# **CHAPTER 9**

# **BIODIVERSITY**

9.1 Biodiversity is the word used to describe all flora and fauna. It originates from "Biological Diversity" and was first used after the Rio Conference in 1992. The UK Government has pledged to reduce the decline in biodiversity and as such has produced a series of Biodiversity Action Plans (BAPs) to guide conservation work with respect to important species and habitats. BAPs have also been produced at the county level by the Cambridgeshire and Peterborough Biodiversity Partnership. The BAPs can be viewed at:

www.ukbap.org.uk

www.cambridgeshire.gov.uk/biodiversitypartnership

9.2 Biodiversity conservation should be considered as a key element of good design as interaction with wildlife enriches people's lives and greenspaces provide health benefits as well as adding value to developments.



Retention of old fruit trees to conserve an orchard within a new housing estate at Heydon

9.3 The distribution of species and habitats is influenced by the landscape. This can result in particular species being found in certain parts of the district and in turn reinforces an area's local distinction or landscape character. For example, the Western Claylands extend from Wimpole to Hatley St George and include some the best ancient woodlands within the district. Their ground flora can include bluebells, wood anemone and oxlip. In contrast one would not expect to find these plants naturally within the Fen Edge landscape character where willow trees tend to dominate and extensive woodlands are not characteristic. Consideration must therefore be given to species' introduction when considering landscape schemes within different landscape character areas as they will ultimate influence the biodiversity to be found there.

9.4 Development should contribute to the protection and further enhancement of biodiversity, and where possible, seek to restore and add to biodiversity. For example, the Trumpington Meadows development of 1,200 homes will result in the restoration of extensive wildflower flood meadows adjacent to the River Cam where arable production had been undertaken in recent decades.



Flood meadow restoration at Trumpington Meadows to deliver locally distinctive riverside habitats of willows and meadows alongside the River Cam.

9.5 Biodiversity and sustainable development sit side-by-side. Sustainable developments should aim to have a minimal impact upon the environment. Where change is unavoidable new opportunities may present themselves for habitat enhancement or creation such as community woodlands as open spaces and carbon sinks to help counter-act the effects of climate change.



Creation of Stockbridge Meadows community park in Melbourn following adjacent house building.

- 9.6 In addition to biodiversity conservation is the system of legally protected species and designated sites. A Protected Species is a species which receives protection under UK or European legislation the protection could be partial (prohibiting sale, for example) or full, in which case the disturbance, killing or injuring of just one of the species could constitute an offence. Details of the species afforded protection under the various pieces of legislation can be found on Natural England's website (<a href="www.naturalengland.org.uk">www.naturalengland.org.uk</a>). Development should avoid causing harm to such species.
- 9.7 Similarly, a number of sites (Sites of Special Scientific Interest, Special Area of Conservation and Special Protection Areas) are legally protected under UK or European legislation due to their importance for wildlife. At a level below these are County Wildlife Sites which receive no legal protection but are a material consideration within planning policy. All such sites are considered as Designated Sites within the SCDC Biodiversity SPD which should be referred to for further guidance. Development should avoid harm to such sites.

# **BIODIVERSITY CONSERVATION IN DEVELOPMENTS**

- 9.8 The existing ecology of the site will need to be properly understood prior to submitting a planning application otherwise it is not possible to deliver effective species and habitat conservation. It is likely that a Priority Species Survey and Assessment or a Biodiversity Site Survey and Assessment will be required to support a planning application. The extent of such surveys can be established through pre-application discussions with planning staff. The SCDC Biodiversity SPD, chapter 3, provides detailed guidance on this aspect and should be referred to of particular importance are tables 1 and 2 which list development types and biodiversity sites that will trigger the need for specific biodiversity information.
- 9.9 Consideration should be given to the type of habitat found at a site and the species that it could support. For example, watercourses and drainage ditches may provide habitat for water voles. Redundant buildings (especially those in rural areas) may be used by barn owls or colonies of bats, while large mature gardens and undeveloped areas within villages can often provide refuges for biodiversity. These green areas may be acting as "stepping stones" or corridors for species such as great crested newts and, therefore, small infill plots should never be disregarded as having no biodiversity potential. When considering in-fill development it may be necessary to provide habitat features, such as native hedge and grass strip planting, to provide continuity of habitats.
- 9.10 Applicants should be aware that some developments may require the collation of ecological data over an extended period of time in order to assess likely impacts and to propose a mitigation scheme. This is

particularly likely in the case of protected species where Natural England will require survey information to support its protected species licensing procedures.

9.11 To assist the consideration of various development types on certain species and to illustrate what form of mitigation might be appropriate six development types are explored in Table 11.1. The contents of the table are not definitive and each development will have to be considered on its own merits.

**Table 9.1: Potential Impact of Smaller Scale Developments on Biodiversity** 

Development	Initial Surveys	Possible Impact	Possible Mitigation
Туре	-	-	
Barn conversion	Bat survey Barn owl nest site survey	Loss of bat roost Loss of barn owl nest site	Time works to avoid disturbing hibernation or breeding periods. Erection of artificial nest sites or create specialist bat roosts.
Listed building alteration	Bat survey to find roost and emergence points. Breeding bird survey or search for nest sites.	Loss of bat roost or access to bat roosts. Loss of bird nesting opportunities	Provision of new access points. Provision of specialist artificial nest sites for house sparrows, starlings or swallows.
House extension and Backland Development	Breeding bird survey Great crested newt survey	Loss of mature garden shrubs Loss of garden pond	Provision of new planting and suitable nest boxes Reconsider design to retain pond, or recreate pond in new location
Creation of boathouse on river or lake	Water vole survey Otter survey Kingfisher nest site survey	Loss of water vole habitat Disturbance of otters Disturbance of kingfisher nest site	Retention of natural water frontage. Sensitive lighting Sensitive screening
Outhouse demolition	Bat survey Search for newts around building periphery (inside and out) Search for nest sites	Loss of bat roost Loss of great crested newt hibernation site Loss of potential bird nesting site	No demolition whilst bat using the structure Provision of alternative hibernation site. Provision of suitable nest boxes

New dwelling	Breeding bird	Loss of scrub habitat	Provision of suitable
on disused	survey	Loss of deadwood	nest boxes
plot	Phase 1 Habitat	habitat for invertebrates	Provision of new native
	Survey (see South	Disturbance of badger	planting
	Cambridgeshire	sett	Retention or
	Biodiversity		replacement of
	Strategy)		deadwood habitat
	Invertebrate survey		Retention of suitable
	Badger survey		screening and habitat
			around sett

9.12 Applicants are strongly encouraged to enter into pre-application discussions and to seek advice from Council's Ecology Officer on biodiversity matters.

# **CHAPTER 10**

# **ENVIRONMENTAL HEALTH ISSUES**

# WASTE / REFUSE COLLECTION AND RECYCLING-OPERATIONAL

- 10.1 Adequate, safe and secure provision should be provided for the storage of the waste and recycling materials collection receptacles (Council or Private Contractor), for all residential (domestic) and non-residential buildings (commercial) uses, without creating a nuisance or being unsightly for the occupants or the general streetscape.
- 10.2 To prevent the storage of such materials becoming a nuisance or unsightly in the future, the design of storage facilities should be sufficiently large to accommodate future expansion of recyclable materials collected and therefore an increase in the number of recycling containers required to be stored.
- 10.3 Access for refuse, delivery and emergency vehicles is best provided by means of permeable grid layout, but where dead ends are unavoidable, turning heads must be provided. Development layouts and the provision of operational waste and recycling provision on-site must accord with Building Regulation H6 and the requirements of the Recycling in Cambridgeshire and Peterborough Partnership (RECAP) Waste Management Design Guide 2008 (RECAP Guide) and the Cambridgeshire Design Guide for Streets & Public Realm. The RECAP Guide was originally published by the RECAP Partnership in 2008 and adopted as SCDC policy in 2008. It has been recently revised by the County Council together with Peterborough City Council as a draft Supplementary Planning Document (SPD) and will be subject to public consultation in February/March 2010 and likely adoption in mid to late 2010.
- 10.4 Guidance contained within the emerging County Council draft
  Supplementary Planning Documents will also relate to policies 16 and 28 in
  the emerging Minerals & Waste Core Strategy covering Waste
  Minimisation, Re-use, and Resource Recovery and the provision of
  Household Recycling Centres. This draft Supplementary Planning
  Document entitled "The Location and Design of Waste Management
  Facilities" will also be subject to public consultation in February/March 2010
  and likely adoption in mid to late 2010. It will guide the design and location
  for strategic Waste Management Facilities in Cambridgeshire to ensure high
  quality design in accordance with best practice and to demonstrate how
  these facilities can be developed in both urban and rural settings.
- The RECAP Guide addresses the issue of waste management in new developments and redevelopments of a residential, commercial or mixed (residential and commercial) nature. It is to be used by:

- Developers and designers to ensure effective segregation, storage and collection of waste materials; and
- Planning Authorities in assessing each planning application to ensure that waste management needs are adequately addressed.
- 10.6 The Guide covers the following areas:
  - Waste Storage Capacity
  - Waste Storage Points
  - Waste Storage Methods
  - Waste Collection
  - Recycling Centres
  - Bring Sites
  - Waste Management in flats & apartments
  - Technical Appendices
- 10.7 The aims of the Guide are as follows:
  - Detail the waste segregation, storage and collection requirements that designers and developers need to satisfy.
  - Provide a strategic tool for use by Planning Authorities when assessing development applications.
  - Address the unique waste management problems presented by high density (residential) developments.
  - State the requirements for developers regarding the funding and provision of additional waste management infrastructure.
  - Highlight the financial implications of waste management upon developers.
  - Highlight examples of good practice demonstrating what can be achieved.
  - Contribute to sustainability and reduced environmental impact.
- 10.8 The RECAP Guide includes a 'ToolKit' to be used by developers to set out how they have addressed waste management requirements as part of their planning application. The ToolKit is on the 1APP list of required documents and as such a completed ToolKit must accompany any planning application in order for it to be registered as a valid application.

- The purpose of the County Council Draft SPD on Waste Management Design Guide mirrors that of the RECAP Guide and sets out a series of development principles based on recognised good planning and design practice.
- 10.10 The Draft SPD provides advice on the design and provision of waste management infrastructure in new developments and redevelopments of a residential, commercial or mixed (residential and commercial) nature, including advice on:
  - Internal storage capacity: including a requirement to provide between 35-40 litres of space within the kitchens of new homes to give residents sufficient space to allow for recycling and composting (as appropriate).
  - External storage capacity: the Guide sets out recommendations for amount of space which is required to store bins for different types of waste to serve residential and commercial developments including different standards for communal bins in relation to flats / apartments. In the case of commercial development the amount of space required is dependant upon the use of the land e.g. requirements for restaurants and fast food outlets are greater. For residential development it is dependant upon whether it is a house or the number of rooms in the case of flats / apartments (excluding kitchens and bathrooms). For example a single house would need to provide 775 litres, with a one bedroom flat with a living room in a 4 floor development would need to provide 320 litres.
  - Location of waste storage: issues which should be considered in relation to location of bins including ensuring that they are accessible for both users and collection crews and that the amenity of residents is protected.
  - Waste storage infrastructure: sets out a minimum specification for compounds to store residential and commercial waste above-ground and guidance in relation to the design of underground facilities.
  - Highway design: requirements for the design of new roads given the
    emphasis away from car dominated environments in urban design to
    take into account the need for waste collection vehicles to serve new
    developments effectively.
  - Additional waste management measures: identifies a range of complementary measures, which can be introduced to support the effective management of waste e.g. educational schemes.

NB: the above detailed capacities are indicative and may need adjusting subject to local and national requirements / priorities and the final version of

- any adopted County Council SPD Waste Management Design Guide.
- 10.11 The Cambridgeshire Design Guide for Streets & Public Realm (Cambridge Horizons 2007), complements national design guidance, such as the Government's Manual for Streets to promote the highest possible standards in all new developments, large and small. The purpose of the Design Guide for Streets & Public Realm is to set out the key principles and aspirations that should underpin the detailed discussions about and requirements for the design of streets and public spaces that take place on a site-by-site basis. The aim is to integrate street design with the RECAP Guide so that there are adequate street widths and access arrangements to accommodate refuse / recycling vehicles so that suitably located waste / recycling collection points can be reached and serviced.
- 10.12 The Environment Services Team within Health and Environmental Services can provide further information and advice.

#### **AIR QUALITY**

- 10.13 Air pollution and poor air quality can have detrimental impacts on health and the amenity of users of land in terms of odour, dust and nuisance. Policy NE/16- Emissions within the Local Development Framework aims to improve air quality in the district and helps to implement the objectives of the Air Quality Action Plan (AQAP), relating to land use.
- 10.14 The District Council and the planning system has a key role in protecting people from unacceptable risks to their health and in providing an adequate protection to the amenity value of land. Low Emission Strategies and S106 agreements can act as a main instrument to minimise the impact of development on the local community and to ensure the developer carries out measures to provide benefit to the environment and community.
- 10.15 Part IV of the Environment Act 1995 sets out the system of local air quality management in which local authorities take the lead in the form of the National Air Quality Strategy (NAQS). The NAQS contains health based air quality objectives for common pollutants.
- 10.16 Under the above legislation, South Cambridge District Council is required to carry out periodic reviews of air quality in their area and to assess against the stated objectives. Where such objectives are unlikely to be met by the target year, local authorities are required to designate an Air Quality Management Area and consequently create and implement an Air Quality Action Plan, which contains the measures required to reduce pollutant concentrations and lower emissions in order that the national objectives are met. This not only aids in the objectives for sustainable development, it also improves the quality of life for existing communities.

- 10.17 Air quality is a material planning consideration and clear links have been established between air quality and land-use planning with transport identified as the main source of pollutants in towns and cities. By guiding the location of new development and preventing or mitigating the exposure of sensitive receptors to poor air quality, reducing the need to travel and promoting smarter and cleaner transport choices by considering a Low Emission Strategy (LES), land use planning and design will form an important element of an integrated strategy to achieve the air quality standards and objectives.
- Air pollution and climate change are intrinsically linked. Both arise from the emission of combustion processes to the atmosphere. Exhaust emissions including carbon dioxide, nitrogen dioxide and particulate matter, continue to increase from transport and transport is the main reason for the Air Quality Management Area (AQMA) declaration in South Cambridgeshire following a national trend for concentrations of nitrogen dioxide and particulate matter to breach health based standards. South Cambridgeshire's AQMA is located along a stretch of A14 to the North of Cambridge City and further information and a map of the AQMA can be viewed in Appendix 4B and via the following link: <a href="http://scambs-airquality.aeat.co.uk/index.php?action=chapter&f\_page\_id=7">http://scambs-airquality.aeat.co.uk/index.php?action=chapter&f\_page\_id=7</a>
- 10.19 Low Emissions Strategies (LES) provide a package of measures to help mitigate the transport impacts of development on local air quality and on climate change. The LES is secured through a series of planning conditions and legal obligations.
- 10.20 The LES will bring together the Council, the County Council, the Highways Agency and, through the improved use of S106 agreements, developers in working towards improving the local air quality and reducing emissions. In addition, it will help towards achieving the target within the new National Indicator NI194: Air quality % reduction in NOx and primary PM10 emissions through local authority's estate and operations.
- 10.21 The South Cambridgeshire Local Development Framework contains Policy NE/16, relating to emissions and air quality. The policy reads:
  - 1. Development proposals will need to have regard to any emissions arising from the proposed use and seek to minimise those emissions to control any risks arising and prevent any detriment to the local amenity by locating such development appropriately.
  - 2. Where significant increases in emissions covered by nationally prescribed air quality objectives are proposed, the applicant will need to assess the impact on local air quality by undertaking an appropriate modeling exercise to show that the national objectives will still be

achieved. Development will not be permitted where it would adversely affect air quality in an Air Quality Management Area.

# 10.22 When will air quality and emissions be considered?

- The Council will identify any developments that have the potential to contribute significant emissions to the local area.
- Any developments within or adjacent to an AQMA boundary.
- Proposals that will result in increased congestion, a change in traffic volumes – an AADT or peak traffic flow which increases by more than 5% for roads with more than 10,000 AADT.
- Proposals which change the traffic composition (i.e. increase the proportion of HGV's).
- Proposals that include car parking or the increase in provision for more than 300 spaces.
- Developments that could give rise to significant dust emissions in areas where people and/or commercial activities could be exposed.
- Pre-application discussions with the developer to exchange ideas and determine the extent of the LES and possible contributions towards air quality improvements using S.106 agreements.

#### 10.23 What will the LES include?

The LES will include all proposals to mitigate the impact of emissions including transport emissions arising from the development. This could be travel to work plans, residential travel plans, priority parking for low emission vehicles or the infrastructure for recharging electric vehicles.

# 10.24 Emissions Impact Assessment

This will be an identification and quantification of all emission sources from the development.

# 10.25 Package of mitigation measures

This should be a full detailed explanation of the mitigation measures intended by the developer, also including a statement of intent for S.106 contributions if this is necessary. It will be linked to the Emissions Impact Assessment to show how reductions, using a variety of methods and technologies, will be achieved.

10.26 Applicants should be directed towards the following documents for help in achieving a low emission development:

Low Emissions Strategies – using the planning system to reduce transport emissions- Good practice Guidance- January 2010, Prepared by the Beacons Low Emission Strategies Group August 2009, Available free to download at:

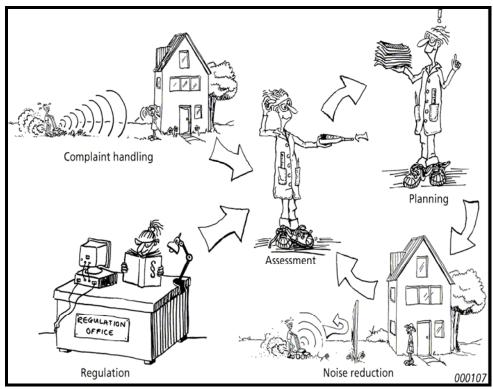
http://www.defra.gov.uk/environment/quality/air/airquality/local/guidance/documents/low-emissions-strategies-2010.pdf

- Air Quality A Guide for Developers South Cambridgeshire District Council, 2009, Available free to download at: (coming soon).
- Planning Policy Statement 23 (PPS23) Planning and Pollution Control, Defra, 2004, Available free to download at: <a href="http://www.communities.gov.uk/publications/planningandbuilding/planningpolicystatement23">http://www.communities.gov.uk/publications/planningandbuilding/planningpolicystatement23</a>
- 10.27 Further guidance is provided in Appendix 4:Air Quality.

#### **NOISE**

- 10.28 It is a fact of life that we all make noise, that is we all make "unwanted sound" in one form or another, often unintentionally. Noise is an unavoidable part of our lives. However, it can have an adverse effect on people's quality of life and there is emerging medical evidence that exposure to unwanted sound can affect our health and welfare.
- 10.29 In relation to noise control, prevention by preempting and avoiding or mitigating to an acceptable level, is better than cure. Protection against noise in the construction, design and layout of residential developments is essential to ensure that existing or future residents are not subjected to unacceptable levels of noise in their own homes or external amenity areas, part of sustainable development in terms of noise.
- 10.30 The likelihood of noise affecting future residents is a key factor in assessing the suitability of a site for residential use.
- 10.31 Planning Policy Guidance 24-Planning and Noise (PPG 24, 1994) guides Local Planning Authorities (LPAs) on the use of their powers to minimise the adverse effects of noise and outlines the considerations taken into account in determining planning applications both for noise-sensitive premises and for those, which generate noise. PPG 24 acknowledges that noise can have a significant effect on the environment and on the quality of life enjoyed by individuals and communities, so its consideration and control is an important part of sustainable development in providing a healthy and quality living environment and is integral to place making.
- 10.32 With higher densities, more mixed-use development, and more demand for late night activities, good acoustic design needs to be actively promoted if

noise is not to become a threat to SCDC growth areas and quality of life. Environmental Health Officers and/or acousticians should be involved at an early stage.



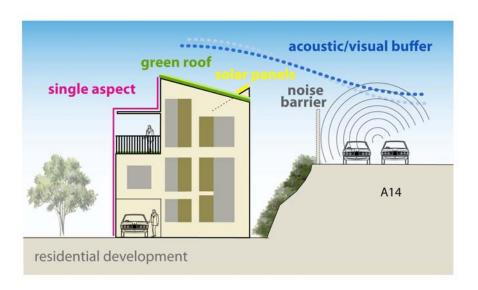
Environmental Noise Protection and Planning for Good Design Brüel&Kjær Sound&Vibration Measurement A/S

- 10.33 Noise can be a material consideration in the determination of planning applications and the planning system is tasked with guiding development to the most appropriate locations whilst advising on noise design issues.
- 10.34 The underlying principles of PPG24 advocate the use of the planning system to ensure that, wherever practicable:
  - New noise-sensitive developments are separated from major sources
    of noise such as road, rail and air transport and certain types of
    industrial development having regard to both the likely level of noise
    exposure at the time of the application and any increase that may
    reasonably be expected in the foreseeable future.

This includes the introduction of new noise sensitive development such as new residential dwellings, schools and hospitals into or locating near to an existing noisy environment, such as noise from road, rail traffic, aircraft, commercial / industrial and or agricultural related and existing building services plants or equipment.

- New development involving noisy activities that have the potential to generate noise should, if possible, be sited away from noise-sensitive land uses.
  - Development that have the potential to generate noise are likely to be commercial / industrial and agricultural uses with associated process equipment and or building services plant of one description or another, usually air-conditioning / ventilation equipment. In addition, noise associated with vehicular movements to a development for example deliveries / collections or a significant increase in general traffic movements off site outside the development site can also have an impact on residents. Applications associated with pubs, clubs and places of entertainment are dealt in the attached appendix on other noise issue.
- 10.35 Planning balances various competing environmental, social and economic needs and where it is not possible to achieve separation of incompatible land uses, for example noise sensitive development from noisy activities, local planning authorities should consider whether it is practicable to control or reduce noise levels by careful urban design, or to mitigate the impact of noise, through the use of conditions or planning obligations. However, an inflexible approach would inhibit regeneration and development and place more pressure on green-field sites.
- 10.36 Solutions to acoustic problems can be technically complex and expensive and very expensive if considered retrospectively. In all but small developments or particularly quiet locations, it is likely that specialist advice will be required from acoustic consultants.
- 10.37 Delaying contact with such specialists until later in a project may result in avoidable additional costs being incurred at the design and construction stages.
- 10.38 Where it is unlikely that residents will be able to keep windows open or sit on/in a balcony / garden without being bothered by one or more external noise sources, such as traffic, industrial noise or customers of entertainment venues, noise will be a material planning consideration and will require careful consideration at the pre-application and design stage.
- 10.39 Mitigation of the effects of noise can be achieved by:
  - i. Control at the source (measures to reduce noise emissions at source such a quiet plant, noise insulating buildings, plant enclosures or quiet road surfaces and or noise barriers).
  - ii. Control of the transmission path (adequate distance separation, building location, form and orientation, screening / noise barriers).

- iii. Control of noise at receiver (sound-conscious design: internal planning such as non habitable rooms providing a buffer, orientation of noise sensitive rooms and balconies and gardens way from noise by barrier dwelling blocks, single aspect courtyards schemes and staggered terraces, careful fenestration, noise insulation scheme for the building envelope of noise sensitive buildings and also buildings generating noise, reduced external amenity, acoustic ventilation).
- iv. By controls over the operations that generate the noise (such as controls over the hours of operation, deliveries / collections).



# Environmental Noise Mitigation Measures-Planning for Good Design

- The applicant is encouraged consult the LPA at an early stage about the possible use of such measures and whether they are desirable or achievable, as this may enable the incorporation of such noise mitigation measures into the design of the proposal before it is formally submitted for determination, the concept of "Sound-conscious urban design". Noise mitigation measures integrated into the overall design of the development should be first in a hierarchy of noise mitigation measures. The control of the noise at the receiver in terms of noise insulation of the building envelope shall be a last resort and the final line of defense against adverse external noise.
- 10.41 Further environmental noise guidance, LDF policies and standards are detailed in Appendix 6- Noise, which shoud be followed for all residential development, in areas where internal or external noise is a determining factor and when noisy commercial / industrial type development is proposed.

#### **ODOUR**

- 10.42 Odour, dust or fumes from plant serving any planning applications for commercial, industrial and agricultural buildings should be considered in relation to nearby sensitive receptor development. When determining an application the Council may include a condition requiring the submission and approval in writing by the local planning authority of the location and type of such plant and details of any equipment for the purpose of extraction and/or filtration and/or abatement of fumes and or odours before the use of the plant commences.
- 10.43 It will be necessary to ensure adequate discharge and or abatement of odours to ensure odour nuisance and or malodours are not caused and to protect the amenity of neighbouring premises.
- 10.44 Extraction, filtration and odour / fume abatement systems must also be designed so that they do not have an unacceptable impact on visual amenity.
- 10.45 The installed systems must not appear as an incongruous feature in the street scene. To be acceptable the proposed extraction system will have to be:
  - Located preferably to minimise its visual impact on the street scene;
  - Of a colour, finish and design to blend in with the buildings to which it is attached, incorporating cladding where appropriate; and-
  - Installed within the building where practicable and particularly where the proposal is within a conservation area or within the setting of a listed building.
- 10.46 If unacceptable smells and fumes cannot be prevented by means of an effective extraction or abatement system, or if ducting cannot be installed without significant detriment to visual amenity, planning permission will not normally be granted.
- 10.47 Odour can be a prevalent problem at low levels of concentrations and has the potential to impact on a wide area and affect amenity.
- 10.48 When there is the potential for odour and or fumes to be generated, SCDC may require the submission of a detailed odour assessment with a planning application, if it is felt that there will be serious detriment to the amenity of the area.
- 10.49 To satisfy the odour and or fume filtration / extraction condition, it is recommended that an effective and appropriate odour/fume extract system

be installed to ensure an odour nuisance is not caused to the occupiers of neighbouring premises. For example for food premises any system will need to deal with the two main phases of contaminants within cooking emissions: the particulate (grease, small food and smoke particles) and gaseous (odour vapour/volatile organic compounds).

- 10.50 Examples of systems available are as follows:
  - An extract system running upwards, either internally or externally with the flue height terminating above roof ridge level to which it is attached by at least one metre. A minimum operating efflux velocity of 10 to 15 metres a second should be achieved. However, the effectiveness of this system is dependent on buildings nearby. If buildings nearby are likely to have an effect on the dispersion and dilution of odour, the flue height should be at least one metre above the ridge of that building.
  - If an appropriate height cannot be achieved, a high efficiency odour abatement measure should be incorporated, such as:
    - grease filters with pre-filter particulate filtration (electrostatic precipitator or passive pre-filters) followed by activated carbon filters:
    - grease filters with pre-filter particulate filtration (electrostatic precipitator or passive pre-filters) followed by an odour neutralisation system:
    - o a high dilution / high velocity system (HDHV) with a minimum operating efflux velocity of 10 to 15 metres a second.
- 10.51 This list is by no means exhaustive as there are other similar systems on the market. Each system has its own advantages and disadvantages in terms of cost, physical size, pressure loss, maintenance requirements, odour arrestment effectiveness and associated noise generation.
- 10.52 It is recommended that flue terminals such as rain cowls / caps do not impede the final discharge termination point.
- 10.53 Further advice regarding the control of odour from end uses, is contained in the following guidance documents:
  - Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems (January 2005- Product Code: PB 10527) produced by Department for Environment, Food and Rural Affairs (DEFRA).
  - Protecting our Water, Soil and Air: A Code of Good Agricultural Practice for farmers, growers and land managers, DEFA 2009

- Technical Guidance Note IPPC SRG 6.02 (Farming) "Odour Management at Intensive Livestock Installations", Environment Agency, Guide to Odour Management, May 2005
- Integrated Pollution Prevention and Control (IPPC), DRAFT Horizontal Guidance for Odour Part 2 – Assessment and Control, Technical Guidance Note IPPC H4: October 2002
- BS EN 13725:2003: Air quality. Determination of odour concentration by dynamic olfactometry

#### POTENTIAL CONTAMINATED LAND

- 10.54 The actual or possible presence of contamination is a material planning consideration. Persons submitting planning applications are expected to declare any knowledge they may have about potential land contamination. In many cases it will be an advantage to determine whether there are likely to be any contamination issues on site before submitting an application for planning consent. On large-scale developments it could form a part of a preapplication enquiry where any necessary investigations can be determined prior to submitting a planning application.
- On any site where there is the potential for contamination to exist, or the proposed use would be particularly vulnerable to the presence of contamination i.e. residential, a contamination assessment, also known as a Phase 1 Desk Study Investigation, should be submitted as part of the application. An essential part of any Phase 1 Investigation is a site walkover to establish current land use as well as a review of historical land uses to identify potential sources and receptors. The Phase 1 Investigation should produce a 'Conceptual Site Model' and Preliminary Risk Assessment that characterises all plausible pollutant linkages. This will form the basis of any subsequent work undertaken as part of a Phase 2 Intrusive Investigation.
- 10.56 On review of the information submitted as part of the application, the Council may attach a condition to the application requiring a Phase 2 Intrusive Investigation of the site followed by, if necessary, remediation and validation. A Phase 2 Site Investigation should determine the nature, extent and severity of contamination by means of intrusive investigations. The Site Investigation Report should include borehole / trial pit logs, sample locations and copies of all laboratory analyses. It should provide an updated Conceptual Site Model and details of remedial options.
- 10.57 The site investigation procedure involves specialist technical knowledge and it is essential that competent and experienced professionals conduct all phases of the site investigation. Health and Environmental Services and Development Control will work together to ensure that the application sites are appropriately investigated, managed and, if applicable, remediated. It is

- ultimately the developer's responsibility to ensure that the site is suitable for its proposed use.
- 10.58 The primary aims are to avoid or mitigate risks to human health and the environment to ensure that the proposed development will be suitable for use.
- 10.59 Further detailed guidance is provided in Appendix 5 to this document.

#### **FOOD HEALTH AND SAFETY**

- 10.60 Food safety and health & safety principles are traditionally not part of the formal planning process. This has led to some poor design of commercial premises design, which has required improvement once the workplace is operational. Early consultation with the Environmental Health should avoid the need for costly remedial work; the Service runs a monthly surgery where businesses can attend to discuss plans with an Environmental Health Officer. Surgeries are run on the last Thursday of each month.
- The appropriate design and construction of premises and equipment help food businesses maintain and manage high standards of food safety.

  Regulations EC No 178/2002, 852/2004 and the Food Hygiene (England)

  Regulations 2006 require food premises to meet certain standards; covering layout, design, construction, equipment and facilities.
- All persons managing commercial premises as a workplace have a general duty to ensure the health safety and welfare of employers, members of the public and persons affected by the business. Integral to this is design, choice of building fabric, organisation of the workplace and specification of workplace features such as flooring. Environmental Health Officers apply the Construction (Design & Management) Regulations 2007 in some developments for early, proactive intervention on design issues. Advice on this aspect can be sought by contacting Health & Environmental Services and raising your queries with an officer.
- 10.63 Further detailed guidance is provided in the Appendix 8 to this document.

# **LIGHT POLLUTION**

In a predominantly rural environment such as South Cambridgeshire, the impact of lighting associated with development can have an adverse impact upon both the surrounding landscape and residents of surrounding properties. In certain circumstances lighting is critical in terms of public safety and security but in others, the amount of light emitted only serves to create a form of pollution either through windows of bedrooms. In such cases, the District Council will seek to reduce the amount of pollution,

- particularly in the context of new development where lighting is required for the road system or security lighting for remote developments.
- 10.65 Therefore it is necessary to try to find a balance between the need for lighting and the negative implications associated with it. Lighting in itself may not need planning permission but the Council will use planning powers where appropriate to manage the effects of lighting to achieve the objective of this part of the SPD which is to reduce excessive, intrusive and unnecessary lighting in both rural and urban areas.
- 10.66 Problems of glare, (the uncomfortable brightness of a light source when viewed against a dark background), and light trespass, (the spilling of light beyond the boundary of the property on which the source is located), are other forms of light pollution. Such light pollution is a waste of electricity and therefore increases energy consumption and emissions.
- 10.67 Designers are advised to have regard to the type of location in designing lighting proposals and devising techniques for limiting light pollution and its impacts.
- 10.68 Policy NE/14 requires that development proposals which include external lighting should ensure that:
  - a. The proposed lighting scheme is the minimum required for reasons of public safety and security;
  - b. There is no light spillage above the horizontal;
  - c. There is no unacceptable adverse impact on neighbouring or nearby properties or on the surrounding countryside;
  - d. There is no dazzling or distraction to road users including cyclists, equestrians and pedestrians;
  - e. Road and footway lighting meets the District and County Councils' adopted standards.
- 10.69 Further guidance and policies are contained within Appendix 7.

# LITTER AND DOG BINS

10.70 The provision of litterbins and dog bins is entirely functional but can have a considerable impact on the appearance of the street or location. SCDC has therefore adopted a standard design, colour and specification for all litter and dog bins. In future large developments consideration will be given to the provision of litterbins that facilitate recycling of segregated litter. The assumption that the provision of litterbins will prevent littering is not always

right. The provision of litterbins is not linked to resident or property numbers but the local land use, e.g. a parade of shops or the route from a school to the nearest sweet shop is likely to benefit from a litterbin rather than a normal residential street.

- 10.71 This council has also decided to provide and install all bins to ensure the appropriate standard and method of fixing. This provides better continuity of / and the service as control is lost once a developer has moved on.
- 10.72 Problems encountered:
  - Poor design.
  - Poor siting / location obstructions, spoiling views etc.
  - Embellishments drawing too much attention to bins.
  - Servicing arrangements / problems.

#### Guidelines

- 10.73 The Environment Operations section of SCDC's Health And Environmental Service should be consulted at the earliest opportunity to seek advice and guidance regarding all proposals to provide litter and / or dog bins.
- 10.74 Provision of dog bins in areas adjacent to where children are allowed to play is not encouraged in order to minimise the risk to Toxocara Canis infection: a common worm infection in dogs. Infective stages of this parasite can be found in the environment particularly in areas frequented by large numbers of dogs kennels, public parks and exercise areas. Children can be infected by picking up the disease from the environment or from handling dogs.
- 10.75 All bins located on land other than public highway (as defined by the Highways Act, 1980) will not be emptied by SCDC unless the developer or landowner pays for this service. Consideration should therefore be given how the bins are serviced once provided.

# **Types**

10.76 The Council's standard is the Glasdon Topsey twist-lock in dark green with the Council logo, stubber plate and fire retard for litter and the Glasdon 55 litre Retriever for dog waste.

# DRAINAGE AND FLOODING-SCDC AWARDED WATERCOURSES

10.77 SCDC has adopted an integrated approach to water cycle management that aims to manage all of the components of the water cycle (rainwater, storm water, sewage, ground water, surface water and recycled water) to secure a range of social, economic and environmental benefits. Reference should be made to the South Cambridgeshire Strategic Flood Risk Assessment

2005 (SCDC SFRA 2005). The Assessment provides a detailed and robust assessment of the extent and nature of the risk of flooding to specific growth areas within South Cambridgeshire and its implications for land use planning. It enables South Cambridgeshire to better meet the obligations created by Planning Policy Guidance Note 25: Development and Flood Risk. SCDC's SFRA 2005 can be downloaded from: <a href="http://www.scambs.gov.uk/Environment/Planning/DistrictPlanning/LocalDevelopmentFramework/Archive/FloodRisk.htm.">http://www.scambs.gov.uk/Environment/Planning/DistrictPlanning/LocalDevelopmentFramework/Archive/FloodRisk.htm.</a>"

- 10.78 There is a policy commitment to minimising flood risk, managing surface water and achieving sustainable drainage principles in new and existing development whilst ensuring that the re-use and recycling of water is given priority. This approach is in line with Planning Policy Statement (PPS) 25: Development and Flood Risk (2006) that emphasises, "all forms of flooding and their impact on the natural and built environment are material considerations".
- Notwithstanding PPS25 there are additional requirements that may fall on developers in connection with the South Cambridgeshire's Awarded Watercourses system. In addition to the warded drains / watercourses, it should be noted that the Environment Agency, Internal Drainage Boards and other landowners / bodies have responsibility for other watercourses. These will also need to be given careful consideration by developers in order to mitigate any potential adverse impact such as flooding".
- 10.80 The Council is responsible for the maintenance of approximately 280 km of awarded watercourses at a variety of locations within the SCDC area. The watercourses are controlled using the Land Drainage Act 1991 and the Council's Land Drainage Byelaws. Copies of the Byelaws and information on the location of the awards are available from the Council's Drainage Manager.
- 10.81 Any works in the vicinity of the award drains will require careful consideration and may require consent under the terms of the Byelaws. In particular, the Byelaws designate a 5-metre maintenance strip, along both sides of the awards, that must remain clear at all times. Additionally, any proposal to increase the rate of flow or volume in an awarded watercourse will require the prior consent of the Council. Developers should be aware that, under certain circumstances, a contribution to the cost of the award drain maintenance may be required by the Council.
- 10.82 SCDC's Drainage Manager in Health and Environmental Services can provide further information and advice on drainage and the impact on awarded watercourses.

#### **HEALTH IMPACT ASSESSMENTS**

10.83 Policy DP/1 Sustainable Development of the LDF requires a Sustainability Statement and a Health Impact Assessment for all major developments, to be submitted with the application demonstrating that the principles of sustainable development have been applied.

# Health Impact Assessment - Policy Context and Purpose of HIA's

10.84 New communities and developments should be planned and designed at the beginning of the process to take full advantage of the opportunities to improve the health of local people and to reduce health inequalities.

# **Health Impact Assessment - Background**

- 10.85 Spatial planning and development has the potential to impact on human health and wellbeing. This is because a wide range of social and environmental factors affects the health of local communities within South Cambridgeshire. These are known as the "Wider Determinants of health" and include:
  - Individual lifestyle factors such as smoking habits, diet and physical activity.
  - Interactions with friends, relatives and mutual support within a community.
  - Wider influences on health including living and working conditions, unemployment, water and sanitation, health care service, housing, food supplies, education, and the work environment.
- 10.86 Ensuring these issues are considered at the planning and design stage can improve both the physical and mental health of the population. Guidance expressed within this District Design Guide SPD can contribute to sustainable planning, good design and the development of community resources. These can encourage environments which: increase people's sense of safety and wellbeing, their opportunities for social interaction and community connectivity, improve air quality and water conservation and promote active travel and physical activity.
- 10.87 It is important to consider the effects of the wider determinants of health on not only the physical environment (e.g. air pollution, traffic patterns, housing stock) but also the social environment, which refers broadly to the social norms and values shared by members of social groups, as well as the quality, content, and volume of interpersonal interactions within urban and rural and between urban and rural communities. It is also known that these wider determinants are not distributed equally among populations (e.g. those people living in areas of deprivation tend to have poorer health

outcomes). By considering these effects and their distribution, development policies and plans can enhance the potential to influence health and wellbeing, and health inequalities.

# **Health Impact Assessment – Aims and Objectives**

- 10.88 Health Impact Assessment should:
  - Appraise the potential positive and negative health and well-being impacts of the proposed development on planned new communities and the adjacent existing communities in the development area.
  - Highlight any potential differential distribution effects of health impacts among groups within the population by asking 'who is affected?' for the impacts identified.
  - Suggest actions / mitigations that aim to minimise any potential negative health impacts and maximise potential positive health impacts, referencing where possible the most affected vulnerable groups.

# **Building Healthy Communities**

- 10.89 In addition to Health Impact Assessments, which look at the impacts the development will/may have on health, it is also important to examine in detail how the proposed development is going to ensure that the new community is a vibrant and healthy one. Building new houses and shops does not build communities. Infrastructure within new communities will need to be more than the roads connecting the built environment; it has to include the social infrastructure as well. The social infrastructure will include, but is not limited to, the opportunities to meet neighbours, to get information and to take part in running the local organisations and councils.
- 10.90 To assist in the preparation of a Health Impact Assessment, further guidance will be provided in an additional Supplementary Planning Document to be published in 2010.

# **CHAPTER 11**

# NATIONAL LEGISLATION AND STANDARDS

# **BUILDING REGULATIONS**

- 11.1 Building Regulations were originally created to ensure the health and safety of people in and around buildings and more recently to provide accessible and thermally efficient buildings.
- 11.2 South Cambridgeshire District Council's Building Control section provides advice and guidance on Building Regulations and works closely with the Council's own Planning, Design and Conservation sections wherever there is an impact on design and the historic environment. The applicants and Building Control consultants who are not currently part of the Council's own Building Control team are encouraged to work with the Council at an early stage to identify any issues, provide a flexible and informed design that protects the interests of the context and to ensure that the works comply with Council standards.
- 11.3 Those works that affect buildings in a Conservation Area or buildings identified as being of architectural and historical interest would need to be discussed with the Conservation Section. Early consultation is encouraged in order to identify if any element is unacceptable and to negotiate any alternatives in conjunction with the Building Control section. English Heritage's guidance, Building Regulations and Historic Buildings, 2004 provides advice for work to any buildings of Historic interest.
- 11.4 The Council's Listed Buildings and Conservation Areas SPDs, together with Appendix 9, provide specific guidance for the application of Building Regulations to work with historic buildings.
- The Dorset Model is an accepted alternative method of compliance for Part B for thatched roofs but needs additional consultation with the Fire Authority and neighbours.

#### **DISABILITY DISCRIMINATION ACT**

- 11.6 The Disability Discrimination Act (DDA) was introduced in 1995 and updated in 2005. It aims to allow equal access to services for all. The Act requires the provision to be reasonable, and the level of reasonable accessibility will therefore vary according to the limits of the specific building and the uses involved.
- 11.7 For new buildings, commercial buildings and buildings open to the public, it is expected that at least primary functions are accessible to all. Where the most accessible option is potentially damaging to a Listed building, other

- provision such as alternative facilities and a Management Plan may be reasonable.
- 11.8 Part M of the Building Regulations provides practical guidelines for the implementation of elements of the DDA. Access Audits / Statements and Management Plans are encouraged for any works that form part of Part M or the DDA. British Standard 8300 provides additional guidance on the requirements.
- 11.9 English Heritage's guidance, Easy Access to Historic Buildings, 1999 provides advice for application of the DDA to any buildings of Historic interest.
- 11.10 Access Audits / Statements and Management Plans are encouraged for any works that form part of Part M or the DDA. British Standard 8300 provides additional guidance on the requirements under Part M.





Disabled access ramp and steps introduced into a tight site at the Michaelhouse Centre, Cambridge.

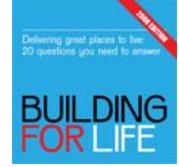
#### LIFETIME HOMES

- 11.11 Policy HG/2 in the Development Control Policies DPD requires a proportion of new dwellings to be designed to incorporate the Joseph Rowntree Foundation's Lifetime Homes standards. The 16 features designed to make homes more flexible and accessible are (see www.jrf.org.uk):
  - 1. Where car parking is adjacent to the home, it should be capable of enlargement to attain 3.3 metres width.
  - 2. The distance from the car-parking space to the home should be kept to a minimum and should be level or gently sloping.
  - 3. The approach to all entrances should be level or gently sloping.
  - 4. All entrances should be illuminated and have level access over the threshold, and the main entrance should be covered.
  - 5. Where homes are reached by a lift, it should be wheelchair accessible.
  - 6. The width of the doorways and hallways should accord with the Access Committee for England's standards.
  - 7. There should be space for the turning of wheelchairs in kitchens, dining areas and sitting rooms and adequate circulation space for wheelchair users elsewhere.
  - 8. The sitting room (or family room) should be at entrance level.
  - 9. In houses of two or more storeys, there should be space on the ground floor that could be used as a convenient bed space.
  - There should be a downstairs toilet that should be wheelchair accessible, with drainage and service provision enabling a shower to be fitted at any time.
  - 11. Walls in bathrooms and toilets should be capable of taking adaptations such as handrails.
  - 12. The design should incorporate provision for a future stairlift and a suitably identified space for potential installation of a house lift (through-the-floor lift) from the ground floor to the first floor, for example to a bedroom next to the bathroom.
  - 13. The bath/bedroom ceiling should be strong enough, or capable of being made strong enough, to support a hoist at a later date. Within the bath/bedroom wall provision should be made for a future floor to ceiling door, to connect the two rooms by a hoist.
  - 14. The bathroom layout should be designed to incorporate ease of access, probably form a side approach, to the bath and WC. The washbasins should also be accessible.
  - 15. Living room window glazing should begin at 800mm or lower, and window should be easy to open/operate.
  - 16. Switches, sockets and service controls should be at a height usable by all (i.e. sockets 450 600mm, switches, door handles and thermostats 900 1200mm).

11.12 In addition to these items, the design and layout of new housing should also make provision for the secure storage of bicycles and discrete space for wheelie bins / waste / recycling receptacles in accordance with the RECAP Waste Management Design Guide. Further information on the provision wheelie bins and or waste / recycling provision is provided in Chapter 10 - Environmental Health - Waste / Refuse and Recycling-Operational.

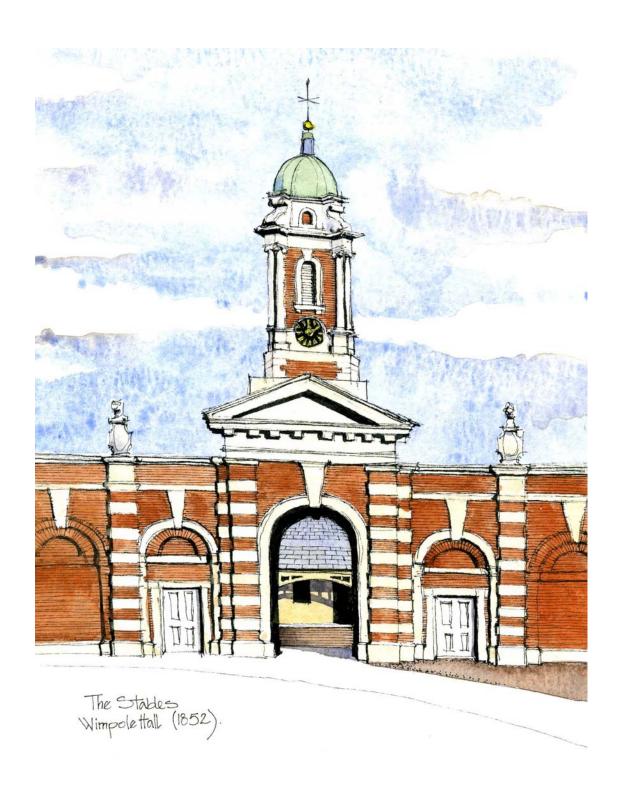
# **BUILDING FOR LIFE**

- 11.13 The Council encourages new residential developments of 10 units or more to achieve a minimum 'silver standard' under the CABE Building For Life scheme. The standard provides a means of assessing the design quality of new developments. Building for Life assessments will be scored out of 20, with scores categorised as:
  - Very good 16 points or more
  - Good 14-15 points
  - Average 10-14 points
  - Poor 10 points or less



- 11.14 Results of the Building for Life Assessments will be reported on as part of the Councils Annual Monitoring Report. The assessment is required for Indicator H6: Housing Quality which records the number and proportion of total new build completions on housing sites reaching very good, good, average and poor ratings against the Building for Life Criteria.
- 11.15 The criteria provides a valuable framework to help planners assess the quality of a proposed development and have been set to embody what housing developments should be: functional, attractive and sustainable. Developers should be aware that their application will be assessed against the Building for Life criteria and so are encouraged to submit evidence of how the proposed scheme meets each of the design criteria as part of their planning application. This could be included within the Design and Access Statement, which will often be the first place assessors will look when undertaking the assessment. The Council expects the developers to use the Building for Life criteria (see <a href="http://www.buildingforlife.org/about">http://www.buildingforlife.org/about</a>) as the basis for development briefs to help speed up planning approvals and win local community support.

# PART III PROCEDURES AND APPLICATIONS



# **CHAPTER 12**

# **DESIGN DOCUMENTATION**

# **INTRODUCTION**

- 12.1 In order to fully understand development proposals, brought forward for consideration, and to enable the Council to fully engage with developers and their architects, the Council wishes to see how the design has been influenced at all stages of the design process. To assist this it will be of great assistance to have sight of options that have been dismissed.
- The following is an indicative list of the design stages and the documentation the Council wish to see evidence of.

# SITE SURVEY

12.3 The site survey is a factual exercise, compiling information about the site and its context. During later discussions it may be necessary to make reference to this information to establish matters of fact, therefore this should be available for reference.

# SITE APPRAISAL

- 12.4 Prior to any design work being undertaken, it is essential that the site in its context is fully understood. This is where the development proposals should be thoroughly assessed against all the facts from the survey, which should result in the clear identification of the constraints that result from existing features or previous use etc. together with the opportunities the site offers. A result of the appraisal process should be the identification as to how a development will be integrated into the existing communities, townscape, landscape and movement patterns.
- The site appraisal should also acknowledge the Government's policy of promoting the re-use of brownfield sites over greenfield development.
- 12.6 The following checklist identifies areas of research that should be completed before design work commences. Evidence of this research should be summarised in design and planning statements accompanying a planning application. This list should not be considered as the definitive list of matters to be considered.

**Table 12.1: Site Appraisal Checklist** 

Issue	Possible research required	Reason
Planning background	•Identify relevant Development Plan allocations and policies	To understand the Council's broad approach to the area/topic/site.
	•Identify other planning constraints (presence of listed buildings/ conservation areas and preserved trees etc)	To help determine the significance of site features.
	•Identify relevant planning guidance affecting the site (e.g., planning briefs, village design statements and planning obligations SPD)	To appreciate how the Council wishes to see a site developed and understand how development of the site could fit into a wider planned context.
	•Identify any live planning permissions on the site or in the immediate locality	To determine whether something similar has been tried before.
Relationship of the site to surroundings	Facilities, connection routes, morphology, architecture, etc. Townscape and landscape.	To understand the context of the site.
Accessibility	•Identify train stations, bus services, cycle, footpath and road networks in vicinity of site, together with potential access points	To determine how well connected site is and scope for improved connections.
	•Identify proximity to local facilities.	To determine how well connected site it – this will inform the form/intensity of development that is appropriate.
	•Rights of way	To establish who has access over the land, when and for what purpose, together with the implications for the design.

Evicting	•Vigual inequation/planning	To identify important buildings
Existing buildings, features and	Visual inspection/planning     history search	To identify important buildings and uses.
uses	•Historic buildings analysis in respect of any buildings of regional, national or local importance	To establish how to ensure compatibility between new and existing uses.
	•Historic analysis in respect of any structure to be demolished within a Conservation Area	To establish the relative significance of buildings and scope issues for future consideration.
	•Historic Parks and Gardens	To establish the relative significance of the landscape for future consideration. The analysis should include
	Buildings and structures, both historic and recent.	an assessment of condition and value.
	•Services (both above and below ground, together with related ancillary structures such as substations).	To establish where existing facilities are located, their suitability for future use and their impact on the design if they have to remain in situ.
The property market	Contact with local agents.	To determine the ability of an area to support non-residential uses. To guide the type of accommodation provided.
Topography	•Views     •Levels survey     •Orientation	To inform design process. Identify relationship to sun path, exposure to prevailing wind etc.
Landscape features	•Refer to Landscape Character study.	To determine significance of landscape character.
	• Identify natural and man-made features and landscape – field patterns (which may be ancient and include 'ridge and furrow' patterning), trees and hedgerows, other landscape features, water-bodies and watercourses.	The analysis should include a tree report with an assessment of condition and potential for wildlife habitat. The analysis should include the contribution of waterbodies to drainage/flood prevention and ecological value.

Biodiversity
(wildlife
conservation

 Pre-application discussion with respect to the level of biodiversity information to support an application Some development types may not require biodiversity information, others may be more complex

Detailed guidance on species, sites and the necessary information to support planning applications.

Enables applicant to gain site information.

Refer to Biodiversity SPD

Undertake desktop study using Cambridgeshire and Peterborough Biological Records Centres www.cpbrc.org.uk and Natural England's www.natureonthemap.org.uk

Need to understand the likelihood of Protected Species being present on site.

Protected Species awareness www.naturalengland.org.uk

Undertake Survey and Assessment.

Provides biodiversity information to enable the LPA to assess level of likely impact. To determine the significance and amenity value of trees on and near the site.

 Arboricultural survey in accordance with BS 5837:2005

To determine the significance and amenity value of trees on and near the site.

To determine the presence of protected species and levels of biodiversity, to help devise mitigation strategies and enhancement measures.

Geology and ground conditions	•Desktop study	To understand the nature of historic and adjoining uses that may lead to contamination. To identify geology and soils to inform foundation design and direct the selection of plant species for landscape works.
	•Intrusive investigations for potential contaminated land.	To identify the specific nature and degree of any potential contamination and the steps / measures required to ensure development is suitable for proposed end use.
Risk of flooding	•Identify watercourses, drainage ditches, lakes, ponds and drains.	Identify potential sources of flooding.
	Check Environment Agency flood maps (available on their web site at <a href="www.environment-agency.gov.uk">www.environment-agency.gov.uk</a> ). Undertake flood risk assessment for both the site and the risks/implications downstream. Check the Council's Strategic Flood Risk Assessment Check with the Council's Drainage Manager Check with the Inland Drainage Board Check with landowners	To determine flood risk and whether a Flood Risk Assessment is required. To establish whether the principle of development is acceptable and determine what special measures may be required to enable development.
	Pollution	To identify the extent of any quality issue and determine design implications and considerations.

Archaeology	Scheduled Ancient Monuments     Desktop study     Intrusive investigations.	To identify specific features associated with the site. To determine the likelihood of items of interest or features of significance being damaged or destroyed during the course of development. To determine the specific nature of deposits to enable a strategy for dealing with the
Noise	•Site visit, enquiry to SCDC	archaeology to be devised.  To identify significant noise generators or noise sensitive uses in the locality.
	•Noise pollution testing Noise measurement / assessment Noise Predictive Modelling	To determine how likely the site is to be affected by noise, and what measures are required to make particular use combinations or types of development work and deliver a suitable noise environment (see PPG24), (including flight paths). Noisy development impact.
Air quality	Site visit/enquiry to SCDC Council      Pollution testing	To determine the whether air quality is an issue ie locating sensitive receptors in an air quality management area and whether the area is an air quality management area.
	Air Quality Monitoring Detailed Air Quality / Emission Monitoring	To identify the extent of any air quality issue and determine design implications and considerations.
Utilities	•Letters to utilities asking form information on the presence of equipment, capability of their systems to accommodate new development.	To identify work required to enable development and establish hidden costs may be involved in developing the site.

Health	Contact local Primary Care     Trust & Public Health Specialist     at SCDC      Health impact assessment.     Building Healthy Communities	To identify the scope of any issue with capacity at local surgeries.  To determine the impact of new development on existing health facilities and identify appropriate measures to offset impact.
Education	Contact Cambridgeshire     County Council Schools Service	To determine whether there are capacity issues at local schools that need to be addressed through planning obligations relating to new development.
Energy Survey	•Renewable energy options	To identify scope for onsite renewable energy generation including determining an optimal layout and orientation to maximise benefit from solar gain.
Party Wall Act.	Development in close proximity to, or abutting, existing property fabric is subject to the requirements of the Party Wall etc Act.	This sets out duties in respect of notifying and procedures, and includes facade retention, structural demolitions, temporary works and surveys to minimise adverse impacts. Advice must be sought from a professional structural engineer and/or surveyor where appropriate. Although this is not a planning matter consideration should be given to it to prevent future problems.

- 12.7 The information gathered through the site analysis should be graphically summarised in the form of a Site Appraisal Diagram, which should then be included as part of any subsequent planning application (thereby enabling the Council to fully understand those aspects that may have influenced the design).
- The output from this analysis should be summarised into a Site Appraisal drawing that should pull together the principal constraints and opportunities in a graphical form. It is anticipated that this site appraisal will form part of any subsequent planning application, helping those assessing the application to understand the thought process that was behind the design.

#### **DESIGN CONCEPT**

At the outset of the design process it should be made clear to the Council what the intended design concept is, and how following the site analysis it is appropriate for the development and the site context. The concept should clearly identify the underlying ethos of the scheme in relation to the social, commercial and/or educational purpose, the visual and aesthetic intent and imagery, the environmental performance, etc. A clear design concept will ensure that all subsequent stages of the design process are undertaken in the context of clear direction to ensure the correct decisions are taken to achieve a particular end.

#### **CONCEPT DIAGRAMS**

12.10 A concept diagram illustrates how the key principles of the design concept will be applied to the site in the context of the site appraisal, indicating how the development proposal responds to the constraints and opportunities presented by the site and its surroundings.

#### PARAMETER PLANS

12.11 The design principles should be plotted to produce parameter plans that establish the key structuring principles of the development. These should include the movement network and hierarchy, development areas, open space areas, frontages, building heights, etc.

# **MASTERPLANS**

- 12.12 On large-scale sites a masterplan will be needed to complete the overall structuring of the development proposals. Larger scale development sites are likely to be realised in a number of phases, often with different developers preparing detailed proposals for adjacent phases. It is essential that the overall masterplan for the development clearly identifies through routes, pedestrian and cycle ways, structural landscape areas and the like that may need to be continued from one developer's site onto an adjacent site. The site specific proposals prepared by the separate developers will then be expected to acknowledge these common aspects, and to incorporate them into their individual proposals in a positive manner.
- 12.13 The Commission for Architecture and the Built Environment (CABE) has been tasked by the Government to ensure that significant projects within the Sustainable Communities Plan (which include developments such as Northstowe) are well designed and based on proper masterplanning. The Department for Communities therefore agreed that CABE should become a non-statutory consultee for such projects and CABE encourages developers and local authorities to seek their advice at an early stage in the

development of these projects. Initial contact with CABE should be via the Design Review Programme Officer at CABE.

# **DESIGN AND ACCESS STATEMENTS**

- 12.14 Planning and Listed Building applications must be accompanied by a Design and Access Statement. Section 327A of the Town & Country Planning Act 1990 specifies that applications not accompanied by a Design and Access Statement shall not be "entertained". This means that they cannot be registered as valid applications.
- 12.15 Design and Access Statements are not required with planning applications for changes of use (not involving operational development), householder applications outside a Conservation Area, advertisements, reserved matters, engineering or mining operations, and tree works.
- 12.16 A Design and Access statement is required with Listed Building applications, although the Access statement can be omitted for applications only involving internal works.
- 12.17 A statement covering design concepts and principles and access issues must now be submitted with an application for planning permission and listed building consent. The key facts are:
  - A Design and Access Statement is required for all Planning Applications (outline or full).
  - South Cambridgeshire District Council is precluded from entertaining an application unless it is accompanied by a Design statement and an Access statement, where required.
  - One statement should cover both design and access, allowing applicants to demonstrate an integrated approach that will deliver inclusive design, and address a full range of access requirements throughout the design process.
  - A Design and Access statement is a concise report accompanying and supporting a planning application to illustrate the process that has led to the development proposal, and to explain and justify the proposal in a structured way.
  - Design and Access statements must not be used as a substitute for drawings and other material required to be submitted for determination as part of the planning application itself. They provide an opportunity for developers and designers to demonstrate their commitment to achieving good design and ensuring accessibility in the work they

- undertake, and allow them to show how they are meeting, or will meet the various obligations placed on them by legislation and policy.
- The level of detail required in a design and access statement will depend on the scale and complexity of the application, and the length of the statement will vary accordingly. Statements must be proportionate to the complexity of the application, but need not be long.
- For local planning authorities, Design and Access statements will enable them to better understand the analysis that has underpinned the design and how it has led to the development of the scheme. This will help negotiations and decision-making and lead to an improvement in the quality, sustainability and inclusiveness of the development.
- Design and Access statements will allow local communities, access groups, amenity groups and other stakeholders to involve themselves more directly in the planning process without needing to interpret plans that can be technical and confusing. This will help to increase certainty for people affected by development and improve trust between communities, developers and planners. It will also enable the design rationale for the proposal to be more transparent to stakeholders and the local planning authority.

# What is required in a Design & Access Statement?

- 12.18 A design and Access Statement should include (as required by Circular 01/06):
  - A contextual appraisal of the site.
  - A Statement explaining the design principles in terms of amount, layout, scale, landscaping and appearance.
  - A Statement explaining access in terms of how access for all will be achieved to building entrances and in terms of movement and circulation around the site, and also access and provision for emergency and waste vehicles.
  - A rationale of how the proposed design reflects the local, regional and national policies.
- 12.19 For detailed information go to Section 3 of <u>DCLG Circular 01/2006</u>, the <u>Cabe Design and Access guidance document</u> and the Cambridgeshire Design Guide for Streets & Public Realm (Cambridge Horizons 2007), which complements the Government's Manual for Streets.

#### LANDSCAPE DESIGN

- 12.20 This should be read in the context of the Council's Landscape in New Developments SPD, where full details of the documentation required are set out. For small schemes information could be included in drawings, but most large schemes will include a series of drawings with supporting written information.
- 12.21 Information required will typically include:
  - Survey and appraisal
  - Landform
  - Details of utilities
  - Significant landscape features; including significant trees, hedgerows, or other areas of significant vegetation (for further information see the Trees and Development Sites SPD)
  - Visual qualities context
  - Special designations e.g. SSSIs

# LANDSCAPE DESIGN DETAILS

- 12.22 Design proposals will typically include:
  - Treatment to site boundaries
  - Access and circulation
  - Areas of hard and soft landscaping
  - Significant features such as landscape structures or public art
  - Consideration of sustainability including haul roads
  - Details of proposed management
- 12.23 Design proposals will include:
  - Plant lists with details of species
  - Specifications for hard surfaces, walls, railings and other hard materials
  - Details of biodiversity enhancement
  - Informal and formal open space, including sports provision
  - Public access and rights of way

# **HERITAGE STATEMENTS**

12.24 Heritage statements are required for non-householder Planning Applications within or adjoining Conservation Areas, adjoining Listed Buildings, or impacting on other Heritage assets. The level of information required will vary dependant upon the complexity of the scheme, but should contain a brief history of the development site, including a planning history and maps, and an assessment of the significance of the building and impact of the proposals. The Heritage statement should be submitted separately to the Design and Access statement and it is recommended that the information for the Heritage statement is obtained at an early stage in order

to inform the design. For further information the Council's "Guidance for the Production of Heritage Statements" should be consulted and is on the Council's website.

# **CONSERVATION STATEMENTS AND CONSERVATION PLANS**

12.25 Listed Buildings, and in particular those listed at Grade I and II\*, should have more detailed Conservation Statements in the form of Conservation Plans. These Conservation Plans will help ensure the future well-being of these important structures, and will also include an assessment of significance. A Conservation Plan should be an A4 document illustrated with drawings and photographs arranged under the following headings, though this may need to be adapted to suit individual heritage assets:

# Summary

A brief single page statement summarising the main conclusions of the plan.

# Background

Authorship and circumstances of the plan, its scope and any limitations of the study, a note of all consultations undertaken and a statement concerning the adoption of the plan by all the major stakeholders in the Listed Building concerned.

# Understanding the asset

An analysis of the site that draws together documentary and physical evidence, and is illustrated with images, maps and phasing plans.

#### Assessment of significance

An assessment of the significance of the asset both generally and in detail for each of its main components, making value judgments about the degree of historical, biological, wildlife, geological, cultural, aesthetic, archaeological, social and other types of significance.

# Defining Issues (i.e. vulnerability)

Details of the issues that have affected the significance of the site in the past affect it now or may do so in the future.

# Conservation Policies

Puts forward policies for the conservation of all aspects of the significance of the asset, which show how: its significance will be retained, defines a conservation philosophy, prioritises repairs and, where relevant, identifies appropriate new uses.

 Implementation and review
 Identifies a strategy for implementing the Conservation Plan and sets out who will review the Plan and when. Appendices
 To contain detailed information that is summarised elsewhere within the document.

# SUSTAINABILITY, WATER CONSERVATION AND RECYCLING STATEMENTS

- 12.26 Major development' (residential development of 20 or more dwellings or 0.5ha. and other development of 1,000m² or site area of 1ha. or more) applications require the submission of a Sustainability Statement and a Health Impact Assessment to demonstrate how the sustainability criteria have been fulfilled, in accordance with Policy DP/1 in the Development Control Policies DPD.
- 12.27 They also require a Water Conservation Strategy and a Resource Re-use and Recycling Scheme.
- 12.28 All planning applications should be accompanied by a completed RECAP Waste Management Design Guide ToolKit to allow the effective evaluation of the waste management requirements for a development. Further information on the RECAP Guide is provided in Chapter 10 Environmental Health Waste / Refuse and Recycling Operational.
- 12.29 SCDC local requirements require the submission of noise information if it is considered a determining factor. It is not always obvious when and what level of noise information is required and government guidance recommends that the local planning authority should not require a level of detail to be provided that is unreasonable or disproportionate to the scale of the application. To ensure a smooth passage through the planning system, even when a full environmental assessment is not mandatory, proposals for developments on noisy sites, or sites which generate noise should take account of noise. Further information on the requirements is contained in Appendix 6 Noise.
- 12.30 This list is not exhaustive refer to the 1APP standard application form for local requirements.