



**South
Cambridgeshire
District Council**

Local Development Framework

Landscape in New Developments

Supplementary Planning Document

Adopted March 2010

03450 450 500
www.scambs.gov.uk



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Published by South Cambridgeshire District Council

© March 2010

Gareth Jones, BSc. (Hons), MRTPI – Corporate Manager
(Planning and Sustainable Communities)

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03450 450 500 or email ldf@scambs.gov.uk**

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CHAPTER 1

INTRODUCTION TO THE SUPPLEMENTARY PLANNING DOCUMENT

- 1.1 This South Cambridgeshire District Council (SCDC) Supplementary Planning Document (SPD) forms part of the South Cambridgeshire Local Development Framework (LDF).
- 1.2 The SPD expands on district-wide policies in the Development Control Policies Development Plan Document (DPD), adopted in July 2007, and policies in individual Area Action Plans for major developments that may vary from the district-wide policies. Policies seek to ensure that a landscape scheme forms an integral part of the planning application, and that landscape features, landscape character and associated biodiversity are adequately addressed throughout the development. This SPD provides additional details on how these will be implemented.
- 1.3 The SPD also builds on national policy in Planning Policy Statement (PPS) 1: Delivering Sustainable Development, PPS 9: Biodiversity and Geological Conservation, Planning Policy Guidance (PPG) 15: Planning and the Historic Environment and PPG17: Planning for Open Space, Sport and Recreation. These planning documents promote sustainable well designed and high quality landscapes that are fully considered at the outset and integrated into each development.
- 1.4 Landscape will not be peripheral to the development but will be fully integrated into the design. A good landscape scheme is not about 'planting a few shrubs' or an 'afterthought' or about 'left-over land'. What is needed is a creative approach which recognises a well designed landscape as an essential element in the delivery of a successful development.

PURPOSE

- 1.5 The objective of this SPD is to assist achievement of the Local Development Framework objectives for the conservation and enhancement of landscape character, including Development Control Policies DPD objectives **NE/b: To protect and enhance the character and appearance of landscapes and natural heritage** and **NE/c: To protect and enhance biodiversity**.
- 1.6 This SPD has been produced to provide additional advice and guidance on landscape planning and design for developers, planning applicants, planning agents, consultants, contractors and others involved in the planning process and others who have an input into the quality of landscape schemes for developments in South Cambridgeshire.

1.7 It is not the purpose of the SPD to design the scheme. Each site is different and existing site features, local character, ground conditions, microclimate, aspect and site surroundings will all be considered. On some sites there may also be a requirement for particular landscapes or design themes. However, specific objectives for this document are to:

- Assist applicants' understanding the role of a landscape scheme to both the actual site and to the wider landscape as part of a high quality design.
- Assist applicants' understanding of the landscape assessment, design, implementation and aftercare implications of their proposals to ensure a sustainable scheme.
- To guide applicants through the planning process by informing them of what landscape information is required to accompany their planning applications.
- Ensure that development works are sustainable and undertaken in an appropriate manner, to ensure there will not be an unacceptable impact on the countryside, landscape character or biodiversity.

SOUTH CAMBRIDGESHIRE LDF POLICY

1.8 This SPD will expand on a number of policies within the Development Control Policies DPD and Area Action Plans that relate to the landscape and these are listed in **Appendix 1**. The key objectives arising from these policies are summarised as follows:

- Conserve and enhance landscape character
- Undertake full surveys of existing biodiversity features and conserve the environmental aspects of the site.
- To conserve and enhance biodiversity, and achieve a net increase.
- To contribute towards recreation opportunities.
- Achieve high quality landscape.
- Not to permit proposals where there will be an unacceptable impact on the countryside, landscape character or biodiversity.
- The major development locations are also required to identify early provision of landscape and biodiversity features.

1.9 The Council has also produced SPDs to provide further guidance on Trees, Biodiversity issues, and Open Space, and it may be helpful to read these alongside this SPD. The Council is also producing a Design Guide SPD, which will also contain useful relevant information.

CHAPTER 2

WHY A LANDSCAPE SCHEME IS NEEDED

- 2.1 A good landscape scheme should be an asset to the development, the local community and to the wider landscape. A landscape scheme can contribute to wide range of development situations, from small scale domestic plots to very large developments involving new schools, hospitals, roads, commercial projects and housing.
- 2.2 It is important to establish the requirements for the landscape scheme early in the design process so that it may contribute to the layout of the development and ensure that sufficient space is available for appropriate planting and other landscape features.
- 2.3 The public are also becoming more discerning about the quality of landscape. External works are typically are a relatively small part of an overall development budget but can make a huge difference to the scheme.
- 2.4 A well-designed and executed landscape scheme can become an on-going asset to the community, contributing in a wide variety of ways. The overall aim is to achieve an environment that maximises the quality of life for people who live and work in South Cambridgeshire. Some of the ways in which a high quality landscape scheme can assist in this are outlined below:
- a) **To promote Landscape Character** – Careful selection of materials and plant species can enhance and add definition to the Landscape Character Areas of South Cambridgeshire. A more detailed description of Landscape Character Areas is included in Appendix 2.
 - b) **To promote ‘A Sense of Place’** – At a more local level choice of materials, planting and landscape features can combine to make a development feel special and memorable, providing visual, cultural, historical and ecological links to the local area.
 - c) **To reduce the visual impact of development** – The landscape scheme can help to integrate the development into the local landscape, and can provide visual screening, softening and mitigation of negative visual effects.
 - d) **To add maturity to developments** – The retention of existing landscape features such as established trees and hedgerows, combined with a high standard of new planting and materials can add character and maturity to a new development.
 - e) **To improve the physical environment** – Hard and soft landscape can combine to reduce and buffer noise, to offer shelter and shade, to filter

dust and pollution, and to provide colour, scent, movement and sound within a development.

- f) To provide enhanced biodiversity** – Hard, and more often soft, landscape can provide a wide range of habitats for plants and animals, and greatly enhance the biodiversity of a development, for example by providing native and non–native food plants for wildlife or nesting or roosting opportunities for birds and bats.
- g) To enhance sustainability within the development** – Appropriate layout and choice of materials and plant species can greatly enhance the sustainability of the development and mitigate against some of the affects of climate change, for example by providing space for Sustainable Drainage Systems, reducing replanting or maintenance requirements.
- h) To provide opportunities for recreation** – Landscape schemes can provide opportunities for both passive and active recreation. This may be very simple, for example a well sited bench, to the provision of major landscape features such as greenways, woodlands or informal recreation areas.
- i) To provide a ‘feel good factor’** – Many of the benefits outlined above can combine to greatly enhance everyday life, and can have a positive effect on health. They will also enhance the desirability of the development.

THE SCOPE OF THE LANDSCAPE SCHEME

- 2.5 South Cambridgeshire is a rural district comprising over 100 parishes, surrounding the City of Cambridge. However, South Cambridgeshire is currently experiencing rapid development, including major extensions to the City and the major new communities of Northstowe and Cambourne. This has increased both the number and scope of the landscape schemes submitted to the Council.
- 2.6 The ‘Landscape’ associated with a development can cover a wide range of landscape features, and vary in scale from a very large size, for example, areas of woodland, fields, lakes, recreation areas and car parks, down to far more detailed elements at a domestic scale such as detailed planting and paved areas. A landscape scheme will normally include both ‘Soft Landscape’ trees, shrubs, plants, turf areas etc, and ‘Hard Landscape’ – paving, fencing and landscape furniture or structures.
- 2.7 A high quality landscape scheme will contribute to the increasing range of urban and suburban developments in South Cambridgeshire, as well as to the more rural settings. It is important that the scheme should sit well within its locality, responding both to the adjacent buildings, planting or local street scene, and to the wider Landscape Character of the area.

- 2.8 The Landscape Character of an area can greatly influence the design of the scheme. A more detailed description of Landscape Character is included below at Chapter 3 and Appendix 2.
- 2.9 Whatever the scale of the landscape scheme it should be of a sufficient size to function correctly, and be robust, safe and pleasant to use. Trees and plants should have sufficient space to grow without overcrowding or the need for excessive maintenance. The scheme should complement the adjacent landscapes and land uses.

CHAPTER 3

THE LANDSCAPE SCHEME

WHEN IS A LANDSCAPE SCHEME REQUIRED?

- 3.1 Most new developments and many alterations or expansions of existing developments will require a landscape scheme as a condition of the planning permission. The detail and range of the information required will vary with the individual application. Some examples of when a landscape scheme may be required as part of the planning application are described below:
- a) When significant construction work is involved.
 - b) Where the development includes external works.
 - c) Where there are issues regarding the location, landform, screening or the need for protection of existing landscape features or habitats.
 - d) To comply with legislation, for example - Tree Preservation Orders, Wildlife and Countryside Act, Countryside and Rights of Way Act.
 - e) Where the scheme includes gates, walls and fences over 1m high that adjoin a vehicular highway, or over 2m high elsewhere.
 - f) If the development will physically or visually affect a Conservation Area or its setting.
 - g) If the development will physically or visually affect a listed building, its curtilage, structure or setting.
 - h) If the development will physically or visually affect a Site of Archaeological Importance.
 - i) When a landscape condition is applied to a grant of planning permission.
 - j) To satisfy Reserved Matters requirements with a planning application.

WHAT ISSUES SHOULD THE LANDSCAPE SCHEME ADDRESS?

- 3.2 Even the most basic of landscape schemes will benefit greatly from time and thought to both the practical points – Does the scheme conflict with planning policy?, or How large will the specified trees grow?, to the wider implications of the proposal, for example does the scheme complement or improve the local or regional landscape character?

3.3 Although not an exhaustive list, typical landscape issues to be considered by the applicant will include some or all of the following:

- a) Development setting and character.
- b) Site layout and the appropriate location of site access.
- c) Links to other developments and the wider landscape.
- d) Protection of established trees and landscape features.
- e) Potential impact on neighbouring properties and screening.
- f) Soft Landscape - tree, and shrub and other plantings, turfing and seeding.
- g) Hard landscape - paving, street furniture, walling and fencing materials.
- h) Biodiversity issues and habitat creation.
- i) The sustainability of the scheme.
- j) Reinstatement of the site after works.
- k) Landscape management objectives.
- l) Staff issues - appointing competent professionals such as a landscape architect and landscape contractor.
- m) The landscape specification.
- n) Landscape maintenance and aftercare.
- o) Compliance with government and other policy and guidance:

Department of the Environment Circular 11/95: Use of Conditions in Planning Permissions. This states that landscape conditions can be applied 'where it is important to secure a high quality of design in a proposal if this is to make a positive contribution to a site and its surroundings and show consideration for its local context...the appearance and treatment of the spaces between and around buildings is also of great importance. Similarly local planning authorities may wish to use conditions to ensure that important vistas are preserved or that landscape features are provided to improve the overall setting of a development'

- p) Compliance with legislation, for example Tree Preservation Orders, Wildlife and Countryside Act, Countryside and Rights of Way Act.

- q) Compliance with relevant national standards, for example BS 5837 2005 Trees in Relation to Construction.
- r) Compliance with the objectives and policies in the South Cambridgeshire Local Development Framework.
- s) To accord with recognised Best Practice, for example that supported by CABI or the Landscape Institute.
- t) Support of wider green infrastructure proposals – Cambridgeshire Green Vision for example.

WHEN SHOULD THE LANDSCAPE SCHEME BE SUBMITTED AND WHAT INFORMATION SHOULD IT CONTAIN?

- 3.4 For many applications, certainly for more complex or environmentally sensitive developments, a pre-application discussion between the applicant and planning officers can be very helpful to clarify planning requirements and the essential requirements of an acceptable landscape scheme.
- 3.5 These discussions will be advantageous for the applicant as in most cases a scheme will be required, and submitting an application that addresses landscape issues at the outset will help to speed up the application and save time and money by avoiding repeated work.
- 3.6 Expert advice from landscape professionals can also greatly assist the application. For smaller schemes the Applicant may for example choose to engage an experienced design and build landscape contractor. For more complex schemes, the applicant is advised to seek professional landscape design advice. Some schemes will also require advice from other professionals such as arborists, ecologists or archaeologists.
- 3.7 **Further information on landscape professionals, including contact details for Landscape Architects and the Landscape Institute can be found in Appendix 3.**

LANDSCAPE REQUIREMENTS OF PLANNING APPLICATIONS

- 3.8 Although the range of landscape schemes is very large and the information required can vary greatly, clear plans and sketches at an appropriate scale together with some supporting written information are common to nearly all applications.
- 3.9 **Most Outline and Full applications** will require a site survey plan showing what is to be retained and what is to be removed. This will show features of landscape value such as established trees and hedges, prominent landscape elements, boundary treatments, water bodies, public rights of way, any significant changes in level and buildings and structures.

- 3.10 For larger applications or if the site is environmentally sensitive, if it contains significant wildlife habitats, significant specimen trees or numbers of trees, or it is in a conservation area for example, further information such as a habitat survey or tree survey is generally required prior to determination.
- 3.11 **For further information regarding tree and habitat surveys see the ‘Trees and Development Sites SPD’, paragraphs 3.10, 3.11 and Chapter 4, and the ‘Biodiversity SPD’, paragraphs 3.7 and 3.16.**
- 3.12 In addition **Outline applications for all major developments** will require a landscape concept plan describing the proposed themes and character of the scheme prior to determination. The concept plan will be supported by additional written material, for example as part of **Design and Access Statement**.
- 3.13 A detailed landscape scheme describing in full the hard and soft landscape materials, construction details, landscape specification, landscape management and maintenance will then normally be required as a condition of the Outline Permission. This information will follow as part of a **Reserved Matters** application, along with conditions covering the positioning and design of buildings, external appearance and the means of access etc.
- 3.14 For **Full applications for all major developments** a site survey plan and a landscape concept plan as described above along with supporting written information is required.
- 3.15 For a Full application this will contain a higher level of detail than for an Outline submission, for example describing in more depth the main areas of hard and soft landscape, areas of native and ornamental planting, formal and informal paving, sport or play areas, and landscape structures and furniture.
- 3.16 A detailed planting and hard landscape scheme is also normally required, either prior to determination, or as a condition of the consent. The detailed scheme will include plant species, sizes, positions and planting rates, details of planting methods, and specifications for imported topsoil, mulches, composts and other soft landscape items. Hard elements such as paving, brickwork, street furniture and landscape structures will also be specified on the plans and accompanying construction details where necessary. A management and maintenance plan is also normally required to ensure the establishment and long term success of the landscape scheme.
- 3.17 In many cases, securing approval of the landscape scheme at the same time as planning consent, rather than as a condition, can benefit the applicant and deliver the best quality scheme. This will assist the passage of the application, ensure that key issues and public concerns are identified and addressed at the earliest possible stage, and enabling a prompt start to works after consent is granted.

DELIVERING HIGH QUALITY LANDSCAPE

- 3.18 It is the objective of this SPD to promote 'High Quality Landscape'. 'Landscape Quality' is sometimes difficult to quantify – it is not a matter of good or bad 'taste'. Achieving a high quality landscape on the ground can perhaps be dependent on the following factors.

(1) RESPECTING LANDSCAPE CHARACTER

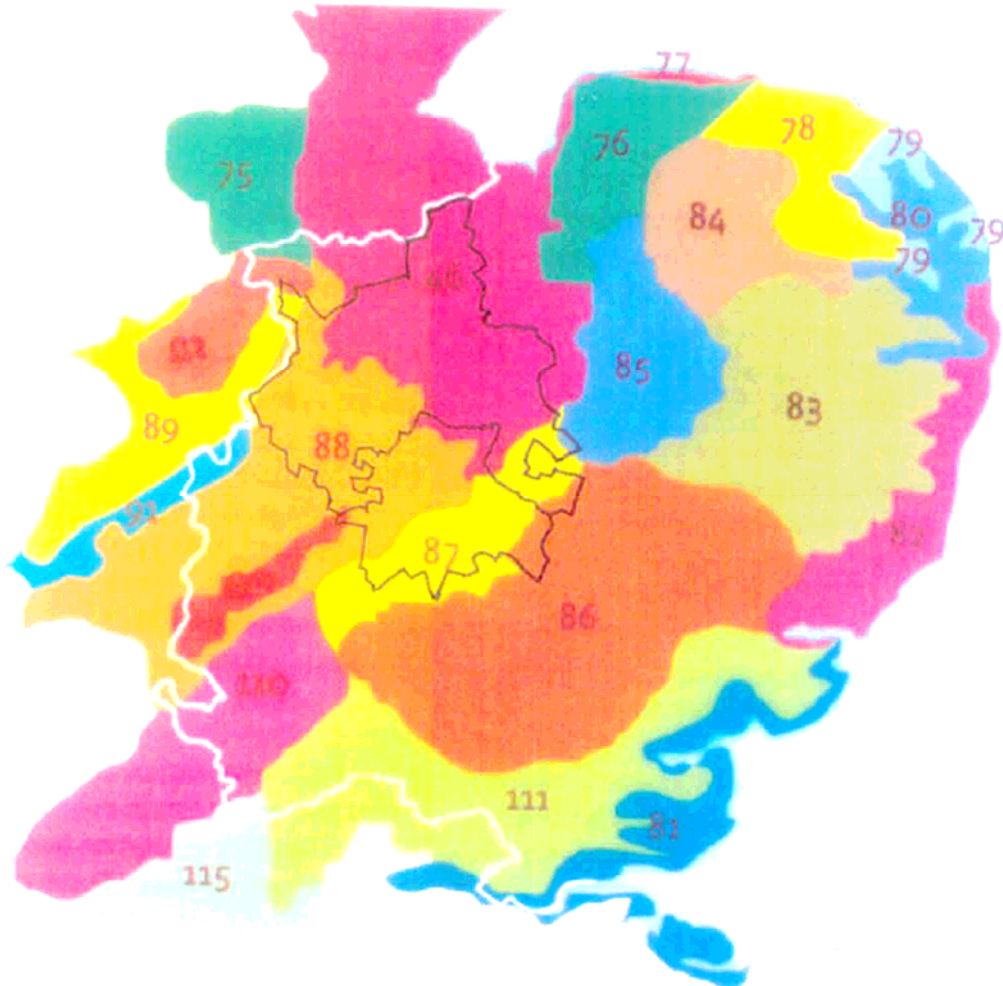
- 3.19 This element addresses how the scheme will relate to its immediate surroundings and how it will sit within the wider landscape. All landscapes, whether in rural or urban locations, have interest, meaning and value to those who live and work within them or visit them. The combination of geology, landform, vegetation and human influences can produce a locally distinctive character that sets the landscape apart.
- 3.20 All landscapes also have, to varying degrees, value for wildlife, and the diversity of species of vegetation within a landscape can be significant. The landscape submission should seek to preserve and enhance the local landscape character wherever possible, by relating the layout, scale, planting and materials chosen directly to the individual site.

Landscape Character Assessment

- 3.21 A national **Landscape Character Assessment** was first put forward by the Countryside Commission (CC) who began to map and assess the countryside of England in the early 1990's. This was based on twelve sets of data, including Landform, Geology, Farming patterns, Settlements, Archaeology, Ecology and Vegetation cover. From this data was produced the first '**Countryside Character**' map. The Cambridgeshire Landscape Guidelines published in 1992 were based on this map.
- 3.22 In 1996 this map was combined with data produced by English Nature (EN) and English Heritage, who had published their own '**Natural Areas**' map based on natural features and habitats.
- 3.23 The Combined map is composed of 159 '**Joint Character Areas**' (JCA's) and has been adopted by Natural England (formally CC and EN who merged in 2006) and covers the entire country. To supplement the map a comprehensive description for each JCA has been produced for each of the areas, describing the visual, ecological, cultural aspects, how the character has been formed, how it is changing and suggestions for future management.

Landscape Character in South Cambridgeshire

- 3.24 South Cambridgeshire has a surprisingly diverse landscape character, with five of the East of England Joint Character Areas being identified:



Natural England's Landscape Character Map showing JCAs in the East of England. Cambridgeshire and South Cambridgeshire are shown in outline.

Landscape Character Areas in South Cambridgeshire are listed below:

- JCA 46 – The Fens
- JCA 86 – South Suffolk and North Essex Claylands
- JCA 87 – East Anglian Chalk
- JCA 88 – Bedfordshire and Cambridgeshire Claylands
- JCA 90 – Bedfordshire Greensand Ridge.

- 3.25 The Fens, Chalk and Bedfordshire and Cambridgeshire Claylands JCAs cover the Majority of the District, with a small area of greensand to the west and a larger strip of the Suffolk / Essex Claylands to the south east.
- 3.26 Further information on JCAs and details which can help in preparing a landscape scheme appropriate to the landscape character of an area can be found in Appendix 2.**

(2) APPROPRIATE DESIGN

- 3.27 Landscape design should work with the boarder aspects of landscape character to create a true sense of place, and create landscapes which are 'fit for purpose'
- 3.28 The **scale** the landscape proposals and the hard and soft landscape elements within the scheme should be of an appropriate scale to the proposed space, built form and the development as a whole. For example tree species chosen for wide city boulevards or industrial sites will usually be far larger than those specified for courtyards or domestic situations. Most large developments will benefit from at least some large trees, and it is essential that sufficient space is allowed for them. The trees should be able to attain their full growth without excessive pruning, and foundation depths of new buildings adjusted to accommodate them.
- 3.29 Landscape proposals should also be appropriate to the space actually available. The landscape scheme should be robust enough to contribute fully to the development, and landscape elements or layouts should be chosen carefully to avoid forcing them into spaces where they will not fit.
- 3.30 The scale of the landscape proposals and landscape elements will also help to establish a logical hierarchy of space, making it easier for users to separate one space from another and to navigate around the site. This is particularly important on larger developments.



Out of Scale

Here public space and vehicle routes have been defined with hard landscape elements completely out of scale with the domestic setting.

- 3.31 The Landscape must **function** correctly. The Landscape proposals should work well and be easy, pleasant and safe to use. Landscape elements such as pathways, steps, levels, landscape furniture, fences, walls and areas of soft landscape should take account of the requirements of the intended user. These requirements will vary, for example when providing a scheme for disabled users or for use by children.
- 3.32 The proposals must ensure that there is sufficient space available for the proposed activity or use, including the opportunity to create personal space or buffer zones between different areas of use where these are desirable.
- 3.33 Hard and soft landscape **materials** should work well, both individually and in combination with each other, complementing the scale and function. This is particularly true where large numbers of landscape elements and materials will be specified – for example street furniture and materials in a busy street scene.
- 3.34 Hard landscape materials such as brick, stone timber and metal should be appropriate to their intended use – the choice of paving materials for heavily used public space will need to perform well over many years, and will differ from the paving used in domestic situations.
- 3.35 Plant materials and species selection may also vary according to how they will be used and to their location. The specification for hedge or tree planting on a busy roadside or industrial site may differ to trees and hedges of a similar scale and function used in a rural setting or a housing area.
- 3.36 Further information which can help in preparing a landscape scheme appropriate to the site, including suggestions for plant species and landscape materials can be found in Appendix 2.**

(3) LANDSCAPE IMPLEMENTATION

- 3.37 The applicant should ensure that all building, construction and soft landscape is carried out to a high standard. Care taken at this stage will not only result in a stronger more robust landscape, but will be more economic in the long run, reducing need for early and repeated replacement of materials and plants.
- 3.38 The applicant should ensure that the landscape works are carried out by suitably experienced contractors, and that a **realistic budget** has been allowed for the establishment and maintenance of the landscape. Cutting the provision or quality of landscape due to overspend in other areas will not be accepted.
- 3.39 The landscape works should be carried out to minimise disruption, noise, dust and damage to the environment by careful positioning of the site access, storage areas and cabins, and careful handling and disposal of waste.

- 3.40 The applicant should pay particular attention to ground compaction on site as this is a major cause of plant failure and water logging. Where possible areas of future planting should be fenced off to avoid compaction or contamination. Any areas which do suffer compaction should be thoroughly de-compacted and cultivated before further landscape operations e.g. the spreading of topsoil.
- 3.41 All work must be carried out in a safe and sustainable manner. Most landscape schemes, certainly those involving groundwork, paving or landscape construction, will fall under the **Construction Design and Management (CDM)** regulations. The designer, the applicant and the contractor will all be responsible for aspects of health, safety, employee welfare and risk management of the landscape scheme. The project will be managed by a suitably qualified **CDM Co-ordinator**, appointed by the client. In addition, if a project lasts for more than 30 days or involves more than 500 person days of construction work, the **Health and Safety Executive must be notified of the scheme**.
- 3.42 **Guidance** for the implementation of hard and soft landscape elements may be covered by a range of Specifications. Bodies such as, The Landscape Institute, The National Building Specification, The National Plant Specification, and The Arboricultural Association produce Guidance Notes and 'Best Practice' guides covering many areas of landscape work.
- 3.43 **British Standards (BS)** cover a range of Landscape operations and materials, including planting operations, soils specifications, paving construction and work around trees.
- 3.44 Most large landscape submissions will include a **full landscape specification**, which is often site specific, detailing the quantities and standards of all hard landscape and plant materials, and the expected procedures for landscape operations.
- 3.45 Throughout landscape operations there will be a need for **effective monitoring** to ensure that the landscape contractors are meeting the required standards, particularly in situations where the work will later be covered up, for example tree pit construction, the preparation of planting areas of base construction for paved areas.
- 3.46 **Further information on the CDM regulations, technical standards and guidance that can help in preparing a landscape scheme can be found in Appendix 3.**

(4) LANDSCAPE MANAGEMENT AND MAINTENANCE

- 3.47 A robust Management plan and aftercare programme will be essential to the successful establishment and development of the landscape scheme. Landscape management and maintenance requirements should be an integral part of the proposals rather than applied at the end of the design process.
- 3.48 Appropriate access for people and machinery must be considered along with the likely experience and budgets of the future maintenance teams – the provision of large, complicated planting schemes maybe beyond the capabilities or financial resources of a Parish Council or resident's group.
- 3.49 If specialist landscape features are proposed within a scheme – perhaps a large water body – the method of maintenance must be identified at the outset. Some landscape features will require statutory levels of maintenance and minimum requirements for access - drainage works or maintaining visibility splays for example.
- 3.50 Maintenance of the landscape scheme can be made easier by the appropriate choice of plants and hard materials, for example choosing plant varieties which will not outgrow the space available, and which are suited to the site conditions.

(5) ENCOURAGING BIODIVERSITY

- 3.51 South Cambridgeshire is one of the fastest growing areas of the country, and development and changing land use are placing pressure on the wildlife and their habitats. South Cambridgeshire contains a number of important habitats and landscape types, such as Chalk Grassland, Wetlands and Ancient Woodland, but these areas tend to be fragmented and pressured by neighbouring land uses.
- 3.52 Landscape schemes can help relieve the pressure on existing habitats by providing links, enhancing existing wildlife resources and providing additional space and landscape features for animals and plants to colonise. Following the landscape guidelines for the Joint Landscape Character Areas will also help to increase biodiversity on the development site.
- 3.53 Large developments will feature a range of green space, from domestic gardens to public areas such as parks, greenways or sports fields. The applicant should consider the existing and proposed transport routes, 'green corridors' and watercourses within and around the development site as opportunities to increase biodiversity. When well designed, these features can be multi-functional, offering access routes and habitats for badgers, bats, birds and other wildlife, as well as human uses.

- 3.54 Where the space is available, schemes should include native tree, shrub or herbaceous planting, particularly if this can form physical or visual links to existing areas of similar planting the countryside and the wider landscape. If space is limited many non-native varieties of plant are 'wildlife friendly' and can increase the wildlife value of the domestic landscape.
- 3.55 Many new build developments will also offer the opportunity to provide 'green' roofs or walls, constructed using a variety of plant material. A wide range of buildings can benefit from greening, from domestic sheds and dwellings to factories and office buildings. Green walls and roofs are particularly useful in providing habitat links where green space at ground level may be limited.
- 3.56 In all developments, large or small, the detailed layout and construction of the landscape scheme can also be important. Decisions regarding aspect, slopes, degree of exposure, sun and shade can greatly affect the microclimate and the range and quality of the habitat provided. Most new development will also require the provision of nest boxes, wildlife shelters and improved access routes and links - leaving gaps beneath garden fences for small mammals for example.



1



2



3

Encouraging Biodiversity on Development Sites.

1 – Sweet pea plants provide nectar rich flowers and shelter. **2** – Establishing wildflowers in informal open space

3 – Access ledges provided for otters and badgers on a culverted drain.

- 3.57 During development the first priority should always be to protect biodiversity on site, but sometimes damage to or removal of habitat may be unavoidable. In these circumstances the applicant should either mitigate against the damage and disruption caused by the development, or compensate for the loss of habitat.

- 3.58 Mitigation measures may include altering access routes, fencing off areas during construction or avoiding disruptive work at certain times, e.g. during the bird breeding season.
- 3.59 Compensation measures will be required where development results in loss or permanent damage to a habitat. In these circumstances the applicant will be required to provide alternative areas of habitat of a similar type and standard, and equal to or greater in area, to that being lost. Wherever possible compensation should be on a 'like for like' basis – the loss of nesting sites compensated by providing suitable bird boxes, the loss of a pond compensated by the provision of swales and wetland areas for example. Compensation measures are normally required to be located within the development site. If this is not possible then new off site habitat must be provided in a suitable location.
- 3.60 For further information which can help in preparing a landscape scheme to increase biodiversity see the Biodiversity SPD, details of which can be found in Appendix 1.**

(6) SUSTAINABLE LANDSCAPE SCHEMES

- 3.61 The principles of sustainable developments are now an essential part of planning policy at all levels, and well designed landscape schemes can play an important part in delivering sustainability. Government guidance PPS1: Delivering Sustainable Development sets out key objectives for delivering sustainable development. Those relating to landscape include:
- Social progress which recognises the needs of everyone.
 - Effective protection of the environment.
 - The prudent use of natural resources.
 - Sustainable Economic Development.
- 3.62 A well designed landscape scheme can help to deliver these objectives. A truly sustainable landscape will evolve and contribute for the lifetime of the development, not just in the short term or establishment phase.
- 3.63 Social inclusion**
A sustainable landscape will encourage high levels of public use and will take account of all of the intended users of the space and their needs. Some spaces will be specific to one group, e.g. a children's playground or a rear garden, while others will need to cater for a wide range of users. The landscape scheme must include appropriate levels of access to green space, both in terms of location, wherever possible public green space should be well connected to public transport systems, footpaths and cycle ways, and in relating to physical elements such as slopes, steps, barriers and gates.
- 3.64 Early engagement with the community, Parish Councils and user groups can help by gaining local or specialised knowledge, and by establishing a sense of

shared ownership of the scheme. Well-used landscapes are safer and more likely to be well maintained and cared for.

3.65 Allotments

Demand for allotments is growing, and large-scale housing applications often require space for allotments as part of the social infrastructure provision. Allotments can not only provide food for the household, but also benefit the community by encouraging physical exercise, healthy eating, and community interaction.

3.66 In addition to the traditional allotment plot, a well thought out landscape scheme can offer a number of opportunities for residents to grow their own food in even the smallest of developments. These can include:

- Roof gardens and green walls.
- Raised beds and container areas.
- Opportunities to grow food in schools, hospitals and care homes.
- Temporary allotments on land parcels awaiting development – This is of particular relevance to major schemes where land in the later stages of a development may lie unused for several years.

3.67 Effective Protection of the Environment

The landscape scheme, and the processes that create it, should seek to conserve and enhance the quality, character and amenity of the natural and built environment, from the wider countryside or a landscape character area, to the protection of an individual tree. The scheme must also ensure that resources below ground resources are conserved, for example archaeology, soil quality, and aquifers.

3.68 As with provision for biodiversity, where a development causes unavoidable adverse impacts to the environment, for example the intrusive visual impact of a tall structure, the applicant must provide mitigation measures or compensate for the impact. A high quality landscape scheme is one of the most effective ways of achieving mitigation or compensation by providing screening, green separation, and buffer zones, additional areas of public open space, or play and sports areas.

3.69 During construction, best practice should be followed to avoid damage to the environment by pollution by noise, dust, air quality, light, or contamination of land or water. Processes on site should ensure that waste produced is kept to a minimum and that it is disposed of in an appropriate manner, and re-cycled where possible, for example using felled timber on site for use as woodchip paths or mulches, or stacked as woodpiles for invertebrate habitat.

- 3.70 Hard and soft landscape materials should be chosen to avoid damage to the environment locally, at source, or during transport to the site. Hard and soft materials should be verifiably sustainable, and locally sourced where possible to reduce transport movements.
- 3.71 The choice of plant material and planting design should avoid future adverse impact to the environment, for example positioning trees where they will shade out a pond, using invasive plant species which will out-compete native varieties, or creating planting schemes or landscapes which will require excessive levels of maintenance.
- 3.72 The Prudent use of Natural Resources**
The landscape scheme should consider the possible future effects of climate change, particularly with regard to sustainable energy production and management of water.
- 3.73 Where solar or wind power is to be a feature of the development, the orientation, scale and massing of the buildings, structure planting, avenues, tree belts and landscape structures should be laid out with the mature size of the planting in mind so that the solar panels or turbines can work to their maximum efficiency.
- 3.74 Some large landscape schemes may feature extensive crop areas of biomass plants (usually varieties of willow or large grasses) for use as fuel in small, on-site combined heat and power stations. Careful design will be needed to integrate the crop areas, and the structures needed for storage, into the landscape fabric, whether on site or further afield.
- 3.75 South Cambridgeshire is a very dry area, receiving an average of less than 50mm a month in rainfall, less than half that of many areas of the country. Planting schemes should be designed so that they will flourish with relatively low levels of watering and maintenance in mind. This does not mean selecting a small palette of standard, tough shrubs and applying this to all situations, but choosing an adaptable range of trees, shrubs, herbaceous plants and grasses which can complement the landscape character, microclimate and soil conditions, and proposed use of the site.
- 3.76 Water conservation is becoming increasingly important. As noted above South Cambridgeshire is relatively dry, but it is also likely to experience periods of far heavier rain over short periods of time, and hence a higher risk of flooding.
- 3.77 An appropriate Sustainable Drainage Systems (SUDS) should be included in the landscape scheme to cope with these more intense weather events.
- 3.78 SUDS can cover a diverse range of drainage systems, using both hard and soft materials at varying scales. Most SUDS systems work by reducing the amount of rainfall reaching the drainage system, by slowing the rate at which rainfall arrives into the system or by containing and holding back rainfall and

then releasing it at a controlled rate. Many systems feature a combination of these methods and the method chosen will be dependent on the space available and the underlying geology.

3.79 The applicant must ensure that sufficient space is made available within the landscape scheme, both at a domestic level (provision of water butts, green roofs or soakaways) and for larger scale development (for example permeable car parks, swales and attenuation ponds). The scheme should also include areas for statutory maintenance of the drainage system. Although for large projects, the land take required for SUDS can be considerable, many schemes can also offer an efficient multi-use of space by combining the drainage function with public open space, wildlife areas or transport routes.

3.80 Further information and relevant contacts for SUDS systems can be found in Appendix 2.



SUDS at Cambourne – Areas for water storage incorporated into public open space

3.81 Sustainable Economic Development

Industrial, commercial, retail, educational and recreation facilities are essential elements of sustainable communities, and a well designed landscape scheme can greatly enhance the appeal of these developments.

3.82 High quality landscape can quickly add value, character and a sense of place at to the development for relatively a relatively small outlay, and provide an attractive range of open space for workers and other users of the development.

3.83 The landscape scheme can integrate and connect large buildings to the wider landscape. This is particularly true of the large 'boxes' of industrial parks or

storage facilities where landscape can break up harsh skylines and screening (or better partly screen) extensive elevations. Business and industrial parks often feature fairly extensive areas of open space, and large areas of car parking and offer numerous opportunities for the establishment of SUDS schemes.

3.84 Green Infrastructure

Providing green space, sustainable landscapes and an increase in biodiversity also contributes to the wider aims of establishing a robust network of Green Infrastructure.

3.85 Green Infrastructure describes a network of public open spaces, routes, wildlife habitats, landscapes and historic sites. It includes a wide range of elements such as rivers and watercourses, country parks, historic landscapes, archaeological sites and rights of way, and combines a range of functions.

3.86 Green Infrastructure is an essential environmental foundation and support system to a high quality natural, historic and built environment. It is key to creating places that are attractive, healthy and give a good quality of life, and delivers a range of other social, economic and environmental benefits.

3.87 Green infrastructure plays an important role as part of both existing and new communities at county, district and neighbourhood scales. Within new developments, Green Infrastructure should be a fundamental part of the design and planning process from the start, and be fully integrated with the development and its setting. In existing communities it should manage, protect, enhance and add to existing green spaces and environmental and historic resources. Green Infrastructure within both new and existing developments should provide links to wider green infrastructure networks.

3.88 The provision of Green Infrastructure is supported at national and regional levels in PPS12: *Creating strong, safe and prosperous new communities through local spatial planning* and in Natural England's *Green Infrastructure Guidance* (2009) and CABI's *Grey to Green* (2009). Green infrastructure is also included in the *East of England Plan* (May 2008).

3.89 At a local level Green Infrastructure elements and approaches are supported and described in Local Development Documents such as Area Action Plans, the Development Control Policies DPD and Site Specific Policies DPD, as well as a number of Supplementary Planning Documents e.g., Landscape, Biodiversity.

3.90 In 2006 Cambridgeshire Horizons and partners (including South Cambridgeshire District Council) produced the first Green Infrastructure Strategy for the Cambridge Sub-Region. This Strategy and its results have been reviewed and a new strategy is currently being prepared which will cover the whole of Cambridgeshire. Other planned work will identify the costs of

green infrastructure and mechanisms for funding including through development.

- 3.91 The District Council strongly supports the planning, delivery and management of green infrastructure as an essential part of new development and crucial to its success. Cambourne and Trumpington Meadows are examples of the successful provision of green infrastructure as part of new developments and their settings. They show how it can deliver a number of specific objectives including sustainable drainage and flood management as well as creating attractive places and encouraging people to walk, cycle and enjoy their surroundings.

CHAPTER 4

THE LANDSCAPE DRAWINGS

SITE SURVEY AND APPRAISAL PLAN

- 4.1 The **Site Survey** and the **Appraisal Plan** form the first stage of the landscape design process, and information provided at this stage can make a significant difference to the eventual success of the landscape scheme.
- 4.2 Drawing scale should be appropriate to the proposals – 1:50 for small domestic schemes up to 1:1250 for the very large schemes. Most plans will be 1:100, 1:200 or 1:500. On complex sites it will be better to spread the information over more than one drawing.
- 4.3 A clear and complete key, clear boundary lines, a north point and a scale bar should be included on all drawings.
- 4.4 Typically the **Appraisal Plan** will include the following Information:
- Information on the landform - for example slopes, orientation, levels, contours and spot heights.
 - Information on overhead cables and power lines and below ground services – water, sewage, gas, telecom etc.
 - Existing landscape features, - trees, hedgerows, other significant areas of vegetation, water, ditches, boundary treatments, structures, significant surface treatments - areas of paving etc. The drawing will note which are to be retained, and which are to be removed.

Where significant trees, hedgerows or other areas of planting are to be retained proposals for their protection should be noted. For further information see 'Trees and Development Sites' SPD. See Appendix 1 for details.

- Visual qualities - views to or from the site, the quality of views, dominant features affecting the site, distinctive local character.
- Context - a description and analysis of the surrounding areas, including hard and soft landscape, buildings, etc., and an indication of any significant links to the wider landscape.
- Special designations for example - listed buildings, Sites of Special Scientific Interest, archaeological sites, Conservation Areas, Tree Preservation Orders, Sites of Nature Conservation Importance.

LANDSCAPE CONCEPT PLAN

- 4.5 The site survey and appraisal plan inform the next element of the landscape submission, the **Landscape Concept Plan**.
- 4.6 This plan will form the basis of any detailed scheme to be submitted, and landscape conditions imposed on the granting of outline planning permission will be related to these drawings.
- 4.7 However it should be noted that the Landscape Concept Plan deals with the broader principles of the scheme and should not result in constraint of the later detailing. The purpose is to ensure that landscape matters are being considered at each stage of the planning process.
- 4.8 Drawing scale should be appropriate to the proposals – 1:50 for small domestic schemes up to 1:1250 for the largest schemes. Most plans will be 1:100, 1:200 or 1:500. On complex sites it will be better to spread the information over more than one drawing.
- 4.9 A clear and complete key, clear boundary lines, a north point and a scale bar should be included on all drawings.
- 4.10 Information presented on the Landscape Concept plan will include:
- The proposed treatment of site boundaries.
 - Access points and proposed circulation routes.
 - Landscape themes – for example whether the proposals are intended to be formal or informal, open or closed, lively or tranquil.
 - The main areas of structural planting and any significant areas of hard landscape.
 - Significant areas requiring specialised maintenance, for example areas of meadow, wetland or drainage (including SUDS).
 - Indications of significant features such as landscape structures or public art - to demonstrate how these can be successfully incorporated into the scheme.

DETAILED LAYOUT

- 4.11 The **Detailed Layout** of the scheme will normally follow the concept plan, either as a condition of the Outline approval or as a Reserved Matters application. Unless circumstances have altered, the detailed designs should be based on the design principles of the concept plan.

- 4.12 Drawing scale should be appropriate to the proposals – 1:50 for small domestic schemes up to 1:500 for the very large schemes. Most plans will be at 1:100 or 1:200.
- 4.13 A clear and complete key, clear boundary lines, a north point and a scale bar should be included on all drawings.
- 4.14 On less complex schemes the layout drawings may be combined with the Landscape Design Details (see below).**
- 4.15 The detailed layout will address the following areas:
- Detailing of the landscape character of the scheme and the relationship between the site and the existing built and natural environment.
 - Detailing transition zones, buffers or connections to retained vegetation and the wider landscape as appropriate.
 - Refinement of the Landscape Themes by specifying plant species and hard landscape materials, precise positioning of public art and landscape features.
 - Managing the microclimate of the site - detailing of areas of enclosure, shade or sunlight using specified plants, landscape features and hard materials.
 - Refinement and management of views around the site.
 - Refining the dimensions of the landscape spaces so that they will function correctly.
 - Detailing of any special landscape features of the site – hedgerows, meadows, river edges, ponds etc.
 - Detailing of any special technical landscape features on the site for example sustainable urban drainage features.
 - Detailing of routeways and connections, creating an integrated, stimulating and safe environment for all users.
 - Consideration of safety issues of the site – ‘Safety by Design’, for example by providing adequate separation between pedestrians and traffic, visibility splays, eliminating potential traps and allowing appropriate space between.
 - Pathways and dense areas of vegetation - primary pedestrian routes should be clearly open to public view from at least one side, the

appropriate choice of boundary treatments and planting, and decisions as to whether or not a space is overlooked.

- Consideration of future management of the scheme – who will manage the scheme and how practical are the landscape proposals?
- Detailing of the size, character and position for public open space within the scheme. Most large development schemes, particularly housing, will require the provision of public open space. This could range from LAPs (Local Area Play) – small unequipped play areas or meeting spots - to LEAPs (Local Equipped Area Play) – larger play areas featuring a range of play equipment - to sports pitches and facilities and other areas of public recreation space.

4.16 For further information on what is required see the ‘Open Space in New Developments’ SPD details of which can be found in Appendix 1.

LANDSCAPE DESIGN DETAILS

- 4.17 These drawings precisely describe the **hard and soft landscape materials** and how these are used on site, enabling the contractor to implement the landscape scheme. For many schemes the drawings will be used in conjunction with a landscape specification, either included on the drawing or as a separate document, depending on the complexity of the scheme.
- 4.18 Drawing scale should be appropriate to the proposals - for plans, 1:50 for small domestic schemes up to 1:500 for very large schemes. Most plans will be at 1:100 or 1:200.
- 4.19 Additional construction details and sections are usually provided at larger scales, 1:10, 1:20 or 1:50. The drawings should make clear how these details and sections relate to the main plans.
- 4.20 Due to the level of detail and technical information, all detailed design information should be clearly labelled. Full botanical names should be used for plant species wherever possible. If lack of space makes extensive use of abbreviations or symbols necessary, the applicant should consider supplying the information at a larger scale or spread over more than one drawing.
- 4.21 A clear and complete key, clear boundary lines, a north point and a scale bar should be included on all plans.
- 4.22 Many of the specification items listed below will be covered by a relevant British Standard or other guidance – see Appendix 3 for details.**

SOFT LANDSCAPE DETAILS

4.23 Design Details for 'soft' proposals typically include:

- Specification for all Trees, Shrubs and Herbaceous plants. This will include the positioning of the plant material, the stock size (including whether bare rooted plants or container grown), planting rates per square metre or planting distances and the numbers of plants needed.

The choice of plant species should further establish the landscape character, be appropriate to the space available, the intended use of the space and the site conditions.

- Details of cultivation methods and specification of imported topsoil.
- Specification for soil improvement, fertilisers, composts and mulches.
- Specification for turf.
- Details and specifications of seed mixes for grass areas and wildflower meadows.
- Details of landscape operations, including tree pit construction and specification, tree planting and staking (including underground guying if needed), handling of plant material on site, general planting operations, seeding and turfing etc.
- Specification for landscape sundries such as watering tubes, tree ties and rabbit guards etc.
- Details of the handling and removal of rubbish arising from the landscape works.

HARD LANDSCAPE DETAILS

4.24 Design Details for 'hard' proposals typically include:

- The detailing and specification for paving, walling, timber, other hard materials and landscape features or structures, including details of construction methods, and named manufacturers and suppliers.
- Details and specification for street furniture (fencing, railings, bollards, signs, interpretation etc) including dimensions, materials, surface finish and colour and fixing methods.
- Details of the fixing and integration of items of public art into the landscape scheme.

- Details of landform and changes in levels, with specifications for steps, ramps and slopes, ensuring access for all users of the scheme.
- Details and specifications for drainage for proposals including SUDS.
- Details and specification of landscape lighting schemes.
- Details and specifications for 'No Dig' Construction around retained trees, hedges or other significant vegetation, together with specification for protective fencing and barriers.

4.25 For further information see 'Trees and development Sites' SPD – see Appendix 1 for details.

MAINTENANCE SPECIFICATION & LANDSCAPE MANAGEMENT PLAN

- 4.26 Proposals for maintenance and landscape management may be included on the design details drawings, or more usually as part of a written landscape specification, together with a supporting plan.
- 4.27 For public spaces the applicant is normally responsible for maintenance of the landscape for a minimum of one year after the scheme is completed, but in many cases this will be extended to five years. For very large landscape schemes – for new communities or for establishment of major green spaces - a maintenance period of ten or more years may be required.
- 4.28 The **maintenance specification** will typically include a description of the work to be carried out, the standards required, the frequency of maintenance visits and the quantities of the landscape to be maintained
- 4.29 Typical landscape maintenance issues will include:
- Watering to establish new planting, trees and grass areas, and maintain good growth.
 - Weeding of planting areas and topping up mulches – a good choice of plant material and a high standard of implementation will assist here. Application of herbicides should be kept to a minimum.
 - Formative pruning of trees, cutting back and pruning of shrubs and herbaceous plants according to species.
 - Thinning of planted areas to allow unrestricted growth.
 - Replacement of dead or failing trees, plants and grass areas.
 - Mowing of lawns, informal grass and meadow areas.

- Adjusting ties, stakes and guards and replacement as necessary.
- Maintenance of special landscape features such as Sustainable Drainage Systems, ponds or boardwalks.
- Maintenance of hard surfaces including patching or re-roiling (e.g. hoggin or gravel areas) as re-pointing of block or stone areas.
- Maintenance of street furniture, fencing and landscape lighting.
- Litter collection.

4.30 On larger or more complex schemes, particularly if implementation of the proposals covers a considerable period of time (for example a major housing development or the creation of a country park) the applicant should provide a **Landscape Management Plan**. This will describe the long-term goals of the landscape scheme and how these will be achieved, in addition to the regular maintenance tasks.

4.31 Typically the landscape Management plan will cover the following areas:

- Describing the overall vision for the scheme.
- Securing long term management of the landscape to enhance and sustain the character of the development and its setting.
- Identifying the time frames required for each stage of the management programme, for example the Establishment period (say years 1-5), Maturation period (years 6-15) and long term mature period (Year 16 onwards) and the essential tasks required within each.
- To identify and describe 'one off' or occasional works which nevertheless may involve considerable expertise and expense, the dredging of a lake or major works to veteran trees for example.
- To ensure through proactive management that foreseeable risks to the users of the landscape are maintained at reasonable, low levels.
- To monitor the progress of the scheme, which may also include amending and priorities and targets as the landscape matures over time.

APPENDIX 1

LOCAL DEVELOPMENT FRAMEWORK POLICIES SUPPLEMENTED BY THE SUPPLEMENTARY PLANNING DOCUMENT

DEVELOPMENT CONTROL POLICIES DEVELOPMENT PLAN DOCUMENT

DP/1 Sustainable Development – in particular part o
DP/2 Design of New Development – in particular parts b, k and l
DP/3 Development Criteria – in particular part o
GB/2 Mitigating the Impact of Development in the Green Belt
GB/3 Mitigating the Impact of Development Adjoining the Green Belt
GB/5 Recreation in the Green Belt
Natural Environment Objectives – in particular objective NE/c
NE/4 Landscape Character Areas
NE/5 Countryside Enhancement Areas
NE/6 Biodiversity
NE/7 Sites of Biodiversity Importance
CH/1 Historic Landscapes

NORTHSTOWE AREA ACTION PLAN

NS/2 Development Principles – in particular part h
The Site and Its Setting Landscape Objective C2/b
Landscape Objectives – in particular objectives D7/b, D7/d and D7/g
NS/12 Landscape Principles
NS/13 Landscape Treatment of the Edges of Northstowe
NS/14 Landscaping Within Northstowe
Biodiversity Objectives D8/a – i
NS/16 Existing Biodiversity Features
NS/17 New Biodiversity Features

CAMBRIDGE SOUTHERN FRINGE AREA ACTION PLAN

CSF/1 The Vision for the Cambridge Southern Fringe
CSF/2 Development and Countryside Improvement Principles – in particular part 9
Trumpington West and the Southern Setting of Cambridge Objectives – in particular
C3/b
CSF/5 Countryside Enhancement Strategy
Landscape Objectives – in particular D6/b, D6/d and D6/g
CSF/12 Landscape Principles
CSF/13 Landscaping within Trumpington West
Biodiversity Objectives D7/a – f
CSF/15 Enhancing Biodiversity
Phasing and Implementation Objectives – in particular E1/b

CAMBRIDGE EAST AREA ACTION PLAN

CE/1 The Vision for Cambridge East
The Site and Its Setting Landscape Objective C3/b
CE/4 The Setting of Cambridge East
Landscape Objectives D7/b, D7/d and D7/g
CE/13 Landscape Principles
CE/14 Landscaping Within Cambridge East
Biodiversity Objectives D8/a – i
CE/16 Biodiversity
CE/17 Existing Biodiversity Features
CE/33 Infrastructure Provision – in particular part g

ASSOCIATED SCDC SUPPLEMENTARY PLANING DOCUMENTS

Design Guide SPD

Aims to assist applicants in understanding the importance of good design in development of all scales, and how solid design principles relate to urban areas, villages, individual properties, the historic environment and the landscape of South Cambridgeshire.

<http://www.scambs.gov.uk/Environment/Planning/DistrictPlanning/LocalDevelopmentFramework/SPDs/DistrictDesignGuideSPD.htm>

Development Affecting Conservation Areas SPD

Aims to help applicants to understand the historical context and character of conservation areas, to advise on appropriate design and guide applicants through the planning and conservation area applications where these are required.

http://www.scambs.gov.uk/Environment/Planning/DistrictPlanning/LocalDevelopmentFramework/SPDs/Development_Affecting_Conservation_Areas_SPD.htm

Open Space in New Developments SPD

Aims to guide applicants through the planning process understand their required contributions to open space provision, ensure Parish Councils and / or the local community are involved in decisions that affect public open space provisions within new developments and that new facilities provided are appropriately designed to maximise amenity benefits.

<http://www.scambs.gov.uk/Environment/Planning/DistrictPlanning/LocalDevelopmentFramework/SPDs/OpenSpaceSPD.htm>

Trees and Development Sites SPD

Aims to Assist applicants' understanding of the role of trees within the wider environment and how they should be incorporated within development proposals as part of a high quality design, to help applicants gain planning permission quickly by informing them of information required to accompany planning applications and to ensure that development works are undertaken in an appropriate manner to avoid adverse harm to trees, including their roots.

http://www.scambs.gov.uk/Environment/Planning/DistrictPlanning/LocalDevelopmentFramework/SPDs/Trees_Development_SPD.htm

Biodiversity SPD

Aims to assist applicants' understanding of the role of biodiversity within the wider environment and how biodiversity features should be incorporated within development proposals, to assist in gaining planning permission quickly by informing them of the level of information required, and to ensure that development works are undertaken in an appropriate manner to avoid harm to biodiversity.

http://www.scambs.gov.uk/Environment/Planning/DistrictPlanning/LocalDevelopmentFramework/SPDs/biodiversity_SPD.htm

Listed Buildings SPD

Aims to Assist applicants' and agents' understanding of whether Listed Building Consent is required to undertake proposed works and an understanding of the local historic context; To ensure that works to Listed Buildings are carefully considered and appropriately designed, protecting and enhancing the character, appearance, architectural interest or setting of listed Buildings, and to assist applicants' and agents' to gain Listed Building Consent and / or planning permission quickly by informing them of what information is required to accompany applications.

http://www.scambs.gov.uk/Environment/Planning/DistrictPlanning/LocalDevelopmentFramework/SPDs/Listed_Buildings_SPD.htm

APPENDIX 2

LANDSCAPE CHARACTER AREAS AND LANDSCAPE PRINCIPLES

Below the landscape Character Areas covered by south Cambridgeshire are described in more detail. Cambridgeshire, together with an overview of how a landscape scheme may respond to the Character Area, both generally and at a more detailed level.

As a general principle, the landscape scheme should respond to the developments place in the wider landscape, respecting the geology, landform, built form, history and management of the South Cambridgeshire Landscapes. To a large extent the Landscape Character of a scheme is what will make the development special and distinctive.

All development should take account of the established landscape character of the location, and new landscapes should build upon these key features through careful design and selection of plants and materials.

Landscape character can be promoted at a range of different ways- ranging from the choice of a paving material or an individual tree, to the structure and layout of a whole new town.

A) JCA 46 - THE FENS

The Fens (and the Fen Edge) are a large scale landscape with long views and extensive vistas to often level horizons and huge skies. However areas of shelterbelts, clumps of trees and occasional hedgerows can merge together to give the impression of a treed horizon.

A hierarchy of rivers, lodes, drains and ditches provide a strong influence throughout the area. Embanked rivers roads and railways create local enclosure and elevation, often with the raised banks providing good grassland habitats.

A rich and varied intensive agricultural land use including wide range of arable, root crops, bulbs, vegetables and livestock. Horticultural glasshouses and general agricultural clutter is often significant. Orchards are a distinctive feature.

The soil is peaty and dark and a significant feature when not covered with crops.

The area contains several low sand and gravel 'Islands' which have provided a focus for settlement, often with the village core is often the high point with the more modern development spreading to the lower land.

These 'islands' often have a significantly higher proportion of grassland cover, trees and hedgerows which screen the low lying buildings.

There is a strong linear street pattern. The older parts of the settlements often having continuous street frontages and an intimate character.

Small scale medieval field patterns are common at the edge of settlements.

Church towers and spires significant trees can create landmarks and be seen from long distances.

Typical trees and hedgerows include Ash, Oak, Poplar, Willow species, Hawthorn, Dogwood, Horse chestnut and Sycamore.



The Huge Sky of the Fenland Landscape - Looking towards the Isle of Ely and Ely Cathedral. *Source: Cambridgeshire County Council*

JCA 46 – The Fens - General Landscape Principles

Loss of individual trees including pollards. Recent tree planting predominantly of leylandii to create shelter.

- The retention of the distinctive large-scale vistas is important.
- Isolated farms and buildings will benefit from tree planting, singly and in groups to soften their form and integrate them into the landscape.
- On clay islands, the introduction of new woodlands and hedgerow reinstatement will reinforce their local distinctiveness.
- Linking Fen villages and settlements to their surrounding landscape should be considered, using grassland, wetland, shelterbelts and hedgerow planting using species and forms, which will reinforce the village edge landscape character. Avoid shelter belts of conifers and ornamental evergreens.

- Dykes and drainage ditches should be managed sensitivity to encourage wildlife and enhance biodiversity – for example by varying the angle of slope and introducing shelves at various levels for plants and wildlife.
- The re-creation of large areas of wet swamp fenland and wash grasslands by management of rivers and drains should be considered. The use of washes for winter water storage and the protection of retained areas e.g. Wicken Fen and Ouse and Nene Washes are important.
- Retain and manage of old orchards and fruit varieties which exist on many village edges. Supplement these existing areas with the establishment of new orchards.
- The conservation of archaeological sites at risk from peat erosion and cultivation should be addressed.

B) JCA 86 SOUTH SUFFOLK AND NORTH ESSEX CLAYLANDS

This is a gently undulating plateau of arable farmland up to 100-120m in height, divided by broad shallow valleys, drained by small streams and with some locally steep slopes.

It is predominantly an open and intensive arable landscape. Field sizes are generally large and are bounded by either open ditches or sparse closely trimmed hedges, both containing variable number and quality of hedgerow trees.

However the landscape is united by the gently rolling landform and areas of woodland, which often appear to join together on the horizons to give a wooded skyline.

Villages and settlements typically have strong linear forms, but often low density and loose-knit, sited in a wooded setting with mature hedgerows and trees which contribute to the rural character. Most villages are sited on the valley sides or ridge tops. Small paddocks and long back gardens help to soften the village edges.

Typically planting will include Mixes Oak-Ash woodland together with Wild Cherry and field maple. Trees in hedgerows will include Oak Ash and Field Maple. On stream sides and slopes Alder may dominate the wetter areas, with the remainder a mix of Dogwood, Guelder Rose, and Willow species, with Hazel Ash and Oak in the dryer areas.

JCA 86 – South Suffolk and North Essex Claylands - General Landscape Principles

- Management and enhancement of existing woodlands. This will include connecting new landscape features to existing woodland and retaining and incorporating smaller areas of woodland into major developments.

- Creation of new woodlands, particularly where these will assist in link large developments to the landscape, or enhance the landform of skyline. New woodland should link with existing landscape features wherever possible.
General Landscape Principles
- Maintenance and enhancement of existing hedgerows, including protection and encouragement of new and existing hedgerow trees.
- Planting shelter belts and widening hedgerows to create linear elements and link woodlands.
- Careful design of village and settlement edges to link with the existing landscape.
- Maintenance and enhancement of other desirable landscape features such as river valley pasture.

C) JCA 87 EAST ANGLIAN CHALK

Distinctive, open, variable topography of rolling Chalk hills, some with distinctive beech belts along roads or featuring hilltop or scarp slope beech woodland (hangers). Lower woodlands are Ash dominated.

Large-scale rolling downland, mainly arable, has distinctive long straight roads, open grass tracks and ancient or Roman routes and earthworks (Devil's Dyke, Fleam Dyke and Icknield Way) Isolated 19th century white or yellow brick farmhouses.

Distinctive nucleated villages, generally within valleys, often at crossing points or fords. Many villages are well treed and often not visible from the wider landscape. Village greens are common, both at large and small scales. Avenue planting to village approaches is typical of some villages.

To the east of the area is cut by the valleys of the rivers Granta and Rhee – giving an intimate character with small grazing meadows and wet woodland. Some valleys also feature historic parklands.

Strong rural character across most of the area although disrupted by major transport routes such as the A505 and M11.

Manicured character of stud landscape and shelter belts approaching Newmarket, with domesticated smaller-scale settled landscape to the east of this featuring rows of pine.

Dominant Woodland trees are the Beech 'hangers' mixed woodland of Beech and Ash with small-leaved lime, hornbeam, wild cherry and yew. Hedges and scrub feature the usual Hawthorn, Hazel, Blackthorn, Field maple and Dog Rose, along with Wayfaring Tree, wild Privet and Yew. Trees in hedgerows are dominated by Ash, with Beech and Field maple.



Rolling Chalkland Landscape near Balsham – The hedge line is recently established and connects two county wildlife sites.

JCA 87 – East Anglian Chalk - General Landscape Principles

- Planting, conserving and enhancing Beech Hangers as focal points to reinforce the Chalk landscape as a setting for development.
- Management, conservation and creation of chalk grassland
- Management of existing shelter belts and creation of new shelter belts and small areas of mixed woodland linked to existing landscape features. This will break up the largest areas of open farmland while maintaining the contrast between the more open landscape and the more small-scale landscape of the river valleys.
- Enhancement of linear features in the landscape such as footpaths, ancient tracks dykes, and road corridors.
- A more sensitive approach to the stud Landscape at the edge of the district towards Newmarket.

D) JCA 88 BEDFORDSHIRE AND CAMBRIDGESHIRE CLAYLANDS

Gently undulating topography and plateau areas, divided by broad shallow valleys.

Predominantly an open and intensive arable landscape. Fields bounded by either open ditches or sparse closely trimmed hedges both containing variable number and quality of hedgerow trees.

Woodlands are scattered with the larger ancient woodland areas concentrated to the north and west of the area. Occasional parkland and orchards add interest to the area.

Villages are often located on the sides of small valleys, along spring lines or on the higher ground. A diversity of building materials.

Medieval earthworks including deserted villages the major feature of visible archaeology.



Near Elsworth - shallow valleys in the Clayland landscape

JCA 88 – Bedfordshire and Cambridgeshire Claylands - General Landscape Principles

- Management and enhancement of existing woodlands and the creation of new woodlands where these will have a beneficial impact on vistas, landform and skyline, or to enhance the traditional field pattern. The continued management of existing ancient woodlands is important.
- Planting woodland blocks based on hedgerows and there is scope for the creation of new woodlands: smaller woods to river valleys and larger woods on

higher plateau areas, with scope to enhance linkage within traditional woodland areas.

- Planting woodland belts and corridors, preferably based on existing and traditional hedge lines and field patterns, particularly in very open areas where hedges have been removed.
- Restoration, conservation of existing hedgerows and planting of new hedgerows.
- Careful design and planting of village approaches and the expanding edges of existing urban areas and the new developments which are often hard and have little relationship with the landscape.
- The management of unimproved grasslands on settlement edges should include the retention of remaining ridge and furrow.

E) JCA 90 BEDFORDSHIRE GREENSAND RIDGE

The Bedfordshire Greensand Ridge forms a narrow elongated area running from Leighton Buzzard in the south west (the highest area) dropping gently to Gamlingay in the north east - a distance of approximately 40km. It is entirely surrounded by the Bedfordshire and Cambridgeshire Claylands. There is a distinct scarp slope to north-west and dip slope to south-east.

The north-west facing scarp slope has a high proportion of woodland (both deciduous and coniferous) and areas of heath and pasture, producing a distinctive wooded skyline. The dip slope features medium sized arable fields and wooded landscape. Here there has been some removal of hedges and hedgerow trees to create larger fields, but the area remains distinctive from the Claylands.

Much of the Bedfordshire Greensand Ridge is located on Cretaceous sands and sandstones, which have produced acidic, free draining soils, which are of poor fertility compared to the surrounding clay. This has had a marked influence on the vegetation which was more suitable for the establishment of hunting estates of heath and mixed woodland. These areas are distinctive and of high biodiversity value.

Due to the areas relative height there are panoramic views to north across claylands, with several large houses and estates utilising the scarp and dramatic change in levels, for example Waresly Park, Tetworth Hall and Woodbury Hall, all near Gamlingay.

To the south further historic parklands and estates, including Woburn, Haynes, Shuttleworth, Sandy Lodge and Southill, often with associated estate villages, give the impression of a well-tended landscape.

The influence of the estate owners has also kept the size of settlements restricted to small nucleated groups. This has controlled the amount of 20th century development in the area.

JCA 90 – Bedfordshire Greensand Ridge - General Landscape Principles

- The contrast between the Greensand area, particularly the edge of dip slope, and the adjacent claylands can be emphasised by appropriate tree species. A varied scarp skyline with a mix of woodland, heath and pasture is important.
- The varied mix of deciduous and coniferous woodlands benefits amenity, recreation, wildlife and timber production.
- There are opportunities to conserve and reinstate hedgerows, hedgerow trees and pasture.
- Creation and restoration and management of existing heath habitats on the scarp slope and opportunities to create new areas of heath.
- Linking and management of the existing areas of parkland, and limited opportunities to re-create new parkland through grazing planting of specimen parkland trees.

FURTHER INFORMATION ON THE SOUTH CAMBRIDGESHIRE LANDSCAPE

Cambridgeshire County Council has produced design guides covering the rural landscape and urban and public landscapes which are available to download.

- ***Cambridgeshire Landscape Guidelines*** – A Manual for Management and Change in the Rural Landscape. This includes a detailed section on Landscape Character:
<http://www.cambridgeshire.gov.uk/environment/countryside/natureconservation/policy/guidelines.htm>
- ***Cambridgeshire Design Guide for Streets and the Public Realm*** - including space requirements for street trees:
<http://www.cambridgeshire.gov.uk/NR/ronlyres/85351670-E400-4490-8ABF-C073C9BEF20B/0/CambridgeshireDesignManual051007EMAIL1.pdf>

TYPES OF LANDSCAPE SCHEMES

The type and scale of the landscape scheme should be appropriate to the development. Below are some examples of a range of developments and landscape elements, both large and small, together with suggestions the scale and character of landscape treatments.

Major Developments

Housing

PPS 1 states that good design is fundamental to the development of high quality new housing, should aid the creation of sustainable, mixed communities, and should contribute positively to making places better. Design which is inappropriate in its context, or which fails to take the opportunities available for improving the character and quality of an area and the way it functions, should not be accepted.

Landscape elements to be considered within a housing scheme may include the following:

- *Buffer zones and connecting landscapes* - Elements such as 'green corridors' should be of a scale to complement the development, and allow sufficient space for a variety of plants including some large trees and areas of native planting where appropriate
- *Existing landscape features* - Existing trees, hedges and significant landscape features such as historic walls, railings or vistas should be incorporated into the design wherever possible. Location of new buildings, roads and parking areas should be carefully considered to allow sufficient room for existing landscape assets.
- *Street Landscapes* - Road layout must be considered at an early stage in the design process. The design should ensure that ensure that the highway layout avoids unnecessary areas of drives and roadway, and that it maximises space for landscape.

Sufficient space should be available for appropriate street trees and areas of landscape to emphasise important local places such as nodes, vistas etc.

Create 'semi-permeable' landscapes - a balance should be struck between security, accessibility and visual quality.

- *Boundary Treatments* – Walls, fencing, rails and bunding must be sympathetic to the local landscape character and landform. Boundary planting must be given sufficient room to mature.
- *Front gardens* - The style quality and layout of front gardens can have a marked effect on the success of the landscape scheme. Attention to the quality and scale of hard surfaces, railing, walling and planting is vital. Refuse storage is often an important design consideration.
- *Public open space and Play Space* – Provision of public open space is often a requirement of a section 106 agreement associated with the planning permission. A variety of spaces should be provided, of appropriate layout and size for their intended use.



Large scale open space adjacent to housing development – Use of native planting and informal hard surfacing connects the development with existing landscape and on to the wider countryside.

Industrial and commercial

- *Buffer Zones and Screening* - Buffer zone of planting are particularly important in helping to integrate industrial or commercial areas into the landscape, particularly as such areas are often situated adjacent to the open countryside. The width of a buffer zone will depend on a variety of factors, for example topography, visibility, sensitivity, surrounding land use and size of development. Generally this will be a minimum of 5 metres and up to 30 metres for larger developments.
- *Structural Landscape* - The spaces between industrial units and major spine roads landscape treatments of an appropriate scale to reduce the impact of often very large buildings. The use of landscape to create gateway features and 'signposting' within the development is also important.
- *Landscape Amenity* – Space at a more human scale – for example a seating area for lunch areas or communal gardens should be provided for employees and visitors, with attractive views, an element of privacy, a choice of sun or shade, and safe and comfortable access for pedestrian and cycles as well as vehicle users.



Small scale amenity spaces can offer a more human scale and the enclosure provided can reduce the impact of large buildings. The use of a mix of shrubs, trees and herbaceous plants can help to establish a more informal character.

Health care and Social Landscapes

While similar in some respects to commercial landscape design - often including large buildings and extensive parking areas - good landscape design for hospitals and care homes is often very specific to the intended users.

Residents, staff and families using hospitals, long-term care and assisted living facilities, residential care homes, hospices, home environments and facilities for children, will all benefit from a well designed landscape that works in harmony with the buildings.

For residents and patients the landscape can speed physical and mental recovery. It can support both physical and mental abilities, compensate for losses, and instil a sense of belonging and usefulness in residents. It can provide opportunities for the development of new skills and hobbies, describe the passing of time and highlight the differences in the seasons through visual and physical connections to the outdoors.

Landscape can create places for physical exercise, with space for residents' activity programmes and a sense of independence and freedom by minimizing the use of monitored or alarmed doorways to secured outdoor areas.

Staff and visitors will also need their own spaces for relaxation.

The landscape must provide a pleasant flexible work environment, and allowance for complete surveillance from inside and out, while visiting families can become involved in outdoor activities, helping residents to settle in their new surroundings.

Below are some brief design notes for landscapes in healthcare facilities.

See further information below Appendix 3 for further details.

- *Integration of buildings* - The landscape setting should be well integrated with the uses of rooms within the building. The building footprint should create attractive spaces, which individual bedrooms and communal sitting rooms can overlook.
- *Links to outside* - Residents can be tempted to visit the outdoors by there being an obvious straightforward route to the gardens from the sitting rooms. The landscape scheme should aim to strengthen the connection between the inside and outside by allowing clear visible links and sheltered outdoor spaces close to the building.
- *Variety of spaces* - The scheme should include a variety of spaces, which are stimulating and suitable for active and passive activities. The external environment should be secure, where possible allowing the doors into the garden from the building to be unlocked, allowing residents to go out into the garden when they choose.
- *Obvious routes* - The layout of the gardens should include circular or figure of eight shaped footpaths so that any residents can easily find their way back to the door they came out.
- *Encouraging activity* - The layout of the gardens should allow the residents to continue with activities, for example gardening in raised beds or growing fruit and vegetables for use in the kitchen.
- *Seasonal planting, colour and scent* - As the garden will also be enjoyed from inside it is important that the planting provides all year round seasonal interest. This should be both visual and scented to also appeal to those with failing eyesight.
- *Attracting wildlife* - Planting should also be attractive to wildlife as aside from increasing biodiversity, many residents will enjoy watching butterflies, birds and squirrels attracted to the landscape.

Education

The design of external spaces are a vital element of colleges, schools, and nurseries, and can contribute greatly to the curriculum, play sport and to the general health and wellbeing of students, teachers and visitors.

The design of the interior and exterior space must be fully integrated from the start, rather than allowing external activities to be relegated to leftover space around the buildings. Not all facilities may be needed immediately, for example a school garden or nature reserve but the layout of external space must be flexible enough to allow their provision when resources allow.

Children will spend a great deal of time in school grounds, particularly in the winter months, and it is important that external spaces provide the range of experiences needed for their healthy development. The landscape should be stimulating and provide some sense of adventure and escape while remaining safe and allowing visual supervision.

Scale will be an important consideration both to the layout of space, for example providing small, quiet spaces intended for a few children, up to lively areas which will accommodate the whole class (or more), and also to individual landscape elements such as boundary treatments and seating. Space will also be needed for parents and visitors to gather and circulate, and for after school time activities.

External space around colleges, schools and nurseries may include the following:

- *Welcoming, comfortable spaces* – Entrance areas and circulation space for adults and children to gather. Places that are sunny and sheltered in the cold months and shaded in hot weather. Seating and space for outdoor lessons.
- *Play space* – Space of varying scales for active and passive play. Active spaces should be robust with hard wear expected.
- *Imaginative Places* - Space for imaginative play involving natural elements such as mounds and ditches, timber, stone and vegetation - a hazel copse for example.
- *Planted Areas* - Robust, colourful planted areas with shrubs, herbaceous plants, herbs and grasses that can be used both for teaching and for play. Planting should provide scent, colour, and texture, and show change throughout the seasons.
- *Sports Areas* - Space for formal games pitches, - tennis, netball or basketball and space for free play.
- *Wildlife Area* – Space with varying degrees of access to encourage wildlife. This can include wet areas and (safe) ponds, native planting and meadow areas. The scale of these areas need not be large.
- *School Garden* - A sunny place for a school garden. The space should be accessible to all with paved areas and some raised beds.



Above: A Safe Pond

A pond with timber viewing deck and safety grid. This can be removed for 'pond dipping.'

Left: Imaginative space

Timber, stone and changes in level combine to offer opportunities for imaginative play in a limited area.

Minor Developments

Housing

- *The Local Landscape* – road widths, vegetation, buildings and areas of open space and local designations, a conservation area for example, will have the greatest bearing on the design. This will usually be at a smaller more domestic scale.
- Space may often be limited and close to existing housing, so careful selection of landscape materials and planting is very important.

Village Landscapes

- Landscape Design should respect the built form of the village, its open spaces and relevant history. As development will often adjoin open countryside, the design of the rear boundaries and spaces will often be as important as the frontage. Careful integration of parking areas and refuse storage into the village scene will be required.

Sustainable Drainage Systems (SUDS)

- *Sustainable Drainage Systems (SUDS)* can bring many benefits to the landscape. They can not only help to protect development from flooding but can also deliver community benefits, enhance the quality of life for residents, increase biodiversity and help to reduce the impact of climate change.

Cambridgeshire City Council has produced a Design and Adoption Guide for Sustainable drainage systems:

<http://www.cambridge.gov.uk/public/docs/SUDS-Design-and-Adoption-Guide.pdf>

Anglian Water has also produced an overview guide to the design and adoption of SUDS. This will be followed by a full technical guide:

http://www.anglianwater.co.uk/assets/media/SUDS_LEAFLET_-_AW162.pdf

The SCDC Biodiversity SPD also includes details of SUDS in relation to biodiversity and examples of SUDS schemes in South Cambridgeshire.

http://www.scambs.gov.uk/Environment/Planning/DistrictPlanning/LocalDevelopmentFramework/biodiversity_SPD.htm

FURTHER INFORMATION

Healthcare Landscape

Chalfont, G. (2008) *Design for Nature in Dementia Care*. London: Jessica Kingsley

Thrive – A charity promoting therapeutic landscape

<http://www.thrive.org.uk/about-thrive.aspx>

Education Landscape

Learning Through Landscapes – The main school grounds charity for The UK, promoting good design to help schools and early years settings make the most of their outdoor spaces for play and learning.

<http://www.ltl.org.uk/>

PLANTING LISTS

Below are brief lists of plant species suitable for various situations. These are only suggestions, and it is important that there is sufficient site analysis to ensure that the plants chosen are appropriate to the local Landscape Character, the site conditions and intended use of the scheme.

Native Planting for Woodlands, Buffer Areas etc.

Large Trees

Ash - *Fraxinus excelsior*

Beech - *Fagus sylvatica*

Crack Willow – *Salix fragilis*

Hornbeam - *Carpinus betulus*

Hybrid Black Poplar - *Populus nigra*

Oak – *Quercus robur*

Small Leaved Lime – *Tilia cordata*

White poplar – *Populus alba*

White Willow – *Salix alba*

Wild Cherry – *Prunus avium*

Medium Trees

Alder – *Alnus glutinosa*

Bird cherry – *Prunus padus*

Crab apple – *Malus sylvestris*

Downey birch - *Betula pubescens*

Field maple – *Acer campestre*

Rowen – *Sorbus aucuparia*

Silver Birch – *Betula pendula*

Small Trees and Shrub Species

Blackthorn – *Prunus spinosa*,

Dog Rose – *Rosa canina*,

Dogwood – *Cornus sanguinea*

Field Rose – *Rosa aevensis*,

Guelder Rose – *Viburnum opulus*,

Grey Willow - *Salix cinerea*

Hawthorn – *Crataegus monogyna*

Hazel – *Corylus avellana*

Holly – *Ilex aquifolium*

Osier Willow – *Salix viminalis*

Purging Buckthorn – *Rhamnus cathartica*

Spindelberry – *Euonymus europaeus*,

Wayfaring tree – *Viburnum lantana*

Wild Privet – *Ligustrum vulgare*,

Typical Native Hedgerow Mixture

50% Hawthorn – *Crataegus monogyna*

15% Blackthorn - *Prunus spinosa*

10% Hazel – *Corylus avellana*

10% Guelder Rose - *Viburnum opulus*

5 % Dogwood - *Cornus sanguinea*

Plus 10 % Species specific to local landscape character.

Street Trees

With extensive hard surfaces, reflected heat and airborne pollution, streets can be a tough environment for trees, particularly in urban areas. In these situations many tree species can be slow to establish. Unwanted physical attributes of the tree (shallow, spreading roots, or susceptibility to aphid dew, for example) can further limit the choice of a suitable street tree.

Below are listed some examples of trees which have proved successful in street planting. Whatever tree is chosen, a first class growing medium of a sufficient volume, care taken in planting operations and a comprehensive maintenance plan will be essential if the tree is to establish and flourish.

Large Street Trees

London Plane - *Platanus x Hispanica*
Maidenhair Tree - *Ginkgo biloba*
Norway Maple - *Acer platanoides* 'Columnare'
Small Leaved Lime - *Tilia cordata* 'Greenspire'
Sweet Gum - *Liquidamber styraciflua*
Turkish Hazel - *Corylus colurna*

Medium and Smaller Street Trees

Crab Apple varieties – *Malus baccata* 'Street Parade', *trilobata*
Hornbeam - *Carpinus betulus* 'Fastigiata'
Manna Ash - *Fraxinus ornus* 'Aire Peters'
Ornamental Pear - *Pyrus calleryana* 'Chanticleer'
Silver Birch - *Betula pendula*

Small Trees for Gardens

Apple Trees on a restricting rootstock, e.g. MM106
Cherry - *Prunus* - e.g. 'Spire'
Crab Apple - *Malus* e.g. *floribunda*, 'John Downie', 'Evereste'
Hawthorns - *Crataegus* e.g. *flava*, *prunifolia*
Ironwood - *Parrotia persica*
Judas tree - *Cersis siliquastrum*
Magnolia – e.g. - *salicifolia*
Maple – small varieties - e.g. *Acer callipes*
Mountain Ash - *Sorbus aucuparia* – e.g. 'Sheerwater Seedling', 'Asplenifolia'
Snowy mespilus - *Amelanchier lamarkii*
Staghorn Sumach - *Rhus typhina*
Strawberry tree – *Arbutus unedo*
Thorn varieties - e.g. *Crataegus monogyna* 'Alboplana'

Planting For Housing and Commercial Areas

Large plants

These will need a minimum of 3m x 3m or more space to grow effectively, and are not suitable for small beds or positions in front of windows etc. Plant as specimens or in small groups.

Barberry - *Berberis* - e.g. *x stenophylla*, *darwinii*.
Bottlebrush buckeye - *Aesculus paviflora*
Butterfly Bush – *Buddleia* - e.g. *davidii*, *alternifolia*, *globosa*
Californian Lilac - *Ceanothus*. e.g 'Impressus'
Cotoneaster - e.g. *cornubia*, *lacteus*
Elaeagnus x commutata
Hydrangea paniculata
Lilac - *Syringea*. - 'Mme Lemoine', 'Mme Antoine Buchner'
Mahonia x media
Mock Orange – *Philadelphus* - e.g. 'Virginal'
Viburnum rhytidophyllum

Medium plants

These will need a minimum of 2m x 2m or more space to grow effectively, and are not suitable for small beds or positions in front of windows. Plant in groups, typically of 5-15 plants. Some species are suitable for mass planting.

Acuba japonica

Barbury - *Berberis* - e.g. - *thunbergii*, 'Parkjuwel', *wilsoniae*.

Ceanothus - e.g. 'Autumnal Blue'

Daisy Bush - *Olearia x haastii*

Dogwood – *Cornus* - e.g. *alba* 'Sibirica', *alba* 'Elegantissima'

Escallonia - e.g. 'Donard Seedling', 'Apple Blossom'

Fatsia Japonica

Firethorn - *Pyracantha* - e.g. 'Orange Glow', 'Mohave'

Flowering Currant - *Ribes sanguinea*

Glabrous Sumach - *Rhus glabra*

Hydrangea macrophylla

Lilac - *Syringa x persica*

Mexican Orange - *Choisya ternata*

Mock Orange – *Philadelphus* - e.g. 'Belle Etoile', 'Aureus'

Rose – *Rosa* – eg 'Canary Bird', 'Constance Spry', *rugosa*, *moyesii*.

Viburnum tinus

'Garden' planting

Planting used in conjunction with the larger plants or on their own in smaller spaces such as front gardens. In small spaces, planting design should normally be simple and contain a mix of shrubs and herbaceous plants.

Shrub Species

Most species are between 0.5 - 1.0m tall. Plant in groups typically of 3-15 plants.

Rock Rose - *Cistus* - e.g. - *x cyprinus*, *creticus*, 'Silver Pink'

Cotoneaster - e.g. - 'Horizontalis', 'Conspicuous Decorus'

Euonymus 'Silver Queen'

Spurge – *Euphorbia* - e.g. - *wulfenii*, *robbeii*, *griffithii* 'Fireglow'

Veronica - *Hebe* - e.g. - *Midsummer Beauty*, *Hebe* 'Autumn Glory', *Hebe* 'Mrs Winder'

Lavander – *Lavandula* - e.g. - 'Hidcote', 'Vera', 'Stoechas'

Lonicera pilata

Jerusalem sage - *Phlomis fruticosa*

Potentilla - e.g. 'Abbotswood', 'Red Ace', 'Elizabeth'

Rose - *Rosa* - e.g. - 'Surrey', 'Bonica', 'Grouse'

Rosemary - *Rosmarinus officinalis*

Sage – *Salvia* - e.g. - 'Purperescens'

Cotton Lavander - *Santolina chamaecyparissus*

Sarcococca humulis

Senecio greyii

Skimmea japonica

Spirea – e.g. *japonica* 'Anthony Waterer'

Perrywinkle - *Vinca minor*

Herbaceous Plants

Most species are between 0.3 - 0.6m tall. Plant in groups – typically of 3 - 15 plants.

Yarrow - *Acillia* - e.g. 'Moonshine'
 Lady's Mantle - *Alchemilla mollis*
 Elephants Ears - *Bergenia* - e.g. 'Purpurea', 'silberlicht'
 Geranim - e.g. - *macrorrhizum*, 'x Magnificum', 'Wargrave Pink'
Helleborus corsicus
 Day Lilly - *Hemerocallis* - e.g. 'Golden Chimes', 'Stafford', 'Fulva'
Iris - e.g. 'Sibirica', 'Pallida', foetidissima
Liriope muscari
 Catmint - *Nepita* 'Six Hills Giant'
Penstemon - e.g. 'Apple Blossom', 'Garnet', 'Pink Endurance'
 Ornamental Sage - e.g. *Salvia* 'May Night'
 Ice Plant – *Sedum spectabile* - e.g. 'Brilliant', 'Stardust'
 Aunt May - *Sisyrinchium striatum*
 Lambs Ears - *Stachys byzantina*

Climbing Plants

Climbing plants can provide a great deal of impact in a limited space, and most will not damage structures or brick work given the correct support. Very vigorous species (particularly the Russian Vine - *Polygonum baldschuanicum*) will not be suitable for many situations.

Clematis - e.g. *Montana* 'Elizabeth', 'Jackmanii', *flammula*, *armandii*
 Honeysuckle – *Lonicera* - e.g. *japonica* 'Halliana', *Lonicera x Americana*
 Ivy - *Hedera* - e.g. *helix* 'Green Ripple', *helix* 'Goldheart', *hibernica*.
 Jasmine - *Jasminum* - e.g. *polyanthum*, *officinale*, *nudiflorum*.
 Sweetpea - *Lathyrus* - e.g. *nervosus*, *odoratus*, *sylvestris*.
 Boston Ivy - *Parthenocissus tricuspidata*
 Ornamental vine - *Vitis cignetiae*

Feature Plants

Generally best planted as single specimens or as small groups of 3 - 5 plants. Care will be needed in siting, ensuring that adjacent planting will allow the feature plant to display its form, while also considering the relationship to doorways, windows and pathways.

Black Bamboo - *Arundinaria nitida*
 Grass Species e.g. *Stipa Gigantica*, *Miscanthus sinensis* 'Gracillimus', *Pennisetum villosum*, *Carex pendula*
Mahonia x 'Charity
 Mullein – *Verbascum* - e.g. *olympicum*, 'Gainsborough'
 New Zealand Flax - *Phormium tenax* varieties.
 Red Hot Poker - *Kniphofia* - e.g. *agarvifolia*, 'Percy's Pride', 'Royal Standard'
 Spurge - *Euphorbia wulfenii*
Verbena bonariensis
Yucca varieties

Hedge Planting

Hedges that can be clipped to shape for tight spaces in housing schemes.

Box - *Buxus sempervirens*
Hornbeam - *Carpinus betulus*
Escallonia varieties
Beech - *Fagus sylvatica*
Privet - *Ligustrum ovalifolium* varieties
Lonicera pilata
Viburnum tinus

Shrub Species Attractive to Wildlife

The plants below are particularly attractive to wildlife offering nectar rich flowers or berries for food throughout the year.

Aucuba japonica.
Fuchsia varieties
Honeysuckle - *Lonicera* varieties
Jasminum officinale
Lavender – *Lavandula* varieties
Lilac - *Syringa vulgaris*.
Oregon Grape - *Mahonia aquifolium*.
Quince – *Chaenomeles* - e.g. *japonica*, *speciosa*.
Russian Sage - *Perovskia atriplicifolia*.
Sea Buckthorn - *Hippophae rhamnoides*.
Skimmia japonica.
Snowy mespilus - *Amelanchier lamarckii*.
Sweet Briar - *Rosa rubiginosa*.
Veronica - *Hebe* varieties
Viburnum – e.g. *bodnantense* or *tinus*.

Tough Wildflower Species for Colour

Below are listed native wildflower species to add colour and biodiversity value to the more informal areas of the landscape scheme. Given adequate ground preparation, most are quick to establish and from seed or plant plugs.

Chalk / drier soils

Greater knapweed - *Centaurea scabiosa*
Small scabious - *Scabiosa columbaria*
Agrimony - *Agrimonia eupatoria*
Lady's Bedstraw - *Galium verum*
Cowslip - *Primula veris*
Oxeye daisy - *Leucanthemum vulgare*
Wild carrot - *Daucus carota*

Loamy soils

Muskmallow - *Malva moschata*
Field scabious - *Knautia arvensis*

Common knapweed - *Centaurea nigra*
Meadow cranesbill - *Geranium pratense*
Cowslip - *Primula veris*
Oxeye daisy - *Leucanthemum vulgare*
Bladder campion - *Silene vulgaris*

Damp soils / ditch sides

Purple loostripe - *Lythrum salicaria*
Meadow sweet - *Filipendula ulmaria*
Devilsbit scabious - *Succisa pratensis*
Cuckoo flower - *Cardamine pratensis*
Ragged robin - *Lychnis flos-cuculi*
Common Fleabane - *Pulicaria dysenterica*
Tufted vetch - *Vicia rubra*
Marsh marigold - *Caltha palustris*
Yellow flag - *Iris pseudacorus*

APPENDIX 3

CONTACT DETAILS, ADVICE AND GUIDANCE, TECHNICAL STANDARDS AND FURTHER INFORMATION

CONTACT INFORMATION

South Cambridgeshire District Council

Landscape Design Officer
South Cambridgeshire District Council
South Cambridgeshire Hall
Cambourne Business Park
Cambourne
Cambridgeshire
CB23 6EA

Tel: 03450 450 500
www.scambs.gov.uk

Local Parish Council Contacts

A list of South Cambridgeshire's Local Parishes is available
<http://scdcsql:8070/mqParishCouncilDetails.aspx?LS=17&SLS=4>

ADVICE AND GUIDANCE

The Landscape Institute

33 Great Portland Street
London W1W 8QG

020 7299 4500
<http://www.landscapeinstitute.org/>

The Institute represents qualified Landscape Architects and other landscape professionals in the UK. The LI can offer advice regarding all aspects of Landscape Design including appointing a Landscape Architect.

British Association of Landscape Industries (BALI)

Landscape House
Stoneleigh Park
National Agricultural Centre
Warwickshire
CV8 2LG

0870 770 4971

www.bali.co.uk

The association represents Landscaping firms and other Landscape Professionals in the UK, and can advise on appointing a landscape contractor.

Natural England (Cambridge Office)

Natural England,
Eastbrook,
Shaftesbury Road,
Cambridge, CB2 8DR

01223 462727

<http://www.naturalengland.org.uk/ourwork/landscape/englands/character/areas/default.aspx>

The website has a full description of the Landscape Character Areas and suggestions for management to enhance the landscape.

Environment Agency (Central Area Office)

Bromholme Lane,
Brampton,
Huntingdon,
Cambridgeshire, PE28 4NE

08708 506506

<http://www.environment-agency.gov.uk/default.aspx>

The Environment Agency is a UK Government Agency that can offer help and advice on rivers, drainage, flooding, pollution, protection of the environment and sustainable development.

The Arboricultural Association

Ullenwood Court,
Ullenwood,
Cheltenham,
Gloucestershire, GL53 9QS.

01242 522152

<http://www.trees.org.uk/index.php> - phones

The Arboricultural Association aims to advance knowledge, good practice and education on all matters concerning trees. They can also offer advice in appointing a tree surgeon.

The Wildlife Trusts (Cambridgeshire Office)

The Manor House
Broad Street
Great Cambourne
CB23 6DH

01954 713500

http://www.wildlifetrusts.org/index.php?section=localtrustsites&trust_id=000222

The Wildlife Trusts are Britain's largest voluntary body and manage over 2200 nature reserves across the UK. The wildlife Trusts promote the protection, enhancement and creation of wildlife sites in new developments and can offer advice on wildlife provision in the landscape scheme.

Institute of Ecology and Environmental Management (IEEM)

43 Southgate Street
Winchester
Hampshire SO23 9EH

01962 868626

<http://www.ieem.net/default.asp>

IEEM represent professional Ecologists throughout the UK, and provides a variety of services to develop competency and standards in ecology and environmental management.

Royal Institute of British Architects (RIBA)

66 Portland Place
London
W1B 1AD

0207 580 5533

<http://www.architecture.com/TheRIBA/Home.aspx>

RIBA represents qualified Architects in the UK and promotes Knowledge training education and good practice in Architecture. The institute can also offer advice in appointing an architect.

Commission for Architecture and the Built Environment (CABE)

1 Kemble Street,
London WC2B 4AN

020 7070 6700

[http://www.cabe.org.uk/ - 2](http://www.cabe.org.uk/)

CABE promotes the creation of high quality architecture, urban design and outdoor space through partnership working, advice and education.

The Royal Town Planning Institute (RTPI)

41 Botolph Lane
London EC3R 8DL

020 7929 9494

http://www.rtpi.org.uk/the_rtpi/

The RTPI represents the planning profession in the UK. The Institute aims to manage the competing uses for space and the creation of spaces which are valued and have identity. The RTPI can also advise on the appointment of a planning consultant.

Town & Country Planning Association

17 Carlton House Terrace
London
SW1Y 5AS

Tel: 020 7930 8903

<http://www.tcpa.org.uk/>

The Town and Country Planning Association campaigns for the reform of the UK's planning system to make it more responsive to people's needs and aspirations and to promote sustainable development.

Planning Portal

<http://www.planningportal.gov.uk/>

Planning Portal is a Government website with access to a huge range of information covering planning policy and building regulations for England and Wales. Many of the documents are available to download free.

Cambridge Horizons

Endurance House,
Vision Park,
Chivers Way,
Histon,
Cambridge CB24 9ZR

01223 714040

<http://www.cambridgeshirehorizons.co.uk/>

Cambridge Horizons bring together relevant agencies, statutory bodies and developers to deliver sustainable housing, open space, community facilities, art and infrastructure to the region.

East of England Development Agency (EEDA)

Victory House,
Vision Park,
Chivers Way,
Histon,
Cambridge CB24 9ZR

01223 713900

<http://www.eeda.org.uk/>

EEDA promote development in the east of England through support for businesses, people and places.

Inspire East

Level 5
Breckland House
St Nicholas Street
Thetford
Norfolk IP24 1BT

01223 484644

<http://www.inspire-east.org.uk/>

Inspire East is the Regional Centre of Excellence for Sustainable Communities in the East of England. Inspire East provides a wide range of services to support people working to plan, deliver and maintain Sustainable Communities.

Shape East

The Courtyard,
Unit B,
21 Sturton Street
Cambridge CB1 2SN

01223 462606

<http://www.shape-east.org.uk/>

Shape East engages the public in issues affecting the local built environment, through workshops, interactive events, exhibitions, talks, training and online resources.

Government Office for the East of England

Eastbrook
Shaftesbury Road
Cambridge CB2 8DF

01223 372500

<http://www.go-east.gov.uk/>

The Government Office for the East of England join up the work of eleven Central Government Departments across the East of England to strengthen national policies, integrate regional strategies and drive local delivery.

STANDARDS and BEST PRACTICE GUIDELINES RELATING TO LANDSCAPE

British Standards

- BS 5837 2005 Trees in Relation to Construction recommendations
- BS 3882 Specification for Topsoil and recommendations
- BS 3998 1989 British Standard Recommendations for Tree Works
- BS 3936-1 1992 Nursery Stock Part 1: Specification for Trees & Shrubs
- BS 4043 1966 Transplanting Semi Mature Trees
- BS 5236 1975 Cultivation and planting of trees in advanced nursery stock category
- BS 4428 1989 Code of Practice for General Landscape Operations
- BS 1192 199 Construction drawing practice Part 4 Recommendations for landscape drawings
- BS 1377 Methods of test for soils for civil engineering purposes

- BS 5930 Code of Practice for site investigations.

The Health and Safety Executive

AW House
6-8 Stuart Street
Luton
Bedfordshire
LU1 2SJ

Fax: 01582 444320

<http://www.hse.gov.uk/index.htm>

(Covering Hertfordshire, Cambridgeshire, Bedfordshire and Milton Keynes and Buckinghamshire)

The Health and Safety Executive (H&SE) offer advice and guidance on all aspects of Health and Safety in Great Britain, including workplace Legislation, Regulation and Policy including specific guidance for the construction industry such as the Construction Design and Management Regulations (CDM).

In April 2007 the H&SE produced a revised version of the CDM Regulations, which place legal duties on virtually **everyone** involved in construction work. Those with legal duties are commonly known as 'Dutyholders'.

Dutyholders under CDM 2007 are:

- **Clients** - A 'client' is anyone having construction or building work carried out as part of their business. This could be an individual, partnership or company and includes property developers or management companies for domestic properties.
- **CDM Co-Ordinators** - A 'CDM co-ordinator' has to be appointed to advise the client on projects that last more than 30 days or involve 500 person days of construction work. The CDM co-ordinator's role is to advise the client on health and safety issues during the design and planning phases of construction work.
- **Designers** - The term 'designer' has a broad meaning and relates to the function performed, rather than the profession or job title. Designers are those who, as part of their work, prepare design drawings, specifications, bills of quantities and the specification of articles and substances. This could include architects, engineers and quantity surveyors.
- **Principal Contractors** - A 'principal contractor' has to be appointed for projects which last more than 30 days or involve 500 person days of construction work. The principal contractor's role is to plan, manage and co-ordinate health and safety while construction work is being undertaken. The principal contractor is usually the main or managing contractor for the work.

- **Contractors**- A 'contractor' is a business who is involved in construction, alteration, maintenance or demolition work. This could involve building, civil engineering, mechanical, electrical, demolition and maintenance companies, partnerships and the self-employed.
- **Workers** - A 'worker' is anyone who carries out work during the construction, alteration, maintenance or demolition of a building or structure. A worker could be, for example, a plumber, electrician, scaffolder, painter, decorator, steel erector, as well as those supervising the work, such as foreman and chargehands.

A summary of the Dutyholder's responsibilities can be found here:

<http://www.hse.gov.uk/construction/cdm/summary.htm>

The full text of the CDM 2007 Regulations can be found here:

<http://www.hse.gov.uk/construction/cdm/legal.htm>

National Plant Specification

The National Plant Specification provides information to aid the selection, specification, scheduling, pricing and delivery of plant material for the landscape industry. Pages cover all major plant groups including Trees, Shrubs, Climbers, Bamboos and Grasses, Herbaceous plants and Wildflower plants.

<http://www.gohelios.co.uk/default.aspx>



Planning and Sustainable Communities
South Cambridgeshire District Council
South Cambridgeshire Hall
Cambourne Business Park
Cambourne
Cambridgeshire CB23 6EA

t: 03450 450 500

www.scambs.gov.uk

