



Local Development Framework
Orchard Park

Supplementary Planning Document
Consultation Draft July 2010

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Note - The maps, photos and site specific design principles are currently included in separate Annexes -

Annex 1 Maps

Annex 2 Photos

Annex 3 Site Specific Design Principles

1. INTRODUCTION

- 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 provides design guidance to support the policy for the development of an area known as Orchard Park, which is contained in the Site Specific Policies Development Plan Document (DPD), adopted in January 2010. The policy carries forward proposals from the earlier South Cambridgeshire Local Plan 2004 for a sustainable housing-led urban extension to Cambridge providing 900 dwellings, employment provision and supporting community facilities and open space.
- 1.3. The policy reflects the location of Orchard Park at the top of the search sequence for new housing development in South Cambridgeshire, being close to the employment, services and facilities provided by Cambridge and having high quality public transport provision, particularly once the Cambridgeshire Guided Busway opens.
- 1.4. The new policy also provides for a change in the mix of development with further residential development in place of some non-residential uses, where this would achieve an appropriate living environment, be acceptable in transport terms, and provide the community and other services and facilities necessary to support the new community. Known land parcels could provide in the order of 220 additional dwellings.
- 1.5. Those preparing planning applications for land within Orchard Park are advised to contact the Council to discuss their proposals during the preparation of the application and before it is submitted, in order to speed up the application process.

Purpose & Scope

- 1.6. The specific purpose of this SPD is to set out the design principles for the remaining land parcels at Orchard Park that the Council expects to be addressed by developers in any planning application, to ensure the creation of a high quality desirable 'place'. The SPD will provide a clear framework that will assist in the assessment of applications.
- 1.7. The SPD provides design guidance that will apply to any development proposals that may come forward for these land parcels and is not land use specific. Appropriate land uses for the remaining parcels will be determined having regard to the planning policy framework and the design principles.

- 1.8. The document aims to provide clear and concise design guidance for the remaining undeveloped sites, which are primarily located on the northern edge of the development adjacent to the A14, in the south-west corner of Orchard Park, and a site fronting Kings Hedges Road towards the eastern end of the development. These are referred to on the approved masterplan for Orchard Park as COM 2a, COM 2b, COM 3, COM 4, L2, K1, Q and HRCC.

Policy Background

- 1.9. Orchard Park is addressed in Policy SP/1 of the Site Specific Policies DPD as set out below with its supporting text. The SPD is consistent with the policy requirements of the LDF, as it deals specifically with design guidance that will apply to any development proposal. Development must comply with the Development Control Policies DPD and the Councils District Design Guide: High Quality and sustainable Development in south Cambridgeshire.

POLICY SP/1 Cambridge Northern Fringe West (Orchard Park)

- 1. Land bounded by the A14, Histon Road, Kings Hedges Road and the former Cambridge-St Ives railway line is allocated for a sustainable housing-led mixed-use development providing a minimum of 900 dwellings, a public transport interchange on the proposed Cambridgeshire Guided Busway along the former railway line, up to 18,000 m² B1 development, a primary school, a local centre, public open space, and the preservation or enhancement of the Arbury Camp site of archaeological interest.**
- 2. Development will take place in accordance with the approved Masterplan for the whole of the site including the land within the City Council boundary, other than where this Policy provides for exceptions. The Masterplan shall provide for:**
 - a. Maximum penetration and service of the site by public transport, including the extension of existing bus routes and full utilisation of the potential of direct connection to any future public transport route along the former railway line;**
 - b. The creation of strong internal cycle and footpath links between component parts of the development and the retention and strengthening of such links to neighbouring parts of the urban area and to the rural area to the north of the A14;**

- c. **Adequate attenuation measures in relation to noise and emissions generated by traffic on the A14, including the adoption of an appropriate layout and disposition of uses.**
 - d. **The retention of an attractive urban edge to Cambridge through the use of high standards of design and landscaping and the creation of gateway features;**
 - e. **The retention of appropriate existing features of ecological interest and the creation of new features which will enhance the interest of the site.**
- 3. Residential development may be granted planning permission as an addition to, or a change from, the approved development and Masterplan, but only where this would be compatible with the objective for the development as a whole of providing a sustainable housing-led mixed-use development and where it would conform with the terms of this Policy. The following specific assessments must be submitted as part of any planning application:**
- f. **A Noise Assessment to demonstrate that the proposed development takes account of, and mitigates as necessary and appropriate, any impacts of noise on achieving a satisfactory external and internal residential noise environment. Where any part of the noise barrier to the A14 would need to be retained as a result of residential development, the impact on the long term setting of Cambridge will be taken into account in determining the planning application. The potential to replace the barrier with higher quality design and materials will be explored and secured through any planning permission if appropriate, subject to ensuring no adverse noise impact on existing communities.**
 - g. **An Air Quality Assessment, including monitoring, to demonstrate that the proposed development takes account of, and mitigates as necessary and appropriate, any impacts of air quality on achieving a suitable residential environment and also any impacts of development upon the objectives of the designated Air Quality Management Area (AQMA). Account should also be taken of the anticipated effects of the A14 Ellington to**

Fen Ditton Improvements on the nature and extent of the A14 AQMA.

- h. A Transport Assessment to demonstrate that there is adequate highway capacity to serve all stages of development on the Orchard Park site as a whole, particularly in the A14 corridor between Girton and Milton, having regard to the traffic forecast to be generated by each phase of development.**

- 2.1 The Orchard Park site, formerly known as Arbury Park, was allocated for mixed-use development in the South Cambridgeshire Local Plan 2004. The site is in a sustainable location on the edge of Cambridge with good access to local services and facilities in the wider Orchard Park development and employment in the nearby Science Park, as well as by good public transport provision to the rest of Cambridge by a number of routes, including the Cambridgeshire Guided Busway. Outline planning permission was granted in 2005, and included approval of the Orchard Park Development Framework Plan. A number of phases of the site are complete or under construction. However, it is appropriate to provide a policy context for any planning applications for changes to the approved development during the period of construction.
- 2.2 The presence of the A14 has a heavy influence on the site. The A14 Ellington to Fen Ditton Improvements will provide dual 3-lane carriageways but this can be accommodated without compromising the strategy in Policy SP/1. This road widening is likely to include noise reduction measures such as a quiet road surface but other mitigation measures will still be necessary to ensure that traffic noise and vehicle emissions are reduced to acceptable levels. It will be particularly important to keep a balance between the provision of effective mitigation measures (such as noise barriers and / or buildings designed or orientated to screen noise) and the creation of an attractive urban edge alongside the widened road. The original strategy envisaged that commercial uses may be used for this purpose.
- 2.3 The outline planning consent allowed a mixed development including 900 homes. There is potential for additional residential development beyond this figure, by using parcels shown in the Development Framework Plan for other uses, including two areas for commercial development adjacent to the A14 and also the south west part of the site where the masterplan approved as part of the

2005 planning permission envisaged there would be mixed use development and a Heritage Resource & Conservation Centre, which is now intended to be located elsewhere in Cambridge. These known parcels could provide in the order of 220 additional dwellings, although the final number will be determined through detailed planning applications and could be higher, although regard must be had to the constraints on these parcels. This will result in a corresponding reduction in the level of commercial development on the Orchard Park site. The south west part of the site fronts onto both Histon Road and Kings Hedges Road and will provide an important gateway building for those entering the historic City of Cambridge from the north. A high quality landmark building will therefore be required, which provides an appropriate frontage to Histon Road and reflects its edge of City location and the need to respect the separation with Histon and Impington village to the north of the A14.

- 2.4 In the development of the original planning policy for residential-led development at the Orchard Park site, the primary purpose of allocating a mixed use development was in order for the proposed employment development on the northern edge of the Orchard Park site to act as noise attenuation for the A14 in order to bring forward residential development and local services and facilities on the remainder of the site. The noise barrier along the A14 was originally envisaged as a temporary measure pending development.
- 2.5 However, the nature of some of the development built on the north eastern part of the site adjacent to the A14 (which includes residential uses) already requires the retention of the eastern part of the noise barrier permanently. Any development proposal for additional residential development as an alternative to commercial uses adjacent to the A14 would need to demonstrate that a satisfactory internal and external residential noise environment can be created, including careful acoustic design and layout of any residential buildings (such as single aspect, limited height, sealed non opening windows on the façade facing A14, passive and or forced mechanical acoustically treated ventilation, no external private amenity spaces such as balconies / gardens on any façade with direct line of sight to road noise source). Any proposals must also demonstrate that there would not be an unacceptable adverse impact on the setting of Cambridge if a greater length of the noise barrier needs to be retained permanently as a result of the development. The local planning authority will seek to secure through development the replacement of any parts of the noise barrier that need to be retained permanently with an more

aesthetically appropriate design and materials for this sensitive location on the edge of Cambridge at the time when the barrier is moved to accommodate the A14 Ellington to Fen Ditton Improvements, subject to ensuring that there is no adverse impact on existing communities, particularly on the north side of the A14 through for example reflected noise.

- 2.6 Where the noise barrier is not required to be retained to protect the additional development, it is important that the development proposals demonstrate that the form of development would provide adequate protection from noise for residential development elsewhere on the Orchard Park site.
- 2.7 An Air Quality Assessment will be required to be submitted as part of any planning application for additional or alternative forms of development depending on the nature and size of the proposal. This must include monitoring of the actual location where residential development is proposed or an agreed equivalent, if appropriate monitoring data is not available from the Council. The assessment should be based on total emissions from the site and be in accordance with current national best practice guidance. An Air Quality Management Area (AQMA) was originally designated to address problems with Nitrogen Dioxide levels in the A14 corridor in 2007, after the granting of outline planning permission for the development. The AQMA was re-designated in 2008 to also include particulate matter (PM10). The AQMA must be taken into account in any development proposals to ensure that a satisfactory residential environment can be provided in order to protect the health of future residents by minimising exposure to poor air quality and appropriate mitigation measures must be included if necessary. Any proposals for additional or alternative forms of development must also have regard to any impacts of development on the national air quality objectives, the designated AQMA along the A14 and the Council's Low Emission Strategy. Account must also be taken of the anticipated effects of the A14 Ellington to Fen Ditton Improvements on the nature and extent of the AQMA. Development will not be permitted on any part of the site where this issue cannot be adequately addressed.
- 2.8 A Transport Assessment will be required to consider the implications of additional or alternative forms of development on highway capacity. This will include a detailed assessment of the net impact of replacing parcels assumed for commercial development in the Transport Assessment accompanying the original planning permission with residential development. The assessment must

also consider the cumulative impact alongside other allocations in this part of Cambridge, on both the A14 Histon Interchange and surrounding local highways junctions and have regard to the effect of the A14 Ellington to Fen Ditton Improvements.

- 2.9 Arbury Camp (an Iron Age enclosure which was re-occupied during the Roman period, when the main Roman settlement was located to the north of Arbury Camp) lies within the site but below ground level. As in-situ preservation of the enclosure has proven to be essential, its site may be used to satisfy part of the open space requirements of the new development insofar as such use is compatible with preservation of the enclosure. Any additional residential development will need to make provision for its recreational needs in accordance with the Council's Open Space and Recreation Standards, as well as any enhanced or additional community services and facilities to serve the additional homes. Consideration may be given to off-site provision of the active recreational needs of new residents in consultation with Orchard Park Community Council as the managing agency.

2. BACKGROUND

Site Location

- 2.1. Orchard Park, previously known as Arbury Park, forms the western part of the Cambridge Northern Fringe (CNF). Development started in 2005 and much of the site is completed and occupied. Orchard Park Community Council formally took on local parish responsibilities for the new community on 1st April 2009.
- 2.2. The sites considered in this brief are the remaining undeveloped parcels that lie along the northern edge of the overall development, running alongside the A14, a large plot in the eastern end of the site– not north east), and land at the south west corner (originally two plots).
- 2.3. The northern edge of the site is bounded by the A14 embankment with a noise barrier on top of it. Although the A14 noise barrier was intended to be a temporary barrier with an aspiration to replace it in the long term by commercial buildings to act as a noise barrier / screen, the building of residential developments on the eastern part of the A14 frontage and potential for further residential in this location means that the A14 barrier must remain permanently for the eastern half of the site. Depending on uses that come forward on the remaining parcels at the western end, it may need to be retained here as well. In addition, the A14 Improvements envisage that the barrier would need to remain. As such, it now seems unlikely that the original intention of replacing the function of the noise barrier with buildings could be achieved and if so for such a short length, that with the retention of the barrier for much of the site, there is limited visual benefit in seeking its removal.
- 2.4. The A14 noise barrier is therefore now expected to remain as a permanent noise mitigation measure. The DPD states that the local planning authority will seek to secure through development the replacement of any parts of the noise barrier that need to be retained permanently with a more aesthetically appropriate design and materials for this sensitive location on the edge of Cambridge.
- 2.5. The Highways Agency's Draft Orders for the A14 Ellington to Fen Ditton improvement, which includes an extra lane in each direction bringing the road closer to the site, include plans for replacement of the existing barrier with a higher, longer and repositioned barrier. The Improvements will provide an opportunity to seek to improve the visual quality of the new barrier through developer contributions in collaboration with the Highways Agency. At the time of writing the consultation draft of the SPD, the future of the A14 Improvement scheme is under review. There may be more

clarity by the time the SPD is adopted. However, the policy objective to seek the upgrading of the noise barrier through development proposals remains the policy for the barrier, with or without the A14 Improvements.

Study Areas

- 2.6. The study areas are highlighted in Map 1.
- 2.7. The sites cover an approximate area of 5.93 hectares in total, comprising of 6 sites:

PLOT COM2a	- 0.73 hectares
PLOT COM2b/3	- 1.08 hectares
PLOT COM4	- 0.94 hectares
PLOT L2	- 0.29 hectares
PLOT K1	- 0.96 hectares
PLOT Q/HRCC	- 1.93 hectares

- 2.8. Plots COM2a and Com2b/3 lie adjacent to the A14 to the west of Com4. To the west is the Premier Inn and to the south is residential development Unwin Square, with planning permission for the local centre.
- 2.9. The site Com4 lies adjacent to the A14 and is bounded to the south and east by areas of residential development and public open space. To the west is the Premier Inn. Site L2 is an undeveloped island within existing residential development also adjacent to the A14.
- 2.10. South of L2 is plot K1, which is surrounded by new residential development and abuts the King's Hedges Road boundary.
- 2.11. The South West Corner Site comprises parcels Q and HRCC and is located in the south west corner of the development. The site lies to the south western corner of Orchard Park, adjacent to the Orchard Park Primary School. The northern edge of the site is thus bounded by the School and Public Open Space (POS 1). To its south the site is bounded by the Guided Busway Route that runs parallel to King's Hedges Road. To its east the site is bounded by Ring Fort Road, the main approach road to the site within which lies the Iron Age Bund adjoining the road. To its west lies the embankment to Cambridge Road.

Site History

- 2.12. Site COM2a was originally zoned for purely commercial uses but was granted planning permission in August 2009 for a Local Centre, comprising 10 shops with 20 residential flats above and a small area of commercial

(B1) uses to the rear, adjacent the A14. The outline planning consent S2379/01/O June 2005 required a Development Framework Plan (conditions 1 & 2), whereby the agreed details showed a mix of Commercial/Local Centre uses. Condition 28 agreed the detailed floor space. The local shops were initially proposed at the front of the site by Kings Hedges Road, but during the master plan stage this was moved into the Circus and finally at the request of Gallagher's moved to its current position at the back of the site around the open space OS/2. Its position was agreed by a planning condition (no.28) of the outline planning consent.

- 2.13. An application for commercial B1 uses of 4,180sqm was granted consent by planning committee in November 2009 on Com2b and Com3 (initially known as OP/2).
- 2.14. COM4 & L2 were the subject of an application by Barratt's for 182 dwellings. This application was dismissed on appeal in November 2008 but confirmed the principle of residential use on these sites.
- 2.15. Plot HRCC was allocated Outline approval for a Historical Resource and Cultural Centre (HRCC) for Cambridgeshire County Council. However an alternative site was found and Reserved Matters on the site were not applied for.
- 2.16. S/2379/01 submitted on 17th December 2001 proposed 4.72 ha of open space distributed on the site. The development framework at this time showed 3ha at the western Circus area with 1.26ha allocated for the school (on the site of the HRCC) and 1.41ha of mixed use on the south west corner site.
- 2.17. The Development Plan Framework, the masterplan that was approved as part of the original outline planning permission, was amended to reposition the school on part of the open space reducing this open space to 1.93ha including the archaeological mound area, thus combining this site with the originally allocated Mixed Use Land, the District Council now looks to achieve a comprehensive and attractive development on this part of the site.

3. VISION AND OBJECTIVES FOR THE SPD

Vision

- 3.1. The vision for this SPD relates specifically to the design and appearance of Orchard Park once the development is complete, within the objective set by the policy for the overall development of achieving a sustainable housing-led mixed-use development. As such the vision reflects that established by the Arbury Camp Design Guide 2007.
- 3.2. The vision is for the remaining development at Orchard Park to contribute to making Orchard Park an attractive, vibrant and contemporary new neighbourhood for Cambridge. New development should take its inspiration from the unique Cambridge context, linking public open spaces and buildings that are formal, with fine grain and domestic scale streets.
- 3.3. Development should reinforce the distinct character areas established in the Arbury Camp Design Guide 2007.
- 3.4. Of key importance is the creation of a place that is safe, accessible and easy to move around.

Objectives

- 3.5. The objective for the development of Orchard Park as a whole, as set out in the policy for the new neighbourhood, is to provide a sustainable housing-led mixed-use development.
- 3.6. Specific objectives for this SPD are as follows:
 - Reinforce the established character areas for Orchard Park;
 - Create positive closure to views along streets;
 - Create active frontages to provide natural surveillance of public realm areas;
 - Screen the A14 embankment.

4. CONTEXT AND SITE APPRAISAL

- 4.1. A contextual appraisal of the development sites identifies a number of key issues that would have to be addressed by proposals. Constraints and opportunities for the site are illustrated on Map 2. Annex 2 – Photos provide panoramic views of the sites discussed in this section.

Site

- 4.2. The restrictive depth of the northern boundary plots, particularly that of Plot COM4 adjacent to the public open space, means that there are limitations in providing a development which offers active frontage to the streets and spaces to the south, but also positive aspects to any views from the A14 to the north. This could be relevant even if the noise barrier remains permanently, dependent on noise barrier design and topography, eg. the western end of the site is higher than most of the site.

Movement, Circulation & Access

- 4.3. The existing infrastructure in place on site creates a framework for clear linkages, however appropriate access points to sites and pedestrian routes is considered as part of this guidance.
- 4.4. The main vehicular access to COM2a is via Circus Drive on the approach to Unwin Square. This route linking to Chieftain Way provides the main access to COM2b/3 and the western end of COM4. Graham Road linking to Topper Street provides access to the eastern end of COM4, L2 and K1.
- 4.5. The main vehicular and pedestrian access to the south west corner site (Plot Q & HRCC) is via Ring Fort Road accessed from King's Hedges Road, or via Chariot Way into Ring Fort Road for traffic travelling west bound along Kings Hedges Road. The existing vehicular access point for the school abuts the northern boundary of HRCC.
- 4.6. The guided bus route runs parallel to King's Hedges Road along the southern site boundaries of Q/HRCC and K1.

Existing Built Form & Frontage

- 4.7. Some areas of Orchard Park form part of residential or mixed-use streets and squares. Other parts are screened by residential frontage. This applies both to existing development and the undeveloped parcels. Design principles must take account of the scale and massing on these streets in terms of frontage treatment and building design to 'complete' these public areas.

- 4.8. The study area fronts directly onto Chieftain Way, a main access road through Orchard Park, and as such should be considered as a key opportunity to provide an active frontage and a positive streetscape to enclose the primary route to sites, and respond positively to existing residential development to the south.
- 4.9. The north boundary of Plot HRCC must be sensitive to the boundary with the primary school, and Plot Q must provide positive frontage overlooking the large open space.

Scale & Massing

- 4.10. The area lying to the south of the northern edge sites is predominantly residential in character and as a result there is a mostly domestic scale development along the southern boundaries of the study sites along Chieftain Way and Topper Street.
- 4.11. Adjacent to the western end of COM2a is the 5-storey Premier Inn.
- 4.12. There is higher density residential development of 4 storey buildings to the west of L2, and 2-3-storey development to the east. To the south west of COM2b/3 is 4-storey residential development. West of COM4 are 2-3 storey buildings.
- 4.13. The south west area of Orchard Park is predominantly residential in character and as a result there is a domestic scale around the south west corner site that varies from three to single storey buildings.
- 4.14. To the north of the south west site is the single storey Orchard Park Primary School. Further north of which is the higher Premier Inn. To the east, along the Ring Fort Road, there are a variety of building heights mainly 4 storeys scaling down to 2 and at times 1.5 storeys.
- 4.15. To the east of the site, buildings within Orchard Park fronting onto Kings Hedges Road are mainly 3 storeys scaling down to 2 storeys.
- 4.16. Note: Building heights for the purposes of this document assumes storey heights based on a typical residential storey of 2.70 metres.

Existing Views & Vistas

- 4.17. A key view is identified along Circus Drive in the approach to Unwin Square. A significant view exists from the eastern end of Topper Street, towards the

public open space at which point the view opens up to the Com4 development site along the northern edge of Orchard Park.

- 4.18. COM2b/3 is a particularly prominent site with respect to views, being adjacent to a main access route through the northern part of Orchard Park, and visually along the Chieftain Way and Stanley Avenue approaches from the south.
- 4.19. Dependent on noise barrier design, there could potentially be some views or glimpses of proposed development from the A14. This is particularly a factor along the existing site section including COM2a and COM2b/3, which is higher than most of the site, as opposed to the COM4 and L2 sites that are much lower and obscured by the existing acoustic barrier.
- 4.20. The A14 embankment and acoustic barrier acts as the backdrop to development along the northern edge sites. The DPD policy requires that where the noise barrier will need to be retained as a result of residential development, the impact of the long term setting of Cambridge will be taken into account in determining the planning application and the potential to replace the barrier with a higher quality design and materials will be explored and secured through any planning application if appropriate. Any enhancement of the acoustic barrier, together with design of built development and landscaping, must contribute to improving the visual aspects of this site boundary.
- 4.21. Long distance views to the south exist across the south west corner site from the A14 interchange to Cambridge City Centre, St. Luke's Church and other historic spires. Views across the site to the historic Cambridge skyline should be retained either over or between buildings.

Public Open Space

- 4.22. A major public open space has already been developed to the south of COM4. This space is overlooked by residential properties from all sides except the northern edge of the development site. The space is of high quality and is actively used as it includes a children's playground. There is a distinct opportunity for development of the COM4 parcel to create a strong frontage to define and enclose this open space, further developing the built fabric surrounding this site, to create an attractive and secure public amenity.
- 4.23. Plot L2 also presents an opportunity to define a smaller scale residential open space amenity on the open space to the west of L2, where providing a key frontage would help achieve this.

- 4.24. The south western plots adjoin an area of significant open space that currently is not strongly defined and is isolated with little natural surveillance. Therefore Plot Q presents an opportunity to provide a strong frontage to define this space and overlook the open space to provide natural surveillance of it by the building users.
- 4.25. The site of an Iron Age Encampment lies adjacent to the south west corner site below ground level and is of archaeological importance. Research suggests that it is of regional importance and the form of camp is worth preserving (Arbury Camp Design Guide, March 2007). The archaeological strategy for the Camp has not only influenced the Development Framework Plan and Arbury Camp Design Guide but has informed the circle to dictate the road alignment outside the camp and to form the structure of building frontages including aspect towards the camp. To support this end reinstatement of the old 'Iron Age' fortification bank and ditch has been implemented along the eastern edge of the corner site, such that it sits alongside the footpath to Ring Fort Road.

Noise

- 4.26. The ambient noise environment of Orchard Park, particularly the study area, is dominated by traffic noise from the A14. Noise can have a significant effect on the environment and on the quality of life enjoyed by individuals and communities.
- 4.27. The acoustic impact of the A14 Noise Barrier is a major influence for development choices on site. Being located alongside the A14 embankment, the area has always been vulnerable to issues of noise disturbance, addressed during the course of the original outline planning approval, resulting in the erection of an acoustic barrier, originally intended as a temporary measure.
- 4.28. The control of noise to an acceptable level is a key design issue, and a requirement of the original design brief is to address the exposure to noise levels, highlighting that it is essential that the detailed design of built form within the study area achieves a maximum 'screening' affect.
- 4.29. The implications of the planned A14 improvements must also be taken into account and the Highways Agency's draft Orders show that noise issues will remain very much as they are currently once the A14 Improvements and its mitigation measures are in place. The worst-case scenario in noise levels must be assumed for any future built form proposals on this site.
- 4.30. The SPD provides general advice about how acoustic issues could be addressed but the quality of development should not be compromised in

addressing issues of attenuation in response to any future acoustic studies. Each application for development will need further noise assessments. In particular the key issue for these sites will be addressing impact on residential amenity and the health and wellbeing of future residents in terms of providing acceptable noise levels both internally and in any external amenity areas.

- 4.31. Noise implications of the A14 for the study parcels should be assessed in accordance with Planning Policy Guidance 24: Noise and Pollution- Noise Exposure Categories (NECs) for new residential dwellings. Noise will therefore be a significant challenge for residential development proposals to address.
- 4.32. Noise levels should be in accordance with British Standard 8233: 'Sound Insulation and Noise Reduction for Buildings Code of Practice' good standard and World Health Organisation Guidelines for Community Noise and Night Noise Guidelines for Europe.
- 4.33. Acceptable internal noise levels must be achieved whilst meeting background noise and ventilation requirements at all times. The opening of any glazing / windows shall not compromise acceptable internal noise levels."

Air Quality

- 4.34. Most of the proposed development areas lies within the SCDC Air Quality Management Area (AQMA) for nitrogen dioxide (NO₂) and fine particulate matter (PM₁₀) as shown in Map 3.
- 4.35. Two main issues relating to air quality at this location are discussed in more detail below:

Protection of future residents from poor air quality

- 4.36. SCDC has a duty to protect future residents from the health effects of poor air quality. Where residential development and open public space are to be granted permission immediately adjacent to the A14, concentrations of PM₁₀ and NO₂ may be in exceedence of their respective national air quality objectives. Such development should only take place if air quality objectives are being met and are likely to be met in the future or if adequate mitigation can be implemented.
- 4.37. With this in mind, if residential development is agreed, appropriate mitigation measures may need to be sought by the developer to protect residents from emissions from the A14. In addition, given the closeness of

the site to the carriageway of the A14, prospective developers may reasonably be asked to carry out air quality monitoring for a duration of no less than 6 months, which will aid in the determination of detailed design and mitigation measures.

4.38. One such package of mitigation that SCDC may request could be:

- Mechanical ventilation;
- Scrubbing and filtration systems that clean the air drawn in from outside.

4.39. Given the locations detailed within the design brief, aspect and orientation are unlikely to have a significant effect on air quality although certain layout designs will pose a greater risk in terms of air quality than others, such as:

- Open/amenity space close to the carriageway upon which residents could reasonably spend 1 hour or more;
- Layouts that create courtyards or “canyons” where pollutants may settle rather than disperse.

Impact of the development on existing air quality conditions

4.40. Any new development adjacent to or within an AQMA should not cause a worsening of the existing air quality conditions. It is expected and advised that the developer will have regard to low emissions development and enters into early discussion with SCDC to agree the terms of a Low Emissions Strategy and ensure that LDF Policy NE/16 (Emissions) is achieved.

4.41. Biomass – for further information on biomass, please see page 10 “Sustainability”.

4.42. It is essential that if these locations are determined for residential development, early pre-application discussions take place in order that air quality assessments and consequently any monitoring, modelling and mitigation measures are discussed and agreed prior to the granting of planning consents.

5. DESIGN PRINCIPLES

Character Areas

- 5.1. The character areas established by the Design Guide to help differentiate between different areas of the site must be considered when designing for the sites. Designs must reflect the range of uses, density and movement through the site, as well as architectural style. These overarching principles outlined in the Design Guide should be considered against any proposals for these development plots.
- 5.2. As outlined in Map 4, the study area overlaps three character areas, The Circus, The Square (in small part), and The Hedges. Designs should consider how proposals could reinforce the established character areas of Orchard Park.
- 5.3. Plot COM2a and most of COM2B/3 should respond to the desired character of The Circus, which is intended to be the 'active heart' of Orchard Park. This character area is centred on the boulevard that links the King's Hedges Road, the 'gateway', to the north western development sites. The boulevard terminates at the south facing Unwin Square, which presents the opportunity to be formed by high quality mixed-use buildings creating a local centre. As required by the Design Guide, there is a formality to be reflected in the design of buildings and landscape in this area.
- 5.4. The character of The Square is predominantly residential, and this plot lies on an area of the site where attractive buildings should be designed to a high specification. This affects the connecting plot between COM2B/3 and COM4, where there is potential for a transition between western and eastern character area. This should be reflected in the design of proposals.
- 5.5. COM4, L2 AND K1 are characterised by the Hedges, where the concept for layout and design is primarily to ensure active frontage to the public open space and residential areas.
- 5.6. The south western sites are within the Arbury Park character area, where there is an emphasis on linking open space and facilities, and creating an attractive green edge to Orchard Park with use of both hard and soft landscaping.

Movement, Access & Circulation

- 5.7. Proposed site access to Plot OP1 will predominantly be from Unwin Square upon the key approach to the Local Centre, which is a key arrival space and destination. Plot OP2 is approached from one of the main access routes, Chieftain Way. The movement and connections in this area of the site are intended to create a lively and accessible area, in keeping with character area proposals, presenting opportunities for gateway developments marking the entrance to the area. Plot COM4 and L2 will be accessed from existing approaches from Topper Street and Neal Drive.
- 5.8. Non-residential traffic should be directed away from residential areas. Careful treatment of the public realm should enhance the east-west connection along the commercial frontage, encouraging pedestrian and cycle movement to permeate through the site. This can be achieved by proposing active frontages, usable entrances and shared surfaces.
- 5.9. Access to Plots Q/HRCC is from Ring Fort Road, including an existing vehicular access for the school. Cambridgeshire County Council, as the County Highway Authority, has expressed an 'in principle' preference for an access adjacent to the Orchard Park Primary school boundary to serve any development uses on the site and a second access for vehicular, pedestrian & cyclists via the cul-de-sac on Ring Fort Road. However it will be up to the applicants to demonstrate that such a provision is satisfactory in highways terms. Provision of level access over the 'Iron Age' ditch is also to be adequately addressed by proposals. Of key importance however is the creation of a place that is safe, accessible and easy to move around.
- 5.10. The main vehicular access point for Plot K1 is fixed from Topper Street on the northern boundary, which allows for a consistent and strong building line along the main gateway route along Graham Road.

Layout & Built Form

- 5.11. The overarching design principle for new development on the northern edge sites is the predominant east-west orientation of development blocks to mitigate noise impacts from the A14. The intention of development on these sites is to positively contribute to the Orchard Park development as a whole by providing essential screening from the A14 acoustically and visually, using massing and built form.
- 5.12. However care should be taken to prevent creating building form and scale that may reflect noise into existing quiet areas and also the creation of gaps that would channel and focus noise further into the site.

- 5.13. Built form and design / orientation of buildings are an important and integral part of mitigating noise but are not the only consideration. The effects of acoustic screening from buildings should then be further enhanced by a proactive design approach to the acoustic management performance of proposed commercial, mixed use or residential buildings incorporating effective architectural detailing. These design elements should be incorporated where appropriate to help with improving acoustic benefits.
- 5.14. Potential applicants are encouraged to consult the Local Planning Authority 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 defence against adverse external noise.
- 5.15. The location and orientation of buildings on the south west corner site must create a high quality gateway to Cambridge and also to the Orchard Park development and minimise potential adverse impacts on the amenity of the adjoining properties in Orchard Park, with particular reference to the Orchard Park Primary School. The layout should also reflect the curved perimeter of the Iron Age encampment.
- 5.16. Layout and built form on Plot K1 should be strong and consistent along King’s Hedges Road to define the southern edge of Orchard Park and help create a strong gateway entrance, enhancing the sense of arrival to the development.
- 5.17. A perimeter block approach for Plot K1 will create a consistent building line that will enclose and define Graham Road and Topper Street.

Scale & Massing

- 5.18. New development must carefully consider the existing urban fabric and relationship to streets and public spaces in terms of massing, heights, frontages, entrances and materials, in order to help enhance the sense of a neighbourhood environment for the community of Orchard Park. Buildings must respect the character of the locality and provide an interface between new development and the existing rhythm across the streets.

- 5.19. Plot COM4 provides the visual backdrop to the northern edge of the public open space and park. A high quality built form enclosing the north side of the open space would contribute positively to the area; therefore appropriate massing dependent on land use is required to contain this space.
- 5.20. Appropriate massing at Cambridge and King's Hedges Road junction is key in achieving the required scale for a 'gateway' building. However, it must not at any time exceed 5 storeys as specified in the Arbury Camp Design Guide.
- 5.21. The height, massing and detail of buildings especially those fronting Ring Fort Road must respect the character of the locality, adjoining built forms and should not generally exceed 3 storeys. This needs to provide a key interface between the new development and the existing rhythm across the streets and therefore seeks high quality built form.
- 5.22. Floor heights between the varied uses including elevation design need to optimise the relations between scales and proportion so that the street does not feel dislocated.
- 5.23. Any proposals for development should not result in the overshadowing of existing properties, particularly the Orchard Park Primary School and should not compromise their amenity. Particular attention is required to the boundary treatment and massing along this sensitive edge.
- 5.24. Roof shapes and materials are of key importance to the success of the south west Corner site as an attractive and high quality development at the edge of Cambridge and therefore the applicant is advised to gain consensus through pre-application discussions.
- 5.25. Scale and massing is addressed in more detail in the following section.

Landscape & Open Space

- 5.26. Some of the public spaces are already established, Plot COM4 overlooks an open area including a playground. A landscape design scheme should include appropriate planting to provide an attractive setting to the buildings that define the northern edge of the public open space. There is a particular need to close views for existing residential properties overlooking the open space from the south towards the A14 barrier.

- 5.27. Using views across open spaces, development can help define these key spaces and create significant views and vistas. With the residential blocks closest to potential commercial blocks to the north of the site, screening with tree planting should be used to ensure that the interface between residential uses and commercial uses is handled carefully and sensitively.
- 5.28. Proposals to enhance a landscape buffer alongside the A14 barrier should be considered as part of proposals.
- 5.29. To break up hard landscaped parking areas, soft landscaping should be used to create an attractive environment, to avoid a 'sea of cars'.
- 5.30. On the southwest corner landscape design scheme should include appropriate planting to provide an attractive setting to the buildings. Particularly key is to soften the impact of the outlook towards the northeast and surrounding areas. The developer should incorporate an attractive buffer to the edge along the embankment.
- 5.31. It is essential that the layout and design of the development should provide adequate planting and explore new technologies to address landscape design on the Southwest Corner site. i.e green roofs, roof gardens and green walls.

Frontage & Public Space

- 5.32. The proposed built form within the study area should generate a sense of enclosure of the streets and spaces; the design of which is important to the environmental quality of these areas. In terms of block arrangements, the position of buildings must ensure positive contributions to existing streetscenes, in particular those bordering existing residential development. The east-west orientation of development and strategic positioning of buildings presents the opportunity for the closure of views looking towards the A14 embankment and noise barrier, therefore improving the visual conditions and benefitting the community of Orchard Park.
- 5.33. Key frontages are illustrated on Map 5. There is also potential for the closure of long views at key locations throughout the site using key focal nodes, for example, on the approach to sites along Chieftain Way, and the termination of the view along Circus Drive to Unwin Square. As outlined by the Arbury Design Guide, the intention of development on plot COM2a is for a mixed use Local Centre (1), with the aim of providing a civic focus and area of activity. Development proposals should provide a high quality landmark with a strong frontage overlooking Unwin Square, creating a distinct arrival space.

- 5.34. Plot COM2b/3 provides an opportunity to create an active development frontage contributing to an active streetscape (2) responding sensitively to the residential development opposite. This should be achieved by treatment of the public realm, varied articulation of built form, and entrances addressing the street.
- 5.35. Figure 12 - Design Principles identifies an opportunity for a public realm connection between Chieftain Way and the public open space (3). This would comprise the proposed development on Plot COM4 being set back so not to overbear on the existing residential development which does not face towards the site directly. This will also create a varied townscape and sense of transition along the predominant east west elevations.
- 5.36. Development proposed for the remainder of Plot COM4 should include a frontage contributing to the public open space setting, the space being defined by the edge of development responsive to this community use, providing an attractive backdrop to open space.
- 5.37. Plot L2 should encourage proposals for a strong corner development to enclose the smaller scale residential open space setting, together with a coherent frontage alongside Topper Street.
- 5.38. A key focal node on the corner of Plot K1 will draw attention to the access road as being a gateway to Orchard Park and enhance the sense of arrival.
- 5.39. Proposals should create clear definition of the public realm through the good fronts to backs relationships.
- 5.40. Safety and security should be promoted throughout the sites by ensuring that all publicly accessible spaces are overlooked by active building frontages.

Public Realm and Public Art

- 5.41. The layout should advocate the creation of safe and secure places by raising awareness and providing practical solutions for the design of the physical environment with a view to reduce crime, fear of crime and antisocial behaviour.
- 5.42. High quality building materials should be used throughout the site with the aim of achieving a visually interesting development. For further guidance on Public Art Strategy and Public Realm details refer Arbury Camp Design Guide.

Parking

- 5.43. Indicative car parking areas are shown on Figure 11. Car parking and servicing within the sites will generally be located on the north side of proposed buildings, allowing for a stronger frontage to the adjacent parcels and also to respond to the acoustic barrier boundary to the north. This will provide ground level secure parking and the opportunity to incorporate undercroft parking as part of the proposals. The design of buildings should define and address these rear spaces appropriately.
- 5.44. The provision of car parking and cycle parking should adhere to parking standards as detailed in the Design Guide which advocates a maximum of 1.5 spaces per. Where it can be fully justified a lower car parking provision will be encouraged. Means of parking provision need to be tested to achieve adequate requirements. Provision must be secure, and covered cycle parking should be incorporated within the design and layout of the site. Cycle parking levels are higher due to the location, close to the city centre and on bus routes.
- 5.45. Issues of car parking and traffic movement, form a key aspect of good design with strong desires for reducing the dominance of the car. The District Council looks to encourage the creation of streetscape within modern developments that provides its users with a sense of pride. Appropriate and alternative means of parking provision need to be tested to achieve the above on the South West Corner Site. Adequate and secure, covered cycle parking should be incorporated within the design and layout of the site, as set out in the South Cambridgeshire District Council's parking standards.

Sustainability

- 5.46. All new development, whether residential commercial or mixed use, should be energy efficient in terms of design, density, location and orientation.
- 5.47. Guidance on Eco-homes and BREEAM certification covering building design, renewable energy and waste can be found in the Sustainability Action Plan prepared for Arbury Camp by WSP. Residential properties should attain the minimum standards prescribed by the Government under the Code for Sustainable Homes. Non-residential buildings should attain a minimum BREEAM rating of 'Good'. Developers are encouraged to promote suitable environmental measures through building design to comply with District Council's 10% renewables policy (Policy NE/2, LDF).

- 5.48. Whilst biomass is a cost effective method of achieving 10% provision of energy from renewables, it may have an impact on local air quality due to NO_x and PM₁₀ emissions. Biomass should not be an option within an AQMA unless it can be shown that emissions (whether from small individual biomass burners or larger, commercial biomass burners) will not have a significant detrimental effect on the concentrations of pollutants within the locality. Where smaller burners are proposed, the cumulative impact needs to be assessed.

Acoustic Strategy / Noise Attenuation Scheme for A14 Traffic Noise

- 5.49. It would be beneficial for buildings on the northern part of the site to be designed and placed in such a way so that they act as a noise barrier reducing the impact of noise from the A14 on the rest of the site, even with the retention of the A14 acoustic barrier. Any proposed development should address, through building design and architectural detailing, acoustic attenuation.
- 5.50. Not only should building location act as a screen to reduce noise from A14, but also provide adequate noise mitigation to the occupiers of any residential development that may be proposed for the edge of the site.
- 5.51. Any forthcoming proposals will have to respond to future air and noise assessments resulting from proposed improvements to the A14 and set out the measures required to achieve satisfactory mitigation. The level of impact and required response is dependent on the land use proposed.
- 5.52. This provides a significant opportunity to develop imaginative architectural responses to the acoustic demands of the site.
- 5.53. It should be noted that The London Mayor's Ambient Noise Strategy provides some useful advice on sound-conscious urban design and the following practical noise reduction issues / measures are viewed as relevant to the various plot options:
- Façade continuity and 'quiet side' - Buildings can be designed not only to protect their occupants, but to screen other areas from noise. High-density development following traditional street blocks can reduce noise on the 'quiet side' by 10 to 20 dB(A).
 - Spaces between buildings - Although enclosed spaces can often be tranquil, tightly-enclosed spaces can also 'trap' sound, including from poorly designed, installed or maintained ventilation plant, waste facilities, vehicle manoeuvring, neighbours, or aircraft. The balance of advantage between contained and more open layouts will depend on

the relative contributions of different noise sources. In noisy areas, acoustic absorbency within 'courtyard' areas should normally be maximised, especially from dense vegetation and soft ground. Rooftop planting may be useful on lower level roofs. In quieter spaces, sound reflection can help people sense where they are. Paving design should consider noise not just from road vehicles, but trolleys, and, particularly over or near bedrooms, footfall. 'Solar pergolas' with photovoltaic panels, could modify sound propagation.

- Façade reflectivity - Multiple reflections between opposing, acoustically hard building surfaces increases noise levels. Façades at the wrong angle can reflect sound into quiet areas, as can curved and outward sloping buildings. Sound absorbing panels, deep acoustic profiling, 'absorptive banners' and other elements should be considered. A wider choice of acoustically absorptive materials needs to be developed, ideally using recycled materials.
- Noise and height - High buildings, with less shielding from other buildings, may receive noise from a wider area. Stepping-back of upper floors, canopies and other projections can offer screening. Acoustic balconies, with high imperforate parapets and absorptive linings to the soffit of any projection above, can reduce noise at a window by 5 dB. The predictive capabilities of noise models need to be improved.
- Vehicle access and parking - Waste storage and collection should be located away and/or screened from noise sensitive uses. Car parking and service areas should be screened, enclosed, or buffered with less sensitive uses.
- Enclosed car parks and bays should be designed to minimise sound reverberation and breakout. Lockable gates to residential courtyards at night can reduce disturbance from vehicles and on-street revellers, especially in mixed-use areas, while avoiding the sort of exclusion associated with the 24- hour gated enclave.
- Features of soundscape interest - Many sounds may be positive or negative depending on context (e.g. active water, wind in trees or rushes, loose surfaces, gratings, reverberant spaces).
- Balancing needs - Passive solar design, in which homes need to face roughly south, may make it difficult to create a 'quiet side'. Noise screening could increase shading. More linking of buildings to reduce noise propagation may mean accepting some change in local character, although visual monotony can be avoided by setbacks and

many other design features. The balance between noise reduction and other needs should take account of potential changes in noise sources, and in competing needs, over the lifetime of the development.

(Reference / Source: "Sunder City, The Mayor's Ambient Noise Strategy, Mayor of London, March 2004", downloadable from:
http://www.london.gov.uk/mayor/strategies/noise/docs/noise_strategy_all.pdf)

Waste and Recycling Storage & Provision

- 5.54. Adequate storage provision and separation for trade and domestic waste is also an important design consideration. Waste and recycling provision should be in accordance with RECAP Waste Management Design Guide 2008, which has been adopted as Council Policy.

Health Impact Assessment

- 5.55. A Health Impact Assessment, incorporated into an Environmental Impact Assessment, will be required for development proposals on these sites. Proposals should also take account of the Government's guidance "Building Healthy Communities".

Site Specific Design Principles

- 5.56. Annex 3 - Site Specific Design Principles sets out the key urban design principles to be addressed for each of the sites in the SPD study area, for illustrative purposes only.
- 5.57. For density guidelines please refer to Report of the Examination into the South Cambridgeshire Site Specific Policies Development Plan Document (September 2009) and recommended densities as per the Arbury Camp Design Guide (March 2007) for adjacent parcels.

APPENDIX 1 LOCAL DEVELOPMENT FRAMEWORK POLICIES SUPPLEMENTED BY THE SUPPLEMENTARY PLANNING DOCUMENT

SUSTAINABLE DEVELOPMENT

POLICY DP/1 Sustainable Development

- 1. Development will only be permitted where it is demonstrated that it is consistent with the principles of sustainable development, as appropriate to its location, scale and form. It should:**
 - a. Be consistent with the sequential approach to development, as set out in the Strategy chapter of the Core Strategy DPD;**
 - b. Minimise the need to travel and reduce car dependency;**
 - c. Make efficient and effective use of land by giving priority to the use of brownfield sites and achieve adaptable, compact forms of development through the use of higher densities;**
 - d. Include mixed-use development of compatible uses as appropriate to the scale and location of the development;**
 - e. Where practicable, use sustainable building methods and verifiably sustainable, locally sourced materials, including recycled materials, and include a Travel Plan to address the travel needs of labour during construction;**
 - f. Where practicable, minimise use of energy and resources;**
 - g. Where practicable, maximise the use of renewable energy sources;**
 - h. Incorporate water conservation measures;**
 - i. Minimise flood risk;**
 - j. Where practicable, use sustainable drainage systems (SuDS);**
 - k. Mitigate against the impacts of climate change on development through the location, form and design of buildings;**
 - l. Ensure no unacceptable adverse impact on land, air and water;**

- m. **Contribute to the creation of mixed and socially inclusive communities and provide for the health, education, recreation, community services and facilities, and social needs of all sections of the community;**
 - n. **Where practicable, include infrastructure for modern telecommunications and information technology to facilitate home working;**
 - o. **Conserve and wherever possible enhance biodiversity of both wildlife and the natural environment;**
 - p. **Conserve and wherever possible enhance local landscape character;**
 - q. **Involve community and providers of community services in the design process;**
 - r. **Conserve and wherever possible enhance cultural heritage.**
2. **In criteria e, f, g, j and n it will be for any applicant or developer proposing to compromise sustainability to demonstrate the impracticability of use of sustainable methods, systems, materials and energy sources and provision of sustainable infrastructure. Additional cost will not, on its own, amount to impracticability.**
3. **For major developments, applicants must submit a Sustainability Statement and a Health Impact Assessment, to demonstrate that principles of sustainable development have been applied.**

2.3 The principles of sustainable development are fundamental to international obligations and to national, regional and strategic planning policy. These principles also underpin the strategy, and all policies and proposals of the South Cambridgeshire Local Development Framework. The eastern region is the driest in the UK. It is also a low-lying area that is vulnerable to the implications of climate change. However, it is also a rural area that is to accommodate a great deal of growth surrounding the important historic city of Cambridge. It is therefore of key importance to the continuing success of the district that development is sustainable and achieves environmental, economic and social gains for current and future generations.

2.4 This key policy draws together sustainability issues to ensure that the fundamental principles of sustainable development underpin all development proposals. The issues dealt with are covered in greater detail in the later subject chapters. It also includes references to key sustainability issues of building methods and materials, which will be part of the overall

consideration of the development proposal, but are not directly related to the planning system.

- 2.5 All planning applications for major development are required to submit a Sustainability Appraisal and a Health Impact Statement to demonstrate that they have addressed sustainability issues, including impact on health, in their development proposals. Major development is defined as:
- Residential development: the erection of 20 or more dwellings, or, if this is not known, where the site area is 0.5 hectares or more; or
 - Other development: where the floor area to be created is 1,000 m² or more, or the site area is 1 hectare or more.
- 2.6 To assist in the preparation of a Sustainability Statement and Health Impact Assessment, further guidance will be provided in a Supplementary Planning Document.

DESIGN OF NEW DEVELOPMENT

POLICY DP/2 Design of New Development

New Development Design

- 1. All new development must be of high quality design and, as appropriate to the scale and nature of the development, should:**
 - a. Preserve or enhance the character of the local area;**
 - b. Conserve or enhance important environmental assets of the site;**
 - c. Include variety and interest within a coherent design, which is legible and provides a sense of place whilst also responding to the local context and respecting local distinctiveness;**
 - d. Achieve a legible development, which includes streets, squares and other public spaces with a defined sense of enclosure and interesting vistas, skylines, focal points and landmarks, with good interrelationship between buildings, routes and spaces both within the development and with the surrounding area;**
 - e. Achieve a permeable development for all sectors of the community and all modes of transport, including links to existing footways, cycleways, bridleways, rights of way, green spaces and roads;**

- f. Be compatible with its location and appropriate in terms of scale, mass, form, siting, design, proportion, materials, texture and colour in relation to the surrounding area;**
- g. In the case of residential development, provide higher residential densities, and a mix of housing types including smaller homes;**
- h. Provide high quality public spaces;**
- i. Provide an inclusive environment that is created for people, that is and feels safe, and that has a strong community focus;**
- j. Include high quality landscaping compatible with the scale and character of the development and its surroundings.**

Design and Access Statements

- 2. Design and Access Statements submitted to accompany planning applications and applications for listed building consent should be compatible with the scale and complexity of the proposal and, as appropriate should include:**
 - k. A full site analysis of existing features and designations;**
 - l. An accurate site survey including landscape features and site levels;**
 - m. The relationship of the site to its surroundings;**
 - n. Existing accesses for pedestrians, cyclists, equestrians and vehicles;**
 - o. Any known historic importance;**
 - p. Opportunities for maximising energy efficiency and addressing water and drainage issues.**
- 3. The Access element of the Statement should demonstrate that the development will achieve an inclusive environment that can be used by everyone, regardless of age, gender or disability. It should also address how the development has taken account of the transport policies of the development plan.**

2.7 All new development will have an impact on its surroundings. The aim must be that any development, from a major urban extension to Cambridge to an

extension to an existing home, takes all proper care to respond to its surroundings, including existing buildings, open spaces and villages edges, and ensure an integrated scheme that does not harm local amenity and wherever possible, brings benefits to the area.

- 2.8 A fully integrated and responsive design-led approach to development is therefore needed. In the case of residential development, it will allow significant increases in residential densities, extend the range of housing choice and, at the same time, improve the environmental quality and integration of new development. Development at higher densities may require more innovative design to incorporate off-street car parking, for example, through integrating garages within the footprint of dwellings or underground parking. Higher densities and smaller gardens place added importance on the need for quality landscaping and open space in developments in order to maintain quality of life. For all development, an urban design led approach will ensure that every proposal, whatever its scale, responds positively to the particular characteristics of a site and its surroundings and reinforces local distinctiveness.
- 2.9 Achieving higher density development will require innovation in both building design and development layout, to ensure that the significant scale of development that will take place in South Cambridgeshire over the plan period is designed very much with people in mind and results in places where people want to live. This will include layouts of residential areas that are permeable and easy to move around and that are legible to people, as well as increased densities over those achieved in the district in the recent past. This means a move away from cul-de-sac developments to more imaginative design solutions that deliver quality sustainable environments.
- 2.10 This policy must be read in conjunction with any design Supplementary Planning Document adopted by the District Council, which will be used in decisions on planning applications. This may include district-wide design guidance and also individual Village Design Statements or Parish Plans that have been prepared by the local community, where these have been adopted by the Council as a Supplementary Planning Document (SPD). The Council will only adopt such guidance or elements of it, as SPD where it is consistent with the policies contained in the Local Development Framework.
- 2.11 The Town and County Planning Act 1990 and the Listed Building Act 1990 (both amended by the Planning and Compulsory Purchase Act 2004) require that the majority of applications for planning permission or listed building consent include a Design and Access Statement. These statements will enable applicants to demonstrate to the Council that they have properly considered the impact of their proposal and taken into account all relevant factors in the design of the scheme, including landscaping matters. It is important that developments are made accessible to everybody, and the access element of the Statements provide a means of establishing that this goal is achieved. The level of detail of the

Statement will vary according to the scale and complexity of the application. The policy sets out the issues that should be addressed in the Statements.

- 2.12 Further guidance on Design and Access Statements can be found in *Design and Access Statements - How to Write, Read and Use Them* (CABE 2006), and DCLG Circular 01/2006.

DEVELOPMENT CRITERIA

POLICY DP/3 Development Criteria

- 1. All development proposals should provide, as appropriate to the nature, scale and economic viability:**
 - a. Affordable housing (in housing schemes);**
 - b. Appropriate access from the highway network that does not compromise safety, enhanced public and community transport and cycling and pedestrian infrastructure;**
 - c. Car parking, with provision kept to a minimum;**
 - d. Safe and secure cycle parking;**
 - e. Outdoor play space;**
 - f. Safe and convenient access for all to public buildings and spaces, and to public transport, including those with limited mobility or those with other impairment such as of sight or hearing;**
 - g. For the screened storage and collection of refuse, including recyclable materials;**
 - h. A design and layout that minimises opportunities for crime;**
 - i. Financial contributions towards the provision and, where appropriate, the maintenance of infrastructure, services and facilities required by the development in accordance with Policy DP/4;**
- 2. Planning permission will not be granted where the proposed development would have an unacceptable adverse impact:**
 - j. On residential amenity;**
 - k. From traffic generated;**

- l. On village character;**
- m. On the countryside, and landscape character;**
- n. From undue environmental disturbance such as noise, lighting, vibration, odour, noxious emissions or dust;**
- o. On ecological, wildlife and archaeological interests;**
- p. On flooding and flood risk;**
- q. On the best and most versatile agricultural land;**
- r. On quality of ground or surface water;**
- s. On recreation or other community facilities.**

2.13 It is important that development proposals make proper provision to meet their needs. Read together with Policies DP/1 and DP/2 on Sustainable Development and Design of New Development, this policy provides a check-list for developers to help ensure that all requirements are met. To avoid an overly lengthy and complex policy, many of the criteria cross-refer to other policies in the Plan, which provide the full detail.

2.14 The Council will prepare a Supplementary Planning Document for various aspects of development dealt with in this policy, and for storage and collection of waste and recycling.

POLICY NE/2 Renewable Energy

The District Council will grant planning permission for proposals to generate energy from renewable sources, subject to proposals according with the development principles set out in Policies DP/1 to DP/3 and complying with the following criteria:

- a. The proposal can be connected efficiently to existing national grid infrastructure unless it can be demonstrated that energy generation would be used on-site to meet the needs of a specific end user;**
- b. The proposal makes provision for the removal of the facilities and reinstatement of the site, should the facilities cease to be operational.**

7.6 Given the commitment by government and the District Council to reduce the use of fossil fuels, opportunities to increase the proportion of energy,

especially electricity, generated from renewable sources will be permitted unless there is clear adverse impact on the environment or amenity of the area.

- 7.7 In South Cambridgeshire, with greater than the UK average levels of sunshine, solar power can make a significant contribution. The District Council will seek the incorporation of measures such as solar panels or electricity generation from photo-voltaic cells in new or converted buildings and structures.
- 7.8 Individual or small groups of wind turbines may also be appropriate.

AIR QUALITY

POLICY NE/16 Emissions

- 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 modelling 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.**
- 7.56 Air pollutants (including dust and odour) have been shown to have adverse effects on health and the environment. Emissions arising from any development including indirect emissions such as those attributable to associated traffic generation must therefore be considered in determining planning applications. Where emissions from industrial processes are subject to pollution control legislation (PPC, LAPC, LAPPC) the regulatory authority will be consulted with respect to control of these emissions.