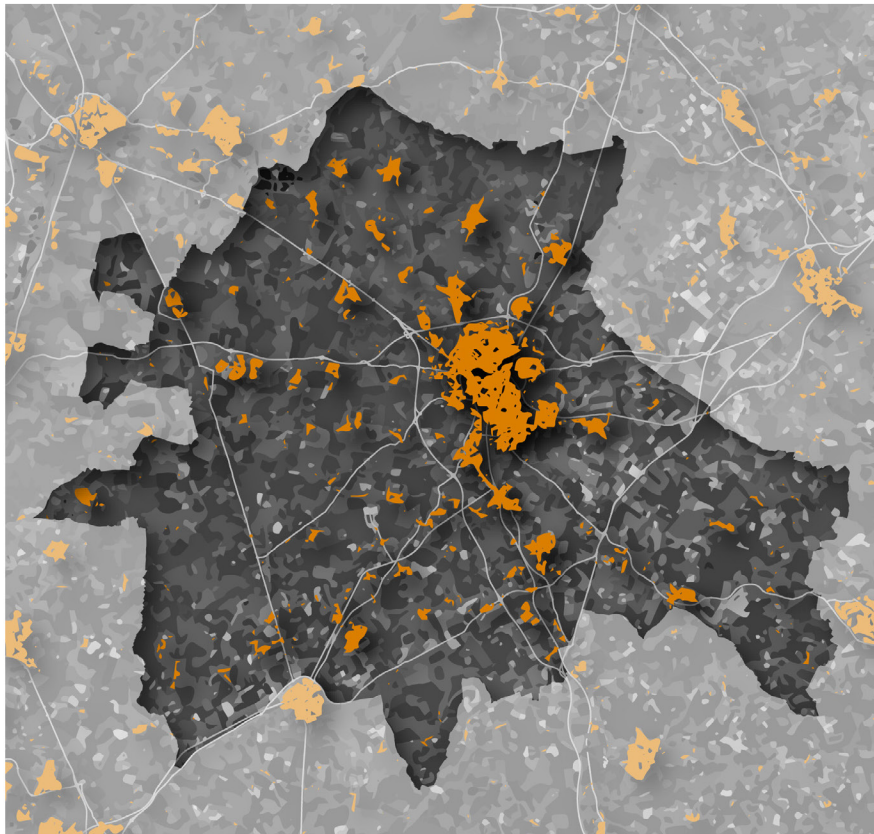


Greater Cambridge Shared Partnership
Greater Cambridge
Landscape Character Assessment



Greater Cambridge Shared Partnership
Greater Cambridge
Landscape Character Assessment

Approved

A handwritten signature in black ink that reads 'D. Watkins'.

Dominic Watkins

Position

Director

Date

11th February 2021

Revision

FINAL V2

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1.0 INTRODUCTION

1.1 Overview of Greater Cambridge

- 1.1.1 Greater Cambridge comprises the local authority areas of South Cambridgeshire District (90,163 ha) and Cambridge City (4,070 ha) located within Cambridgeshire in the East of England (see **Figure 1.1**).
- 1.1.2 Covering 94,233 ha, Greater Cambridge includes the City of Cambridge and the surrounding rural landscapes and villages of South Cambridgeshire. The total population of Greater Cambridge is around 283,884¹ with over half living in rural villages within South Cambridgeshire.
- 1.1.3 The Greater Cambridge landscape is varied with intimate river valleys contrasting with open fens, wooded claylands and ridges, and rolling chalk hills. Built around the banks of the River Cam, Cambridge is a distinctive and iconic historic University city.

1.2 The Greater Cambridge Landscape Character Assessment

- 1.2.1 On behalf of South Cambridgeshire District Council and Cambridge City Council ('the Councils'), in May 2020 the Greater Cambridge Shared Planning Service commissioned CBA to prepare an up-to-date and consistent Landscape Character Assessment of the whole Greater Cambridge area.

Study Areas

- 1.2.2 The Landscape Character Assessment has been undertaken at three scales:
- A detailed study of the landscapes within the "Greater Cambridge Study Area" defined on **Figure 1.1** (outside of the Cambridge Urban Area).
 - A high-level study of the rural villages within the South Cambridgeshire District part of the Greater Cambridge Study Area.
 - A high-level study of the landscapes and open spaces within the "Cambridge Environs Study Area" defined on **Figure 1.1** that contribute to the setting of Cambridge.

¹ Population Reports, Cambridgeshire Insight, 2019

Approach

- 1.2.3 The study has been undertaken in accordance with the principles of Natural England's latest guidance set out in 'An Approach to Landscape Character Assessment' (2014). Details of the methodology used to undertake the Greater Cambridge Landscape Character Assessment can be found in **Appendix 1**.
- 1.2.4 The Landscape Character Assessment identifies and records the patterns, features and elements of the various generic types of landscape and areas of distinctive character in Greater Cambridge that contribute to making one landscape different from another. It is these factors that contribute to defining local distinctiveness and sense of place.
- 1.2.5 The Landscape Character Assessment also identifies the forces for change in the landscape that are eroding or enhancing local distinctiveness and offers guidance on ways by which landscape change might best be managed to reinforce and enhance landscape character.
- 1.2.6 The Landscape Character Assessment can be used to inform monitoring of landscape change to enable the Councils to assess the practical effectiveness of existing policy, initiatives and management, and help modify these in the light of actual trends.

1.3 Uses

- 1.3.1 The Landscape Character Assessment will be used by the Councils to:
- Develop an appropriate spatial strategy in the new Greater Cambridge Local Plan
 - Develop suitable Local Plan policies to protect and enhance the area's sensitive, valued and vulnerable landscapes
 - Develop design, place-making, sustainable development and climate change policies in the Local Plan
 - Inform decision-making on planning applications
- 1.3.2 The range of potential uses and applications of the Landscape Character Assessment for spatial planning and development management also include:
- Contributing to Landscape Sensitivity/Capacity Assessments to help assess the type/scale of development that might be able to be accommodated without compromising landscape character
 - Providing an input to Sustainability Appraisals of development plans and policies
 - Providing a framework and context for the production of more detailed local landscape character assessments to support Neighbourhood Plans and Village Design Statements

- Assisting studies of development potential, for example identifying sites for new development
- Informing the siting, scale and design of development proposals, including major infrastructure projects
- Informing Landscape and Visual Impact Assessments to demonstrate the likely effects of a proposed development on the landscape
- The Landscape Character Assessment will also identify potential landscape restoration, enhancement and management opportunities to inform and support delivery of strategies and proposals outside of the planning system such as:
 - Providing a basis for the preparation of green infrastructure, biodiversity and trees/woodland strategies
 - Helping guide landscape change in positive and sustainable ways, for example programmes of woodland expansion, opportunities for large-scale tree planting for agri-forestry and carbon storage schemes and identifying new uses for degraded land
 - Informing the targeting of resources for land management and agri-environment schemes and evaluating the effectiveness of funding

1.3.3 The Landscape Character Assessment offers a common framework and source of baseline information about the Greater Cambridge landscapes within the Study Area. This framework provides a basis for adopting an integrated, positive approach to managing landscape change by all those involved with, or that have an interest in, the planning, design and management of the Greater Cambridge landscape, such as:

- Local authorities (South Cambridgeshire District Council, Cambridge City Council and Cambridgeshire County Council)
- Government agencies (e.g. Natural England, Historic England, Environment Agency, Highways England and National Rail)
- Developers, land owners and land managers
- Parish councils, community/local interest groups and voluntary organisations
- Educational establishments and research organisations

1.4 Structure of the Landscape Character Assessment

- **Chapter 2: Landscape Character Context** – this chapter outlines the national, regional, and county landscape character context for the study.
- **Chapter 3: Evolution of the Greater Cambridge Landscape** – this chapter describes the main physical influences and human/cultural influences that have shaped the evolution and character of the Greater Cambridge landscape, highlights perceptions of the Greater Cambridge landscape and considers the state of the landscape today.
- **Chapter 4: Character of the Greater Cambridge Landscape** – following an overview of the Greater Cambridge landscape classification, this chapter sets out detailed descriptions of the Landscape Character Types and component Landscape Character Areas with recommended guidelines for managing landscape change.
- **Chapter 5: Character of South Cambridgeshire’s Rural Villages** – this chapter provides a high-level study of the existing character of the rural villages within South Cambridgeshire, and includes signposts to sources of more detailed character assessment information and guidance.
- **Chapter 6: Character of the Cambridge Environs** – this chapter provides a high-level study of the landscapes and open spaces that contribute to the setting of Cambridge, and includes signposts to sources of more detailed character assessment information and guidance.

1.4.1 A glossary of terms can be found in **Appendix 6**.

2.0 LANDSCAPE CHARACTER CONTEXT

This chapter outlines the national, regional, and county landscape character context for the study.

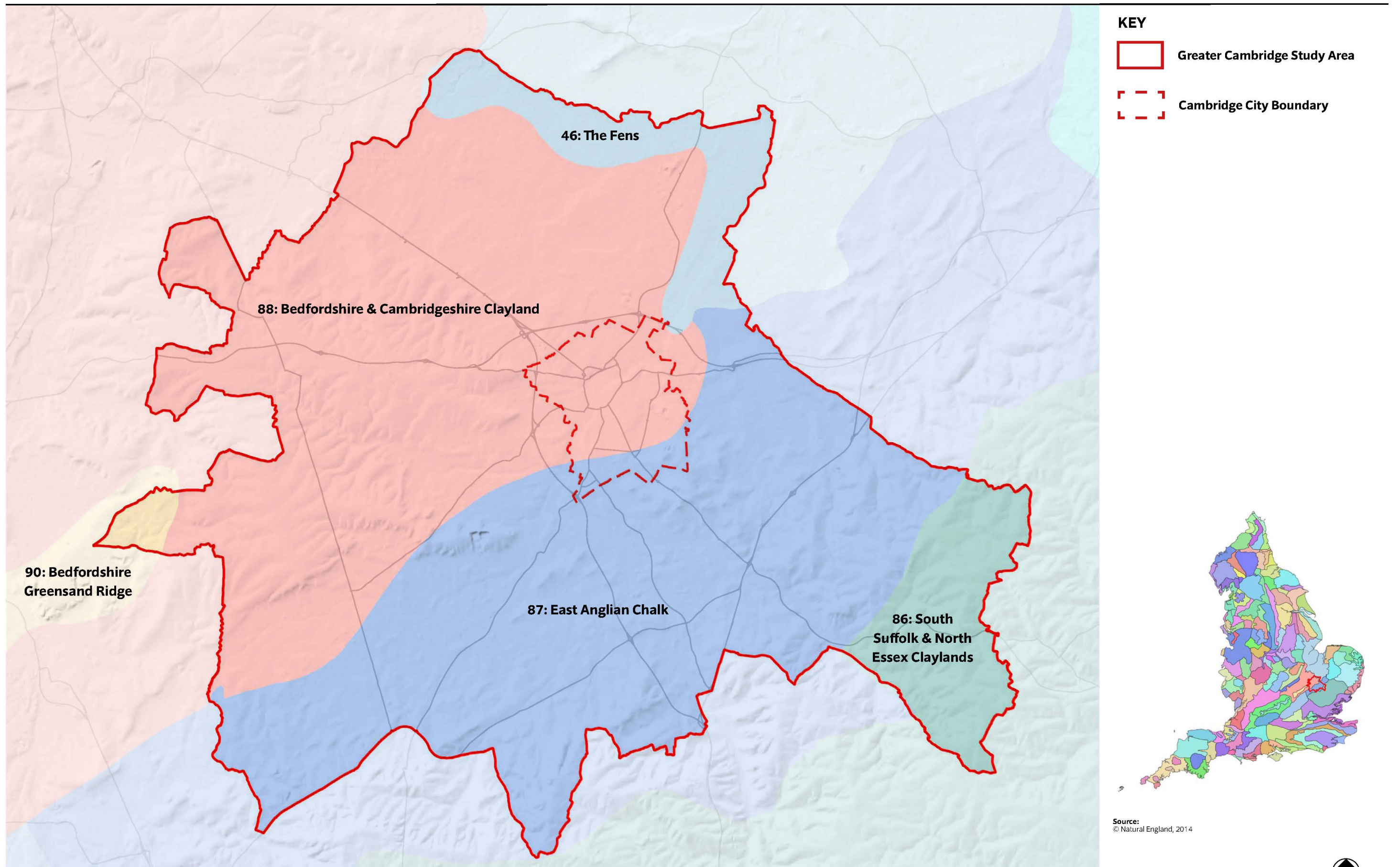
2.1 National Landscape Context

2.1.1 The Greater Cambridge Landscape Character Assessment has been prepared within the framework of the Character of England Map, which identifies broad-brush National Character Areas defined at a scale of 1:250,000. The landscape of Greater Cambridge is represented at the national level by five National Character Areas as shown on **Figure 2.1**. The Greater Cambridge landscape classification broadly nests within this framework.

2.1.2 The National Character Areas within the Greater Cambridge Study Area are:

- **88 - Bedfordshire & Cambridgeshire Claylands**: covering much of the north and west of Greater Cambridge, this is a broad, gently undulating, lowland plateau dissected by shallow river valleys.
- **90 - Bedfordshire Greensand Ridge**: covering a small area in the very west of Greater Cambridge, this is a distinctive, narrow ridge formed by the underlying sandstone geology, characterised by a variety of historic landscapes including farmland, parkland and historic architecture.
- **87 - East Anglian Chalk**: covering much of the south and east of Greater Cambridge, this is a simple and uninterrupted landscape of smooth, rolling chalkland hills and large regular fields enclosed by low hawthorn hedges, with few trees and expansive views to the north.
- **46 - The Fens**: extending into the northern edge of Greater Cambridge, this is a distinctive, historic and human-influenced wetland landscape particularly notable for its large-scale, flat, open landscape within extensive vistas to level horizons.
- **86 - South Suffolk & North Essex Clayland**: covering the south-east of Greater Cambridge, this is an ancient landscape of wooded, arable countryside with a distinct sense of enclosure, set within a gently undulating plateau with small-scale river valleys.

2.1.3 Profiles for the National Character Areas published by Natural England have been used to inform the Greater Cambridge Landscape Character Assessment where appropriate.



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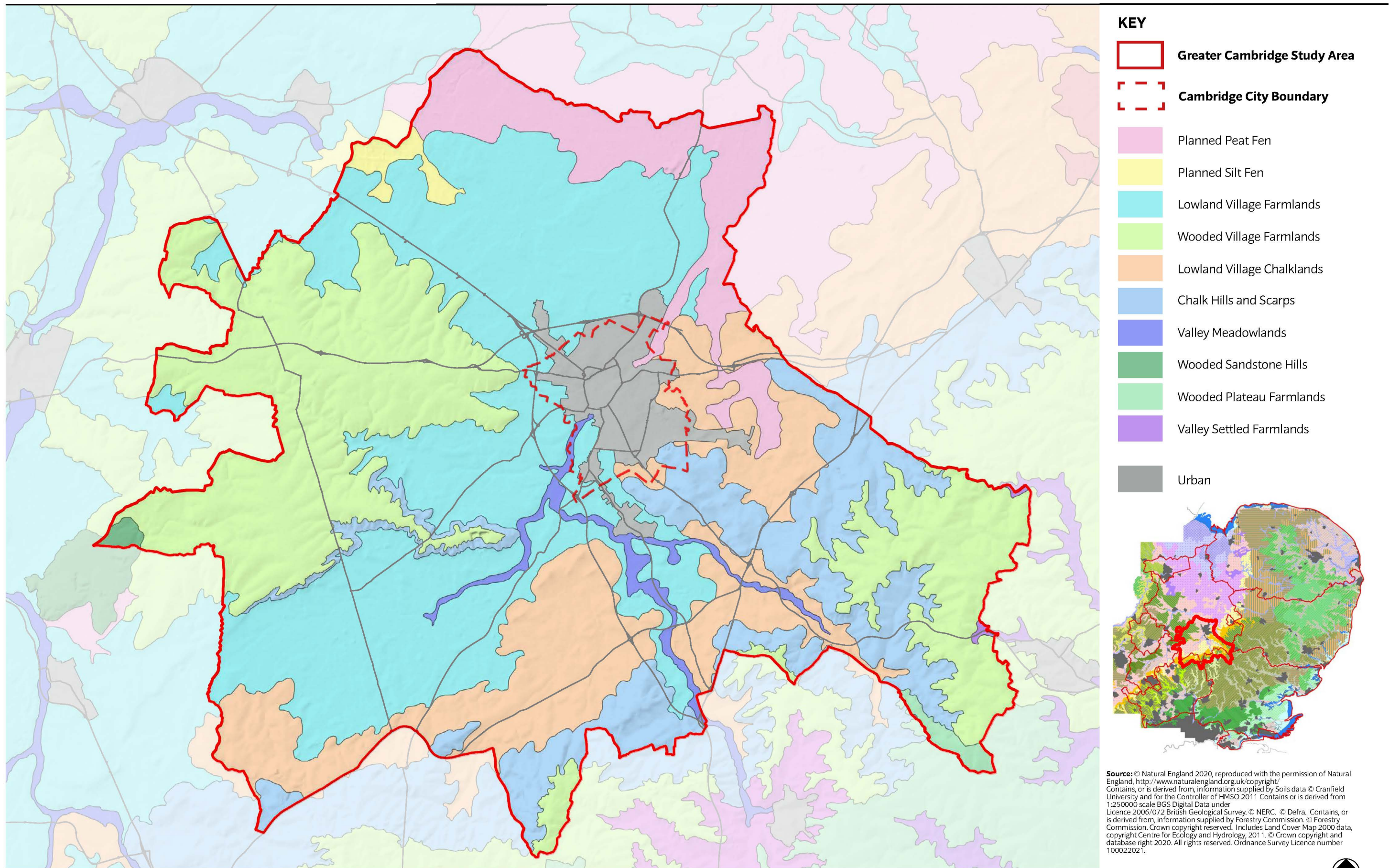
2.2 Regional Landscape Context

2.2.1 The **East of England Landscape Character Typology** identifies Regional Landscape Character Types defined by Natural England. The landscape of Greater Cambridge is represented at the regional level by ten Regional Landscape Character Types as shown on **Figure 2.2**. The Greater Cambridge landscape classification broadly nests within this framework.

2.2.2 The main Regional Landscape Character Types within the Study Area are:

- **Planned Peat Fen:** a flat, low lying and sparsely populated landscape in the north of Greater Cambridge. It is characterised by dark peaty soils, a grid like pattern of large arable fields bounded by drainage ditches and wide views to distant, often dramatic skies.
- **Planned Silt Fen:** an engineered, large-scale open landscape that extends north of Greater Cambridge. It is a distinctively flat and uncomplicated landscape, comprising large, regular arable fields in which vertical features appear prominent.
- **Lowland Village Farmlands:** a well settled, low lying landscape that covers a large part of Greater Cambridge; extending from the north, around the west of Cambridge and through the south of the Study Area. The high density of settlement, intensive agriculture and major transport infrastructure contribute to an often busy, rural landscape.
- **Wooded Village Farmlands:** a gently rolling, elevated landscape with ancient woodland blocks and small, nuclear villages that covers a large part of the west of the Study Area and occurs again in the southeast. It is often an open landscape with long distance views, although woodland contains views particularly around settlements.
- **Lowland Village Chalklands:** a low lying, but gently rolling arable landscape through the south and east of Greater Cambridge. It is dissected by small streams and has a distinctive pattern of nucleated villages and patchwork of woodlands and shelterbelts.
- **Chalk Hills and Scarps:** prominent chalk hills found in the south of the Study Area and also a narrow band around the south of the Wooded Village Farmlands. The chalk hills form distinct edges in places, elsewhere incised by dry valleys to create a rounded rolling landform that is often well wooded with long distance views. It is a large scale landscape with an ordered pattern of fields and woodlands.
- **Valley Meadowlands:** flat, low lying valley floors that extend through the landscape south of Cambridge. The Valley Meadowlands support pastoral land use, associated with notable watercourses/rivers. They are generally unsettled, with occasional areas of carr woodland and gravel extraction lakes or ancient meres.

2.2.3 A small part of the **Wooded Sandstone Hills** extends into the west of the Study Area. In addition, small parts of the **Wooded Plateau Farmlands** and **Valley Settled Farmlands** extend into the south-east of the Study Area



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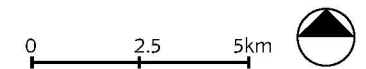


FIGURE 2.2
 REGIONAL LANDSCAPE
 CHARACTER TYPOLOGY

2.3 County Landscape Context

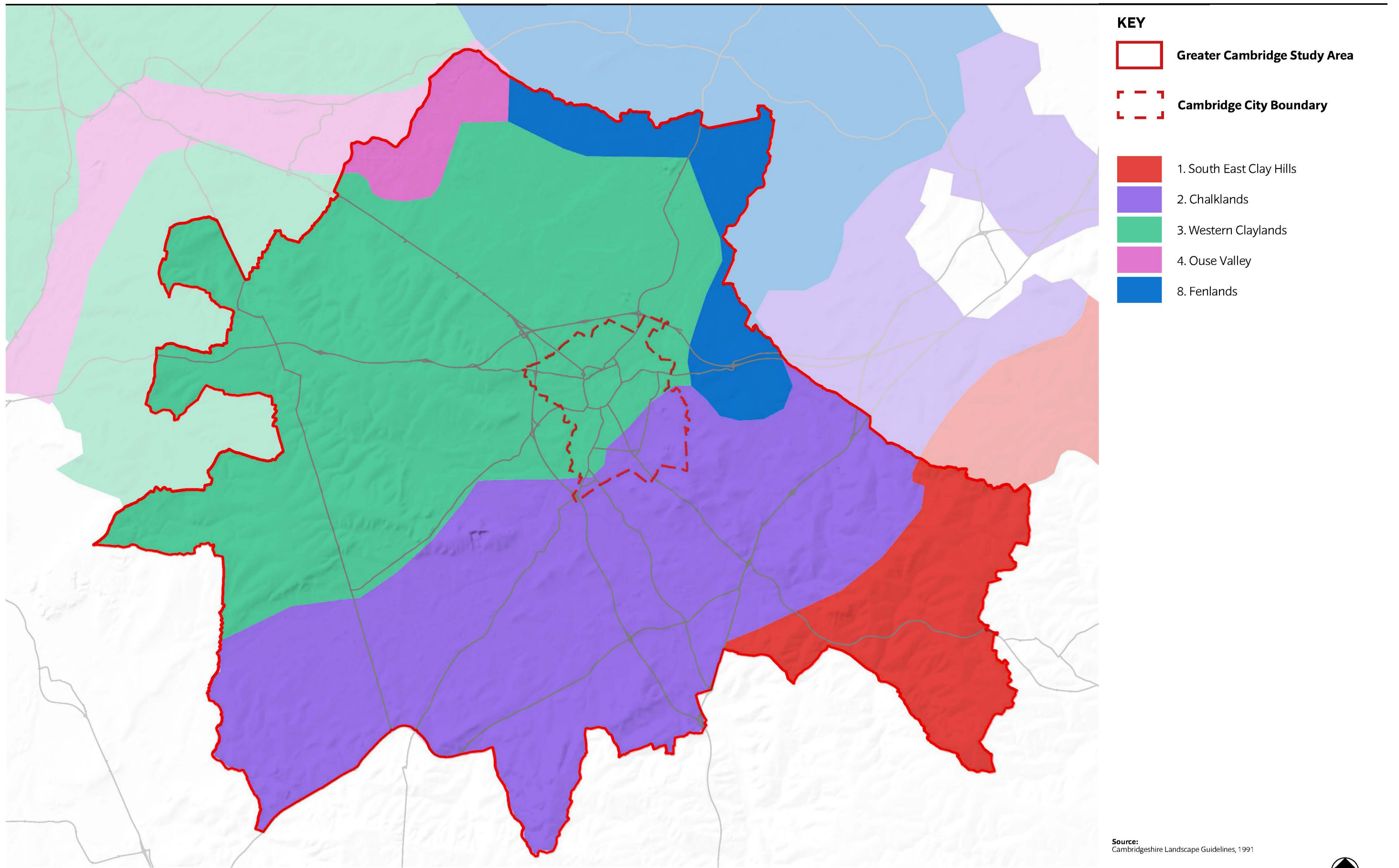
2.3.1 The Greater Cambridge assessment has also been prepared within the framework of the 1991 Cambridgeshire Landscape Guidelines, which identifies nine broad Landscape Character Areas within the County as a whole defined by Cambridgeshire County Council. The landscape of Greater Cambridge is represented at the county level by five Landscape Character Areas as shown on **Figure 2.3**. The Greater Cambridge landscape classification broadly nests within this framework. The County Landscape Character Areas are:

- **1 - South-East Clay Hills:** an undulating area, quite high for Cambridgeshire, with small villages generally in more sheltered locations, often along the springline in shallow valleys. It is a wooded landscape within which moated sites are a common feature. The large fields are united by the gently rolling landform and woodlands.
- **2 - Chalklands:** an area where the complex history of settlement and the impact of people on the landscape over the centuries is particularly apparent. This is a largely arable and broad scale landscape of large fields with low, trimmed hedge boundaries and limited tree cover.
- **3 - Western Claylands:** a gently undulating landscape subdivided by the shallow Ouse Valley that consists of large-scale arable farmland with open fields, sparse trimmed hedgerows and watercourses often cleared of bankside vegetation.
- **4 - Ouse Valley:** the shallow valley of the River Great Ouse bisects the Claylands on the western edge of Cambridgeshire. The margins of the river consist of a mosaic of floodplains and grazing meadows, working and disused gravel pits and lakes, sprawling housing areas and industrial estates.
- **8 - Fenlands:** a complex landscape of contrasts and variety. It is a large, open landscape with a haphazard pattern of settlement and tree cover superimposed on the regimented and highly organised drainage patterns.

2.3.2 The Landscape Character Area descriptions from the Cambridgeshire Landscape Guidelines published by Cambridgeshire County Council in 1991 have been used to inform the Greater Cambridge Landscape Character Assessment where appropriate.

2.4 Local landscape Context

2.4.1 The local landscape context for Greater Cambridge is provided by the relationship to neighbouring Landscape Character Assessments detailed in Appendix 2.



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2.5 Landscape Policy Context

What is Landscape?

- 2.5.1 As promoted by Natural England's guidance, 'An Approach to Landscape Character Assessment', the European Landscape Convention's definition of "landscape" is:

'...an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.' (European Landscape Convention, Council of Europe 2000)

- 2.5.2 The landscape provides the ever-changing backdrop to people's daily lives in Greater Cambridge, and is more than just 'the view' – it is about the relationship between people, place and nature. Landscape results from the way that different components of the natural and cultural environment interact and are experienced and perceived by people. As people value landscape for many different reasons, understanding what the landscape is like today, how it evolved and how it is likely to change in the future is important.

Managing Landscape Change

- 2.5.3 Landscapes are dynamic and continually evolve and maintaining a past landscape may not always be realistic. Landscapes are not fixed and are subject to continual and inevitable forces of change which apply pressures and have different influences upon landscapes, so that they change in response to both human activities and changing natural processes. In line with the approach advocated by Natural England, the aim of the Landscape Character Assessment is not to preserve all landscapes created from past processes, but to ensure that valued and key characteristics which create a sense of place are maintained and enhanced for the future whilst accommodating necessary changes arising from social, economic and environmental needs.
- 2.5.4 It is recognised that there are many possible opportunities and challenges for Greater Cambridge's landscapes. For example, in those areas that have features which are designated for their nature and/or heritage conservation value (such as SSSIs, registered historic parks or conservation areas), there should continue to be a strong emphasis on landscape protection where the priority is to promote actions that conserve and enhance these features as special qualities of the landscape.
- 2.5.5 However, many everyday landscapes will also require a mixture of landscape protection (involving appropriate criteria-based policies in the Local Plan affording protection for the key landscape features identified as being of particular local value), landscape management (involving actions that ensure sustainable development and ongoing upkeep of a landscape, guiding changes arising from meeting social, economic and environmental needs) and landscape planning (involving strong forward-looking actions to enhance, restore or create landscapes).
- 2.5.6 For example, in some areas it may be appropriate for some landscapes to be allowed to evolve in a sustainable manner and opportunities taken to introduce new elements in the landscape.

- 2.5.7 In addition to consideration of valued experiential characteristics of Greater Cambridge's landscapes such as tranquillity, dark skies and cultural associations, the role of managing landscapes to provide ecosystem services that can help support quality of life and the economy is increasingly emphasised by national policy and emerging new legislation. For example, proposals for making changes to particular landscapes in order to enhance them and ensure they are resilient to climate change may be appropriate – such as reconnecting rivers to more natural flood plains to mitigate the impacts of the anticipated increase in flooding and storm events, or creating opportunities to expand and link valuable semi-natural habitats to mitigate the effects of fragmentation at the landscape-scale.

Policy Context

- 2.5.8 The Landscape Character Assessment reflects the principles of the European Landscape Convention, the Government's National Planning Policy Framework and Planning Practice Guidance, and Natural England's guidance on 'An Approach to Landscape Character Assessment'. It provides a valuable context for spatial planning in Greater Cambridge by informing our understanding of the intrinsic character and value of Greater Cambridge's landscapes.

European Landscape Convention

- 2.5.9 The England European Landscape Convention Project Group (comprising the Department for Environment, Food & Rural Affairs, Natural England and Historic England) encourages local authorities to adopt an integrated, positive approach to managing landscape change in line with the principles of the European Landscape Convention.
- 2.5.10 Created by the Council of Europe in 2000, the European Landscape Convention promotes landscape protection, management and planning, and European co-operation on landscape issues. Signed by the UK Government in February 2006, the Convention became binding from March 2007. The Convention derives from the Council of Europe (not the European Commission) and was ratified by the UK outside its membership of the EU. The Landscape Institute currently advises that the Convention continues to apply now that the UK has exited the EU.
- 2.5.11 It applies to all landscapes, towns and villages, as well as open countryside; the coast and inland areas; and ordinary or even degraded landscapes, as well as those that are afforded protection. The European Landscape Convention highlights the importance of developing policies dedicated to the protection, management and creation of landscapes, and establishing procedures for the general public and other stakeholders to participate in policy creation and implementation.
- 2.5.12 Landscape Character Assessment offers a key tool for the delivery of the European Landscape Convention in the context of Greater Cambridge's landscapes.

National Planning Policy Framework & Planning Practice Guidance

- 2.5.13 With regards to local plan-making and landscape considerations, the Government's National Planning Policy Framework (NPPF) updated in 2019 requires strategic policies to make sufficient provision for the conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure (para 20).
- 2.5.14 With regards to achieving well-designed places, para 127 of NPPF 2019 requires that planning policies and decisions should ensure that developments are sympathetic to local character and history, including the surrounding built environment and landscape setting. while not preventing or discouraging appropriate innovation or change.
- 2.5.15 Para 170 of the NPPF 2019 requires that planning policies and decisions should contribute to protecting and enhancing valued landscapes, recognising the intrinsic character and beauty of the countryside and improving local environmental condition by remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- 2.5.16 Planning Practice Guidance (PPG) on the Natural Environment advises:
- ‘The National Planning Policy Framework is clear that plans should recognise the intrinsic character and beauty of the countryside, and that strategic policies should provide for the conservation and enhancement of landscapes. This can include nationally and locally-designated landscapes but also the wider countryside. Where landscapes have a particular local value, it is important for policies to identify their special characteristics and be supported by proportionate evidence. Policies may set out criteria against which proposals for development affecting these areas will be assessed. Plans can also include policies to avoid adverse impacts on landscapes and to set out necessary mitigation measures, such as appropriate design principles and visual screening, where necessary. The cumulative impacts of development on the landscape need to be considered carefully.’
- 2.5.17 The Planning Practice Guidance also includes guidance for local planning authorities on implementing policy to protect and enhance green infrastructure. It recognises that green infrastructure exists within a wider landscape context and can reinforce and enhance local landscape character, contributing to a sense of place and natural beauty². In line with the Planning Practice Guidance, the Councils are adopting a strategic approach to green infrastructure planning through preparation of a Green Infrastructure Strategy.

² Paragraph: 006 Reference ID: 8-006-20190721 - Revision date: 21 07 2019

25-Year Environment Plan

2.5.18 The 25-Year Environment Plan (2018) sets out the Government's approach to protecting and enhancing the environment in England. Target areas for action in the 25-year Environment Plan include:

- Using and managing land sustainably
- Recovering nature and enhancing the beauty of landscape
- Connecting people with the environment to improve health and wellbeing
- Increasing resource efficiency, reducing pollution and waste
- Mitigating and adapting to climate change

Environment Act

2.5.19 The Environment Act puts the environment at the centre of policy making in England, introducing action to create a cleaner, greener and more resilient country. The Act aims to manage the impact of human activity on the environment, creating a more sustainable and resilient economy, and enhancing well-being and quality of life. Amongst other things, the Act creates a new governance framework for the environment, introduces a mandatory requirement for development to deliver a biodiversity net gain and includes mechanisms for enhancing green spaces.

Agricultural Act

2.5.20 The 2020 Agriculture Act establishes a new agricultural system based on the principle of paying public money to farmers, foresters and other land managers for public goods that provide societal benefits – such as better environmental protection, improved public access to the countryside or higher animal welfare standards.

2.5.21 The UK Government has set out a 3 year transition plan that introduces a replacement for the current Environmental Stewardship scheme called Environmental Land Management (ELM). The new ELM scheme aims to incentivise sustainable farming practices, create habitats for nature recovery and establish new woodland to help tackle climate change.

2.5.22 Agriculture and farming practices shape our rural environment and our distinctive natural and cultural landscape features. The ELM scheme represents a key delivery mechanism to achieve the landscape management objectives identified in this Landscape Character Assessment.

2.5.23 The Landscape Character Assessment has a role to play in helping target agri-environmental payments to farmers and other land managers for maintaining and enhancing the intrinsic character and value of the Greater Cambridge landscape. It provides a robust evidence base and context for informing appropriate management strategies for maintaining or enhancing assets at a landscape-scale in a manner that can conserve and strengthen landscape character.

3.0 EVOLUTION OF THE GREATER CAMBRIDGE LANDSCAPE

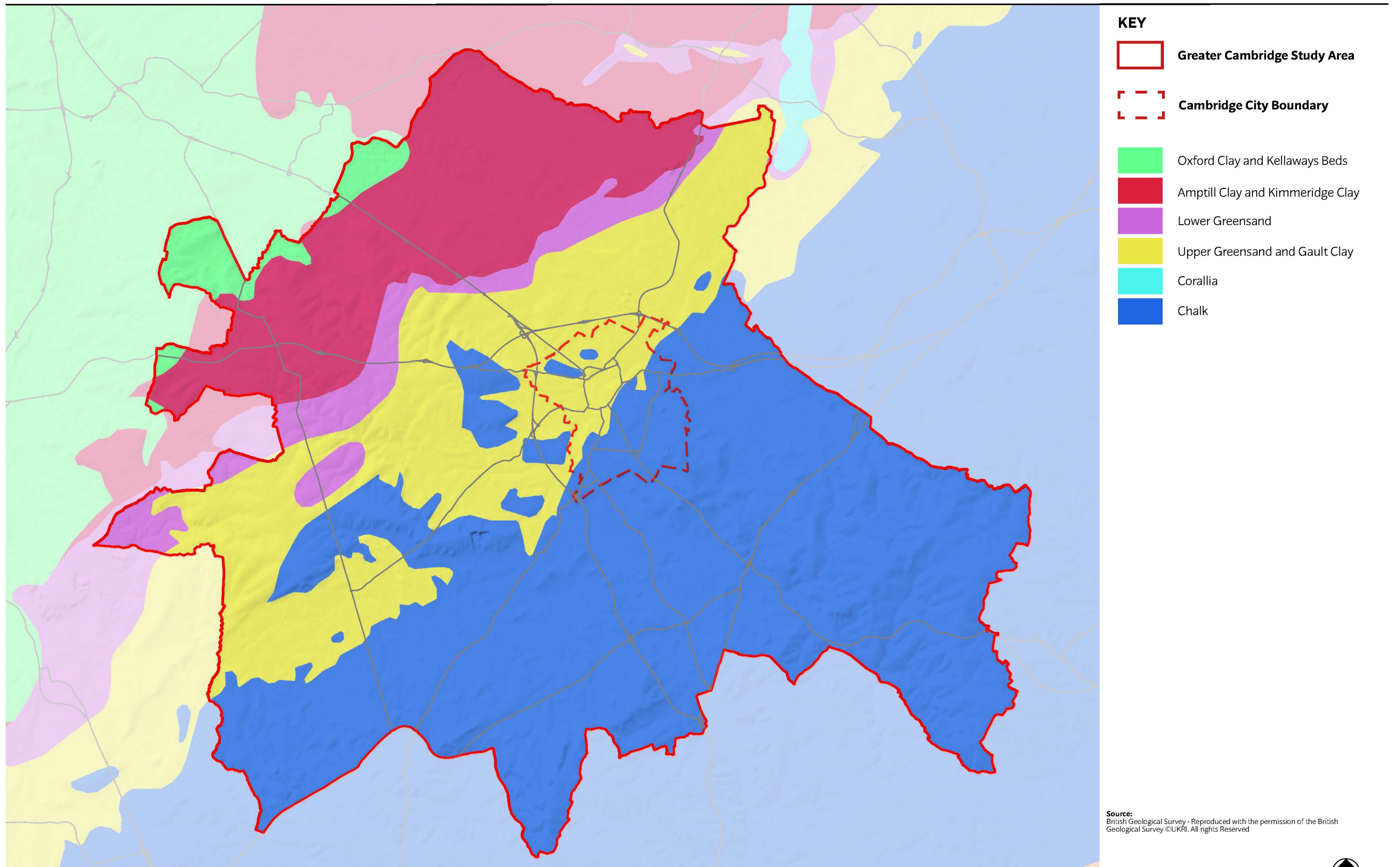
This chapter describes the main physical influences and human/cultural influences that have shaped the evolution and character of the Greater Cambridge landscape, highlights perceptions of the Greater Cambridge landscape and considers the state of the landscape today.

3.1 Physical Influences

Geology and Soils³

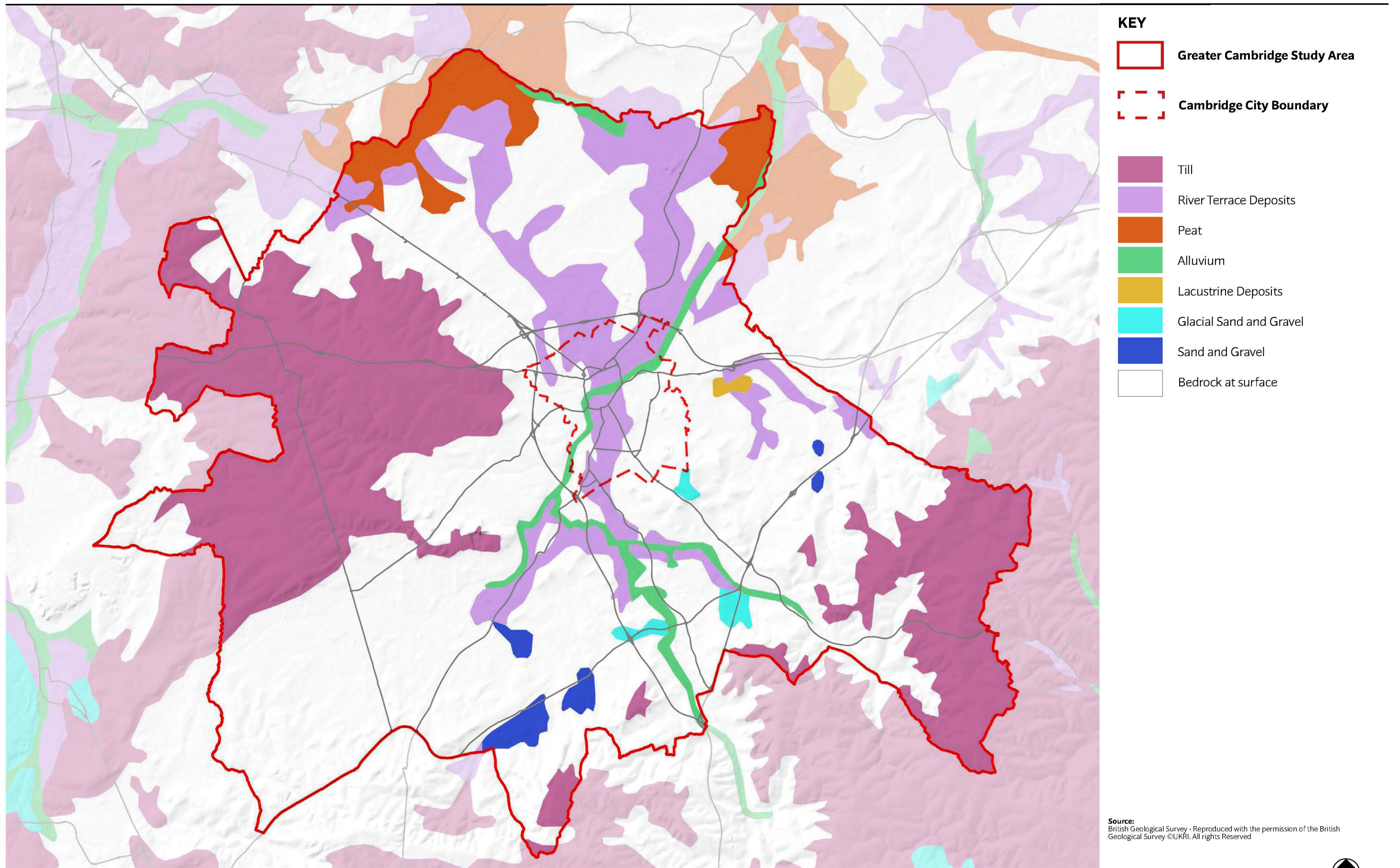
- 3.1.1 The geological deposits (see **Figures 3.1** and **3.2**) that underlay the Greater Cambridge area predominantly date from the Cretaceous Period of geological history (65 to 140 million years ago). In the north-west of the district are a series of slightly older clay deposits from the Upper Jurassic Period. The geology is divided into a series of strata that outcrop in bands running roughly north-east to south-west across the area. These formations were laid down as successive marine deposits that have since been raised and tilted to slope south-eastwards by earth movements in Tertiary times.
- 3.1.2 The south-eastern half of the Greater Cambridge area is underlain by chalk, a soft white limestone of great purity and composed almost entirely of calcium carbonate derived from the shells of marine animals deposited in a warm, clear sea. Chalk is a relatively soft rock that makes a poor building stone, but in this region a more resistant formation from the Lower Chalk beds was sometimes used in traditional buildings, where it is referred to as clunch. The Lower Chalk beds also include a Chalk Marl that is particularly suitable for the manufacture of cement. In the south-east parishes of the area the chalk is overlain by glacial bolder clay, deposited by the retreating glaciers at the end of the last ice age.
- 3.1.3 Nodules of flint, a few centimetres or more in diameter, are a feature of chalk deposits. Flint is very hard and composed of silica, chemically unrelated to chalk, but with its origins also in marine organisms, albeit ones with delicate skeletons of silica. The silica forming these skeletons was not particularly stable and, after the creatures' death, it was dissolved into the chalk where it re-deposited in a more stable form as nodules of flint. The hard nature of the flint nodules makes them difficult to shape for use in walling. Because of this, the traditional form of flint walling was to lay rough nodules of flint in beds with one side crudely faced, or knapped, and to use brickwork to frame rectangular openings for windows and doors, or to turn corners. This careful, selective use of brickwork reflected the relatively high cost of importing bricks from the adjacent clay areas and has created a distinctive appearance in the region.

³ South Cambridgeshire LDF District Design Guide, South Cambridgeshire District Council, 2010



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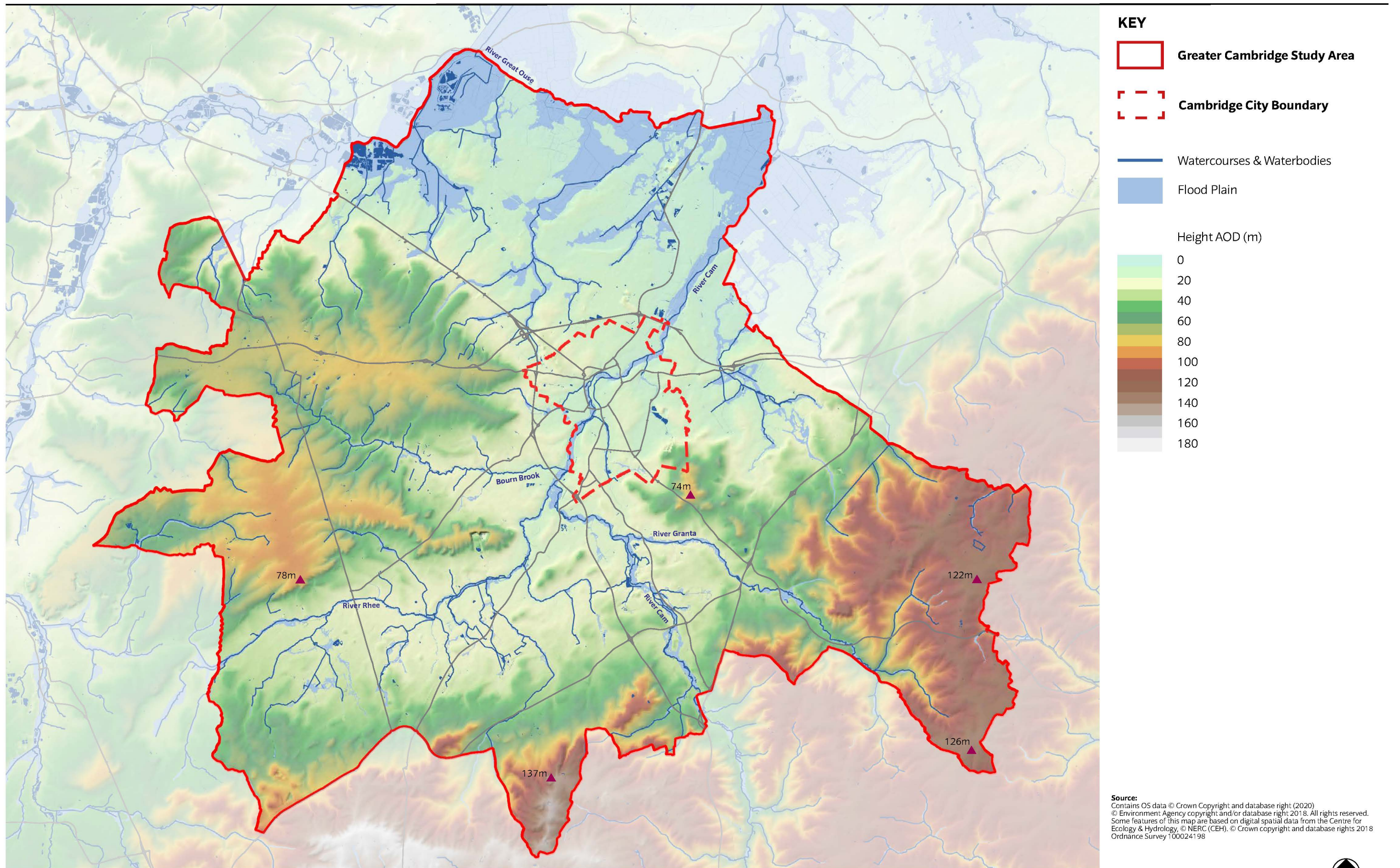
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- 3.1.4 North-west of the chalk is a band of dark blue/grey clay, known as the Gault Clay. In the eighteenth century this band of clay began to be worked on a large scale for brick making, producing at first a 'white' brick that weathers grey, then later in the nineteenth century, the characteristic yellow 'Cambridge stock' brick. The same beds were worked for plain clay pegtiles for the fifteenth century onwards with clay pan-tiles becoming widespread from the eighteenth century.
- 3.1.5 Immediately north-west of the Gault Clay is a narrow band of sandstone, referred to as the Lower Greensand. This band is relatively insignificant in the northern parts of the district, but it produces a slightly raised rib of land above the adjacent clay fens that is the site for a number of settlements, most notably Cottenham and Oakington. To the west of the area the band of Greensand increases in width and around Gamlingay it becomes much more prominent in the landscape.
- 3.1.6 In geological terms, the fen basin in the north of the Study Area is relatively recent⁴. During the millennia before the end of the last Ice Age, when Britain was joined to the European continent, the area was a wide clay plain drained by tributaries of the River Rhine. As the glaciers melted, sea levels rose, Britain was severed from the continent and the fenlands were flooded, save for a few islands of higher land. The story of the present day fen begins at this point, with the ebb and flow of seawater counter-balanced by the erosion and deposition of inland rivers, which led to the infilling of the basin with deposits that derived from marine and freshwater environments.
- 3.1.7 The bedrock geology of the fens is underlain by Jurassic Oxford, Ampthill and Kimmeridge Clays. The character of the fen landscape is determined by its surface geology – the interlocking layers of marine clay, silt and peat that filled the fen basin over the centuries since the Ice Age.

Topography and Hydrology

- 3.1.8 As illustrated on **Figure 3.3**, the topography and hydrology of the Greater Cambridge area closely reflects the underlying geology. This consists of flat and low-lying (below 10m AOD) fen peat to the north of Cambridge, higher (up to 80m AOD) rolling Gault Clay ridges to the west, and a broad chalk ridge (up to 150m AOD) to the south and east of the Study Area. The main rivers (Cam, Granta, Rhee and Bourn Brook) have eroded broad valleys through the chalk and/or clay to form the low-lying land to the immediate south and southeast of Cambridge. The fens drain into the River Cam and the River Great Ouse.
- 3.1.9 Springs are also a feature of the chalk landscapes, issuing at the point where the porous chalk overlies the impermeable clays. These give rise to the distinctive spring line villages clustered along the foot of the scarp slopes.

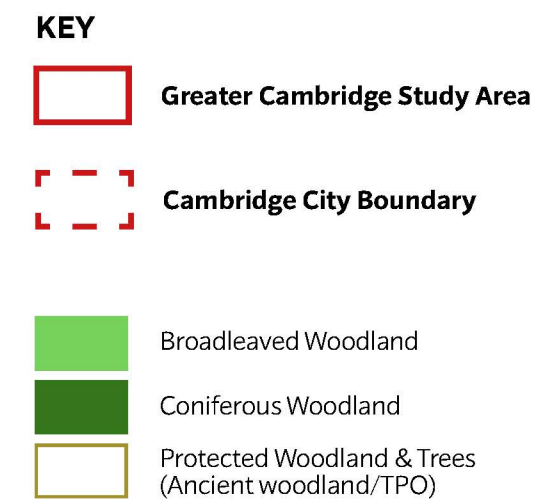
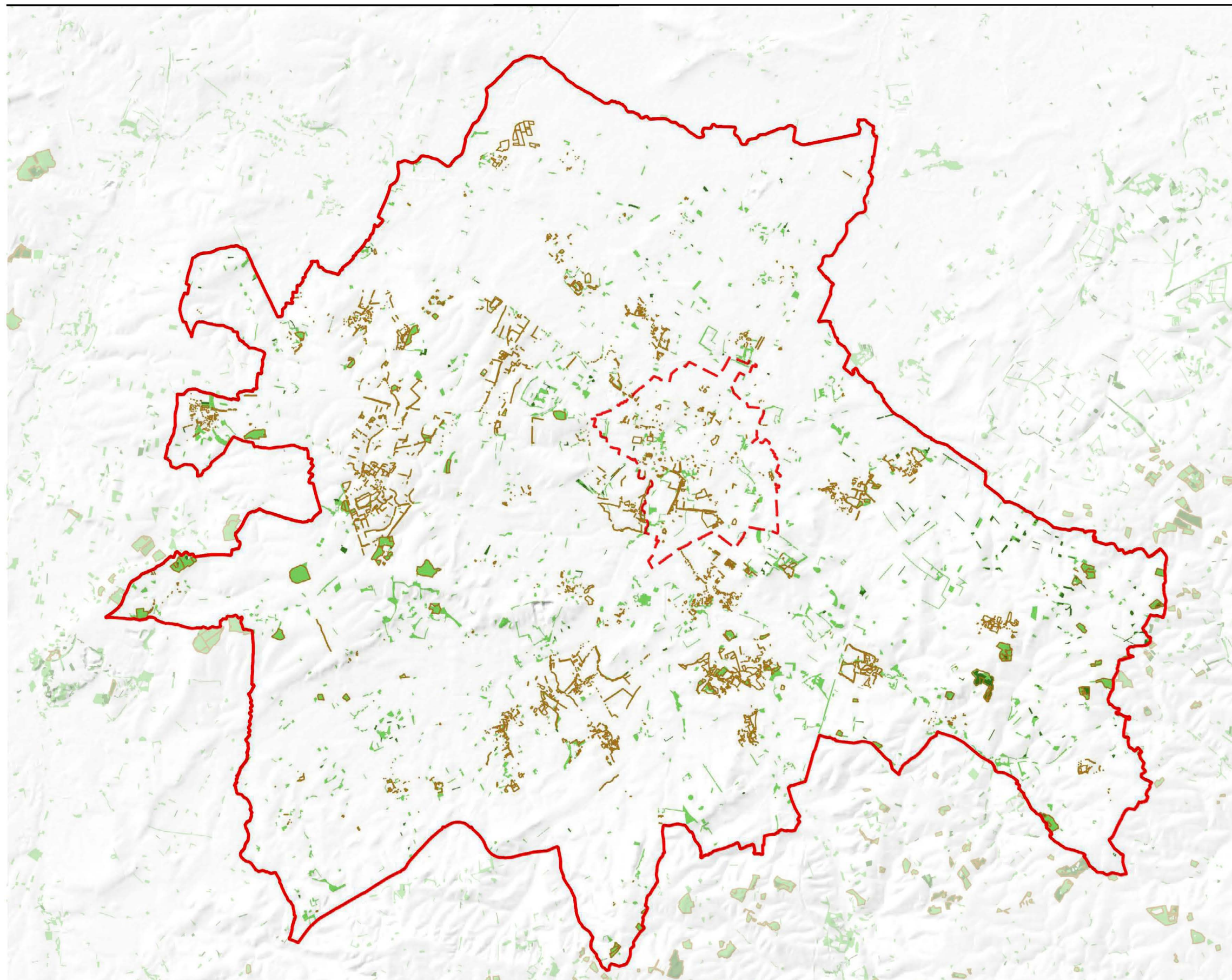
⁴ Ouse Washes Landscape Character Assessment, Shiels Flynn, 2013



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Ecological Character

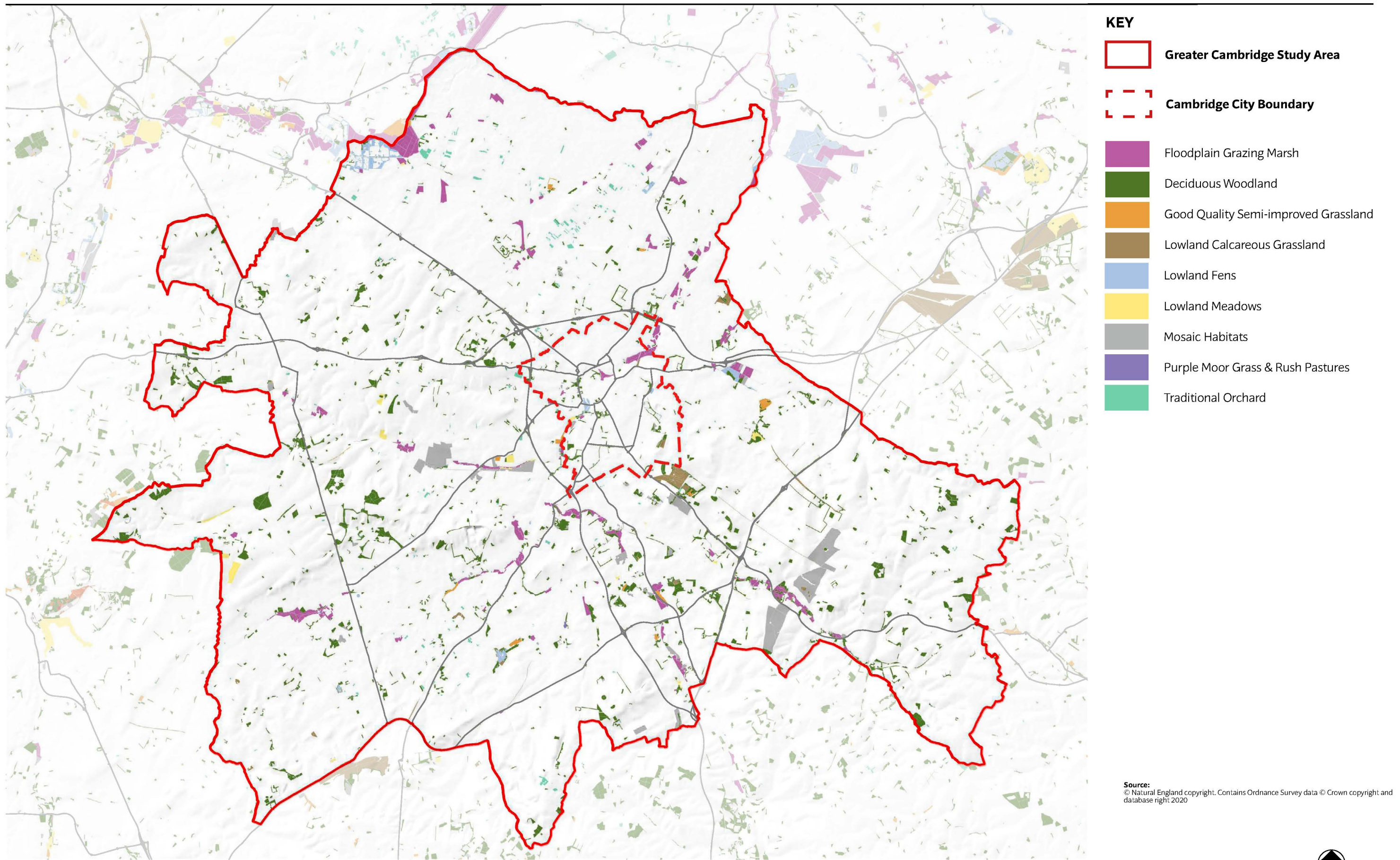
- 3.1.10 The Greater Cambridge area hosts a wide range of ecological habitats, the most characteristic and valuable of which are highlighted below.
- 3.1.11 Cambridgeshire is one of the least wooded areas in the UK. As such wooded habitats play a vital role in the county as important wildlife habitats and landscape features. As illustrated on **Figure 3.4**, the Greater Cambridge landscape is relatively sparsely wooded. Ancient woodlands are found in the west of the Study Area (such as Hayley Wood and Eversden Wood) and in the southeast (such as Borley Wood and Hare Wood), which are of high nature conservation value due to the diverse animal and plant communities they support. In addition, grasslands and wetlands are also distinctive habitats types within the Study Area.
- 3.1.12 The distribution of the following priority habitats of principal importance for conservation within the Study Area are shown on **Figure 3.5**:
- Floodplain grazing marsh
 - Deciduous woodland
 - Good quality semi improved grassland
 - Lowland calcareous grassland
 - Lowland fens
 - Lowland meadows
 - Mosaic habitats
 - Purple moor grass and rush pastures
 - Traditional orchard
- 3.1.13 Other habitats which are important for nature conservation, include:
- Rivers and streams, including chalk rivers
 - Ponds and standing water bodies
 - Scrub
 - Hedgerows
 - Arable farmland
 - Churchyards and cemeteries
 - Historic parklands
 - Wood pasture
- 3.1.14 These habitats support a range of species identified as of principal importance for conservation within the Study Area, namely:
- Otters, water voles and brown hare
 - Skylarks
 - Great crested newts
 - House sparrows
 - Barn owls
 - White-clawed crayfish
 - Native black poplar trees
 - Song thrush



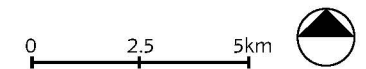
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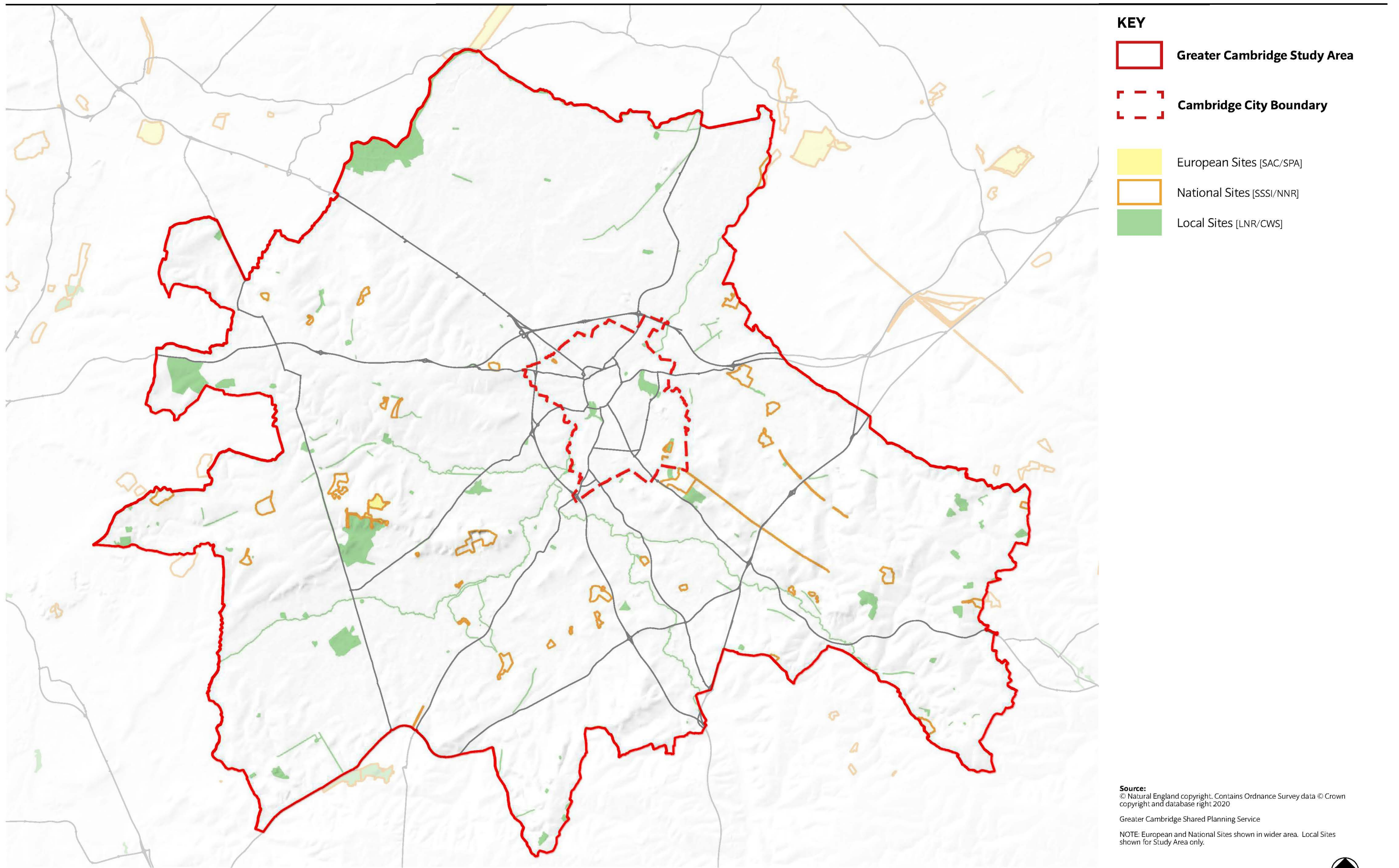


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- 3.1.15 As illustrated on **Figure 3.6**, a number of woodland, grassland and wetland sites within the Study Area are designated for their biodiversity value. Designated sites include a statutorily protected Special Area of Conservation (SAC) and numerous Sites of Special Scientific Interest (SSSIs), as well as non-statutorily protected Local Nature Reserves (LNR) and County Wildlife Sites (CWS). A number of sites are also designated for their geodiversity value.
- 3.1.16 The Everseden and Wimpole Woods SAC is of particular importance for its breeding colonies of the rare Barbastelle bat.
- 3.1.17 There are 42 nationally designated SSSIs within and on the boundary of the Greater Cambridge area, including the linear features of the Roman Road south of Cambridge, Fleam Dyke, and the Cam Washes SSSI, which consists of seasonally flooded pastures along the River Cam in the north of the Greater Cambridge area, which are used by wildfowl and waders. Some of these lie within the area around the city of Cambridge, including the Cherry Hinton Chalk Pits and Traveller's Rest Pit. A small number of the sites are designated for the geological interest (e.g. Barrington Pit SSSI and Histon Road SSSI).
- 3.1.18 There are currently 16 designated Local Nature Reserves (LNRs) across the area, including Sheep's Green and Coe Fen, Logan's Meadow and Nine Wells on the southern edge of Cambridge. There are also over 100 County Wildlife Sites across the area, two adjacent RSPB Reserves at Fen Drayton Lakes and Ouse Fen on the northern border with Huntingdonshire, and a further (smaller) RSPB Reserve at Fowlmere in the south.
- 3.1.19 In addition, Cambridgeshire County Council have designated a list of Protected Road Verges (PRVs), recognising their status as the largest area of unimproved grassland in the county and their role as important habitat.

3.2 Human and Cultural Influences

- 3.2.1 The landscape of the Greater Cambridge area today is the product of a series of major changes through which its character has been transformed by the interaction of natural and human or anthropogenic processes. Like most areas of Britain, the landscape in the Study Area bears the imprint of successive periods of human habitation and land use. While the basic landforms have remained the same, the vegetation covering and land use have been subjected to constant change, although some periods of change have been far more rapid and radical than others. These changes are important not only from an archaeological perspective but also in determining the overall character of the Study Area. The following is a summary of the past human and cultural influences on the evolution of the Greater Cambridge landscape.



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Historical Development – Pre History to Present^{5,6}

- 3.2.2 Across the Greater Cambridge area, the siting and historical development of settlements is closely associated with the communication network (particularly at river crossings or road junctions), the avoidance of land liable to flooding, and developments in agriculture. The spring-lines between the chalk and clay were favoured areas for settlement, and so, to an even greater extent, were the river valleys, with their light gravel and alluvial soils and good communications. The chalk areas to the south could only be settled where water supplies were available, but the open aspect of this countryside made it particularly suitable for trade routes from east to west across the region, using numerous parallel tracks that are collectively known as the Icknield Way.

Prehistoric

- 3.2.3 In Palaeolithic and Mesolithic times the area was occupied by hunter gatherers, when much of the area that was later to become fen was then above sea level, so could also support the more transient societies in a heavily wooded landscape. It was the rise in sea level that accompanied the melting ice-cap at the end of the last Ice Age that led to periodic flooding and the development of the fenland areas in the north. In Neolithic times, communities became more settled as an agrarian based society started to develop. These early communities especially established themselves on the chalk grasslands around the Icknield Way, along the river valleys and fenland edge, and on the lighter soils associated with the Greensand.
- 3.2.4 The development of these communities continued through the Bronze Age and into the Iron Age, by then farming had become so well developed that huge tracts of land were covered by ditched fields and enclosed homesteads, especially in areas of gravel subsoil, but also in the heavier clay areas where developments in agricultural technology produced ploughs capable of working the heavier soils. Evidence of metal working, trading and habitation from the Bronze and Iron Ages has been found in Cambridge, including a large Iron Age farm on the site of the Addenbrooke's Hospital.

⁵ South Cambridgeshire LDF District Design Guide, South Cambridgeshire District Council, 2010

⁶ Cambridge Inner Greenbelt Study, LDA Design, 2015

Roman

- 3.2.5 Roman towns including Cambridge (as well as Godmanchester, Sandy and Great Chesterford in the wider area), had markets that brought prosperity to the adjacent rural areas, and the network of Roman roads have left a lasting legacy. The best preserved Roman settlement is at Bullock's Haste in Cottenham; a site so large that it appears more like a town than a village, while Romanisation of the countryside was established through a series of villas that were at the centre of agricultural estates. By 70AD the Romans had built a road from Colchester to Godmanchester, which crossed the River Cam close to the present Magdalene Bridge. A castle was constructed on Castle Hill and a small town developed adjacent to it. The construction of the fenland canal system by the Romans led to Cambridge becoming an inland port. Carr Dyke, visible today at Cottenham, Landbeach and Waterbeach, was used to transport food-stuffs, leather goods and other products from the agricultural regions of southern Cambridgeshire to the army stationed in Northern Britain. It may also have served to drain neighbouring land.

Anglo-Saxon

- 3.2.6 Occupation of a number of Roman sites is believed to have continued on into Saxon times, along with use of the Roman roads, since many Saxon settlements and burial sites follow these routes. The best-known sites from the early Anglo-Saxon period are a series of cemeteries and defensive Dykes, though more recent excavations have now revealed evidence of huts, halls and other signs of human occupation at Hinxton, Linton, Cottenham, Waterbeach, Pampisford and Great Wilbraham. The four great Anglo-Saxon dykes in South Cambridgeshire (Miles Ditches, Bran Ditch, Brent Ditch and Fleam Dyke), together with the larger Devil's Dyke in East Cambridgeshire, all appear to have had the same function, namely to protect land in the east by preventing easy access along the Icknield Way, and all are built to a similar pattern, with wide, flat bases and straight-sided ditches on the western side.
- 3.2.7 It is likely that Cambridge was on the front line of battles between the kingdoms of Mercia and East Anglia, until the East Angles' victory in 634. A new bridge over the River Cam was built in the eighth century, and the town began to revive. However, in 871, invading Danes plundered and burnt the town. Later an Anglo-Danish settlement was established and Cambridge became within the control of the Danelaw until 921. The town thrived in the latter part of the Saxon period. It was a port to boats coming down from the Wash, and traded with Ireland and the continent. It established a mint in 975, and flourished as a business, military, administrative and legal centre.

Middle Ages

- 3.2.8 By 1086, when the Domesday Book was written, all the current villages of the Greater Cambridge area existed, with the exception of the modern communities of Bar Hill, Cambourne and Northstowe, though most have undergone a number of changes since their Saxon foundation. William the Conqueror built a castle at Cambridge and quickly established control of the town. The town and county continued to prosper, and several churches, religious houses and a hospital were constructed, including the Round Church. Land was granted to the religious houses which has remained as open space within the city, such as Jesus Green and Midsummer Common.
- 3.2.9 Cambridge was already known as a centre of learning in 1209, when a group of scholars fleeing from riots in Oxford settled in the town. From this point, the University rapidly expanded in size and power, and gained royal support. Over the following 800 years, the colleges were established, including several on former monastic sites following the dissolution of the monasteries in 1536.
- 3.2.10 Between the 10th and 15th centuries, the town and surrounding villages were rocked by events including uprisings by Hereward the Wake, the peasants' revolt, dispossessed barons marauding from the fens, the Black Death in 1348, numerous plagues and civil disturbances. However, the town continued to thrive and grow, largely due to the increasing domination of the University. Development took place along the three main routes out of the town to the south-east and south, namely Trumpington Street, St Andrew's Street and Jesus Lane. Most villages in the area would not regain the levels of their thirteenth century populations until the nineteenth century and the resulting labour shortage led to much of the land being converted to sheep pasture.

Post Medieval

- 3.2.11 The University at Cambridge continued to expand in the Tudor period, and to become increasingly powerful, with heightening tensions between town and gown. The colleges owned large areas of land within and adjacent to the town, some of which are still preserved as open spaces today. They displaced areas of wharves and housing adjacent to the river to make way for the building of colleges. The University also controlled rents, markets and food prices, and was politically opposed to the town in the Civil War.
- 3.2.12 By 1600 most of the major Cambridge colleges had been established, and the town had expanded slightly on the eastern side. However, expansion of the town was restricted by the surrounding common fields. The result was that the built-up areas of the town becoming increasingly cramped, with many houses divided into tenements.

- 3.2.13 In the late seventeenth century work started to drain the fens in the north of the area by cutting a series of canals that would take excess water straight to the sea. The process was to be fraught with problems as the peat shrank, leaving much of the land below sea level and windmills (later replaced by steam, diesel and electric pumps) were then required to lift the water back up to sea level. However, the rich farmland that was created by this process was capable of supporting a large population, and the villages along the fen-edge expanded as a result.
- 3.2.14 Until the middle of the eighteenth century the majority of parishes continued to farm in common, as they had since Saxon times, with the huge medieval open fields worked in narrow strips. Then, over a period of 100 years, these fields were enclosed by successive Acts of Parliament as the enclosure movement brought about major change to the countryside. At the same time many common rights to grazing and gathering fuel were also lost, and most of the countryside became private property. This radical change in land-ownership meant the end of the traditional peasant class in England and much of the population moved to urban areas, or emigrated to America or Australia.

The Victorian Era

- 3.2.15 The town of Cambridge did not expand much beyond its medieval limits until the 19th century, and in 1801 the population of the town was only approximately 9000. The southern limit of the town was extended in the early 19th century by the building of Downing College, but it was two further factors, enclosure of land around the town from 1807 and the coming of the railways in 1845 which enabled its large-scale expansion. During the 19th century, the population of the town increased fourfold.
- 3.2.16 The railway station was sited approximately a mile southeast from the centre of the town, as the University would not permit it any closer. Gradually, the land to the south and southeast of the historic core was filled with terraced housing, much of which was constructed for railway workers. As the town grew, adjacent villages, such as Chesterton became amalgamated with Cambridge. Land to the west of the river, which had formerly been unsuitable for building, was drained and made available for development. Following a change in University policy allowing Fellows to marry, substantial family houses were built in this area.
- 3.2.17 When common land and fields were enclosed, they were subdivided and distributed between the people who had formerly used or had rights to the land. In Cambridge, these new landowners included the University, other institutions (such as Addenbrooke's Hospital) and private individuals. Therefore land which had formerly been a single large field, could be developed by several different people, at different times and in different ways. Usually, land allocated to private individuals was sold relatively quickly to speculative builders, who constructed terraces, which were occupied by the working classes.

- 3.2.18 The University generally did not develop their land immediately. When they did develop it, they generally constructed large detached villas in extensive gardens, which they sold leasehold to maximise profit. These neighbourhoods were occupied by the middle and upper classes and are still attractive and exclusive residential areas.
- 3.2.19 Expansion of Cambridge to the northeast did not take place until the middle of the 19th century, when the common fields of Chesterton were enclosed. Relatively little development took place on the west side of the city, as the land was largely owned by the colleges. This has affected the development of Cambridge up to the present day and is largely why the historic core and the “city centre” is not centrally located within the urban area of the city.
- 3.2.20 In the wider area, populations fell in all but the commuter settlements immediately adjacent to Cambridge, and this pattern continued through the first half of the 20th century, exacerbated by the impact of the First World War and the depression of the inter-war period. It was not until after the Second World War that the pattern was to change, and the villages once again started to expand to cope with the housing needs of a growing population.

The 20th Century

- 3.2.21 The 20th century saw the greatest growth of the city of Cambridge, including residential estates and new University buildings outside the old city limits.
- 3.2.22 Clare College Memorial Court (built after the First World War) was the first part of the University to cross Queen’s Road. Other University buildings developed in this area to the west of the river, including the Library: the monumental tower of which is a landmark for many miles. In the 1960s, construction of faculty buildings took place close by at Sidgwick Avenue, including the Seeley History Faculty.
- 3.2.23 Considerable development has taken place on the outskirts of the city. In addition to academic buildings such as the Institute of Astronomy, developments such as the new Addenbrooke’s Hospital have had a strong impact on the plan of the city. Since the establishment of the Cambridge Science Park by Trinity College in the early 1970s, Cambridge has seen extensive developments of business and science parks, including the University’s West Cambridge site.
- 3.2.24 Suburbs developed in the inter-war and post-war periods. To the south of the city are early mid-20th century leafy estates. Chesterton also developed as a suburb largely in the inter-war period. The Arbury and King’s Hedges residential areas were developed to the north of the city in the 1960s and 1970s.
- 3.2.25 The establishment of the Green Belt between 1965 and 1992 effectively set a limit to the expansion of the city into the surrounding countryside. In the 1950s/60s, inner necklace villages such as Milton were developed, before development moved to outer necklace villages such as Bar Hill.

Early 21st Century

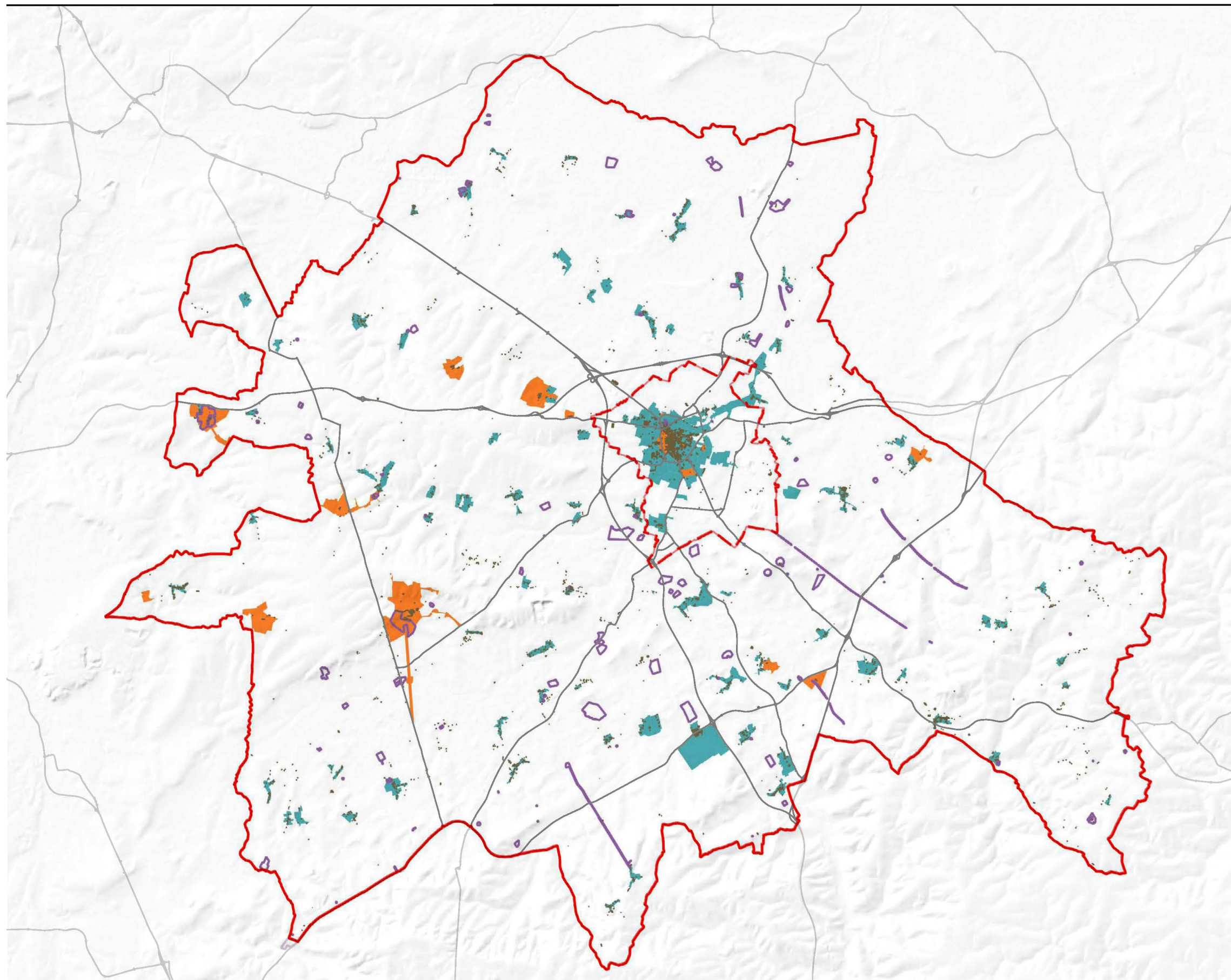
- 3.2.26 Between 2006 and 2010, a number of Green Belt releases were made that have resulted in expansions of the Cambridge Urban Area. These included urban extensions in the Cambridge Southern Fringe located to the east and south of Trumpington (including development at Trumpington Meadows, Glebe Farm and Clay Farm); Northwest Cambridge (now Eddington), which provides facilities and accommodation for Cambridge University as well as market housing; Darwin Green (formerly known as NIAB) on the northwestern edge of Arbury; and east of Cambridge to the north of Newmarket Road (Marleigh).
- 3.2.27 There is also additional ongoing expansion of the University's West Cambridge site, which provides additional educational and research facilities; at Addenbrooke's Hospital (Cambridge Biomedical Campus), providing additional research and medical facilities; as well as residential development on the former Bell School site.
- 3.2.28 Within Cambridge itself there have also been some major redevelopment projects, which have included the Accordia residential development to the south of the Botanic Garden and the ongoing mixed use development around Cambridge station.
- 3.2.29 Despite the expansion of the city in the 20th and early 21st centuries, Cambridge remains a small scale city. Its suburbs are well-connected to the city centre which is focussed on the medieval core.

Heritage Assets in the Landscape

- 3.2.30 Designated and non-designated heritage assets within the Greater Cambridge area are shown on **Figure 3.7**. These include the following buildings, monuments, sites, places, areas and landscapes of heritage value and significance:
- 113 Scheduled Monuments (e.g. Cambridge Castle Mound and Chesterton Abbey)
 - 99 Conservation Areas (e.g. Newnham Croft and Westwick)
 - More than 3500 Listed Buildings (e.g. the Church of St. Andrews, Cambridge and Denny Abbey, South Cambridgeshire)
 - 24 Registered Historic Parks & Gardens (e.g. Cambridge Botanic Garden and Wimpole Hall)

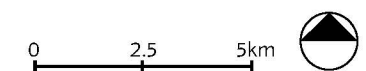
Historic Landscape Character

- 3.2.31 The landscape of the Greater Cambridge area is the product of influences which have acted upon it over time, some ancient and some more recent. The character of the landscape has altered based on factors such as its underlying geology, the topography and hydrology. These have in turn interacted with the human activity in the landscape and thus the patterns of land use. It is these patterns of land use which demonstrate the cultural dimension of the present day landscape.



- KEY**
- Greater Cambridge Study Area
 - Cambridge City Boundary
 - Scheduled Monument
 - Historic Parks and Gardens [RHPG and Local HPG]
 - Conservation Area
 - Listed Building

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- 3.2.32 Cambridgeshire County Council has defined Historic Environment Character Areas within Cambridgeshire. These areas provide a high level framework for understanding the “time depth” in the present landscape shaped by episodes of changing land uses, activities and attitudes associated with cultures in different eras through the millennia in response to the physical environment, natural resources and prevailing climate.
- 3.2.33 The County Council has identified and described 16 County Historic Environment Character Areas that fall wholly or partially within the Greater Cambridge area as shown on **Figure 3.8** and set out in the profiles included as **Appendix 5**. This information has been used to inform the Landscape Character Type and Landscape Character Area descriptions set out in **Chapter 4** of this study.

Settlement Form, Pattern and Built Character

- 3.2.34 As illustrated on **Figure 5.1** in **Chapter 5**, the dispersed pattern of 102 villages is a particularly distinctive feature of the rural landscape in Greater Cambridge. Small, medium and large villages occupy a variety of positions, including hilltops, valley-sides and along spring lines. They often exhibit a complex mix of patterns including linear, dispersed, nucleated, agglomerated and planned. A number have been formed from amalgamation of initially separate and historic hamlets. Villages that grew up along important communication links are often linear, with an area of green in front of buildings. Further information about the landscape setting and built character of the rural villages within Greater Cambridge is provided in **Chapter 5**.
- 3.2.35 As illustrated on **Figure 6.2** in **Chapter 6**, the city of Cambridge is small scale. Further information about the character of the Cambridge Urban Area can be found in **Chapter 6**.

3.3 Perceptions of the Greater Cambridge Landscape

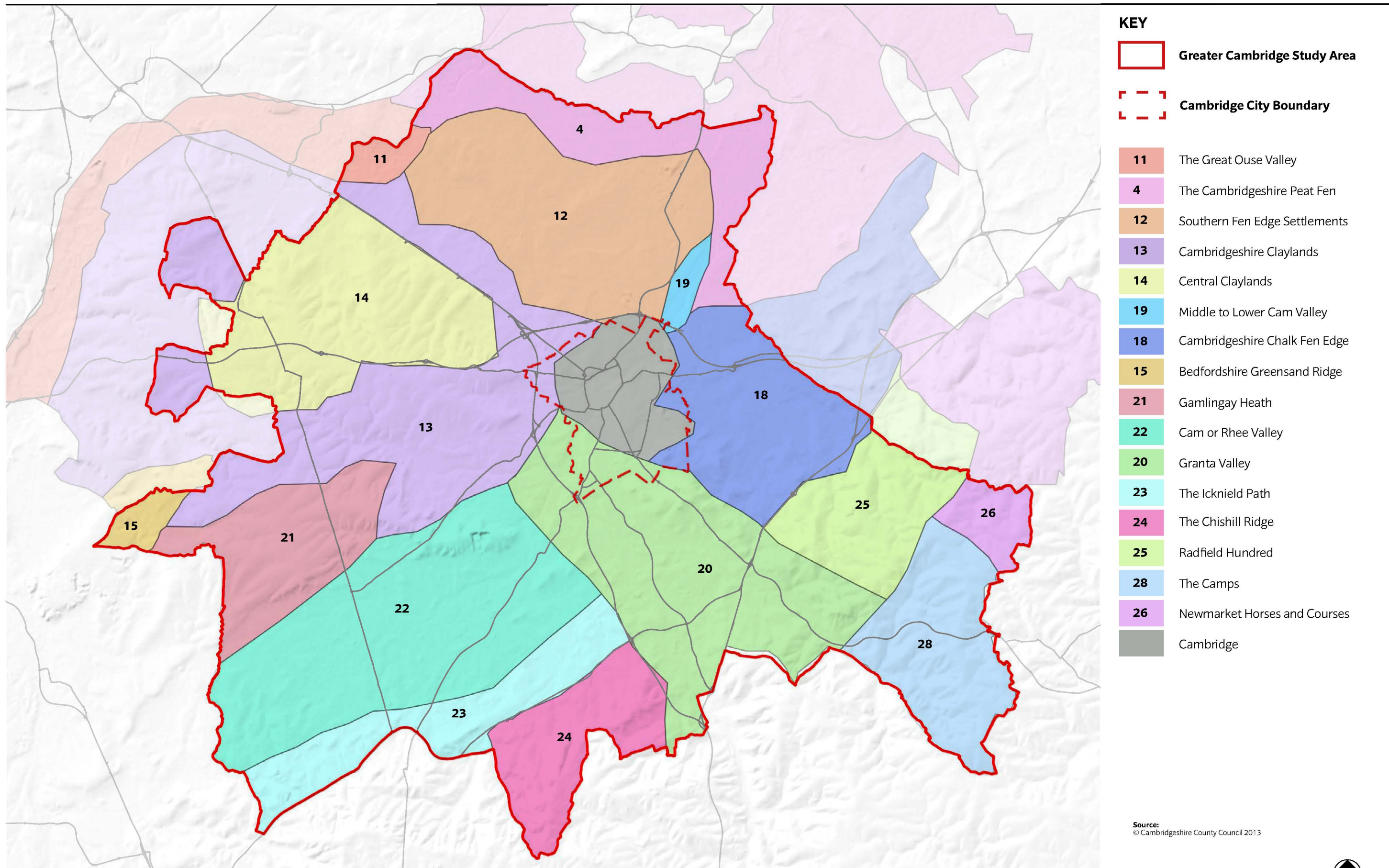
- 3.3.1 The South Cambridgeshire landscape within the Greater Cambridge Study Area is generally not as well represented in literature and the arts as Cambridge, which is famed as a historic centre for academic learning.

Writers and Poets

- 3.3.2 Poets who have been inspired by Cambridge include the English poet, William Wordsworth (1770-1850), who studied at St. John’s College, Cambridge. Wordsworth described Cambridge in his writing:

*“The long-roofed chapel of King's College lift.
Turrets and pinnacles in answering files,
Extended high above a dusky grove.”⁷*

⁷ Inside of King's College Chapel, Cambridge, William Wordsworth, 1820/21



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- 3.3.3 Bryan Waller Procter (1787-1874), who worked as a lawyer and wrote poetry, plays and biographies under the pen-name "Barry Cornwall", also wrote of Cambridge in his poetry. He was inspired by the sounds of the town, "*all the bells were ringing in the old grey town*"⁸, and by the images created by the town's University, "*the men go to lecture with the wind in their gowns*".
- 3.3.4 In later years, Rupert Brooke (1887-1915), an English poet known for his sonnets written during the First World War, described "*The lovely hamlet Grantchester*" with its "*peace and holy quiet there, Great clouds along pacific skies*" in his poem entitled *The Old Vicarage, Grantchester*⁹.
- 3.3.5 Christopher Taylor's 1973 detailed examination of *The Cambridgeshire Landscape*¹⁰ paints a picture of the South Cambridgeshire landscape steeped in history:

"Even in the height of summer, when the main roads are jammed and the fenland rivers are crowded with pleasure boats, one can wander through the lanes of south Cambridgeshire to an isolated church situated within the long-forsaken ramparts of a mighty Norman castle. Here it is possible to walk along the street of a deserted village which originally grew up outside the castle and then shrank away to a green field again when the castle was abandoned."

The Arts

- 3.3.6 The 18th century landscape architect Lancelot 'Capability' Brown popularised the English Landscape Style, replacing formal gardens with naturalistic parkland, expanses of water and smoothly rolling grass. Brown created fine landscapes for Wimpole Hall, Madingley Hall and an unrealised design for the 'Backs'. For many years he owned the Manor in Fenstanton, and Brown is buried in the churchyard of St Peter and St Paul in the village¹¹.
- 3.3.7 Humphry Repton, Brown's successor also worked on a design for Wimpole Hall in 1801. Repton's 'Red Books' survive to demonstrate how he approached landscape design as an artform, presenting watercolour before and after drawings to illustrate his plans¹².
- 3.3.8 The Cambridge University Library keeps the early 19th century Relhan Collection of over 350 watercolours of Cambridgeshire¹³. This is a collection containing illustrations of villages before enclosure, churches before Victorian restoration, great houses before demolition or major changes and monuments before. They were mostly drawn by Richard Relhan, a Cambridge apothecary, between about 1797 and 1840.

⁸ *Autumn Morning at Cambridge*, Bryan Waller Procter, 1921

⁹ [The Old Vicarage, Grantchester, Rupert Brooke, 1912](#)

¹⁰ *Cambridgeshire Landscape (Making of the English Landscape)*, Christopher Taylor, 1973, Hodder & Stoughton Ltd

¹¹ [About Capability Brown, Capability Brown Festival, 2016](#)

¹² [Humphry Repton, Parks & Gardens, no date](#)

¹³ [Resources, Cambridge Antiquarian Society, no date](#)

- 3.3.9 The rock band Pink Floyd’s 1969 song Grantchester Meadows is evocative of the pastoral idyll associated with the Cam’s riverside:

“See the splashing/Of the kingfisher flashing to the water/And a river of green is sliding/Unseen beneath the trees/Laughing as it passes/Through the endless summer/Making for the sea.”

Myth and Legend

- 3.3.10 Named after the Greek Gods, myth and legend associated with the Gog Magog Hills include stories about giants, knights, pagans, gods, chalk patterns and ley lines¹⁴.
- 3.3.11 There are claims of a giant chalk figure, or figures, cut into the chalk of the Gog Magog Hills¹⁵. Verbal history tells of a giant on a hillside which could be seen from Sawston as late as 1850, and a second giant inscribed on the top of Wandlebury Hill associated the so called “Gogmagog Olympics” held on the Hills in the 16th and 17th centuries.
- 3.3.12 In the 1950s, archaeologist TC Lethbridge uncovered what he believed to be a goddess, but this was later dismissed as natural features.

3.4 State of the Greater Cambridge Landscape Today

- 3.4.1 The condition of Greater Cambridge’s landscapes is strongly determined by changes in land use. The current pattern of land use can be seen in the aerial photographs on **Figure 3.9**.
- 3.4.2 An overview of the state of the Greater Cambridge landscape today is provided below. Further details about the condition of existing landscape-scale green infrastructure assets, including the quality/status of habitats, blue infrastructure and accessible natural greenspace and access networks, can be found in the emerging Greater Cambridge Green Infrastructure Study.

Agriculture

- 3.4.3 The management of farmland has widespread and direct impacts on soils, water, wildlife, other habitats, landscapes and people, and this has been strongly influenced by both national and international drivers of change. Farming continues to be an essential determinant of landscape character across the Greater Cambridge area.

¹⁴ Wandlebury Hillfort, Cambridge Past, Present and Future, no date

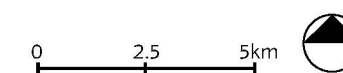
¹⁵ Gogmagog, Peter Meadows, 2015



KEY

- Greater Cambridge Study Area
- Cambridge City Boundary

Source:
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- 3.4.4 Cambridgeshire as a whole has one of the largest areas of high-grade agricultural land in the UK, predominantly associated with the fenland landscapes. The underlying soils in the Greater Cambridge area give rise to a mix of classified agricultural land, predominantly comprised of Grade 2 and 3, with small pockets of grade 1 and 4 in the north and west. Grade 1 and Grade 2 agricultural land represent the best and most versatile land for farming, along with Grade 3a agricultural land (the national maps of agricultural land classification do not distinguish between Grade 3a and Grade 3b agricultural land).
- 3.4.5 Amongst the greatest influences on agricultural land use over the last 25 years or so has been the EU Common Agricultural Policy and the market prices of agricultural commodities. Since the late 1980s, EU agri-environment schemes have funded environmental management by farmers and other land managers. The current agri-environment management options in the Greater Cambridge area include for example: hedgerow planting, management and restoration; provision of buffer strips on cultivated land; provision of permissive access routes; hedge and ditch management, grassland creation and management; field corner management; and restoration of woodland, wood pasture and parkland. Higher Level Stewardship schemes aim to deliver greater environmental benefits in priority areas. There is national evidence from Natural England that these schemes have been effective in many respects but have not yet reached their potential in delivering the full range of ecosystem services and adapting to climate change.
- 3.4.6 Following the UK's exit from the EU, the 2020 Agriculture Act establishes a new agricultural system based on the principle of paying public money to farmers, foresters and other land managers for public goods that provide societal benefits – such as better environmental protection, improved public access to the countryside or higher animal welfare standards. The UK Government has set out a 3 year transition plan that introduces a replacement for the current Environmental Stewardship scheme called Environmental Land Management - see **Section 2.5** for further information.

Natural Environment

- 3.4.7 The current condition of SSSIs in the Greater Cambridge area is mixed due to recreational and development pressures. For example:
- Cherry Hinton Pit SSSI – ‘mostly unfavourable’
 - Traveller’s Rest Pit SSSI - ‘favourable’
 - Therfield Heath SSSI – ‘unfavourable-recovering’
 - Eversden and Wimpole Woods SSSI - ‘unfavourable-recovering’/‘favourable’
- 3.4.8 The 2011 Cambridgeshire Green Infrastructure Strategy notes that habitat loss and fragmentation is a key concern in the broader region, which is influenced by threats from changing farming practices, climate change and development pressures. This includes the removal of hedgerows and drainage of wetlands to accommodate intensive agriculture which has created open landscapes of large fields, often bound by gappy hedgerows and drainage ditches. This has reduced biodiversity habitats and fragmented links between them.
- 3.4.9 In particular, woodland is typically ecologically isolated and there are limited large patches of continuous woodland habitat to aid species dispersal. Initiatives such as the West Cambridgeshire Hundreds Living Landscape Scheme are attempting to reverse the loss and fragmentation of woodlands by helping to support increased habitat connectivity between woodlands within the west of Greater Cambridge (Hardwick Wood, Cambourne Nature Reserve and Hayley Wood) and woodlands in Huntingdonshire.
- 3.4.10 According to the Cambridgeshire Biodiversity Partnership, since the 1930s semi-natural grassland cover has fallen from around 27% to 4.5% in 2018 in Cambridgeshire as a whole (while built-up areas increased from 5.8% to 10.7% of land cover)¹⁶. Initiatives such as the Gog Magogs Living Landscape Scheme aim to create an inter-connected network of species-rich chalk grassland and other habitats.
- 3.4.11 Rivers and wetlands are an important feature of the Greater Cambridge landscape. However, over the last fifty years, factors such as changing agricultural practices, water pollution, engineered flood defences and navigation structures and management have led to loss or decline of wetland species and habitats. Initiatives such as the Ouse Valley Living Landscape Scheme and the National Trust’s ‘Wicken Fen’ project aim to create a network of species-rich flood meadows, floodplain grazing marsh and wet woodland through the expansion and management of existing nature reserves, and the creation of wet grassland for breeding and wintering water birds.

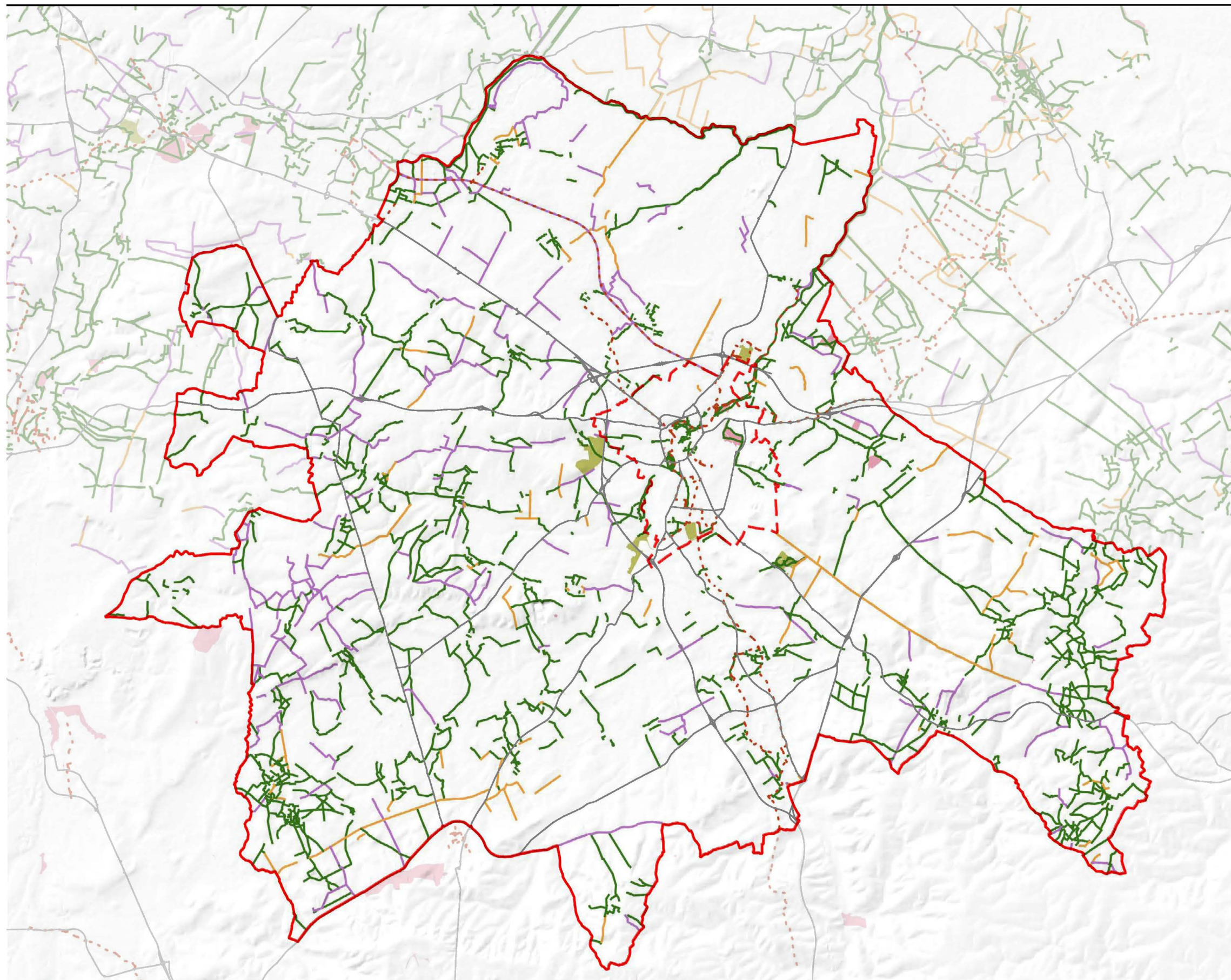
¹⁶ Mapping natural capital and opportunities for habitat creation in Cambridgeshire, Natural Capital Solutions for Cambridgeshire Biodiversity Partnership, 2019

Historic Environment

- 3.4.12 The historic and natural environment are closely connected. The ecosystems of the Greater Cambridge area have been shaped by human activity over time, helping to define landscape character and sense of place. Historic sites can provide valuable evidence of how landscapes have evolved and been managed in the past, providing important learning for the future. The natural and historic environment is valued by local people and visitors for recreation, culture, history, education, tourism, and for religious, aesthetic and spiritual reasons, contributing to people's health and wellbeing. Historic buildings and places provide homes, workplaces and green spaces, and help to conserve the natural environment at those sites. They make vital contributions to the local economy, attracting business, visitors and investment, and underpinning sustainable development.
- 3.4.13 The key concern highlighted by Historic England's 2020 East of England Heritage at Risk Register relates to the number of scheduled monuments in South Cambridgeshire classed as being 'at risk' (14 sites) – largely due to arable ploughing, although extensive animal burrowing, plant growth, and arable clipping are also threats. South Cambridgeshire also has 9 listed buildings or listed places of worship at risk, and 5 Conservation Areas at risk, 4 of which are deteriorating. Cambridge has 1 scheduled monument and 1 listed place of worship at risk. The historic environment is affected by planning and development, farming practices and the impacts of climate change such as flooding. Pests and disease also pose a threat to designed landscapes, historic landscape character, timbers in historic buildings and living botanic collections.

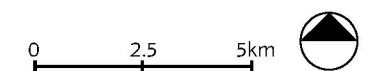
Access to the Landscape

- 3.4.14 There is an increasing body of evidence to demonstrate that regular contact with nature and use of outdoor places for exercise can benefit physical and mental health and wellbeing. Access to the countryside can encourage exercise outdoors, helping to prevent and treat health problems including obesity, cardiovascular disease, chronic stress, depression and anxiety. Contact with nature has particular benefits for children's development and for addressing emotional and behavioural difficulties such as Attention Deficit Hyperactivity Disorder (ADHD). Activities in natural greenspace can also help families and communities to spend time together, strengthening social networks. On the economic side, high quality and wildlife-rich landscapes can reduce health and social care costs, prevent flooding and drive urban regeneration and economic renewal. This will attract visitors and businesses and investment in land and property.
- 3.4.15 There is a well-established network of Public Rights of Way, promoted routes, small areas of open access land and country parks that provide opportunities for people to access and enjoy Greater Cambridge's landscapes, historic villages and the historic University city of Cambridge.
- 3.4.16 As shown on **Figure 3.10**, there is a well-established network of Public Rights of Way, open access land and country parks that provide opportunities for accessing the countryside to experience the landscapes within the Study Area.



- KEY**
- Greater Cambridge Study Area
 - Cambridge City Boundary
 - Open Access Land
 - Country Park
- Public Rights of Way**
- National Cycle Network Route
 - Footpath
 - Bridleway
 - Byway/Restricted Byway
 - Main Roads

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 Cambridgeshire County Council
 South Cambridgeshire District Council



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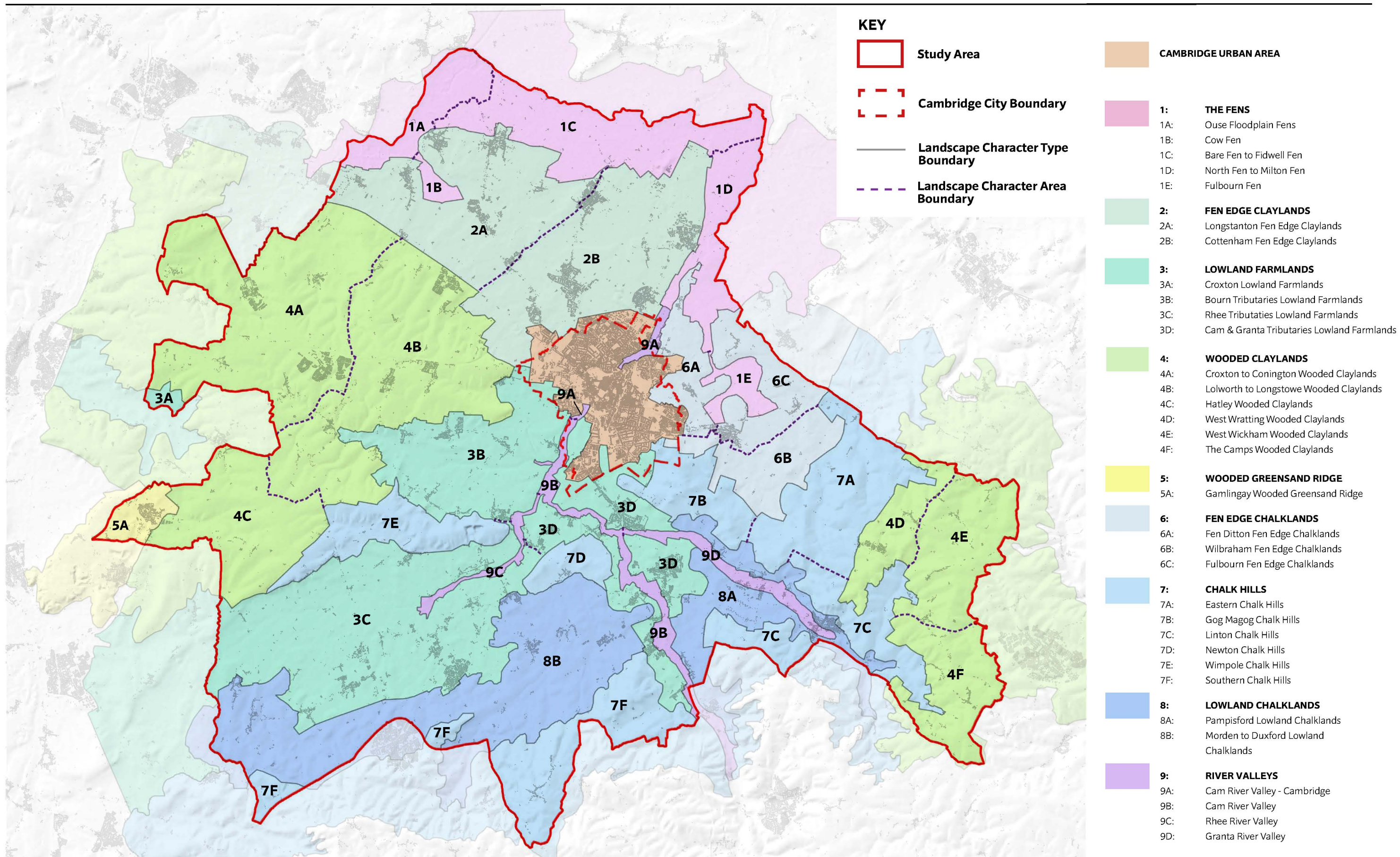
- 3.4.17 Public Rights of Way include: footpaths (a highway over which the public has a right of way on foot only); bridleways (a highway over which the public has a right of way on foot, horseback and on a pedal cycle including mountain-bikes); restricted byways (a highway over which the public is entitled to travel on foot, horseback and with non-mechanically propelled vehicles such as pedal cycles and horse drawn vehicles); and byways open to all traffic (a highway over which the public is entitled to travel on foot, horseback or pedal cycle and by wheeled vehicle of all kinds, including horse-drawn and motorised vehicles; these are routes used by the public mainly for walking or for riding with occasional use by motorised vehicles).
- 3.4.18 There are a number of long distance recreational walking routes in the area including the Fen Rivers Way, Clopton Way, Harcamlow Way, Wimpole Way, Pathfinder Long Distance Walk, and the E2 European Long Distance Path.
- 3.4.19 The 2016 Cambridgeshire Rights of Way Improvement Plan Update (ROWIP) sets out Cambridgeshire County Council's approach to maintaining and enhancing the local rights of way network in accordance with the Countryside & Rights of Way Act (2000). The main objective of the ROWIP is 'to manage, improve and promote a Public Rights of Way network as an integral part of a wider transport system which meets the needs of the whole community for safe sustainable local transport, which improves public health, enhances biodiversity, increases recreational opportunities and contributes to the rural economy'.

4.0 CHARACTER OF THE GREATER CAMBRIDGE LANDSCAPE

Following an overview of the Greater Cambridge landscape classification, this chapter sets out detailed descriptions of the Landscape Character Types and component Landscape Character Areas with recommended guidelines for managing landscape change.

4.1 Landscape Classification

- 4.1.1 The physical and cultural influences described in the previous chapter have combined to create the unique and distinctive character of the Greater Cambridge landscape.
- 4.1.2 The area is characterised by a diversity of landscapes and these variations and differences are represented by nine generic **Landscape Character Types**. Each of the Landscape Character Types has a distinct and homogeneous character that shares broadly similar patterns of physical and cultural attributes in terms of geology, topography, drainage patterns, land cover, ecology and historic evolution. They may occur repeatedly in the Study Area, or in just one place.
- 4.1.3 The Landscape Character Types have been further sub-divided into **Landscape Character Areas**, which are unique, individual geographical areas that share common characteristics with other areas of the same type. Each Landscape Character Area has a distinct and recognisable local identity and sense of place.
- 4.1.4 The Greater Cambridge landscape classification is illustrated on **Figure 4.1** and outlined in **Table 4.1**.
- 4.1.5 The Landscape Character Types and Landscape Character Areas shown on **Figure 4.1** has been prepared in a Geographic Information System (GIS) with mapping undertaken at a scale of 1:25,000. It should however be noted that there are subtle differences between and within the individual types and areas. The boundaries illustrated therefore usually indicate transitions rather than marked changes on the ground.
- 4.1.6 Full details of the methodology used to undertake the Greater Cambridge Landscape Character Assessment can be found in **Appendix 1**.
- 4.1.7 The relationship of the Greater Cambridge landscape classification to Landscape Character Assessments in neighbouring areas is set out in **Appendix 2**.
- 4.1.8 Field survey sheets for each Landscape Character Area are included in **Appendix 4**. These provide detailed information on distinctive landscape features, aesthetic factors, perceptual/experiential factors, distinctive views, key characteristics, evidence of landscape changes and landscape condition.



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Table 4.1 - The Greater Cambridge Landscape Classification

Landscape Character Types	Landscape Character Areas
1. The Fens	1A: Ouse Floodplain Fens 1B: Cow Fen 1C: Bare Fen to Fidwell Fen 1D: North Fen to Milton Fen 1E: Fulbourn Fen
2. Fen Edge Claylands	2A: Longstanton Fen Edge Claylands 2B: Cottenham Fen Edge Claylands
3. Lowland Farmlands	3A: Croxton Lowland Farmlands 3B: Bourn Tributaries Lowland Farmlands 3C: Rhee Tributaries Lowland Farmlands 3D: Cam & Granta Tributaries Lowland Farmlands
4. Wooded Claylands	4A: Croxton to Conington Wooded Claylands 4B: Lolworth to Longstowe Wooded Claylands 4C: Hatley Wooded Claylands 4D: West Wrattling Wooded Claylands 4E: West Wickham Wooded Claylands 4F: The Camps Wooded Claylands
5. Wooded Greensand Ridge	5A: Gamlingay Wooded Greensand Ridge
6. Fen Edge Chalklands	6A: Fen Ditton Fen Edge Chalklands 6B: Wilbraham Fen Edge Chalklands 6C: Fulbourn Fen Edge Chalklands
7. Chalk Hills	7A: Eastern Chalk Hills 7B: Gog Magog Chalk Hills 7C: Linton Chalk Hills 7D: Newton Chalk Hills 7E: Wimpole Chalk Hills 7F: Southern Chalk Hills
8. Lowland Chalklands	8A: Pampisford Lowland Chalklands 8B: Morden to Duxford Lowland Chalklands
9. River Valleys	9A: Cam River Valley – Cambridge 9B: Cam River Valley 9C: Rhee River Valley 9D: Granta River Valley

4.2 Evaluation of the Landscape

Landscape Condition and Strength of Character

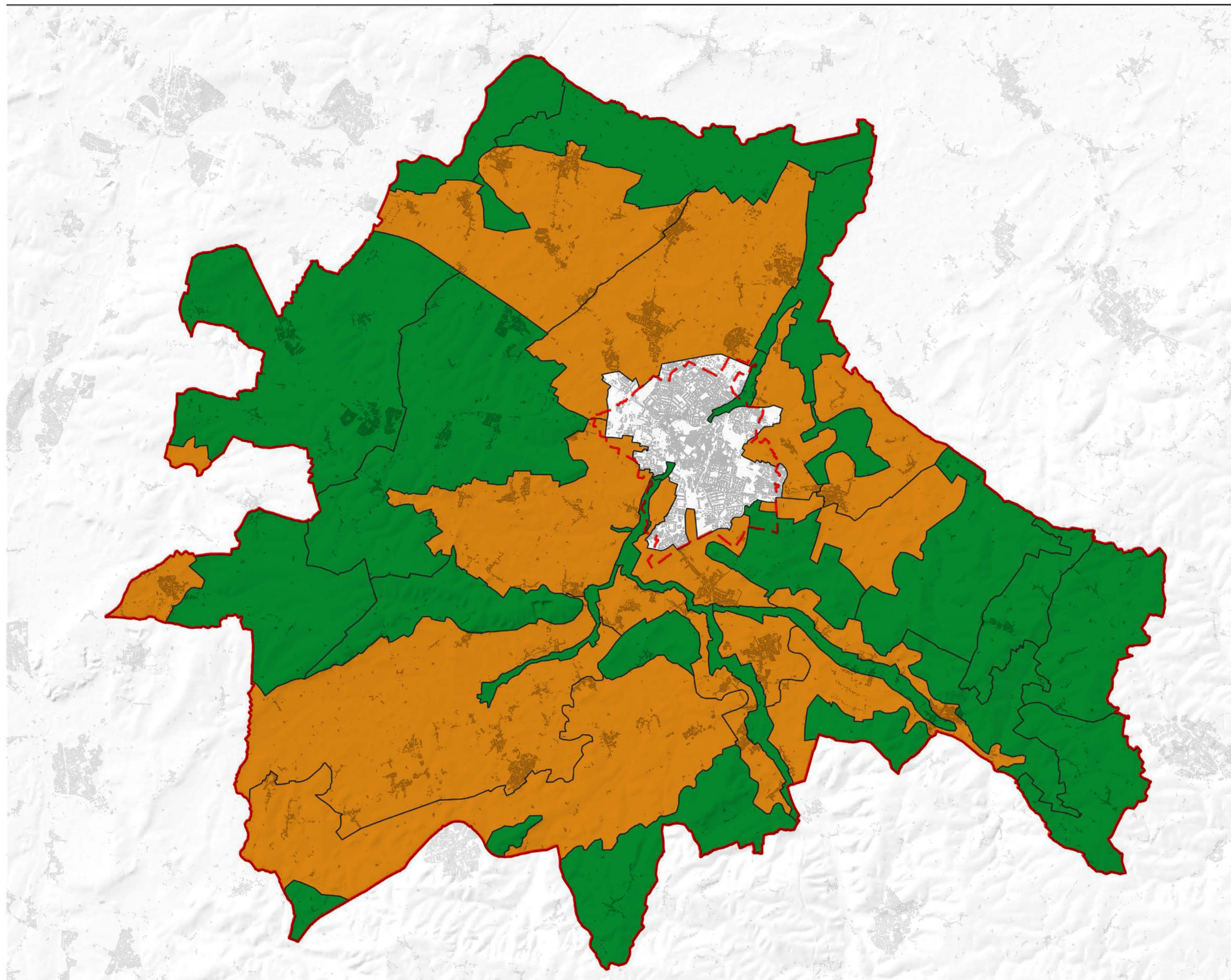
- 4.2.1 The condition of the Greater Cambridge landscape evaluated by Landscape Character Type is shown in **Table 4.2** and mapped on **Figure 4.2** based on judgements about how the condition and intactness of the different components create a perception of the overall condition of the landscape. Using professional judgement, landscape condition is defined on a three-point scale of **poor**, **moderate** or **good**, as evaluated within the character descriptions in **Section 4.7**.
- 4.2.2 The strength of character of the Greater Cambridge landscape evaluated by Landscape Character Type is shown in **Table 4.2** and mapped on **Figure 4.3** based on the combination of individual components and their contribution to landscape character. Strength of character is connected to distinctiveness and landscape integrity. It is based on judgements about how distinct and recognisable the pattern of physical and cultural attributes is that defines the character of the landscape, and the sense of place that they evoke. Using professional judgement, strength of character is defined on a three-point scale of **weak**, **moderate** or **strong**, as evaluated within the character descriptions in **Section 4.7**.

Table 4.2 – Landscape Condition and Strength of Character

Landscape Character Types	Landscape Condition	Strength of Character
1. The Fens	Good	Strong
2. Fen Edge Claylands	Moderate	Moderate
3. Lowland Farmlands	Moderate	Moderate
4. Wooded Claylands	Good	Strong
5. Wooded Greensand Ridge	Moderate	Strong
6. Fen Edge Chalklands	Moderate	Moderate
7. Chalk Hills	Good	Strong
8. Lowland Chalklands	Moderate	Moderate
9. River Valleys	Good	Strong

Key Landscape Sensitivities

- 4.2.3 The key landscape sensitivities of each Landscape Character Type and Landscape Character Area are evaluated within the character descriptions in **Section 4.7**. These provide a framework for informing landscape sensitivity assessments of potential changes from specific development types or land management practices.



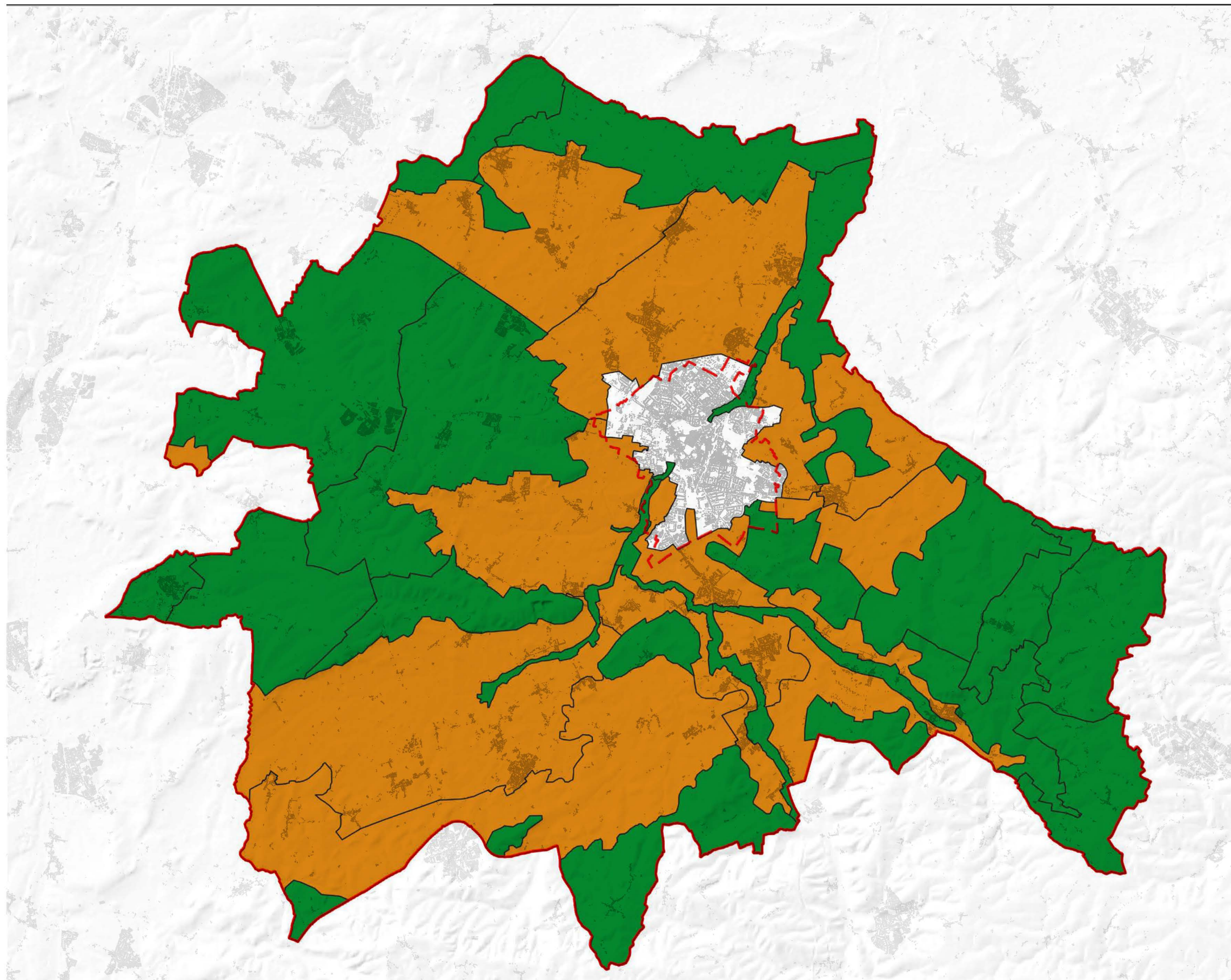
KEY

- Greater Cambridge Study Area
- Cambridge City Boundary

Condition of Landscape Character Types
(see Figure 4.1):

- Good
- Moderate

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KEY

 Greater Cambridge Study Area

 Cambridge City Boundary

Strength of Character of Landscape Character Types (see Figure 4.1):

 Strong

 Moderate

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4.3 Landscape Management Objectives

4.3.1 Taking into account the condition of the landscape and its strength of character, using professional judgement, recommended objectives for managing the Greater Cambridge landscape have been identified for each Landscape Character Type within the character descriptions in **Section 4.7**. In overview, the objectives for each Landscape Character Type are shown on **Figure 4.4** and summarised in **Table 4.3**.

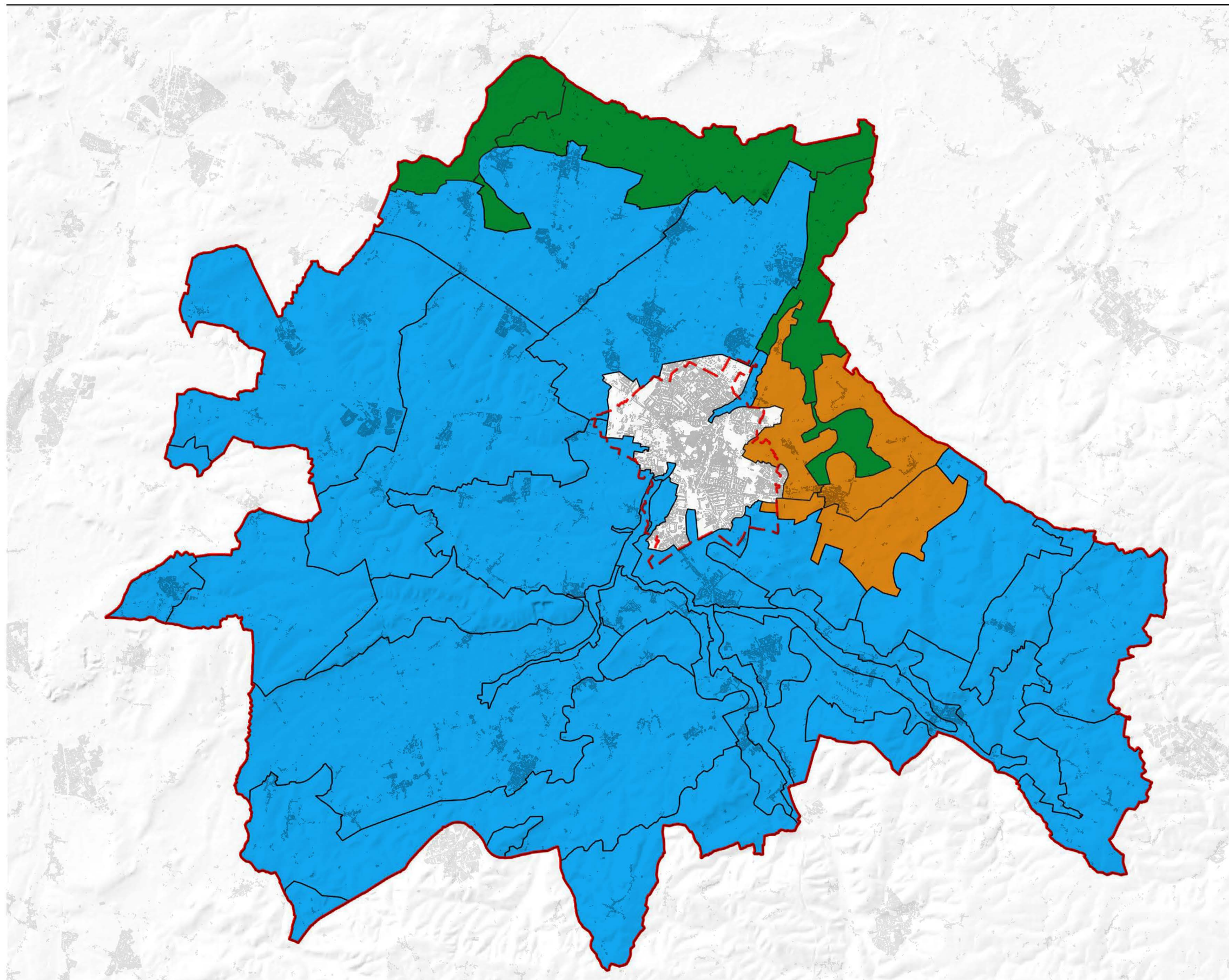
Table 4.3 – Landscape Management Objectives

Landscape Character Types	Landscape Management Objective		
	Conserve	Enhance	Restore
1. The Fens	✓		
2. Fen Edge Claylands	✓	✓	
3. Lowland Farmlands	✓	✓	
4. Wooded Claylands	✓	✓	
5. Wooded Greensand Ridge	✓	✓	
6. Fen Edge Chalklands		✓	✓
7. Chalk Hills	✓	✓	
8. Lowland Chalklands	✓	✓	
9. River Valleys	✓	✓	

4.3.2 The objectives represent different management strategies ranging from conservation of the current landscape in areas of strong character and good condition, to encouraging positive change in landscapes where the character is generally weaker and in poorer condition through enhancement, restoration or creation - as defined below:

- **Conserve:** Landscapes of strong character in good condition and therefore judged to be of high quality where emphasis should be on conservation of existing character and of particular features that contribute to this character. The aim should be to continue the current landscape management regimes and adopt best practice approaches. Great care will need to be taken in the introduction of new characteristics.
- **Enhance:** Landscapes of strong/moderate character in good/moderate condition where the emphasis should be on enhancing existing character. This may include improvements to current landscape management regimes and adopting best practice.
- **Restore:** Landscapes of moderate character in moderate condition where the emphasis should be on restoring elements of historic, ecological and amenity value that have been lost or declined. This may include re-introduction of landscape elements/features in line with best practice.

4.3.3 In some cases, landscape management objectives have been combined to reflect the individual context and requirements of a specific Landscape Character Type. The recommended management objectives are not intended to be prescriptive, and local circumstances should be taken into consideration in developing proposals for landscape change.



KEY

- Greater Cambridge Study Area
- Cambridge City Boundary

Management Objectives for Landscape Character Types (see Figure 4.1):

- Conserve
- Conserve & Enhance
- Enhance & Restore

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- 4.3.4 Whilst not applicable at a Landscape Character Type level, for specific places at a more detailed scale the appropriate landscape management objective may be 'create'. Where the strength of landscape character is weak and its condition is poor, and is not highly valued, the emphasis should be creating a new and different landscape, or accelerating change towards a new character, with positive benefits for people and the environment. This should be proactive rather than reactive, and it may be appropriate to develop plans or strategies in consultation with stakeholders to determine appropriate new character.

4.4 Landscape Guidelines

- 4.4.1 Recommended guidance on landscape management and integrating development into the landscape is provided within the Landscape Character Type and Landscape Character Area Descriptions in **Section 4.7** to help positively shape proposals and decisions in line with the overall landscape management strategy identified for each Landscape Character Type.
- 4.4.2 The aim of the guidelines is to ensure that those landscape features and characteristics identified as making a particular contribution to Greater Cambridge's local distinctiveness and sense of place are appropriately protected, managed and enhanced.
- 4.4.3 The landscape guidelines are not intended to be prescriptive, and local circumstances should be taken into consideration in proposals for landscape change.

4.5 Principles for Managing Positive Landscape Change

- 4.5.1 With regards to the design of development and land management proposals, it is recommended that the following overarching principles for managing positive landscape change are considered. In all cases, the character information about the Greater Cambridge landscape (see **Section 4.7**), South Cambridgeshire's rural villages (see **Chapter 5**) and the environs of Cambridge (see **Chapter 6**) should be used to inform proposals and decision making:
- As the local planning authorities, the Councils should use the relevant character information to assist in the development management process. Development assessed as having potential to have a significant adverse effect on valued characteristics may be a candidate for refusal or require planning conditions that ensure important features/qualities are not diminished

- Avoid a standardised “anywhere” approach to design by using the relevant character information to inform the process of negotiation between planning officers and developers, to support appropriate high-quality design and place making. The Councils should be proactive in helping developers better understand how their proposals can be designed to reflect and enhance local landscape character. For example, officers may use the relevant character information to highlight to developers the characteristic features of the landscape, villages and townscape that should be considered for enhancement, restoration or conservation etc, and identify specific criteria and landscape considerations that a development proposal should take account of prior to approval and subsequently be assessed against
- The Councils should, where appropriate, encourage developers to use local building materials, building styles, native species which are diverse and resilient in the face of climate change, and other characteristic features and elements of a particular landscape to strengthen local distinctiveness
- Developers and other agents for change should be encouraged to adopt creative solutions to conserving and/or enhancing local landscape, village and townscape character, and identify the means by which development and land management proposals might be successfully integrated into the existing landscape character. Consideration should be given to the scale of development, layout and relationship to existing development and field patterns. In addition to informing new development on greenfield sites, the relevant character information should also be used to help identify opportunities for creating new landscapes and restoring habitats on previously developed brownfield sites that offer limited landscape features for new development to refer to
- The Councils should consider the cumulative effects of small-scale development and incremental change on landscape character. Incremental changes can gradually erode landscape character and local distinctiveness if the wider context of a development or land management initiative is not considered. The character information about the Greater Cambridge Landscape in **Section 4.7** highlights key characteristics such as distinctive field patterns, features and settlement patterns that are particularly susceptible to incremental change. This information can also be used, alongside other place-specific guidance such as Village Design Guides and Neighbourhood Plans (see **Chapter 5**), to help identify the means by which such developments may be successfully incorporated into the landscape and enhance particular characteristics

- Developers should be encouraged to use the relevant character information as a baseline resource for informing Landscape & Visual Impact Assessments of development proposals in accordance with the latest edition of the Guidelines for Landscape & Visual Impact Assessment. The impact of development on key landscape features and characteristics should be assessed and where impacts are found to occur, appropriate scheme modification or mitigation measures should be required to avoid, reduce or compensate for potential adverse impacts

4.6 Landscape Planning Policy Recommendations

- 4.6.1 It is recommended that the Councils undertake a review of the current approaches to landscape protection in their adopted Local Plans in light of the Government’s National Planning Policy Framework and Planning Practice Guidance highlighted in **Section 2.5**.
- 4.6.2 In line with the approach taken by the European Landscape Convention, Natural England and recent planning appeal decisions, it is considered that all landscapes have some degree of value and therefore not only landscapes protected by legislation or those which are locally designated in a development plan can be “valued landscapes”.
- 4.6.3 The Councils may wish to consider adopting either a “local landscape designations approach” or a “character-based approach” for meeting their overall objective with respect to landscape policy for protecting and enhancing the character, diversity and natural beauty of all landscapes in Greater Cambridge.
- 4.6.4 Adopting a character-based approach, supported by the Landscape Character Assessment, would require a robust and clearly justified overarching landscape policy for the entire Local Plan area, rather than just for areas protected by local landscape designations.
- 4.6.5 It is recommended that this overarching landscape policy should:
- Highlight the importance of protecting and enhancing the character, diversity and natural beauty of all landscapes in Greater Cambridge
 - Emphasise, wherever possible, opportunities to introduce new landscape features to compensate for loss or degradation elsewhere as a result of a proposal. For example, this might include ensuring that where a particular habitat or area of planting is lost, habitat creation or planting is undertaken at a suitable location close by to offset the loss and in addition provide a net environmental gain
 - Seek to ensure that change is appropriate to the relevant Landscape Character Type and Landscape Character Area, and the features and characteristics that define their local distinctiveness. Where relevant, the experiential and perceptual aspects of landscape character, such as a sense of tranquility, remoteness and wildness, should also be considered

- 4.6.6 The landscape policy should make reference to the Greater Cambridge Landscape Character Assessment, which provides character information and guidelines that can be used to help development proposals respond positively to the distinctive character and valued qualities of the Greater Cambridge landscape, South Cambridgeshire's rural villages and the environs of Cambridge.
- 4.6.7 With regards to criteria-based policies for site allocations in the Local Plan, it is recommended that these include a requirement to provide strategic landscape mitigation and enhancement measures for integrating new development into the surrounding landscape. The site allocation policies should be informed and supported by the relevant character information and associated guidance identified in the Greater Cambridge Landscape Character Assessment, taking into account the principles highlighted in **Section 4.5** as appropriate and the Greater Cambridge Green Infrastructure Opportunity Mapping Study.

4.7 Landscape Character Descriptions

4.7.1 The landscape descriptions set out in this chapter are structured as outlined below:

Landscape Character Types

Location plan and illustrative photograph.

Description:

- Key Characteristics
- Physical Influences
- Biodiversity
- Historic Landscape Character
- Settlement Form and Built Character
- Access to the Landscape

Evaluation:

- Key Landscape Features
- Forces for Change
- Condition
- Strength of Character
- Key Landscape Sensitivities

Landscape Guidelines:

- Guidance for Landscape Management
- Guidance for Integrating Development into the Landscape

Landscape Character Areas

Map, location plan and illustrative photographs.

Description:

- Key Characteristics
- Character Description

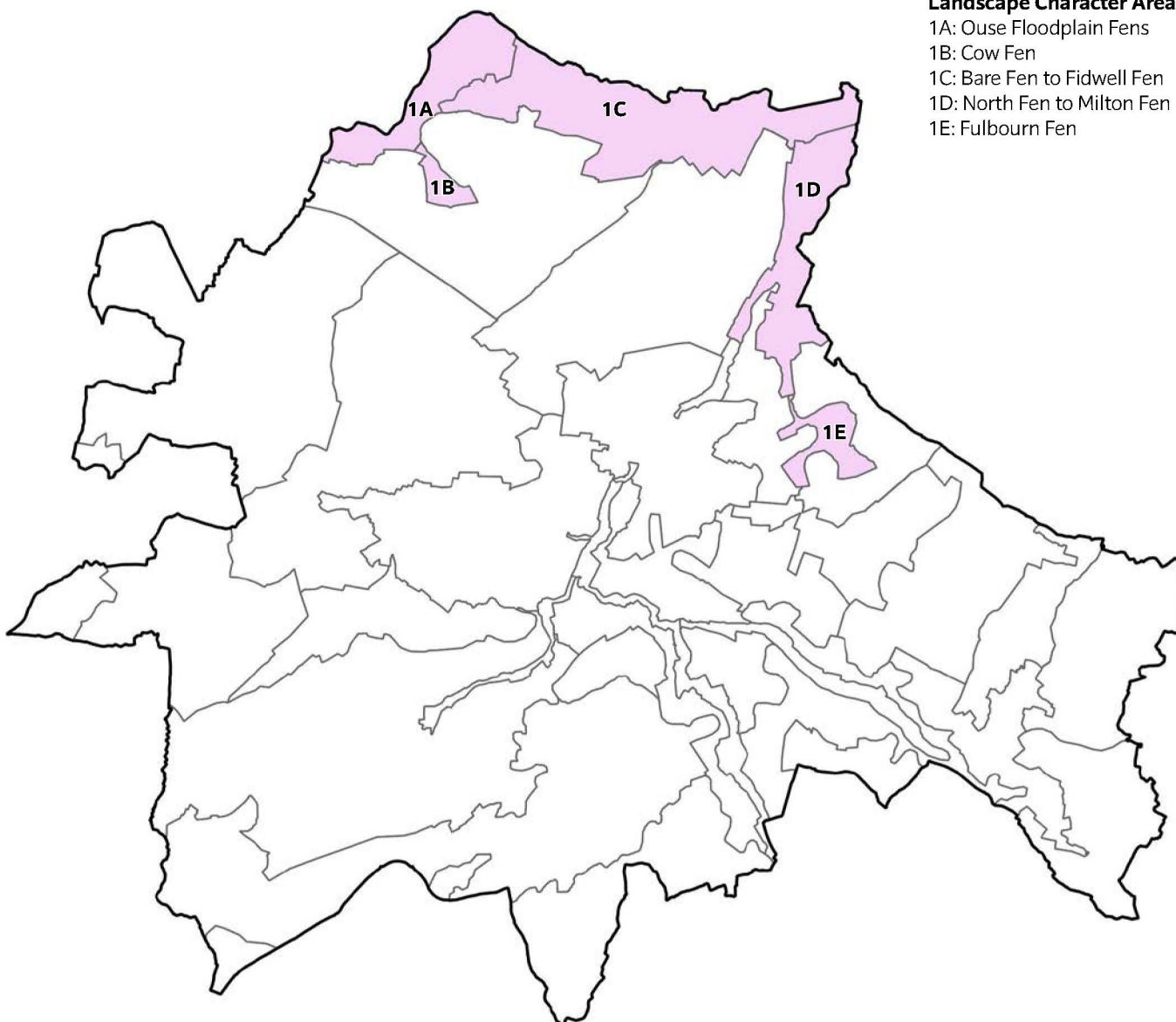
Evaluation:

- Specific Landscape Sensitivities
- Specific Landscape Guidelines

LANDSCAPE CHARACTER TYPE 1: THE FENS

Landscape Character Areas:

- 1A: Ouse Floodplain Fens
- 1B: Cow Fen
- 1C: Bare Fen to Fidwell Fen
- 1D: North Fen to Milton Fen
- 1E: Fulbourn Fen



LANDSCAPE CHARACTER TYPE 1: THE FENS

The Fens Landscape Character Type (LCT) forms part of the extensive and distinctive low-lying, flat and open fenlands with long views and large, dramatic skies, extending northwards through Cambridgeshire to The Wash.

Description

Key Characteristics

- Expansive, flat, open, low-lying fen landscape with extensive vistas and large skies
- Sense of rural remoteness and tranquillity
- Hierarchy of rivers, streams, lodes, drains and ditches that dissect the landscape
- Dominance of arable farming within an open field network bound by straight ditches and dykes that define regimental field patterns
- Distinctive, dark peaty soils
- Haphazard pattern of scattered farms and agricultural buildings
- Sparse woodland cover comprising scattered, small deciduous woodland blocks, isolated field trees and shelterbelts
- Concentration of floodplain grazing marsh and lowland fens priority habitats alongside the rivers and main drains
- Vertical features including the high voltage pylon lines to the northeast and east of the city, telegraph poles and masts are very prominent in the flat landscape

Physical Influences

The Fens landscape within the Study Area is defined by its large-scale, low-lying, flat, expansive landscape divided by numerous drainage ditches, dykes and rivers. The land in this area rarely rises to more than 5m AOD and is predominantly below sea level. Spurs of Fen break up the rising landform along the southern edge of character type, forming island-like features where the clay and chalk geology rises to the surface. The underlying geology of the area is mostly Kimmeridge Clay overlain by Quaternary deposits of silt and peat.

The overlying soils largely comprise loamy, sandy soils with naturally high groundwater. Dark peaty soils are clearly visible with areas of loamy clay, floodplain soils that are fertile and make the area ideal for growing root crops.

The River Great Ouse flows along the northern and western edge of The Fens LCT, continuing east along the District boundary before flowing north of the Study Area and discharging to the Wash estuary. The River Cam flows through the east of the Fen landscape within the Study Area, continuing north and east to join the Great Ouse near Ely. A complex network of straight ditches and dykes define the grid pattern of arable fields and provide ecological links.

Biodiversity

The Fens landscape is characterised by drained fenland and is predominantly under arable cultivation including root vegetables and horticultural crops. Despite this, it also supports a mosaic of wetland habitats including fens, reedbed, wet woodland and patches of grazing marsh in the wider area.

The length of the River Great Ouse within the Study Area is a designated County Wildlife Site (CWS). Fen Drayton Gravel Pits and Middle Fen are designated CWS in the west of the Fen type, adjoining the river. The River Cam is designated as CWS, flowing through the east of the LCT between the northeast edge of Cambridge and The Washes near River Bank in the northeast of the LCT. Chear Lode and Engine Drain are also linear CWS linking south of the River Great Ouse through the Fen landscape.

Wicken Fen is a National Nature Reserve within the Fen landscape, but located to the east of the Study Area. It is a unique remnant of un-drained fenland and is one of Europe's most important wetlands with over 9000 recorded species.

The Cam Washes SSSI is located to the southwest of Wicken Fen, along the River Cam (and District boundary), comprising of pasture that is seasonally flooded. Priority habitats within the SSSI include floodplain grazing marsh, lowland fens and good quality semi-improved grassland.

Priority habitat areas that are scattered across the Fen landscape include floodplain grazing marsh, lowland fens, good quality semi-improved grassland, with concentrations of these habitats in proximity to the rivers and main drains.

Overall, woodland cover is sparse with a few scattered, small woodland blocks, isolated field trees and occasional shelterbelts. There are infrequent, small blocks of priority deciduous woodland habitat in The Fen landscape. There are a number of group Tree Preservation Orders in the southwest of the LCT, protecting a well-defined, intact hedgerow pattern around the fields at Bare Fen.

Historic Landscape Character

The Fens are a complex landscape, produced from draining the tidal basin of the Wash. It has undergone continual transformation since the last ice age, with the balance between saltmarsh, fen, bog and woodland altering with each associated sea level change. The management of the Fenland was achieved in three principal phases over the last 2000 years. During the Roman period, the sea wall around the Wash was constructed, which enabled rural settlement generally along higher ground and along levees of streams and rivers. The main economic activities were salt production, using fen peat and the tidal salt water in the brooks, and the rearing of sheep and cattle.

In the early Middle Ages, areas of the fenland began to be drained, which created extensive areas of pasture and contributed to a wealthy fenland economy through the production of meat, butter, wool, livestock and traditional products of reed, sedge and peat. The Lodes system including the artificial, navigable water courses of Lodes Reach, Bottisham, Swaffham Bulbeck, Swaffham Prior and Burwell in the east, is an example of medieval management of the Fenland. The lodes are recognised as historic monuments in the area; embanked on both sides, fed by catchwater drains or managed streams and associated with wharves, hythes and basins. It is considered likely that they were likely established for water management and latterly local transport¹⁷.

¹⁷ *The Cambridgeshire lodes', in An Atlas of Cambridgeshire and Huntingdonshire History, ed. T. Kirby and S. Oosthuizen (2000)*

The late 16th and 17th centuries saw the introduction of new drainage systems in the Fenland. Drainage designed by Vermuyden and implemented in the 17th century with an elaborate system of drains and river diversions including the construction of the Ouse Washes to the north of the Study Area. The scheme enabled deep drainage of the fen landscape, resulting in a conversion of pasture to arable cultivation across a pattern of regular, rectangular fields still predominant in the present landscape. Drains, banks and wind pumps were introduced throughout the fens at this time.

By the early 18th century, lowering land levels resulted in the middle level rivers to be embanked and there were further attempts to drain the fens. The mid-19th century saw the introduction of steam pumps and pumping stations with large brick chimneys, some of which survive today.

Ongoing shrinkage of the peat from farming and draining continues to expose sites of archaeological significance, particularly around the Fen islands and edges. Examples of early drainage attempts are visible via cropmarks, earthwork survey and fieldwork interventions.

The regimental field patterns formed by long, straight drains and roads have generally removed traces of the historic landscape from the current view. Exploitation of the rich peaty soils has resulted in the pattern of recent and modified enclosures.

Settlement Form and Built Character

There is a strong history of occupation of The Fens, with much of the present-day settlement pattern attributed to post-medieval settlement of the landscape.

Arable agriculture dominates The Fen landscape and economy of the area. A haphazard pattern of settlement is superimposed on the regimented, regular drainage and field patterns. Isolated farmsteads, agricultural storage buildings and loose-knit hamlets are scattered across The Fen landscape and are often prominent against the large, changing sky. Narrow lanes and driveway tracks link between the properties and connect to the Fen Edge villages.

The Fen islands and edges that rise above the flat landscape have provided an historic focus for larger settlements, such as Aldreth to the north, Willingham to the south and Burwell to the east of The Fens LCT.

Access to the Landscape

A small number of roads transect The Fens landscape, generally linking in a north-south direction between settlements around the north of Cambridge towards Ely and the outlying villages. There are limited crossings of the numerous drains and River Great Ouse to the north.

Occasional minor roads link from the main routes to join farm access tracks along causeways and drains. There is a higher concentration of long, straight, minor roads in the east of The Fens LCT, between the villages on the edge of The Fens and the River Cam.

Public Rights of Way (PROW) are limited and generally follow the farm access tracks and main drains along embankments and causeways. They link north to the footpaths and crossing points of the River Great Ouse. The Ouse Valley Way long distance path follows the north bank along the length of the River Great Ouse, beyond the Study Area. The Pathfinder Long Distance Walk follows the east bank of the River Great Ouse in the west of the LCT, between the gravel pits and lakes. There are limited attractions within the LCT. There are a small number of Scheduled Monuments, with occasionally visible earthworks.

Evaluation

Key Landscape Features

- Sense of remoteness and tranquillity created by expansive, low-lying landform and limited settlement
- Hierarchy of numerous water courses and drainage channels
- Areas of species rich floodplain grazing marsh and lowland fen habitats
- Variety of preserved archaeological evidence protected by the peat
- Historic landscape with a number of preserved tracks, droveways, medieval lodes and ridge and furrow
- Dominance of arable and horticultural land use with sparse tree cover

Forces for Change

- Ongoing mineral extraction site in the north of the area and subsequent restoration as a wetland landscapes; altering the open arable fields and creating a more diverse, organic wetland mosaic
- Intensive arable agriculture has resulted in field expansion and removal of key habitats including hedgerows. Changes in agri-environmental schemes and agricultural subsidies could result in further fragmentation of ecological networks and conversion/expansion of farmsteads
- Neglect of characteristic ditch networks due to changes in drainage and land use
- Climate change could lead to further shrinkage of peat, which would alter the ecological networks, and increased frequency of flooding resulting in shift in species composition and requiring alterations in management
- Modern development on settlement margins within the adjoining Fen Edge landscapes that could result in conspicuous built form and uncharacteristic planting, which would intrude on the tranquil and open landscape of The Fens
- Development of large scale farm buildings due to intensification of farming practices

Condition

The Fens LCT is an intensively farmed LCT. However, it remains rich in geodiversity and archaeology. The landscape has a strong, distinctive geometric/rectilinear landscape pattern that is a result of a long history of land management that also provides an important ecological network. The overall condition of the landscape is perceived to be **good**.

Strength of Character

This is a landscape of **strong** character. The flat, low-lying landform with distinctive hierarchy of drainage channels, regular field pattern and limited settlement with sparse tree cover create a landscape with a sense of remoteness and tranquillity. The strong character also relates to the historic associations and various features present in the landscape including historic droveways, dykes and lodes.

Key Landscape Sensitivities

- Sense of remoteness and tranquillity
- Hierarchy of water courses and drainage channels that provide valuable networks of wetland habitat
- The openness of the low-lying fens and panoramic views have a high visual sensitivity to change
- The mosaic of ecological sites and habitats including grazing marsh, deciduous woodland and lowland fens
- Dispersed, sparse settlement pattern

Landscape Guidelines

The overall management objective for The Fens LCT should be to **conserve** the inherent openness, distinctive land patterns and tranquillity of The Fens landscape and its important ecological and historic features.

Guidance for Landscape Management

- Conserve the sense of remoteness and isolation
- Conserve and enhance existing watercourses, drains, ditches and dykes to maintain historic features and enhance the ecological value of the farmed landscape
- Conserve areas of grazing marsh, good quality semi-improved grassland, scattered deciduous woodland and lowland fens of high ecological value
- Conserve and enhance existing hedgerows and consider opportunities for re-planting hedgerows where these have been lost/become fragmented
- Protect the sites and features of archaeological and historic interest
- Encourage opportunities to recreate areas of wet fenland landscapes
- Manage the agricultural landscape and soils both for production and opportunities to improve biodiversity

Guidance for Integrating Development into the Landscape

- Conserve the sense of isolation and tranquillity, with sparse settlement and road network and limited visible development
- Avoid incremental development on the flat, low-lying fen
- Ensure new developments are integrated by wide hedgerows, copses and shelterbelt planting reflecting the local mixes
- Ensure new developments integrate/connect with existing Public Rights of Way (PROW)
- Ensure new developments reflect the form, scale and proportions of the existing vernacular buildings of the area and pick up on the traditional building styles, height, materials, colours and textures of the locality
- Retain hedges and introduce them as boundaries alongside roads outside village cores
- Integrate water features, such as ditches, dykes and ponds, into new developments
- Avoid the use of standardised and intrusive urban materials, street furniture, lighting and signage as part of traffic calming measures wherever appropriate

LANDSCAPE CHARACTER AREAS

- **1A: Ouse Floodplain Fens**
- **1B: Cow Fen**
- **1C: Bare Fen to Fidwell Fen**
- **1D: North Fen to Milton Fen**
- **1E: Fulbourn Fen**

1A: OUSE FLOODPLAIN FENS LANDSCAPE CHARACTER AREA

The Ouse Floodplain Fens Landscape Character Area (LCA) is a broad, flat landscape dominated by extensive lakes and wetlands.

Description

Key Characteristics

- Broad, flat, floodplain landscape to the south of the River Great Ouse
- Extensive gravel pit lakes and wetlands have transformed much of this landscape
- Belts of trees, hedgerow trees and areas of woodland around waterbodies combine to create localised visual enclosure
- Highly accessible landscape with a network of Public Rights of Way and cycle routes through and around the lakes
- Archaeologically rich landscape with a strong sense of place associated with the historic droveways and drains/lodes connecting to the Fen Edge villages

The Ouse Floodplain Fens LCA is a broad, flat floodplain landscape at c.5m AOD that extends north into Huntingdonshire. A network of straight, historic ditches and drains connect the Fen Edge villages with the River Great Ouse which forms the northwestern boundary of the Study Area.

This is a rural area that has been altered by ongoing gravel extraction, interrupting the open fields of the fens. The former waterlogged fen has been transformed into a distinctive network of gravel pit lakes and wetlands, particularly around Fen Drayton. Extraction and transformation are ongoing in the north of the area. The gravel pit lakes at Fen Drayton are now an RSPB managed nature reserve designated as a County Wildlife Site (CWS), comprising a mosaic of lakes, meadows and reedbeds. The lakes are enclosed by the surrounding woodlands and are separated from the wider village and arable farmland context. Between extraction sites, fields are rectilinear and organised in a particularly regimented pattern north of Swavesey, becoming larger and more irregular in the northeast of the LCA. The droveways, drains and lanes are often bound by hedgerows and trees, and the banks of the River Great Ouse are well wooded, contributing to localised visual enclosure and framed views across the open fields.

This is largely an unsettled landscape with occasional, small, isolated farms. Church spires and lines of poplars are evidence of villages on raised land to the south. There is also limited vehicular access through this area, which results in a generally strong sense of isolation and tranquillity. This is impinged upon in part, by ongoing extraction in the north of the area. It is a highly accessible recreational landscape, particularly around Fen Drayton lakes and along the River Great Ouse. There are a variety of Public Rights of Way and cycle routes, with public car parks at the nature reserve. The Cambridgeshire Guided busway also connects through Fen Drayton, with a stop at the centre of the reserve.

There is strong evidence of historic human occupation and settlement in this area, dating from the Palaeolithic and Neolithic periods. By the Late Saxon-medieval period an open field system surrounded the Fen Edge villages and straight droveways connected the villages to common pastures on the fen. The historic droveways and lanes contribute to the strong sense of place and historic sense of territory associated with this character area.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

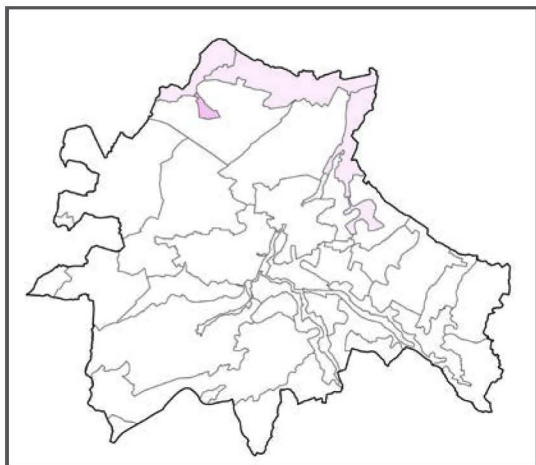
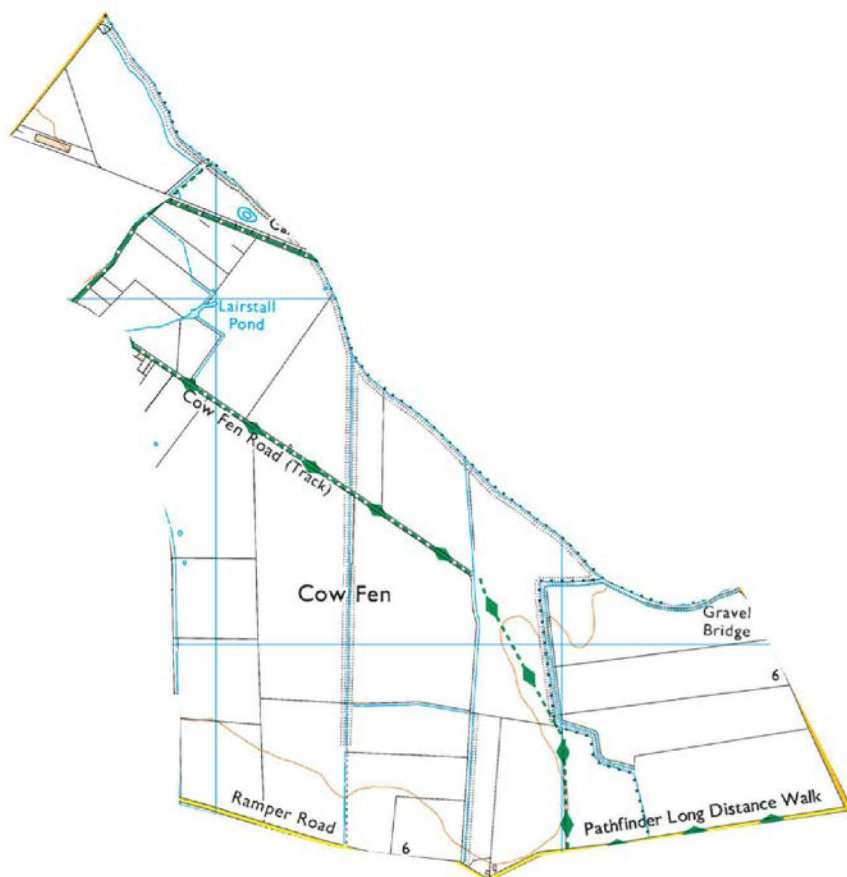
- Gravel pit lakes and wetlands unique in The Fens
- Accessible landscape that is valued for recreation, particularly access to the nature reserve and lakes
- Localised enclosure established by woodlands and belts of trees around the restored wetlands and linking along the river and hedge and tree boundaries along droves and fields
- The distinctive historic droveways and drains that contribute to the area's sense of place

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Retain historic field patterns including pockets of medieval bowl barrows, and associated landscape features including the droveways, lanes and hedgerows
- Encourage opportunities for replanting hedgerows and trees in areas where historic structure is becoming fragmented
- Create and manage new wetland habitats as part of the restoration of former extraction sites
- Conserve framed views across the open fields towards the banks of the River Great Ouse

LANDSCAPE CHARACTER AREA 1B: COW FEN



1B: COW FEN LANDSCAPE CHARACTER AREA

Cow Fen Landscape Character Area (LCA) is a pocket of low-lying, unsettled fen landscape with predominantly large scale, regular arable fields that provides a sense of separation between villages on the fen edge.

Description

Key Characteristics

- Regimented pattern of arable fields defined by drains and low, mature hedgerow boundaries
- Large-scale landscape with mature hedgerow boundaries, occasional tree belts and hedgerow trees
- Generally unsettled landscape comprising isolated, small farms
- Sense of isolation and separation of the rural landscape between the Fen Edge village

Cow Fen is a broad, flat, floodplain landscape at c. 5m AOD. Distinctive linear drains associated with past occupation of The Fens lead to Swavesey Drain on the northeastern edge.

It is a strongly rural area with a sense of separation from nearby settlements. It is a predominantly large-scale, arable landscape with pockets of small scale, more intimate pasture to the north, in proximity to the historic core of Swavesey. A large-scale, regular, rectilinear field network is defined by a combination of linear drains, ditches and mature hedgerows supplemented with occasional hedgerow trees and narrow tree belts.

This is an unsettled landscape, with a distinctive sense of separation between the villages in neighbouring LCAs. The hedgerows, isolated trees and narrow tree belts combine to create open views across the open fields towards well wooded horizons. Views include well screened individual farms and edge of village properties on the rising contours of the Fen Edge Claylands landscape. The edge of the new development in Northstowe becomes apparent to the southeast. Church spires, a telecommunications mast and trees on the horizon are occasional vertical features which break the skyline.

There is limited accessibility and an overall sense of remoteness and isolation within this character area. The Pathfinder Long Distance Walk links through this character area, between the former RAF Pathfinder stations. A short length of the Cambridgeshire Guided Busway passes through the north of the site. It is well integrated and not intrusive.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

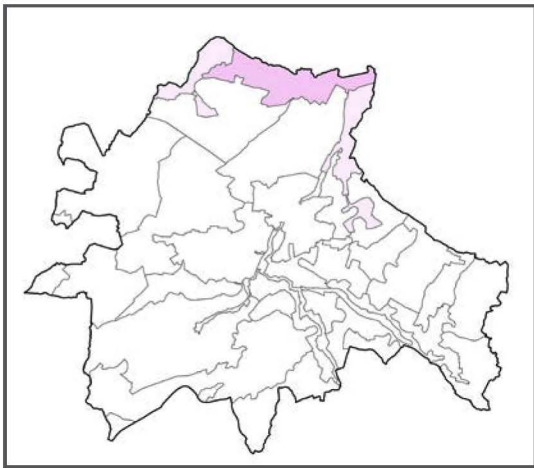
- Mature hedgerow network in addition to drains and ditches providing enclosure
- Sense of separation between the rural landscape between the Fen Edge villages

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve open views across fields to well wooded horizons through management of existing hedgerows and tree belts
- Conserve the distinctive sense of rural isolation and separation between the Fen Edge Clayland villages

LANDSCAPE CHARACTER AREA 1C: BARE FEN TO FIDWELL FEN



1C: BARE FEN TO FIDWELL FEN LANDSCAPE CHARACTER AREA

Bare Fen to Fidwell Fen Landscape Character Area (LCA) is a large, open swathe of planned peat fenland with occasional isolated settlement and a distinctive, irregular arable field pattern defined by drains.

Description

Key Characteristics

- Open, low-lying, flat floodplain landscape with expansive, panoramic views to distant horizons
- Regular, rectilinear enclosure pattern defined by drains, dykes and lodes that are evidence of historic occupation of The Fens
- A landscape with sparse woodland cover, in which fragmented hedgerows, isolated trees and shelterbelts are visually prominent
- Settlement is limited to isolated farms, with occasional small, linear settlements along the roads

Bare Fen to Fidwell Fen is a broad, flat floodplain landscape at c. 5m AOD that extends north into East Cambridgeshire District. Within the Study Area, it is found between the southern banks of the River Great Ouse and the villages of the Fen Edge Claylands that rise to the south. Distinctive 17th-19th century drainage schemes including ditches, drains and lodes are still present and characteristic of the flat horizontal landscape today.

Arable agriculture dominates the landscape with occasional, traditional orchards towards the Fen Edge Claylands. This is a large-scale, open landscape with a strong, regular pattern of rectilinear fields defined by complex network of long, straight ditches, drains and droves. There is limited tree cover, limited to infrequent patches of deciduous woodland and scrub, and discrete tree belts around farmsteads. There are limited hedgerow boundaries and those that are present are generally fragmented and heavily trimmed. The limited vegetation cover gives rise to expansive, panoramic views of a flat landscape with particularly distinctive large, dramatic skies that are often punctuated by vertical elements such as communication poles and wires, conifer tree belts and occasional larger, modern farm buildings.

Superimposed on the organised drainage pattern is a more haphazard pattern of scattered settlement and tree cover. This is the most settled of the Fen LCAs. Settlement largely comprises isolated individual farms accessed along drove tracks, with occasional clusters of cottages along the country lanes. Access is limited to long, predominantly straight minor roads and Public Rights of Way (PROW). Roads generally follow the route of historic droveways and PROW generally follow the route of historic tracks from villages in the Fen Edge Chalklands into The Fens.

This is a complex landscape that has undergone continual transformation. Earthworks including Aldreth Causeway, Belsar's Hill and pockets of ridge and furrow are evidence of widespread early prehistoric habitation.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

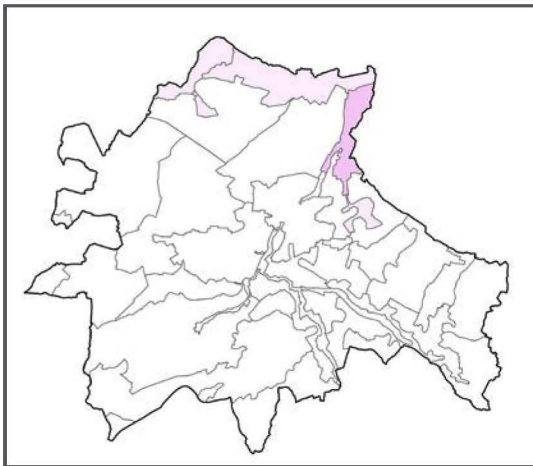
- Particularly distinctive, historic network of ditches, drains, tracks and droves that define the regimented, open field pattern
- Limited vegetation providing expansive, panoramic views
- Dispersed pattern of small farms and cottages in the large-scale, rural landscape

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Limit the introduction of large, modern farm buildings that would be prominent in the vast landscape
- Conserve and manage the characteristic isolated trees and patches of woodland through small scale planting
- Conserve the open, expansive landscape and large, generally uninterrupted skies through careful consideration for location of new development and particularly tall/vertical structures

LANDSCAPE CHARACTER AREA 1D: NORTH FEN TO MILTON FEN



1D: NORTH FEN TO MILTON FEN LANDSCAPE CHARACTER AREA

North Fen to Milton Fen Landscape Character Area (LCA) forms the sparsely settled floodplain along the length of the River Cam with a generally regular field pattern and strong linear features.

Description

Key Characteristics

- Broad, flat, floodplain landscape with wide views often punctuated by tree groups and framed by shelterbelts
- Distinctive regular, rectilinear field pattern defined by a combination of ditches, drains and hedgerow boundaries with frequent tree shelterbelts
- Smaller fields along the green corridor following the River Cam, where there is a sense of separation between Milton and Horningsea
- Pockets of ecologically rich landscape including grazing marsh along the course of the River Cam
- Limited settlement comprising small, scattered farms strung out on the high land alongside roads
- Electricity pylons are very prominent, providing a strong contrast to the flat landscape

North Fen to Milton Fen forms part of the broad, flat floodplain of the River Cam at c. 5m AOD. It is part of a larger character area which extends into East Cambridgeshire District. Within the Study Area, The River Cam forms the boundary in the southwest and northeast, and a network of ditches and drains define the regular field pattern.

It is a predominantly arable landscape with a regimented, generally small- scale field pattern defined by a network of small, straight ditches and drains. There is some variation from this in the south of the area, to the east of Horningsea, where there is a localised less regular and larger scale field pattern. This correlates with change in bedrock and the transition from the peaty fenlands to the Fen Edge Chalklands. Vegetation cover is greater than in the other Fen LCAs. Fields, roads and tracks are often bound by hedgerows with occasional trees. Tree shelterbelts and lines of willows and poplars along the River Cam combine with boundary vegetation to give the sense of more densely treed horizons and often frame open views across the fields. A variety of habitats contribute diversity to the landscape character of this area, particularly small enclosures of grazing marsh along the River Cam and scattered patches of deciduous woodland. Stow Cum Quy Fen is an important reserve and SSSI in the south of the area, comprising a well-managed, mosaic of habitats including lowland calcareous grassland, open water reedbed and scrub with woodland and grazing marsh.

Settlement is relatively limited, particularly in the south of the area. It is characterised by scattered farms strung out on the high land alongside roads. Most buildings are of brick construction and date from the draining of the land in the 18th and 19th centuries. Properties are regularly bound by hedge and tree shelterbelts, which contribute to the diversity of the landscape and break up the skylines in this area. Electricity pylons and occasional telecommunication poles are vertical features which break the horizon and provide a strong contrast to the flat landscape.

Milton and Waterbeach are large villages in the Fen Edge Claylands to the west of the area, and this LCA contributes to their setting. The green corridor along the River Cam provides a distinct green corridor which contrasts with the edges of these settlements, and a sense of separation between Milton and Horningsea. Modern expansion has taken place around the historic village cores and urban elements stand out on the edge of the fen in places. Distinct linear features include the railway and the sparse network of roads which follows historic droveways, as well as the pattern of enclosure, which contrast with the sinuosity of the River Cam.

This is a relatively accessible landscape, in particular there are a number of walking and cycling routes along the River Cam into Cambridge and continuing north towards Ely. The historic route of the Harcamlow Way passes through the south of this area. It offers good connectivity with paths along the River Cam and continues east and south to link with a number of historic features and sites.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

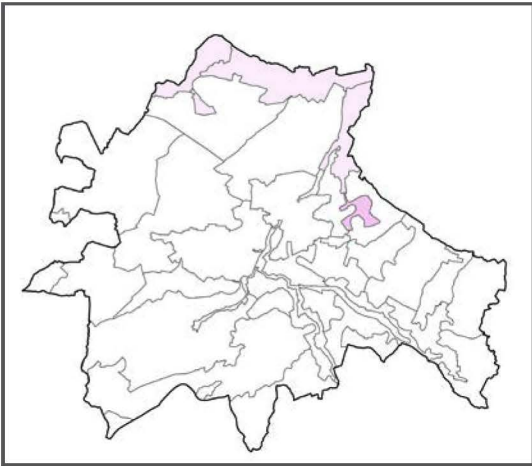
- Distinctive regular, rectilinear field pattern defined by a combination of ditches, drains and hedgerow boundaries with frequent tree shelterbelts
- Tree shelterbelts and lines of willows and poplars along the River Cam that give the sense of more densely treed horizons and frame open views across the landscape
- Smaller fields along the green corridor following the River Cam, where there is a sense of separation between Milton and Horningsea
- Diversity of vegetation cover and habitats that contribute to localised variation and ecological value in the expansive, intensively farmed Fen landscape

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve framed, open views across the landscape through management of existing hedgerows and shelterbelts
- Conserve and manage priority habitats as part of localised variations in landscape pattern and features
- Ensure development enhances existing landscape features, creates links between villages and recreational assets and is in keeping with the open, rural character

LANDSCAPE CHARACTER AREA 1E: FULBOURN FEN



1E: FULBOURN FEN LANDSCAPE CHARACTER AREA

Fulbourn Fen Landscape Character Area (LCA) is a pocket of sparsely settled low lying landscape forming part of the floodplain to Quy Water and Little Wilbraham River.

Description

Key Characteristics

- Quy Water/Little Wilbraham River cuts a distinctive sinuous, tree-lined route through the landscape
- Willow trees along watercourses are prominent skyline features
- Local sense of enclosure provided by tree and scrub vegetation and sloping landform of the surrounding Fen Edge Chalklands LCA
- Ecological diversity from a combination of floodplain grazing marsh, lowland fen, deciduous woodland and semi improved grassland
- Electricity pylons are very prominent, providing a strong contrast to the flat landscape

Fulbourn Fen is a generally open, flat landscape at c. 10m AOD that forms part of the floodplain to Quy Water and Little Wilbraham River. These watercourses cut a more sinuous route through the landscape, in contrast to the network of straight droveways, drains and ditches that define the characteristic, regular field pattern.

The landscape is characterised in part by the distinctive regimented, rectilinear arable field pattern common to The Fens, in combination with areas of wetland vegetation. South of the watercourses, the field pattern is generally more irregular with some larger fields. Soils appear chalkier in this character area, as a result of change in the underlying bedrock from clays to chalk and more limited superficial deposits. Watercourses in this area are often lined with hawthorn scrub or large willow trees, which form prominent features on the local skyline. There is a higher concentration of deciduous woodland than other LCAs within The Fens. Combined with scrub and trees along watercourses, this results in localised visual enclosure that is often enhanced by the sloping landform of the adjoining Fen Edge Chalklands.

Settlement is limited to isolated farms and occasional dwellings along the roads that pass through the edges of the area. There are no other roads within this area and there is a sense of isolation. Electricity pylons and occasional telecommunication poles are vertical features which break the horizon and provide a strong contrast to the flat landscape. A small number of Public Rights of Way (PROW) follow historic droveways in the north of the area, which are remnant connections between the village of Little Wilbraham and former common pastures. The historic route of the Harcamlow Way also passes through this area, following the route of Quy Water/Little Wilbraham River and connecting several heritage and nature features and sites in adjoining character areas.

Great Wilbraham Common is a publicly accessible area of Common in the east of the area. It is a designated SSSI and is one of the largest remaining, species-rich grasslands in Cambridgeshire. There is a further, large SSSI at Wilbraham Fens in the north of the area, which is a large area of fen and neutral grassland.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

- Scattered deciduous woodland, scrub and tree lined watercourses are characteristic of this area and contribute to local sense of enclosure and separation

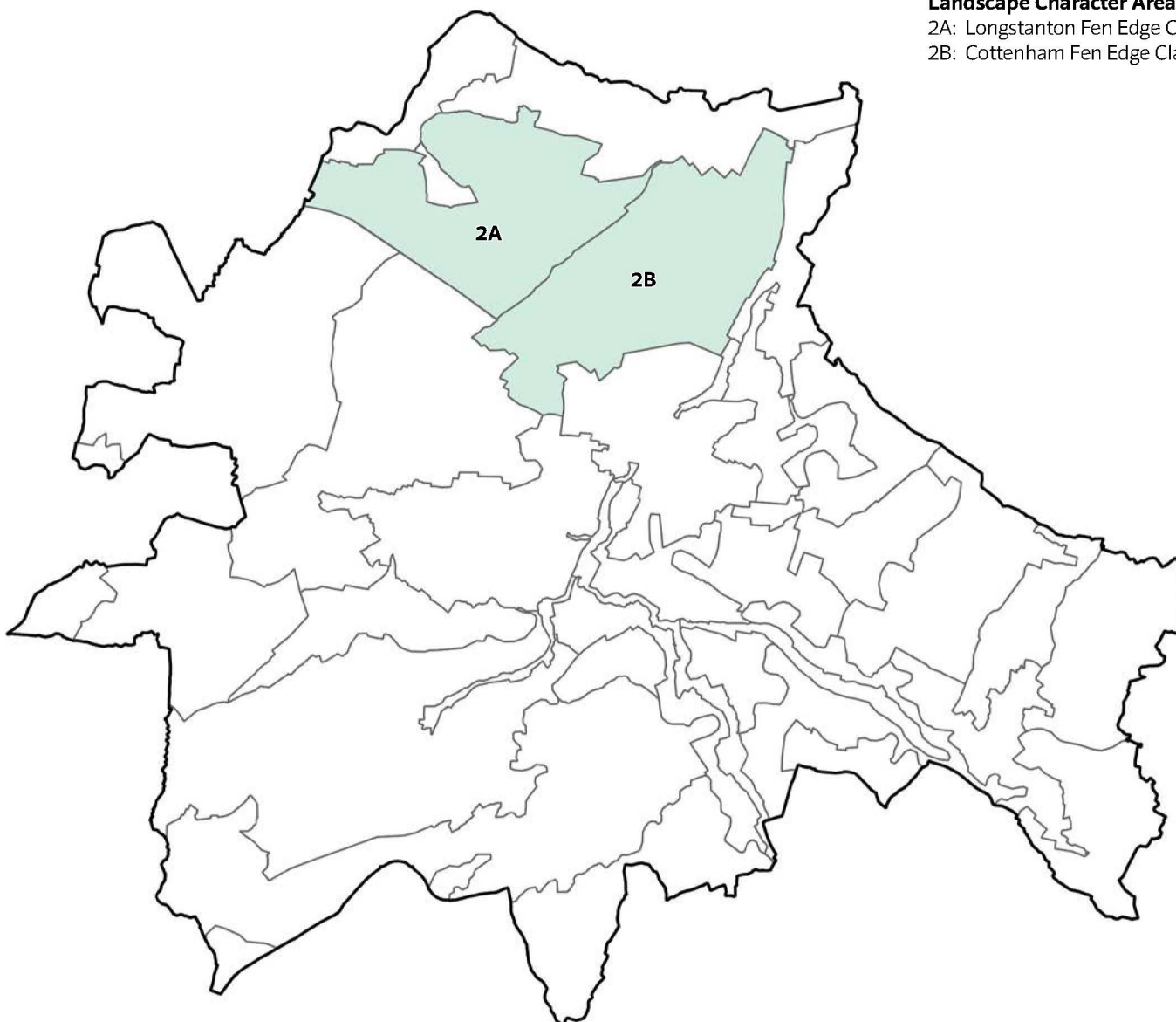
Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Manage deciduous woodland, scrub and trees along watercourse to maintain the sense of enclosure and separation

LANDSCAPE CHARACTER TYPE 2: FEN EDGE CLAYLANDS

Landscape Character Areas:
2A: Longstanton Fen Edge Claylands
2B: Cottenham Fen Edge Claylands



LANDSCAPE CHARACTER TYPE 2: FEN EDGE CLAYLANDS

The Fen Edge Claylands Landscape Character Type (LCT) is a transitional, predominantly arable landscape with large scale, open fields, orchards and villages built on “islands” of high ground.

Description

Key Characteristics

- Low-lying, gently undulating landscape with extensive vistas and large skies
- Gradually rising landform, south from the edge of The Fens, which adds a prominence to the Fen Edge villages in places
- Large-scale, open field system defined by a hierarchy of drains, ditches and lodes
- Predominantly arable farmland supplemented with small scale pastoral field patterns around settlement edges
- Little vegetation cover, limited to dispersed fragments of deciduous woodland, scattered traditional orchards and gappy hedgerows
- Hedgerows, shelterbelts and small clumps of trees create a distinctive, localised vegetation pattern in proximity to villages
- Orchards are a distinctive feature, particularly around the settlements
- Dispersed settlement pattern of villages on raised landform at the edge of The Fens and individual farms and cottages.

Physical Influences

The Fen Edge Claylands landscape is relatively low-lying, with very gradual variation in a general north-south direction from c.5m AOD adjoining the Fen landscape, to c.20-30m as it transitions to the more distinctly rising Claylands.

The underlying geology varies from Jurassic and Cretaceous Clays with pockets of overlying River Terrace Deposits in the west to Lower Greensand and Upper Greensand with a greater concentration of surface River Terrace Deposits in the east. The variation in underlying geology is not reflected within the terrain, which is relatively uniform across the LCT.

The soils across the LCT are mostly loamy and clayey with impeded drainage. They are moderately to highly fertile with good grassland and arable cover. The soils are suited to wet pasture, woodland and rich vegetation.

The landscape is drained by small, generally indistinct streams that drain north into The Fens to the Great River Ouse. Between these is a network of ditches and dykes, similar although less distinct to those found in The Fens. The concentration and distinctive pattern of these ditches and drains generally reduces to the south, moving away from The Fens towards the rising Claylands.

Biodiversity

This is a productive landscape that is dominated by arable agriculture, interspersed with occasional pasture on lower-lying land and fields used for horticulture including traditional orchards. This is not an ecologically rich area, with few designated sites across the LCT.

The Fen Drayton Gravel Pits County Wildlife Site (CWS) is located on the northwest boundary of the LCT with The Fens. Swavesey Meadows adjoins this, within the LCT. These are made up of a variety of habitats, including a large percentage of open water/wetland and grassland with some scrub/woodland. Beach Ditch is a linear CWS towards the east of the LCT, which links with lodes and drains in the adjoining Fens to the north. A small area of orchard at Ashley Farm and short stretch of the Over Railway Cutting are also small CWS within this LCT.

Priority habitats identified within this LCT include pockets of floodplain grazing marsh near Swavesey, Oakington and Landbeach; a number of traditional orchards, generally concentrated around settlements through the north of the LCT; and scattered, small blocks of deciduous woodland.

This is generally a sparsely vegetated landscape, with small groups of trees, including traditional orchards and small deciduous woodland concentrated around the settlements. The fields are predominantly bound by ditches and drains with occasional trimmed, often gappy hedgerows and tree shelter belts along roads and tracks. Hedgerows are more common around the smaller scale field networks in proximity to settlements, particularly those on the edge of Cambridge to the south of the LCT.

Historic Landscape Character

The location of the existing main settlements on the edge of the Fen landscape has characterised and influenced their development. As the Fen and peaty soils have receded the villages have expanded north.

Many of the villages have their origins in the 11th and 12th centuries, when they exploited the high ground and expanded with successful schemes of fen drainage. There was also rapid population growth in the area in the 16th and 17th centuries¹⁸. The Fen Edge villages were traditionally wealthy and contain several fine medieval churches.

Akeman Street (Roman Road) transects the eastern part of the LCT, running north towards the north Norfolk coast. There are a large number of Iron Age and Roman archaeological sites in proximity to the straight line of the Roman Road (which forms the A10 as it leaves the LCT to the north).

There are a small number of scheduled monuments within the LCT, which include former abbey sites at Waterbeach and Denny Abbey in the east and some Priors earthworks in the northwest. There are also some small areas of castle earthworks at Swavesey and Rampton, relating to remains of medieval settlement of the landscape.

¹⁸ Historic Britain from the Air, R.E.Glasscock, 1992

Settlement Form and Built Character

The Fen Edge Clayland is a well settled landscape that has traditionally been an important location for settlement, being above the Fen floodplain and with easy access to both the wetland resources to the north and the higher land, suitable for agriculture to the south. It is an area that is dominated by arable agriculture, interspersed with commuter settlements with former RAF bases.

The largest of the settlements in this area are Swavesey, Over, Willingham, Longstanton, Cottenham, Histon, Impington and Milton. These villages originally established along a linear pattern following the main road systems, as evidenced by the designation of their conservation areas. Their modern form is more dispersed, having expanded since the 1960s as commuter settlements in proximity to Cambridge. A number of individual farms and cottages are dispersed across the landscape between the villages.

Traditional building materials within the villages include gault brick, render and thatch. Due to the geology of the area, there were limited building material resources, which has influenced the vernacular architecture with a consistency of appearance. Stone was imported and used for architectural detailing on brick built, higher status buildings in the 18th and 19th centuries.

There are some significant areas of quarrying within the LCT, between Cottenham and Waterbeach in the east and south of Milton in the southeast (now Milton Country Park). These were formerly areas of clay extraction and more recently for sand and gravel for more recent development expansion.

Remnants of the RAF barracks are present in the landscape between Longstanton and Oakington and to the north of Waterbeach, including the landing strips and former buildings.

Access to the Landscape

The A14 is the main road, following the straight line of the former Roman Road, through the south of the LCT between the northwest edge of Cambridge, northwest to Huntingdon. The A10 connects north, through the east of the LCT from the north edge of Cambridge to Ely.

A number of B- and minor roads connect in a north-south direction through the LCT, linking Cambridge and the A14 to the outlying, commuter villages. Minor roads link between the villages, with tracks that follow the ditches connecting off these for farm access.

There are many bridleways across the Fen Edge Claylands, including a continuous route through the centre following the route of the guided busway between Cambridge and Huntingdon. A variety of footpaths, byways and bridleways link from this, following the line of ditches and drains to the nearby villages.

The Pathfinder long distance walk connects through the centre and west of the LCT. This path links the historic RAF Pathfinder stations at Wyton, Graveley, Oakington and Warboys, using rights of way through gentle countryside and passing many wartime memorials.

Evaluation

Key Landscape Features

- Historic, dispersed settlement pattern of villages and individual farms and cottages
- Characteristic Fen Edge villages along the line of the floodplain
- Numerous, small, traditional orchards particularly in the north of the LCT in proximity to the village settlements
- Pockets of priority habitats, particularly grazing marsh in proximity to watercourses
- Strong sense of historic settlement and land use

Forces for Change

- Intensive arable agriculture has resulted in field expansion and removal of key habitats including hedgerows. Changes in agri-environmental schemes and agricultural subsidies could result in further fragmentation of ecological networks and conversion/expansion of farmsteads
- Loss of traditional orchards and small-scale field systems in proximity to the traditional settlements, through development expansion, change of land use and further intensification and modernisation of farming practices
- Climate change and land use change could lead to increased risk of flooding, which would alter the ecological networks, resulting in shift in species composition and requiring alterations in management
- Pressures for development which would change the character of the Fen Edge villages through further expansion and densification
- Ad hoc woodland and shelterbelt planting that would alter the open character of the landscape
- Development of large scale buildings on farms due to intensification of farming practices
- Continued evolution of the landscape as the new town at Northstowe is built out

Condition

The Fen Edge Claylands is an intensively farmed LCT with limited ecological value. The hierarchy of drainage channels and historic tracks and droves connecting between the settlements and The Fens to the north are generally intact historic landscape features that contribute to the value of this landscape. The overall condition of the landscape is perceived to be **moderate**.

Strength of Character

This is a peaceful rural landscape judged to be of **moderate** strength of character with few distinguishing features. Traditional orchards are a feature of this landscape. However, this network is declining in places due to development and farming pressures. The historic linear form of the Fen Edge villages is generally retained. Modern estates have altered the overall form of the settlements, although are generally well integrated by hedgerows, copses and shelterbelts where appropriate.

Key Landscape Sensitivities

- Network of historic ditches and droveways that contribute to the area's sense of place
- Peaceful, rural open character of the landscape
- Hedgerows, shelterbelts and small clumps of trees forming a distinctive, localised vegetation pattern in proximity to villages
- Surviving traditional orchards
- Remaining pockets of high ecological value landscape features such as grazing marsh alongside watercourses and scattered deciduous woodland
- Historic, linear village cores

Landscape Guidelines

The overall management objective for the Fen Edge Claylands LCT is to **conserve** the rural character and the important surviving landscape features such as traditional orchards, droves, drains and linear village cores. It would also be appropriate to **enhance** those features that are declining or are incongruous in the landscape, such as the traditional orchards and modern village edges.

Guidance for Landscape Management

- Conserve and restore traditional orchards whilst maintaining the productive Claylands arable landscape
- Conserve and enhance existing watercourses, drains and ditches to maintain historic features and enhance ecological value of the farmed landscape
- Conserve and enhance the regular small-scale pastoral fields, shelter belts and hedges at village edges
- Manage the agricultural landscape and soils both for production and opportunities to improve biodiversity
- Conserve and enhance existing hedgerows and consider opportunities for re-planting hedgerows where these have been lost/become fragmented
- Protect the sites and features of archaeological and historic interest
- Encourage opportunities to expand and link woodland, hedgerows and other semi-natural habitats to benefit biodiversity whilst managing the open character of the landscape

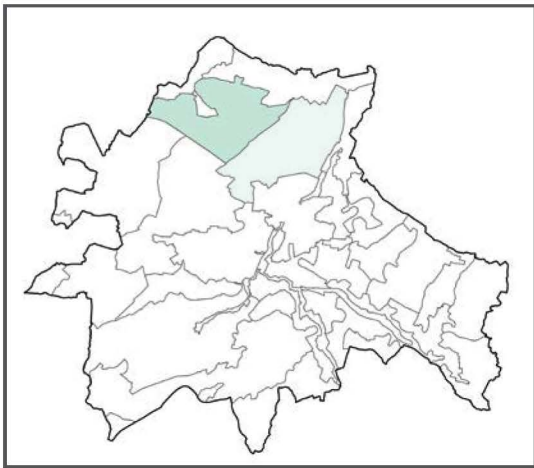
Guidance for Integrating Development into the Landscape

- Conserve the overall rural character, with dispersed Fen Edge villages, farms and cottages linked by rural roads and historic droves and tracks
- Ensure any village extensions are located on the high ground of the Fen Islands, avoiding incremental development on the flat, low-lying fen
- Ensure new developments on the edges of villages are integrated by wide hedgerows, copses and shelterbelt planting reflecting the local mixes
- Ensure a transition between Fen and Fen Island by retention and creation of small hedgerowed paddocks
- Conserve and enhance existing orchard and hedgerowed paddocks
- Maintain linear or rectilinear form of the settlements and avoid closes and cul-de-sacs where possible
- Ensure buildings are mostly set on the back edge of pavements, or face the street with small front gardens in the village cores
- Ensure new developments integrate/connect with existing Public Rights of Way (PROW) within development layout
- Ensure new developments reflect the form, scale and proportions of the existing vernacular buildings of the area and pick up on the traditional building styles, height, materials, colours and textures of the locality
- Enclose boundaries facing onto roads by low brick walls and/or simple iron railings, timber picket fences and hedges as appropriate in the village cores
- Retain hedges and introduce them as boundaries alongside roads outside village cores
- Integrate water features, such as ditches dykes and ponds, into new developments as part of open spaces
- Avoid the use of standardised and intrusive urban materials, street furniture, lighting and signage as part of traffic calming measures wherever appropriate

LANDSCAPE CHARACTER AREAS

- **2A: Longstanton Fen Edge Claylands**
- **2B: Cottenham Fen Edge Claylands**

LANDSCAPE CHARACTER AREA 2A: LONGSTANTON FEN EDGE CLAYLANDS



2A: LONGSTANTON FEN EDGE CLAYLANDS LANDSCAPE CHARACTER AREA

The Longstanton Fen Edge Claylands Landscape Character Area (LCA) is a gently undulating, settled, open landscape with several villages located on raised 'islands' above The Fens.

Description

Key Characteristics

- Settled rural landscape including villages with historic linear cores on elevated fen 'islands' buildings as well as small, isolated farms
- Fragmented pockets of ecological value include grazing marsh at Swavesey and Oakington, dispersed pockets of deciduous woodland and traditional orchards

Longstanton Fen Edge Claylands is a gently undulating, open landscape extending west into Huntingdonshire. Within the Study Area, it gently rises from c. 5m AOD at the edge of The Fens to c. 30m AOD where it meets the Wooded Claylands in the south. A small number of minor streams flow through the south of the area from the Wooded Claylands and are channelled into the network of drains which becomes more regular in the north of the LCA.

Arable fields of generally medium size are arranged in a slightly haphazard rectilinear pattern, defined by a mixture of fragmented hedgerows and distinctive straight historic drainage ditches and droveways, built to connect villages in this area with the common pastures on The Fens. Vegetation is sparse, but scatterings of tree clumps, shelterbelts around isolated farms and occasional hedgerows sometimes merge together to give the sense of a more densely treed horizon, notably on the edge of villages and farms where they provide localised visual enclosure. Orchards and small-scale paddocks and pastoral fields are found close to the edge of villages, adding variety and intimacy to the landscape. Pockets of grazing marsh designated as County Wildlife Sites (CWS) are found near Swavesey and Oakington.

This is a settled landscape, with a number of small to moderate sized commuter villages including Fen Drayton, Swavesey, Longstanton, Northstowe, Over, Willingham and Rampton. Villages are located on low sand and gravel fen 'islands', elevated from The Fens and generally have an historic linear core following the main road. More recent development has gradually expanded a number of the villages around a network of cul-de-sacs. The former Oakington RAF base at Northstowe is being developed as a new settlement. There are also some small linear settlements along roads and isolated farms, generally surrounded by hedgerows and trees. Robust hedgerows to paddocks, copses, groups of mature trees and orchards often screen settlement, so that built form is only intermittently visible in open views across the LCA. Farm buildings tend to be low barns and well-integrated in the landscape.

The largely flat landscape and sparse vegetation combine to offer long, open views between settlements, in which large, dramatic skies are a prominent feature. Occasional vertical features stand out on the skyline, including masts and poles related to the communications network, church spires and lines of willow trees. The straight A14 dual carriageway, which forms the southwestern boundary to the LCA, detracts locally from the tranquillity experienced elsewhere.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

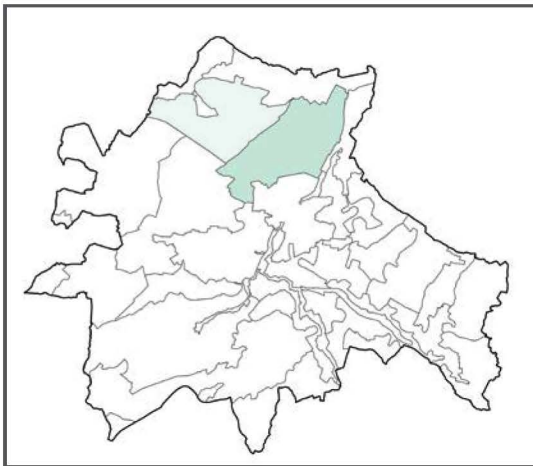
- Long, open views from villages across open, arable fields

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Ensure new development is integrated into the landscape sympathetically and does not affect long, open views

LANDSCAPE CHARACTER AREA 2B: COTTENHAM FEN EDGE CLAYLANDS



2B: COTTENHAM FEN EDGE CLAYLANDS LANDSCAPE CHARACTER AREA

The Cottenham Fen Edge Claylands Landscape Character Area (LCA) is a well settled landscape with several villages located on raised 'islands' above The Fens and urban influences extending from the edge of Cambridge.

Description

Key Characteristics

- Well settled rural landscape comprising a number of large villages with historic linear cores located on elevated 'islands'
- Pockets of remnant parkland alongside orchards, hedgerows and shelterbelts create a distinctive, localised vegetation pattern in proximity to the villages
- Urban influences associated with the urban edge of Cambridge and major road network in the south which are discordant with the otherwise rural character

The Cottenham Fen Edge Claylands gently undulating landscape rises very gently from c. 5m AOD at the edge of The Fens in the north to c. 30m AOD in the south where it meets the Wooded Claylands. A small number of minor streams flow through the south of the area from the Wooded Claylands and join the more regimented drainage network of drains and ditches that extends across the wider area. A number of scattered waterbodies are consistent with historic mineral extraction, particularly in the east of the area at Cambridge Research Park, Milton Country Park and west of Waterbeach.

This is a predominantly arable landscape, comprising medium sized fields arranged in a generally irregular rectilinear pattern defined by straight historic ditches and droveways with occasional gappy hedgerows. Smaller scale pastoral fields, paddocks and orchards on the edge of settlements have a more enclosed character created by boundary hedges, shelterbelts and trees close to the villages. Belts of woodland around waterbodies and fragments of historic parkland in Histon, and shelterbelts concentrated around settlements, golf courses and the disused airfield north of Waterbeach Barracks provide occasional vegetation cover which creates localised visual enclosure and frames views across the surrounding arable landscape. South of the A14 the vegetation cover begins to include more robust hedges and scattered blocks of woodland, creating a greater sense of enclosure as the landform starts to rise towards the Wooded Claylands.

This is a settled rural landscape, with several small to medium sized villages including Cottenham, Waterbeach, Histon Milton and Girton, located on low 'islands' that rise from The Fens. There are also some small linear settlements along roads and isolated farms and cottages. The villages have strong historic linear cores, often with large greens. More recent, suburban development has taken place, expanding the villages as commuter settlements along the major route network in proximity to Cambridge. Settlement generally sits low in the landscape and is well screened by mature trees, shelterbelts and hedgerows, but glimpses of built form can often be seen, maintaining a settled rural character between villages. Rows of poplar trees, occasional lines of telegraph poles and pylons are vertical features which interrupt the skyline.

The proximity of this rural LCA to Cambridge means that there are a number of localised urban influences particularly in the south and east of the area that locally are discordant and detract from the tranquillity experienced elsewhere within the LCA. These include the major road network and industrial sites such as the factory at Impington and Cambridge Research Park. There are also a number of recreational sites including the restored mineral extraction sites which are used for sailing and have walking trails; golf courses at Girton and north of Waterbeach Barracks; and a fishing lake south of Histon.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

- Framed, long views between vegetation from villages across open, arable fields
- Remnant parkland west of Histon
- Pressure for recreation

Specific Landscape Guidelines

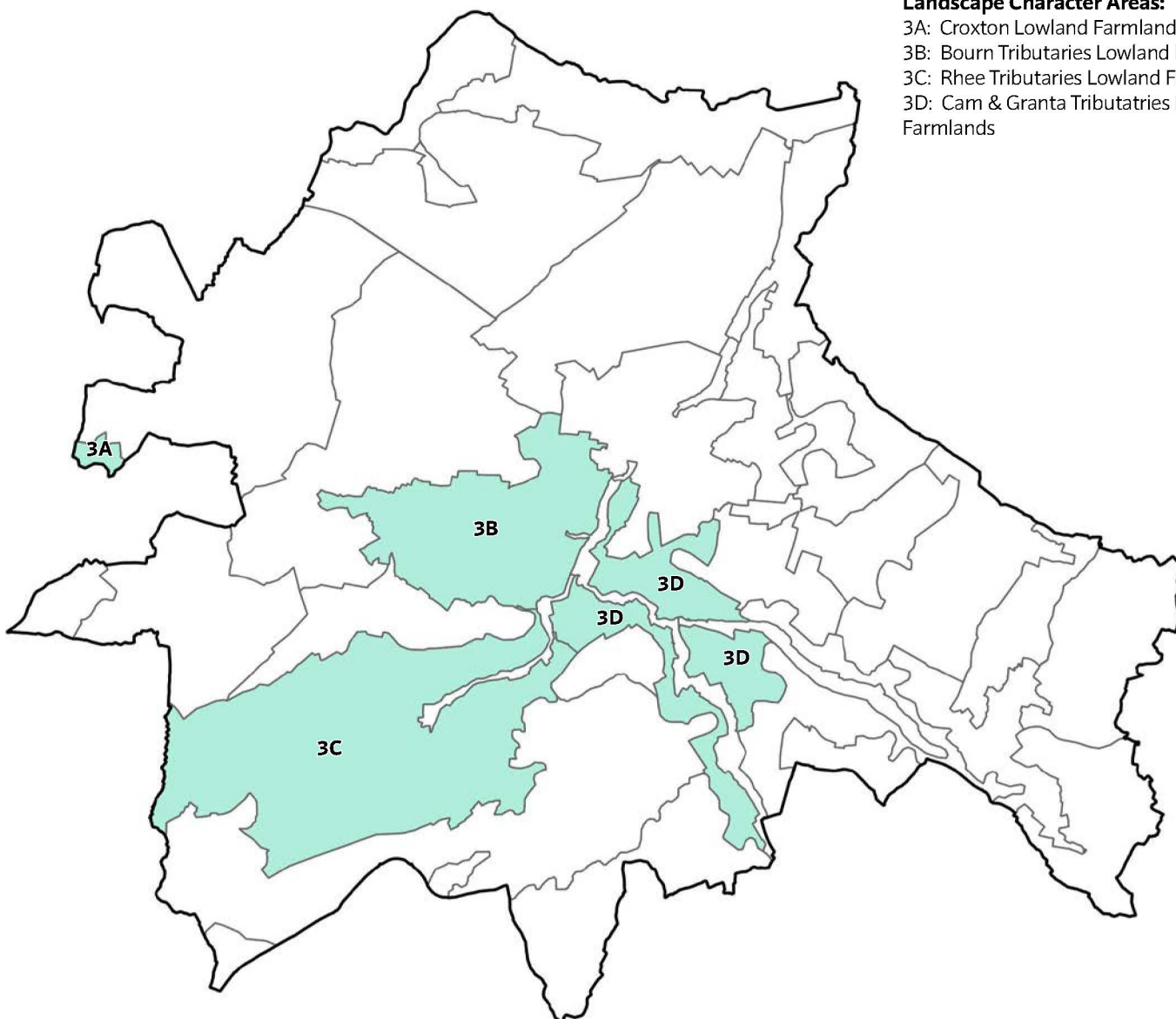
In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Ensure new development is integrated into the landscape sympathetically, is in keeping with the open, rural character, and does not affect long, framed views
- Conserve parkland and enhance the specific features that give character and its context within the wider landscape in areas where it has been fragmented
- Ensure land developed for recreation enhances existing landscape features, creates links between villages and recreational assets and is in keeping with the open, rural character

LANDSCAPE CHARACTER TYPE 3: LOWLAND FARMLANDS

Landscape Character Areas:

- 3A: Croxton Lowland Farmlands
- 3B: Bourn Tributaries Lowland Farmlands
- 3C: Rhee Tributaries Lowland Farmlands
- 3D: Cam & Granta Tributaries Lowland Farmlands



LANDSCAPE CHARACTER TYPE 3: LOWLAND FARMLANDS

The Lowland Farmlands Landscape Character Type (LCT) is a gently undulating, intensively farmed arable landscape encompassing densely settled, wide, flat river valleys and their tributaries.

Description

Key Characteristics

- Low-lying, gently rolling topography crossed by river corridors and drained by small streams
- Open character and often extensive views
- Productive, intensively farmed, predominantly arable landscape that has experienced significant modification during the 20th century, resulting in amalgamation of fields
- Generally sparse woodland cover and fragmented network of hedge boundaries
- Woodland and traditional orchards often define the edge of settlements
- Scattered Medieval moated sites and stone churches are characteristic features
- A well settled landscape with a relatively dense rural settlement pattern comprising large and small villages and outlying farmsteads

Physical Influences

The topography of this LCT is quite varied, with a general range from c.10m AOD alongside the River Valleys to c.35m-40m AOD as the land begins to rise into the Wooded Claylands landscape to the north and west and the Lowland Chalklands to the south.

The underlying geology of the LCT is principally Gault Clay, comprising of Jurassic and Cretaceous clay sediments. This is overlain in places by Quaternary glacial and fluvial deposits including boulder clay or till. This transitions to chalk overlain with alluvium silt, clay, sand and gravel through the south of the LCT.

The soils of the LCT vary with the underlying geology, with the most fertile, lime-rich, loamy and clayey soils in the north. Soils become more free-draining and are lime-rich and loamy in the south of the LCT, with moderate levels of fertility.

The landscape is drained by small streams, which are often visually indistinct. The more substantial watercourses, such as Bourn Brook and the River Cam/Rhee are tree-lined along much of their courses and more identifiable through the lower-lying landform.

Biodiversity

This is a productive, intensively farmed, agricultural landscape in which arable land use predominates with some areas of pasture and orchards. There are patches of wet woodland and wet grassland along watercourses.

There are a small number of statutory nature designations within the Lowland Farmlands, including Kingston Amenity Area Local Nature Reserve and a handful of Sites of Special Scientific Interest (SSSI) including Fowlmere Watercress Beds, former pits and meadow sites.

There are also a number of County Wildlife Sites (CWS) within the Lowland Farmlands, including the courses of the River Cam/Rhee and Bourn Brook and several tributary streams. Some of the CWS are also ancient woodland and nature reserves.

Priority Habitats within the Lowland Farmlands include scattered deciduous woodland; small patches of good quality semi-improved grassland, lowland calcareous grassland, lowland meadows and lowland fens; and scattered traditional orchard particularly in proximity to settlements.

Tree cover is characterised by groups of trees around settlements and farmsteads and scattered, small blocks of mixed woodland across the undulating landform. Fields and roadsides are occasionally bound by hedges that are generally low and well-trimmed and often gappy. Treed watercourses are distinctive features through the lower-lying landform. Trees around settlement edges contribute to localised, more intimate landscape scale and a large number of these are protected by Tree Preservation Orders (TPO).

Historic Landscape Character

Historically, dense woodland and heavy soils deterred prehistoric farmers. The majority of the existing settlements had been founded by Medieval times.

There are a number of moated sites through the Lowland Farmlands, which were established to make use of the water-retentive soils that gave protection to homesteads within the newly settled landscape. There is also evidence of medieval agricultural systems visible in the landscape through the survival of ridge and furrow in places.

Field systems include a mix of rectilinear and sinuous patterns, reflecting the process of planned surveyor enclosure from common fields. All fieldscapes have experienced significant modification during the 20th century, which has resulted in removal of hedgerows and amalgamation of fields.

The present landscape character derives from the scattering of historic, small settlements and farmsteads, interspersed with farm woodlands. The villages have generally strong, historic, linear form with rows of cottages and a few, larger farmsteads. Larger settlements occur in the east of the LCT, with their origins at the crossing points of the river and in proximity to historic communications routes.

The Lowland Farmlands contain a variety of historic sites and features. The route of Ermine Street Roman Road (now A1198) is a long, straight route that passes through this LCT; evidenced by cropmarks, parish boundaries and archaeological investigations in various locations along it.

There are several designated historic sites within the Lowland Farmlands, including registered parklands and Scheduled Monuments. A number of the settlements have designated Conservation Areas that identify the historic core and contain a variety of listed buildings. There are several designated and undesignated moated sites in the southwest of the LCT.

Settlement Form and Built Character

This is a well settled landscape that is crossed by the major river corridors. There is a relatively dense, largely nucleated, rural settlement pattern composed of large and small villages, and outlying farmsteads.

The historic villages are mostly linear in form, with modern infilling and expansion evident, particularly in the east of the LCT where they have developed along key routes into Cambridge. In the west of the LCT there are distinctive lines of smaller villages, along the base of the Wimpole Chalk Hills to the south and Wooded Claylands to the north.

The main building materials through the Lowland Farmlands include Gault Clay, brick, clay tile, render and thatch. Church spires and towers are prominent features on the skylines through the Lowland Farmlands.

The relatively high density of settlement, intensive agriculture and major transport routes that pass through it mean that it is often a busy, rural landscape. The western part of the LCT is generally less populated, with smaller isolated villages. Settlement size increases east, towards Cambridge and villages are more closely located and have grown to meet commuter demand.

Access to the Landscape

The Lowland Farmlands are crossed by a number of major roads, linking from surrounding towns, through villages into Cambridge from the south, west and southwest. The M11 cuts through the east of the area, linking southeast between Cambridge and London. The A1198 follows a long, straight route from Huntingdon through the Lowland Farmlands to Royston and beyond the District, along the line of Ermine Street Roman Road.

Between the major roads is a range of B- and minor roads that connect between the various village settlements and provide a robust network across the lowland landscape. This is a well-connected landscape, evidenced by the settled character of the Lowland Farmlands.

There are a large number of Public Rights of Way through this landscape, linking between settlements, through parklands and across the river valleys. These routes include stretches of the Harcamlow Way long distance path that passes through the west of the LCT, into Wimpole Park.

There are a small number of visitor sites and attractions within this LCT, including nature reserves, wildlife park, campsites and Trumpington Meadows Country Park on the southwest edge of Cambridge.

Evaluation

Key Landscape Features

- Low-lying, gently rolling, rural landscape
- Scattered, small woodlands often focussed on the edges of the village settlements and in proximity to watercourses
- Characteristic stone churches and scattered Medieval moated sites within and in proximity to the village settlements
- A well settled landscape comprising of large and small villages and outlying farmsteads connected by major and minor roads

Forces for Change

- Intensive arable agriculture has resulted in amalgamation of fields and removal of hedgerows and other key habitats between the village settlements. Changes in agri-environmental schemes and agricultural subsidies could result in further fragmentation of ecological networks and conversion/expansion of farmsteads
- Further loss of traditional orchards and small-scale field systems in proximity to the traditional settlements, through development expansion, change of land use and intensification and modernisation of farming practices
- Loss and fragmentation of woodland and hedge boundaries that would result in change in visual and ecological character
- Climate change and land use change could lead to increased risk of flooding, which would alter the ecological networks, resulting in shift in species composition and requiring alterations in management
- Development pressures, particularly for new housing which would affect the rural character of the existing village settlements and could result in settlements appearing to coalesce along main transport routes
- Increase in farm sizes and larger farm units that would be prominent in the landscape

Condition

The Lowland Farmlands is an intensively farmed LCT. It maintains a tranquil and rural character due to the dispersed hierarchy of settlements from large villages to outlying farmsteads. Scattered small scale woodlands are a distinctive feature that have lost some connectivity through changes in land use. The overall condition of the landscape is perceived to be **moderate**.

Strength of Character

This is an intensively farmed, often busy rural landscape with areas of tranquillity away from major transport routes. The landscape is judged to be of **moderate** strength of character with few distinguishing features. Moated sites and small, scattered woodlands are particular features of this landscape, often located within and around the edges of the village settlements. Modern expansion of the villages has been limited across much of this LCT, with some sprawl taking place along major transport routes to the south of Cambridge.

Key Landscape Sensitivities

- Rural tranquillity
- Hierarchy of water courses that provide valuable networks of wetland habitat
- Scattered pattern of small woodlands
- Surviving Medieval moated sites
- Dispersed, rural settlement pattern

Landscape Guidelines

The overall management objective for the Lowland Farmlands LCT is to **conserve** the tranquil, rural landscape with its network of scattered small woodlands, surviving moated sites and dispersed pattern of rural villages and to strengthen its character through measures to minimise the urbanising influence of large villages, new settlement and transport routes. **Enhancements** to woodland and linking vegetation features should also be encouraged to retain or enhance biodiversity and visual character.

Guidance for Landscape Management

- Manage the agricultural landscape and soils both for production and opportunities to improve biodiversity
- Conserve and enhance existing watercourses to enhance the ecological value of the farmed landscape
- Conserve areas of grazing marsh, and scattered deciduous woodland and orchards of high ecological value
- Conserve and enhance existing hedgerows and consider opportunities for re-planting hedgerows where these have been lost/become fragmented
- Protect the sites and features of archaeological and historic interest
- Encourage opportunities to expand and link woodland, hedgerows and other semi-natural habitats to benefit biodiversity and managing key views across the rural landscape

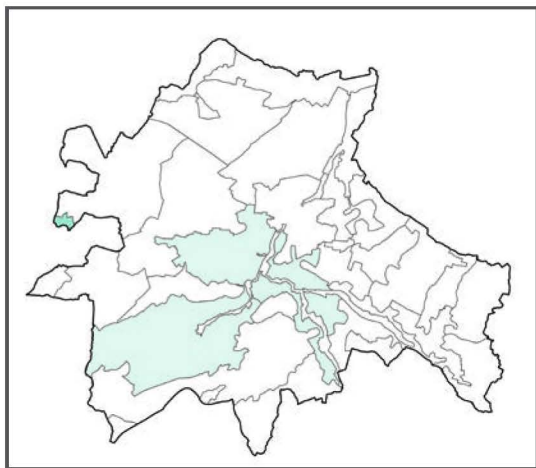
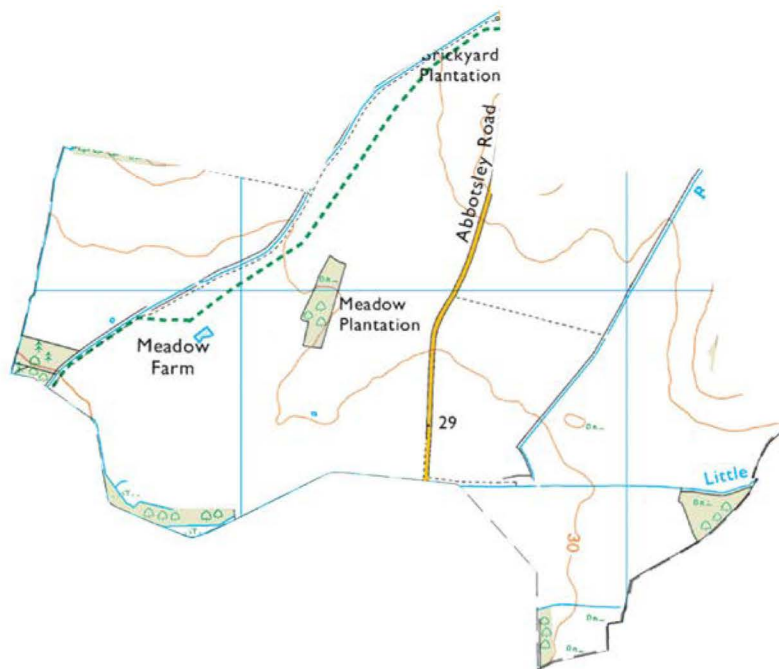
Guidance for Integrating Development into the Landscape

- Conserve the historic villages through avoidance of ribbon development and coalescence with nearby settlement
- Manage the scale, siting and design of settlement expansion to avoid incongruous development in the rural landscape
- Maintain the distinctive settlement pattern of the area and its local context
- Ensure density and pattern of new developments reflect that of existing villages and hamlets
- Avoid backland and cul-de-sac developments where possible
- Ensure buildings are arranged in continuous frontages within village cores and are arranged in loose knit patterns facing the street on more peripheral sites
- Ensure new developments are integrated with sufficient space for garden and street tree planting where applicable
- Enhance village gateways and, where appropriate, consider provision of appropriate planting on village approaches
- Take opportunities to create new village greens and/or wildlife areas within new developments.
- Ensure new developments integrate/connect with existing Public Rights of Way (PROW) within development layout
- Ensure new developments reflect the form, scale and proportions of the existing vernacular buildings of the area and pick up on traditional local building styles, height, materials, colours and textures
- Retain hedges along roads
- Enclose boundaries facing the street on village peripheries with hedge and tree planting
- Avoid the use of standardised and intrusive urban materials, street furniture, lighting and signage as part of traffic calming measures wherever appropriate
- Ensure new agricultural buildings, such as large storage sheds, are sited and designed to reduce their apparent mass, minimising their impact on the wider landscape by the appropriate use of texture, colour and planting

LANDSCAPE CHARACTER AREAS

- **3A: Croxton Lowland Farmlands**
- **3B: Bourne Tributaries Lowland Farmlands**
- **3C: Rhee Tributaries Lowland Farmlands**
- **3D: Cam & Granta Tributaries Lowland Farmlands**

LANDSCAPE CHARACTER AREA 3A: CROXTON LOWLAND FARMLANDS



3A: CROXTON LOWLAND FARMLANDS LANDSCAPE CHARACTER AREA

Croxton Lowland Farmlands Landscape Character Area (LCA) is a small area of unsettled rural landscape that extends into Huntingdonshire District, characterised by large fields divided by small streams and open, expansive views.

Description

Key Characteristics

- Network of small streams including the Abbotsley Brook and its tributaries
- Large, irregular fields bound by streams, open ditches or closely trimmed hedgerows
- Occasional scattered small woodlands
- Open and expansive views into neighbouring LCAs and into Huntingdonshire
- Unsettled with a tranquil, rural character

Croxton Lowland Farmlands LCA is part of the gently sloping valley of the Abbotsley Brook, which forms the southern boundary and extends west into Huntingdonshire District. Within the Study Area, the LCA rises from c. 25m AOD adjacent to the brook in the southwest to a high point of c. 40m in the east. Several small, streams including the Banham Dean Brook and Little Brook cross the LCA in a roughly northeast to southwesterly direction to join the Abbotsley Brook in the south.

Landcover is predominantly arable farmland with occasional, scattered small woodland blocks. Large, open fields are organised in an irregular pattern, divided by the network of small streams, open ditches and very occasional fragmented hedgerows. Scattered riparian trees and scrub follow the routes of the streams, and there is a pocket of ecologically valuable floodplain meadow north of the Abbotsley Brook. In the north, woodlands in the adjacent 4A: Croxton to Conington Wooded Claylands provide localised intimacy and visual enclosure. Generally, open, expansive views over gently sloping arable fields towards distant largely flat and unbroken wooded horizons are framed by the small woodlands and riparian trees.

This relatively simple LCA is unsettled and access is limited. The character is tranquil and rural, with very little movement. Abbotsley Road, a minor road, is the only road in the LCA, linking Abbotsley to the south with Croxton to the north. A Public Rights of Way (PROW) follows the route of an unnamed stream in the west of the LCA, linking Brickyard plantation to the north with Abbotsley to the south.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

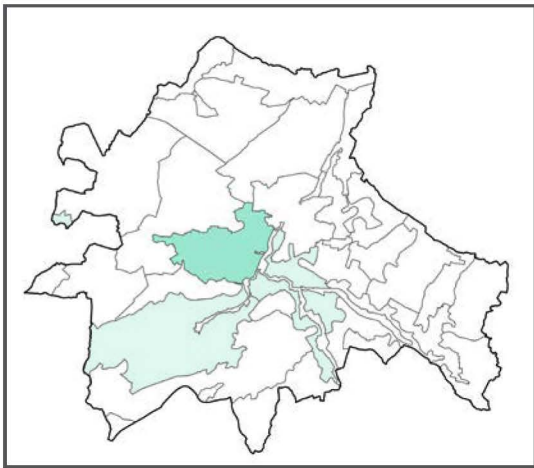
- Distinctive open and expansive views into neighbouring LCAs

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve expansive views across the open fields into Huntingdonshire

LANDSCAPE CHARACTER AREA 3B: BOURN TRIBUTARIES LOWLAND FARMLANDS



3B: BOURNE TRIBUTARIES LOWLAND FARMLANDS LANDSCAPE CHARACTER AREA

Bourn Tributaries Lowland Farmlands Landscape Character Area (LCA) is a well settled rural landscape, with distinctive radio telescopes on the skyline that is strongly influenced by the wide, shallow valley of the Bourn Brook.

Description

Key Characteristics

- Wide valley of the River Bourn and its tributaries as it nears its confluence with the River Cam
- Generally strong, regular rectilinear field pattern with smaller scale pastoral fields near villages
- Ecological richness associated with the river including lowland meadows, good quality semi improved grassland and floodplain grazing marsh
- Radio telescopes are a unique and distinctive feature on the skyline
- Well defined settlement edges defined by mature trees, copses and thick hedgerows enclosing small scale fields and paddocks
- Network of major roads locally detracts from the otherwise tranquil, rural character
- Recreational land use includes golf clubs, University sports fields and a polo club
- Coton Countryside Reserve is linked to the historic core of Cambridge by views towards the city's historic core and a green corridor which contributes to the setting of the city

Bourn Tributaries Lowland Farmlands comprises the broad, wide valley of the Bourn Brook and its tributaries as it flows from west to east towards its confluence with the River Cam. The landscape is comprised of a repeating pattern of subtle ridges and dips which reflect the repeating drainage pattern of tributaries joining the Bourn Brook from the north and south. The overall appearance is relatively flat. The highest points of the gently rising valley slopes are c. 60m in the south at the boundary with 7E: Wimpole Chalk Hills, and c. 45m AOD in the north. The eastern part of the LCA becomes wider and flatter as it approaches the River Cam Floodplain, at c.10m AOD.

This LCA comprises open and intensively farmed arable farmland. Fields are generally rectilinear and organised in a regular pattern, except where they are interrupted by the network of watercourses. Fields are bound by well trimmed hedgerows or open ditches, supplemented with boundary trees. The characteristic straight boundaries and medium scale field pattern brought about by general enclosure in the 19th century are still generally in use today, however there are some examples of very large fields where several fields have been amalgamated and smaller enclosed fields and paddocks are often found around village edges. Stream corridors are often visible within the landscape as lines of willow trees. In the east, trees along the Bin Brook combine with other linear features including the Coton footpath hedge, other hedges and ditches to form a distinctive bifurcated green corridor which connects with Cambridge's historic core. Occasional small, scattered woodland blocks and shelterbelts add diversity to the landscape and provide localised visual enclosure. Pasture in the flood plain meadows along the river valleys and orchards in the north of the LCA add interest and ecological variety in the landscape.

Settlement includes small to medium sized scattered villages often located at road junctions, linear settlement along roads, and isolated cottages and farms. Villages generally have an historic, linear form, supplemented with post-war estates. They are mostly set on high ground, to the north and south of the Bourn Brook. Each village is identified by a church spire, or tower, which enliven the skyline. Villages in the south are located along the spring line at the base of the chalk ridge. The settlement edges are largely well defined by mature trees, copses and thick hedgerows, adding intimacy and visual enclosure to village edges. Small fields and paddocks contribute to their landscape setting, providing localised intimacy, visual enclosure and a transition to the surrounding countryside. Views tend to be open and expansive across arable fields towards distant wooded horizons. In the south of the LCA, the landform of the rising chalk escarpment provides localised visual enclosure. In the east of the LCA there are short views towards the skyline of Cambridge above the tree canopy, notably from Red Meadow Hill in Coton Countryside Reserve, providing a visual connection between the landmarks of the city and the rural surroundings. The Radio Telescopes at the Lords Bridge Radio Astronomy Observatory form a highly distinctive feature on the skyline, and the Travelling Radio Telescope on the re-purposed Varsity Railway is a distinctive linear feature. Other vertical features interrupting the skyline include telegraph poles and rows of poplar trees.

Sports and leisure are important land uses in the LCA. Recreational land use includes University sports grounds, Cambridge Polo Club, Cambridge Rugby Football Club, golf clubs in the north and west. Coton Countryside Reserve has a network of mown paths amongst grass meadows and orchards, and is connected to the River Cam in Cambridge via a two pronged green corridor comprising orchards, sports grounds and leafy colleges in the west of the city which contributes to the setting of the west of Cambridge. Despite the presence of some major roads including the M11 and A603 Roman Road, much of the area has a relatively tranquil, rural character due to the low density of the settlement and relatively quiet roads.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

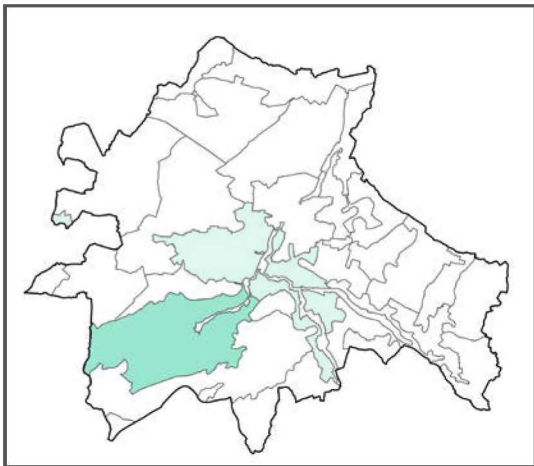
- Green corridor linking Coton Countryside Reserve and the historic core of Cambridge which contributes towards the setting of the city
- Distinctive radio telescopes form a prominent landmark on the skyline
- Well defined settlement edges defined by mature trees, copses and thick hedgerows enclosing small scale fields and paddocks
- Pressure for recreational land use

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Ensure land developed for recreation enhances existing landscape features, creates links between villages and recreational assets and is in keeping with the open, rural character
- Conserve and enhance the regular small-scale pastoral fields, shelter belts and hedgerows at village edges

LANDSCAPE CHARACTER AREA 3C: RHEE TRIBUTARIES LOWLAND FARMLANDS



3C: RHEE TRIBUTARIES LOWLAND FARMLANDS LANDSCAPE CHARACTER AREA

Rhee Tributaries Lowland Farmlands Landscape Character Area (LCA) is a large swathe of gently undulating rural landscape with distinctive linear features that forms the wide, shallow valley of the River Rhee.

Description

Key Characteristics

- Wide valley of the River Rhee and its tributaries
- Predominantly medium to large rectilinear fields organised in a haphazard pattern with pockets of regularity
- Small woodland blocks combine with shelterbelts and clumps of trees to create well treed horizons
- Small scale fields often found at the edge of villages
- Ecological richness including lowland meadows, lowland fen and floodplain grazing marsh
- Dense settlement pattern comprising large, nucleated villages in the south of the LCA
- Distinctive linear features including Ermine Street Roman road, Wimpole Hall Avenue and the railway

The Rhee Tributaries Lowland Farmlands LCA is defined by the broad, wide valley of the River Rhee and its tributaries, and extends west into Central Bedfordshire. Within the Study Area, the River Rhee flows from west to east towards its confluence with the River Cam. The landform is gently undulating, with a repeating pattern of subtle ridges and rips which reflect the drainage pattern. The highest point is c. 45m AOD in the south and c. 60m AOD in the northeast. In the east, the lowest point is c. 15m AOD.

The landcover is predominantly arable farmland. Medium to large fields are generally rectilinear, occasionally with sinuous edges where they are enclosed by waterbodies. They are organised in an irregular pattern, with more regularity in the south of the LCA, and enclosed by a fragmented network of low, mature hedgerows or straight ditches. Occasionally several fields have been amalgamated to create very large fields, and small scale pasture and orchards are often found close to village edges. Small deciduous woodland blocks, shelterbelts and small beech copses on the brow of hills are scattered through the area, and stream corridors are often visible within the landscape as lines of willow trees. Woodland combines with clumps and rows of trees to create landscape to create well treed horizons. Pockets of floodplain grazing marsh, lowland fen and lowland calcareous grassland combine with deciduous woodland to create variety within the landscape and additional habitat. This is most noticeable at the RSPB managed Fowlmere Nature Reserve; west of Wendy; north of the disused airfield at Bassingbourn Barracks; east of Bassingbourn; south of Whaddon; and at the disused pits south of Hauxton.

The settlement pattern is sparse in the north, with larger settlements including larger, nucleated villages and towns in the south of the LCA. Villages generally have an historic, linear form. The proximity of the A505 to the south and the railway mean that these villages have grown into nucleated commuter settlements in the late 20th century. Village edges are varied, typically bound by a mixture of open fields, woodland or smaller fields so that generally, villages appear well treed and are not visible in the wider landscape. Church spires are prominent features on the horizon, alongside telegraph poles and trees. A few isolated farms are sited at track ends, often hidden by groups of mature trees or shelterbelts. Military land use at Bassingbourn Barracks and solar farms south of Wendy and north of Whaddon interrupt the otherwise simple land cover pattern but are generally well screened and inobtrusive. Military buildings and farm buildings tend to be low in the landscape and unobtrusive. Views are generally long, open and expansive, with wooded horizons, framed by the wooded ridges of the Wooded Claylands. In the north of the LCA, the landform of the rising chalk escarpment provides localised visual enclosure. Occasional features locally detracting from the otherwise tranquil, rural LCA are the landfill site at Barrington, a well screened factory complex west of Meldreth and the busy A10 and A1198 roads.

Ermine Street is a straight, Roman Road, providing a northwest to southeast transport spine, with roughly east to west connections. Other distinguishing strong linear features in the LCA are roads and tracks linking settlements, the railway line, the end of Bran Ditch, and the distinctive Wimpole Avenue, extending south from the designated historic park and garden at Wimpole Hall for c. 3.5km. The historic route of the Harcamlow Way passes through this area, linking several heritage and nature features and sites in adjoining character areas. Fowlmere Nature Reserve has a variety of trails open to the public for recreation, and golf courses at Whaddon, north of Meldreth and east of Melbourne also provide recreational land use.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

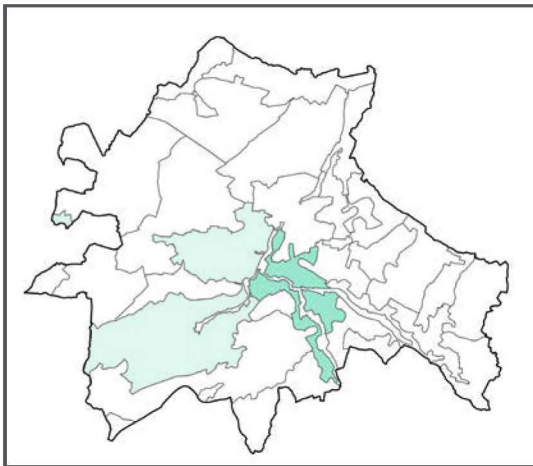
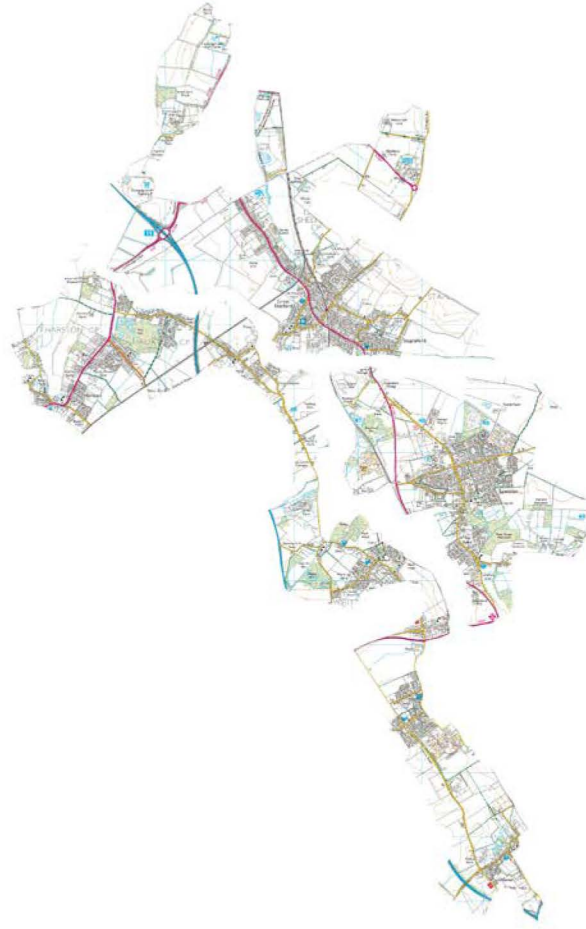
- Small scale fields often found at the edge of villages
- Distinctive linear features including Ermine Street Roman road, Wimpole Hall Avenue and the railway

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve and enhance the regular small-scale pastoral fields, shelter belts and hedgerows at village edges
- Maintain distinctive linear features

LANDSCAPE CHARACTER AREA 3D: CAM & GRANTA TRIBUTARIES LOWLAND FARMLANDS



3D: CAM AND GRANTA TRIBUTARIES LOWLAND FARMLANDS LANDSCAPE CHARACTER AREA

Cam and Granta Tributaries Lowland Farmlands Landscape Character Area (LCA) is distinguished by its wooded appearance, which makes it more visually enclosed than the other Lowland Farmlands, and by the relatively built up and suburban character of its villages.

Description

Key Characteristics

- Wider floodplain of the River Cam or Rhee and River Cam or Granta
- Shelterbelts and scattered blocks of deciduous woodland including historic parkland at Sawston Hall provide visual enclosure
- Dense pattern of large commuter villages with a suburban character and industrial influences, eroding rural character
- Transport networks including railway and major road networks fragment the area
- Green corridor including Hobson's Park and the rising foothills of the Gog Magog Hills to the east contributes to the setting of Cambridge

The Cam and Granta Tributaries Lowland Farmlands LCA. It is a gently undulating, low lying area, occurring in three places surrounding the narrow River Valleys of the River Cam and River Rhee. It has high points of c. 40m AOD north of Ickleton and Stapleford, where the Gog Magog Hills start to rise to the east, and a low point of c. 10m AOD in Trumpington Meadows Country Park. The LCA contains a number of minor tributaries of the River Cam, Rhee and Granta, and Hobson's Brook, an engineered watercourse designed in the 17th century to bring fresh water into the centre of Cambridge. A number of former clay pits often include waterbodies surrounded by woodland that benefit biodiversity and recreation.

The predominant land cover comprises medium to large, generally rectangular fields in an irregular pattern with low trimmed, fragmented hedgerows and few trees. Occasional pockets of small-scale fields, including fragments of orchards, southeast of Sawston and East of Harston have a localised intimate character and visual enclosure. Shelterbelts and blocks of woodland throughout the LCA, including woodland associated with designed parkland at Sawston Hall, combine to create a wooded appearance and provide visual enclosure. Views across arable fields are short, towards treed horizons. Floodplain grazing marsh occasionally extends from LCA 9B: Cam River Valley, which combines with small fragments of lowland meadow, deciduous woodland and a pocket of calcareous grassland at Sawston Hall to add ecological variety to the landscape. In the north, a green corridor east of Hobson's Brook, which includes Hobson's Park Bird Reserve, provides an important contribution to the setting of the southern part of Cambridge, and a sense of separation between Trumpington and Addenbrooke's Hospital. It provides a tranquil contrast to the urban edge, and a link through the wider green corridor to the north to the centre of Cambridge via the E2 European Long Distance Route.

The LCA is fragmented by several key busy routes into Cambridge, including the A10 and A1201. Large villages which have developed along these routes are well suited for commuting to Cambridge and London, via the nearby M11 and the train line on the western side of the area. Villages generally have strong, historic linear form, though the majority, including Sawston, Shelford and Harston, have expanded through cluster or ribbon development, and this has led to a more suburban feel on the approaches to the city through this area. Once isolated farms tend to be on the edge of settlements, with large barns occasionally prominent on the edges. Industrial development on the northeastern edge of Sawston, south of Duxford, and along the river corridors combines with the large suburban villages and the busy major highways network to erode the rural character of the small-scale riverside location. Woodland within the landscape, and shelterbelts around settlements and industrial developments give an overall relatively enclosed character, increase the “greenness” of the landscape setting, and screen views. This restricts views towards built form, as well as more distant views to Cambridge.

Trumpington Meadows and Hobson’s Park are nature reserves, providing pockets of tranquility with a network of walking trails open to the public.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

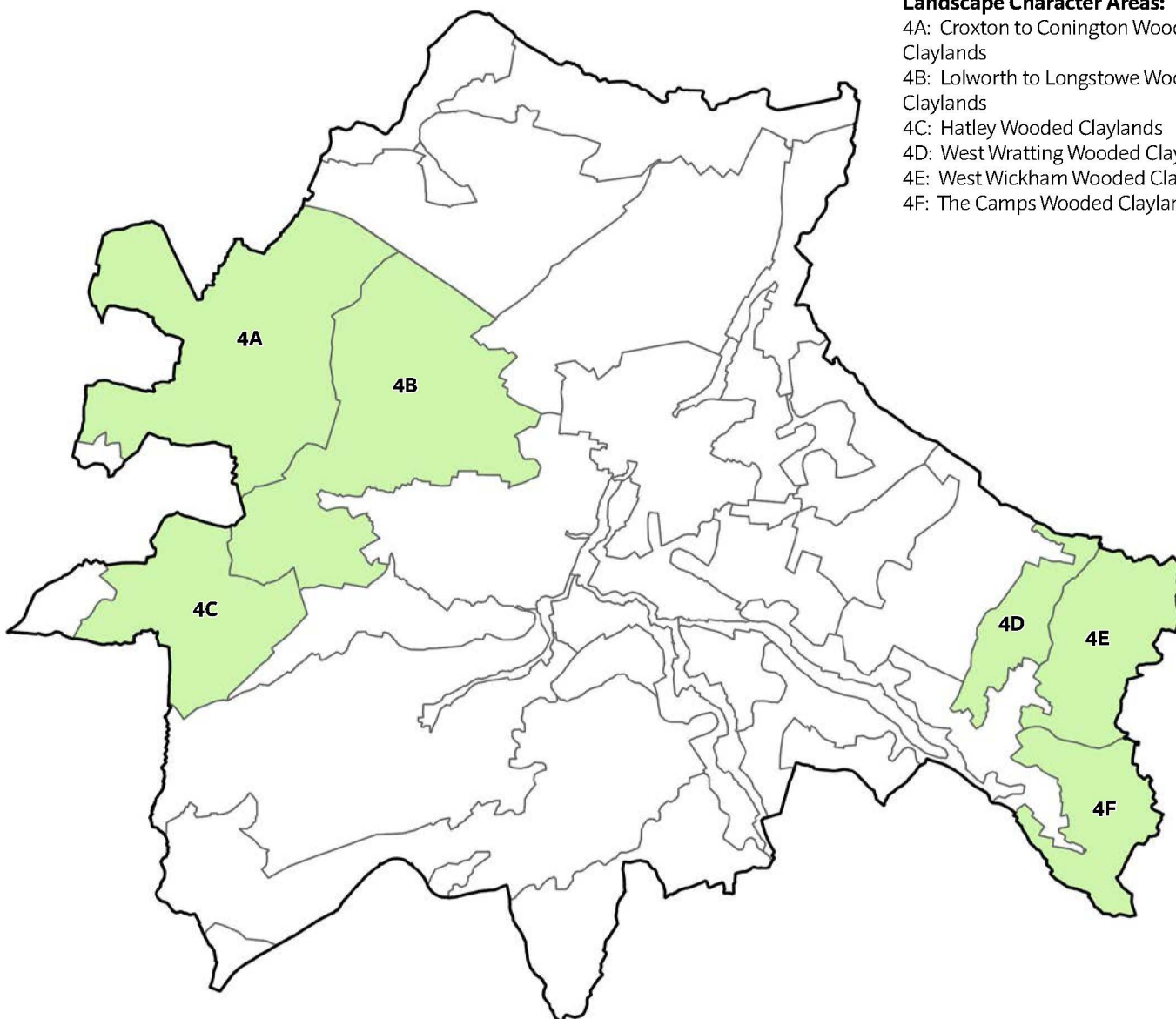
- Green corridor including Hobson's Park which contributes to the setting of Cambridge
- Scattered blocks of deciduous woodland and shelterbelts providing visual enclosure
- Historic parkland at Sawston Hall

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Ensure development enhances existing landscape features, creates links between villages and recreational assets and is in keeping with the rural character
- Conserve and manage woodland to maintain a visually enclosed character and separation
- Conserve parkland and enhance the specific features that give character and its context within the wider landscape in areas where it has been fragmented

LANDSCAPE CHARACTER TYPE 4: WOODED CLAYLANDS



Landscape Character Areas:

- 4A: Croxton to Conington Wooded Claylands
- 4B: Lolworth to Longstowe Wooded Claylands
- 4C: Hatley Wooded Claylands
- 4D: West Wratting Wooded Claylands
- 4E: West Wickham Wooded Claylands
- 4F: The Camps Wooded Claylands



LANDSCAPE CHARACTER TYPE 4: WOODED CLAYLANDS

The Wooded Claylands Landscape Character Type (LCT) are rolling, elevated, settled rural plateaux with shallow valleys which are characterised by low density villages and open views framed by areas of woodland.

Description

Key Characteristics

- Gently rolling, elevated, arable landscape forming a lowland clay plateau
- Minor streams within create shallow depressions or valleys dissect the landscape
- Wooded landscape with substantial areas of deciduous and mixed woodland particularly at higher altitudes and associated with parkland and farm estates
- Strong evidence of medieval settlement, including deserted medieval villages, substantial earthworks, green lanes and several moated sites
- Low density settlement, comprising small linear or nuclear villages interspersed with farms and woodlands
- Open, peaceful and rural landscape

Physical Influences

The Wooded Claylands are a gently rolling and elevated landscape, typically associated with a broad glacial plateau. Both eastern and western parts extend into neighbouring districts. The topography varies across the LCT, with lower landform in the west and higher in the east of the Study Area. The landform of the western Wooded Claylands gradually rises through the LCT, in a generally north-south direction from c.10m AOD to high points of between 70-80m AOD across the central plateau. The landform then gradually slopes down to the south, towards the Lowland Farmlands. Wooded Claylands to the east are generally more elevated, with a topographical range of c.80m to 126m AOD.

This variation in landform is due to variation in the underlying geology. The western Wooded Claylands are underlain by Jurassic and Cretaceous clay sediments, much of which is covered by glacial and fluvial deposits including boulder clay or till and river terrace sands and gravels. The eastern Wooded Claylands are defined by the boulder clay plateau of the South Suffolk and North Essex Clayland, which comprises underlying bedrock of Late Cretaceous Chalk overlain by the glacial boulder clay deposits.

Soils across the LCT are predominantly lime-rich and clayey with impeded drainage. These are very fertile soils, which is reflected in the variety of land uses including rich pastures, deciduous woodland and arable farmland with some grassland.

The landscape is dissected by minor streams that create shallow depressions or valleys that contribute to the undulating character of the landform.

Biodiversity

Overall, this is a productive landscape that is predominantly arable farmland with areas of grassland. In contrast to the adjoining LCTs, this is a wooded landscape with some substantial areas of deciduous and mixed woodland particularly at higher altitudes, across the clay plateau.

Woodland cover is also influenced by a number of parklands and farm estates within this LCT. Although hedgerow boundaries have been removed and heavily trimmed in places, they often provide continuity of vegetation between woodlands and are protected by Tree Preservation Orders (TPO).

There are a small number of Sites of Special Scientific Interest (SSSI) scattered across the Wooded Claylands, which are predominantly areas of woodland that in many cases are also ancient woodland. There are also various County Wildlife Sites (CWS) that include grassland verges, woods and parkland.

Priority Habitats within the Wooded Claylands include small pockets of floodplain grazing marsh in proximity to lower lying watercourses, small areas of lowland meadows and the dominant habitat being dispersed copses and blocks of deciduous woodland.

Historic Landscape Character

The Wooded Claylands landscape contains a mixture of small scale, sub-regular and sinuous fields alongside areas of planned geometric fields, reflecting the late enclosure of former commons and waste.

Prehistoric and Roman settlements are not commonly found in this landscape, due to past dense woodland and heavy soils. There is strong evidence of medieval settlement, with a number of the present settlements having their origins in this time period. Particularly evident in the western Wooded Claylands are deserted medieval villages, substantial medieval earthworks, green lanes and several moated sites that are evidence that the landscape was once more densely populated than the present settlement pattern.

There are several designated historic sites within the Wooded Claylands, including a number of historic parks and gardens, predominantly at sites with medieval origins. The scattered Scheduled Monuments include a number of the deserted medieval settlements and moated sites.

Historically, small villages and hamlets have generally developed in more sheltered situations, usually along the springline in the shallow valleys. An historic, irregular field pattern is largely still present and earth banks are a distinctive feature along some roadsides; appearing to be relic from the historic hedge and bank field boundaries.

The prehistoric Icknield Way and several Roman Roads pass through this LCT, having clearly influenced the layout of parishes and location of settlements.

Settlement Form and Built Character

Settlement within the Wooded Claylands is characterised by relatively low density settlement, comprising small linear or nuclear villages interspersed with farms and woodlands. The edges of villages are often well-defined by mature trees, wide hedgerows, copses or parkland. Small fields also contribute to their landscape setting and provide a transition to the surrounding countryside.

The villages are generally located on the sides of small valleys or along spring lines or on slightly elevated ground. Villages are low density and often arranged around a central village green and with minimal 20th century expansion. The exception to this is Cambourne, which is a new, planned settlement located along the A428 to the west of Cambridge.

A variety of building materials are used within the Clayland villages, including plastered timber-frame, warm red brick and occasional yellow brick with clay tiles, pantiles, longstraw hatch or welsh slate roofs.

Access to the Landscape

There are a few A-roads that cross the Wooded Claylands, providing connections into Cambridge from towns to the north, southeast and west of the Study Area. The A1198 through the western Wooded Claylands follows much of the route of Ermine Street Roman Road.

A variety of B- and minor roads connect from the A-roads and between the dispersed village settlements. These are largely rural and often narrow country lanes. A few isolated farms are located along lanes or at track ends.

There is a strong network of Public Rights of Way (PROW) through the Wooded Claylands, providing connections between the parklands, nature sites and dispersed settlements across the open countryside. The PROW include a variety of bridleways and footpaths, which tend to follow field boundaries and trackways through the landscape.

The Harcamlow long distance path links through the eastern Wooded Claylands and the Clopton Way long distance path through the west of the LCT.

There are a limited number of public sites and attractions in this landscape, although the PROW network provides generally good access to the countryside. Sites include public woodlands and nature reserves.

EVALUATION

Key Landscape Features

- Gently rolling, elevated landscape forming a lowland plateau
- Distinctive wooded landscape of scattered deciduous and mixed woodland including a number of ancient woodland sites
- Remnants of medieval settlement including deserted medieval villages, substantial earthworks, green lanes and several moated sites
- Open, peaceful, rural landscape with some long ranging views from elevated landform

Forces for Change

- Intensive arable agriculture has resulted in amalgamation of fields and removal of hedgerows and other key habitats between the village settlements. Changes in agri-environmental schemes and agricultural subsidies could result in further fragmentation of ecological networks and conversion/expansion of farmsteads
- Climate change resulting in adaptation of agricultural practices and land use change that could increase pressure on priority habitats as well as extreme weather events such as drought that may lead to loss of ancient and veteran trees particularly in the hedgerows and parkland landscapes resulting in a decline in woodland cover
- Development pressures, particularly for new housing which would affect the rural character of the existing village settlements and could result in coalescence of settlements particularly along main transport routes
- Threat of disease and pests to areas of woodland that could result in loss of ancient woodland and veteran trees, reducing the overall woodland cover of this landscape
- Increase in farm sizes through intensification, resulting in removal of hedgerows, ditches and other linear features resulting in loss of definition in the landscape, and introduction of large farm buildings that could be prominent in the rural landscape
- Neglect of historic features including historic parklands and moated sites as well as conversion of historic farm buildings

Condition

The condition of the landscape is generally judged to be **good**. The landscape has a generally well-kept appearance with strong linkages of hedgerows/woodland, often maintained by the influence of parklands and estates. Arable farming has altered the field pattern in places through removal of hedgerow and ditch boundaries, although there is evidence of more recent improved management.

Strength of Character

The Wooded Claylands are largely a peaceful, rural landscape with intact hedgerows, woodland and small villages and scattered farms of vernacular materials. There is localised influence from major transport routes and new, large settlement and extension of villages along them. However, the overall strength of landscape character is judged to be **strong**.

Key Landscape Sensitivities

- Rural tranquillity
- Distinctive pattern of hedgerows and woodland, including substantial areas of ancient woodland
- Parkland estates
- Long, framed views from elevated landform
- Rural settlement pattern of small vernacular villages and dispersed farms

Landscape Guidelines

The overall management objective for the Wooded Claylands is to **conserve** the peaceful, rural landscape with its characteristic network of woodlands, hedgerows, parkland trees and grassland and pattern of small villages and scattered farmsteads. The strategy should seek to **enhance** its character through measures to minimise the urbanising influence of new settlement and transport routes and improve the woodlands and farmlands by encouraging management to retain or enhance their biodiversity and historic character.

Guidance for Landscape Management

- Manage the agricultural landscape and soils both for production and opportunities to improve biodiversity
- Protect the sites and features of archaeological and historic interest, particularly parklands, ancient woodlands and moated sites
- Manage existing woodland particularly ancient woodland through appropriate techniques, and encourage opportunities to plant new woodland to extend or link with existing woods with careful consideration of views, wildlife potential, landform, skyline and landscape pattern
- Manage and enhance hedgerows, particularly those of visual and ecological significance and consider opportunities for re-planting hedgerows where these have been lost/become fragmented

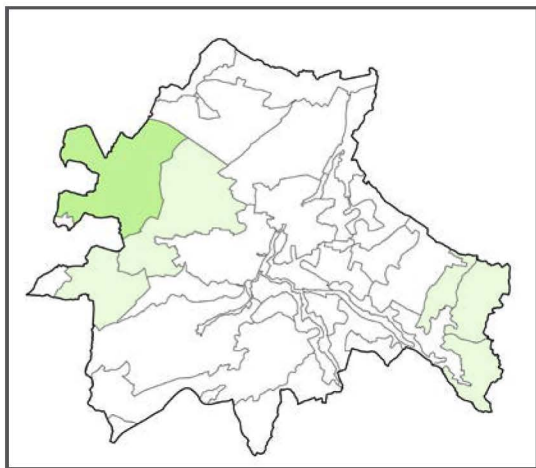
Guidance for Integrating Development into the Landscape

- Maintain the distinctive, dispersed settlement pattern of small, scattered villages and hamlets and isolated farmsteads, within the context of their wooded landscape setting
- Ensure any extensions to valleyside villages are located parallel to contours or at right angles to them along lanes reflecting the historic settlement form
- Ensure any small extensions to villages on hilltops are located along ridgelines
- Ensure the strong linear or rectilinear form of settlements is maintained by avoiding backland and cul-de-sac development where possible
- Ensure density and pattern of new developments reflect that of existing villages and hamlets
- Houses should normally be set back from the street with front gardens, except where enclosure of the street frontage is important to the historic character
- Ensure buildings are arranged in a loose knit form, generally facing and close to, or set a little back from, the streets
- Ensure developments are well integrated with the local patterns of tree planting and hedgerows by using a framework boundary of native woodland, tree and thick hedge planting that reflect the local mixes
- Ensure new developments integrate/connect with existing Public Rights of Way (PROW) within development layout
- Ensure new developments respond to the form, scale and proportions of the existing vernacular buildings, and reflect traditional local building styles, height, materials, colours and textures
- Mark street boundaries by the use of simple picket or trellis fencing, hedges, or in appropriate locations, low flint and brick walls
- Retain hedges and introduce them as boundaries alongside roads outside village cores
- Avoid unnecessary straightening and widening of narrow hedge banked country lanes and the use of standardised and intrusive urban materials, street furniture, lighting and signage as part of traffic calming measures wherever appropriate
- Ensure new, large agricultural buildings are sited and designed to reduce their apparent mass, and minimise their impact on the wider landscape, by relating them to existing farm buildings, avoiding prominent ridgeline sites and by appropriate use of texture, colour and planting
- Conserve small pre-nineteenth century paddocks
- Protect prominent hills and ridges and their skylines by avoiding locating tall structures including masts and wind turbines in visually prominent locations, and by using topography and the landscape's woodlands to reduce the visual impact

LANDSCAPE CHARACTER AREAS

- **4A: Croxton to Conington Wooded Claylands**
- **4B: Lolworth to Longstowe Wooded Claylands**
- **4C: Hatley Wooded Claylands**
- **4D: West Wrating Wooded Claylands**
- **4E: West Wickham Wooded Claylands**
- **4F: The Camps Wooded Claylands**

LANDSCAPE CHARACTER AREA 4A: CROXTON TO CONINGTON WOODED CLAYLANDS



4A: CROXTON TO CONINGTON WOODED CLAYLANDS LANDSCAPE CHARACTER AREA

Croxton to Conington Wooded Claylands Landscape Character Area (LCA) is a settled rural landscape where small woodlands, shelterbelts and tree clumps combine to create a well treed character.

Description

Key Characteristics

- Scattered small blocks of woodland, including some ancient woodland, with expanses of large arable fields in between
- Irregular, rectilinear field pattern
- Clumps of trees and hedgerow trees provide an overall well treed, enclosed character
- Parkland features at Conington Hall and Croxton Park including woodland blocks, shelterbelts, clumps of trees and a pond
- Settlements of a range of sizes including a new town at Cambourne and large village of Papworth Everard, several small villages, linear settlements along roads and isolated farms
- Village edges generally well defined by small fields, orchards, mature trees, thick hedgerows, shelterbelts and woodland
- Ermine Street Roman Road is a distinctive linear feature

Croxton to Conington Wooded Claylands LCA rises from c. 10m AOD adjacent to the Fen Edge Claylands in the north to form an undulating plateau that extends west into Huntingdonshire District. Within the Study Area it has a high point of c. 70m AOD north of Cambourne. It is divided by the shallow valleys of several brooks including Bourn Brook, Haydean and Eastern Brook.

Medium size, arable farmland is organised in a generally irregular, rectilinear field pattern. They are enclosed by a mixture of gappy hedgerows with hedgerow trees and open ditches. In some places, fields have been amalgamated to form very large fields. Scattered woodlands are occasional features within the landscape, with large expanses of open fields in between. Woodland are generally small, and the greatest concentration of woodland is associated with designed parkland at Croxton Park in the southwest. Eltisle Wood, Elsworth Wood, Papwell Wood and Knapwell Wood include ancient woodland. Shelterbelts, clumps of trees and hedgerow trees provide an overall well treed character. Occasional small fragments of orchards, floodplain grazing marsh and mosaic habitats add variety and interest to the landscape, as do parkland at Caxton Hall and Conington Hall. Ermine Street Roman Road is a distinctive linear feature, running from roughly northwest to southeast through the LCA. Other linear features within the landscape include straight tracks used as Public Rights of Way (PROW) between settlements, and straight field boundaries.

Settlement includes the new town of Cambourne, several villages, linear settlements along roads and isolated farms. Cambourne is the largest settlement in South Cambridgeshire, incorporating three villages; Great Cambourne, Lower Cambourne and Upper Cambourne. The largest village, Papworth Everard grew significantly in the 1920s with the development of cul de sacs accessed from Ermine Street to create an overall linear settlement. The smaller villages include Conington, Graveley, Elsworth, Eltisley and Caxton. These villages have a range of forms, from Elsworth which is nucleated, to Graveley and Conington which are roughly rectangular, with fields at the centre. Papworth St Agnes, Eltisley and Caxton have historic linear forms.

The villages tend to have well defined edges provided by mature trees, thick hedgerows, shelterbelts and woodland. Small fields and paddocks at village edges contribute to their landscape setting and provide a transition to the surrounding countryside. Views over undulating arable fields between settlements are long, framed by trees and look towards treed or wooded horizons. Vertical features interrupting the skyline include telegraph poles, pylons, lines of poplar trees, windmills at Bourn and Elsworth, and church steeples which are occasionally visible above the trees. The busy A1307, A14, A428 and A1198 roads are localised detractors from the rural tranquillity elsewhere within the LCA.

The Pathfinder Long Distance Trail crosses the LCA, providing a link between former RAF bases. Cambourne Nature Reserve contains a mixture of meadows and wetlands with a network of paths open to the public for recreation.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

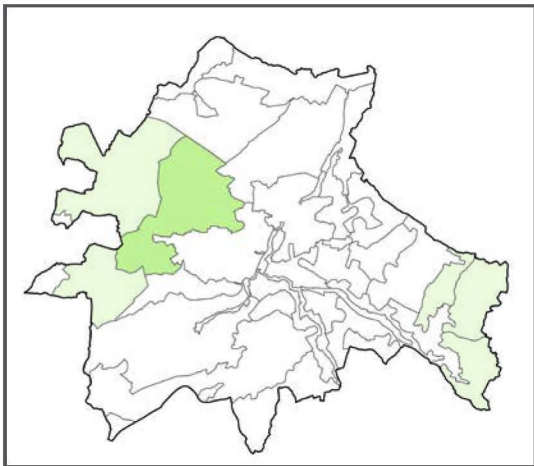
- Parkland features at Conington Hall and Croxton Park including woodland blocks, shelterbelts, clumps of trees and a pond
- Village edges generally well defined by small fields, orchards, mature trees, thick hedgerows, shelterbelts and woodland
- Ermine Street Roman Road is a distinctive linear feature

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve parkland and enhance the specific features that give character and its context within the wider landscape in areas where it has been fragmented
- Conserve and enhance the regular small-scale small fields, orchards, mature trees, thick hedgerows, shelterbelts and woodland at village edges
- Maintain distinctive linear features

LANDSCAPE CHARACTER AREA 4B: LOLWORTH TO LONGSTOWE WOODED CLAYLANDS



4B: LOLWORTH TO LONGSTOWE WOODED CLAYLANDS LANDSCAPE CHARACTER AREA

Lolworth to Longstowe Wooded Claylands Landscape Character Area (LCA) is a settled rural landscape with a distinctive wooded parkland character.

Description

Key Characteristics

- Scattered, small blocks of woodland, including some ancient woodland, linked by mature, fragmented hedgerow network
- Irregular, generally rectilinear field pattern
- Distinctive repetition of designed parkland features including historic parkland and the American Cemetery
- Landscape divided by straight linear features including roads, tracks and a dismantled railway
- Dense settlement pattern of small and medium sized villages concentrated close to main roads
- Villages generally have well defined edges defined by mature hedgerows, woodlands and clumps of trees
- Distinctive wide, open views towards Cambridge from Coton Countryside Reserve and towards Ely from the American Cemetery

Lolworth to Longstowe Wooded Claylands LCA rises from the Fen Edge Claylands in the north at c. 15m AOD to form an undulating plateau that extends southwest into Central Bedfordshire. Within the Study Area it has a high point of c. 70m west of Highfields Caldecote. Shallow valleys of streams including the Bin Brook, Dean Brook and tributaries of the Bourn Brook, as well as some unnamed streams, dissect the landscape, generally flowing to the north and south either side of the A428 which forms the approximate watershed.

Arable fields are generally rectilinear, indicative of 19th century enclosure, but arranged in an irregular way. Fields are generally of medium size, but in places fields have been amalgamated to make very large fields. Mature, fragmented hedgerows and occasional open ditches provide enclosure. Occasional woodland blocks are linked by the robust hedgerow network, creating localised enclosure and intimacy. Kingston Wood and Hardwick Wood both contain ancient woodland. A key feature of this LCA is the repetition of historic parkland features including tree belts, clumps, woodland and waterbodies at Childerley Hall, Madingley Hall, Longstowe Hall, Bourn Hall and south of Boxworth. The formal commemorative landscape of the American Cemetery in the east of the LCA also has clumps of trees and individual trees set in woodland in a post-war parkland. Occasional tree avenues along main roads are extensions of the designed parkland character. Pockets of orchard and mosaic habitats add diversity to the landscape within the LCA. Ermine Street Roman Road is a strong linear feature, as is the A428, from which largely straight minor roads tend to follow the north-south alignment of the rivers, and the line of the disused railway marked by a line of trees and good quality semi improved grassland in the landscape. Tranquillity within the LCA is locally eroded close to the A14, A428 and A1198.

Settlement comprises isolated farms and villages generally located close to the main roads. Villages include Highfields Caldecote, Hardwick, Madingley, Boxworth, Lolworth, Bar Hill, Dry Drayton, Knapwell, Bourn and Longstowe. In general, villages tend to have an historic linear core and rural character with edges well defined by mature hedgerows, woodlands and clumps of trees providing visual enclosure. Enclosed small fields and paddocks often help the transition between village and farmland. Churches are landmarks within the landscape. Bar Hill is a densely populated planned village, atypical of the other villages, comprised of cul de sacs accessed from spine roads and surrounded by dense tree planting and hedgerows. Views from villages are generally long and framed by woodland or clumps of trees, across open fields towards wooded horizons. In the south of the LCA, the landform of the rising chalk escarpment provides localised visual enclosure. Occasional vertical features interrupting the skyline include telegraph poles, distant pylons and turbines which break the skyline.

Distant, panoramic views towards Cambridge from an elevated viewpoint at Coton Countryside Reserve include the landmark buildings of the city centre, and the elevated slopes of the American Cemetery has views towards Ely. As well as a visual connection, Madingley Wood and the American Cemetery are connected to the River Cam in Cambridge via a green corridor comprising the Bin Brook in 3B: Bourn Tributaries Lowland Farmlands, sports grounds and leafy colleges in the west of the city, which contributes to the setting of the west of Cambridge. Long distance footpaths crossing this LCA include the Pathfinder Long Distance Walk, Harcamlow Way and the Wimpole Way, providing links between several heritage and nature features and sites in adjoining character areas.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

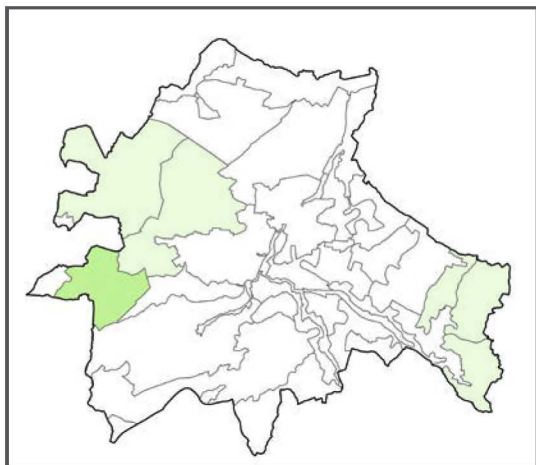
- Distinctive repetition of designed parkland features
- Well defined village edges of small fields and paddocks with mature hedgerows, woodlands and clumps of trees
- Distinctive wide, open views towards Cambridge from Coton Countryside Reserve and towards Ely from the American Cemetery
- Green corridor linking Madingley Wood and the historic core of Cambridge which contributes towards the setting of the city

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve parkland and enhance the specific features that give character and its context within the wider landscape in areas where it has been fragmented
- Conserve and enhance small-scale small fields and paddocks with mature hedgerows, woodlands and clumps of trees at village edges
- Conserve open views across the wider landscape towards Cambridge and Ely
- Ensure development enhances existing landscape features, creates links between villages and recreational assets and is in keeping with the open, rural character

LANDSCAPE CHARACTER AREA 4C: HATLEY WOODED CLAYLANDS



4C: HATLEY WOODED CLAYLANDS LANDSCAPE CHARACTER AREA

Hatley Wooded Claylands Landscape Character Area (LCA) has a sparsely settled, rural character, with designed parkland and long, open views towards distant wooded horizons.

Description

Key Characteristics

- Rectilinear arable fields in an irregular pattern
- Well treed landscape with hedgerows, avenues of trees, shelterbelts, tree clumps and blocks of woodland, including ancient woodland, combining to create long, open views to distant horizons
- Parkland character composed of woodland, shelterbelts and clumps of trees near Hatley Park
- Sparse settlement comprising Little Gransden, linear settlements along roads and isolated farms

Hatley Wooded Claylands LCA is an undulating plateau landscape that extends southwest into Central Bedfordshire. It is dissected by several small stream valleys including Gransden Brook and Millbridge Brook. Within the Study Area the highest point is c. 80m AOD north of East Hatley, and the lowest point c. 50m in the west.

This is a well treed landscape with hedgerow trees, tree clumps and occasional blocks of woodland fragmented by large, arable fields. Fields are generally rectilinear and organised in an irregular pattern. Enclosure is by low, fragmented hedgerows ditches and sometimes. A disused railway and the airfield east of Little Gransden impose some linearity and regularity on the otherwise irregular pattern. The largest block of woodland, Hayley Wood, includes ancient woodland, and is designated a SSSI for its diverse landscape. Variety is added to the landscape by scattered orchards, and designed parkland features at Hatley Park, including woodland, shelterbelts and clumps of trees. Enclosure by wooden fences in this area maintains open views across undulating fields, towards distant horizons, framed by clumps of trees. Occasional tree avenues on roads contribute to the parkland character. Pockets of lowland meadow south of the disused railway and south of Hatley Park, and grazing marsh north of Hatley Park add diversity to the landscape.

Sparse settlements include the village of Little Gransden, linear settlements along roads and isolated farms. Little Gransden is a linear village located in the valley of Gransden Brook. Dwellings are interspersed with small fields, hedgerows and woodland providing localised intimacy and visual enclosure. Farm buildings are generally low and well-integrated into the landscape. Occasional vertical features interrupting the skyline are occasional telegraph poles and trees. A limited number of minor roads means that there is a greater perception of tranquillity than in other western Wooded Claylands.

The Clopton Way, linking the Greensand Ridge Walk with the Wimpole Way, passes through the south of the LCA, providing connectivity with the Public Rights of Way (PROW) network and heritage sites in other LCAs. Hayley Wood Nature Reserve has a network of paths which are open to the public for recreation.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

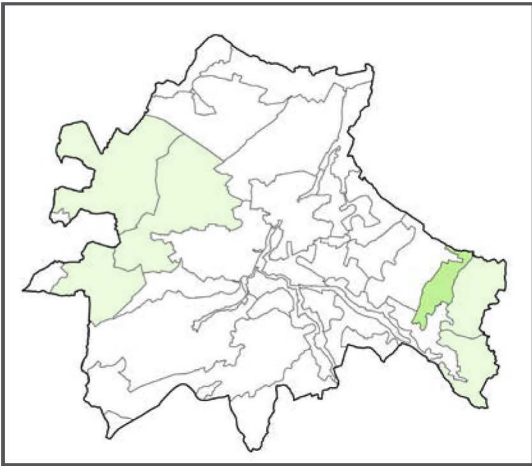
- Parkland character composed of woodland, shelterbelts and clumps of trees near Hatley Park
- Small fields, hedgerows and woodland near to Little Gransden

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve parkland and enhance the specific features that give character and its context within the wider landscape in areas where it has been fragmented
- Conserve and enhance small-scale small fields and paddocks with mature hedgerows, woodlands and clumps of trees at village edges

LANDSCAPE CHARACTER AREA 4D: WEST WRATTING WOODED CLAYLANDS



4D: WEST WRATTING WOODED CLAYLANDS LANDSCAPE CHARACTER AREA

West Wrattling Wooded Claylands Landscape Character Area (LCA) is a rolling, tranquil, rural landscape with small villages and scattered woodland including blocks of ancient woodland.

Description

Key Characteristics

- Large fields organised in a regular pattern in the north which becomes more haphazard in the south, indicative of medieval field patterns
- Scattered woodland comprising several small, scattered blocks and two larger areas including ancient woodland at Balsham Wood and Borley Wood
- Settled rural landscape comprising two small, linear villages and isolated farms
- Village edges are generally surrounded by pastoral fields enclosed by hedgerows and shelterbelts creating a more intimate character
- The Roman Road is a distinctive linear feature

West Wrattling Wooded Claylands LCA is a rolling rural landscape. Within the Study Area, the high point is c. 120m AOD in the east and the lowest points c. 75 m AOD in the north and south. Hydrological features are limited to occasional drains extending into neighbouring LCAs in a roughly northwesterly and southeasterly direction.

Arable fields are generally large, enclosed by well-trimmed, sometimes gappy hedgerows with occasional hedgerow trees, and straight open ditches. There is some regularity to the field pattern in the north which starts to become a bit more irregular in the south of the LCA where it is indicative of medieval field patterns. Smaller fields, paddocks and woodlands closer to edges of settlements give a localised more intimate scale and visual enclosure. Scattered woodland comprises several small blocks in the east and two large blocks of woodland in the south, giving the LCA its wooded character. This includes ancient woodland at Balsham Wood and Borley Wood. Borley Wood is a County Wildlife Site and Balsham Wood a SSSI, indicative of ecologically valuable landscape.

Settlement comprises small villages, Balsham and the slightly larger West Wrattling, interspersed with isolated farms. The villages are linear and have a wooded setting, mature hedgerows and trees that contribute to rural character. West Wrattling Park forms the eastern edge of West Wrattling village, introducing parkland character to the landscape, and enclosed fields give it a soft edge. The landform and woodland cover combine to create long expansive views which extend to distant wooded skylines. Views sometimes include vertical features which interrupt the skyline including village rooftops, church towers and the wind turbines at Wadlow Wind Farm in 7A: Eastern Chalk Hills. The area generally has a remote, rural character.

The routes of the historic Icknield Way and Harcamlow Way pass through the LCA, linking the area with historical and ecological sites in neighbouring LCAs. Part of their route is along the distinctive linear Roman Road in the south of the LCA.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

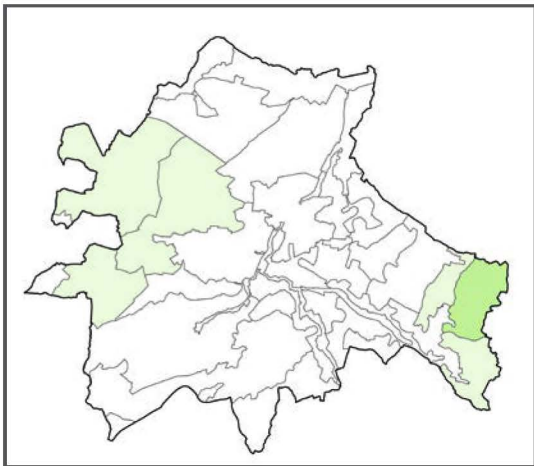
- Irregular field pattern in the south indicative of medieval enclosure patterns
- Well defined village edges with small pastoral fields enclosed by hedgerows and shelterbelts near villages
- Distinctive linear feature of the Roman Road

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve irregular, medieval field boundaries
- Conserve and enhance the regular small-scale pastoral fields, shelter belts and hedgerows at village edges
- Maintain distinctive linear features

LANDSCAPE CHARACTER AREA 4E: WEST WICKHAM WOODED CLAYLANDS



4E: WEST WICKHAM WOODED CLAYLANDS LANDSCAPE CHARACTER AREA

West Wickham Wooded Claylands Landscape Character Area (LCA) is characterised by an irregular field pattern with a scattering of small villages and isolated farms, interspersed with blocks of ancient woodland.

Description

Key Characteristics

- Predominantly irregular field pattern indicative of medieval field layout
- Significant woodland cover generally comprising medium size blocks including ancient woodland
- Settlement includes small, linear villages and isolated farms, generally enclosed by strong woodland groups and mature hedgerows.
- Distinctive open, panoramic views towards wooded horizons

West Wickham Wooded Claylands LCA is composed of rolling landscape that extends north into East Cambridgeshire District and east into West Suffolk. Within the Study Area, there is a high point of c. 122m AOD east of West Wickham and a low point of 85m AOD in the southwest. The LCA contains the source of the River Stour, a small stream which unobtrusively winds its way east through the landscape. A number of ponds east of Horseheath are fragments of the remains of designed parkland.

Predominantly medium sized arable fields are enclosed by a combination of open ditches and a fragmented hedgerow network. The field pattern is generally haphazard, indicative of the medieval enclosure pattern, with occasional regularity imposed by later enclosure of large fields around West Wickham, or the now disused 20th century airfield east of West Wickham. There are a number of small, regular fields on the edges of villages, which create intimacy and localised visual enclosure in these locations. Substantial areas of woodland scattered throughout the LCA, including ancient woodland, creates a distinctive, wooded character. The woodland blocks are predominantly designated as County Wildlife Sites (CWS) and Over Wood and Carlton Wood are designated SSSI, due to the ecological value of the landscapes here. Hedgerow trees combine with woodland and isolated trees to give a well treed, balanced character and a wooded skyline.

Settlement includes a number of small, linear villages including Weston Green, Weston Colville, Carlton and Willingham Green, interspersed with isolated farms. Villages and farms are generally enclosed by strong woodland groups and mature hedgerows. Expansive, open views extend across undulating arable fields towards wooded skylines, often framed by woodland or lines of trees. Occasionally views are enclosed by rising landform, or include glimpses of built form, church towers, vertical telegraph poles, masts or the wind turbines at Wadlow Wind Farm in 7A: Eastern Chalk Hills. Occasional very large barns break the skyline and are discordant with the otherwise remote, rural landscape. The A1307 southern boundary is a localised detractor from tranquillity experienced elsewhere in the LCA.

Scattered features of historical and recreational significance include a section of the historic route of the Harcamlow Way which provides a link to historical sites in other LCAs, the Roman Road which is a distinctive linear feature in the south, and earthworks including several moats. Lower Wood Nature Reserve has a number of walking trails through the ancient woodland which are open to the public for recreation.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

- Predominantly irregular field pattern indicative of medieval field layout
- Small, regular fields, strong woodland groups and mature hedgerows generally enclosing settlement
- Distinctive open, panoramic views towards wooded horizons

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve irregular, medieval field boundaries
- Conserve and enhance the regular small-scale fields, woodlands and hedgerows at village edges
- Conserve open views towards wooded horizons

4F: THE CAMPS WOODED CLAYLANDS LANDSCAPE CHARACTER AREA

The Camps Wooded Claylands Landscape Character Area (LCA) is an open, rural landscape, characterised by an irregular, haphazard arable field pattern, with a scattering of small villages and linear settlements and occasional blocks of woodland.

Description

Key Characteristics

- Irregular medieval field pattern
- Raised banks, open ditches and fragmented hedgerow network provide enclosure
- Scattered small woodlands and shelterbelts, often at settlement edges
- Settlement comprises two small villages, linear road side settlements and isolated farms

The Camps Wooded Claylands is a rolling rural landscape that extends east into West Suffolk and south into Uttlesford District. Within the Study Area, it has a highpoint of c. 126m AOD in the southeast and low point of c. 70m AOD in the west. The rolling landform contains the source of tributaries of the River Bourn, River Granta and Stour Brook in shallow valleys.

An historic, irregular arable field pattern remains, interspersed by occasional woodlands of varying sizes, including ancient woodland at Langley Wood in the south. A robust, but fragmented hedgerow network provides enclosure, supplemented by occasional ditches. Smaller fields, woodlands and shelterbelts close to the edges of settlements add to the complexity of the landscape. Earth banks are a distinctive feature along some roadsides, reflecting ancient hedge and bank field boundaries. Langley Wood is a designated SSSI, and Woodpack Grove and Northey Wood are designated County Wildlife Sites for their ecologically rich deciduous woodland.

Settlement comprises a number of scattered hamlets, linear settlements along roads, isolated farms and two linear villages, Castle Camps and Shudy Camps. Localised visual enclosure by hedgerows, tree belts, small fields and parkland east of Shudy Camps give a more intimate feeling close to the village. This provides a contrast to views elsewhere which tend to be open, expansive views towards distant horizons, often framed by clumps of trees. This is a remote LCA with a rural character, and the skyline is rarely broken, apart from by poplar trees, lines of telegraph poles and a mast southeast of Camps End. Several moats are localised distinctive features within the landscape, adding time depth.

The A1307 which forms the sinuous northern boundary, and the disused railway line north of Shudy Camps are distinctive linear features in the otherwise haphazard, organic pattern. The disused railway is marked by mature trees in the landscape. The A1307 is a localised detractor from rural tranquillity experienced elsewhere in the LCA.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

- Irregular, medieval field pattern
- Raised banks
- Small, regular fields, tree groups and mature hedgerows generally enclosing settlement
- Expansive, panoramic views towards distant wooded horizons

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve irregular, medieval field boundaries
- Conserve raised bank field boundaries
- Conserve and enhance the regular small-scale fields, tree groups and mature hedgerows at village edges
- Conserve expansive views towards distant wooded horizons

LANDSCAPE CHARACTER TYPE 5: WOODED GREENSAND RIDGE

Landscape Character Areas:
5A: Wooded Greensand Ridge



LANDSCAPE CHARACTER TYPE 5: WOODED GREENSAND RIDGE

The Wooded Greensand Ridge Landscape Character Type (LCT) covers a small area of a well wooded, elevated narrow ridge with a dispersed pattern of settlements, continuing southwest of the Study Area into Bedfordshire.

Description

Key Characteristics

- Rolling, elevated and prominent wooded ridge
- Dispersed settlement pattern of hamlets and individual properties around the main settlement of Gamlingay
- Tree plantations with some traditional coppice
- Wooded slopes, particularly to the west of the ridgeline
- Pockets of remnant heathland
- Generally irregular, small-scale field pattern
- Textured landscape with strong sense of enclosure

Physical Influences

The LCT is defined by a narrow band of sandstone, referred to as the Lower Greensand. It forms a prominent, narrow ridge to the west of the Study Area, around Gamlingay. The landform rises gently from c.35m AOD alongside Potton Brook in the east, to c.60m AOD in the west of the Study Area. Beyond this the landform slopes more steeply, through Tetworth, Woodbury and Everton beyond the District boundary.

The solid geology of the LCT is predominantly Cretaceous Lower Greensands (green and brown sands and sandstones) with outcrops of Ampthill Clay. The soil is generally free draining, slightly acidic sand that is not very fertile. It is suitable for dry pastures, acid woodland and has potential for lowland heath.

Small streams drain the ridges, feeding into the watercourses at the base of the slopes and in turn, to the river courses. There are occasional ponds and water bodies associated with designed landscape or former quarries, including those along the watercourse in the northeast-east of the LCT.

Biodiversity

This is a wooded landscape, comprising predominantly mixed deciduous woodland with occasional areas of acidic grassland.

Gamlingay Wood is a Site of Special Scientific Interest in the north of the area. It is also an area of ancient woodland. There are further areas of ancient woodland across the steeper slopes to the west of the LCT, outside the Study Area, including Sand Wood, White Wood, Woodbury Sinks and Boxhole Wood.

There are three main County Wildlife Sites within the Study Area, namely Gamlingay Cinques, Gamlingay Heath Plantation and New Barn Grassland. Gamlingay Cinques is a small Wildlife Trust reserve that is under restoration. It is an area of lowland heath, meadow and pasture. There are a couple of smaller County Wildlife Sites on the southern edge of Gamlingay, including Gamlingay Cemetery.

Priority habitats within the LCT include substantial areas of deciduous woodland and a small area of lowland fens around the water body west of Gamlingay.

This is a wooded landscape, which also contains a number of Tree Preservation Orders including group TPO at Gamlingay Heath Plantation and individual TPO within Gamlingay and near to Gamlingay Cinques.

Historic Landscape Character

The poor fertility and lightness of the soils resulted in the creation of parkland estates and settlement being established on the higher land of this LCT.

By the 12th century, heathland had developed on the Lower Greensands and the poor soil drainage resulted in two quaking bogs on Gamlingay Heath (drained in 1855) and Cinques Common. There are a number of ancient woodlands within the LCT, including Gamlingay Wood that has been woodland for at least 1000 years and was a source for building materials and firewood to past communities.

Gamlingay Park survives to the west of Gamlingay, comprising extensive earthwork remains of an early formal garden including terraces and a trapezoid lake. This was laid out when a house was built in 1712 but abandoned in 1776¹⁹.

Tree planting at Gamlingay Great Heath and pig rearing after enclosure in the mid-19th century altered the landscape. Enclosure of the landscape appears to have been piecemeal and gradual, due to its irregular pattern.

Settlement Form and Built Character

Settlement within the LCT, within the Study Area, comprises the village of Gamlingay, a number of hamlets, small clusters of properties and individual farms. Gamlingay was historically a group of hamlets, around the place on the heathland where a series of routeways converged. It now has the form of a nucleated village, although the conservation area identifies the former linear character of the settlement. Settlement beyond Gamlingay is generally linear, located along the roads and tracks that link between the larger villages of Gamlingay and Potton to the south.

There is a variety of vernacular building character, comprising red brick, white render and tiled roofs. Scattered, more recent development has taken place as infill and on the edges of the hamlets, including residential properties and small commercial and agricultural units. The northern and southern outskirts of Gamlingay are characterised by modern cul-de-sac, residential development.

¹⁹ www.parksandgardens.org

Access to the Landscape

A small number of minor roads link through this LCT, between larger settlements to the north and south. Drove Road follows the contours along ridge, to the western edge of the LCT. There are limited Public Rights of Way (PROW) within the Study Area. The Clopton Way promoted route runs through the LCT, between Gamlingay and Wimpole Hall to southeast. This links along Tetworth Hill (road) to the Greensand Ridge Walk long-distance path that follows the ridgeline southwest beyond the District boundary. Other footpaths link between settlement areas, including a well-defined bridleway south towards Potton. There is public access to Gamlingay Cinques and Gamlingay Wood, with numerous pathways around both.

Evaluation

Key Landscape Features

- Prominent wooded ridgeline creating a distinctive skyline to the lower lying Claylands to the east
- Significant areas of ancient woodland, along with other important nature conservation habitat types including heath, meadow and grassland
- Remnant estate parkland landscapes including earthworks, woodland and parkland planting west of Gamlingay, linking west to Woodbury Park
- Settlement is distributed along the crest of the ridge and encompassed by small, irregular fields

Forces for Change

- Neglect or removal of hedgerows and decline in grassland habitats as a result of localised agricultural intensification and amalgamation of farms
- Development pressures at the edges of existing settlements resulting in encroachment of settlement towards the edge of the ridge, where it would be prominent and impact on rural character
- Neglect of historic features including parkland, through changes in land use and expansion of farming practices
- Climate change leading to more extreme weather that could alter the agricultural landscape and therefore, the variety of habitats across the ridge
- Threat of disease and pests to areas of woodland that could result in loss of ancient woodland and veteran trees, reducing the overall woodland cover of this landscape

Condition

The landscape possesses a moderate degree of intactness, with good survival and management of woodland but some neglect of estates within the Study Area. There are a variety of habitats across this LCT, with a number of designated nature sites that are well managed. The condition of the landscape is generally judged to be **moderate**.

Strength of Character

This is a landscape of generally **strong** character as a result of its distinct and recognisable pattern of elements that contribute to the settled, wooded ridgeline. It is a textured landscape with strong sense of enclosure that contrasts with the adjoining open Claylands.

Key Landscape Sensitivities

- Areas of ancient woodland and parkland planting that define the character of this LCT
- The range of habitats of nature conservation value including areas of woodland and heathland
- Rural settlement character that is largely contained to the crest of the ridge

Landscape Guidelines

The overall management objective for the Wooded Greensand Ridge is to **conserve** the woodland, parkland and heathland that characterise the landscape, along with the rural settlement pattern and intact pattern of small fields that encompass Gamlingay. Some landscape elements require **enhancement**, in particular hedgerows and historic parkland features.

Guidance for Landscape Management

- Manage the agricultural landscape and soils both for production and opportunities to improve biodiversity
- Conserve and enhance the historic parkland and estate landscapes, particularly the wooded patterns; any new landscape features or woodland planting should have regard to the designed character of parklands in the wider landscape
- Manage existing woodland particularly ancient woodland through appropriate techniques, and encourage opportunities to plant new woodland to extend or link with existing woods with careful consideration of views, wildlife potential, landform, skyline and landscape pattern
- Conserve and enhance hedgerows, particularly those of visual and ecological significance and consider opportunities for re-planting hedgerows where these have been lost/become fragmented
- Protect the sites and features of archaeological and historic interest, particularly parklands and ancient woodlands
- Manage and create areas of heathland habitat through appropriate methods, to protect the existing habitat resource and diverse landscape character and cultural qualities of the ridge

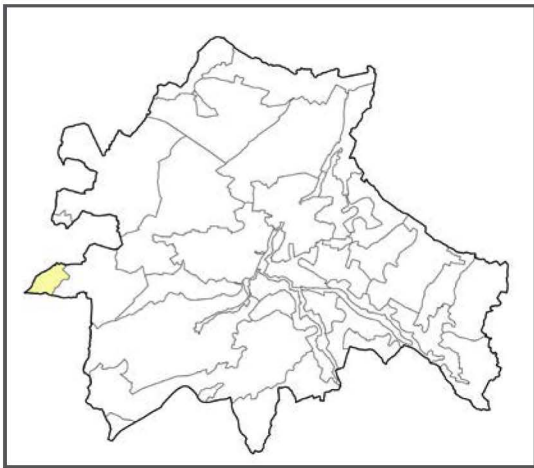
Guidance for Integrating Development into the Landscape

- Manage the scale, siting and design of new settlement to avoid incongruous development that sprawls across the ridge
- Maintain the distinctive, dispersed settlement pattern of farmsteads, cottages and small, detached houses along lanes, seeking to avoid infill
- Maintain the distinctive settlement setting of Gamlingay, including; small stream valleys, woodlands, mature hedgerows and trees
- Ensure new developments improve any existing harsh edges with a framework of new hedges, trees and woodland planting relating to local mixes
- Maintain the traditional linear form of Gamlingay by limiting backland and cul-de-sac developments
- Ensure buildings are positioned to reflect local patterns such as mostly continuous frontages running along back edge of pavements, with occasional gaps giving glimpses of countryside
- Ensure new developments integrate/connect with existing Public Rights of Way (PROW) within development layout
- Ensure new developments reflect the form, scale and proportions of existing vernacular buildings and pick up on the traditional building styles, height, materials, colours and textures of the locality
- Enclose boundaries facing onto roads by brick walls in the village core
- Retain hedges and introduce them as boundaries alongside roads outside village cores
- Avoid the use of standardised and intrusive urban materials, street furniture, lighting and signage as part of traffic calming measures wherever appropriate
- Ensure large barns are sited and designed to minimise their bulk and impact on the wider landscape, normally relating them to existing groupings of farm buildings

LANDSCAPE CHARACTER AREAS

- **5A: Gamlingay Wooded Greensand Ridge**

LANDSCAPE CHARACTER AREA 5A: GAMLINGAY WOODED GREENSAND RIDGE



5A: Gamlingay Wooded Greensand Ridge LANDSCAPE CHARACTER AREA

Gamlingay Wooded Greensand Ridge Landscape Character Area (LCA) is a settled, elevated ridge with distinctive woodland cover, including historic parkland providing visual enclosure.

Description

Key Characteristics

- Diverse landcover comprising distinctive woodland cover interspersed by a matrix of heathland, arable and pastoral farmland
- Woodland, remnant parkland, hedgerows and shelterbelts combine to create an intimate landscape with a strong sense of enclosure
- Remnant parkland features including a network of ponds and woodland west of Gamlingay
- Distinctive network of small pastoral fields enclosed by mature hedgerows, trees and shelterbelts around Gamlingay

Gamlingay Wooded Greensand Ridge rises distinctively from the adjoining Wooded Claylands LCT that continues southwest into Central Bedfordshire. Within the Study Area it rises from c. 30m AOD in the south to form an undulating plateau of c. 50-60m AOD. Minor streams including Millbridge Brook feed a local network of ponds associated with parkland west of Gamlingay.

Small to large blocks of woodland are scattered throughout an irregular pattern of mixed farmland and heathland, resulting in a strong wooded character with a strong sense of enclosure along the ridgeline. This includes ancient woodland at Gamlingay Wood and woodland associated with remnant parkland at Gamlingay Park. The mosaic of woodland is linked by an inconsistent network of mature, low hedgerows and shelterbelts, supplemented by post and wire fences, wooden fences and places with open boundaries. The landscape south of Gamlingay generally has a greater sense of enclosure and intimacy, with a number of small pasture fields with low hedgerows and trees. In the north of the LCA, especially the northeast, the landscape is more open and larger scale with large fields and limited hedgerows. The diversity of landcover, trees and boundary types combine to create complexity and diversity in the landscape.

In addition to the large village of Gamlingay, there is a dispersed settlement pattern of farmsteads and cottages located along the minor road network. Gamlingay retains a strong historic linear core. More recent development comprises small, piecemeal estates with cul-de-sacs, creating an overall nucleated settlement. Throughout the landscape, buildings are visible in varying degrees, but are generally low and not prominent on the skyline. Open fields, hedgerowed paddocks, woodland and streams contribute to the distinctive and tranquil landscape setting, despite a harsh urban edge in parts. Occasional vertical features which stand out on the horizon include masts and poles related to the communications network, and lines of poplar trees.

Gamlingay Wood is an important location for recreation and ecology. It is a designated SSSI with a number of recreational pathways providing access through the ancient woodland. Gamlingay Heath Plantation and Gamlingay Cinqes also have walking trails which are open to the public.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

- Diversity of landcover and features which create complexity and intimacy within the landscape
- Remnant parkland features including a network of ponds and woodland west of Gamlingay that contributes to the overall historic and ecological value of the landscape
- Distinctive network of small pastoral fields enclosed by mature hedgerows, trees and shelterbelts around Gamlingay

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Manage watercourses and ponds to maintain historic features and enhance ecological value of the landscape

LANDSCAPE CHARACTER TYPE 6: FEN EDGE CHALKLANDS

Landscape Character Areas:

6A: Fen Ditton Fen Edge Chalklands

6B: Wilbraham Fen Edge Chalklands

6C: Fulbourn Fen Edge Chalklands



LANDSCAPE CHARACTER TYPE 6: FEN EDGE CHALKLANDS

The Fen Edge Chalklands Landscape Character Type (LCT) is a settled, transitional landscape with scattered villages and historic parkland, characterised by long, open views over predominantly arable fields between the low-lying Fens and rising land to the east and southeast of Cambridge.

Description

Key Characteristics

- Low-lying, gently undulating landform
- Generally open landscape with long views across large fields
- Predominantly arable landscape dominated by late enclosures, with limited woodland cover and low, hawthorn hedge or ditch boundaries
- A variety of parkland landscapes in proximity to the historic villages
- Vegetation comprises scattered woodland copses and shelterbelts across the higher landform, with a concentration of woodland around settlements forming part of remnant parkland landscape
- Settlement comprises generally small villages with strong, historic, linear form and traditional vernacular
- Vertical features including the high voltage pylon lines to the northeast and east of the city, telegraph poles and masts are very prominent in the gently undulating landscape

Physical Influences

The Fen Edge Chalklands landscape is a generally low-lying but gently rolling landscape extending east into East Cambridgeshire District that is dissected by small streams. The landform rises in a general northwest to southeast direction, from c. 5m AOD on the edge of The Fens to high points of c.50m as it rises towards the Chalk Hills. Within the Study Area, the LCT provides a subtle and gradual transition between the Chalk Hills and the edge of The Fens.

The Fen Edge Chalklands are located on the western edge of a band of Upper Cretaceous Chalk, which forms part of a chalk ridge that runs across southern England between the Chilterns and Newmarket. The chalk is covered in surface deposits laid down by rivers and glaciers during the last ice age.

The overlying soils are generally free-draining, lime-rich and loamy. These are moderately fertile, with some areas of higher fertility where there is more acidity such as around Swaffham Bulbeck and Little and Great Wilbraham. The soils give rise to a typical landcover of arable farmland with scattered, rich woodland and chalk grasslands on the rising landform.

The landscape is drained by small streams in shallow, often tree-lined valleys that become more open as they flow into the adjoining Fens.

Biodiversity

This is a productive landscape with large areas of cereal crops, interspersed with small woodlands and shelterbelts on higher land. There are a small number of areas of remnant chalk grassland, which is often found along road verges. This is not an ecologically rich landscape, with few designated sites across the LCT.

The arable farmland is largely divided by hawthorn hedges, which link between small areas of broadleaf woodland particularly around the villages. Roads are often lined with beech shelterbelts, and trees along streams provide some diversity.

There are a small number of County Wildlife Sites (CWS) within this LCT, including grassland and hedges at Low Fen Drove in the north of the area, roadside verges along Airport Way at Teversham in the west and Fleam Dyke Pumping Station to the southeast.

Fleam Dyke Pumping Station CWS is adjacent to Fleam Dyke, which is designated as a Site of Special Scientific Interest (SSSI) for its chalk scrub and species-rich chalk grassland. To the northwest of this is Fulbourn Fen SSSI, which contains a variety of calcareous loam, neutral grassland and fen woodland species and is a nature reserve managed by the Bedfordshire, Cambridgeshire and Northamptonshire Wildlife Trust.

There is generally limited woodland cover within this LCT, comprising concentrations of broadleaf copses including orchards and often related to former parkland estates in proximity to the village settlements at Fulbourn, Great Wilbraham, Bottisham, Stow cum Quy and Lode. Broadleaf and conifer shelterbelts are scattered across the higher landform in the southeast of the LCT.

Historic Landscape Character

The chalkland landscapes of Cambridge have a complex history of settlement and there are various historic sites and landscape elements within the Fen Edge Chalklands LCT.

There are several medieval moated sites throughout the LCT. This includes Manor Farm Scheduled Monument at Teversham, the unscheduled moat at Hall Orchard to the east of Fulbourn and others outside of the Study Area.

Fleam Dyke (Scheduled Monument) is a significant Anglo-Saxon earthwork that runs through the LCT, running from Balsham, through Fulbourn Fen towards the Icknield Way to the southeast (outside of the Study Area). It is one of four other Anglo-Saxon earthworks in the wider chalkland landscape.

There is a Registered Park and Garden at Wilbraham Temple and remnants of landscaped parkland through this LCT, largely dating from the 18th century.

The landscape is dominated by regular fields from 19th century enclosure, which largely follow parish boundaries and roads. Some enclosures represent early piecemeal enclosure of common fields. The whole area has experienced significant modification from the mid-20th century.

Settlement Form and Built Character

Settlement within the Fen Edge Chalklands is characterised by a number of small villages separated by farmland with scattered farms. The villages within this LCT are largely concentrated on the lower-lying landform, within the undulating landform around the edge of The Fens. Individual farm and small groups of cottages are scattered across the higher landform to the south and east of the type.

The villages generally have a strong historic, linear form, following the line of the roads that link through this landscape. Some small scale, modern development has taken place and expanded the villages in places. Fulbourn is the largest of the settlements, having doubled in size between the 1950s-1970s²⁰, to the east edge of Cambridge.

The villages have a traditional appearance, with houses constructed of brick or 'clunch' (building chalk) under thatched roofs. They have largely retained their historic core, whilst becoming commuter villages to Cambridge.

Cambridge City Airport is located on the east edge of Cambridge, within the Fen Edge Chalklands LCT. It is a large area that is occupied for transport and communication, with no public scheduled flights.

Access to the Landscape

The A14 and A1303 are major roads that pass through and converge within the centre of the LCT; providing connectivity between Cambridge and Newmarket and the A11 to the east. More minor routes criss-cross the landscape, between the main roads and the villages, and linking into the east of Cambridge.

There are a number of Public Rights of Way (PROW) within the Fen Edge Chalklands, with many of them focussed on the villages. The majority of these are footpaths, with the occasional bridleway and byway linking between places where there is no road network.

The Harcamlow Way long distance path passes through this LCT; along the Fleam Dyke and following tracks, local roads and watercourses via a number of the villages.

Fulbourn Fen Nature Reserve is publicly accessible, with a local network of mown footpaths.

²⁰ Taylor 1998, volume II

Evaluation

Key Landscape Features

- Traditional vernacular and linear form of village settlements
- Remnants of parkland estates and moated sites in proximity to the village settlements
- Open landscape with long views
- Small streams in shallow, often tree-lined valleys
- Significant Anglo-Saxon earthwork at Fleam Dyke, with links to others in the wider area

Forces for Change

- Intensive arable agriculture has resulted in field expansion and removal of key habitats including hedgerows. Changes in agri-environmental schemes and agricultural subsidies could result in further fragmentation of ecological networks and conversion/expansion of farmsteads
- Climate change and land use change could lead to increased risk of flooding, which would alter the ecological networks, resulting in shift in species composition and requiring alterations in management
- Pressures for development which would change the character and setting of the Fen Edge villages through further expansion and densification
- Ad hoc woodland and shelterbelt planting that would alter the open character of the landscape;
- Development of large scale buildings on farms due to intensification of farming practices

Condition

The Fen Edge Chalklands is an intensively farmed LCT with limited ecological value. Within the farmed landscape there are pockets of priority habitat and nationally important sites that are connected in places by linear features including trees along watercourses and tracks. Hedgerows are largely trimmed low and gappy. The overall condition of the landscape is perceived to be **moderate**.

Strength of Character

This is a peaceful rural landscape judged to be of **moderate** strength of character with few distinguishing features. It is a large-scale landscape with long views across open fields. The traditional qualities of the settlements are largely intact, with limited expansion/intrusion on the rural landscape.

Key Landscape Sensitivities

- Peaceful, rural open character of the landscape
- Long, open views across this landscape, from adjoining LCTs towards Cambridge
- Scattered landscape features of ecological and historical value
- Traditional, linear form of the villages with parkland estates and moated sites
- Chalk grassland on Fleam Dyke

Landscape Guidelines

The overall management objective for the Fen Edge Chalklands LCT is to **enhance** the rural character and the important surviving landscape features such as grassland meadows, treed watercourses and scattered woodland/shelterbelts whilst retaining distinctive open views. **Restoration** of lost and/or declining features, such as the field boundaries, is also important within key areas.

Guidance for Landscape Management

- Manage the agricultural landscape for production and opportunities to improve biodiversity
- Conserve and enhance existing drains, ditches and dykes to maintain historic features and enhance ecological value of the farmed landscape
- Manage and create chalk grasslands within the landscape, considering connectivity along road verges
- Conserve and enhance existing hedgerows and consider opportunities for re-planting hedgerows where these have been lost/become fragmented
- Protect the sites and features of archaeological and historic interest
- Encourage opportunities to expand and link woodland, hedgerows and other semi-natural habitats to benefit biodiversity whilst managing the open character of the landscape

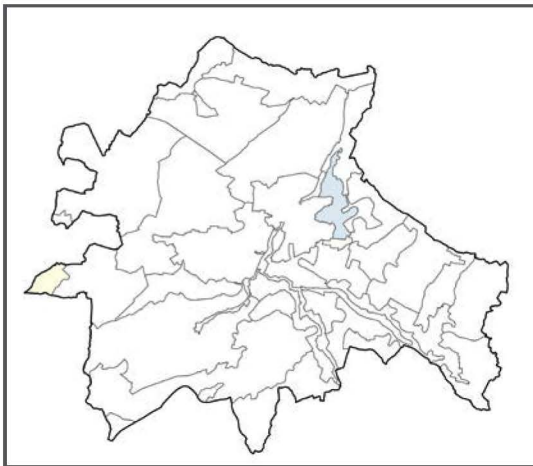
Guidance for Integrating Development into the Landscape

- Conserve the overall rural character, with dispersed, linear Fen Edge villages, farms and long views across open fields
- Maintain the distinctive settlement pattern of the area and its local context
- Maintain the linear, or rectilinear form of the settlements
- Ensure density and pattern of new developments reflect that of existing villages and hamlets
- Avoid backland and cul-de-sac developments where possible
- Ensure buildings are arranged in continuous frontages within village cores and are arranged in loose knit patterns facing the street on more peripheral sites
- Ensure new developments are integrated with sufficient space for garden and street tree planting where applicable
- Enhance village gateways and, where appropriate, consider provision of appropriate planting on village approaches
- Take opportunities to create new village greens and/or wildlife areas within new developments.
- Ensure new developments integrate/connect with existing Public Rights of Way (PROW) within development layout.
- Ensure new developments reflect the form, scale and proportions of the existing vernacular buildings and pick up on the traditional local building styles, height, materials, colours and textures.
- Enclose boundaries facing the street in village cores by low, or high, flint walls with brick detailing, simple decorative railings, picket fencing or hedging
- Enclose boundaries facing the street on village peripheries with hedge and tree planting
- Avoid the use of standardised and intrusive urban materials, street furniture, lighting and signage as part of traffic calming measures wherever appropriate
- Ensure new agricultural buildings, such as large storage sheds, are sited and designed to reduce their apparent mass, minimising their impact on the wider landscape by the appropriate use of texture, colour and planting

LANDSCAPE CHARACTER AREAS

- **6A: Fen Ditton Fen Edge Chalklands**
- **6B: Wilbraham Fen Edge Chalklands**
- **6C: Fulbourn Fen Edge Chalklands**

LANDSCAPE CHARACTER AREA 6A: FEN DITTON FEN EDGE CHALKLANDS



6A: FEN DITTON FEN EDGE CHALKLANDS LANDSCAPE CHARACTER AREA

Fen Ditton Fen Edge Chalklands Landscape Character Area (LCA) is a settled landscape with small, linear villages and discordant influences introduced due to the proximity of the urban edge of Cambridge.

Description

Key Characteristics

- Irregular pattern of large, rectilinear fields contrasts with small scale, more regular field patterns around settlement edges
- Well-trimmed hedges, boundary trees and shelterbelts provide a distinctive localised vegetation pattern near villages
- Settled rural landscape comprising small villages with historic linear cores and isolated farms
- Urban influences due to proximity to the urban edge of Cambridge including large scale transport infrastructure and hospitals

Fen Ditton Fen Edge Chalklands rises from c. 5m AOD adjacent to The Fens to a high point of c. 20m AOD in the south where it meets LCA 6B: Wilbraham Fen Edge Chalklands. The northern part of the LCA forms part of the floodplain of the broad, flat River Cam, which provides part of the north-western boundary. A minor stream north of Teversham joins the drainage ditch network which extends into this LCA from The Fens in the north and east.

Arable farmland dominates the smooth rolling chalkland, offering a broad-scale landscape of large, late enclosure fields organised in a slightly haphazard pattern. Field boundaries are marked by a network of low, gappy thorn hedges, intermittent roadside trees and occasional ditches. Adjacent to the River Cam, pockets of floodplain grazing marsh in the form of smaller pastoral fields bound by trees have a more intimate character. Woodland cover is low, however occasional shelterbelts and small scale, enclosed fields around settlements provide a transition between villages and the surrounding open fields. A narrow belt of trees follows a gently curving dismantled railway through the LCA.

Settlement includes a number of small villages separated by farmland and scattered farms. Fen Ditton, Horningsea and Teversham are historic villages with strong linear form. Groups of mature trees contribute to the character of the villages, and screen views of built form. Outside the villages there are open views across arable fields. From the western part of the LCA there are immediate views to the edge of Cambridge. The airport, which occupies a large area on the outskirts of Cambridge, dominates many of these views, providing visual separation between the city and wider countryside.

Other discordant urban infrastructure scattered throughout the LCA due to its proximity to Cambridge include the busy A14 and A1303 transport corridors, Capital Park Industrial Park, hospitals set in parkland south of the railway and vertical features which interrupt the skyline including pylons, telegraph poles and lines of poplar trees. The building of the A14 has severed the link between the city and the Fen Edge landscape to the north, and along with the A1303 is a localised detractor from tranquillity experienced elsewhere in the LCA. In general, linear infrastructure superimposed on the landscape, such as the major road network, Airport Way, the railway and the dismantled railway, introduce gentle curves which are discordant with the historic straight lines largely found elsewhere in the LCA.

Fleam Dyke, a large Anglo-Saxon bank and ditch is a distinctive linear feature providing a link with the past. The Fen Rivers Way and the historic route of the Harcamlow Way pass through this area, linking several heritage and nature features and sites in adjoining character areas.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

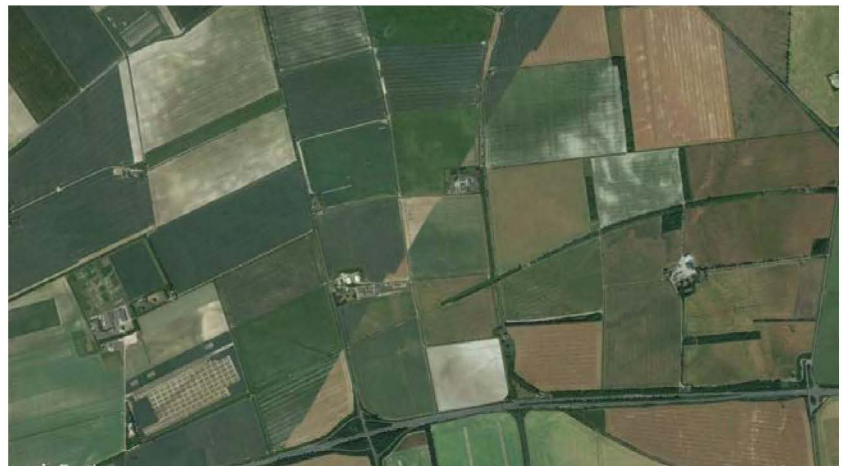
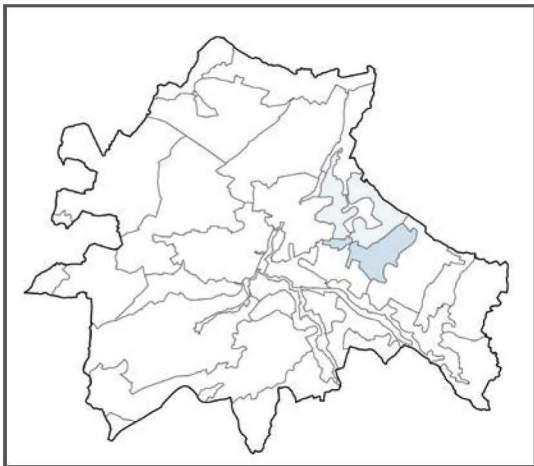
- Small scale pastoral fields, shelter belts and associated vegetation including floodplain grazing marsh at village edges and adjacent to the River Cam
- Historic, linear drains and ditches including the Fleam Dyke

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve and enhance the regular small-scale pastoral fields, shelter belts and hedges at village edges
- Manage drains and ditches to maintain historic features and enhance ecological value of the farmed landscape
- Ensure development is in keeping with the open, rural character

LANDSCAPE CHARACTER AREA 6B: WILBRAHAM FEN EDGE CHALKLANDS



6B: WILBRAHAM FEN EDGE CHALKLANDS LANDSCAPE CHARACTER AREA

Wilbraham Fen Edge Chalklands Landscape Character Area (LCA) is a landscape with occasional isolated settlement, a regular strong field pattern and distinctive linear features including the Fleam Dyke.

Description

Key Characteristics

- Distinctive, regular field pattern
- Strong linear features including the minor road network and Fleam Dyke
- Sparse woodland cover limited to scattered shelterbelts and particularly distinctive small blocks of woodland associated with high points
- Limited settlement comprising scattered isolated farms and cottages
- Panoramic views encompass the rising Chalk Hills to the south which adds diversity to the otherwise simple landscape

This is a gently undulating landscape which rises from c. 15m AOD at its lowest point in the north to a high point of c. 51m AOD at Mutlow Hill. Hydrological features are limited to a small number of straight ditches which extend from LCA 6C: Fulbourn Fen Edge Chalklands to the north.

It is predominantly agricultural, offering a simple landscape of large, late enclosure arable fields which are arranged in a distinctive, regular, rectilinear pattern. Field boundaries are marked by low, gappy thorn hedges or lines of roadside trees. Woodland cover is low, however there are occasional distinctive small woodlands and shelterbelts on higher ground in the east, and linear woodland associated with the A11 and the dismantled railway.

Settlement is limited to isolated farms and cottages. Farms are often set back from the road network and accessed by straight tracks. The A11 forms much of the southern boundary of the LCA, otherwise the road network is limited to straight minor roads linking the Chalk Hills and The Fens. The roads, combined with Fleam Dyke and the field boundary pattern provide a strong linearity, broken only by the gentle curve of the railway and dismantled railway.

Views are generally panoramic, and often include views across surrounding LCAs. To the north, well vegetated settlement at Cambridge, Fulbourn and Great Wilbraham in neighbouring LCAs are present in localised views, as are large scale solar farms and wind turbines on the elevated Chalk Hills to the south, adding diversity to the otherwise simple landscape. Within the LCA, vertical features which interrupt the skyline include lines of trees, pylons and telegraph poles.

The Harcamlow Way long-distance footpath runs along the elevated Fleam Dyke, a large Anglo-Saxon bank and ditch which is a distinctive linear feature within this LCA and designated as a Scheduled Monument and SSSI. Both Fleam Dyke and Fleam Dyke Pumping Station contain pockets of chalk grassland with ecological value. Fleam Dyke intersects with Mutlow Hill, a Scheduled Monument, which like other localised high points, has distinctive hilltop beech tree clumps which offer a little visual diversity and occasional reference points.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

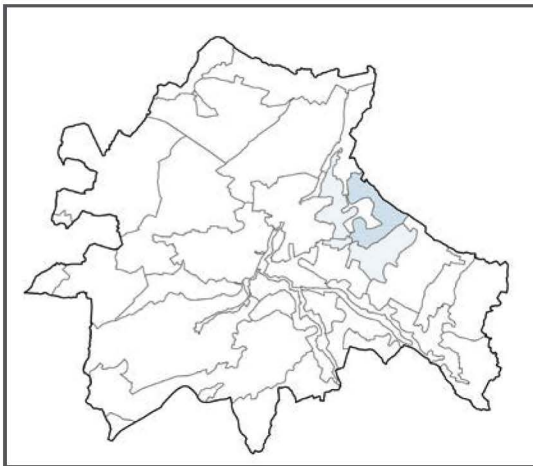
- Strong, regular field pattern
- Distinctive linear features
- Intervisibility with surrounding LCAs
- Earthworks and chalk grassland at Fleam Dyke
- Particularly distinctive groups of trees on elevated landform providing landmarks and a sense of place

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Maintain the strong, regular field pattern
- Maintain distinctive linear features
- Maintain the distinctive regular field pattern and linear features

LANDSCAPE CHARACTER AREA 6C: FULBOURN FEN EDGE CHALKLANDS



6C: FULBOURN FEN EDGE CHALKLANDS LANDSCAPE CHARACTER AREA

Fulbourn Fen Edge Chalklands Landscape Character Area (LCA) is a settled landscape with scattered woodland including remnant parkland features close to historic villages.

Description

Key Characteristics

- Scattered woodland cover includes remnant historic parkland in proximity to historic villages
- Small scale field patterns around settlement edges
- Settled rural landscape with historic linear settlements and isolated farms
- Pockets of ecological value including floodplain grazing marsh and lowland meadow

Fulbourn Fen Edge Chalklands is a gently undulating landscape that continues east into East Cambridgeshire District. Within the Study Area, the landform gently rises from c. 5m AOD at the edge of The Fens, to c. 25m AOD in the south-west where it meets the Chalk Hills. A small number of minor streams in the south of the LCA flow into LCA 1E: Fulbourn Fen where they converge to form Quy Water, and re-emerge in the north of the LCA to eventually join the ditch network in The Fens to the north. The ditch network intermittently extends from LCA 1E: Fulbourn Fen, generally coinciding with tree cover east of Fulbourn, west of Great Wilbraham and north of Stow cum Quy.

Much of the landscape comprises open, arable fields generally enclosed by intermittent, gappy hedgerows and ditches. The field pattern is irregular, with smaller scale more regular fields found close to settlement. Tree cover is higher than other Fen Edge Chalklands LCAs, with scattered areas of woodland, often including remnant parkland, clustered near to villages.

Settlement includes a number of small, linear villages and scattered farms separated by farmland. The villages, Fulbourn, Great Wilbraham, Little Wilbraham and Stow cum Quy, are located on relatively high ground and their church towers are prominent in the landscape. Of these villages, only Fulbourn has expanded with significant areas of modern housing surrounding the historic core. Village edges tend to be enclosed by small scale pastoral fields, shelterbelts and robust, well-trimmed hedgerows, forming localised visual enclosure and a soft rural edge to the historic cores. The gently rolling landform and intermittent hedges combine to offer long, framed views from settlement across arable fields to distant woodland. From higher land there are distant views to Cambridge across the open landscape. Vertical features breaking the skyline include trees, poles associated with the communications network, pylons, and wind turbines in the Chalk Hills to the south. The A14 and A1303 cut through the LCA, locally detracting from the rural character and tranquillity experienced elsewhere in this LCA.

Variety in the landscape is achieved through scattered designed parkland landscapes. These include Wilbraham Temple, a Registered Park and Garden east of Great Wilbraham, and Quy Hall, an 18th century Deer Park with areas of floodplain grazing marsh. Further ecological value is found at Fulbourn Fen Nature Reserve, a SSSI and local nature reserve which contains a pocket of lowland meadow, fen woodland and good quality semi improved grassland. It is publicly accessible, with a local network of footpaths for recreational use. Part of the Harcamlow Way long distance footpath passes through it, linking several heritage and nature features and sites in adjoining character areas.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

- Network of small pastoral fields enclosed by hedgerows and shelterbelts close to settlement
- Parkland features at Quy Hall and Wilbraham Temple
- Pockets of ecological diversity including floodplain grazing marsh and lowland meadow

Specific Landscape Guidelines

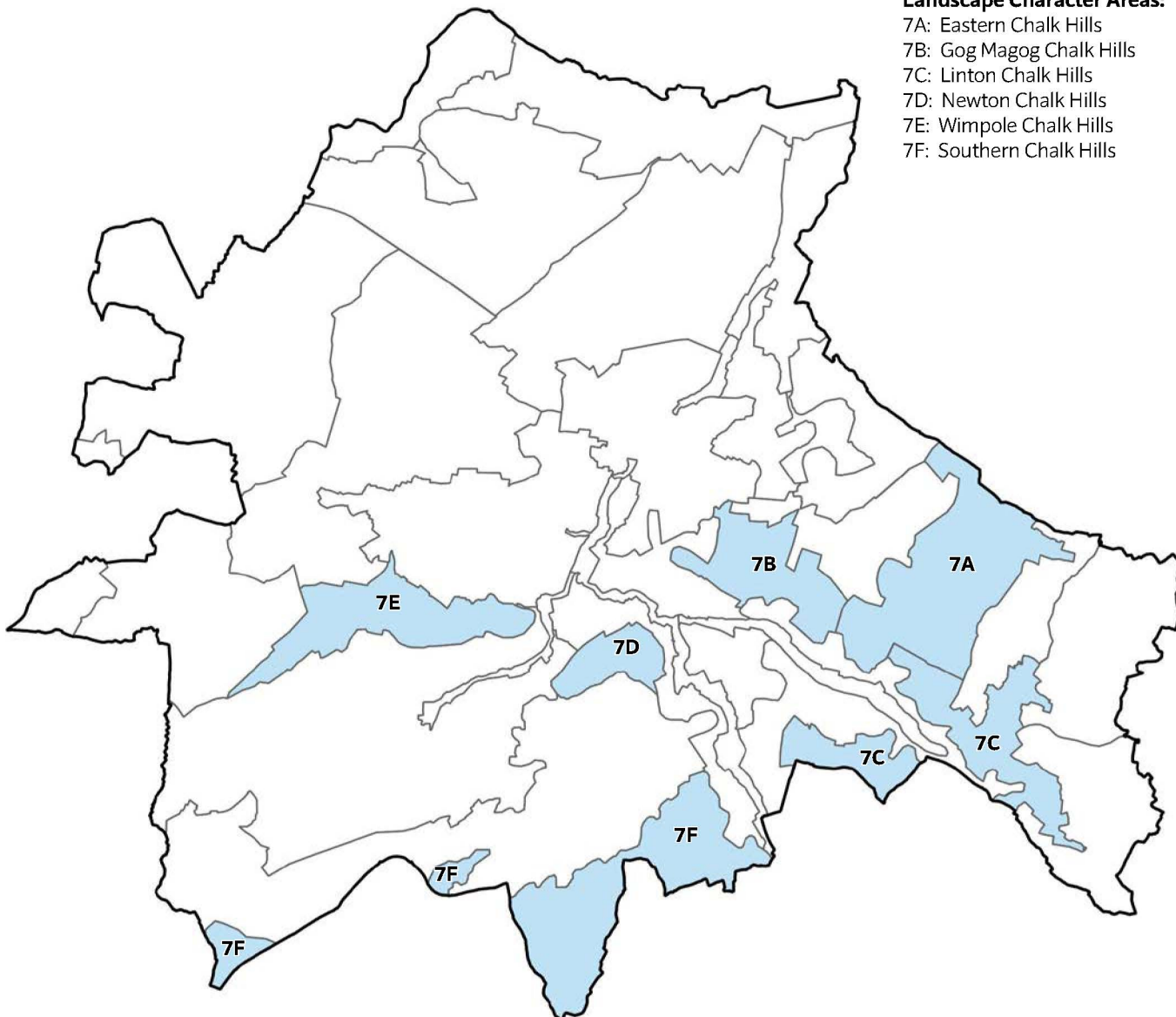
In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Restore parkland in areas where it has been fragmented, enhancing the specific features that give character and its context within the wider landscape

LANDSCAPE CHARACTER TYPE 7: CHALK HILLS

Landscape Character Areas:

- 7A: Eastern Chalk Hills
- 7B: Gog Magog Chalk Hills
- 7C: Linton Chalk Hills
- 7D: Newton Chalk Hills
- 7E: Wimpole Chalk Hills
- 7F: Southern Chalk Hills



LANDSCAPE CHARACTER TYPE 7: CHALK HILLS

The Chalk Hills Landscape Character Type (LCT) forms an arc of prominent, elevated hills across the central and southern part of the Study Area. Chalk hills and scarps form distinctive rising landform beyond the Fen Edge Chalklands to the southeast of Cambridge, south of the Lowland Chalklands along the southern boundary of the District and north of the Lowland Farmlands in the west of the Study Area. There is also a small outlier across the Newton Hills to the south of Cambridge.

Description

Key Characteristics

- Locally prominent, elevated chalk hills with localised steep-sided slopes and incised by dry valleys that create a rounded, rolling landform
- Free-draining landscape with dry valleys that contain small, seasonal watercourses
- A predominantly arable landscape with some permanent pasture and woodland on steeper slopes
- Tree cover comprises scattered woodland across the rising landform and concentrated around historic parkland or estates
- Various historic features including ancient routes, earthworks and hill forts
- A generally unpopulated landscape, interspersed with large farms, granges, halls and cottages
- A simple and tranquil landscape with long distance panoramic views

Physical Influences

The Chalk Hills LCT forms the most elevated landform across the Study Area. It is part of a larger chalk band that extends to the northeast and southwest of Greater Cambridge. Within the Study Area, the Chalk Hills often rise dramatically from the lower lying Fen Edge landscapes and Lowland Farmlands and Chalklands. The landform rises through relatively steep slopes to form locally distinctive hills, slopes and ridgelines with high points of c.146m AOD in the south of the Study Area.

The LCT is defined by the underlying bands of Upper Cretaceous Chalk, which forms part of the East Anglian Chalk ridge that extends across the south of England. This is overlain with deposits of alluvial silt, sand gravel and till on the higher landform.

The overlying soils vary in respect of the underlying geology and terrain. They are predominantly free draining, lime rich and often loamy, which gives rise to fertile soils that support the dominant arable land use, with woodland and grassland habitats.

This is a free draining landscape with frequent dry valleys, some of which contain small, seasonal watercourses that are often not visually obvious.

Biodiversity

This is predominantly an arable landscape, with permanent pasture and woodland on steeper slopes. Ancient semi-natural beech, lime and sycamore woods are often situated on summits and slopes of the hills and form prominent and characteristic features in the open landscape.

Fragments of remnant chalk grassland is found through the Chalk Hills, including along road verges, in chalk pits and along sections of ancient linear dykes, Roman roads and disused railway lines.

The landscape is characterised by a medium to large scale, regular field pattern that is defined by hedgerows in places. Smaller scale, tighter field patterns occur around the dispersed villages, hamlets and country estates. These are well defined by hedge and tree boundaries.

There are a number of designated ecological sites, particularly within the east and west of the Chalk Hills. These include Sites of Special Scientific Interest (SSSI) along linear Roman features, at former pits/quarries and designated significant areas of chalk grassland. There are also a small number of, often linear County Wildlife Sites within the Chalk Hills landscape.

Priority habitats found across the Chalk Hills are primarily deciduous woodland and lowland calcareous grassland. Lowland mixed woodland is a predominant habitat type of the upland chalk landscapes in the Study Area.

Historic Landscape Character

The Chalk Hills are dominated by late enclosure of former arable fields and common grazing. There is evidence of other enclosures that appear to represent early piecemeal enclosure of common fields.

Historic features such as tracks and hill forts occur throughout this LCT. The Icknield Way passes through parts of the Chalk Hills and was historically an important highway. In the Iron Age it was controlled by Wandlebury hill fort in the north of this LCT. In Anglo-Saxon times it was controlled by the distinctive linear dykes that span the chalkland from the fen edge east of Cambridge to the wooded edge of the higher chalklands to the south/southeast of the Study Area.

There are a small number of designated historic sites across the Chalk Hills. Particularly notable are the Anglo-Saxon linear earthworks and the hill fort at Wandlebury. Wimpole Hall is a Grade I registered park and garden on the western edge of the Chalk Hills, which also contains scheduled earthworks of a medieval settlement.

Settlement Form and Built Character

This is generally a sparsely settled landscape, forming the transition between the upland villages along the wooded ridgeline with the Wooded Chalklands and the villages along the springline in the Lowland Chalklands.

Settlement predominantly comprises scattered large farms, granges, halls and cottages with occasional small villages and hamlets at the edge of the LCT. Farms and larger properties are often encompassed by woodland copses and shelter belts.

Traditional building materials used within the Chalk Hills include flint, clunch and pale brick.

Access to the Landscape

Whilst the Chalk Hills are transected by a number of major roads, there are very few links from them into the rural landscape. The A1198 and A603 cut through the Wimpole Chalk Hills, linking north to Huntingdon, northeast to Cambridge and south to Royston. The M11 passes through the edge of the Newton and Southern Chalk Hills and there are several A-road links through the eastern Chalk Hills landscape areas. These routes provide easy access for commuters and has influenced settlement particularly to the south of Cambridge.

Between these main routes there are a limited number of minor roads, which predominantly provide connections between village settlements, with discrete access tracks off to local farms.

There are clusters of Public Rights of Way (PROW), often associated with settlement areas and historic features such as the Roman Roads and Dykes. These include the historically important Ickniel Way and Harcamlow Way through Wimpole Park and along Fleam Dyke.

Recreation contributes to the character of parts of the Chalk Hills, particularly evident in the north of the LCT at Wimpole Park and at Wandlebury to the south of Cambridge. Southern parts of the Chalk Hills are less accessible, with more limited connectivity.

Evaluation

Key Landscape Features

- Locally prominent, elevated chalk hills with steep sided slopes in places that contrast with the low-lying landform across much of the Greater Cambridge area
- Scattered woodlands including ancient woodland, historic parkland and estate planting
- Sparsely populated, rural landscape with scattered farmsteads, granges, halls and cottages

Forces for Change

- Intensive arable agriculture has resulted in field expansion and removal of key habitats including hedgerows. Changes in agri-environmental schemes and agricultural subsidies could result in further fragmentation of ecological networks and conversion/expansion of farmsteads
- Intensification of agriculture could result in removal of woodland or change to woodland patterns that would be prominent in the upland landscape and reduce the sense of tranquillity
- Increased size of farms and particularly introduction of large farm buildings that would stand out in the large scale, often open, upland landscape
- Pressures for development across Greater Cambridge, which would alter the dispersed, rural settlement character of the Chalk Hills, and would also likely impact on views from the elevated Chalk Hills across the surrounding LCTs
- Climate change could reduce the groundwater levels and cause unpredictable periods of drought and flood that would alter the flow of the chalk streams and species composition of the Chalk Hills
- Development of land for wind turbines and solar power may alter the rural character

Condition

The landscape of the Chalk Hills has been altered by relatively recent changes in agriculture, with some scattered pasture remaining between swathes of large arable fields. The farmed landscape is punctuated by scattered blocks of woodland that break up the skyline of the ridges of the upland landscape. The rural qualities and particularly the historic settlement pattern is largely intact. The overall condition of the landscape is perceived to be **good**.

Strength of Character

The Chalk Hills is a relatively simple, uninterrupted and tranquil landscape with distinctive, long distance and often wide views across the lower lying landform of Greater Cambridge. There is some localised intrusion from major transport routes and expansion of settlement in adjoining LCTs that interrupt views in places. Overall, it is judged that the Chalk Hills LCT has a **strong** character.

Key Landscape Sensitivities

- Distinctive, elevated landscape that forms locally prominent hills and ridges that contrast with the surrounding, low lying landscape that is characteristic of Greater Cambridge
- Open, long distance, panoramic views across Greater Cambridge and beyond from this upland landscape
- Scattered woodland including ancient woodland on summits and slopes
- Network of historic routes and earthworks that contribute to the area's sense of place
- Wooded and undeveloped ridgelines are visually sensitive
- Tranquil, often remote rural landscape away from major roadways

Landscape Guidelines

The overall management objective for the Chalk Hills LCT is to **conserve** the tranquil, generally uninterrupted character of the rural landscape. This will include management and enhancement of features including woodlands, pasture and historic features associated with parklands and vernacular of villages. There is also opportunity for **enhancement** of chalk grasslands and creation of new woodland areas.

Guidance for Landscape Management

- Conserve and enhance areas of ancient woodland as important landscape, historical and nature conservation sites
- Enhance landscape character by planting new beech hangers and woodlands on carefully sites hill-tops/ridges and scarps to form focal points and reinforce the chalklands landscape
- Conserve and restore important areas of unimproved grassland as important landscape, historical and nature conservation sites
- Conserve the tranquil and largely uninterrupted rural character
- Manage the agricultural landscape and soils both for production and opportunities to improve biodiversity
- Conserve and enhance existing hedgerows and consider opportunities for re-planting hedgerows where these have been lost/become fragmented
- Protect the sites and features of archaeological and historic interest
- Encourage opportunities to expand and link woodland, hedgerows, grassland and other semi-natural habitats to benefit biodiversity whilst managing the open character of the landscape

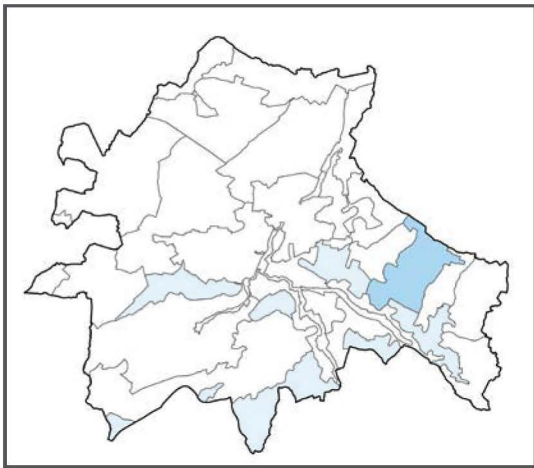
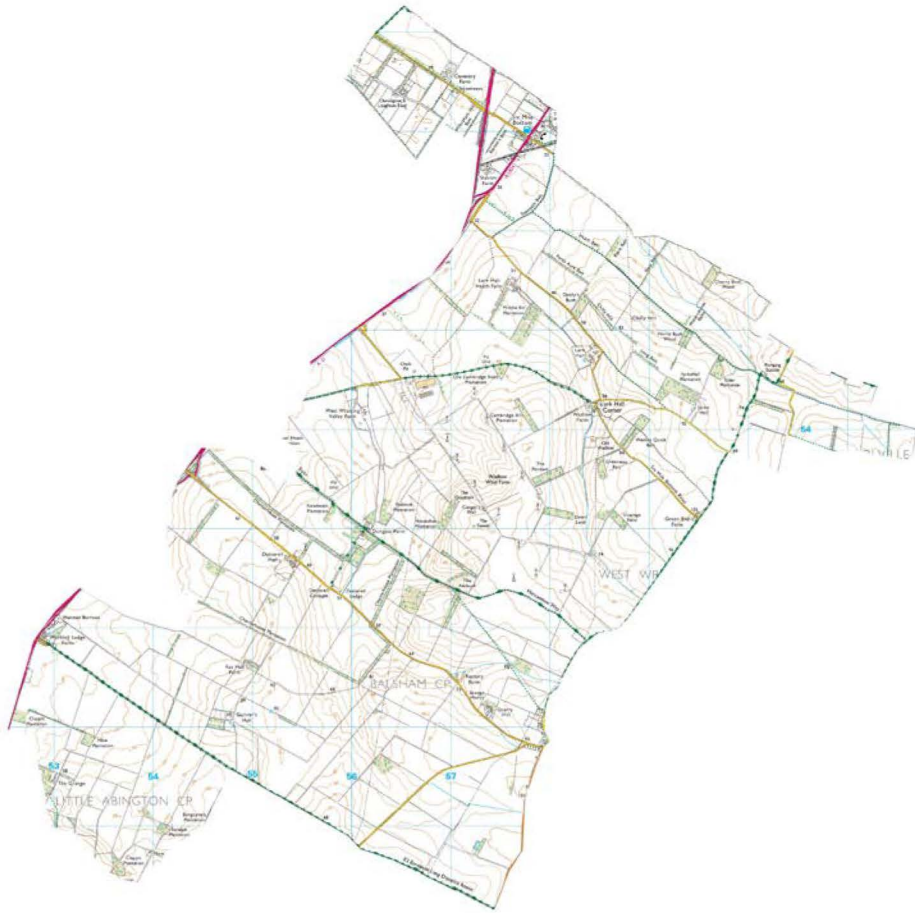
Guidance for Integrating Development into the Landscape

- Maintain the distinctive settlement pattern of the area and its local context
- Ensure any extensions to springline villages are located along the bottom of steeper slopes and along lanes
- Maintain the linear, or rectilinear form of the settlements
- Ensure density and pattern of new developments reflect that of existing villages and hamlets
- Avoid backland and cul-de-sac developments where possible
- Ensure buildings are arranged in continuous frontages within village cores and are arranged in loose knit patterns facing the street on more peripheral sites
- Ensure new developments are integrated with sufficient space for garden and street tree planting where applicable
- Enhance village gateways and, where appropriate, appropriate planting on village approaches
- Take opportunities to create new village greens and/or wildlife areas within new developments
- Ensure new developments integrate/connect with existing Public Rights of Way (PROW) within development layout
- Ensure new developments reflect the form, scale and proportions of the existing vernacular buildings and pick up on traditional local building styles, height, materials, colours and textures
- Enclose boundaries facing the street in village cores by low, or high, flint walls with brick detailing, simple decorative railings, picket fencing or hedging
- Retain hedges along roads
- Enclose boundaries facing the street on village peripheries with hedge and tree planting
- Avoid the use of standardised and intrusive urban materials, street furniture, lighting and signage as part of traffic calming measures wherever appropriate
- Ensure new agricultural buildings, such as large storage sheds, are sited and designed to reduce their apparent mass, minimising their impact on the wider landscape by the appropriate use of texture, colour and planting
- Protect prominent hills and ridges and their skylines by avoiding locating tall structures including masts and wind turbines in visually prominent locations, and by using topography and the landscape's woodlands to reduce the visual impact

LANDSCAPE CHARACTER AREAS

- **7A: Eastern Chalk Hills**
- **7B: Gog Magog Chalk Hills**
- **7C: Linton Chalk Hills**
- **7D: Newton Chalk Hills**
- **7E: Wimpole Chalk Hills**
- **7F: Southern Chalk Hills**

LANDSCAPE CHARACTER AREA 7A: EASTERN CHALK HILLS



7A: EASTERN CHALK HILLS LANDSCAPE CHARACTER AREA

The Eastern Chalk Hills Landscape Character Area (LCA) is a gently rolling rural landscape of regular arable fields and ornamental shelterbelts with short views often featuring wind turbines.

Description

Key Characteristics

- Simple landscape of large predominantly regular fields enclosed by low, gappy hedges
- Pocket of ‘studscape’ in the north including small rectangular paddocks divided by post and rail fencing and shelterbelts
- Distinctive pattern of broadleaf, coniferous and mixed shelterbelts and ornamental roadside trees
- Small scale landscape, visually contained by landform, trees and shelterbelts, with wind turbines prominent on the horizon of many views

The Eastern Chalk Hills LCA is a simple gently rolling chalk landscape that extends east into East Cambridgeshire District. Within the Study Area, it rises from c. 30m AOD south of the Chalk Edge Fenlands to form a series of hills with a localised north-west facing escarpment. The highest point is c. 105m AOD south of Wadlow Wind Farm. The chalk hills are incised by a small number of narrow valleys, which tend to be dry in the west and contain minor streams in the east.

This is a simple rural area dominated by large scale arable production. Fields are large and form a predominantly regular pattern, enclosed by gappy low hawthorn hedgerows. Scattered broadleaf, coniferous and mixed shelterbelts are a key characteristic, as well as lines of trees planted along roads, often ornamental species like Scots Pine. In the north, a pocket of distinctive “studscape” comprising small, rectangular paddocks divided by post and rail fencing and shelterbelts extends beyond the Study Area towards Newmarket. Chalk extraction is ongoing south of the A11, and a small number of disused pits of quarries have been restored to arable farmland and small areas of woodland. Other land uses include energy generation at Wadlow Wind Farm and a solar farm south of the A11. A combination of shelterbelts and rolling landform generally contain views visually, making this a smaller scale landscape than elsewhere in the Chalk Hills. Pylons, masts and poles are occasional features which interrupt the treed skyline, and the wind turbines at Wadlow Wind Farm are prominent features on the skyline of many views.

Settlement is sparse, limited to isolated halls and farms. Farm buildings are low and generally well-integrated into the landscape. Overall, the LCA has a peaceful, remote and tranquil character. The A11 forms much of the northern boundary, locally detracting from tranquillity. Mature trees along much of its length provide visual separation between this LCA and the Fen Edge Chalklands and means it is rarely seen within views and. Elsewhere the minor road network is limited, providing largely straight connections between settlements in the Fen Edge Chalklands and the Wooded Claylands.

The Fleam Dyke is a distinctive historic linear feature within the landscape, as is the Roman road which forms the southwestern boundary. The Harcamlow Way follows the route of the Fleam Dyke, which also contains a fragment of lowland calcareous grassland, adding diversity to the otherwise simple landscape. The E2 European Long Distance Route follows the route of the Roman road, and the Ickniel Way trail follows straight tracks and roads in the northeast. These walking trails provide some connectivity with the generally sparse Public Rights of Way (PROW) network elsewhere in the LCA, and a connection to recreational and historical features in neighbouring LCAs.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

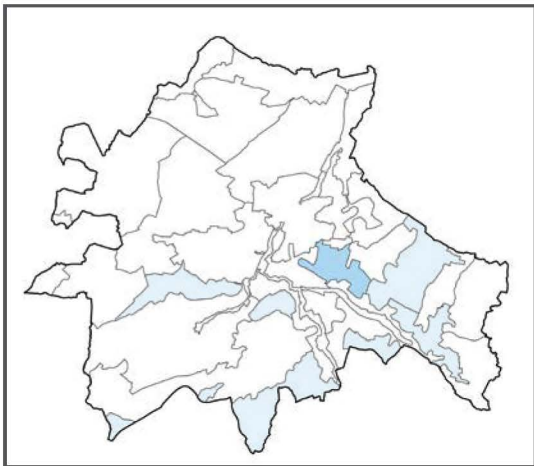
- Pocket of 'studscape' including small rectangular paddocks divided by post and rail fencing and shelterbelts
- Distinctive pattern of shelterbelts and ornamental roadside trees
- Small scale landscape, visually contained by landform, trees and shelterbelts
- Fragment of lowland calcareous grassland at Fleam Dyke

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Work with the horse racing industry and major landowners of historic properties to expand the area of species-rich grassland through appropriate management techniques
- Conserve characteristic shelterbelts, hedgerows and trees through small scale planting
- Conserve small scale framed views across arable fields

LANDSCAPE CHARACTER AREA 7B: GOG MAGOG CHALK HILLS



7B: GOG MAGOG CHALK HILLS LANDSCAPE CHARACTER AREA

The Gog Magog Chalk Hills Landscape Character Area (LCA) is a series of accessible hills southeast of Cambridge that contribute to the setting of the city. It is characterised by expansive views towards the city and a strong sense of time depth.

Description

Key Characteristics

- Locally prominent chalk hills with distinctive panoramic views over Cambridge
- Ecologically diverse landscape with deciduous woodland, lowland calcareous grassland, good quality semi improved grassland, orchard and mosaic habitats
- Green corridor which links chalkland sites to the Fens, and contributes to the setting of Cambridge
- Accessible landscape with a network of Public Rights of Way (PROW) and recreational land uses including Wandlebury Country Park, local nature reserves and a golf course
- Strong sense of time depth due to Wandlebury Hill Fort, circular earthworks and a straight Roman road

The Gog Magog Hills LCA are a series of low, rounded, chalk hills to the southeast of Cambridge that contribute to the setting of the city. They rise from c. 25m AOD at the edge of the Fen Edge Chalklands and Lowland Farmlands to high points of c. 75m AOD. Hydrological features are limited within the chalk landscape.

The majority of land is used for arable crop production. Fields are generally rectilinear and regular, divided by low, straight hedges. Deciduous woodland on hill tops is a distinctive feature, with beech, lime and sycamore dominant species. The wooded summit of Wandlebury is a memorable feature which contributes to the character of the landscape and enriches the setting of Cambridge. Local Wildlife Sites at Cherry Hinton Chalk Pits and Beechwoods, as well as a County Wildlife Site at Wandlebury Country Park are indicative of the ecologically diverse landscape which includes scattered deciduous woodland, a relatively large area of lowland calcareous grassland, and pockets of good quality semi improved grassland, orchard and mosaic habitats. There are elevated panoramic views towards Cambridge, in which the southern edge of Cambridge is strongly apparent, and long distance views towards Ely from Wandlebury Country Park. These views give this LCA a strong connection with the city of Cambridge and a strong sense of place. On lower ground views towards wooded horizons are visually enclosed, or framed by rolling landform and deciduous woodland.

Settlement is limited to scattered farms and very occasional small linear settlements along roads, because of the shortage of water on the chalk. In the north, the landform and woodland at the sunken Cherry Hinton Chalk Pits provides a sense of enclosure and separation from the urban edge of Cambridge which contrasts with the panoramic views from the hills. It also provides a connection via a green corridor between the Gog Magog Hills and a sequence of open green spaces including Coldham's Common east of Cambridge. Occasionally masts, telegraph poles, and the wind turbines in 7A: Eastern Chalk Hills break the horizon.

Tranquillity is locally eroded by the A11 which forms the southern boundary, and the busy A1307 which is a key route into Cambridge. Elsewhere the minor road network is generally contained to a small number of straight roads at right angles to the A1307 providing connections between this road and settlements in the Lowland Farmlands and Lowland Chalklands.

This is an open, elevated landscape with a strong sense of time-depth due to distinctive circular and linear features including the Iron-Age hill fort at Wandlebury, the straight Roman road to Cambridge which runs along the ridge, and a number of circular bowl barrows which form a distinctive pattern in the landscape. This is an accessible landscape in which recreation is an important land use. The E2 European Long Distance Route passes along the Roman Road, providing connections with the local Public Rights of Way (PROW) network. Local Nature Reserves at Cherry Hinton Chalk Pits and Beechwoods have trails which are open to the public, as are Wandlebury Country Park and a picnic site to the west of Wandlebury.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

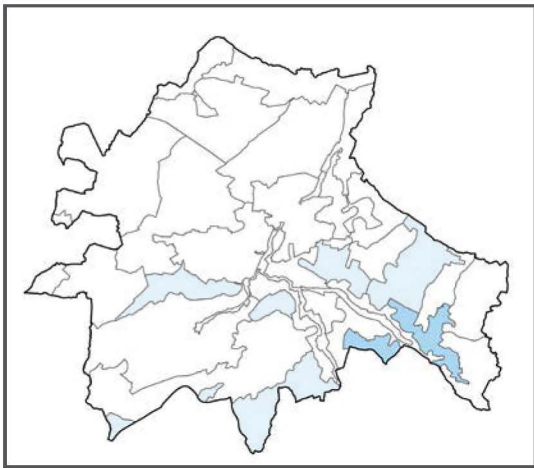
- Ecologically diverse landscape with deciduous woodland, lowland calcareous grassland, good quality semi improved grassland, orchard and mosaic habitats
- Green corridor which links chalkland sites to the Fens, and contributes to the setting of Cambridge
- Pressure on landscape for recreational use

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve areas of deciduous woodland, lowland calcareous grassland, good quality semi improved grassland, orchard and mosaic habitats
- Ensure development enhances existing landscape features and is in keeping with the open, rural character

LANDSCAPE CHARACTER AREA 7C: LINTON CHALK HILLS



7C: LINTON CHALK HILLS LANDSCAPE CHARACTER AREA

The Linton Chalk Hills Landscape Character Area (LCA) is a simple, large scale rolling arable landscape with scattered woodland and open views across the Granta River Valley.

Description

Key Characteristics

- Simple rural landscape with large, rectilinear arable fields organised in an irregular pattern
- Sparsely scattered small woodland blocks, including ancient woodland
- Small pockets of lowland calcareous grassland and mosaic habitat
- Open character with long views across the Granta River Valley
- Distinctive linear features including earthworks, a Roman road, historic tracks, minor roads and dismantled railways

Linton Chalk Hills LCA is part of a rolling, elevated chalk landscape that occurs in two places within the Study Area, joined by landscape which extends south into Uttlesford District. Within the Study Area, it rises from a low point of c. 35m next to the Lowlands Chalklands to form a series of chalk hills with a high point of 112m at Rivey Hill. The River Granta and its small stream tributaries cut narrow valleys through the landscape.

The undulating landscape comprises large, open arable fields which are generally rectilinear and organised in an irregular pattern, enclosed by a fragmented hedgerow network. Woodland is sparse, with occasional shelterbelts and scattered small blocks of deciduous and mixed woodland, including ancient woodland at Bush Park, Hildersham Wood and Rivey Wood. There is a localised distinctive linear pattern associated with the vineyard at Chilford Hall. Ecologically rich landscape includes small pockets of lowland calcareous grassland within larger areas of mosaic habitat. The elevated landscape offers long views across the Granta River Valley to distant horizons which are punctuated by scattered woodland.

The LCA is sparsely settled, with occasional isolated farms. This is a simple, large scale rural area with a quiet and tranquil character. The road network is sparse, predominantly comprising straight minor roads connecting settlements in the Lowland Chalklands with the Wooded Claylands. The busy A11 and A1307 cut through the LCA, locally detracting from the tranquil character. Rivey Hill Water Tower is a prominent feature on the horizon above Linton from the southern section of the LCA. Occasionally pylons and masts interrupt the skyline, and the wind turbines in 7A: Eastern Chalk Hills can be seen on the horizon in some views. Villages on lower ground within the 8A: Pampisford Lowland Chalklands are occasionally visible within views, generally they are well integrated into the landscape and built form appears in a wooded context.

Distinctive linear features within the landscape include the Brent Ditch earthwork, historic tracks, the dismantled railway in the southwest which is marked by linear trees, and the two Roman roads; one forming the route of the A11 in the west and the second forming much of the northern boundary. The treed line of the dismantled railway in the east cuts a contrasting more sinuous line through the landscape. The historic Harcamlow Way, Icknield Way Trail and the E2 European Long Distance Route are long distance walking routes, often following linear historic tracks and roads to provide connections with historic and ecological features in neighbouring LCAs.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

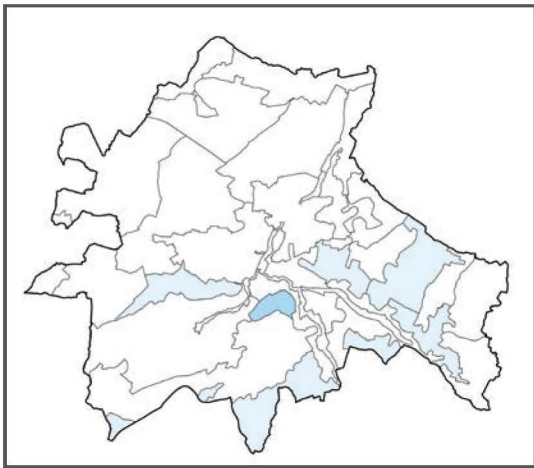
- Scattered areas of priority habitat including deciduous woodland, pockets of lowland calcareous grassland and mosaic habitat

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve areas of deciduous woodland, lowland calcareous grassland and mosaic habitats

LANDSCAPE CHARACTER AREA 7D: NEWTON CHALK HILLS



7D: NEWTON CHALK HILLS LANDSCAPE CHARACTER AREA

The Newton Chalk Hills Landscape Character Area (LCA) is a simple, rural landscape characterised by arable farmland on low hills with beech copses on high ground. It is the lowest part of the Chalk Hills.

Description

Key Characteristics

- Generally rectilinear fields in an irregular pattern with pockets of regularity, enclosed by low, gappy hedgerows
- Settlement comprises the small village of Newton which has a parkland setting, and isolated farms and cottages
- Views across the Granta River Valley from an obelisk on St Margaret's Mount, but otherwise public access is limited

The Newton Chalk Hills LCA is formed by a small outcrop of chalk between the valleys of the Granta and the Rhee. It is the least prominent of all the Chalk Hills. It is a typical chalk landscape, containing a series of gently rolling hills. It has a low point of 15m AOD in the north and a high point of 50m AOD at Rowley's Hill. A limited network of ditches in the east join a small stream which is a tributary of the River Cam.

Large arable fields are generally rectilinear and organised in an irregular pattern which becomes more regular in the east, and are enclosed by low trimmed, gappy hedgerows. The landscape is generally large scale and open. Vegetation is limited to shelterbelts and blocks of woodland, often on high ground. The predominant species is beech. There is a simple, unified landscape with a mostly strong rural character. There are a number of smaller fields with a localised more intimate character on Newton Road, northwest of Newton. Views from elevated locations are long and framed, but are enclosed by rising landform in the north

Newton is a small linear village located on low ground in the south of the LCA. Elsewhere settlement consists of a few houses and farms alongside roads. Recent development in Newton is creating a nucleated settlement, but its small scale character is retained. Newton Hall provides an extensive parkland setting to the west and elsewhere, open fields abut the village edges. Built form of both Newton, and Harston in neighbouring 3D: Cam & Granta Tributaries Lowland Farmlands is visible from within the wider landscape, and there is a sense of separation between the two villages. The limited minor road network consists of predominantly straight roads, or roads which 'dog leg'. The M11 and railway which forms the northwestern boundary are major transport links which pass through the area, locally disrupting tranquillity.

Public access to the hills is limited, but there are expansive, open views across the wooded 9A: Granta River Valley and well treed 8A: Pampisford Lowland Chalklands from the obelisk on St Margaret's Mount.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

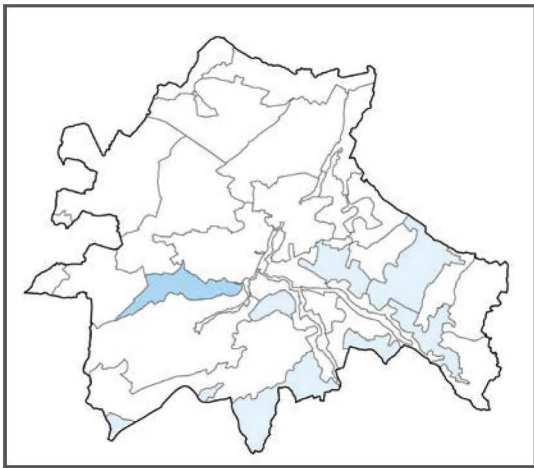
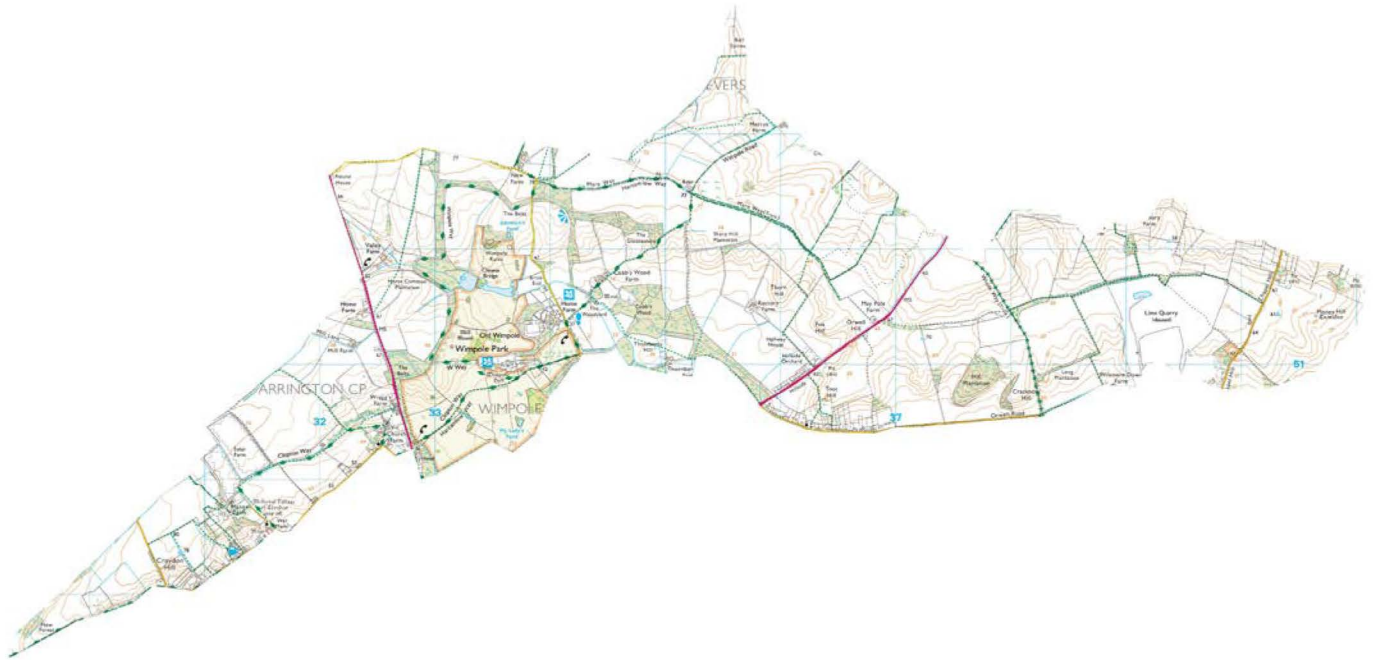
- Sparse settlement pattern with sense of separation between Newton and Harston

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Conserve the distinctive sense of rural isolation and separation between Newton and Harston
- Ensure new development is integrated into the landscape sympathetically and enhances views towards villages from the wider landscape

LANDSCAPE CHARACTER AREA 7E: WIMPOLE CHALK HILLS



7E: WIMPOLE CHALK HILLS LANDSCAPE CHARACTER AREA

The Wimpole Chalk Hills Landscape Character Area (LCA) has a distinctive parkland character connected to the mature designed landscape at Wimpole Hall.

Description

Key Characteristics

- Distinctive designed parkland landscape associated with Wimpole Hall
- Scattered areas of priority habitat including deciduous woodland and pockets of lowland calcareous grassland, orchards and mosaic habitats
- Designed views provide a variety of scales across the landscape from large to more intimate
- Earthworks and the Wimpole Hall estate provide a strong sense of time depth
- Highly accessible landscape which contains the Wimpole Way, Clopton Way, Harcamlow Way and Mare Way, as well as footpaths within the National Trust operated Wimpole Estate which is open to the public

Wimpole Chalk Hills LCA is a chalk ridge with a distinctive character strongly influenced by parkland at Wimpole Hall. This area is characterised by its elevated and rolling topography. The hill rises from c. 25m AOD southeast of Orwell, to a high point of c. 75m AOD. Chalk bedrock and superficial clay deposits combine to create a varied landscape which is complex and inspiring. The northern slope contains a number of small dry valleys and the southern slopes contain a number of small stream tributaries of the River Rhee. One of these streams has been dammed to form a serpentine lake which is part of the parkland at Wimpole Hall.

The Wimpole Hall parkland contains a serpentine lake, shelterbelts, copses of trees, a folly, carriage drive and planned views across the estate, in the immediate context of irregular pastoral fields with a mixture of straight and sinuous boundaries. The overall effect is unified, textured and colourful. Views are harmonious, reflecting the complex interplay between the rolling landform and mature ornamental planting which creates a variety of open and framed views across the landscape. To the north, the summit of the ridge is covered in dense deciduous woodland, including beech, oak, ash and lime. In addition to deciduous woodland, including a block of ancient woodland at Cobb's Wood, small fragments of lowland calcareous grassland, orchards and mosaic habitat add interest and ecological variety to the landscape. On the northern face of the ridge, and to the west and east the parkland influence is less pronounced, and the slopes appear as open expanses of arable fields, with a small area dedicated to solar power in the west. Arable fields are generally rectilinear and organised in an irregular pattern, divided by mature hedgerows, contributing to a feeling of intimacy in these locations. There are distant views of Cambridge from the ridge, with the most famous from Chapel Hill on the eastern boundary (a view referred to in Rupert Brooke's poem "The Old Vicarage, Grantchester"). The historic landmarks of Cambridge are visible on the skyline, and the city can be seen set in a green landscape, with river valleys, chalk hills and clay ridges all contributing to the impression of the city.

Settlement is restricted to scattered farms. Roads are limited to generally straight roads including the A1198 Ermine Street and A603 Roman Road connecting villages in the Lowland Farmlands and Wooded Claylands in a roughly north-south orientation. The site of the Medieval Village of Croydon, the Wimpole Estate and scheduled deserted medieval settlement earthworks within the parkland add time depth to the landscape. The Wimpole Way, Clopton Way, Harcamlow Way and Mare Way provide recreational walking routes through the landscape and connect the area with historical and ecological features in neighbouring LCAs. The designed parkland is now operated by the National Trust and open to the public.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

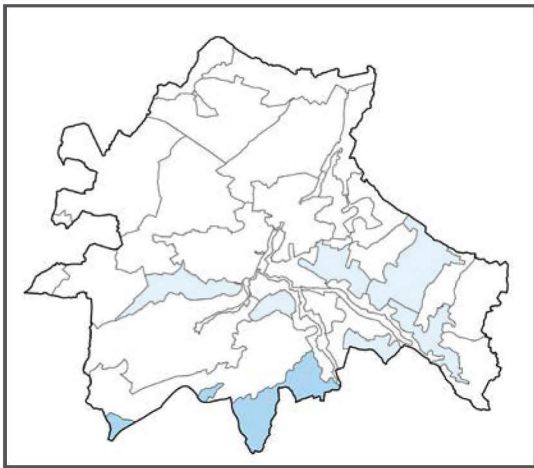
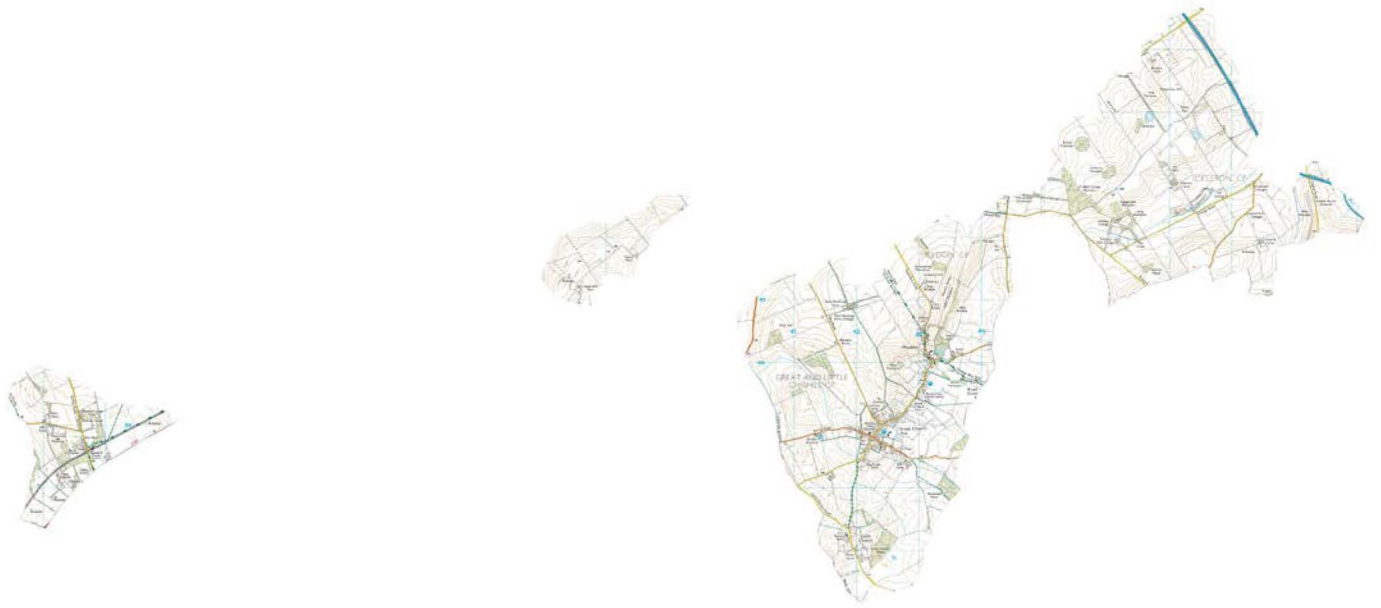
- Designed parkland landscape associated with Wimpole Hall, including deciduous woodland, a serpentine lake, folly and carriage drive with planned views
- Scattered areas of priority habitat including deciduous woodland and pockets of lowland calcareous grassland, orchards and mosaic habitats
- Strong sense of time depth
- Highly accessible landscape, that is valued for recreation, particularly access to Wimpole parkland and long distance footpaths

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Manage historic parkland to maintain and enhance its distinctive features and enhance the ecological value of the landscape
- Conserve areas of deciduous woodland, lowland calcareous grassland and mosaic habitats

LANDSCAPE CHARACTER AREA 7F: SOUTHERN CHALK HILLS



7F: SOUTHERN CHALK HILLS LANDSCAPE CHARACTER AREA

The Southern Chalk Hills Landscape Character Area (LCA) contains the highest parts of the Study Area within an open, rolling chalk landscape which is part of the much larger Chilterns chalk ridge.

Description

Key Characteristics

- Distinctive north facing chalk escarpment incised by dry valleys
- Vast, open character with long distance panoramic views to the north
- Scattered areas of priority habitat including deciduous woodland, orchards and mosaic habitats
- Settlement comprises three historic linear villages with intimate well treed character, and scattered isolated farms and cottages

The Southern Chalk Hills LCA comprises three areas within the southern part of the Study Area which are part of a longer chalk ridge that extends south into North Hertfordshire District and southwest to the Chilterns. The steep, north facing escarpment rises from a plateau at c. 45m AOD in the north, to a rolling chalk landscape of broad ridges and panoramic vistas with a high point of c. 145m AOD east of Great Chishill. It is incised by several north facing valleys which are predominantly dry.

This is a vast, open landscape with a generally irregular large scale rectilinear arable field pattern enclosed by ditches and fragmented hedgerows. Fields are often smaller and more organic in shape around settlements, where there is some pasture. Priority habitats include scattered deciduous woodland and shelterbelts, a small amount of mosaic habitat in the east and an area with orchards north of Great Chishill. Woodland and shelterbelts include ancient woodland at Monkshole Wood and Little Chishill Wood. In the west of the LCA, parkland at Odsey Grange provides variety. Views north towards Cambridge from the escarpment are expansive and long distance with distant wooded horizons punctuated by occasional isolated trees and woodland.

This is a rural area which feels remote and has a strong sense of tranquillity. Settlement comprises a small number of hilltop villages, Heydon, Great Chishill and Little Chishill, as well as isolated farms and cottages scattered through the LCA. The villages are linear, surrounded by small fields enclosed by mature trees and hedgerows. This creates localised intimacy and visual enclosure which contrasts with the wider large scale, rolling, open landscape. Their church towers and the windmill at Great Chishill are landmarks which are occasionally visible from the wider countryside. Other features which occasionally interrupt the skyline are occasional poles and masts. Quiet roads are often bound by mature hedgerows which contributes to localised perceptions of intimacy. In the north they are generally straight, sometimes 'dog-legging' and they become less regular in the south. The rural character is locally eroded in the west by the railway line and A505, and in the east by the M11.

The Icknield Way, an historically important highway, followed the line of the chalk ridge. The Icknield Way Trail and Harcamlow Way are long distance footpaths which follow the historic route today along a series of tracks and green lanes, as well as along the Bran or Heydon Ditch, a distinctive linear earthwork. These routes and the Bran or Heydon Ditch provide time depth, and along with the Chain Walk in the west of the LCA, provide connections to historic and ecological sites in neighbouring LCAs.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

- Scattered areas of priority habitat including deciduous woodland, orchards and mosaic habitats

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

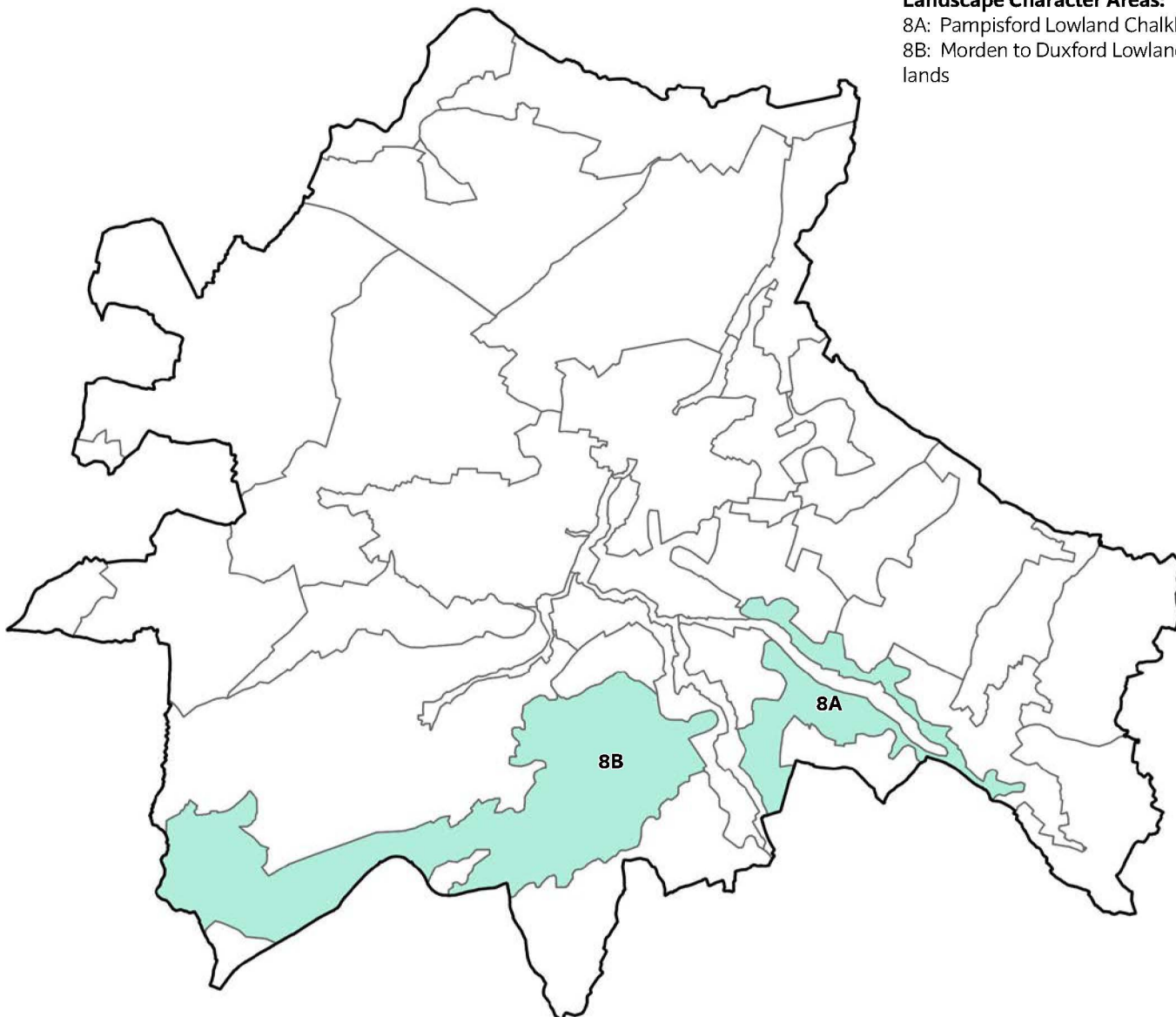
- Conserve areas of deciduous woodland, orchards and mosaic habitats

LANDSCAPE CHARACTER TYPE 8: LOWLAND CHALKLANDS

Landscape Character Areas:

8A: Pampisford Lowland Chalklands

8B: Morden to Duxford Lowland Chalklands



LANDSCAPE CHARACTER TYPE 8: LOWLAND CHALKLANDS

The Lowland Chalklands Landscape Character Type (LCT) is an intensively farmed arable landscape forming the gently rising transition between the Lowland Farmlands and the Chalk Hills. It is well settled, due to historic and modern communication links.

Description

Key Characteristics

- Gently rolling landscape, occasionally dissected by small streams in shallow valleys
- Productive, predominantly arable landscape with limited woodland cover
- Vegetation cover comprises scattered copses and shelterbelts of deciduous woodland with occasional hawthorn hedge field/roadside boundaries
- The landscape is dominated by late enclosures, resulting in field patterns which are generally rectilinear and occasionally sinuous
- A wealth of historic and archaeological features including ancient routes, earthworks and Roman sites/features
- Settled rural landscape characterised by dispersed historic, nucleated villages on lower landform
- Generally strong rural character, locally interrupted by major roads cutting across the landscape

Physical Influences

The Lowland Chalklands LCT forms the low-lying, gently rolling foothills of the chalk hills that rise to the south of the Study Area. The landform rises gently from c.30-40m AOD where the Lowland Farmlands transitions to the Lowland Chalklands. The landform gradually rises to c.65-75m AOD at the edge of the Chalk Hills, where the landform begins to rise more steeply.

The bedrock that defines the Lowland Chalklands is Upper Cretaceous Chalk and comprises bands of lower and middle chalk as the topography rises south through the LCT. This is overlain in places by surface deposits of till, sand and gravel, and river terrace deposits on the lower lying landform in proximity to the river valleys.

The soils vary across the LCT, but are generally lime-rich, loamy, free draining with moderate levels of fertility that supports the arable land use with areas of grassland and deciduous woodland habitats.

A small number of streams rise and flow through the Lowland Chalklands into the main rivers. The watercourses cut shallow valleys in the landscape and are often tree-lined.

Biodiversity

This is a productive landscape that is dominated by arable agriculture, with fragments of lowland calcareous grassland and limited woodland cover. This is not an ecologically rich landscape, with few designated sites across the LCT.

The landscape is characterised by medium to large sized fields that are enclosed by hawthorn hedges. Smaller fields with more distinctive hedgerow and tree boundaries occur around the edges of villages within this LCT.

There is limited tree cover across the arable landscape between the villages. Tree cover largely comprises shelterbelts on the higher slopes and scattered copses/clumps of deciduous woodland alongside watercourses, roads and in proximity to the villages. It also forms part of former parkland landscapes.

There are a small number of Sites of Special Scientific Interest (SSSI) within this LCT, which include pockets of carr woodland, meadow and hummocky fields containing nationally rare species.

There are a small number of County Wildlife Sites (CWS) scattered across the LCT, which include chalk pits, stretches of disused railway and intact hedgerow boundaries.

Priority habitats within this LCT include copses of deciduous woodland, scattered pockets of lowland calcareous grassland and floodplain grazing marsh, and some remnants of traditional orchard.

Historic Landscape Character

The Lowland Chalklands are dominated by late enclosures, most of which were created from common fields. Mid 19th century enclosure has altered much of the landscape, with irregular field boundary enclosures suggesting this was a gradual, piecemeal process.

The East Anglian Chalk landscape was historically sparsely populated due to a shortage of wood and water. This is evident by the location of settlements within the Lowland Chalklands where there is a water source, such as springs at Fowlmere and Thriplow and settlements in the east along the course of the river valleys.

The Icknield Way cuts through the south of this LCT. This route dates from Neolithic times and survives as a series of tracks and green lanes that are dotted with archaeological remains. As well as the historic route of the Icknield Way, Ermine Street (Roman Road) connects through this LCT from Royston northwards towards Godmanchester. The settlement of Royston grew up at the intersection of the two ancient routes.

The A11 follows the route of Worstead Street Roman Road, transecting the east of the LCT. Truncating the Roman Road is the Brent Ditch, which dates from the Saxon period and is linked with other ditches to the north.

Scheduled Monuments are dispersed across the LCT, including Roman sites and ditches. There are a number of historic parklands within and on the edge of this LCT on lower landform in proximity to the rivers, including at Abington, Hinxton and Babraham. Small, medieval moated sites are also scattered through the LCT.

Settlement Form and Built Character

Settlement pattern varies across the Lowland Chalklands. The region was mostly too dry for early settlement, which explains the concentration of villages on lower topography in proximity to the rivers and watercourses. The dryness and light vegetation meant that it was an ideal route for ancient communications.

Much of this LCT has a distinctive pattern of historic, nucleated villages. A number of these have expanded through the 20th century and Royston contributes to an urbanising influence on the edge of the Study Area. Villages along the rivers and main road network, in particular have expanded as commuter settlements to the south of Cambridge.

Villages through the west of the LCT have generally retained their small scale and historic character. They are generally small, concentrated settlements that are separated by extensive tracts of countryside. In the east of the LCT, settlement forms a larger proportion of the landscape, having developed along the key routes into Cambridge, resulting in some expanded, ribbon development and a substantial science and technology park at Babraham and Great Abington.

Many of the villages contain examples of traditional, rural architecture. Building materials within the settlements are largely flint, clunch (building chalk) and pale brick often under thatched roofs.

Access to the Landscape

The Lowland Chalklands are characterised by historic and modern communications links. The landscape is traversed by several major roads, including the A505 cutting along the contours to join the M11 in the west and the A11 and A1307 converging and linking into Cambridge through the east of the LCT.

A variety of A-roads and minor roads link from the major roads to local settlements and further afield, through the adjoining LCTs. The villages are largely concentrated around minor road networks and maintain their rural character.

The historic routes of the Harcamlow Way and Icknield Way long distance footpaths converge and link through the south of the Lowland Chalklands. A number of footpaths and bridleways connect with the long distance footpaths along their route through the landscape.

There are generally concentrations of Public Rights of Way (PROW) in proximity to the settlements, particularly noticeable in the west around Steeple Morden and Guilden Morden. However, routes are often short and do not provide strong connections through the wider landscape.

There are a small number of leisure sites and attractions within this LCT, including golf courses, small nature reserves and the Imperial War Museum at Duxford.

Evaluation

Key Landscape Features

- Low-lying, rolling, rural landscape
- Balanced landscape of medium to large fields with sparse woodland linked by hedges
- Settled rural landscape characterised by dispersed, historic, nucleated villages
- A wealth of historic and archaeological features including ancient routes, earthworks and stone churches within the nucleated villages

Forces for Change

- Intensive arable agriculture has resulted in field expansion and removal of key habitats including hedgerows. Changes in agri-environmental schemes and agricultural subsidies could result in further fragmentation of ecological networks and conversion/expansion of farmsteads
- Potential for erection of new farm buildings that may be visually intrusive, particularly on higher ground
- Pressures for development to expand village settlements, particularly those along main transport routes
- Ad hoc woodland and shelterbelt planting that would alter the open character of the landscape
- Climate change and land use change could lead to increased risk of flooding, particularly in proximity to the river valleys, and/or more frequent drought periods, which would alter the ecological networks, resulting in shift in species composition and requiring alterations in land management
- Development of land for sustainable energy including solar power and wind turbines may alter the rural character

Condition

The Lowland Chalklands is a productive agricultural landscape with limited ecological value. Within the farmed landscape there are fragments of chalk grassland and scattered, small woodlands that are linked by hedges that are particularly intact in proximity to settlements. There are a variety of historic and cultural features scattered across the LCT, including a number of protected sites. The overall condition of the landscape is perceived to be **moderate**.

Strength of Character

The Lowland Chalklands is a settled, rural landscape comprising dispersed, historic villages separated by open countryside with little tree cover and a sense of tranquillity. There is localised intrusion from major transport routes and larger, expanded villages along them. Overall, this landscape is judged to have **moderate** strength of character.

Key Landscape Sensitivities

- Low-lying, gently rolling landform dissected by small streams in shallow valleys
- Medium to large sized fields enclosed by hedges
- Strong sense of historic integrity, with several visible historic earthworks, routes and buildings
- Tranquil, often remote rural landscape away from major roadways and extended villages

Landscape Guidelines

The overall management objective for the Lowland Chalklands LCT is to **conserve** the tranquil and rural landscape away from urban influences (to include maintenance of historic sites and features and character of the dispersed historic villages); and **enhance** key features landscape including hedge boundaries, scattered woodlands and chalk grassland to strengthen landscape character through measures to retain or enhance biodiversity and visual character and minimise the urbanising influence of large villages, new settlement and transport routes.

Guidance for Landscape Management

- Conserve and enhance existing hedge boundaries and restore where possible
- Conserve the tranquil and uninterrupted rural character
- Protect the sites and features of archaeological and historic interest
- Manage the agricultural landscape and soils both for production and opportunities to improve biodiversity
- Conserve and enhance existing hedgerows and consider opportunities for re-planting hedgerows where these have been lost/become fragmented
- Manage planting of new trees and woodland in order to conserve open views of the undulating chalkland and emphasise landforms whilst improving biodiversity

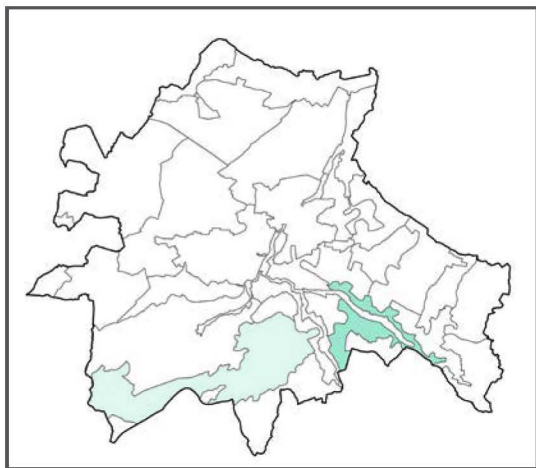
Guidance for Integrating Development into the Landscape

- Maintain the distinctive settlement pattern of the area and its local context
- Ensure any extensions to springline villages are located along the bottom of steeper slopes and along lanes
- Maintain the linear, or rectilinear form of the settlements
- Ensure density and pattern of new developments reflect that of existing villages and hamlets.
- Avoid backland and cul-de-sac developments where possible
- Ensure buildings are arranged in continuous frontages within village cores and are arranged in loose knit patterns facing the street on more peripheral sites
- Ensure new developments are integrated with sufficient space for garden and street tree planting where applicable
- Enhance village gateways and, where appropriate, consider provision of appropriate planting on village approaches, and retain hedges along roads
- Take opportunities to create new village greens and/or wildlife areas within new developments.
- Ensure new developments integrate/connect with existing Public Rights of Way (PROW) within development layout
- Ensure new developments reflect the form, scale and proportions of the existing vernacular buildings and pick up on traditional local building styles, height, materials, colours and textures
- Enclose boundaries facing the street in village cores by low, or high, flint walls with brick detailing, simple decorative railings, picket fencing or hedging
- Enclose boundaries facing the street on village peripheries with hedge and tree planting
- Avoid the use of standardised and intrusive urban materials, street furniture, lighting and signage as part of traffic calming measures wherever appropriate
- Ensure new agricultural buildings, such as large storage sheds, are sited and designed to reduce their apparent mass, minimising their impact on the wider landscape by the appropriate use of texture, colour and planting

LANDSCAPE CHARACTER AREAS

- **8A: Pampisford Lowland Chalklands**
- **8B: Morden to Duxford Lowland Chalklands**

LANDSCAPE CHARACTER AREA 8A: PAMPISFORD LOWLAND CHALKLANDS



8A: PAMPISFORD LOWLAND CHALKLANDS LANDSCAPE CHARACTER AREA

The Pampisford Lowland Chalklands Landscape Character Area (LCA) is a settled landscape comprising villages located on key historic routes along the River Cam and River Granta with a wooded character and strong sense of visual enclosure.

Description

Key Characteristics

- Mature hedgerows, small blocks of woodland and shelterbelts combine with occasional lines roadside trees to create a visually enclosed, intimate character
- Scattered designed historic parkland features, including some modern developments of large science and technology research parks, in proximity to the River Cam and River Granta
- Settlement pattern of scattered small villages on elevated ground at the edges of the River Valleys

Pampisford Lowland Chalklands LCA is a transitional landscape, rising between the River Valleys, Lowland Farmlands and the Chalk Hills and extending south into Uttlesford District. This LCA is part of the wider broad, shallow river valleys of the River Cam and River Granta, beyond the narrow floodplains described in the River Valleys. Within the Study Area, it gradually increases in height from c. 25m AOD at Pampisford to c. 55m AOD, east of Hinxton.

This is a broad scale landscape of large, undulating arable fields and mature hedgerows. A mixture of straight and sinuous field boundaries bind large fields in an irregular pattern. Sparse woodland comprises small woodland blocks or shelterbelts which combine with occasional lines of roadside trees and woodland within the River Valleys to visually contain views and create a character which is generally small scale and intimate. Scattered designed parkland at Pampisford Hall, Babraham Hall and Bartlow Park is a distinctive feature of the LCA and adds to the well treed character. Historic parkland is the setting for the Babraham Research Institute and Granta Park which offer campus-like settings for science and technology parks featuring large modern buildings which provide a contrast to the rural character elsewhere. Southwest of Great Abington, a mix of horticultural enterprises with glasshouses and grazing have a distinctive, small scale field pattern. This is not an ecologically rich landscape, however small blocks of deciduous woodland combine with small amounts of floodplain grazing meadow, mosaic habitat and a small pocket of lowland calcareous grassland at Sand Hill to provide some variety within the landscape. Linear belts of trees follow the routes of dismantled railways along the route of the A11 and route of the A1307 Cambridge Road. Views are generally short and enclosed by landform, woodland and shelterbelts, but occasionally there are framed long views towards wooded horizons from high ground.

Sparse settlement includes several small villages, isolated cottages and farms which have developed adjacent to the floodplains of the River Cam and River Granta along key historic routes into Cambridge. The villages include Hinxton, Pampisford, Little Abington, Great Abingdon, Linton and Bartlow. They are generally linear, with some 20th century estate development, notably in Linton which has grown substantially since the 1950s. They have varied edges, typically abutted by a mix of open fields, mature trees, hedgerows, woodland, or smaller fields. Villages are generally well integrated into the landscape in views, with church spires occasionally providing landmarks and build form appearing in a wooded context. Generally, this is a tranquil rural landscape. Occasionally large farm buildings, telegraph poles or pylons interrupt the skyline. The A11, A1307, A505 are busy main roads which fragment the LCA, locally eroding the rural character.

The sense of time depth in this LCA is strong. The Icknield Way Trail follows the route of the historic Icknield Way, and the Harcamlow Way passes near to Bartlow, providing links between historical and ecological features in neighbouring LCAs. A long history of human habitation is indicated by the A11 which follows the route of a Roman road, Brent Ditch, a linear Anglo Saxon earthwork, and the distinctive conical mounds of the Bartlow Hills which are well preserved Roman Barrows.

Evaluation

Specific Landscape Sensitivities

In addition to the generic landscape sensitivities for this landscape character type, the following sensitivities are specific to this character area:

- Well wooded, visually enclosed, intimate character
- Scattered designed historic parkland features, including some modern developments of large science and technology research parks, in proximity to the River Cam and River Granta

Specific Landscape Guidelines

In addition to the generic landscape guidelines for this landscape character type, the following guidelines are specific to this character area:

- Manage existing woodland and plant new woodlands to maintain the wooded character
- Manage historic parkland to maintain and enhance its distinctive features and enhance the ecological value of the landscape