Appendices
Case Studies
The Kent Habitat Survey is a comprehensive study of the countryside and coast of Kent and Medway. The survey provides up to date information on the extent and quality of semi-natural habitats. Where possible, changes to this resource between 1995 and 2003 have also been identified. These results will help guide current and future activities and inform plans to conserve and enhance Kent’s wildlife.

**METHODOLOGY**

The Survey involved interpreting aerial photographs of the county with selected field surveys of key habitats including UK Biodiversity Action Plan (BAP) Priority Habitats. Habitats were classified using the Integrated Habitat System (IHS).

Further information may be obtained from:

Biodiversity and Habitats,
Environment & Economy,
Strategic Planning,
County Hall,
Maidstone
Kent ME14 1XX
tel: 01622 221538
web: www.kent.gov.uk/biodiversity
email: biodiversity@kent.gov.uk

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Green spaces and links

**GREEN GRID KENT THAMESIDE**

A scheme to provide a network of green links and open spaces across the northern parts of Dartford and Gravesham, including the riverside areas.

It will connect existing neighbourhoods with new development areas where residents will live and work, providing access to both new and existing open spaces.

It includes improvements to existing streets and open spaces providing an open space strategy for the whole of the area.

“Green Grid” is one of the key components for creating a new sense of place for the growth area.

The scheme depends on public and private sector funding, including developer contributions.

Part of the grid has been delivered around key development sites including Bluewater regional shopping centre and Ingress Park.
Public Realm – a sense of place
KINGS HILL CENTRE – LIBERTY SQUARE
ARCHITECTS: Lee Evans Partnership, a collaborative venture between Rouse Kent Limited and KCC

The challenge for the designers was to create a vibrant new heart for the Kings Hill residential and business communities. The architects set out to create a place which reflected the character of a small traditional Kent town centre in a contemporary way, with a locally distinct urban fabric. The architects developed the masterplan prepared by Clague (working with architects Kilgour and Skinner), and then went on to implement the detailed design.

The architectural vocabulary of Liberty Square has emerged from a study of Kentish vernacular with echoes of Tenterden, West Malling and Faversham and other traditional village locations, but with the architecture interpreted in a contemporary way. A mix of local materials has been used, including timber, ragstone, weatherboarding, plain tiles and brick. The streetscape has a human scale. Pedestrian green routes and cycleways lead from the surrounding business park and residential areas. It has a mix of restaurants, shops and medical facilities and was designed to encourage a ‘café society’. A sculpture by the artist Rick Kirby forms a striking focal point.

Mixed Use and Urban Renewal – Respecting Context
HORSEBRIDGE AND BROWNINGS YARD
ARCHITECT: Clague Architects
DEVELOPER: West Beach Homes Ltd (a subsidiary of Banbury Estates)

This project, the subject of a design competition, is located in the centre of Whitstable, close to the beach on a site that previously comprised a former 19th Century slipper bath, a car park, a bus depot and an old community building alongside redundant buildings of a poor condition. The resulting contemporary scheme fits well within the Whitstable context, capturing the unique atmosphere of the town with its winding alleys and timber boarded houses.

Phase I of the development was a Kent Design Award winner in 2004. It included the Horsebridge Centre - a public art gallery and performing arts space and housing. Phase 2 opened in 2005 and has received a Kent Design Award for this year. The new buildings are grouped around a small, newly-created town square complete with a circular freestanding bandstand and new public toilets, five retail shops and a restaurant. The overall scheme now includes 17 apartment units and 17 houses. The square provides a setting for other existing buildings, notably Pearson’s Crab & Oyster House, The Oyster Fishery and the Prince Albert public house. The internal community space is owned by Canterbury City Council, as is the public square. Around 25 jobs have been created as well as thirty-four new homes.

The success of the scheme reflects the architects deep understanding of the local context and morphology and an ability to translate this into a contemporary Kentish style.

Phase II has been given a 2005 Kent Design Award.
A development in context
ST DUNSTANS GATE CANTERBURY
ARCHITECTS: CLAGUE, CANTERBURY

Traditional street layout with houses giving access directly onto pavement. The layout was designed to reflect the fine grain of the surrounding city townscape. The road layout was then designed to complement this, inobtrusive speed reduction being a key objective. Although through traffic has been eliminated the tight bends, short road lengths between junctions and buildings closely defining the street give a clear signal to drivers to slow down. This has been achieved without the use of measures such as road humps.

Iconic building, culture led regeneration and contribution to a sense of place
TURNER CONTEMPORARY

Turner Contemporary is a proposal for a new gallery in Margate. It is one of the most exciting building projects in the UK, not only for the design and construction of a building, but for the process leading up to its opening in 2008.

This memorable building will have landmark status. It is located on the stone pier in Margate, highly visible from all over the town. It will have two elements: 3 floors of galleries housed in the sail-like form on the seaward side; and the cafe, restaurant, shop and administrative block on the pier. The two separate buildings will be linked by a wide glass bridge.

A Norwegian and British team, Snøhetta + Spence, developed the design for Turner Contemporary following an international architectural competition. Lord Rogers described the design as ‘an exceptional piece of architecture.’

The project is more than an inspiring building. It is the aim of Turner Contemporary to stimulate and promote understanding and enjoyment of contemporary art. Working alongside the development of the winning design has been a team of project staff commissioning new work from artists and having an influence on education.

Further information: Turner Contemporary 17-18 The Parade Margate Kent CT9 1EY England www.turnercontemporary.org/contact/
Innovative Housing reflecting Kent’s Vernacular

LACUNA, WEST MALLING
DEVELOPERS: Sunley Estates plc, Environ Country Homes
ARCHITECTS: Clague, Canterbury, Kent
LOCAL PLANNING AUTHORITY: Tonbridge and West Malling District Council

Formerly a Battle of Britain airfield, Kings Hill (263 ha) is being developed as a new settlement near West Malling by Rouse Kent. The mix of uses includes a business park and housing alongside retail, educational, recreational and community facilities.

Lacuna sits at the heart of Kings Hill. Both the overall layout and the individual housing designs are imaginative. The far-sighted brief from the developers was to create a mixed variety of house types and elevational treatments while respecting local architectural context and detailing. Lacuna offers modern design, using traditional building materials and Kentish vernacular forms and styles. The homes are constructed of eco-friendly timber frames and meet the ‘Super E’ home standard (adopted by the Canadian government). The layout of the houses has been designed to create safe streets, with the emphasis on pedestrian circulation and cycleways.

This innovative design approach was supported by planning officers from Tonbridge & Malling Council, who took a flexible attitude to existing planning standards for residential areas. The result has been a radically new approach to the treatment of streetscape, well removed from pastiche but acknowledging the Kent vernacular tradition.

Increasing safety and security

NORTHVIEW ESTATE, SWANLEY
ARCHITECTS: Fry Drew Knight Creamer

Northview Estate was built in the mid 1970s. Blocks of 3 storey walk up flats stood in a bleak open desert of tarmac and worn grass. Extensive consultations with the residents and Kent Police lead to proposals for improvements. The estate is now subdivided into new neighbourhoods with colour and name themes and provides controlled access to the flats with improved stairs and balconies. Segregated secure parking areas, private and small scaled communal gardens and play areas sit amidst extensive landscape planting. On completion, the improvements showed an up to 60% reduction in recorded crime and a significant improvement in the wellbeing of residents.

Subsequent studies and crime statistics have confirmed that this has been sustained. The estate was chosen as a case study of good practice in “Safer Places. The Planning System and Crime Prevention” published in 2004 by the ODPM.
Homezone - Safer streets

**DENTON GRAVESEND**

*Gravesham Borough Council with Kent County Council*

Following a successful bid to the Home Zones Challenge Fund, three home zones on a 1940’s council estate in Denton were proposed - Rose Avenue, Shamrock Road and Thistle Road. These streets were selected because Denton had already benefited from urban regeneration funding and met the necessary physical criteria, being wide with low traffic volumes and plenty of space. This enabled shared space to be created with clever car parking schemes to slow traffic and individual features.

Rose Avenue was completed first due to a high level of local support and consensus. The project was used to show other streets what could be accomplished. It has been successful in highway terms and informal feedback from residents has been very positive. The project has brought about a community spirit and shared sense of achievement that did not exist before.

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Innovative new public transport system in North Kent encouraging higher density mixed use development along its length

**FASTRACK**

Fastrack is the first step in a comprehensive, integrated transport system linking key development sites in the Kent Thameside area of Dartford and Gravesend.

The concept for Fastrack is to encourage development within the Kent Thameside area to be less reliant on private vehicles. It makes possible higher density mixed use development clustered around the new fastrack network making it easier to move about without a car.

The new high quality bus service will link the two town centres of Gravesend and Dartford, passing through a number of key housing and employment sites within the area. Running part of the route on dedicated track, the first phase between Dartford Town Centre and Greenhithe will be complete early in 2006. By 2020 it is hoped that 35 kilometres of network will be in operation.

Subsequent phases of construction will take the network on to Bluewater Regional Shopping Centre and Gravesend town centre where regeneration plans for the town are to provide a major new transport interchange around the existing station. It will link in to other public transport initiatives in the area including the international passenger station at Ebbsfleet, opening in 2007.

Much of the wider Fastrack network will be provided by the private sector as development of major sites within Kent Thameside proceeds. Use of a bus instead of a fixed tram network allows the scheme flexibility to adapt as opportunities to extend the route emerge.

Further information: [www.kent.gov.uk/transport-and-streets](http://www.kent.gov.uk/transport-and-streets)
Energy efficient home
THE BOUNDARY HOUSE, TUNBRIDGE WELLS
ARCHITECT AND OWNER: Michael Winter

Architect Michael Winter’s house, in a woodland setting in Tunbridge Wells, sets new standards of self-sufficiency. The roof, walls and floor are so well insulated with cellulose fibre made from recycled materials that there is no need for a central heating system. A wood burning stove and heat gain through the triple glazing are sufficient to heat the whole house even on the coldest day in winter. The annual bill for gas is about £10. Rainwater for domestic re-use is stored in an underground tank – the annual bill for water supply is around £10 for the drinking water supply. Hot water is supplied by solar panels installed on the roof. These provide around one third of the heating needs with an electric immersion as backup.

In selecting materials for the house, the designer considered the environmental impact of materials used, including the embodied energy (the energy used in the production of the material) as well as the scarcity of natural resources used in production. The structure and cladding are in wood, with salvaged timber flooring used throughout the house.

Although located on a heavily-wooded site only three trees were felled to make way for the building. The foundations are not conventional – the house rests on concrete pads which have been placed between tree roots. The whole building rests lightly on the soil and the potential for damage to tree roots is minimised.

Renewable Energy - Policy
INTEGRATING RENEWABLE ENERGY INTO NEW DEVELOPMENTS

This toolkit offers advice on which renewable technologies are suitable to London including aesthetic issues, risks and reliability. It gives an insight into the cost benefit analysis of installing renewables, and provides on successful case studies and suggestions on how problems can be overcome. It offers in-depth calculations for use by consultants to help determine the most appropriate renewables for individual schemes.

The work was funded by the Department of Trade and Industry and the London Development Agency with support from Creative Environmental Networks amongst others.
Designing for Ecology

ECOLOGY PARK GREENWICH MILLENNIUM VILLAGE
ARCHITECTS: DESIGN FORUM

Client: Greenwich Millennium Village Ltd
(a joint venture between Taylor Woodrow Developments Ltd and Countryside Properties plc, in association with English Partnerships)
Planning Authority: London Borough of Greenwich

An ecology park has been created that provides not only essential habitats for birds and invertibrates but a natural, green backdrop to high density urban housing.

The masterplan for the Greenwich Millennium Village set out to allocate nearly 15% (20 ha) of land for public open spaces. Three parks and a riverside walkway have been laid out early in the development of the site. These are linked by a network of footpaths and cycleways.

The Ecology Park contains open freshwater, marshland, meadow and woodland habitats. The park has proved to be a popular asset to the development with 54% of people identifying it as a key reason for moving there. The park is managed by the Trust for Urban Ecology (TRUE) on behalf of English Partnerships.

Sustainable Construction

ROMNEY MARSH VISITOR CENTRE
ARCHITECTS: Baker-Brown McKay Owner: Shepway District Council

Straw bale construction has been used for this new visitor centre at Romney Warren, near Hythe – a Site of Special Scientific Interest. This structure houses an exhibition about the origins and current attractions of Romney Marsh.

A number of unique design challenges have been resolved by the designers, particularly the straw bale construction that had not been fully tried and tested before. The construction had to be simple so that it could be built by relatively unskilled people. Locally sourced aggregates are used in the gabions and floor slab, with coppiced chestnut and the straw bales supplied from the Kent Weald and local farms respectively. Use of these materials helped to reduce energy consumption in delivery and fabrication.

A prefabricated cabin provides toilet facilities and there is a stand alone sewage treatment system with vertical and overland flow reed beds.
A sustainable venue designed for living, learning and working.

THE PINES CALYX, ST MARGARETS BAY, DOVER

The Pines Calyx is a 370m conference and events venue built within six acres of organically managed gardens and parkland, immediately adjacent to the White Cliffs of Dover. The design team were tasked with providing a structure that would be sensitive to the existing landscape and built with local materials wherever possible.

Using a ‘whole systems’ approach to the design the following, key attributes of the building are:

- A healthy interior environment – an optimum learning environment
- A visually interesting design, complementing the natural setting
- A practical demonstration project on sustainable construction blending centuries’ old methods and latest technologies
- Embodied Energy and waste material generated in the construction process is a fraction of that from conventional methods due to predominant use of on-site and local materials for construction
- Flexibility in design for different uses and future changes in energy management
- Annual Energy Consumption at 10-15% of conventional (initial energy consumption est. @ 35KWh/m² p.a. from both non fossil & fossil sources)
- Zero (fossil) energy and CO2 emissions over lifetime of building
- Very low maintenance costs and economical build costs

The building has an earth-bermed/earth sheltered construction, cut into the natural shape of the ground. South facing windows provide passive solar heating and the heat gained will be absorbed by the thermal mass of the building to virtually negate the need for artificial heating. Rammed chalk, using chalk from the site itself, is used for most of the walls, avoiding the need for unsustainable concrete structures.

This project is being managed and co-ordinated by a predominantly Kent based design and build team but universities from the UK, Europe, USA and Africa are providing support on a number of sustainable building methods and technologies.

The project is part of an ongoing programme of environmental initiatives in the vicinity by the St Margaret’s Bay Trust.

Further Details
Project Information: www.pinescalyx.co.uk
Project Owners and Co-ordinators: www.baytrust.org.uk
Project Facilitators and Concept Developers: www.helionix.com
Contacts: Alistair Gould alistair@baytrust.org.uk
Olivia Clark olivia@baytrust.org, 01304 851737
Renewable Technologies – Use in Existing Buildings

KENWARD TRUST (Rehabilitation Charity), YALDING, KENT
Consulting Engineers: Troup Bywaters & Anders, Energy + Environmental Solutions

Kenward Trust has been working with its consulting engineers to investigate incorporating renewable technologies into the Kenward House building. The Trust was about to undertake refurbishment works, including an extension to Kenward House, providing additional accommodation. The project has realised the opportunity to incorporate various renewable and sustainable technologies to minimise both the existing farm house and new extension energy costs and associated environmental emissions.

It is believed that Kenward house could achieve “Zero Energy Consumption” and “Zero Emission” at different times over the summer and winter seasons. More importantly, the implementation of renewable technologies has given a flexible approach to the energy management for the site, with reduced running costs. Features include:

• Rainwater harvesting
• External photovoltaic cells
• Active solar heating
• Wood pallet and oil fired CHP

All options considered require significant capital expenditure and have, wherever possible, been offset by incentive programmes funded by the various Government organisations which can provide up to 65% funding for the capital cost and reduce the initial expenditure and pay-back period. Once payback has been achieved on the technology, ongoing savings will be achieved throughout the life of the equipment.

To demonstrate renewable energy in practice, the Kenward House Charity proposes to offer site visits and training seminars on its experiences with introducing renewable energy.

Sustainable and innovative housing
INTEGER (‘INTELLIGENT GREEN’) HOUSING

Integer homes are designed to minimise the consumption of natural resources and energy from the construction process and pass these benefits on to the occupiers. The partnership of housing associations and like-minded construction professionals and suppliers has built a number of new homes across the country which are exemplars of sustainable construction and low energy consumption. Often such projects depend on the speculative research of partner organisations. Many of the Integer houses have been built without having a budget; the bulk of materials being donated the projects.

Find out more about the Integer initiative at www.integerproject.co.uk
Defining the wider picture

GREATER ASHFORD DEVELOPMENT FRAMEWORK

Ashford is one of four of the government’s growth areas in the south east, targeted for 30,000 new homes and 29,000 jobs over the next 30 years. Ashford benefits from an existing international high-speed rail terminal with domestic services planned as part of the growth.

New development at Ashford is planned as a series of urban villages close to a revitalised town centre with traffic calming, a civic square and a learning campus. Greenery and water are central themes creating a vision of city-style living within a calm setting of lakes, canals and parkland.

Urban Initiatives was commissioned to oversee the production of the development framework which will set out a long term framework to deliver growth.

Engaging the community in master planning

ENQUIRY BY DESIGN

Enquiry by Design establishes principles for development of a site at an early stage in the process through collaborative design workshops that involve all stakeholders with an interest in the site. It was devised as a technique by The Princes Foundation in partnership with the Campaign for the Protection of Rural England. The objective is to raise design quality and sustainability of major new developments; promoting mixed use, walkable developments and ‘Placemaking’. Participants include planners, engineers, local Members, developers, representatives from local interest groups and the local community. A professional facilitator provides a creative input and challenges participants.

Ashford Borough Council is committed to applying collaborative design-led approach based on Enquiry by Design for all major sites across Ashford, and has worked with a range of different developers. Starting a dialogue early has helped address potential conflicts and difficult issues, raised aspirations for design quality and encouraged a collaborative rather than adversarial approach to development.
Helping mend the urban fabric

**LORD STREET AND PARROCK STREET MASTERPLAN, GRAVESEND**

This is an example of a local authority led masterplan. Gravesham Borough Council’s bold aspirations for regeneration have resulted in a highly praised plan for the Lord Street and Parrock Street area of Gravesend.

The masterplan is recognised as an example of best practice by CABE and as a demonstration of commitment to quality design by a forward thinking local authority. A consultant team led by Penoyre and Prasad designed the proposals with the close involvement of the community. The scheme comprises high density housing and car parking on the site of two public car parks. It brings together the historic town centre and a nearby public housing estate, repairing the urban fabric.

Improving the planning process

**MAKING YOUR PLANNING APPLICATION**

Maidstone Borough Council recently produced a leaflet “Grand Designs – Talk to Us About Your Plans for Maidstone”. It underlines the need for applicants to talk to the local planning authority before a planning application is submitted.

The leaflet sets out the level of information applicants should provide for pre-application discussions, along with a list of policy documents to be aware of. It lists questions for discussion so that the authority can understand the impact of the proposal, including constraints such as listed buildings and existing landscape features; noise and air quality; flooding and economic prosperity.

The document puts an emphasis on the need to consider the design issues, including:

- Ensuring that the proposals meet the Kent Design standards
- Landscape and views
- Understanding of the context and character of the area
- Loss of any facilities, space or features
- Consideration of neighbouring properties – windows, private areas, light etc.

The booklet gives developers clear guidance on how to put together a well thought through application and the importance of discussing proposals as they evolve. This is likely to speed up the application process once submitted.

For further information contact
Maidstone Borough Council,
Development Control
01622 602000
Iwade, a small village to the north west of Sittingbourne, was identified for significant development in the Swale Borough Council Local Plan (2000). A masterplan for around 1,200 dwellings centred around the existing village was prepared by the developers. Given that the development would be phased over a number of years with increasingly progressive and innovative approaches to design anticipated, the expansion created an excellent opportunity to monitor the success of the homes post-occupancy. The project became a Kent Design beacon scheme, supported by developers Hillreed Homes and Ward Homes in partnership with Swale Borough Council and the Kent Design Initiative.

The monitoring, which took place over 5 years, tested the satisfaction of homeowners; the approach to environmental sustainability; use of local facilities and transport patterns. The results of the research could then be tested against assumptions made at the design stage. It identified that occupants were generally very happy with their homes and the wider village environment, but raised some problematic issues such as parking. It suggested that people were interested in environmental issues and would take this into account when selecting a house. The work will be valuable in informing other new development across Kent. The final report is expected in 2006.
Glossary

Some terms and concepts used in this Guide explained.
Adverse Environmental Impacts of Development

Sometimes, existing features of value may be at risk. Where this is unavoidable, proposals should identify mitigation measures to compensate for lost habitats and landscape features. These might include:

• planting to screen or enhance the appearance of a development
• creating new habitats or open spaces to encourage wildlife
• enhancement of retained features
• landscaped footpaths to improve opportunities for walking and cycling
• noise attenuation measures
• links between existing or proposed green spaces, including access for the less mobile.

Mitigation and compensation measures should themselves be assessed to ensure they do not cause adverse impacts. Opportunities should be taken to enhance the existing and planned environment by the creation, restoration and enhancement of habitats. Appropriate surveys together with character appraisals should help identify suitable mitigation measures.

Archaeological Remains

A development layout can be influenced by more than surface issues. It is important to assess and evaluate the archaeological potential of a site at an early stage since this may dictate a required form of design avoiding disturbance of important remains. Scheduled and unscheduled archaeological remains and areas of potential can be identified by the County Archaeologist. Early discussion can avoid delay and expense later. A desk study, field evaluation, and excavation and recording of remains may be necessary. Archaeological remains are a material planning consideration, and planning authorities may refuse planning permission where a proposal does not accommodate them. Where development is allowed, the principal aim will be to preserve archaeological deposits in situ.

Architecture in Kent - vernacular materials

Before the advent of cheap transport the need to use readily available materials meant that timber construction characterised Kent’s buildings. By the Tudor period the use of brick became more widespread. In the 15th and 16th centuries buff-coloured and red brick were mainly used but the richness and quality of Kent clays later produced diversity from red-brown to the blush Wealden bricks, with paler colours in the east and, in North Kent, the strong influence of Gault clay.

As with brickwork the colour of clay tiles varies across the county. The use of slate roofs above yellow brickwork is traditional in north Kent and in the towns with a significant railway heritage. Mathematical tiles were sometimes used for wall cladding, as in Faversham and Canterbury. Other popular local materials include sandstone, flint and chalk from the North Downs, and ragstone.

Even after the advent of brickwork as the most common form of walling, timber continued to be used for roof shingles, church spires and weatherboarding (coated in tar, unpainted or painted white or cream). Hung tile and rendered walls were sheltered by thatched, tiled or slated roofs. In inland Kent the vernacular thatching material was long straw. Many of these materials and styles co-exist in the same village or even in the same building, and contribute greatly to local character.

Area Action Plan

Document used to provide the planning framework for areas where significant change or conservation is needed. A key feature will be the focus on implementation.

Area Appraisal

A document that assesses the land uses, the built and natural environment and other characteristics. A character appraisal will fulfil a similar role, but may be in more detail. Both will define the context of a place. Character Appraisals were originally introduced by English Heritage for areas, particularly conservation areas, with a distinct character and quality through urban design analysis so that such areas could be protected and enhanced by planning policy or intervention.

Areas of Outstanding Natural Beauty

Areas of Outstanding Natural Beauty (AONBs) are designated by Government under the National Parks and Access to the Countryside Act 1949, solely on account of their natural beauty and with the aim of conserving and enhancing it. The criteria for designation of AONBs are:

• Quality of landscape, natural beauty, unspoilt or special quality of national significance;
• Extent and continuity;
• Unusual or unique characteristics.

Designation demands that planning policies and decisions should focus on the conservation and enhancement of the landscape.
Two parts of the county have been designated as AONBs. These are Kent Downs and High Weald. Contact your local planning authority if you are in any doubt as to whether a site falls within one of these areas as specific policies apply.

Specific design guidelines have been produced to cover the Kent Downs AONB and these have been adopted by some local authorities and can be a material planning consideration. For further information refer to Kent Downs Area of Outstanding Natural Beauty Landscape Design Handbook (Jan 2005). Visit www.kentdowns.org.uk/landscapehandbook.html to order a copy.

**Biodiversity Action Plans**
Biodiversity Action Plans provide a planning framework together with appropriate delivery mechanisms for achieving national and local targets in the protection of habitats and species. The use of Kent’s Biodiversity Action Plan can assist in identifying habitats and species of importance and the appropriate action to help ensure their long term survival.

**BREEAM**
‘BREEAM’ is the Building Research Establishment’s benchmark Environmental Assessment Method. ‘BREEAM’ is one of many methods of measuring environmental performance. The new homes equivalent is ‘EcoHomes’. The assessment can be used in support of planning applications. The reward to developers is a certificate and report that give marketing advantages by demonstrating that the development will be energy-efficient and have lower running costs. BREEAM goes beyond basic Building Regulation requirements to encourage best practice in building location, transport issues, ecology, health and building design. New homes should be built to at least ‘very good’ standard, with an ‘excellent’ standard to be achieved by 2010.

**CABE**
The Commission for Architecture and the Built Environment. A non-departmental public organisation set up by government in 1999. Through public campaigns and support to professionals, CABE encourages the development of well-designed homes, open spaces, schools, hospitals and other public buildings. CABE produces a wide range of advisory documents that should be in any planning authority’s, designer’s, consultant’s or developer’s library.

**Community Involvement by Groups and Individuals**
The public and their representatives have an important role to play at key stages in the development of projects and in the preparation of Local Plans, Conservation Area Appraisals, Development Briefs and Village Design Statements. Participation should be encouraged as a scheme develops. It is important to identify and involve those groups and individuals affected by a proposed development in order to increase the understanding of development ideas and local priorities. Community involvement in the design process can ensure that designers are fully aware of the local context and of local priorities and concerns. There are many advantages to be gained by involving the community at an early stage in the design process.

**Conservation Areas**
Conservation areas are areas designated by the local authority as having special architectural or historic interest that makes a significant contribution to local character. The local authority will seek to preserve or enhance the character and appearance of conservation areas, not just restricted to building developments but to forms of enclosure, landscape, paving, signs and street furniture. There is a need to assess what characteristics make an area special - any available local authority Conservation Area character appraisals or management plans should be referred to, together with any detailed Supplementary Planning Documents. If these are not available a character assessment should be carried out as part of the site appraisal to aid the design process. (Advice is available in PPG15 and English Heritage’s leaflet on development in historic areas). Conservation Areas, Listed Buildings and their settings, and Scheduled Ancient Monuments make an important contribution to local character and are protected by law. Whilst there are many examples of historic buildings that have been adapted or converted to new use, consent is normally required for works affecting Conservation Areas, Listed Buildings and Scheduled Ancient Monuments. They are protected by law.

Note that:
- listed building consent is required for the demolition, alteration or extension of listed buildings
- conservation area consent is required for the demolition or partial demolition of buildings within conservation areas and
- planning permission is required for extensions and some alterations to both listed and unlisted buildings.

Many minor alterations and additions to buildings can be carried out without a specific grant of planning permission as they are deemed to have permission...
using "permitted development" rights, as explained in the booklet "Planning Permission - A Guide to Householders". However, where even minor changes could spoil the character of a conservation area, the local planning authority may make a Direction under Article 4 of the Town and Country Planning (General Permitted Development) Order, 1995 giving control over minor developments. Outline planning applications are normally unacceptable in Conservation Areas. Applications must include illustrations of the proposal in its context so that a proper assessment of the effect on the local scene may be made. Core strategy (of Local Development Framework) Sets out the key elements of the planning framework for the area. It should include a spatial vision and strategic objectives for the area.

**Design champion**
A person responsible for ensuring that a particular organisation - a district authority or county council, for example - promotes high standards of design in the area.

**Design Codes**
A design code is a document, usually with detailed drawings or diagrams, setting out with some precision the design and planning principles that will apply to development in a particular place. It provides guidance on how design and planning principles should be applied. Codes can be both design and technically based, visual and functional, and measurable. They can be used as a set of guides for the designer or as a means of assessing the design. They may be included as part of a development brief, masterplan or area development framework where a degree of prescription is appropriate and cover a group of buildings, a street or a wider area.

Codes and guides can:
- inspire innovative design
- illustrate and describe how principles can be implemented
- help to avoid possible design failings
- provide a basis for consistency
- deliver rewards for compliance (e.g. higher densities at transport nodes, speedier planning process).

CABE suggests that codes can be a three-dimensional masterplan of the development area showing the intended arrangement of spaces and buildings, including massing, orientation, distribution of uses, densities, building lines, spaces, etc. Supporting text explains the plan, provides dimensions where relevant, and addresses detailed issues such as use of materials, landscaping and tenancy mix, depending on the level of prescription required. Codifying design against the unwanted or undesirable is likely to find its way into the statutory planning process in due course since it ensures that thought is given to the achievement of design quality.

**Design Competitions**
Competitions are an excellent way of generating ideas that can lead to outstanding buildings.

Clients, developers and local planning authorities need to be fully committed to the process. They should take professional advice on writing the development brief and organising the competition. These can be arranged in a number of ways, including open competitions and limited entry competitions (from a short list of appropriate design teams/architects). Adequate funding should be allocated for prizes (many competitions provide honoraria for a number of selected designers so that they can produce concepts for judging), with the award of the full design work being the main prize. Care should be taken to advertise the competition in areas according the anticipated value of the building. Some competitions need to be advertised in Europe. Advice can be sought from the Kent Architecture Centre (KAC) and from the RIBA. KAC has experience of setting up competitions, forming judging panels, interviewing designers and acting as a 'critical friend' to designers and clients.

**Design guidance**
A generic term for documents providing guidance on how development can be done in accordance with the planning and design policies of a local authority or other organisation. Guidance often refers to a specific type of development such as shops or household extensions.

**Design Quality Indicators (DQI)**
Supported by CABE and the Office of Government Commerce (OGC), the Construction Industry Council (CIC) has launched DQI Online - www.dqi.org.uk - which can be used at all stages of the construction process to evaluate design quality. DQI Online is straightforward to use and provides instant results in a graphical form. The long term aim of the project is to influence best practice by harvesting data from accumulated DQI returns.
Design panel (or Design advisory panel)
A panel of design professionals (architects, planners, urban designers and landscape architects are included) that is available to local authorities, developers and others on the design merits of schemes before they reach the formal planning application stage.

Design Statement by Planning Applicant
Design Statements are useful in explaining development proposals to the Local Planning Authority, taking them through the thought processes that have led to a design. They allow the planning authority to give an initial response to the key issues raised. Appropriately skilled professionals should be employed by the applicant to prepare development schemes and the associated Statement. The cost and time involved will be more than offset by reducing the time taken in the determination of an application. The Statement should demonstrate that proposals take account of the content of Local Plans and Supplementary Planning Documents, and show how the scheme relates to the site’s character and its wider context.

The degree of detail in a Design Statement depends on the type and size of the proposal. It is important that the Statement outlines how design principles have been applied.

Government’s PPG1 - General Policy and Principles - states: ‘Applicants for planning permission should, as a minimum, provide a short written statement setting out the design principles adopted as well as illustrative material in plan and elevation.’

A Statement will need to contain:
- a written report with illustrations sufficient to describe the proposal
- details of how access is proposed and where rights of way must be kept
- information on the surrounding area as well as on the site itself
- any conservation area requirements
- information on how the design proposal (built form and open space) has developed from the site appraisal and the application of design principles.

On sensitive sites the statement should include a contextual appraisal showing how the design responds to local distinctiveness, the grain and street pattern, etc.

Development Briefs
A development brief is an illustrated document providing guidance on how a specific site of significant size or sensitivity should be developed in line with the relevant planning and design policies. It will usually contain some indicative, but flexible, vision of future development form. ‘Planning brief’ and ‘design brief’ are terms that are also used. A local authority, landowner or developer can promote the development of a specific site with a development brief defining land use, movement, and infrastructure requirements. Development briefs address design opportunities, ground conditions, existing and new built form, public areas, indicative site layout, and key infrastructure. They can supplement Local Development Framework policies and are particularly useful for large or complex sites which are of strategic importance, or a sensitive character, involve brownfield land, are of mixed use, or in a town centre. A development brief sets out the general parameters of what will be acceptable in a planning application. It will identify:
- key opportunities and constraints
- links with surrounding development
- alternative solutions that meet the design objectives
- scale, massing and height of buildings
- types of use required to ensure financial viability
- guidance on planning and design policies, and any scope for flexibility
- significant concerns raised during initial consultations.

Development Plan Documents (DPDs)
Parts of the Local Development Framework (LDF) which form the development plan - not including for example, supplementary planning documents or the statement of community involvement. DPDs are subject to more rigorous community involvement and inquiry procedures than other parts of the LDF, and as such receive greater weight in the planning process.

Doors and Windows in Alterations
The most common problems arising over building alterations relate to doors and windows. If original, these are a key part of the history of the building and should be repaired and kept whenever possible. Joinery replacement should be custom-built in the original material as exact copies of the original doors or windows. Special care should be taken when providing roof-windows (when permitted). The introduction of small ‘conservation’ roof-lights may be appropriate in certain
locations. Refer to Building Regulations Part L and English Heritage advice on double-glazing and heat loss issues.

Environmental Capital

The Environmental Capital approach defines the character of an area and identifies its environmental benefits and disbenefits together with the projects proposed there. It considers how important each benefit is and to whom and why. In some locations the Environmental Capital may be found to be so valuable and irreplaceable that development should be rejected. Ancient woodland, for example, cannot be recreated except over hundreds of years. Other sites may have attributes that warrant substitution. The approach can inform decisions about the provisions to be made in a development to ensure sustainability and may suggest solutions based on compensatory action and enhancement.

The approach focuses on the way in which natural features and characteristics matter by identifying their attributes and contribution to biodiversity, historical character and recreation. These are evaluated in the local and global context by considering:

- the scale at which the attribute assumes importance
- how important it is at its current scale
- whether enough of the resource can be anticipated in the future
- what if anything could replace or substitute for the attribute.

Environmental Impact Assessments

Environmental Impact Assessment is compulsory for certain categories of development. It involves describing the existing baseline environment, predicting proposed environmental impacts of a development and attempting to eliminate, minimise or mitigate negative effects. Historic environmental issues will need to be identified and addressed. Further information on Environmental Assessments is given in Circular 2/99, Assessment of Environmental Regulation. Historic environment issues will need to be identified and assessed. The Interreg Planarch project provides guidance on how this should be approached. Landscape, physical and ecological surveys should be submitted with development proposals showing clear links between the survey results and the design. Landscape surveys should include information on growing conditions, existing vegetation and trees (including their condition) and those species which are appropriate to the area. Physical surveys should deal with topography, geology, soils, water flows, (catchment areas, position of aquifers, streams and ponds - earth modelling can be used as a solution to reducing excess run-off), water quality (nutrient status, acidic or neutral) and site orientation. Ecological surveys should identify habitats, features and species affected by a development. They should evaluate the importance of the features identified, determine the type, duration and significance of potential effects arising from the development and assess the overall balance of losses and gains, taking any proposed mitigation measures into account.

Extensions

Location and scale of a building and whether or not it is listed will affect the size of any permitted extension. Where a modern building has a relatively formal front and an informal rear, the design of a rear extension may be straightforward. Similarly, the addition of a side extension may in many cases be a simple matter. Extending a well-preserved 18th century house may prove difficult without adversely affecting its architectural integrity.

Small cumulative changes can destroy an area’s special character. It is the precise historical detail of buildings which matters. If inaccurate features are added to buildings then the character will be muddled and the value of the area will decline. The best way to ensure that alterations improve rather than spoil an area's character is to seek expert advice.

Extensions to pitched roof buildings should also have pitched roofs. Flat roofs are unlikely to be acceptable, particularly if two-storey and attached to pitched roofed buildings. Extensions to detached or semi-detached houses should not be of such a size or form that they result in the terracing of an originally well-spaced development. Wide dormers to loft conversions should be avoided; poorly-designed dormers to front elevations or other publicly visible elevations can seriously damage the quality of the streetscape.

In some cases, side extensions, particularly two-storey ones, will have an unexpectedly strong effect on the balance of pairs of houses, or the regularity of buildings in the street scene. This may be so severe as to spoil the character of the wider area as well as the house itself. The spaces between buildings are often as important to the character of an area as the buildings themselves - the loss of such space may itself be unacceptable.

Extensions to a building of historic or architectural interest must be justified and not impair its scale, balance or proportion. A break in the façade between new and old may help the overall effect particularly where the extension is to be symmetrically arranged. Junctions between new and old roofs require particular care. The following principles apply:-
• use of materials of equal quality and sympathetic colour, form and texture is essential
• materials must usually closely match the existing colour, type and texture
• the overall style and design will generally need to match the existing but a modern imaginative interpretation can often be successful.

Local standards and guidance may differ from one local planning authority to another so advice should be sought from the planning officer and conservation officer. Generally the following principles apply:

• extensions must respect a building's form, scale, proportions, materials and detailing
• the use of the same materials and components, proportions and arrangement of elements will generally be necessary
• if imaginatively handled, extensions can be of differing design; if the existing building is of mediocre character, it may even be desirable
• if the original building is of a formal design it may be necessary to separate the extension from the formal facade to avoid upsetting the symmetry
• with informal designs it may be possible to extend facades without damaging character
• extensions should not impinge on the amenity of neighbours by overshadowing adjacent windows and private open spaces.

Care should be taken to ensure that building character is retained. Where radical alteration is needed to make buildings fit for occupation, conversion may prove unsuitable. Most local planning authorities provide guidance on the appropriate re-use of redundant agricultural buildings.

Extensions to barns and other historic agricultural buildings
Many ancillary farmstead buildings in mid-Kent were traditionally built with the expectation of occasional flooding. Rehabilitation of these buildings for modern uses will need to take account of this.

Design elements that should be conserved include:
• form, massing and roof-line
• materials
• openings such as windows and barn doors
• overall simplicity of form and design
• tone and colour of materials
• setting in the landscape (access and parking provision must take this into careful consideration) and the impact of the use of space around the building
• the extent of the residential curtilage.

Flammable Materials
Consideration should be given to fire safety with flammable or toxic construction being materials avoided, and sprinkler systems installed in larger buildings. Any new building or refurbishment provides the opportunity to install mains-powered smoke detection. Installing both smoke detection and domestic sprinklers should be standard practice.

In the case of social housing, care premises, homes in multiple occupation, hostels and private homes where people with disabilities reside, sprinklers offer the most effective method of reducing deaths and serious injuries as a result of fires. Sprinklers permit a greater degree of flexibility when designing properties allowing architects to move away from the prescriptive methods of Building Regulations Approved Document B. Details on water provision for building types are outlined in ‘National Guidance Document on the Provision of Water for Firefighting’.

Flood Risk
With its long coastline, extensive low-lying areas (such as the North Kent marshes and Romney Marsh) and its major river systems, flood risk is an important issue in Kent.

Traditionally the defence against flooding has been to provide 'hard' structures to protect property at risk, but this is non-sustainable and the latest guidance seeks to manage flood risk. With climate change, the probability of flooding is set to increase. Accordingly there must be a focus on reducing the consequences of flooding, best achieved by effective design and planning. Whilst the best way of managing flood risk is to build in areas where the risk is low, historically development has usually been built on low-lying flat land. Indeed most important settlements contain areas at risk to flooding; Ashford, Canterbury, Tonbridge, Maidstone, Medway, Dartford and Gravesend being examples. It is recognised that further development in flood risk locations in urban areas is likely. Even where flood defences are provided it is still important for design to take account of the residual risk of flooding from a breach or over-topping of defences. Consideration should be given to locating less vulnerable forms of development in higher risk areas and to position vulnerable development, such as housing, in low risk areas.
areas. Some development, for example hospitals with accident and emergency provision, should never be positioned in high flood risk areas. Where, exceptionally, vulnerable development is placed in high-risk areas the design should minimise the risk, by, for example, raising living accommodation above predicted flood levels.

**Flood Risk Assessments**

Strategic Flood Risk Assessments will be prepared by Kent’s local planning authorities in collaboration with the Environment Agency. These will give an indication of flood risk within districts and set policies on how flood risk is to be managed. Local planning authorities will apply a sequential test - allocating low risk sites in preference to higher risk locations. The flood risk from tidal and riverine sources is shown on the flood zone maps produced by the Environment Agency and these should be the first points of reference.

A Flood Risk Assessment (FRA) must accompany all planning applications in identified flood risk areas, and all others extending to more than one hectare in any location. The scale and nature of the FRA will depend both on the risk and the development. Again the sequential approach should be adopted with lower vulnerability uses, for instance public open space, situated in the higher risk locations.

**Generic Development Control Policies**

The Local Development Framework should contain a limited suite of policies which set out the criteria against which planning applications for development can be tested and accords with the spatial vision and objectives set out in the core strategy.

**Green Grid**

Forms part of a comprehensive long term plan consisting of many individual projects which, in combination, will implement an improved and co-ordinated landscape structure for future generations.

**Health impact assessment (HIA)**

It is now part of good practice to integrate health and social issues into other forms of impact assessment. HIAs provide a key opportunity to address health issues at the earliest stages of the plan-making process and can be built in to large scale masterplans.

There are six key stages:

**Stage 1 Screening**

Deciding whether to undertake an HIA. It may not be necessary in every case and there may be little identifiable impact on health issues resulting from a development proposal

**Stage 2 Scoping**

Deciding how to undertake a HIA, including who needs to be involved and in what depth the assessment needs to be carried out

**Stage 3 Appraisal**

Identifying and considering a range of evidence for potential impacts on health and equity.

**Stage 4 Developing Recommendations for decision-making**

Based on the best available evidence and consensus discussion, deciding on and prioritising specific recommendations.

**Stage 5 Engagement**

Discussions with decision makers to help reinforce the value of the recommendations and encourage adoption or adaptation.

**Stage 6 Evaluation**

Ongoing monitoring to assess if the adoption (or adaptation) of any specific HIA recommendations did occur and if they had a positive effect on health and equity and, if not, to review and consider the reasons for this and how plans might be further adapted. www.publichealth.nice.org.uk

Milton Keynes has produced a spatial planning checklist to assist in the assessment process. Putting Health Impact Assessment at the centre of the planning process (Produced by Ben Cave Associates).www.mksm.nhs.uk

**Kent Architecture Centre**

Based in north Kent, but operating over the whole of the south east the centre (KAC) is an independent not-for-profit organisation which facilitates quality design and urban regeneration. It works with the community and its decision makers to promote innovation and create a wider understanding of the importance of design and also provides a forum for sharing knowledge. Clients and supporters include Kent’s local authorities, CABE, English Heritage, English Partnerships, and the Arts Council of England. KAC manages the South East Region Design Panel on behalf of SEEDA.
Kent Habitat Survey
The Kent Landscape Information System
SUPPORTED BY: KCC, ENGLISH NATURE

The Kent Landscape Information System (KLIS) is a web-based system holding information on Kent’s landscape and biodiversity that will help take forward planning for biodiversity and identify opportunities for landscape restoration. It can also help farmers and land managers in decision-making and farm planning.

Opportunity maps have been created to locate the best places for habitat creation. These maps reflect the priority habitats found in Kent and have been developed by applying a number of landscape ecology rules such as size, connectivity and landscape character. The site can be found at www.kent.gov.uk/klis.

Landscape and Amenity Space Adoption and Long-term Maintenance
A long-term maintenance strategy for proposed amenity space, landscape and nature conservation areas must be provided for a development proposal. Management plans and identified sources of funding for future management should be described. It is likely to prove beneficial to encourage local stakeholders, such as parish councils and community groups, to contribute to management plans and agree their objectives and the rights and responsibilities of all parties. The arrangements for maintenance should be simple, cost effective and promote sustainable after-care of landscape, habitats and species. They should also promote a sense of ownership amongst residents and stakeholders. Options for management include the parish council, district council, a management company, or a trust. Management proposals should be flexible over time, as the needs of the users change. While tidiness is often equated with maintenance there are schemes which require less intensive maintenance such as meadow grass and naturalised landscape and woodlands.

Landscape and Nature Conservation Policy Context
Policies dealing with landscape and nature conservation designations are defined by national, regional or local plans. Wherever possible, development should avoid areas that have significant value for nature conservation. Development proposals that could materially harm the nature conservation or scientific value of internationally or nationally designated sites will normally be refused. Information on designations should be sought at an early stage to ensure the special characteristics of such areas are given due attention.

The various protecting designations include:
- International - Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar Sites.
- National - Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNRs) and Areas of Outstanding Natural Beauty (AONB).
- Local - Special Landscape Areas (SLA), Sites of Nature Conservation Interest (SNCI), Local Nature Reserves (LNR), Tree Preservation Orders (TPO), Hedgerow Protection Orders (HPO), Protected Species, Regionally Important Geological Sites (RIGS) and Historic Landscapes.

Landscape Character Assessments
The Countryside Agency has produced a Landscape Character Map for England which has been refined for Kent by KCC. It describes landscape patterns as the basis for analysing the condition and sensitivity of the county’s landscapes. District wide assessments are encouraged at a more local level.

Character areas are a combination of physical features of the landscape (landforms, soils etc.), ecological profiles and cultural associations. Landscape Character Assessments analyse the condition and sensitivity of an area and describe characteristic features. Guidance is given on the type of change that may be appropriate to the area; for example, restoration, conservation or improvement. (See also ‘Landscape in Kent’)

Landscape in Kent
It is important to establish the landscape character of a site and its setting, so that it can inform the design and layout of new development. The Landscape Character Assessment of Kent - to be adopted as a Supplementary Planning Document - details 115 different character areas. These vary from flat marshland to undulating chalk downland; from heavy clay weald, to the rolling wooded High Weald in the south; and from the generally open character of the east, to the enclosed wooded character of the south and west. More detailed local Landscape Character Assessments and Landscape Guidelines have been prepared for some local authorities but, where there is no local landscape study, the County study should be referred to (contact Kent County Council, Environment Division).

Landscape design should complement the existing landscape setting and the scale and form of buildings and open spaces. It should protect or conserve sensitive sites and minimise impact during construction. Buildings should be kept within the fold of the landscape to preserve vistas. Consideration should be given
to re-creating or restoring habitats that have been lost or are in poor condition. Landscape design can reinforce or create local identity. There may be opportunities to introduce new water features or woodlands and to create links between existing habitats for wildlife corridors, for example, by joining two woodland areas with a new hedgerow.

**Landscape Plans to Accompany Planning Applications**

According to the type of development proposed and the context of the site, planning applications should be accompanied by a detailed drawing of external works showing contours, proposed levels, areas of new planting and retained existing planting. Species, size of stock and density of planting should be clearly indicated. Areas of land to be adopted by the Local Authority or Highway Authority must be clearly shown. Landscape proposals should demonstrate how the new development fits with its setting. It should take into account the existing site features, conserve or increase biodiversity, provide useable and accessible amenity space, create a clear structure and hierarchy of external spaces, respond to positive views and screen negative views. The proposals should include landform; spatial arrangement; water and planting including trees and shrubs.

Protecting and enhancing existing flora and fauna can lessen the need to replant and establish new landscapes. The suitability of plants and trees chosen for retention or planting is important; native plants are generally most suitable but ornamental species may sometimes be appropriate in new urban developments. Wherever possible seed of local provenance should be used. Planting should be appropriate to local ground conditions and consideration given to long-term growth characteristics and maintenance requirements so ensuring survival and avoiding damage to other features.

It is essential that the landscape and biodiversity proposals are an integral part of the design process so that appropriate mitigation measures can be developed at an early stage and integrated into the design rather than “bolted-on” at the conclusion of the development. When new trees are added as an afterthought, there is invariably insufficient space for a proper scheme of planting.

A full tree survey should be submitted as part of the planning application to show the position, species, girth, height, spread of branches and condition of existing trees. This should be superimposed on a contoured site survey plan to enable essential decisions to be made before sketch plans are prepared. The survey should conform to the guidance provided in BS 5837: 1991 - ‘Trees in Relation to Construction’. A report may be required to confirm that building or engineering operations can be carried out without damage to trees whilst a report by an engineer or building surveyor may be necessary to demonstrate that buildings will not be adversely affected by trees.

**Listed Buildings**

These are an important element in the built heritage giving character and historical continuity to localities. It is necessary to be aware that:

- Listed building consent is needed for alterations, extensions or demolition affecting the character of a building. This may include other structures within the curtilage of the site
- Having listed building consent does not negate the additional need for planning permission or approval under the building regulations
- Carrying out work on listed buildings without listed building consent is an offence
- Unoccupied listed buildings in need of urgent preservation work can be repaired and protected by the Local Planning Authority and the owner recharged with the costs
- Consultation with conservation officers and English Heritage, at an early stage, can provide helpful guidance and advice on a range of issues including possible grant aid.

Poorly preserved listed buildings may be the subject of a Repairs Notice. If the work which the Local Planning Authority specifies as being reasonably necessary for preservation is not carried out, a local authority has powers to compulsorily purchase the building.

With listed buildings the presumption is very firmly for preservation. Only in the most exceptional cases will the granting of consent for demolition be possible. There is a wealth of advice from the government and from local planning authorities on alterations to listed buildings. It is important that expert qualified advice is sought at an early stage, including the advice of the planning authority and its conservation officer. Reference should be made to guidance from English Heritage.

**Local Development Document**

The parts of the development plan that are prepared by the local planning authority (i.e. not part of the regional spatial strategy).
Local Development Framework (LDF)
The document which sets out, in the form of a portfolio, the local development
documents which collectively deliver the spatial planning strategy for the local
planning authority’s area.

Masterplans
The term ‘masterplan’ describes a study of how a site or a series of sites is to be
developed, showing phasing and programming. Masterplans set out in flexible
terms the principles on matters of importance including land use, public facilities
required, transportation and circulation connections, public spaces, routes and
places, phasing and timing. Masterplans should not prescribe the design of
development. They are mainly used for major development projects that are
likely to take place over a long time-scale. Accordingly they need to be flexible.
Masterplans are usually prepared by or on behalf of the site owner or the local
planning authority, and provided there has been public consultation, can become
Supplementary Planning Documents. CABE has produced a handbook on the
commissioning and preparation of Masterplans entitled “Creating Successful
Masterplans - A Guide for Clients”.

The three main elements of a Masterplan, as defined by CABE, are:-

1. Strategic Framework. A statement of aims and objectives for a large area of
land or part of an urban area. It acts as the brief for the spatial masterplan, is
based on data analysis, and incorporates potential implementation processes.

2. Spatial Masterplan. Plans and written material setting out the proposed design
approach and establishing a three-dimensional framework of buildings and
public spaces which:
   • allows understanding of the spaces between buildings
   • shows how streets, squares and open spaces are connected
   • defines heights, massing and bulk of buildings
   • controls the relationship between buildings, public spaces and the network of
     movement patterns
   • determines the distribution of uses
   • allows an understanding of how well a new neighbourhood is to be integrated
     into its context and natural environment
   • defines use of available natural resources.

3. Implementation Plan
   A written strategy including information on costs and phasing as well as
programming for implementation of a Masterplan.

Parish & Town Councils
Parish Councils and Town Councils are experienced in representing the needs and
aspirations of their communities. They also have a deep understanding of their
locality and its history and are statutory consultees at planning application stage.
It can be beneficial to seek their input at an early stage in the design process to
obtain beneficial local knowledge and to avoid difficulties later on.

Permitted Development
Smaller scale, usually residential development which does not require formal
planning permission provided it complies with the criteria set out by the
government. Projects that are deemed to be ‘permitted development’ generally
will need to comply with the requirements of the Building Regulations or part of
them.

Placecheck
A type of urban design audit advocated by professional design body the Urban
Design Alliance. A local collaborative alliance or partnership uses checklists to
investigate how a place could be improved. (http://www.placecheck.info/)

Planning Agreements
At the planning application stage it is likely that the local planning authority will
require a developer to enter into a legal agreement to ensure that necessary
features are provided and that new neighbourhoods can be sustainable. In Kent,
the Local Planning Authorities will be strong in seeking developer contributions
to the costs of community infrastructure through Section106 legal agreements
or whatever ‘tariff’ system may come into being. These agreements may include
transport infrastructure and green travel arrangements; definition of the number,
tenure and size of units; open spaces for amenity recreation and play; shops, pubs,
community and health service facilities; schools; leisure and other such services.
In addition to the principle of provision, phasing of Section106 provisions may be
required.

Planning for RealTM
A participation technique, pioneered by participation agency the Neighbourhood
Initiatives Foundation, that involves residents and other stakeholders making a
model of their area and using it to help them determine priorities for the future.

Planning Policy Statement (PPS)
Guidance on planning issues provided by government - replacing PPGs (Planning
Policy Guidance Notes).
Ponds and Watercourses
The retention of existing ponds and watercourses and the creation of new ones is of value for land drainage, biodiversity and amenity. Public access will often be desirable, but there will be requirements for safety and maintenance. The Drainage Authority, if involved, will have standards that can have a strong impact on design. The piping (culverting) of watercourses should be avoided if possible but if unavoidable the Environment Agency must be consulted as consent may be required. The inclusion of new ponds and watercourses, which are particularly effective as drainage measures, is encouraged.

Pre-Application Discussions
This eases the process and can avoid abortive work. It need not protract the planning application process. Advice is given in the 'Councillors Guide to Urban Design', one of many useful booklets published by CABE. Maidstone Borough Council also produces a useful guide.

Public Rights of Way
(PROW) are highways established in law and should be viewed as a positive benefit to development schemes.

Incorporated into a development PROW can add significantly to the quality of life and to the amenity of the area. Kent has some 4,273 miles (6,876 kms) of public rights of way. They can provide opportunities for leisure and a healthy alternative to the car when undertaking short local journeys.

It is recommended that developers give thought at an early stage to:
  ” How the PROW network is affected by their proposals
  ” How the impact of development on the PROW network can be minimised
  ” And how the network can be enhanced

Renewable Energy
It is particularly important that speculative developers place greater emphasis on the energy use of a building even though they will not be directly responsible for paying future running costs. The building user will have a vested interest in the durability and costs of running the building, and may base the decision to occupy partly on running costs. Where known, the potential occupier should be consulted early in the design process.

The main sources of renewable energy which should be considered are as follows:
  • Active solar systems. Include panels that collect solar energy to provide heat by the passage of water through matt black pipes in a shallow glazed box. This is typically roof-mounted, facing south on buildings in order to maximise exposure to the sun.
  • Photovoltaic (PV) systems. These use solar radiation to stimulate an electric current in photovoltaic (PV) cells. They can be mounted in panels on the exterior of buildings, or integrated into building materials such as cladding, glass and roof tiles. PPG 22, 1994 states that the UK has enough sunlight for viable solar heating. Grouped solar heating systems have the advantage of levelling out demand, as low use at a particular time from one occupier can compensate for the use of another. Solar panels located next to the area they are serving minimise heat loss. Outdoor swimming pools often follow this principle.
  • Wind Energy. A mature technology capable of generating power at prices comparable with that of fossil fuels. It can take the form of a single large wind turbine at the edge of a development or small wind turbines supplying power direct to single users, such as homes, schools and businesses.
  • Biomass Heating. Organic materials including straw, wood, energy crops and industrial waste can be used as a source of heat. A well-proven technology that has widespread applications from a domestic level through to district heating or combined heat and power (CHP) systems. The availability of large volumes of wood chips from Kent from the maintenance of parks, woodlands and roadside vegetation could provide a ready source of fuel. Kenward House, a charitable institution near Yalding, is developing a renewable energy strategy that includes a replacement biomass heating system based on free supplies of damaged wooden pallets as fuel.
  • Heat Pumps. Ground warmth can be collected by circulating water through pipes embedded in the ground under or adjacent to a building. In Kent, soil temperatures only a little way below ground are high enough to allow energy to be abstracted from the ground and condensed, providing usable heat for space heating systems. The greater the depth of the pipes the greater the soil temperature and heat made available.
Shrubs and Low-level Planting
Low-growing closely-knitting hardy shrubs (up to 450-600mm high) can be used on ‘soft’ areas of public spaces in housing developments, such as those carrying statutory services or the adaptable areas resulting from highway sight lines. Such areas of three-dimensional planting can be used to produce variety and reduction of scale in what would otherwise appear as left-over parts of the layout.

Sunlight and Daylight to Dwellings and Gardens
Sunlight and daylight to dwellings should be not less than the minimum laid down in the DoE Publication ‘Sunlight and Daylight: Planning Criteria and Design of Buildings’ (HMSO 1971) as updated, unless there are strong overriding environmental considerations such as the maintenance of existing townscape form. Appropriate levels of sunlight are important to health and wellbeing. For residential uses, health-care buildings, cafes and restaurants, windows facing south, east and west are most desirable. For office, industrial, educational and studio buildings, south facing windows should be avoided or shaded. This is often an issue for flats but sensitive layout design will ensure that at least one main living room can receive a reasonable amount of sunlight. A sensible approach is to try to match internal room layout with window wall orientation so that living rooms and balconies face south or west. However, measures may need to be taken to reduce heat gain and to encourage natural ventilation.

Site-Specific Allocation
Where land is allocated for specific uses (including mixed uses) in one or more development plan document. The identification of sites is founded on a robust and credible assessment of the suitability, availability and accessibility of land for particular uses.

South East Regional Design Panel Advice (SERDP)
Valuable advice on architectural and urban design quality is provided by the South East Regional Design Panel. This can arrange an independent assessment of a proposal on behalf of a developer, site owner or local authority. It provides a neutral forum for debate on schemes. Design Panel involvement at the concept/sketch design stage can assist with the formulation of a Design Statement to ease the planning process. SERDP’s advice is freely available and can be sought via the Kent Architecture Centre - info@kentarchitecture.co.uk - which manages the panel on behalf of SEEDA with support from CABE. The use of the Regional Design Panel is not mandatory and the local planning authority takes the decision as to whether or not planning permission is granted for a proposed development, taking into consideration the Panel’s views.

Statement of Community Involvement
Sets out the standards to be achieved by the local authority in involving the community in the preparation, alteration and continuing review of all development documents and planning applications. These have to be presented as part of the development plan documents under the proposals of the Planning and Compulsory Purchase Bill 2003.

Statement of Design Principles (Design Statement)
To accompany the formal planning application. Covers a number of points. It has the benefits of clarifying the design approach for the particular site for both the designer/developer and for the local planning authority. The statement overall should show that all site constraints have been properly considered, that the local context has been understood and has been respected and demonstrates the rationale of the design. Always required for larger development proposals, but may be useful even for extensions and small developments, depending on sensitivity or special circumstances.

Supplementary Planning Document
Document forming part of the Local Development Framework but which does not form part of the development plan due to lower requirements in community involvement and inspection and, as such, carries less weight.

Sustainability Statements
Sustainability Statements indicate how resource management has been taken into account in the design and implementation of a proposed development. The design should aim to enhance the best of the built and environmental resources of the site and set out the contribution to be made to the reduction in greenhouse gas emissions and attainment of sub-regional targets. Sustainable practices should minimise the use of scarce resources (including water and energy-intensive materials), facilitate recycling and re-use, ensure safe disposal and minimise future maintenance. Sustainability Statements assume a greater importance as the size of the development and/or its likely environmental impact increases but some criteria will be valid for any scale of development. The Government’s document ‘UK Strategy for Sustainable Development’ (1999) is a valuable source of information.

Trees - Services, Buildings and Foundations
Some trees possess characteristics which make them unsuitable for retention close to development so sufficient space should be provided to accommodate their long-term growth, both above ground (to avoid overshadowing) and in their root zone, since failure to do so may lead to pressure to fell later. Where buildings are
proposed close to trees, a tree survey prepared in accordance with the guidelines in BS5837 should accompany the planning application.

Steps should be taken at all stages to protect existing trees and an indication given on the survey of how this will be done during construction. Compaction of the ground must not be allowed over the root spread and the ground below the canopy should not be surfaced with impervious material. If existing hard paving around a tree is removed, it must be replaced immediately with topsoil before surface roots dry out.

Trees do not adapt easily to nearby trench works or alterations in ground conditions so that changes within the spread of the roots should be avoided. In those exceptional cases where such excavation is unavoidable hand digging will be required under strict control to preserve and protect the root system. Detailed guidance is provided in BS 5837: 1991 - “Trees in relation to Construction” and N.H.B.C. Supplementary Practice Notes “Building Near Trees” and “A Quick Way to Find the Right Depth of Foundations on Clay Soils”.

Petroleum products and other chemicals must be kept away from the roots. The best protection is achieved by fencing off an area of ground around the tree equivalent to or greater than the area of crown spread, and preventing intrusion. Damage to foundations from tree root action can be a problem in shrinkable clay soils particularly in the case of oak, ash, elm, poplar and willow. Advice should be sought when building close to these species. The problem is less marked in chalk soils. Sound drains will not normally be disturbed by roots unless very close to a tree. The local planning authority may, in the case of large developments wish to impose conditions or to ask for details of major service runs since their position needs to be taken into account at an early stage. Services and drainage runs should be located so as to:

(a) prevent damage to the root system of any retained tree, including those along highways and in paved areas
(b) avoid areas reserved for new tree planting.

Urban Design Frameworks

Urban Design Frameworks are usually prepared by the site owner or developer and provide a context for more detailed Development Briefs. They may have gained a statutory significance through adoption by the local planning authority. They describe and illustrate how planning and design policies and principles should be implemented in an area of anticipated change (such as urban quarters, transport interchanges, housing estates, areas of special landscape value, conservation areas and villages). They often show phasing of development, perhaps by different developers, where land is in multiple ownership. An Urban Design Framework is characterised by:

- broad design principles to promote, or guide change, in villages, neighbourhoods and districts, town extensions, town centres and conservation areas
- a strategy for implementation and phasing of developments
- the context for detailed development briefs for specific sites
- a framework for development control.

Village Design Statements

An advisory document, usually produced by a village community, showing how development can be done in harmony with the village and its setting. Village Design Statements define features of local character and distinctiveness that deserve to be protected and enhanced by new development. They help ensure that the character of a village or smaller town is fully understood and taken into account in planning decisions. Describe the character of the village and its landscape setting by addressing its distinctiveness and the relationship of the settlement to the surrounding landscape, by drawing up design principles related to distinctive local character, and co-ordinating with existing statutory Local Planning policy. Village Design Statements are particularly effective when they are representative of the views of the village as a whole; and when they involve a wide section of the local community in their production so that they are firmly based on local knowledge, ideas and views. The research used to develop the statements may also provide useful information for developers. Where compatible with the statutory planning system, Village Design Statements may be approved as Supplementary Planning Documents unless there is a conservation area appraisal adopted as SPD.

Vision Statement

The main objectives for the development or redevelopment of an area - to be used as a constant reference point throughout the development of the project.
Site Waste Management Plans
– GUIDANCE FOR CONSTRUCTION CONTRACTORS AND CLIENTS
All those who produce or handle wastes from demolition, earthworks and construction activities have a duty of care for its safe keeping, transport and subsequent recovery or disposal. Failure to comply can result in an unlimited fine. Guidance has been produced for the Dti. This voluntary code of practice sets out 9 steps for a successful site waste management plan:

Step 1 Identify who is responsible for producing the SWMP and ensuring that it is followed
Step 2 Identify the types and quantities of waste that will be produced
Step 3 Identify waste management options
Step 4 Identify waste management sites and contractors
Step 5 Ensure trained in-house and sub-contract staff
Step 6 Plan for efficient materials and waste handling
Step 7 Measure how much waste and the types of waste produced
Step 8 Monitor the implementation of the SWMP
Step 9 Review how the SWMP worked at the end of the project

The document can be obtained from the dti website www.dti.gov.uk

Wildlife and Habitat
Development that could have an adverse impact on a statutorily designated Local Nature Reserve or non-statutory County Wildlife Site will only be considered for approval if the adverse impacts can be adequately compensated for. Meeting the statutory requirements relating to protective species is an obligation upon all developers. It is important to commission a scoping survey at an early stage in the design process, before any site clearance is undertaken. Timing of surveys is critical - detailed surveys may be required for particular species at certain times of the year.
Further reading
SECTION ONE THE VALUE OF GOOD DESIGN

'The Value of Urban Design', CABE, UCL, DETR 2001
'By Design' The companion guide to PPG1, CABE/DETR 2000

Good Design and Policy Framework
‘Sustainable communities: Building for the future’, ODPM 2003
‘County Structure Plan for Kent and Medway’
‘PPS12, Local Development Frameworks’

Getting the process right:

Respecting context and character
‘Building in Context’, English Heritage and CABE
www.cabe.org.uk www.english-heritage.org.uk

Urban Areas
Planning Policy Statement 6 PPS6 ‘Planning for Town Centres’
The Prince’s Foundation 0207 6213 8500. enquiry@princes-foundation.org
‘Vernacular Architecture’, R W Brunskill, Faber & Faber, 2000

General housing
‘Building for life’ standard www.buildingforlife.org
‘Winning Housing Designs – lessons from an Anglo-French housing initiative’, CABE, supported by the Kent Architecture Centre, November 2005, downloadable from www.cabe.org.uk/publications/

General

Safe and Secure Design
‘Design out Crime’, Ian Colquhoun, 2004

Travel Plans
‘Making Travel Plans Work’ Department of Transport, 2002

Disabilities
‘Highways suitable for the mobility impaired’ Kent County Council ‘Reducing Mobility Handicaps’, Institution of Highways and Transportation www.iht.org.uk

Green Space and Health
‘The Value of Public Space’, CABE Space 2004
‘Improving urban parks, play areas and green spaces’, DTLR 2002
Further reading

**General - about sustainability**

www.sustainability-east.com

'Sustainable Renewal of Suburban Areas', Civic Trust and Ove Arup, 1998

'Sustainable Settlements', University of the West of England Bristol

'Sustainable Urban Design – an environmental approach', Randall Thomas and Max Fordham


'Making design policy work – How to deliver good design through your local development framework', CABE 2005

'Designing Lifetime Homes' www.jrf.org.uk/housingandcare/lifetimehomes

'Streets for All', English Heritage, www/english-heritage.org.uk

'Sustainable Urban Extensions – planned through design: The Enquiry by Design Approach', The Prince's Foundation. Details from enquiry@princes-foundation.org

'Energy Systems and Sustainability', Godfrey Boyle, Bob Everett and Janet Ramage editors

Oxford University Press, ISBN 0 19 926179 2

'Renewable Energy', Godfrey Boyle editor

Car Sharing: www.carclubs.org.uk
SECTION TWO  CREATING THE DESIGN

\textit{The Urban Design Compendium} – English Partnerships with The Housing Corporation, 2000. www.englishpartnerships.co.uk or www.rudi.net

K-LIS – Kent Landscape Information System search KLIS on www.kent.gov.uk

\textbf{Kent’s built environment history}

Pevsner’s \textit{Buildings of England} series:


\textbf{Climate Change}


\textbf{Flood Risk}

Website of the Environment Agency: www.environment-agency.gov.uk/subjects/flood

\textbf{Landscape Design}

‘Landscape and Sustainability’, John Benson and Maggie Rowe, 2000

‘Environmental Planning for Site Development – a manual for local planning and design’, Anne Beer and Catherine Higgins, second edition, 2000


‘Beazley’s Design and Detail of the Space Between Buildings’, Elisabeth Beazley, 1990

‘Designing Lifetime Homes’, www.lifetimeways.org.uk

\textbf{Designing in Context}


\textbf{Designing Streets and Spaces}

\textit{Places, Streets and Movement}, DETR

‘Paving the Way’, ODPM/CAE

\textbf{Safe and Secure Design}


‘Design out Crime – creating safe and sustainable communities’, Ian Colquhoun, 2004

\textbf{Noise}

BRE Digests, www.bre.co.uk

‘Acoustics in the Built Environment – advice for the design team’, Duncan Templeton, editor.

\textbf{Sustainable Drainage Systems}


\textbf{Ecology}


‘Working with Wildlife’ CIRIA www.ciria.org.uk

‘Biodiversity Indicators for Construction Projects’, CIRIA

\textbf{Urban Villages}

‘Urban Villages’, Tony Aldous, The Urban Villages Forum


\textbf{Tall Buildings}


A paper for debate, www.glasgowarchitecture.co.uk/tall_buildings.htm

‘Guidance on Tall Buildings – London’, English Heritage and CABE

**Homezone Design**

‘Homezones – A planning and design handbook’, Mike Biddulph, The Joseph Rowntree Foundation

**The spaces between buildings**


**Public Art**


**Street Lighting**

‘A Guide for Crime and Disorder Reduction through Public Lighting Strategy’, Institute of Civil Engineers, 1999

**Building Materials**

‘Material Architecture: Emergent materials for innovative buildings and ecological construction’, John Fernandez

**Adaptable Buildings**

‘Architecture in a Climate of Change: a guide to sustainable design’, Peter F Smith

**Energy Efficiency**


‘Adapting to Climate Change – a checklist for development’, South East Climate Change Partnership, c/o SEEDA, Guildford.

**Sustainable Construction:**


‘Environmental Site Layout Planning’, Littlefair et al, BRE, 2000


‘Waste minimisation and recycling in construction’, CIRIA
PART 3  GETTING THE PROCESS RIGHT

Development Briefs

Design Management

Design Process – Masterplans
‘Creating Successful masterplans – a guide for clients’, CABE, 2004

Design Codes
‘Building Sustainable Communities: The use of design codes’, CABE, 2003

Statement of Design Principles
Design Statement ‘By Design’, ODPM and CABE, 2000

Design Competitions
Refer to Kent Architecture Centre, 01634 401166 www.architecturecentre.org
‘Environmental Planning for Site Development’, E & FN Spon, 1990
Contacts
The Architecture Centre
Historic Dockyard
Chatham
Kent ME4 4TZ
T 01634 401166
F 01634 403302
E info@kentarchitecture.co.uk
www.architecturecentre.org

British Urban Regeneration Association
63 – 66 Hatton Garden
London EC1N 8LE
T 0800 018 1260
F 020 7359 9614
E info@bura.org.uk
www.bura.org.uk

Civic Trust
Essex Hall
1 – 6 Essex Street
London WC2R 3HU
T 020 7359 7900
F 020 7539 7901
E info@civictrust.org.uk
www.civictrust.org.uk

Commission for Architecture & the Built Environment (CABE)
1 Kemble Street
London WC2B 4AN
T 020 7070 6700
F 020 7070 6777
E enquires@cabe.org.uk
www.cabe.org.uk

Creative Environmental Networks (CEN)
Kent Energy Centre
3rd Floor International House
Dover Place
Ashford
Kent TN23 1HU
T 01233 646783
F 01233 646966
E enquiries@cen.org.uk
www.kentenergycentre.org.uk

English Heritage
South East Region
Eastgate Court
195 – 205 High Street
Guildford
Surrey GU1 3EH
T 01483 252000
F 01483 252001

English Partnerships
Central Business Exchange II
414 – 428 Midsummer Boulevard
Central Milton Keynes MK9 2EA
T 01908 692692
F 01908 691333

Environment Agency
Orchard House
Endeavour Park
London Road
Addington
West Malling
Kent ME19 5SH
T 0870 505505
F 0870 505505
E enquiries@environment-agency.gov.uk

Institution of Civil Engineers
1 Great George Street
London SW1P 3AA
T 020 7222 7277
E engineering@ice.org.uk
www.ice.org.uk

Kent Design Initiative
c/o Regeneration & Economy
Kent County Council
Invicta House
County Hall
 Maidstone
Kent ME14 1XX
T 01622 696875
F 01622 676768
www.kent.gov.uk (search Kent Design guide)

Kent Wildlife Trust
Tyland Barn
Sandling
Maidstone
Kent ME14 3BD
T 01622 662012
E info@kentwildlife.org.uk

Landscape Institute
6 – 8 Barnard Mews
London SW11 1QU
T 020 7944 4400
F 020 7944 5390
E mail@l-i.org.uk
www.l-i.org.uk

Office of the Deputy Prime Minister
Enquiry Service
T 020 7944 4400
F 020 7944 6589
www.odpm.gov.uk

Royal Institute of British Architects (RIBA)
66 Portland Place
London W1N 4AD
T 020 7307 3700
F 020 7436 9112
E info@inst.riba.org
www.architecture.com
LOCAL AUTHORITIES IN KENT

Ashford Borough Council
Civic Centre
Tannery Lane
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T 01233 330240
F 01233 330682
E media@ashford.gov.uk
www.ashford.gov.uk

Canterbury City Council
Council Offices
Military Road
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T 01227 862157
F 01227 862020
www.canterbury.gov.uk

Dartford Borough Council
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E webdev@ dartford.gov.uk
www.dartford.gov.uk

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E ceg@dover.gov.uk
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F 01474 337531
www.gravesesham.gov.uk

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F 01474 337531
www.kent.gov.uk

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www.medway.gov.uk

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www.swale.gov.uk

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F 01843 298610
www.thanet.gov.uk

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Kings Hill
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Kent ME19 4LZ
T 01732 876268
F 01732 876317
E admin.services@tmbc.gov.uk
www.tmbc.gov.uk

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Royal Tunbridge Wells
Kent TN1 1RS
T 01892 554069
F 01892 554076
E info@tunbridgewells.gov.uk
www.tunbridgewells.gov.uk

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Canterbury CT1 2NN

Mid Kent Division
Doubleday House
St Michael’s Close
Aylesford ME20 7BU

West Kent Division
Joynes House
Gravesend DA11 OAT
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