



Local Development Framework

Landscape in New Developments

Supplementary Planning Document

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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, and Planning Policy Guidance (PPG) 15: Planning and the Historic Environment. These promote sustainable, well designed, development that ensures landscape and biodiversity are at the heart to help create green spaces for people and wildlife, to contribute to a high quality natural and built environment, and contribute to a better quality of life.
- 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 of the role 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 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 B**. The key themes 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,
- To achieve a net increase in biodiversity
- To contribute towards recreation opportunities
- Achieve high quality landscaping;
- 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 include early provision of landscaping and biodiversity features on site.

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 Landscaping can become an on-going asset to the community, contributing in a wide variety of ways. The overall aim is to achieve an environment which 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 A.
 - 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** – Landscaping can help to integrate the development into the local landscape. It can provide visual screening, softening and mitigation of negative visual effects to developments of all scales.
 - d) **To Add maturity to developments** – The retention of good existing Landscape Features combined with a good standard of new planting and materials can add maturity to a new development.
 - e) **To improve the physical environment** – Hard and soft landscaping 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 – landscaping 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 effects of climate change – for example by providing space for sustainable urban drainage, 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. 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 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 and a more detailed description of this is included in below.
- 2.9 Whatever the scale of the landscape scheme it should be of a sufficient size to function correctly. It should be easy, safe and pleasant to use, trees and plants should have enough space to grow without overcrowding and it should complement and work well with 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 will 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. [and 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? How safe will the site entrance be? 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 Landscaping - tree, and shrub and other plantings, turfing and seeding.
 - g) Hard landscaping - paving, walling and fencing materials.
 - h) Biodiversity issues and Habitat creation.
 - i) The sustainability of the scheme. ? [do you mean species adaptable to drier climate so less need to water? – may be worth elaborating a little here.]
 - j) Reinstatement of the site after works.
 - k) Staff issues - appointing competent professionals such as a landscape architect and landscape contractor.
 - l) The landscape specification.
 - m) Landscape maintenance and aftercare
 - n) Compliance with government and other policy and guidance, for example, [need to reflect that the eggs are wider than Government guidance]
- 3.4 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’*

- o) Compliance with legislation for example - Tree Preservation Orders, Wildlife and Countryside Act, Countryside and Rights of Way Act.
- p) Compliance with professional codes and environmental policies for example
BS 5837 2005 Trees in Relation to Construction.
- q) Compliance with the objectives and policies in the South Cambridgeshire Local Development Framework.
- r) To accord with recognised Best Practice, for example that supported by CABI or the Landscape Institute.
- s) Support of wider green infrastructure proposals – Cambridgeshire Green Vision for example. ? [what status does this have?]

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

- 3.5 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.
- 3.6 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.
- 3.7 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.
- 3.8 **Further information on landscape professionals, including contact details for Landscape Architects and the Landscape Institute can be found in Appendix C**

LANDSCAPE REQUIREMENTS OF PLANNING APPLICATIONS

- 3.9 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.

- 3.10 **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 features, boundary treatments, water bodies, public rights of way, any significant changes in level and buildings and structures.
- 3.11 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 to BS 5837 2005 is generally required prior to determination.
- 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 the **Design and Access Statement**.
- 3.13 A detailed landscape scheme describing in full the hard and soft landscape materials, construction details, landscape specification 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 landscaping, 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

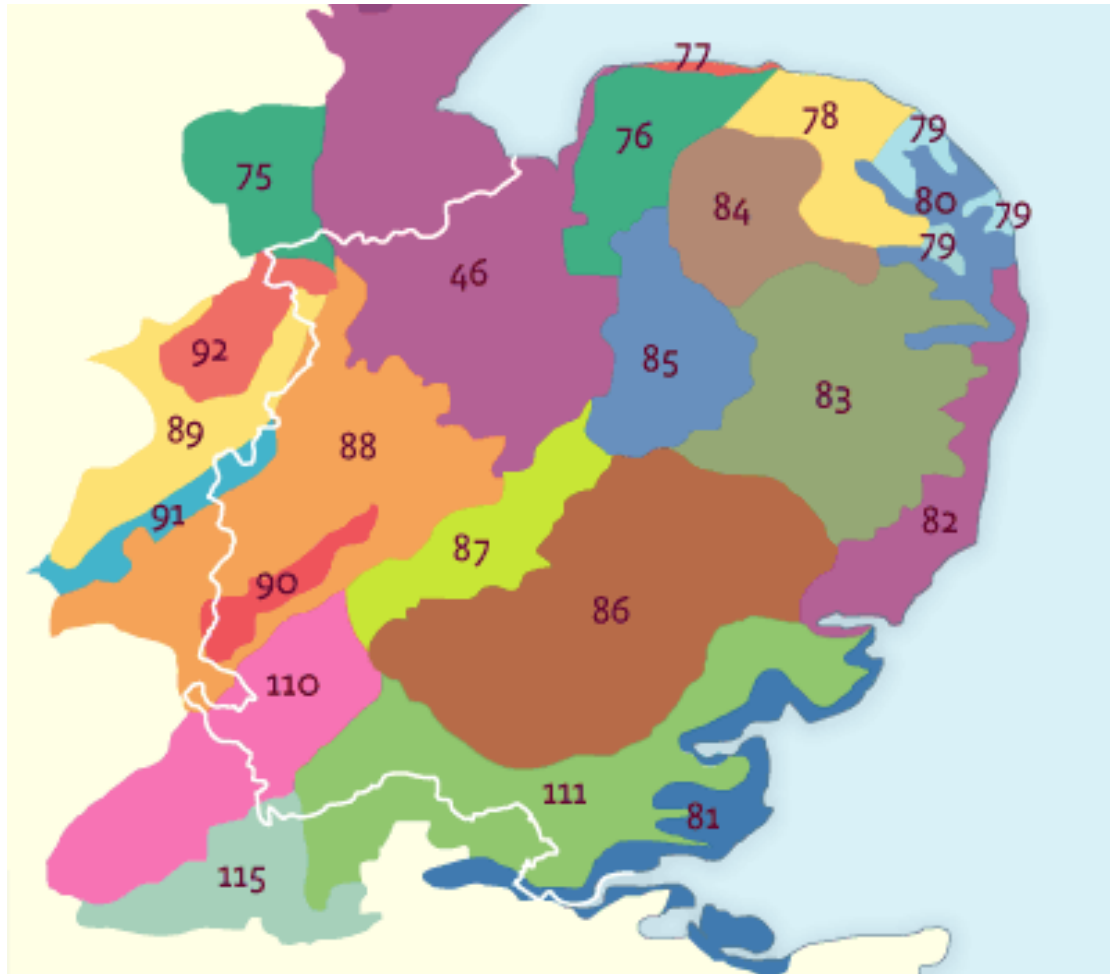
- 3.19 This element addresses how the scheme will relate to its immediate surroundings and how it will sit within the wider landscape. All landscapes, whether in rural or urban locations, have interest, meaning and value to those who live and work within them or visit them. The combination of geology, 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 local 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:



East Of England Landscape Character Areas in South Cambridgeshire

- JCA 46 – The Fens
- JCA86 – 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 JCA's 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 JCA's and other detailed information which can help in preparing a landscape scheme appropriate to the landscape character of an area can be found in Appendix B

(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.

Papworth balls

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 or 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.

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 landscaping 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 Both hard and soft landscape **materials** should work well, 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 B**

Photo or detail Drawing of Best practice Scale, Function, Materials

(3) LANDSCAPE IMPLEMENTATION

- 3.37 The applicant should ensure that all building, construction and soft landscaping 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 landscaping operations eg 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 that 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 CABI, The Landscape Institute 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 Landscaping 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 landscaping and plant materials, and the expected procedures for landscape operations.
- 3.45 Throughout landscaping 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 which can help in preparing a landscape scheme can be found in Appendix C**

(4) MAINTENANCE AND AFTERCARE

- 3.47 A robust Management plan and Aftercare programme will be essential to the successful establishment and development of the landscape scheme, and management and aftercare requirements should be designed into 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.
- 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 – eg 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 Further information which can help in preparing a landscape scheme to increase biodiversity of the scheme can be found in the SCDC**

(6) SUSTAINABLE LANDSCAPE SCHEMES

- 3.61 The principals 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 PPS 1- 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 **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.
- 3.66 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.

- 3.67 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 recycled where possible – for example using felled timber on site for use as woodchip paths or mulches, or stacked as woodpiles for invertebrate habitat.
- 3.68 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.
- 3.69 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.
- 3.70 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.
- 3.71 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.
- 3.72 Some large landscape schemes may feature extensive crop areas of biomass plants (usually varieties of willow or large grasses) for use 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.
- 3.73 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.

- 3.74 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.
- 3.75 An appropriate sustainable drainage systems (SUDS) should be included in the landscape scheme to cope with these more intense weather events.
- 3.76 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.
- 3.77 Whatever system is chosen, the applicant should ensure that sufficient space is made available within the landscape scheme, both at a domestic level (provision of water butts, green roofs or soakaways) or for larger scale development (permeable car parks, swales and attenuation ponds). Space should include areas for statutory maintenance of the drainage system. Many SUDS systems can also offer an efficient multi-use of space by combining the drainage function with public open space, wildlife areas or transport routes.
- 3.78 Further information and relevant contacts for SUDS systems can be found in appendix C**
- 3.79 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.
- 3.80 Landscaping 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.
- 3.81 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.

CHAPTER 4

THE LANDSCAPE DRAWINGS

SITE SURVEY AND APPRAISAL PLAN

- 4.1 This is 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.
- 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 B 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.
- 4.4 Typically the site survey plan will include the following Information:

- 4.5 The site survey and appraisal lead on to 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 principals 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 landscaping.
 - 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 survey and concept plans.

- 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 B

LANDSCAPE DESIGN DETAILS

- 4.17 These drawings precisely describe the hard and soft landscaping 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, particularly plant species, should be clearly labelled using full names or descriptions 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 C 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 B for details.

LANDSCAPE MANAGEMENT PLAN

- 4.26 The landscape Management Plan may be included on the design details drawings, or more usually as part of a written Landscape Specification.
- 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 Landscape Management plan will typically include a description of the work to be carried out, the maintenance standards required, the frequency of maintenance visits and the quantities of the landscape to be maintained
- 4.29 Typical landscape Management plan items 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 drainage areas, ponds or boardwalks.
- Maintenance of hard surfaces including patching or re-roiling (e.g. hoggins or gravel areas) as re-pointing of block or stone areas
- Maintenance of street furniture, fencing and landscape lighting
- Litter collection

