accessible employment opportunities;**
- d) provide open spaces and links which can be subsumed into the Borough Green Grid network;**
- e) maximise the potential for public transport provision, walking and cycling;**
- f) incorporate a design that is based around pedestrian priority access and movement and which enhances local character and distinctiveness.**

Applications will need to be based on a planning brief for the site agreed with the planning authority and will need to be accompanied by a masterplan.

Walkable Neighbourhoods

- 2.3.6 A number of identified development sites within the Borough are not sufficiently large to accommodate a new urban village. Nevertheless many of the urban village principles, referred to above, are equally applicable on these smaller sites. These sites have the potential to become attractive and distinct places in which to live embodying key sustainable principles. These are referred to as walkable neighbourhoods. As in the case of urban villages, walkable neighbourhoods should have the creation of a sense of place as a key objective with well-designed streets, squares and civic spaces. By their very name, walkable neighbourhoods should encompass a public realm that is safe and well cared for to encourage people to walk. Good quality footways, well-connected and overlooked by houses and other buildings will be key considerations in any design.

- 2.3.6a Policy DD1 is an over-arching policy which sets out the criteria that will need to be met for those sites referred to in the first part of the policy. In addition, policy DD3 applies to those sites which are expected to include a substantial element of residential use.

- 2.3.7 During the Plan period, “windfall” sites may come forward for either residential development or mixed use development which includes residential development. Where a significant element of residential development could be accommodated on these sites, likely to be in

excess of 100 dwelling units, development proposals would need to demonstrate that they incorporate the key design principles applicable to urban villages and walkable neighbourhoods. Proposals for more than 100 residential units will be expected to have the critical mass to be able to incorporate the criteria set out in policy DD3.

2.3.8 Design should be based upon a network of spaces, rather than a hierarchy of roads. Design layouts will need to demonstrate that they incorporate the principles of public transport orientated development, referred to in policy DD1. A planning brief will be a requirement in each case, which will establish the overall form of development, based upon density and layout and define the layout of spaces and how movement relates to them.

2.3.8a The timing of when to prepare a planning brief will vary in regard to the particular site. However, a brief should normally be prepared and agreed with the planning authority before a planning application is made.

DD3 Walkable Neighbourhoods

Development proposals at the following locations that include a significant element of residential use will only be permitted if they incorporate the principles and characteristics of a walkable neighbourhood.

- 1. Stone Castle**
- 2. Bexley Hospital**
- 3. West Hill Hospital**
- 4. Large “windfall” sites within the urban area**

Proposals should meet the following criteria:

- a) provide a mix of housing types and tenures, including affordable housing, to meet local housing needs;**
- b) seek to build sustainable communities by ensuring access to facilities (shopping, educational, community and recreational) of a range and scale compatible with the development. Where necessary, new facilities will have to be provided on site;**
- c) provide local and accessible employment opportunities;**
- d) provide open spaces and links which can be subsumed into the Borough Green Grid network;**
- e) maximise the potential for public transport provision, walking and cycling;**
- f) incorporate a design that is based around pedestrian priority to access and movement and which enhances local character and distinctiveness.**

Applications should be based on a planning brief for the site agreed with the planning authority and be accompanied by a masterplan.

2.4 Mixed-Use Development and Design

2.4.1 The mix of land uses is a major determinant of a settlement's character and quality. Three key aspects of mixed-use are grain (the way in which people, activities, land uses, buildings and spaces are mixed together), density and permeability (the extent to which an environment allows people access through it, from place to place). Mixed-use occurs in different settings - within districts or neighbourhoods; within the street and other public spaces; within street blocks; and within individual buildings.

2.4.2 Although a mix of uses can be found or promoted in a number of locations, within Dartford, the primary locations are within Dartford town centre, existing and proposed neighbourhood centres, on major development sites and on large windfall sites. The approach for both the town centre and the neighbourhood centres calls for a gradual revitalisation and incremental restructuring of existing parts of the town centre, including reuse, conversion and refurbishment. Both the unidentified and allocated large sites are likely to experience comprehensive development. Planning briefs and detailed design guidance can play a

leading role in determining the future pattern of uses on individual sites and for specific areas respectively.

- 2.4.3 The Local Plan Review has identified a land supply sufficient to meet the Structure Plan housing requirement of 10,500 dwellings to 2011. However, the ability to meet the target depends to a large degree upon the availability of key sites, such as Eastern Quarry. In some cases, the phasing of development on these sites is outside the scope of the local authority. The Plan's policies aim to give strong protection to the Green Belt and, other than the proposed changes to the boundary of the Green Belt there are no exceptional circumstances to warrant the release of other sites currently within the Green Belt, either for residential development or for safeguarding purposes.
- 2.4.4 However, development proposals at the four types of locations referred to in paragraph 2.4.2 can help to contribute to the provision of residential development by incorporating residential development as an element of mixed use development. Developments that bring together different and complementary uses, including residential uses, in close proximity can have a number of benefits, including the creation of more vibrant and sustainable communities and a reduction in the need to travel. Bringing together shops, schools and workplaces benefits the local population, and increases the potential for good public transport as an alternative to the car.
- 2.4.5 Mixed-use development can promote urban quality, producing attractive and sustainable settlements, although by itself it is no guarantor of quality, just as single use does not inevitably lead to bad design. Size, scale and form are just as important as use for the quality of urban design.

DD4 Mixed-Use Development

Unless it can be demonstrated that either the characteristics or scale of the site or the use proposed would not be suitable for such development, development proposals should incorporate an integrated mix of uses. Proposals for mixed-use development will only be permitted if they incorporate an element of residential development unless it can be demonstrated that either the characteristics of the site or the other uses proposed would not be suitable for such development.

2.5 The Green Grid Network

- 2.5.1 Open space is considered generally in PPG3, PPG9 and PPG17, as well as a wide range of other government publications. These stress the need:
- to protect, manage and create open spaces;
 - to place a greater emphasis upon open space in the planning process; and
 - to adopt a strategic approach for planning and managing open spaces.
- 2.5.2 However, the Thames Gateway Planning Framework (RPG9a) specifically refers to the opportunities within Thames Gateway to create a "green grid", joining the main open areas with river frontages and linking with both existing and new communities. Riverfronts can be opened up for public access with walkways, cycle paths, parks and viewing areas.
- 2.5.3 A critical element in the aim to bring a new environmental standard to Kent Thameside is the creation and development of a "Green Grid". The Green Grid is defined for the purposes of this Plan as a number of multi-purpose, attractive open spaces, linked by a web of green corridors, footpaths and landscape to neighbourhoods within the urban area. At the present, it comprises some 27 open spaces across the urban area of the Borough, which are linked by a number of footpaths and public rights of way. But within the Plan period, the Green Grid will evolve and grow substantially - both in terms of the number of publicly accessible open spaces and the creation of new links, such as footpaths and cycleways - as development proposals come forward on the major development sites. In

addition, the Darenth Country Park, opened in 2002, makes a significant contribution to the Green Grid network.

- 2.5.4 A key aim of the Green Grid network is to give ready access to open space and develop strong wildlife corridors. The Grid will protect and enhance “the countryside” in urban areas for wildlife and people, as well as improve access from the urban area to the countryside, promote informal recreation and manage sites for wildlife.
- 2.5.5 Green Grid is fundamental to the success of achieving sustainability objectives in Kent Thameside, for it will provide an environmental context for the scale of growth planned for the area. Over time, the Green Grid will help define the new urban structure for Kent Thameside, linking and integrating existing communities with the emerging pattern of new development. Open space provision will be a key priority in the planning and design of any new development.

The Existing Green Grid Network

- 2.5.6 27 key open spaces have been identified in the Borough which form the nucleus of the Green Grid network because of their special contribution, both in terms of their size and their location, to the recreational, visual and nature conservation value within Kent Thameside. A number of private open spaces, and spaces with limited public accessibility, are included where they nevertheless have visual or nature conservation value.
- 2.5.7 The Council will safeguard and where appropriate, seek to enhance the amenity value of these areas and their contribution to the Green Grid. It is also important that development in surrounding areas respects the special qualities of these spaces.

DD5 Green Grid Safeguarding

The following existing open spaces, as shown on the Proposals Map, comprise the key components of the Green Grid network and will be safeguarded:

- 1. Beaconwood Country Park**
- 2. Birchwood Golf Course**
- 3. Bluewater (part)**
- 4. Brooklands Lakes and land immediately to the east**
- 5. Broomfield Park, Swanscombe**
- 6. Central Park, Dartford***
- 7. Craylands Gorge, and land north of Alkerden Lane and Ingress Gardens, Swanscombe**
- 8. Darenth Country Park**
- 9. Darenth Valley**
- 10. Darenth Wood**
- 11. Dartford Golf Course**
- 12. Dartford Heath, including Bowmans Heath**
- 13. Dartford Marshes**
- 14. Edwin Road Open Space, Wilmington**
- 15. Glaxo SmithKline Sports Ground, Dartford**
- 16. Heath Lane Recreation Ground and Playing Fields, Dartford**
- 17. Hesketh Park, Dartford**
- 18. Joydens Wood**
- 19. Land east of the former Bexley Hospital site**
- 20. Land north of Hook Green Lane, Leyton Cross**
- 21. Leigh City Technology College**
- 22. Oakfield Park**
- 23. Princes Sports & Leisure Club**
- 24. Stone Lodge**
- 25. Stone Recreation Ground**
- 26. Swanscombe Park**

27. Worcester Park and Stone Place Open Space, Stone

Development will not be permitted, either in or within close proximity of any of the above spaces, which would be likely to have a detrimental impact upon the

- a) amenity and recreational value;**
- b) contribution to the visual qualities of the area;**
- c) value in providing an attractive alternative to motorised travel;**
- d) wildlife conservation value; or**
- e) landscape value.**

(*See paragraphs 9.4.2, 14.14.13 and Policy TC11)

2.5.8 Policies that aim to protect other areas of open space which do not form part of the Green Grid are set out in the Leisure, Recreation and Tourism chapter. The other elements of the existing pattern of Green Grid consist of linkages in the form of footpaths, rural lanes and public rights of way between these open spaces, communities and the River Thames. All public rights of way and rural lanes within the Borough are safeguarded in the Leisure, Recreation and Tourism chapter. It will be for supplementary planning guidance to identify which of these “links” comprises part of the Green Grid network.

The Expansion of the Green Grid Network

2.5.9 One of the key purposes of open space is to serve the local community. The expansion of the Green Grid will be guided by the primary aim to link important elements of a community – residential areas, workplaces, schools and shopping centres, for example – with open space, encouraging more sustainable modes of transport. Clearly, sensitive locations will need to be carefully managed to ensure there is no potential conflict between the aims of increasing accessibility to green areas and protecting areas that have nature conservation interest. Development proposals on those sites identified on the Proposals Map to which policy DD6 will apply will be expected to be supported by evidence demonstrating how the nature conservation interests on the site will be protected and enhanced, such as through wildlife corridors. Landowners and developers will be expected to involve communities in planning, creating and managing the new elements of the Green Grid.

2.5.10 Many opportunities exist in Kent Thameside to simply create parcels of open space, particularly in the major development sites and along the River Thames. However, the Council is seeking a more considered approach from developers - one that results in the improvement or creation of open space which satisfies the multi-functional potential of the Green Grid network. In essence, it means

- maintaining, enhancing or creating . . . (the process)
- linkages, open spaces and corridors (the form), in order to . . .
- accommodate wildlife habitats, formal and informal recreation, and public access, be it footpaths, cycleways and bridleways, while creating a strong, high quality landscape framework (the purpose).

2.5.11 In order to be realised, a number of “links” within the Grid will need to be created, particularly on major development sites and along the River Thames. Areas that are deficient in open space and require Green Grid links will form the priority for creation and enhancement. Links will be sought which encourage walking and cycling between communities and areas of open space or the River Thames. The exact alignment will be a matter for negotiation between the local authority and developers. However, the Green Grid is not just about linkages – it is also about the creation of new open space within the new development sites, and particularly at intersections on the network. Where possible, these “nodes” should be priorities for open space and, where possible, habitat creation.

2.5.12 A conceptual plan of the Green Grid for the Kent Thameside area within Dartford is shown at Figure 4. The Plan shows both the existing Green Grid areas and the development sites

that will be expected to contribute to the Green Grid network, as shown on the Proposals Map. However, Figure 4 also shows the main Green Grid links, which connect both existing and future green spaces to neighbourhood centres, together with physical barriers along the links. In a number of places there are missing links which reduce the effectiveness of the Green Grid. In many cases, there will be opportunities to remove these missing links and so join up the Green Grid when a site comes forward for development. Where gaps currently exist in the route network of the Green Grid, the Council will seek to establish an appropriate public right of way, in order to achieve continuity.

2.5.13 The Grid has been devised to follow as far as possible existing open spaces including private open spaces where these contribute to its amenity or wildlife value. In several cases, however, connections between component open spaces may only be achieved along roads and footpaths. It is intended that the supplementary planning guidance will provide greater detail about what is expected in order to achieve Green Grid links between the major development sites. Development briefs will set out the requirements for integrating a Green Grid network within the major developments sites.

2.5.14 As stated above, open space in new developments should contribute to the effectiveness of the Green Grid. On the larger development sites, such open space provision will be of structural significance, contributing to wider community needs beyond the site itself. In addition to the identified development sites, development proposals that come forward during the Plan period on “windfall sites” of 1 ha or more will also be required to contribute to the Green Grid network. It may not always be possible to accommodate new Green Grid links, particularly on a windfall site. Exceptionally, in these circumstances, environmental improvements off-site may be acceptable.

DD6 Green Grid and Development Sites

Development proposals on the development sites identified on the Proposals Map, and on “windfall sites” of 1 ha or more will only be permitted where they include a network of public open space of a scale and quality appropriate to the site and its context which will contribute to the purposes of the Green Grid network. All such open space and rights of way provision must be designed to meet the following objectives:

- 1. provide the highest level of landscape, visual and environmental quality possible for new and existing communities;**
- 2. create a distinctive character for Kent Thameside as an attractive place in which to live and work;**
- 3. produce an attractive landscape framework for existing and new development, delineating urban form and character and defining the limits of development and the green network resource;**
- 4. improve the network of strategic links from open spaces in urban areas to and along the Thames and other water courses, linear open spaces and corridors, into the Kent countryside;**
- 5. provide safe, attractive and accessible open space corridors and linkages such as footpaths, cycleways and bridleways;**
- 6. ensure the provision of useable open spaces and green linkages for formal and informal recreation;**
- 7. create and enhance wildlife corridors; and**
- 8. protect and enhance the ecological and landscape heritage of the area, improving the relationships and links between people and nature.**

Community Woodland within the Urban Fringe of Dartford

2.5.15 Government advice in PPG17 states that planning authorities should encourage recreational facilities and increased public access to open land on the urban fringe. It goes on to advocate afforestation initiatives in urban fringe areas. Structure Plan policy ENV8

provides the strategic framework for the creation of community woodland in Thames Gateway.

2.5.16 Kent County Council's landscape appraisal 'Kent Thames Gateway Landscape' states: "The development of a strong landscape infrastructure within the corridor area should be designed to tackle the particular problems caused by the fragmentation of the Thames Gateway landscape by the continued expansion of urban and industrial development and the road network. Key components of the infrastructure will be the provision of:

- green corridors and links;
- areas of green space within the urban context, linked to the network of corridors;
- green wedges and buffers to future urban expansion; and
- landscape frameworks to absorb existing and possibly future development.

2.5.17 The open landscape south of the A2 forms a backdrop to the urban area and there is scope for afforestation in those parts of the rural areas that are vulnerable to visual intrusion and to noise from the A2 and M25. Kent County Council's 'Landscape and Conservation Guidelines' (March 1993) identify this as a landscape type particularly suited to this concept:

'Northern Agriculture Belt: large fields and the proximity of many urban areas result in an open landscape dominated by manmade intrusions. This is an area where major woodland planting would be desirable. The remaining woods are of prime importance for landscape and nature conservation'.

2.5.18 A Forestry Commission paper 'Community Woodlands for North Kent' (1996) lends support to this approach and draws attention to the availability of funds under their Woodland Grant Scheme and Community Woodland Supplement.

2.5.19 Six development sites on the southern edge of the built area of Dartford have potential to incorporate a visual and functional buffer of community woodland between the development and the countryside beyond. Newly created community woodland here would supplement the existing areas of open space in the urban fringe including Dartford Heath, Darenth Woods and the Dartford Golf Club and the new Darenth Country Park. These sites are Eastern Quarry, Ebbsfleet, Bexley Hospital, Oakfield Lane Campus, the proposed extension to Questor (formerly the Dartford Trade Park) and Mabledon Hospital. Each of these sites is identified on the Proposals Map for new Green Grid links. Development proposals that come forward within the plan period elsewhere within the urban fringe would also be expected to contribute to the network of community woodland. It is considered that community woodland planting would be appropriate in parts of this area and would fulfil the following functions:

- it would visually soften the edge of the urban area, and present a tidier and attractive urban fringe;
- it would form a visual screen to the A2, reduce traffic noise and act as a physical filter for air pollution;
- it would form an element of the Green Grid and tie it into the rural area; and
- it would provide a recreational resource, and a route by which the countryside beyond can be accessed.

2.5.20 In other areas, community woodland can also fulfill the specific functions.

- Transport Corridors – in addition to the A2, trees can help to mitigate the impact of road and rail development (such as the M25 and the CTRL).
- Derelict and degraded land – trees can help to restore and enhance the landscape, improve stability, generate an economic return and improve the image of an area.
- Agricultural land – some areas may also qualify for additional grants, such as the Woodland Grant Subsidy (WGS) Better Land Supplement and the Farm Woodland Premium Scheme.

- Extension to existing woodland – new planting could create access to existing woodland, giving the added benefit of recreation in mature woodland. The existing woodland would be eligible for the WGS Annual Management Grant for recreation.

2.5.20a Whilst it is presumed that the community woodland planting will normally occur on land that forms part of the development site allocation, there may be opportunities for planting on other land which would also provide opportunities for a visual and functional buffer of woodland.

2.5.20b New trees should be from local native species and preferably local provenance stock. It is also important that planting does not take place on land of existing wildlife value but is targeted on agricultural land to encourage biodiversity.

DD7 Community Woodland in the Urban Fringe

Development proposals on the following sites will only be permitted where the contribution towards the Green Grid network includes an element of community woodland:

1. Eastern Quarry
2. Ebbsfleet
3. Bexley Hospital
4. Oakfield Lane Campus
5. Darenth Road proposed extension to Questor (formerly the Dartford Trade Park)
6. Mabledon Hospital and
7. large “windfall” sites (more than 1 ha) elsewhere within the urban fringe of Dartford in the A2 corridor.

2.6 Neighbourhood Centres

2.6.1 It is also important to look at the existing urban fabric, and to examine the extent to which its sustainable functioning and environmental quality can be improved. Such changes are likely to be gradual, incremental, and for the most part small in scale.

2.6.2 An analysis of the urban area has been undertaken in order to develop a conceptual structure which can form a basis for planning decisions. Its main elements are as follows:

- a) the definition of distinct ‘neighbourhoods’ with clearly identifiable boundaries;
- b) a range of facilities, including shops, post office, schools and other community facilities within a defined neighbourhood centre;
- c) the degree of accessibility to each centre on foot or bicycle from their respective neighbourhoods;
- d) the provision of access to public transport.

2.6.3 Based upon these criteria, fourteen neighbourhoods and their centres have been identified, together with a number of proposed new neighbourhood centres. These are:

Neighbourhood

Fleet Downs
Greenhithe
Heathside
Joydens Wood
Knockhall
New Town/The Brent
Priory
South Dartford
Stone

Neighbourhood Centre

Fleetdale Parade
Station Road
Chastilian Road
Summerhouse Drive

The Brent
Burnham Road
Lowfield Street
London Road/Invicta Road,
Stone and Watling Street
(proposed new centre)

Stone Village/Horns Cross
Swanscombe

Temple Hill
West Dartford
Wilmington

Horns Cross
High Street and Craylands
Lane/Milton Street,
Temple Hill Square
Dartford Road/Havelock Road
High Road, Wilmington

2.6.4 A primary function of these neighbourhood centres is the provision of local daily shopping, and policies in the Retailing chapter will protect these local shopping facilities. However, the aim of policy DD9 is to improve the sustainable functioning of these neighbourhood centres as a whole, including their important social and community role.

2.6.5 Below this hierarchy of neighbourhood centres, there are a number of smaller centres that are referred to in the Retailing chapter, while policies for village centres are set out in the Countryside and Villages chapter. Land south of Watling Street, Dartford (including the former Cascade Motors site) has been identified within the existing urban area where proposals that would support a new neighbourhood centre will be permitted. A planning brief for the site is available from the Council.

2.6.6 The major development sites identified as being suitable for new urban villages and walkable neighbourhoods, referred to in policy DD2, will be expected to include new neighbourhood centres.

DD9 Existing Neighbourhood Centres

Proposals that either retain or enhance the function of the following locations as neighbourhood centres will be permitted:

- 1. Burnham Road**
- 2. Chastilian Road**
- 3. Dartford Road/Havelock Road**
- 4. Fleetdale Parade**
- 5. High Road, Wilmington**
- 6. High Street and Craylands Lane/Milton Street, Swanscombe**
- 7. Horns Cross**
- 8. London Road/Invicta Road, Stone**
- 9. Lowfield Street**
- 10. Station Road, Greenhithe**
- 11. Summerhouse Drive, Joydens Wood**
- 12. Temple Hill Square**
- 13. The Brent**

Proposals at the above neighbourhood centres for the following uses will be permitted:

- a) retail uses in accordance with policy R4;**
- b) leisure and community facilities to serve the immediate locality;**
- c) small scale commercial facilities; and**
- d) residential development at densities appropriate to the existing character of the centre.**

Proposals should contribute to the improved functioning of the public transport system and, wherever possible, provide priority for it. Reduced car parking requirements, where a minimum may be sought, may be appropriate in locations well served by alternative means of travel other than the car, or where there is potential for shared parking or on-street parking.

DD10 Land South of Watling Street, Dartford

Proposals which serve to create a new neighbourhood centre by incorporating the following uses at land south of Watling Street, Dartford will be permitted:

- 1. use classes A1, A2 and A3 of a size appropriate to the surrounding neighbourhood to serve the immediate locality;**
- 2. leisure or community facilities to serve the immediate locality;**
- 3. small scale commercial facilities; and**
- 4. residential development at densities appropriate to the existing character of the surrounding neighbourhood.**

Proposals should be based upon a scheme for the site as a whole and allow good accessibility by foot and by cycle to the surrounding neighbourhood.

2.7 General Development and Design Criteria

- 2.7.1 The purpose of a set of criteria for design, applicable to all new forms of built development, is to ensure a consistency of approach while at the same time allowing for originality and new initiatives to flourish, particularly on the major development sites.
- 2.7.2 An essential component of the design or layout of any development will be the need to have taken full account of the function of the proposal. How the proposal is intended to work effectively will influence the design.
- 2.7.3 The pattern and role of space between buildings is important. Existing functions and activities must be respected where they contribute to environmental quality and sense of place. The space between buildings can create a sense of character which individual buildings alone cannot create. Streets, squares, parks and other spaces which make up the public domain are vital elements in the design and layout of new development which demand an understanding of how built and unbuilt space interacts. The appearance and treatment of spaces between and around buildings is often of comparable importance to the design of the buildings themselves. Successful street design requires a fine balance between the users of buildings and external spaces. There exists considerable potential for the layout of major new development to include new linkages or enhance existing ones.
- 2.7.4 New development must have regard to the existing built fabric. For example, the scale of a proposal in terms of height, proportion and overall form should reflect the street scene and not introduce an element of discord between the new buildings and those existing buildings close by. Where proposals affect a conservation area, special attention to the built form, details and materials will be necessary. Proposals to change the use of an existing building should not result in a significant loss of amenity of neighbouring properties.
- 2.7.4a Skin cancer is the second most common cancer in the UK and is one of the most rapidly increasing cancers. Ultraviolet radiation from the sun is the primary cause. Development proposals will therefore be expected to consider the use of both natural and constructed shade, particularly in developments often used by children. Areas providing shade should be well designed and safe, as well as offering effective protection against ultraviolet radiation.

Materials

- 2.7.5 New developments should use materials that are of good quality, durable and attractive. The choice of materials should be an integral element in the design of new buildings and fixtures. Infill developments should use materials that are sympathetic to their surroundings and which complement materials used in adjacent and prominent buildings in the street scene. Similarly, extensions to buildings should use materials that match or are compatible with the original building. The choice of materials for walls, roofs, windows and doors is important and consideration should be given to:
- a) Colour
 - b) Texture
 - c) Size/proportion
 - d) Weathering properties

e) Existing character of the locality

2.7.6 This is particularly important in Conservation Areas where the use of high quality materials is important in preserving and enhancing the character of the area as a whole.

Energy and Water

2.7.7 Energy conservation and the use of renewable energy sources can help reduce greenhouse gas emissions and the demand for non-renewable energy. The layout and design of new development can make a positive contribution to energy conservation. In particular, shaping new development patterns can minimize the need to travel by car. For example, new development should incorporate appropriate recycling facilities in an integrated way making them accessible by walking and cycling and at locations which increase the potential for linked trips. The Kent Waste Local Plan (1998) contains relevant policies for recycling, but developers are advised to contact the Council for current advice and best practice relating to operational matters. Improvements to the efficiency of buildings (in terms of usage of energy and other resources) can be effected through careful detailing, although this is largely outside the scope of land use planning. On the other hand the siting, orientation and disposition of buildings – by, for example, requiring a southerly orientation on a south-facing slope and provision of terraced and flatted developments to reduce heat loss – should be an important consideration in the design of new development.

Planting Design

2.7.8 Good landscape design can positively improve the appearance of any building or new development, as well as set the framework for the pattern of development. The treatment of spaces around buildings is an essential consideration in the design process. It contributes to the visual amenity, character and identity of an area. It can also assist in the integration of new development in an area, influence the spatial organisation of buildings, and enhance the identity of a locality as well as screen, provide privacy and shelter, reduce noise, improve the microclimate and define space and pedestrian/vehicle priority.

2.7.9 Landscaping proposals should be based on a comprehensive survey, which examines the key elements, including existing and proposed ground levels and soil. Existing trees, shrubs and hedgerows enhance the appearance of new developments and should be retained to form part of the scheme wherever possible. Replacement should be planned for those plants that are not practical to keep.

2.7.10 Factors to be considered in detailed planting design include:

- a) The final mature size of the trees and shrubs
- b) Soil type
- c) Site conditions
- d) Proximity to buildings
- e) Obstruction of light and vision
- f) Shade from the Sun
- g) Nuisance
- h) Climate conditions
- i) Underground and overground services
- j) Maintenance

Topography

2.7.10alt is preferable to retain the natural topography of a site in the layout of new development. However, it is accepted that on some sites, particularly the major development sites, there will need to be considerable remodelling of the existing topography and landscape to achieve a development layout which functions well, is aesthetically interesting and which encourages biodiversity.

- 2.7.11 Policy DD11 sets out the general policy with which all development proposals must comply. Clearly, some of the criteria listed will not be appropriate in every case; for example, minor household development will not normally have an impact upon the character of the public realm, accessibility by car, landscaping or pollution.

DD11 Development and Design General Criteria

A high standard of design will be sought in all proposals. Planning permission will be granted if the proposed development:

- 1. is compatible with neighbouring buildings and spaces or improves their surroundings in terms of scale, height, massing, materials and site coverage;**
- 2. incorporates a layout which, where appropriate, respects the original topography of the site and retains those trees, hedgerows, shrubs and water features which are important landscape features;**
- 3. retains or enhances the privacy and amenity of the local area by reason of form, scale, height, outlook, noise or light intrusion or activity levels including vehicular or pedestrian movements;**
- 4. retains important buildings or spaces;**
- 5. retains, enhances or creates external spaces, views, landmarks and other townscape features which make a material contribution to the character of the public realm;**
- 6. ensures a satisfactory environment for future occupants, including adequate provision for daylight, sunlight, privacy, garden space, storage and landscaped amenity areas;**
- 7. provides for adequate shade from sunlight;**
- 8. allows for a high degree of accessibility to a range of modes of travel other than the car;**
- 9. incorporates appropriate provision for the role of the car;**
- 10. includes parking provision in accordance with local planning and local highway authority policies and standards;**
- 11. incorporates landscaping proposals as an integral part of the design and provides for the protection and maintenance of trees and other landscape features;**
- 12. meets the requirements of statutory undertakers and service providers;**
- 13. is designed to optimise water and energy conservation and minimise pollution; and**
- 14. enhances the image of Kent Thameside.**

2.8 Accessibility for the Less Mobile

- 2.8.1 Accessibility for people with impaired mobility will be taken into account in determining planning applications. This includes access to and into buildings, as well as the need for accessible housing. The needs of disabled people should be considered early in the design process when a new building, an alteration or a change of use of a building is proposed. This requirement is particularly important in commercial schemes and in public buildings that are likely to attract a wide cross section of the community. Development which should be fully accessible to the public includes shops, commercial buildings, social and community facilities, sports, leisure and recreation centres, together with car parks, open spaces and routes such as footpaths. The location and arrangement of housing on a site, as well as the internal layout and construction should comply with the provisions of Part M of the Building Regulations 1991. In this respect developers should consult the Council's Building Control Section.

DD12 Access for the Less Mobile

Development to which the public would reasonably expect to have access will only be permitted if provision is made in the design for safe and convenient access by all, including people with impaired mobility.

2.9 Security

- 2.9.1 Opportunities for criminal activity can be minimised through the adoption of good design in both commercial and residential development. The layout of buildings and careful design of windows and their location, for example, can increase views from a large number of vantage points without the need for, say, investing in closed circuit television. Although crime prevention can be aided by unobstructed views and good street lighting, it should not lead to simplistic layouts devoid of planting, but rather, influence the design spaces, landscaping and layouts.
- 2.9.1a Secured by Design is an initiative promoted by the Home Office which encourages developers to work with local police forces in designing new residential developments which reduce the opportunities for crime.
- 2.9.2 It is important to design outside space, particularly in residential development, that has no potential hiding spaces. While it will be important to design for a permeable network of footpaths and cycleways, the design equally needs to minimise the potential for escape routes. The priority should be to understand the local context, and to achieve a balance between security and other issues. For example, the provision of culs-de-sac may be appropriate to the character of a particular area and inappropriate elsewhere. The concept of “quarters” for large residential developments can increase community feeling. “Territoriality” can be fostered through the demarcation of space by symbolic barriers – changes of level and spaces set back from the public realm, for example. Communal space should not fall into the category of having no recognisable function; an area that is neither a square nor a through route will become neglected and a potential crime risk. At the same time, high densities and mixed uses are likely to contribute to higher levels of usage of the public area at different times of the day, which should assist in crime prevention.
- 2.9.3 Much can be achieved through careful design, the provision of good lighting, walkways, fixtures, fittings and materials, landscaping and boundary treatments to reduce the likelihood of vandalism and reduce the risks of personal attack.

DD13 Security

Proposals for new development will only be permitted which incorporate the following measures to protect the security of people and property:

- 1. well used or overlooked streets and spaces which allow for natural surveillance, especially play areas and communal space;**
- 2. a design that provides a clear definition of ownership and responsibility for each part of the development; and**
- 3. clear and direct routes through an area for all forms of movement.**

Such measures should maximise natural surveillance wherever possible and be acceptable in design, conservation and transport terms.

2.10 Public Art

- 2.10.1 Public art is any art sited within the public realm. It includes hard and soft landscape, street furniture and lighting, as well as statues, abstract sculpture and murals. It should not be considered as additive or decorative, but rather as an influence on, and input to, the whole of the design process.
- 2.10.2 It can focus attention on the historical and social context of an area and encourage developers to create public environments of quality and character. It can provide fresh, alternative ideas for the treatment of spaces and buildings both within and surrounding a development. Above all, incorporating public art in a development scheme at an early

stage can help to raise the design quality, add value and determine the form and layout and its relationship to its setting.

2.10.2a Public art can form an integral part of the space (for example a landmark or sculpture) and as part of the buildings that surround the space. It can also provide opportunities for local artists and the community to participate in the design process.

2.10.2b The “Percent for Art” concept, developed by the Arts Council, encourages developers to set aside a proportion of their project’s capital budget (usually 1%) to commission work by artists and crafts people, as part of the development. Examples of such work might include the design and production of metal work, stonework, brick detailing and patterning, signage, stained glass, tiling and paving, or could involve the inclusion of textiles, murals, photographs or sculpture. Funds might also be used to employ an artist as an integral member of the project design team.

2.10.3 The aim of the policy is to ensure that opportunities are not missed in enhancing the physical environment and adding to the cultural network on the key development sites within the Borough. While provision of public art will be encouraged on all sites it will be a requirement on sites of more than 2 hectares.

DD14 Public Art

Development proposals on all development sites of more than 2 hectares will only be permitted where they incorporate an element of public art. The Council will seek to ensure the value of public art comprising a percentage of the capital costs associated with the development.