

Guidance for the application of Policy 3/13 (Tall Buildings and the Skyline) of the Cambridge Local Plan (2006)



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1. Introduction



1. Introduction

1.1. Scope, Purpose and Status

1.1.1. This guidance is intended to provide clarity on saved Policy 3/13 of the Cambridge Local Plan (2006) (Figure 1). Policy 3/13 states:

“New buildings which are significantly taller than their neighbours and/or roof-top plant or other features on existing buildings, will only be permitted if it can be demonstrated that they will not detract from:

- a. Local residential amenity;
- b. Ancient monuments and their settings;
- c. Listed Buildings and their settings;
- d. Conservation Areas and their settings;
- e. Historic landscapes and their settings; and
- f. Key vistas, the skyline and views within, over and from outside the City”.

1.1.2. This guidance will set out in more detail how Policy 3/13 can be applied to proposals for tall buildings in the City. The guidance is for the benefit of developers, landowners, the community and the Council in exercising its decision-making powers on planning applications. The guidance does not create new ‘policy’ but instead will help interpret and assist in the application of Policy 3/13 and other relevant policies that govern the consideration of proposals for tall buildings which could impact on the City skyline. This document, when approved, will represent informal Council guidance but will be a material consideration in the review of planning applications submitted to the Council.

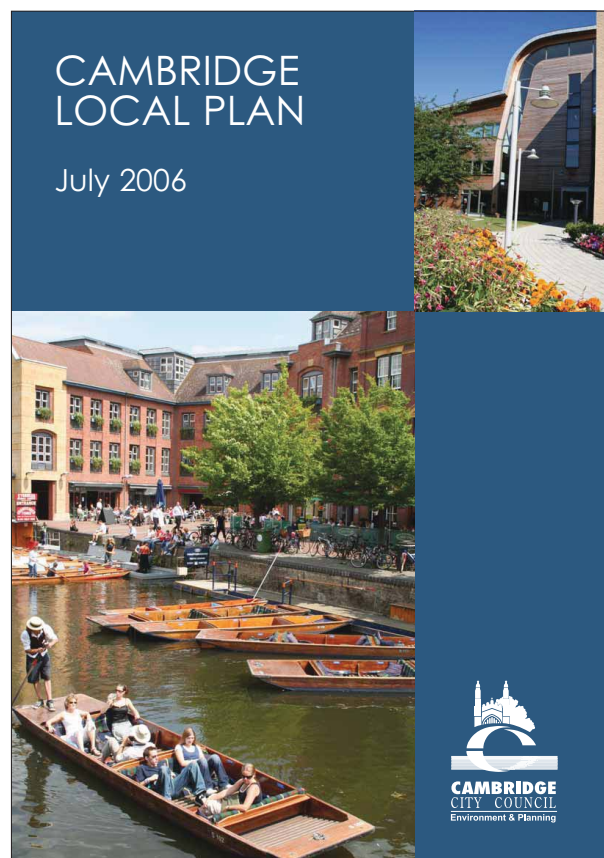


Figure 1: Cambridge Local Plan (2006)

- 1.1.3.** The purpose of the guidance is fourfold:
- To provide a working definition of a “tall building” in the context of Cambridge and scope of Policy 3/13;
 - To outline the characteristics of the Cambridge skyline, its setting and landscape and townscape character and identify valued views and vistas;
 - To set out the relevant background documents, policy and guidance that underpin Policy 3/13 and their application in the assessment of tall buildings in the City skyline; and
 - To provide specific criteria which must be considered in the preparation and assessment of a proposal for a tall building.

- 1.1.4.** The document is primarily aimed at providing guidance on tall buildings for developers. However the principles of the guidance can be applied to tall structures such as flues and chimneys, although these will generally be subject to separate Environmental Impact Assessments (EIAs).

1.2. Background

- 1.2.1.** Cambridge is one of England's most important historic settlements and possesses a fascinating, varied skyline composed of towers, turrets, chimneys and spires, many of which are associated with the City's historic core. Famous buildings, such as King's College Chapel, St John's College Chapel (Figure 2), the Our Lady and the English Martyrs Church (Roman Catholic Church) and the University Library, are treasured landmarks. The view of King's College from The Backs presents a world-renowned skyline synonymous with Cambridge (Figure 3).

- 1.2.2.** The modest scale of Cambridge combined with the overall flat topography of the City and the surrounding area limits the number of vantage points which afford City-wide panoramic views. There are however several key long distance views across the City from the southeast, southwest, and west, as well as from other parts of the City's Green Belt that are important. These are discussed further in Section 3.0 and listed in Appendix B. The overall character of the City skyline is one of building 'incidents' of both historic and new buildings emerging above a landscape and townscape with a comparatively high tree cover. Many of these building 'incidents' comprise tall, slender spires, with a general absence of large modern towers. In addition to these 'incidents', there are the clusters of bulky hospital buildings at Addenbrooke's Hospital and the hangars at Cambridge Airport which are juxtaposed against a domestic-scaled suburban area on the periphery of the City.



Figure 2: St John's College Chapel



Figure 3: King's College Chapel, viewed from the Backs

1.3. Vision

- 1.3.1.** Vision for the Cambridge Skyline Guidance:
- 1.3.2.** 'To maintain and where appropriate enhance the overall character and qualities of the Cambridge skyline as the City continues to grow and develop into the future.'



Figure 4: View of Cambridge Skyline at sunset from the River Cam



Figure 5: Cambridge University Library tower

1.4. Aims and Objectives

- 1.4.1.** The overall aims of the Cambridge Skyline Guidance are to:
- Maintain the character and quality of the Cambridge skyline;
 - Ensure that tall buildings, as defined in this guidance, which break the established skyline are well considered and appropriate to their context;
 - Support only new buildings which are appropriate to their context and contribute positively to both near and distant views; and
 - Provide clarity to the public and the development industry about the expectations of Cambridge City Council when considering tall buildings.
- 1.4.2.** Based on this vision and with these overall aims in mind, the specific objectives of the Cambridge Skyline Guidance will be to:
- Provide a definition of 'tall buildings' for Cambridge;
 - Set out the existing baseline situation in relation to the landscape and townscape character of Cambridge;
 - Identify key views from around and within the City;
 - Provide a review of 'best practice' and reference to other 'skyline strategies' appropriate to the Cambridge context;
 - Provide assessment criteria to articulate Policy 3/13 of the Cambridge Local Plan (2006) and explain terminology;

- Provide the basis for positive engagement of members, stakeholders and the public to achieve support for the guidance;
- Provide guidance which forms a 'material consideration' in the determination of planning applications;
- Feed into the forthcoming review of the Cambridge Local Plan and Policy 3/13 with a view to informing new policy.

1.5. Definition of Tall Buildings and Skyline

1.5.1. Policy 3/13 of the 2006 Cambridge Local Plan does not contain a definition of what constitutes a "tall building". The 'Guidance on Tall Buildings' note published in 2007 by English Heritage and CABA states:

"It is not considered useful or necessary to define rigorously what is and what is not a tall building. It is clearly the case that a 10-storey building in a mainly two-storey neighbourhood will be thought of as a tall building by those affected, whereas in the centre of a large City it may not."

1.5.2. The definition of tall buildings as defined by other local authorities in the country ranges significantly. Bristol City Council, for example, requires that buildings over 27m (approximately 9 floors) automatically trigger the need for applicants to address the assessment criteria set out within their Tall Building Supplementary Planning Document (SPD). The Bristol SPD also notes that buildings between six to nine storeys located within the City centre would be addressed on a case-by-case basis. Newcastle City Council adopt a far looser definition of tall buildings, whilst Brighton and Hove adopt a fairly complex definition of what constitutes a tall building.

1.5.3. In the application of this guidance, the following working definition shall apply to the term "tall building" as based on the wording in Policy 3/13:

A tall building is any structure that breaks the existing skyline and/or is significantly taller than the surrounding built form.

In the application of this guidance, the City Council emphasizes that building height is not absolute but relative.

1.5.4. The word 'skyline' is not defined within the Cambridge Local Plan 2006. The Oxford Dictionary of English defines it as "an outline of land and buildings defined against the sky: the skyline of the City".

1.5.5. In Cambridge's historic core, 'background buildings' tend to rise to between three and five storeys tall, are generally of pre-1950s construction, and include occasional six-storey modern buildings such as the Grand Arcade. However, the height of storeys varies notably between buildings. These 'background buildings' are interspersed by taller landmark buildings within the historic core. In the suburbs, overall building heights tend to be two storeys, with limited areas of three-storey buildings focused principally along the key approach roads leading into the City.

When will this guidance be applied?

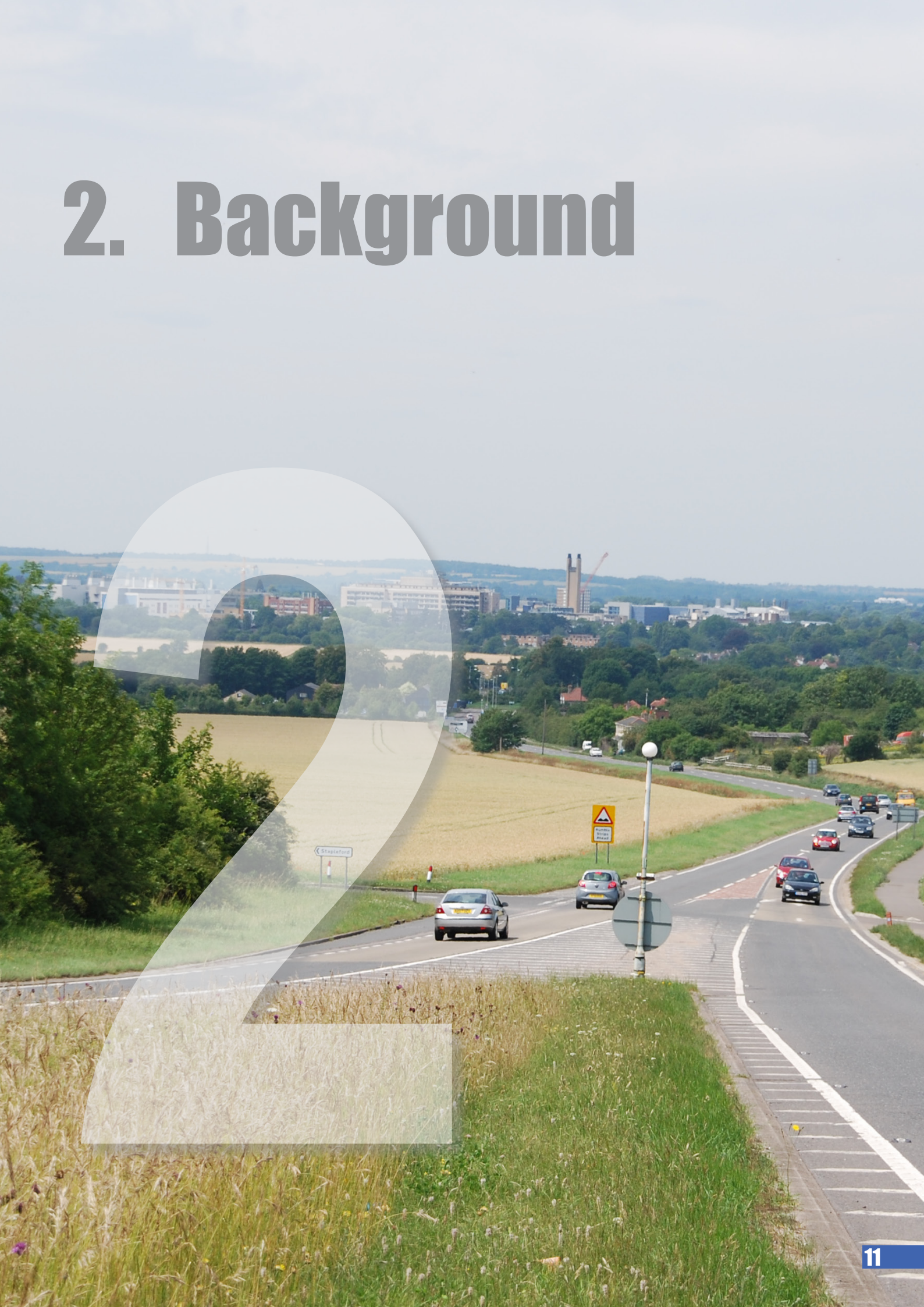
1.5.6. Within the historic core, a six-storey or above building (assuming a flat roof with no rooftop plant and a height of 19m above ground level) would automatically trigger the need to address the criteria set out within the guidance. However, dependent on the exact location within the historic core, buildings between four and six storeys within this area may also need to be evaluated against the assessment criteria herein due to proximity to heritage assets and potential impacts on key views. Within the suburbs, four-storey or above buildings (assuming a flat roof with no rooftop plant and

a height of 13m above ground level) will automatically trigger the need to address the criteria set out within the guidance. All areas of 'Major Change' within the Southern Fringe of the City are already subject to maximum building height parameters and sites in Northwest Cambridge are already, or will be, subject to maximum building height parameters. Assumptions in relation to height in metres are given in the Glossary of the document under 'Storey heights'.

1.6. Process of Preparation

- 1.6.1.** The Cambridge Skyline Guidance has been prepared following discussion and debate locally since 2009. The following key events and milestones have helped inform this guidance:
- September 2009 – 'Is tall beautiful?' - A debate about tall buildings held jointly with the City Council and Cambridge Association of Architects as part of the annual Urban Design Group conference held at Peterhouse in Cambridge;
 - March 2010 – A public debate and workshop sponsored by the City Council, Cambridge Past Present and Future, and Cambridgeshire Horizons, with support from the Federation of Cambridge Residents' Associations, the Royal Society of Arts and the University of Cambridge;
 - April 2010 – preparation of Sustainability Appraisal scoping report and work program for preparation of the guidance as a possible Supplementary Planning Document (SPD);
 - January 2011 – agreement on work program and approach to preparing guidance with Executive Councillor for Climate Change and Growth for agreement at Development Plan Scrutiny Sub-Committee;
 - March 2011 – consultation on the Sustainability Appraisal Scoping Report to support possible SPD status of the guidance.
 - October 2011 – approval and six-week consultation on draft guidance
 - January 2012 – agreement of responses to representations by Executive Councillor for Planning and Sustainable Transport

2. Background



2. Background

2.1. Reasons for preparing guidance

- 2.1.1.** In recent years, the City Council has received a number of planning applications for buildings significantly taller than their surrounding neighbours. These applications were subject to considerable debate before being determined. The applications included proposals in and around the Station Area (CB1), the area around Cambridge Leisure (near the junction of Cherry Hinton Road and Hills Road), Botanic House at the junction of Station Road and Hills Road, the “Eastern Gate” (the area surrounding the Newmarket Road/East Road roundabout), the Fire Station at Parkside / East Road, the Cambridge Biomedical Campus, and the Varsity Hotel on Thompson’s Lane. The city will also be undergoing significant change over coming years as the southern extension sites are built out. As part of any planning application for a new tall building, applicants will be expected to provide a clear justification for building tall within the Design and Access Statement accompanying the application.
- 2.1.2.** All of these proposals aroused debate in respect of the matter of building height. The question has consistently been asked as to why the Council does not have guidance beyond Policy 3/13 on planning for tall buildings to address such situations. This guidance is prepared in response to that question.

2.2. Policy and literature review

- 2.2.1.** There is already a considerable amount of both policy and literature nationally on the matter of tall buildings and their impact on skylines.
- 2.2.2.** As noted earlier, the Commission for Architecture and the Built Environment (CABE) and English Heritage published “Guidance on tall buildings” in 2007 (Figure 6). This document sets out how CABE (now part of the Design Council) and English Heritage evaluate proposals for tall buildings and is a useful reference nationally. Several local authorities have also produced detailed guidance on tall buildings and the skyline, including Bristol, London, Plymouth, Liverpool, Leeds, Swansea, Torbay, Brighton and Hove, Nottingham and Newcastle. Other cities have specific policies in their Local Plans/Local Development Frameworks including Oxford, Edinburgh, Sheffield and Northampton. In most cases the policies contained in these plans seek either to define key views, settings and vistas and protect them from new tall buildings, or provide guidance, which sets out what is expected in the submission of a planning application for a tall building.
- 2.2.3.** There are two important local written works on the subject of tall buildings, specifically “Cambridge Planning Proposals: A report to Cambridgeshire County Council” by William Holford and Myles Wright (1950) (Figure 7) and “Dreaming Spires and Teeming Towers: The Character of Cambridge” by Thomas Sharp (1963). Holford and Wright’s publication suggested that building height limits be imposed near the centre of Cambridge with a maximum height limit of 55 feet (approximately 17m). “Dreaming Spires and Teeming Towers”

was a report examining the character and scale of the centre of Cambridge with the objective of serving as a guide for developers and the Council at the time. The author advocated restraint and caution in dealing with any proposals for tall buildings within the centre of the City. Both documents reveal that concerns over tall buildings within Cambridge are nothing new.

2.2.4. In addition to Policy 3/13, all applications will be subject to policies 3/2 and 3/4 which are of particular relevance to tall buildings. Policy 3/2 'Setting of the City' states:

"Development will only be permitted on the urban edge if it conserves or enhances the setting and special character of Cambridge and the biodiversity, connectivity and amenity of the urban edge is improved."

Policy 3/4 'Responding to Context' states:

"Developments will be permitted which can demonstrate that they have responded to their context and drawn inspiration from the key characteristics of their surroundings to create distinctive places. Such development will:

- a. Identify and respond positively to existing features of natural, historic or local character on and close to the proposed development site;
- b. Be well connected to, and integrated with, the immediate locality of the wider City; and
- c. Have used the characteristics of the locality to help inform the siting, massing, design and materials of the proposed development"

2.2.5. Tall buildings have the potential to negatively impact on the setting of historic buildings. Policy HE 9.1 of Planning Policy 5 (Planning for the Historic environment) states:

'Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification. Substantial harm to or loss of a grade II listed building... should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance should be wholly exceptional.'

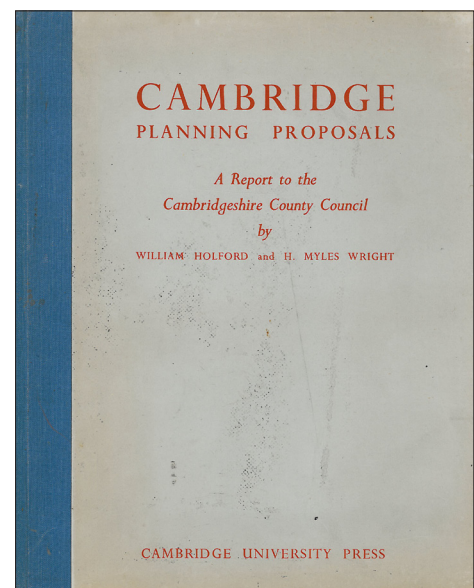


Figure 6 and 7 above: Guidance on tall buildings (2007), English Heritage. Cambridge Planning Proposals (1950), William Holford.

2.3. Skyline guidance

2.3.1. Consultation events co-hosted by the Council in 2009 and 2010 (Figures 8, 9 and 10) revealed a range of views on the potential benefits and drawbacks of tall buildings and their impact on the Cambridge skyline. These events generally concluded that a 'tall building' is a relative term and that it would be better to talk about 'taller buildings' or buildings that were significantly taller than their neighbours. While there seemed little support for taller buildings within the City's historic core, there were a variety of views on taller buildings at other locations in the City. There was general agreement that any new taller buildings must be sympathetic to their context and position, that they should have a 'sense of place', and be of high quality both in respect of design and materials. It was considered that tall buildings must also be sustainable, environmentally friendly and connected to established infrastructure, particularly public transport. Finally, it was felt that a more proactive "strategy" was needed in order to avoid the potential for a piecemeal approach to the location of tall buildings across the City.

2.3.2. While there has been an expressed desire to create a 'tall buildings strategy', it is important to note that this guidance is not intended to promote tall buildings in Cambridge. Instead, it is intended to provide an understanding of the skyline and then provide a robust set of criteria to assess applications with a view to preserving the special character of Cambridge. A 'zoning-based' approach to tall buildings is considered potentially detrimental to the character and appearance of certain areas of the City, as they could become the target for excessive development or redevelopment for tall buildings. However, the review of the Local Plan, which is now beginning, does present an opportunity to review Policy 3/13 and this guidance will help

feed into the process. The onus will be on an applicant for planning permission to provide a clear justification for building taller in the accompanying Design and Access Statement.



Figure 8: 'Is Tall Beautiful' debate leaflet

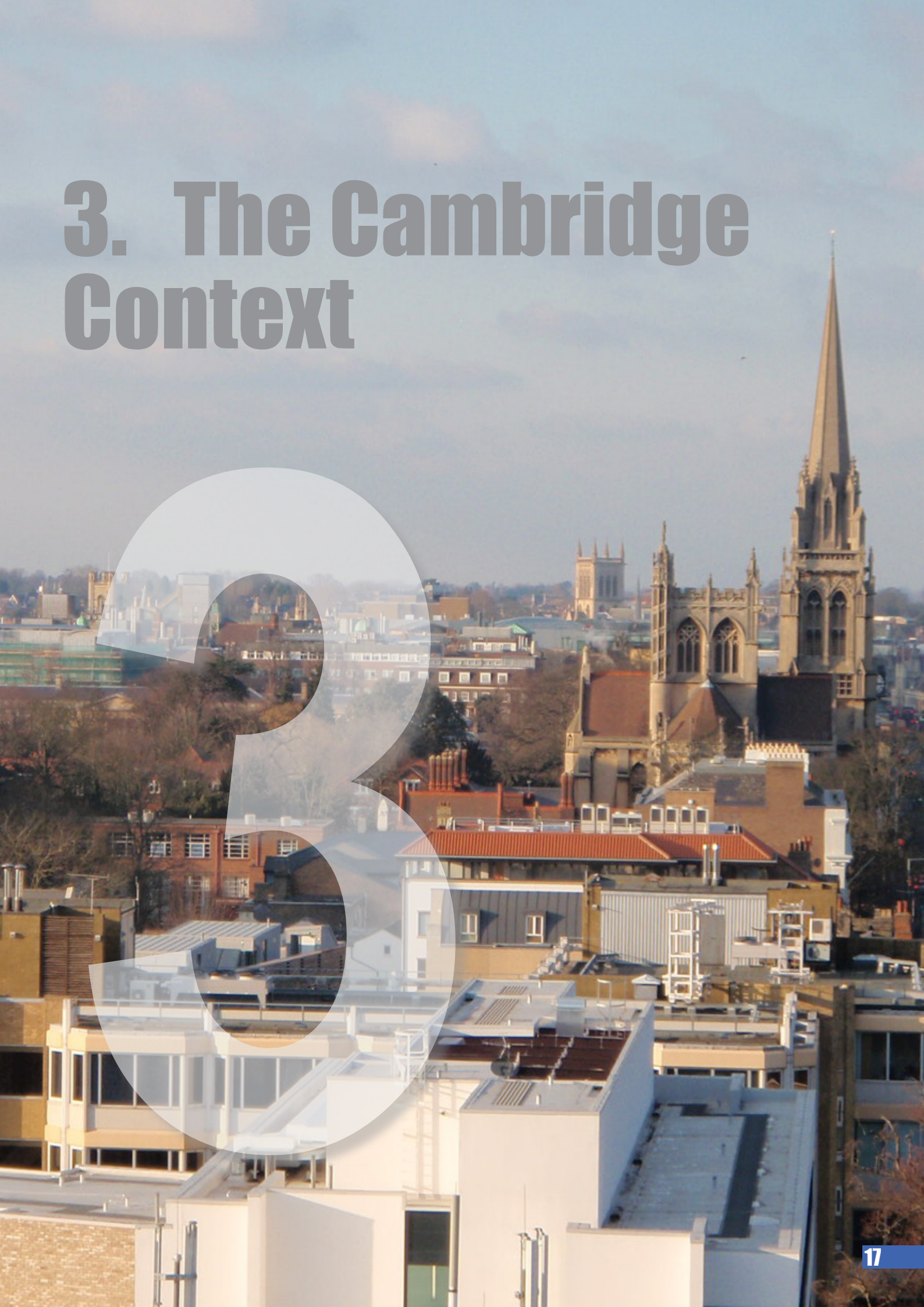


Figure 9 and 10 above: photographs of delegates at the 'Is Tall Beautiful' debate(2009)

2.4. Approach in the guidance and what needs to be managed

- 2.4.1.** As part of consultation undertaken in March 2010, representatives of the development industry advised that whilst Cambridge remains an attractive place in which to invest and build, tall buildings are expensive to build and “premium” locations are likely to face difficulties in terms of being able to gain permission either because of site sensitivity or availability. This means that Cambridge will be unlikely to experience pressure for very tall buildings as is experienced in larger cities such as London, Birmingham or Manchester. Rather, Cambridge will face pressure for buildings that are taller than the prevailing built form across the City, which is generally three to five-storeys across the Historic Core and two to three beyond. Pressure is more likely to be experienced in parts of the City for buildings of heights between five to ten residential storeys. However, given the relatively low scale nature of the Cambridge, buildings of this height are still likely to have both immediate and wider impacts on the skyline.
- 2.4.2.** The Council has considered the key findings and issues emerging from consultation to date and due to the factors limiting the preparation of any new policy, this guidance is set out as a set of robust, practical criteria to assist in the evaluation of the likely impact of a tall building (or buildings) on the immediate and wider City skyline. Most of the criteria herein are already used in other policies and guidance nationally and so are considered the basis for good practice. The guidance needs to be used for the purposes of pre-application discussions with the Council and as part of the submission of formal planning applications.

3. The Cambridge Context



3. The Cambridge Context

3.1. Introduction

- 3.1.1.** Cambridge is one of England's finest historic towns. The existing characteristics of the City need to be understood if the essential qualities of Cambridge are going to be maintained into the future.
- 3.1.2.** This section provides a summary description of Cambridge in respect to its setting, topography, character, skyline characteristics, urban structure, key approaches and gateways, and key views to and within the City. More details and additional references are given in Appendix B.

3.2. Topography and geology

(Shown in Figure 3.1: Strategic Viewpoints)

- 3.2.1.** One of the most important characteristics of Cambridge is the relationship between the City and its rural setting and the notion of a contained town sitting in a partial bowl of generally low lying landscape with higher ground to the south east, south and west and low lying fen and clay lands to the north and east.
- 3.2.2.** To the southeast of the City lies a broad chalk ridge rising up to 74 metres Above Ordnance Datum (AOD) at the Gog Magog Hills. To the west of the City, two gault clay ridges (north and south of Coton) run in a broadly east-west direction. The northernmost ridge rises up to 63m, south-west of the American Cemetery at Madingley. The southern ridge generally lies around 50m AOD.
- 3.2.3.** The lowest land in the City lies below the 5 metre AOD contour along the River Cam.
- 3.2.4.** The built environment of the City occupies

a level area of land generally between 5 and 15 m AOD (Above Ordnance Datum). Discrete areas of land above 20m AOD lie around Castle Hill, to the north of the River Cam and at the 'West Cambridge University' site. Castle Mound, a man made structure which forms part of Castle Hill rises up to approximately 32m AOD, and affords the only significant panoramic view within the City and which is not taken from a building.

3.3. National Landscape Character

- 3.3.1.** Cambridge sits at the boundary of three national character areas identified by the Countryside Agency in 2005 described in Appendix B.

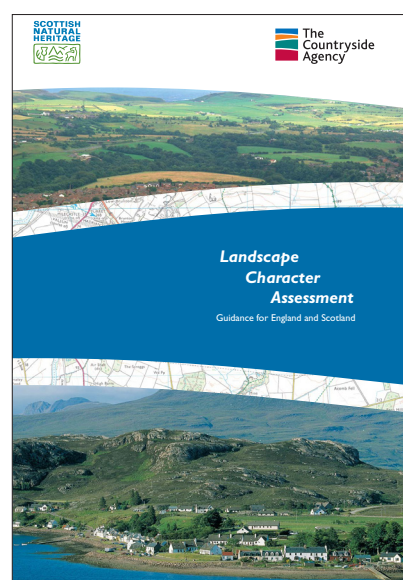


Figure 11: National Character Assessment Guidance for England and Scotland

3.4. Local townscape and landscape character

3.4.1. In 2003, Cambridge City Council published a 'Landscape Character Assessment' of the City and its environs. The study identifies a number of physical features or resources, which define the character of the City and are essential to its character. These are as follows:

- Buildings and The Historic Core;
- Green Fingers and Corridors;
- Open Green Spaces within the City;
- Water Courses and Water Bodies;
- Setting and views of the City skyline; and
- Separation.

3.4.2. The following sections examine some of these characteristics, which have particular relevance to proposals for buildings that are likely to change the existing skyline of the City. Future buildings, by virtue of either overall height or massing, could negatively impact on the character of Cambridge if their potential impact is not considered from the outset. For further background reading, detailed townscape assessments of large parts of the City are given within the various Conservation Area Appraisals produced by the Council which are available at <http://www.cambridge.gov.uk/ccm/navigation/planning-and-building-control/historic-environment-and-trees/conservation-areas/>

3.5. The setting of the City

3.5.1. The historic City of Cambridge is a contained, compact collegiate City set within an accessible rural hinterland.



Figure 12: Cambridge Landscape Character Assessment

The City Council's Landscape Character Assessment published in 2003 (Figure 12) highlights the proximity of the rural hinterland to the City Centre, instilling a sense of compactness and accessibility to the countryside.

3.5.2. The setting of the historic City of Cambridge is an important issue when assessing the impact of tall buildings. Tall buildings have the potential to reduce the need for urban expansion into the Greenbelt and consequently help to protect the setting of the City. However tall buildings or buildings of significant massing, especially groupings of tall buildings, have the potential to adversely impact the setting of the City if inappropriately located and/ or poorly designed.

3.5.3. The wider setting of the City and its compactness has been largely preserved over the years by the surrounding Green Belt and the green fingers extending into the City which are also partially designated as Green Belt. The setting of the historic core has also been preserved by the substantial areas of open space which encircle it, including The Backs, Midsummer Common, Jesus Green, Sheep's Green and Coe Fen, and Parker's Piece.

3.6. Watercourses and water

bodies (Figure 3.2: Open Spaces and Water Bodies)

- 3.6.1.** There are a variety of watercourses across the City and its rural hinterland. The most prominent of these, the River Cam, serves as a key approach to the City. The river practically encircles the historic core along its northern, western and north-eastern edges and flows through a variety of open spaces of differing character and scale. The river is particularly sensitive to new development and in particular to taller buildings owing to its open character and proximity to the historic core. As the 2003 Landscape Character Assessment notes, some of the best panoramic views of the City are afforded from the south west of the City, including Grantchester Meadows and the rising footpath to Grantchester.
- 3.6.2.** Notwithstanding the potential adverse impacts of future tall buildings on the river corridor, existing views of tall, slender structures such as the various churches across the City and the chimney at Cambridge Technology Museum provide interest and variety to the skyline when viewed from the river corridors (Figure 13). These buildings contribute to the character of the river corridor and improve the legibility of the City.



Figure 13: View of the Museum of Technology Chimney from Grantchester Meadows

3.7. Green fingers and open green spaces within the City

(See Figure 3.2: Open Spaces and Water Bodies and 3.5: City Approaches)

- 3.7.1.** Among one of the most important and defining characteristics of Cambridge are the green fingers and corridors that penetrate into the City from the rural hinterland, many of which are in the Green Belt. The open spaces associated with the River Cam vary in character, from open rural landscapes outside the City to the commons such as Midsummer and Stourbridge Commons, the College 'Backs', and the more enclosed urban landscapes found to the south of Castle Hill, the City's historic river crossing point.
- 3.7.2.** The College Backs are the most evocative of these open spaces affording memorable views to King's College and the other colleges across the college lawns. These views are particularly vulnerable to change.
- 3.7.3.** In addition to these linear green spaces, there are a number of other key open spaces which encircle the City's historic core such as Parker's Piece, Christ's Pieces and the Botanic Garden. Proposals for taller buildings within close proximity to these areas of open space are likely to be particularly contentious due to their increased prominence and visibility, as well as given the historic associations of many of these green spaces.
- 3.7.4.** Views from the City's open spaces within and surrounding the historic core are highly sensitive to change.

3.8. Heritage Assets (See Figure 3.3: Conservation Areas and 3.4: Heritage Assets)

3.8.1. Cambridge is an internationally recognized City with an outstanding collection of listed buildings and buildings of local interest (or “BLI’s”). The historic core’s diverse character is defined by the intermingling of the generally larger-scale collegiate buildings and the more ‘domestic scale’ market town buildings described further in Section 3.9. The historic core of the City is covered by the Central Conservation Area, which has helped preserve the character of the historic core. The surrounding ten other Conservation Areas (listed in Appendix B) have protected the setting of the historic core although these areas have been designated in their own right and not specifically to protect the setting of the historic core. Many of the college grounds lining the River Cam which form ‘The Backs’ are designated as ‘Registered Historic Park and Gardens’.



Figure 14: Rose Crescent

3.9. The urban structure of the City

- 3.9.1.** The historic core of the City comprises a mix of grand, collegiate, civic, commercial and ecclesiastical buildings together with more vernacular, market town buildings. There is a hierarchy of streets ranging from the Market Square through to the main routes, linking lanes and alleys. The street layout affords a wide variety of vistas which are often terminated by towers and spires creating a highly attractive and legible townscape.
- 3.9.2.** The historic ‘town’ buildings often have narrow plot widths and are generally



Figure 15: Petty Cury



Figure 16: Kings Parade

three to four storeys in height, with some two and five- storey buildings. Taller buildings within the historic core are predominately post WWII construction. Many of the streets within the historic core are narrow with relatively high buildings in proportion to the street width, providing a pronounced sense of enclosure such as at Rose Crescent (Figure 14) and Petty Cury (Figure 15). Conversely, there are streets such as Kings Parade (Figure 16) with a much more open character.

3.9.3. The collegiate buildings are typically laid out around large courts. The buildings and landscape that back onto the River Cam create a distinctive area known as The Backs. The relationship between the built form and open space is part of what makes historic Cambridge so distinctive and unique.

3.9.4. The character of the town to the north, east, south and west of the historic core differs significantly. To the west and south west of the River Cam, the townscape is characterised by low density development comprising college and other university buildings set amidst expansive playing fields and grounds and large private houses and gardens laid out on a rectilinear street pattern.

3.9.5. Immediately to the north of the core, there are extensive areas of Edwardian and Victorian terraces and townhouses, which have subsumed the ancient village centre of Chesterton. Chesterton has retained its more irregular, intimate pattern of streets, in marked contrast to the surrounding rectilinear street patterns.

3.9.6. At the far northern edge of the City is the Science Park, a collection of large research and office buildings set amidst landscaped grounds built from the 1970's onwards.

3.9.7. The inner suburbs to the east of the City are characterised by substantial areas of relatively higher density development

and typified by small to medium sized Victorian and Edwardian terraces set out on relatively tight, rectilinear street patterns which run perpendicular to the main approach roads into the City. The outer suburbs comprise large-scale inter-war and post WWII development (Cherry Hinton, Kings Hedges and Arbury).

3.9.8. The railway corridor, to the east of the City is characterised by large industrial and commercial developments (though some of these areas are being redeveloped) and is relatively open in character, allowing open views and vistas not afforded elsewhere in the City. The station area is one of the few areas in the City (in addition to sections of the riverside) where the industrial heritage of the City is still partly evident, primarily in the form of Foster's Mill, a prominent landmark building visible from the City's rural hinterland.



Figure 17: Elevated views - Historic Core, image taken from Barton Hill



Figure 18: Elevated views - Addenbrookes Biomedical Campus, taken from Babraham Road, Gog Magog Hills

3.10. Movement corridors, approaches and gateways (see Figure 3.5: City Approaches)

3.10.1. Understanding the approaches and gateways to the City is important in order to assess the potential impact of any tall building proposal. The centre is served by a number of broad radial and relatively straight routes into the City, many of which have long historic associations. Given their high level of accessibility, the main approach roads, particularly towards the edge of the historic core, are desirable locations for developers of future taller buildings. This is evident from development of the Belvedere at Hills Road railway bridge and recent applications along Newmarket Road. Taller buildings on these roads, or those with a considerable mass, are likely to be prominent but could equally have the potential to serve as positive gateways and landmarks to the City if well designed. The impact of taller buildings on vistas along these approaches needs to be assessed by applicants.

3.11. Characteristics of the City Skyline

- 3.11.1.** Skylines of cities evolve and change over time in response to increasing urban expansion and renewal. The Cambridge skyline has undergone just such a process, albeit until recently in a relatively small scale and incremental way and over a comparatively long time period.
- 3.11.2.** The skyline of any City will clearly vary in accordance with the location from which it is viewed. The opportunities to experience wide, panoramic views of the City are limited due to the generally level topography and often well-vegetated rural surroundings combined with the modest scale of buildings within the City. These factors make the Cambridge skyline highly vulnerable to change.
- 3.11.3.** Trees form an important element in the modern Cambridge skyline, within both the historic core and the suburbs. Many of the elevated views of the City from the rural hinterland and from Castle Mound show a city of trees with scattered spires and towers emerging above an established tree line.
- 3.11.4.** Within the historic core there is a great variety of rooflines, characterised by spires, cupolas, chimneys and towers. The predominantly narrow plot widths help give the historic core highly varied rooflines notably along King's Parade, where five storey buildings are juxtaposed against three storey buildings. Above the roofline of 'town' buildings, emerge the taller, ecclesiastical college and university buildings. The level of enclosure created by relatively tall buildings and narrow streets does mean that some of the taller buildings constructed throughout the City in 1960s and 1970s (notably University buildings) have remained visually discrete.
- 3.11.5.** Beyond the historic core, the prevailing height of residential buildings is generally two storeys with substantial numbers of three storey Victorian and Edwardian buildings on the main approach roads, notably the 'City ends' of Regent Street, Hills Road, Trumpington Road, and to a lesser extent, Chesterton Road. Chimneys and subtle variations in roof heights and the presence of dormer windows provide variety in addition to scattered ecclesiastical buildings.
- 3.11.6.** The low density residential areas to the west of the historic core generally lack any prominent, focal buildings. Trees, rather than the built form, generally define the skyline within this part of the City. There are, however, some exceptions within this part of the City, including architecturally prominent university buildings, most notably the tall tower of the university library (see figure 17 which shows the tall, bulky library building at the left side of the photograph)

3.11.7. Large areas of the outer post WW2 suburbs, notably the eastern (east of the railway line) and southern sections of the City, are dominated by large areas of two storey buildings and lack any notable buildings and lack inter-visibility with the historic core. The notable exceptions to this being the Addenbrookes Hospital (see Figure 18) and the Marshall's Hangars which feature very prominently in local and distant views from the south and east.

3.11.8. Additional information is provided in Appendix B.

3.12. Landmark buildings (Figure 3.6)

3.12.1. The Oxford English dictionary defines a landmark as “an object or feature of a landscape or town that is easily seen and recognized from a distance, especially one that enables someone to establish their location e.g. the spire was once a landmark for ships sailing up the river”. The Dictionary of Urbanism (Cowan, 2005) defines a landmark as “a conspicuous building or structure; one that stands out from the background buildings; a point of reference in the urban scene.” Interestingly, Kevin Lynch notes in his important work ‘The Image of the City’ that a landmark need not be tall. For example the ‘grasshopper clock’ of Corpus Christi College is a landmark (Figure 19). For the purposes of this guidance, the principal landmark buildings on the City skyline are listed in Appendix B and are identified by merit of their relative visibility within the City. They are also shown on Figure 3.5: Landmark Buildings. Almost all of the landmarks built prior to the 20th Century lack useable floor area at high level but instead aim to demonstrate their civic importance and thereby enhance the skyline of the city through height (The photograph in Figure 20 shows one such building).



Figure 19: The ‘Grasshopper Clock’ Corpus Christi College



Figure 20: Our Lady of the English Martyrs (OLEM) Hills Road.

3.13. Viewpoint analysis

Overview

- 3.13.1.** The generally level topography of the City and its environs results in limited vantage points to enable views of the whole City skyline. Notwithstanding this fact, there are still some good vantage points around the city. The 2003 Landscape Character Assessment notes the importance of distant views from the south, southwest and west.
- 3.13.2.** Views can be divided into a variety of types. Long to medium distance views are views which are taken from outside of the City within its rural hinterland, some of which allow panoramic views of the entire City skyline or large portions of it. These can be further divided into elevated or level views.
- 3.13.3.** Many of the best views of the Cambridge skyline are afforded from private buildings within the historic core, including from multi-storey car parks. Views from the tower of Great St Mary's are particularly impressive and may be experienced by the public for a small fee (Figure 21). From these points, the City's surrounding topography can be appreciated and experienced, which would otherwise be impossible from large parts of the City at street level.



Figure 21: Views of the Market Square from St Mary's Church

Long to medium distance views towards Cambridge (Figures 3.7 and 3.8: Photographs)

- 3.13.4.** These views are taken from the rural hinterland of Cambridge and from both elevated and level views. The views of the spires and towers of the historic core from the rural hinterland are limited and are generally distant. Dependent on the scale and location of individual applications, the following views should normally be assessed as part of a tall building application.

(i) Views from the southeast

From the southeast of the City, panoramic views are afforded from the following locations around the Gog Magog Hills and Magog Down (associated with Wandlebury Country Park) and elevated land to the south east of Cherry Hinton. The view from the junction of Shelford Road/ Worts Causeway and the Harcamlow Way is one of the few viewpoints where a panorama is afforded that takes in both Addenbrooke's Hospital, the City centre and the hangars at Cambridge Airport.

- Little Trees Hill, Magog Down;
- Junction of Shelford Road and Harcamlow Way;
- Limekiln Road lay by.

(ii) Views from the east

- South of Teversham from Airport Way.

(iii) Views from the northeast and north

- Stourbridge Common
- Ditton Meadows south of Fen Ditton
- River Cam towpath south of Baits Bite Lock
- View from the junction of the A10 and A14

(iv) Views from the west

- Madingley Road (intermittently);
- Red Meadow Hill - open panoramic views of the City are afforded from Red Meadow Hill within Coton Countryside Reserve;
- Barton Road, east of the junction 12 of the M11.

(v) Views from the southwest and south

- Grantchester Road;
- Grantchester Meadows;
- Hauxton Road, north of junction 11 of the M11.

Local or short distance views

3.13.5. While it is relatively simple to create a list of a limited number of distant/long range views of the City, being able to fix a list of local views within the City is clearly dependent on the location and scale of a proposed tall building. If the current “pattern” of tall building proposals continues whereby buildings of between six to ten stories are proposed, it is arguably the more local parts of the skyline within the City which are more vulnerable to change than the wider skyline experienced from the City’s rural hinterland. Local views must be considered on a case-by-case basis as part of the pre-application process. The criteria set out in Chapter 4 will describe in greater detail the approach that needs to be taken to selecting local views of a given proposal. It is also worth noting that paragraph 3.40 of the Cambridge Local Plan (2006) does set out some of the important, localised views of the historic core, such as from Castle Mound (Figure 22) and across open spaces such as Midsummer Common, Lammas Land and The Backs. In and around the City core, key local views from and across the following open spaces are likely to be important:

- Parker’s Piece
- Jesus Green
- Midsummer Common;
- Coe Fen
- Sheep’s Green
- Lammas Land
- College grounds within The Backs
- Stourbridge Common
- Coldham’s Common

3.13.6. The following elevated City views may also need to be assessed dependent on site location and the scale of proposals:

- Hills Road railway bridge looking towards town (Figure 23)
- Coldham’s Lane railway bridge
- Carter Cycle Bridge
- Mill Road railway bridge
- Elizabeth Way Bridge (Figure 24)
- Long Road Bridge
- Grand Arcade car park
- Grafton East car park
- Queen Anne Terrace car park
- Park Street car park
- Castle Mound
- Church of St Mary the Great

3.13.7. Applicants for tall buildings should carefully consider other local views on key approach roads for assessment. The main approach roads to the City are where a



Figure 22: View of St John's College from Castle Hill



Figure 23: View of Cambridge University Press Site from Hills Road Bridge



Figure 24: View of Riverside from Elizabeth Way Bridge

high proportion of visitors and residents experience the scale of the City.

3.13.8. Applicants for tall buildings also need to assess relevant key views from footpaths along the river corridor within the City which do not fall within the commons or Backs such as areas around Riverside.

3.14. Sensitivity and significance of views

3.14.1. The Cambridge Local Plan (2006) does not include any detailed policy or commentary about the significance of views to and across the City. As such, it is not possible to set out protected view cones which go beyond policy already set out in Policy 3/13.

3.14.2. The Cambridge Local Plan (1996) identified 'Cones of View' from various elevated viewpoints around the City. Policy NE2 of that Plan sought to control development within view cones and stated: "Any new development proposed within or close to the cones of view...shall be of a height, scale and mass which will not significantly detract from these views. Enhancement of these views will be sought where development is permitted". It is worth noting that these cones of views were subsequently removed from the 2006 Local Plan.

3.14.3. It is possible, however, to attach a degree of weight to those views which relate to the buildings, landscapes and settings which Policy 3/13 particularly seeks to protect e.g. Listed Buildings and their settings, Conservation Areas and their settings, etc.. Views of the historic core and the key buildings within the core are therefore particularly important to protect. In this case, distant views of the historic core from Red Meadow Hill, Lime Kiln Hill, and the Gogs are especially important, as are more localised views of the historic core from Castle Mound, The Backs, and open spaces within and around the historic core. The views from open spaces within the City to the historic core are very important and arguably the most important views by the very nature of their inherent openness. Other views of particular note include those experienced from the south-west of the City. The 2003 Landscape Character Assessment notes:

“views across from the Grantchester area are so special and evocative of Cambridge they are part of the Defining Character of the setting and views”. The Inner Green Belt Inner Boundary Study (2002) notes the areas of land between Newnham and Grantchester Meadows as particularly sensitive to development and is identified as land which defines the character of the City.

3.15. Conclusion

3.15.1. The City skyline comprises a mix of spires, towers and chimneys, which emerge as a series of incidents above a background of lower buildings and trees. Individual trees can also form distinct elements of the Cambridge skyline in their own right. Notably from Midsummer Common there are a number of both individual trees and groups of trees which feature as prominent elements on the skyline.

3.15.2. The City generally lacks the tower blocks which have come to define the character of many cities in the late 20th century, although clusters of large buildings are clearly evident at Addenbrooke’s Hospital and Cambridge Airport. The prominence of these buildings is further emphasized by the relatively light coloured materials used in their construction.

3.15.3. The relatively modest scale of the City, combined with the generally flat topography, means there are limited opportunities to view the skyline in its totality. However, there are key views within the City and views from The Backs are world-renowned. The modest scale of the City and the low lying topography means that the skyline is highly sensitive to change with few opportunities to mitigate the effects of tall buildings. Consequently, the location, scale, massing and design quality of proposed tall buildings are of vital importance. Local views within and across the historic core, in particular from open space

immediately surrounding the historic core, will continue to be of the greatest importance and significance within the City. In addition, long distant views from Gog Magog Hills and Grantchester Meadows towards the historic core are also of great value and the key characteristics of these views need to be protected.

3.15.4. With appropriate, robust assessment of proposals for tall buildings, combined with a high quality design for any new tall buildings, the key characteristics of Cambridge’s skyline can be preserved and enhanced for the future.

4. Assessment Criteria



4. Assessment criteria

4.1. Explanation of the assessment criteria

- 4.1.1.** The assessment criteria outlined on the following pages are intended to help provide a framework for informing a detailed, evidence-based process to help address the policy requirements in Policy 3/13 of the Cambridge Local Plan 2006. The criteria are widely used in similar guidance, policies and strategies across the country and should, if properly understood and applied, provide an objective, factual and realistic portrayal of proposals for tall buildings. The criteria cover a broad range of matters relevant to the evaluation of a tall building proposals and are included in order to ensure that the highest quality of submissions, and so decisions on such submissions, are put forward and realized.
- 4.1.2.** Applicants need to work through the assessment criteria as they consider proposals for buildings that can be considered 'tall' and which are likely to impact on the Cambridge skyline. Ultimately, applicants need to submit a document that addresses all of the assessment criteria as part of the Design & Access Statement or Heritage Impact Assessment. As part of any planning application for a new tall building, applicants will be expected to provide a clear justification for building tall within the Design and Access Statement accompanying the application.

4.2. Planning application requirements

- 4.2.1.** Submissions for planning applications involving tall buildings will need to include written and illustrative material which provides the evidence-base and policy justification for the proposed building(s). Planning applications for alterations to existing tall buildings in the City which result in major changes to the external appearance of such buildings will also need to address the assessment criteria, as appropriate, listed in this chapter.

4.3. Relevant Policy and Guidance

- 4.3.1.** Planning applications for tall buildings, as defined in this guidance, need to take consideration of, and make reference to, where appropriate, other policy, guidance and documents that are also relevant to the preparation and assessment of an application. A list of relevant guidance and policies is provided in Appendix A.

4.4. The assessment criteria

Criteria 1: Location, setting and context

- 4.4.1.** Policy 3/13 states that tall buildings will not be permitted if they detract from key buildings or landscapes and their settings, or from vistas, the skyline and views within, over and from the City. Any new tall building needs to complement, not detract, from these features and views. The relationship of the proposed building, or buildings, to the surrounding context needs to be carefully examined. A

townscape, landscape and urban design appraisal needs to be prepared which analyses features such as:

- Topography;
- Townscape and landscape types and character areas;
- Site history (see criteria 2);
- Movement and access patterns;
- Scale, height and massing of surrounding buildings and set backs of buildings;
- Urban grain – noting typical plot sizes and the rhythm of the street;
- Prevailing architectural language;
- Land use;
- Areas of open space;
- Listed buildings and Conservation Areas (see criteria 2);
- City gateways and nodes
- Local and long distance views and vistas and local landmarks; and
- Opportunities and constraints

4.4.2. Preliminary site and context appraisal work needs to be used to inform pre-application discussions with the City Council and to inform the final proposals.

4.4.3. This guidance does not aim to identify specific areas for tall buildings. The modest scale of the city and its level topography does not lend itself to the allocation of large zoned areas for tall buildings. While this guidance cannot represent planning policy, it is considered that some locations do lend themselves to taller buildings where localised increases in height may be appropriate.

In such conditions, tall buildings have the potential to act as positive landmarks which aid legibility and make it easier for people to orientate themselves and recognize where they are. Appropriate “conditions” for a tall building could, for example, include local nodes, key city street junctions, the ends of important vistas, and in and around principal transport junctions. The Cambridge Local Plan (2006) review will provide a chance to further review and consult on this, and other, approaches to the location of tall buildings in respect of future planning policy.

4.4.4. Tall buildings have the potential to affect local biodiversity in both negative and positive ways. It may be appropriate, for example, for applicants to include bird or bat boxes. Reference should be made to Section 2.6 of the City Council’s ‘Cambridge Sustainable Design and Construction SPD’ for further information.

4.4.5. Policy 8/13 of the Cambridge Local Plan (2006) is about the Cambridge Airport Safety Zone and Airport Safeguarding restrictions. Developers of tall buildings should contact Marshalls Airport at pre-application stage to discuss the effect which safeguarding restrictions may have on the maximum height of the buildings.

4.4.6. Where buildings of a particularly large scale and massing are proposed or where schemes are proposed within a particularly sensitive location, a full Landscape and Visual Impact assessment as part of an Environmental Impact Assessment will be required (subject to the appropriate screening process as laid out in EU legislation). The LVIA needs to be prepared in accordance with the following guidelines:

- ‘Guidelines for Landscape and Visual Impact Assessment’ (Second Edition) published by the Landscape Institute and the Institute of Environmental Management and Assessment (Spon Press 2002)

- 'Landscape Character Assessment Guidance for England and Scotland'. The Countryside Agency/ Scottish Natural Heritage (2002)
- 'Design Manual for Roads and Bridges' (Department for Transport, Highways Agency, 2011)

Assessing visual impact

4.4.7. Illustrations of any proposal must include a range of clear and accurate drawings and images, including photomontages, computer generated images (CGIs), etc., in order to depict the three dimensional qualities of the proposal. They must also be capable of being easily understood for the purposes of stakeholder and public consultation. The production and display of a scale model may also be helpful in assessing the impact, either positive or negative, of a proposal. Illustrations and models must show neighbouring existing buildings, the surrounding streetscape and the historic context. For larger buildings, or those proposed within particularly sensitive locations, a night time assessment may be expected with accompanying CGIs. Applicants will need to take account of the potential cumulative impact of other approved tall building applications within close proximity to their development sites.

4.4.8. Consideration must be given to the visual impact of any proposal from key distant and localised views, including from adjacent streets and open spaces. Three view types should be provided with any planning application, including vistas, panoramas and view corridors. They may be defined as follows:



Figure 25: Vista looking north along Petty Cury towards the Lloyds Bank



Figure 26: Panoramic views across the historic core from Castle Mound.



Figure 27: View Corridor along Hills Road looking towards the Historic Core.

Vista (Example shown in Figure 25)
A view from a specific viewpoint looking towards a proposed building or structure.

Panorama (Example shown in Figure 26)
A view from a specific viewpoint looking across a wide area at numerous buildings or structures within the setting of the proposed building or structure. Castle Mound is a good example of a panoramic view within the City.

View corridor (Example shown in Figure 27)
Numerous views from a variety of viewpoints looking at a proposed building or structure set amongst other buildings or structures. Typical view corridors include the approach roads into the City, railway and open space areas.

4.4.9. The location of proposed viewpoints needs to be agreed with the City Council as part of the pre-application process. Chapter 3 and Appendix B set out a number of important viewpoints across Cambridge.

Views of existing landmarks

4.4.10. A building with a large bulky form presents a silhouette that has the potential to block views to existing, positive landmark buildings or create unsympathetic backdrops to such buildings. Breaking up the massing of proposals to create more slender buildings can help to avoid these negative impacts.

Enhancing legibility and creating positive views

4.4.11. An appropriately sited tall building has the potential to make a positive contribution to the City, assisting in way-finding across the City.

Landform and Topography

4.4.12. Given that the City is generally level and low lying, tall buildings located on higher

ground, for example in areas located around Castle Hill to the north of the river, will be subject to close scrutiny.

Summary - Criteria 1

4.4.13. Applicants must demonstrate, by means of a visual assessment or appraisal with supporting visualisations and illustrations, how the proposal will sit within the existing landscape and townscape and describe the impact the development will have within the local and wider context. The exact methodology, views, etc., will be agreed on a case by case basis, dependent on the scale and location of the application.

Criteria 2: Historical Impact

4.4.14. Applicants need to make reference to the 'Historic Core Appraisal' published by the Council and the various current Conservation Area Appraisals across the City. These documents provide detailed assessments of the parts of the city in respect of history, urban form, character, key buildings and views, amongst others. Any application that results in impacts on heritage assets needs to be accompanied by a separate Heritage Statement or address such issues within the Design and Access Statement, dependent on the scale of the impact.

4.4.15. While Policy 3/13 is not specific on the matter, tall buildings within the Historic Core area are unlikely to be supported in order to ensure that the historic integrity of the centre is maintained. Whether the building can be described as a 'tall building' and be subject to the criteria set out herein will be dependent on the exact location of the proposed building within the Historic Core and the prevailing height of surrounding development. However it is assumed that any building within the Historic Core of six storeys or above will automatically trigger the need to address the criteria set out within this document. Lower buildings would be judged on a case-by-case basis.

4.4.16. Tall buildings have the potential to negatively impact on the setting of historic buildings. Policy HE 9.1 of PPS5 states:

‘Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification, Substantial harm to or loss of a Grade II listed building...

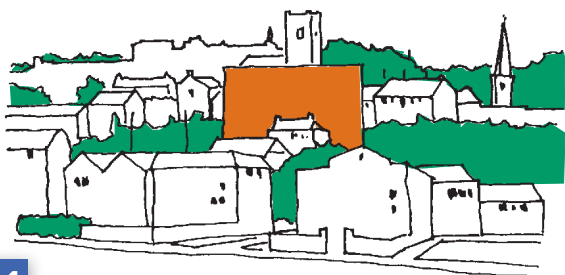


Figure 28: Skylines are sensitive to being obscured by high buildings in front of existing buildings or having their silhouette spoiled by high buildings behind them (By Design, Urban Design in the Planning System - Towards Better Practice (May 2000))

should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance should be wholly exceptional.’

Summary – Criteria 2

4.4.17. Tall building proposals which have the potential to impact on heritage assets will need to demonstrate and quantify the impact on the heritage asset, be it a Listed Building, Scheduled Ancient Monument, Conservation Area, Registered Historic Park and Garden and non-designated heritage assets, including but not limited to Buildings of Local Interest. Other undesignated heritage assets will be identified as part of a contextual appraisal by the applicant and be verified by the City Council.

Criteria 3: Scale, massing and architectural quality

4.4.18. The appropriate scale and massing of buildings is an important consideration in achieving the good integration of new buildings within established urban areas and the wider landscape. An understanding of the surrounding context, as required by saved Policy 3/4 of the Cambridge Local Plan, is an important step in achieving appropriately scaled buildings.

4.4.19. Tall buildings are frequently constructed to serve as memorable, landmark features and the silhouette of such buildings is therefore of critical importance. As noted already, the Cambridge skyline is typified by slender ‘incidents’, such as church spires punctuating the skyline. Consideration needs to be given to the articulation of the building and the creation of shadow lines to provide interest and relief to facades.

4.4.20. In addition to the overall massing of a building, the quality of a scheme can be significantly affected by how roof top plant and telecommunications facilities are integrated.

4.4.21. New tall buildings need to make reference to their surroundings through their details and materials. Tall buildings and their materials need to be of the highest quality and sensitive to site context. Building materials should be of similar or sympathetic to the surroundings or provide contrast through thoughtful juxtaposition of materials. Particular attention should be given to roofing materials and plant. Applicants must



Figure 29: Decorative timber paneling and projecting balconies add interest and articulation (Residential building in Malmö)



Figure 30: Lightweight fins and canopy help deflect glare, Addenbrooke's Hospital.



Figure 31: Curved glass curtain walling system on a modern office development in Cambridge.

make reference to the Sustainable Design and Construction SPD (2007) produced by Cambridge City Council.

Summary – Criteria 3

4.4.22. Applicants will need to demonstrate through drawings, sections, models, CGIs, etc., the design rationale of the building and how the form, materials and silhouette of the building will deliver a high quality addition to the city which will respond positively to the local context and skyline. A clear building massing strategy will need to be prepared as part of the design process and be included within the applicant's Design and Access Statement.

Criteria 4: Amenity and microclimate

4.4.23. Tall buildings should be good neighbours. Careful consideration must be given to the design of any new tall building to ensure neighbouring properties are not adversely affected due to the loss of aspect, outlook or privacy (overlooking),

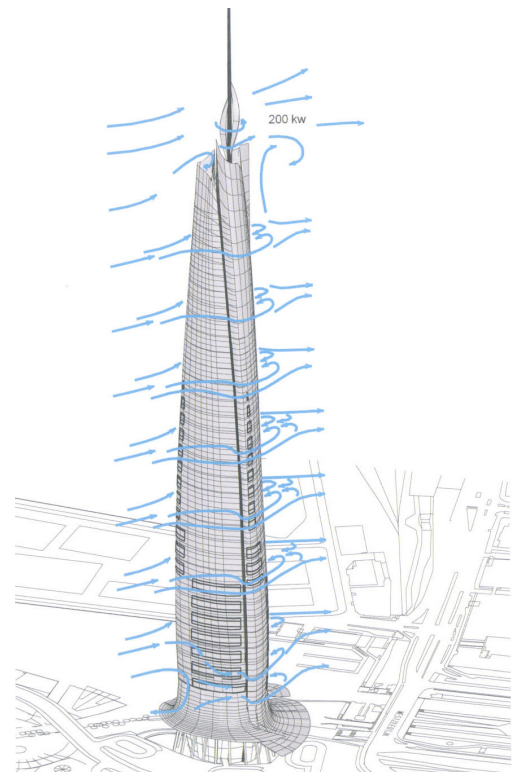


Figure 32: Proposals for Parkhaven, Rotterdam, showing the building form designed to minimise turbulence.

loss of daylight and sunlight to adjacent properties, overshadowing of gardens, noise, or any other relevant amenity.

4.4.24. Tall buildings have the potential to adversely impact on the microclimate of the surrounding public realm through the diversion of wind (Figure 32) and the effects of overshadowing and loss of daylight and sunlight. In many cases, these impacts can be successfully mitigated through both careful positioning of the building(s) and detailed building form and design.

4.4.25. Critical to an understanding of potential impacts from a tall building are detailed and accurate wind and shadow studies. Shadow studies need to be prepared that assess the impacts of overshadowing of buildings at different times of day and throughout the seasons. Initial shadow studies can be undertaken using SketchUp™ models as part of pre-application discussions. Some schemes may require a formal daylight and sunlight study; this requirement will be considered on a case-by-case basis. Public and private open spaces and amenity areas shall not be in shadow for significant amounts of time of the day/year. For reasons of environmental health, wind studies may also be required

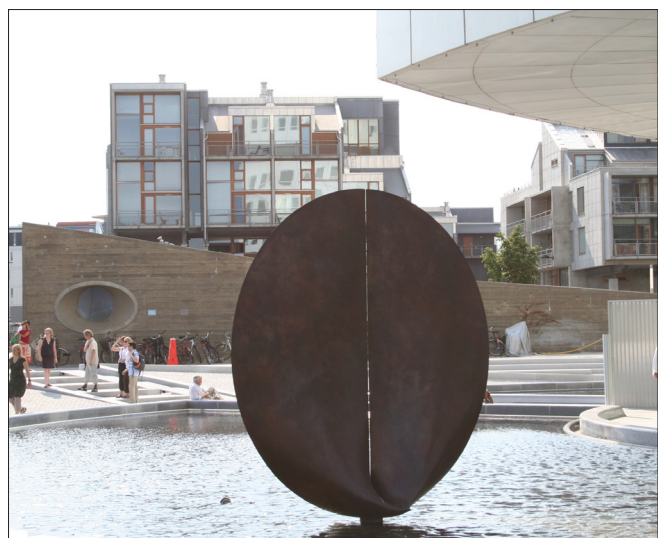


Figure 33: Public Realm surrounding the Twisting Torso, Malmö.

in order to assess potential impacts of localized increases in wind speed and/or channeling of wind.

4.4.26. Tall buildings also present opportunities to provide innovative amenity spaces through the creation of spaces such as roof terraces, balconies and internal courtyards, although such spaces are clearly not restricted to tall buildings.

Summary – Criteria 4

4.4.27. Proposals for buildings defined as ‘tall’ in this guidance will need to demonstrate the impacts of the proposal on neighbouring properties and open space and be designed to minimise any potential negative impacts. Key matters to address will include overshadowing, loss of daylight/ sunlight, overlooking, wind, and resulting heat “islands” or glare. The exact methodology of assessment will be agreed as part of the pre-application process and be proportionate and reasonable, driven by the scheme’s relative scale and its location. Applicants need to make reference to the Sustainable Design and Construction SPD (2007) produced by Cambridge City Council.

Criteria 5: Public Realm

4.4.28. The design of space around buildings is crucial in the creation of good public realm. Tall buildings need to be sensitively located so that they relate well to the space around them. The edges of the public realm need to be well defined by active uses with open or glazed ground floor façades which create activity throughout the day and help to ‘animate’ the public realm. Mixing uses within larger buildings can help to generate activity throughout the day and into the evening and provide activity and surveillance of the public realm.

4.4.29. The public realm around tall buildings needs to be proportionate to the building, attractive, safe, appropriately landscaped,

well lit and comfortable to sit in or pass through, and needs to link to surrounding public realm in a seamless manner.

Summary – Criteria 5

4.4.30. Applicants will need to provide sufficient information through the use of detailed illustrations and drawings of the proposed public realm around a tall building showing both the detail pertaining to the application site but also how the new public realm on site relates to the wider streetscape/wider public realm and ensures a sense of human scale at street level.

4.5. Process and technical requirements

4.5.1. The following sets out the likely process for agreeing key views and assessment of impact for tall buildings that are identified as having the potential to impact on the skyline of Cambridge.

- A preliminary contextual appraisal of the area shall be undertaken. This needs to identify the characteristics of the area, including building heights, building materials and details, key views, land-use, building typologies, landmarks, movement patterns and nodal spaces, etc.. The extent of these studies should be proportionate to the scale of the scheme and the relative sensitivity of its location.
- Presentation by applicant of details in respect of scale and massing and overall design strategy. Depending on the nature of the proposal, this stage may trigger consideration of the need for an Environmental Impact Assessment.
- Initial assessment of proposals by the City Council with initial response and opportunity to review preliminary key viewpoints put forward by the applicant.



Figure 33: View of the Cambridge Building Heights Data Model looking southeast towards Jesus Green



Figure 34: View of the Cambridge Building Heights Data Model looking northwest along Hills Road



Figure 35: View of the Cambridge Building Heights Data Model looking south east along Huntingdon Road

- Applicant to prepare a formal list of key views based on advice in this guidance and identify on a base map. The list of key views will be checked and agreed with City Council.

- Applicant to prepare digital modelling (at a draft stage) to show possible impact on key views. This should take the form of a basic massing model in SketchUp (or similar) and set within a digital terrain model.
- Discussion with City Council of modelling results. Assessment of impact considered further, with the potential need for additional views (including detailed verifiable views) to be considered.

4.5.2. Depending on the results of the above stages, additional and more detailed accurate visual representations or verifiable photomontages and information may need to be produced and included as part of the planning application.

Digital visualisation techniques

4.5.3. The use of 3D digital modelling and visualisation by applicants for tall buildings is strongly encouraged at pre-application discussions with applicants. Cambridge City Council has produced a 3D computer model of the wider City area, which is used by planners and urban designers to aid the assessment of proposed developments. As part of the planning process, developers may produce 3D computer models of their scheme to illustrate the scale and massing of proposed development.

4.5.4. Where 3D computer models are made available to Cambridge City Council, these need to be produced in a format compatible with SketchUp or AutoCAD (.dwg or .dxf) format. Models need to be at the correct scale (1:1), location, elevation and orientation according to Ordnance Survey data, including a reference point of existing nearby buildings sufficient to allow the proposed building model to be geo-referenced into the wider City model.

4.5.5. The Cambridge Building Heights Data Model (Figures 33-35) has been

constructed to two levels of detail. The City Centre model is derived from LiDAR data and provides a height accuracy of +/-15cm, whilst remaining areas are completed to +/-100-150cm using RaDAR data. This data is not available for use by applicants. The City Council will, however, assess imported models which can be imported into its model to enable an assessment of the impact of proposals on the immediate site locality and the City as a whole. Developers need to indicate the level of accuracy used to construct their model and the method used for deriving surrounding building heights.

4.5.6. At the pre-application stage, 3D models need to show the basic form of the building with proposed roof forms and any stepped/staggered elevations, and overhangs or defining architectural elements.

4.5.7. Some tall building applications will require 'verifiable photomontages' as part of the submitted planning application documents. The number and location of these viewpoints will need to be determined during the pre-application process. The views will typically include a mix of wireframes and fully rendered images. While best practice in relation to the production of verifiable images is constantly changing and being refined, applicants need to follow recommendations within 'Guidelines for Landscape and Visual Impact Assessment' (Second Edition) published by the Landscape Institute and the Institute of Environmental Management and Assessment (Spon Press 2002) and their subsequent advice note "Photography and Photomontage in Landscape and Visual Impact Assessment" (01/11).

4.5.8. Verified images need to demonstrate a clear audit trail which allows the images to be verified by an independent third party. In circumstances where proposed tall buildings are adjacent to large areas of open space, winter views will be expected.

Appendices



Appendix A:

Background Documents

- “Cambridge Planning Proposals – A report to the Cambridgeshire County Council” by William Holford and H. Myles Wright (Cambridge University Press, 1950)
- “Dreaming Spires and Teeming Towers – The Character of Cambridge” by Thomas Sharp (Liverpool University Press, 1963)
- Cambridge Green Belt Study – A Vision of the Future for Cambridge and its Green Belt Setting (Landscape Design Associates) (2002)
- Cambridge Inner Green Belt Boundary Study – Cambridge City Council (2002)
- Cambridge Landscape Character Assessment, Cambridge City Council (2003)
- Cambridge Local Plan (1996), Cambridge City Council
- Cambridge Local Plan (2006), Cambridge City Council
- Guidance on Tall Buildings (CABE and English Heritage) (2007)
- Seeing the History in the View (English Heritage, 2011)
- The Setting of Heritage Assets (English Heritage, 2011)

Appendix B:

Background information to Chapter 3

Introduction

This section provides additional information in relation to Chapter 3 in respect to the City setting, topography, character, skyline characteristics, urban structure, key approaches and gateways, and key views to and within the City. This appendix does not provide a detailed character assessment or explain the historic evolution of the City; rather it is a type of “informative” to back up the key findings and information in Chapter 3.

Chapter 3 and this appendix has been informed by recent site appraisals and research undertaken by the City Council and also draws upon and makes reference to several existing studies including ‘Cambridge Historic Core Appraisal Conservation Area Appraisal’ (Cambridge City Council 2006), ‘Cambridge City Landscape Character Assessment (Cambridge City Council, 2003), the ‘Cambridge Green Belt Study’ (Landscape Design Associates, 2002), Cambridge City Council’s 2002 ‘Inner Green Belt Boundary Study’ and various Conservation Area Appraisals and ‘Suburbs and Approaches’ studies completed by the Council in recent years.

National Landscape Character

Cambridge sits at the boundary of three national character areas identified by the Countryside Agency in 2005:

- The ‘East Anglian Chalklands’ (NCA 87) to the southeast rise to 74m AOD at Gog Magog Hills from which there are extensive views of the City and surrounding countryside. The high ground and open countryside close to the City centre is a highly valued resource;
- The ‘Bedfordshire and Cambridgeshire Claylands’ (NCA 88) to the west comprise typically open, rolling countryside rising to a height of about 60m AOD close to the village of Madingley;
- The ‘Fenlands’ (NCA 46) to the northeast where the most obvious character is the low-lying, level terrain.

Heritage Assets

(see also Figure 3.4: Heritage Assets)

The surrounding ten Conservation Areas which have protected the setting of the historic core and are Conservation Areas in their own right are:

- Brooklands
- Chesterton
- Conduit Head Road
- De Freville
- Ferry Lane
- Newnham Croft
- Southacre
- Storey’s Way
- Trumpington
- West Cambridge

Movement corridors, approaches and gateways (see Figure 3.4: City Approaches)

In the LDA Cambridge Green Belt Study

of 2002, the following statement is made: “Approaches to and within the urban area provide the viewpoints from which most visitors see the City and gain their perception of its scale. Distance and travel time between open countryside and distinctive Cambridge, and the character of the approaches, play an important role in determining people’s perception of the character and scale of the City. The length of approaches therefore provides a fair representation of how people perceive the scale of Cambridge” (LDA, 2002).

Figure 3.5 (City Approaches) in this guidance illustrates the key approaches and gateways into Cambridge. When considering key views for the purposes of evaluating a tall building proposal, applicants should provide illustrated views from relevant approaches and gateways. Views along road approaches into the City tend to be linear vistas, constrained by physical features such as trees and buildings, although the river and rail approaches to the City are often more panoramic and extensive in character. Examples of approaches and gateways based on the LDA 2002 Green Belt study include the following:

Tree Lined approaches including:

- Hills Road;
- Hauxton Road/Trumpington Road;
- Barton Road;
- Madingley Road;
- Huntingdon Road; and
- Grantchester Road – this approach is particularly sensitive to change. There is a particularly strong connection between the Historic Core and its rural hinterland (LDA, 2002)

Suburban approaches:

- Histon Road
- Milton Road
- Cherry Hinton Road
- Commercial Approaches:
- Newmarket Road
- Mill Road

River Approaches

- Fen Rivers Way and Harcamlow Way
- Approach from Grantchester (Grantchester Meadows Footpath)

Railway Approaches from London, Ely and Ipswich

Public footpaths

Views from public rights of way, including long distance views such as Harcamlow Way, the Fenway and the Wimpole Way, may need to be assessed depending on the scale and location of the proposals. Views will be agreed as part of the pre-application process.

Reference should be made to the four existing ‘Suburbs and Approaches’ studies prepared by Cambridge City Council which provide information on the significance of buildings, views and settings in the following areas:

- Barton Road
- Huntingdon Road
- Madingley Road
- Newmarket Road

Similar studies have been prepared for Hills Road, Long Road and Trumpington Road and are currently under review.

Historic development of the skyline and additional information in relation to skyline characteristics

Up to the mid 19th Century, open panoramic views of the Cambridge skyline were afforded from vantage points within the City. 'Buck's Prospect of Cambridge from the North West, 1743' provides a fascinating, annotated lithograph of the City skyline, dominated by King's College Chapel with a scattered collection of college and ecclesiastical towers and spires set against a strong landscape backdrop, rising up to the Gog Magog Hills. By the late 19th century and early 20th century, the construction of substantial areas of new housing gradually blocked pre-existing panoramic views of the historic core.

As already noted in Chapter 3, in response to rising concern in relation to the emergence of tall building proposals, in the early 1960's Cambridge City Council commissioned Thomas Sharp of Liverpool University to assess the character of the City and address the issues relating to tall buildings. He expressed opposition to tall buildings in his report 'Dreaming Spires and Teeming Towers', recommending that no 'normal' building should exceed five storeys. However, Sharp noted: "it cannot be held that the Cambridge skyline is as fine or distinguished as might be expected from a place of this character. Nor is it anywhere to be seen to much advantage as a whole. Only from Madingley Hill, among public places, does one get a general panoramic view, and that somewhat too distant view to be fully effective. Inside the town only Castle Hill provides a wide close prospect."

Sharp observed that the skyline of the suburbs required diversification but not domination. This observation is still valid today. Large areas of the suburbs, notably the interwar and post WWII suburbs to the east of the railway line and the

southern sections of the City, lack any notable buildings and lack inter-visibility with the historic core. The majority of these suburban areas are characterised by two storey buildings with occasional three storey buildings. The notable lack of church towers and spires throughout these areas has contributed to this lack of diversity in character. However the notable exceptions are the incinerator chimney and hospital buildings of Addenbrooke's Hospital which create focal, though over-dominant and unsympathetic, additions to the skyline.

Since Sharp's report, the skyline of Cambridge has on the whole remained intact, however the cumulative and continuing development and expansion of Addenbrooke's Hospital has significantly altered views from the southern approaches to the city. Throughout the 1960s and 70s, a number of relatively tall buildings were constructed across Cambridge, many of them built by the University. Within months of Sharp's publication, the eight storey William Stone Building for Peterhouse was opened. The building is located adjacent to the Fitzwilliam Museum and is partly visible from Coe Fen, viewed through a strong belt of trees. The construction of the hangars at Cambridge Airport and the hospital buildings at Addenbrooke's arguably had the biggest effect on the broader, more distant views of the City, notably from the east, south and south-west.

Bulky structures within the historic core include six storey buildings on Malcolm Street/King Street and the New Museums Site of Cambridge University. The New Museums complex is comparatively well hidden amidst the tight street network, and its tower is visible within many sections of the historic core. The six storey University engineering block on Fen Causeway is more visible owing to its location next to a wider road and its proximity to Coe Fen.

Though the recently completed Grand Arcade rises up to six stories in height, its upper floors are well set back avoiding the structure becoming overly dominant within the local street scene. In contrast, the Varsity Hotel on Thompson's Lane is seven storeys in height with a roof terrace. The building presents a particularly prominent, rectangular silhouette (with horizontal emphasis) against the skyline of the historic core when viewed from Jesus Green. It sits seemingly at odds with the surrounding low level residential buildings.

Taller buildings outside of the City core include six storey apartment units recently constructed at Chesterton facing onto the northern edge of the River Cam alongside the Elizabeth Way Crossing and six storey apartment buildings on the southern edge of the Cam at Riverside Place. The bulky eight storey block at Hanover Court off Coronation Street is well screened, predominantly due to the presence of relatively tall buildings on Hills Road and the scale of the Chemistry Building on Lensfield Road.

Cromwell Road includes a cluster of taller, developments at Winstanley Court and Hampden Gardens, which rise to 5 stories in height. The area around the railway station includes a number of large footprint buildings such as Cambridge Leisure. Though this particular example is not especially tall, Cambridge Leisure has a large mass, lack of windows to the rear, and its relatively light coloured brickwork make it relatively visible from distant viewpoints to the south of the City, including from Little Trees Hill (the highest point on the Magog Down) from where it appears as a strong horizontal mass in this part of the City. Such developments highlight the importance of considering not just building height, but also the mass and continuity of roofscape of development proposals.

Landmark buildings (Figure 3.5)

Landmark buildings in the City are listed below. Note they are "landmarks" primarily owing to their height, as this measure is of particular relevance to this guidance. Height data is based on the Cambridge City Council Building Heights Model showing two levels of accuracy. Outer areas of the City in the model have a tolerance of +/-100 -150 mm (Radar) whilst Lidar data used within central areas has a tolerance of +/- 15cm.

(i) Medieval to Early Modern

- King's College Chapel - four turrets (44.5m)
- St Mary the Great - square tower with prominent corner turrets (33m)
- Trinity College Hall – glazed lantern (24m)
- St Andrew's Church, Chesterton – spire (32m)
- Holy Trinity Church - spire (34m)

(ii) 19th Century

- St Andrews the Great, St Andrews Street
- St John's College New Court Gate House – tower (45m)
- St John's Chapel – square tower with corner pinnacles (45m)
- Church of Our Lady and the English Martyrs (the Catholic Church) – spire and crossing tower (65m);
- All Saint's Church, Jesus Lane – spire (53m)
- St Luke's Church, Victoria Road – spire (42.5m)
- The Pitt Building – square tower

- Cambridge Museum of Technology – chimney
- Foster’s Mill at the railway station – five storeys with full attic floor and a raised central tower (31.5m)
- Emmanuel United Reformed Church – square tower with short spire (35m)
- Gonville and Caius College – chateaux-like spires and prominent chimneys (maximum height of 24m)
- Maltings building at Ditton Walk
- Fitzwilliam Museum – glazed lanterns and domes (32m)
- Westminster College Tower
- Christ Church, Christchurch Street (21m)
- shaped building (30m)
- Varsity Hotel – seven storeys plus roof terrace
- The Schlumberger building – guyed white tents (20.3m)
- Carter Cycle bridge – prominent white pylon
- William Stone Building for Peterhouse – eight storey tower (31m)
- Chemistry Building, Cambridge University, Lensfield Road – prominent green copper flues (43m)
- Arup Building, Department of Materials Science and Metallurgy - Corn Exchange Street – Twelve-storey tower (33.3m)
- Napp Pharmaceutical Building, Cambridge Science Park (11m)
- Trinity College, the Whiwell’s Court ‘Ziggurat’ – horn like metal and glass stairheads flanking a lead tank and vents
- Moller Centre (Churchill College)

(iii) 1900-1945

- Cambridge University, Engineering Department Chimney
- De Vere University Arms Hotel - four corner towers on a bulky four storey building (23.5m)
- University Library – tower (48m)
- St George’s Church, Chesterton Road – tower

(iv) Post-War

- Aircraft hangars at Cambridge Airport (30m)
- Addenbrooke’s Hospital – a growing cluster of large buildings and a double headed incinerator chimney (72m)
- The Belvedere – generally four stories with a fifth storey set back and a ten storey tower
- Botanic House – seven storey lens-

Appendix c:

Image Credits

Figure 1: View of Cambridge Skyline at sunset (www.samsays.com)

Figure 28: Locations of Tall Buildings (By Design, Urban Design in the Planning System - Towards better practice 2000)

Figure 32: Proposals for Parkhaven, Rotterdam, showing the building form designed to minimise surrounding turbulence (Tall Buildings : A strategic Design Guide, Zonia Strelitz, 2005)

All other figures are produced by Cambridge City Council.

Glossary

Above Ordnance Datum (AOD)

Benchmark used to record the height above sea level (mean sea level) calculated from observations taken at Newlyn, Cornwall, and used as the official basis for height calculation on British maps.

Active frontages/Active uses

An active frontage/use is one which allows some kind of movement or visual relationship between the person outside and the activity inside. At a minimal level, this interaction might be one of simple observation such as a window display or people working. At a higher level of interaction, the pedestrian could be encouraged to enter the unit to buy something or participate in an activity. The most interactive frontages are usually those of cafés, bars or shops, which spill out onto the street.

Accurate Visual Representations

A form of computer visualisation that can assist in the assessment of the visual effects of specific proposals on designated views. An Accurate Visual Representation or Verified View is a tool used in the planning process that helps to inform the effect of a proposal by providing three dimensional visualisations of it. These images can be very realistic and should be accurate with respect to height, form, size and location

Biodiversity

Encompasses all aspects of biological diversity, especially including species richness, ecosystem complexity and genetic variation.

Building element

A feature (such as a door or window) that contributes to the overall design of a building.

Building line

The line formed by the frontages of buildings along a street.

Built form

Buildings and their structures

Bulk

The combined effect of the arrangement, volume and shape of a building or group of buildings. Also called massing.

Buildings of Local Interest

Buildings of Local Interest are not subject to statutory protection, but are recognised as being of importance to the locality or the City's historical and architectural development.

Cambridge Local Plan 2006

The Cambridge Local Plan 2006 sets out policies and proposals for future development and land use to 2016; the Plan will be a material consideration when determining planning applications.

City Centre

Historic Core and Fitzroy/Burleigh Street shopping areas in Cambridge. These areas provide a range of facilities and services, which fulfil a function as a focus for both the community and for public transport. See also Cambridge Proposals Map (February 2008).

Computer Generated imagery (CGI)

Computer-generated imagery is the application of the field of computer graphics or, more specifically, 3D computer graphics that can be used to see the possible relationship a building will have in relation to the environment and its surrounding buildings. CGIs allow an architect to visualize a space and perform "walk throughs" in an interactive manner, thus providing "interactive environments" both at the urban and building levels. Specific applications in architecture not only include the specification of building structures such as walls and windows, and walk-throughs, but the effects of light and how sunlight will affect a specific design at different times of the day.

Conservation Areas

Areas identified, which have special architectural or historic interest, worthy of protection and

enhancement.

Context

The setting of a site or area, including factors such as traffic, activities and land uses as well as landscape and built form and character.

Enclosure

The use of buildings to create a sense of defined space.

Fine grain

The quality of an area's layout of building blocks and plots having small and frequent subdivisions.

Form

The layout (structure and urban grain), density, scale (height and massing) and appearance (materials and details).

Floor Plate

The gross floor area of a single storey of a building.

Geology

The scientific study of the origin, history, and structure of the earth; the structure of a specific region of the earth's crust.

Gogs

Gog Magog Hills located south east of Cambridge.

Green Belt

A statutory designation made for the purpose of: checking the unrestricted sprawl of large built up areas, preventing neighbouring towns from merging into each other, assisting the safeguarding the countryside from encroachment, preserving the setting and special character of historic towns and assisting in urban regeneration by encouraging the recycling of derelict and other urban land.

Green roof

Roof covered in low and light weight vegetation and under low maintenance regime.

Green Spaces

Open spaces covered with grass and other vegetation. Includes commons, allotments, playing fields, cemeteries, churchyards, large gardens, parks, public open land and agricultural land.

Heritage Asset

A building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. Heritage assets are the valued components of the historic environment. They include designated heritage assets.

Historic Core

The historic core of Cambridge is part of the large Central Conservation Area, which is one of ten conservation areas in Cambridge. In 1995, the City Council decided that it was unworkable to produce any meaningful proposals to cover such a wide and diverse area and set about dividing this conservation area into sectors. Details of the Historic Core can be found within the document 'understanding the City' of the Historic Core Appraisal at <http://www.cambridge.gov.uk/ccm/content/planning-and-building-control/historic-environment-and-trees/historic-core-appraisal.en>

Historic Parks and Gardens

The English Heritage 'Register of Parks and Gardens of Special Historic Interest' includes designed landscapes of all ages. As with other designations, a sliding scale of significance is employed with Grade 1 being sites of exceptional interest. Grade II* are of great historic interest and Grade II are of special historic interest. Grading is independent to that of any listed buildings located within the park. See the register of Historic Parks and Gardens.

Landmark

A building or structure that stands out from its background by virtue of height, size or some other aspect of design. Landmark buildings, in townscape terms effectively act as a pointer to guide people around a City and makes a significant contribution to local distinctiveness.

Legibility

The degree to which a place can be easily understood by its users and the clarity of the image it presents to the wider world.

Listed Building

A building or structure of special architectural or historic interest and included in a list, approved by the Secretary of State. The owner must get Listed Building Consent to carry out alterations that would affect its character or its setting.

Local Plan

Abbreviation used to describe the statutory plan adopted by the City Council. It is a material consideration in determining planning applications, which should be in accordance with them as part of the Development Plan.

Major Development

Defined as:

Residential development: the erection of 10 or more dwellings or, if this is not known, where the site is 0.5 hectares or more; or

Other development: where the floor area to be created is 1,000m² or more, or the site area is 1 hectare or more.

Massing

The combined effect of the arrangement, volume and shape of a building or group of elements. This is also called bulk.

Microclimate

A microclimate is a local atmospheric zone where the climate differs from the surrounding area. The term may refer to areas as small as a few square feet (for example a garden bed) or as large as many square miles. Microclimates exist, for example, near bodies of water which may cool the local atmosphere, or in heavily urban areas where brick, concrete, and asphalt absorb the sun's energy, heat up, and reradiate that heat to the ambient air: the resulting urban heat island is a kind of microclimate.

Mitigation

The purpose of mitigation is to avoid, reduce

and where possible remedy or offset any significant negative (adverse) effects on the environment etc arising from the proposed development.

Mixed use development

Development comprising two or more uses as part of the same scheme. This could apply at a variety of scales from individual buildings, to a street, to a new neighbourhood or urban extension. 'Horizontal' mixed uses are side by side, usually in different buildings. Vertical mixed uses are on different floors of the same building.

Movement

People and vehicles going to and passing through buildings, places and spaces.

Nodes

A place where activity and routes are concentrated: a point of interchange in a transport network.

Open Space

Specifically within Cambridge, the definition of open space is mainly green space, whether designed landscape, natural or semi-natural green space. The majority of the open space will be planted landscape as opposed to hard paved (see definition of public realm), and may be private or publicly owned.

Open Space Standards

The amount of open space required in all developments either on site or through commuted payments.

Parking Standards

Document setting out maximum permissible levels of car parking for various use-classes, along with minimum levels of cycle parking.

Panorama

A view from a specific viewpoint looking across a wide area at numerous buildings or structures within the setting of the proposed building or structure. Castle Mound is a good example of a panoramic view within the City.

Permeability

Permeability describes the degree to which urban forms, buildings, places and spaces permit or restrict the movement of people or vehicles in different directions. Permeability is generally considered a positive attribute of urban design, as it permits ease of movement by different transport methods and avoids severing neighbourhoods. Areas which lack permeability, e.g. those severed by arterial roads or the layout of streets in cul-de-sac form, are considered to discourage effective movement on foot and encourage longer journeys by car.

Perimeter Block

Development blocks defined by a grid of streets, with a clear distinction between public fronts and private backs. Blocks can vary in size. They can accommodate a range of building types and densities. In City centre locations or Victorian suburbs, buildings tend to form a continuous edge to the block and are generally of a higher density than blocks found in the outer suburbs where blocks often comprise of detached or semi-detached buildings.

Photomontages

The process and result of making a composite photograph by cutting and joining a number of other photographs. A photomontage can illustrate the relationship a building will have in relation to the environment and its surrounding buildings.

Planning Policy Guidance Note (PPG)

The guidance was issued on a range of planning issues by the (former) Department of the Environment; Department of the Environment, Transport and the Regions; Department of Transport, Local Government and the Regions; the Office of the Deputy Prime Minister and the Department for Communities and Local Government.

Planning Policy Statement (PPS)

The new versions of PPGs issued by the Office of the Deputy Prime Minister and its successor, the Department for Communities and Local Government.

Public Art

Publicly sited works of art, which make an important contribution to the character and visual quality of the area and are accessible to the public. Details as per adopted Public Art SPD and any successor document.

Public Realm

The parts of a village, town or City (whether publicly or privately owned) that are available, without charge for everyone to use or see, including streets, squares and parks.

Renewable Energy

Renewable energy covers those energy flows that occur naturally and repeatedly in the environment – from the wind, the fall of water, the movement of the oceans, from the sun and from biomass.

Setting

‘The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.’

Skyline

Generally a city skyline comprises a grouping of buildings, structures and landform viewed against the horizon viewed from long (or possibly medium) distance views. However the level nature of Cambridge and its surroundings restricts the number of long and medium distance views of the city skyline.

Storey Heights

Where commercial floor uses are proposed, the floor to ceiling height will typically be around 3.7m (4m floor to floor height). Upper residential floors are assumed to have a 2.7m floor to ceiling height (3m floor to floor height). Floor to floor heights assume a 300-400mm depth of construction for floors. Consequently a six storey building would correspond to a 19m building height in the historic core and a four storey building in the suburbs would be 13m.

Suburb

All areas within the City boundaries which outside of the Historic Core and include residential, commercial and mixed used areas.

Supplementary Planning Guidance (SPG) / Supplementary Planning Document (SPD)

SPDs add detail to policies laid out in development plan documents, or a saved policy in an existing development plan. These may take the form of design guides, area development briefs, a master plan or issue-based documents. These documents can use illustrations, text and practical examples to expand on how the authority's policies can be taken forward.

Local authorities must involve the community in the preparation of SPDs. They are also subject to a Sustainability Appraisal to ensure economic, environmental and social effects of the plan are in line with sustainable development targets.

The SPD may be taken into account as a material consideration in making planning decisions such as determining planning applications.

Sustainable Development

Sustainable Development is a very broad term that encompasses many different aspects and issues from the global to local levels. Overall sustainable development can be described as 'Development, which meets the needs of the present without compromising the ability for the future generations to meet their own needs' (after the 1987 Report of the World Commission on Environment and Development – the Brundtland Commission).

Sustainable Drainage Strategy (SuDS)

Development normally reduces the amount of water that can infiltrate into the ground and increases surface water run-off due to the amount of hard surfacing used. Sustainable drainage systems control surface water run off by mimicking natural drainage process through the use of surface water storage areas, flow limiting devices and the use of infiltration areas or soakaways etc.

Topography

A description or representation of artificial or natural features on or of the ground.

Transport Assessment (TA)

The Assessment [or Consideration] of the potential transport impacts of a proposed development, with an agreed plan to reduce or mitigate any adverse consequences and where appropriate establish how more sustainable modes of travel can be increased.

Travel Plan

Package of measures tailored to a particular site, aimed at promoting more sustainable travel choices (such as walking, cycling, public transport) and reducing car use. It may include initiatives such as car sharing schemes, provision of cycle facilities, improved bus services, and restricting or charging for car parking.

Urban Grain

The pattern of the arrangement and size of buildings and their plots in a settlement; and the degree to which an area's pattern of street blocks and street junctions is respectively small and frequent, or large and infrequent.

Urban Heat Islands

An area of warmer temperatures associated with urban development. The effect is caused by the urban fabric retaining and storing heat; by industry, heating, air conditioning and transport; by pollution reducing the radiation of heat; and by drainage reducing the amount of cooling by the evaporation of surface water.

Use Class

The Town and Country Planning (Use Classes) Order 1987 (as amended) established Use Classes, which is a system for classifying uses of land.

Vista

A view from a specific viewpoint looking towards a proposed building or structure.

View corridor

Numerous views from a variety of viewpoints looking at a proposed building or structure set

amongst other buildings or structures. Typical view corridors include the approach roads into the City, railway and open space areas.

Visual Amenity

The value of a particular area or view in terms of what is seen.

Visualisation

Computer simulation, photomontage or other technique used to illustrate the appearance of a development.

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