

The Greensand Country Landscape Partnership

HISTORIC ENVIRONMENT CHARACTERISATION

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Preface

All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

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Key Terms

Throughout this document the following terms or abbreviations are used:

ACA Archaeological Character Area
AVDC Aylesbury Vale District Council
CBC Central Bedfordshire Council
DBD Designation Bedfordshire

HECA Historic Environment Character Area
HLCA Historic Landscape Character Area
HLCZ Historic Landscape Character Zone

HER Historic Environment Record LP Landscape Partnership

MK Milton Keynes

NHLE National Heritage List for England RBECA Rural Built Environment Character Area

SM Scheduled Monument

I. INTRODUCTION

I.I Background

The Bedfordshire Rural Communities Charity (BRCC) together with the Greensand Trust are leading the Heritage Lottery Fund funded Greensand Country Landscape Partnership Programme.

The Greensand Country is a long wooded ridge of Lower Greensand bedrock crossing central Bedfordshire from Leighton Buzzard in the south-west to Gamlingay in the north-east. It is recognised as a National Character Area (no. 90) "Bedfordshire Greensand Ridge" by Natural England.

For the purposes of the Greensand Country Landscape Partnership programme, the Greensand Ridge has been named 'Greensand Country' to include the low lying river valleys and low lying areas that lie at the edge of the ridge but are an integral part of its distinctive character. It will therefore be referred to as Greensand Country within this report.

Its topography and geology have led to the Greensand Country having an archaeological and historical development distinct from the more fertile clay vales to its north and south. Steep ridges led to the establishment of prehistoric hillforts and medieval fortified structures along its northern edge. The acidic "marginal" soils of the ridge and the resulting heathland and woodland, together with steep slopes in parts of the Greensand Country, meant that agricultural exploitation was difficult.

Due to its physical and agricultural marginal location, the Greensand Country was not intensively settled initially but used for the siting of monasteries. After the dissolution of the monasteries the land was given to major landowners who established their own stately homes and gardens, deer parks and estate villages. Much of the economic exploitation of the ridge was in the form of forestry, rabbit warrens and livestock grazing. Only with the onset of more modern farming methods were large areas of the ridge turned into arable land, most notably by the Duke of Bedford, who established innovative farming techniques and built a large number of "model farms".

The historic environment is a central resource for modern life. It has a powerful influence on people's sense of identity and civic pride. Its enduring physical presence contributes significantly to the character and sense of place of both rural and urban environments. However, modern land use and the rapidly expanding built environment have led to the decline of the archaeological and built heritage of the Greensand Country.

The Landscape Partnership Programme seeks to reverse some of this decline, raise awareness among local people and visitors of the Greensand Country's unique heritage, and involve them in creating a sustainable future.

To underpin their programme the Greensand Country Landscape Partnership is producing a Landscape Conservation Action Plan. Part of this Plan is a Historic Environment Characterisation Study which will inform the Plan but will also be capable

of acting as a stand-alone document, informing other strategies, policies and planning decisions. Other strands of the Landscape Conservation Action Plan are a Landscape Character Assessment, Sandstone Structures Audit and Historic Parkland Audit.

Albion Archaeology in association with Alison Farmer Associates and Fiona Fyfe was commissioned to undertake the Historic Environment Characterisation Study part of the Landscape Conservation Action Plan.

1.2 The Purpose of Historic Environment Characterisation

Detailed, local spatial planning and green infrastructure provision is contained in the Local Development Schemes for Central Bedfordshire, Aylesbury Vale District Council and Milton Keynes Unitary Authority. These are supplemented by Green Infrastructure Plans like the Mid Bedfordshire Green Infrastructure Plan (2008), the Aylesbury Vale Green Infrastructure 2011-2026 (AVDC 2011), Milton Keynes GI plan (2008) and Cambridgeshire GI Strategy (CCC 2011).

It has to be noted that on 19th November 2015 the full Council resolved to withdraw the Central Bedfordshire Local Plan and to begin work on a new plan. Until the new local plan is adopted, development in the central part of the unitary authority (formerly Mid Bedfordshire District) is covered by the Central Bedfordshire – North Local Development Framework (LDF) and the South Beds local plan. The LDF policies are set out in the Core Strategy and Development Management Policies Development Plan Document adopted by the Council on 19th November 2009.

As part of Local Development Plans development impact will have to be managed strategically, so that development can be shaped and directed in order to protect, conserve and enhance the historic environment and create new communities which respond to local character and sense of place.

To achieve this requires the development of more holistic approaches which go beyond the traditional site by site approach to development control and planning. Historic Environment Characterisation is one of those approaches. It is part of a system of assigning significance and value to a resource and assessing development impact and its significance upon that resource. It also provides tools for identifying development opportunities for that resource.

For the historic environment this allows more effective prioritisation, resource allocation, and management, within a broader characterisation framework. Broadly, the purpose of historic environment characterisation is set out below.

- Establish the historic environment as a key factor in developing a sense of place and context for new development.
- Provide historic environment input into Development Strategies, Local Plans and other strategic documents such as Village Plans.
- Identify historic environment issues, both constraints and opportunities, early in the development process.

- Identify opportunities for using the historic environment as part of Green Infrastructure Plan policies and influence Green Infrastructure delivery.
- Develop a development control tool and provide a model methodology for prospective developers to use in assessing the impact of individual development proposals on the historic environment.

1.3 Objectives of the Greensand Country Historic Environment Characterisation

The Greensand Country Historic Environment Characterisation Study has several objectives which are in addition to the general purpose of historic environment characterisation and specific to the Greensand Country character area. These objectives are set out below.

- To improve and promote the understanding and appreciation of the historic environment of the Greensand Country Landscape Partnership Area.
- To engage communities in the process in order to raise awareness of local heritage features and secure input on what features they value.
- To identify opportunities for using the historic environment in the development of the Greensand Country Landscape Conservation Action Plan (LCAP) and subsequent delivery of the LP programme.

1.4 Methodology

The study area boundary supplied included the Greensand Country Landscape Partnership area, excluding the urban areas of Ampthill and Flitwick.

The methodology involved a two-stage process. The first stage involved thematic characterisations of different aspects of the historic environment: Archaeological Character Areas (ACA), Historic Landscape Character Areas (HLCA), and Rural Built Environment Character Areas (RBECA).

Some of these datasets already existed from previous studies, whilst others have needed to be created using background data such as the HER, and local knowledge of enclosure patterns. It has also been necessary to incorporate information from Buckinghamshire and Cambridgeshire into existing datasets in order to create a seamless characterisation across the entire Greensand Country.

The second stage involved using the thematic characterisations to identify and refine larger scale Historic Environment Character Areas (HECA) and smaller scale Historic Environment Character Zones (HECZ). Historic Environment Character Areas are designed to inform strategic planning at a county-wide level. Historic Environment Character Zones (HECZ) break down the larger Historic Environment Character Areas (HECA), identified above, into smaller zones, which are of a size more suitable for strategic planning on a more localised basis. HECZs can be used at an early stage in the planning process to identify impacts on the historic environment, thereby highlighting the need for informed conservation, enhancement and mitigation.

| The methodology and descriptions for the HECAs and HECZs is given in the main body of the report in Sections 3 and 4. They are illustrated in Figures 1 and 2. The methodology and definition of the thematic datasets is given in the Appendices. | | |
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2. ARCHAEOLOGICAL AND HISTORICAL CONTEXT

2.1 Introduction

This section presents a broad narrative summary of the archaeological and historical context of the Greensand Country within Bedfordshire. It draws heavily on previous studies, in particular An Archaeological Research Framework for Bedfordshire (Oake et al 2007), Bedfordshire Historic Landscape Characterisation (Simco 2005) and the Bedfordshire Aggregates Archaeological Resource Assessment (Woburn Sands Formation AS-A) (CBC 2011). The latter has been used to compile the archaeological background in this report and, unless otherwise referenced, is the main bibliographical source for the text in this section.

The information is presented in chronological order from prehistoric times to the present day. No detailed account of all aspects of the county's historic environment is attempted. Rather, the aim is to identify the main trends and elements within it. Consideration is also given to the context of discovery, with the aim of elucidating the main elements in our understanding of the county's historic environment.

2.2 Geological and Topographical Setting

The geology and topography of the Greensand Country have strongly influenced the evolution of the area's historic environment.

2.2.1 Solid geology

The south-west to north-east trending "grain" of Bedfordshire is provided by the solid geology. The youngest rocks, Lower, Middle and Upper Chalk, appear on the surface in the south of the county as the Bedfordshire Chilterns. Moving northwards, the Chalk is successively underlain by older Gault Clay, Lower Greensand, Oxford Clay, Cornbrash and Oolitic Limestones.

This super-imposition produces a "corrugated" effect, moving from the highest point of the county, the Chilterns in the south towards the Greensand Country, which is rising out of the surrounding clay plateaus to its north and south. Following the geological grain of the country the Greensand Country forms a distinctive band of higher ground stretching from Leighton Buzzard in the south-west to Gamlingay in the north-east.

The Lower Greensand actually continues in a south-west to north-eastern band across the entire country, appearing in Norfolk, Cambridgeshire, Bedfordshire and Buckinghamshire. Within Bedfordshire the Lower Greensand is known as Woburn Sands Formation and is informally divided into Red Sands, Silver Sands and Brown Sands, the colours being the result of varied inclusions of iron oxide, silt and glauconite.

Heavy concentrations of iron oxide give rise to sandstone and ironstones which are interbedded with Fullers Earth (a very fine clay that was historically used for cleaning or "fulling" wool and textiles).

2.2.2 Drift geology

Partially draped over this underlying framework are a variety of superficial deposits.

In the Greensand Country there are drift deposits of Boulder Clay in the south-western and central-northern part of the ridge. Oxford Clay intrudes along the edge of the ridge from the Bedfordshire clay vale to its north. Other significant drift deposits are the alluvial gravels of the valleys of the Rivers Ivel, the Flit and the Ouzel.

2.2.3 River gravels

The gravel terraces of the river valleys undoubtedly were a focus of settlement from the earliest human times. However, this natural bias has been accentuated by archaeological evidence that has been recovered as a result of quarrying and development in the river valleys. The well-drained nature of gravel terraces leading to a better visibility of archaeological sites also makes them particularly suitable to aerial prospection, which potentially further skews the overall pattern.

2.2.4 Quarrying

Where these deposits outcrop at the surface, they have long been (and in many cases continue to be) exploited as mineral resources: sand and Fuller's Earth around Leighton Buzzard, Woburn and Aspley Guise, clay for brickmaking in the central part of the ridge, and sand to the east of Sandy. Phosphate pebble beds at the base of the Lower Greensand were exploited for fertiliser production during the late 1800s to early 1900s.

A number of quarry locations used to extract solid sandstone have been identified within the Bedfordshire part of the project area by the Strategic Stone Study, a project undertaken by Historic England (formerly English Heritage) and the British Geological Survey (BGS) researching the use of building stone in England. However, Garrand notes that the extraction of sandstone as a building material has often been secondary to the quarrying of aggregates, or was extracted in parallel with sand quarrying, because the nature and quality of the stone deposits are so variable across the Greensand Country (Garrand 2015).

Due to the high variability of sandstone as a building material only a small proportion of it was used for the construction of high status buildings, like bridges and parish churches The majority of the building stone was used for secondary structures such as boundary walls, modest houses and cottages and occasional farm buildings and estate lodges (Garrand 2015).

2.2.5 Topography

The Greensand Country is a relatively low ridge with the highest point at c.170 AOD at its western end on Bow Brickhill heath. Towards the north it has a pronounced and steep scarp slope which levels off at the top to form the main undulating plateau of the ridge. This falls gently towards the south and east, forming dip slopes into the valley of the River Flit in the south and Ivel in the east. Short, steep valleys, which were formed during the Ice Age, break up the landscape of the ridge. These are important visual features but make farming difficult.

The River Flit has carved a relatively narrow valley into the Lower Greensand along the southern edge of the ridge, while the River Ivel lies within a wide valley with extensive gravel banks either side of the watercourse. To its east the ridge again rises

as a steep slope, with the Lower Greensand continuing eastwards into Cambridgeshire where it disappears under overlaying clay deposits near Gamlingay.

The River Ouzel loops around the base of the Greensand Country in the west and the western slopes are also steep and heavily wooded.

2.3 Human occupation

2.3.1 Early prehistoric evidence (Palaeolithic to Bronze Age)

Evidence for early prehistoric activity in the Greensand Country is almost exclusively in the form of flint tools. The majority of the finds are unstratified or come from secondary contexts. Where flints have been found in the ploughsoil they are often not associated with any underlying features of the same date, suggesting an absence of more permanent sites. Some of the finds may be chance losses by groups of hunter gatherers moving through the regions, others indicate the existence of flint knapping and production sites with one site including the possible presence of a working floor (HER 2595).

Two noticeable collections come from the central part of the Greensand Country. They are an assemblage of finds retrieved during fieldwalking prior to the construction of the Aylesbury to Steppingley gas pipeline south-west of Flitwick (HER 15844). This contained a large number of Mesolithic cores, blades, bladelets and microliths, with the diverse number of material suggesting that this could be a flint knapping and processing site.

The other is an assemblage collected by an amateur archaeologist over a period of thirty years in the area of Laurel Wood within Ampthill Park (HER 18269) and comprises 4,200 pieces of flint. It has not been fully analysed but contains a large number of Neolithic type blades, flakes, cores and debitage.

The nature of early prehistoric activity in the Greensand Country is difficult to conclude from the available material. Most of the finds spots are either on the upper slopes of the ridge at good vantage points or from sites within the river valleys. It is assumed that the ridge would have been largely wooded in the early prehistoric period and the available evidence suggests the presence of seasonal and temporary hunter-gatherer sites used for both flint production and the processing of animal and plant remains.

Apart from a small number of antiquarian finds, and the Ampthill amateur collection, most of the flint artefacts were retrieved during archaeological investigations prompted by the planning process. It is therefore likely that the lack of artefacts also mirrors the relatively low number of commercial archaeological investigations on the ridge.

2.3.2 Bronze Age

The end of the Neolithic period (c. 2,000 BC) saw a number of changes in pottery types, the emergence of metal artefacts, the abandonment of earlier communal monuments and an increased emphasis on individual burial. Within Bedfordshire, in terms of the distribution of the evidence and the absence of definite settlement sites, this period has much in common with the preceding Neolithic.

As in much of lowland Britain, the study of this period has been dominated by the study of burial monuments or barrows. The sites of around 150 have been identified within the county as a whole. The great majority are on the Great Ouse and Ivel gravel terraces; there are only 25 on the chalk uplands and a handful elsewhere. Within the study area only 4 ring ditches are recorded, all within or overlooking the river valleys.

The absence of evidence for barrows suggests that the ridge may still have supported considerable areas of woodland in the Bronze Age period. A possible pillow mound and round barrow were recorded on the northern scarp slope of the ridge to the northwest of Haynes West End (HER 7487 and 7488). However, the pillow mound is most likely a medieval rabbit warren and there is no physical evidence for the round barrow actually existing.

Bronze Age flints do occur within the assemblages discussed in Section 2.3.1 above. These are the only indicators for potential settlement sites on the ridge, no other evidence for settlements or agricultural exploitation in the form of field systems has yet been found. This could either represent a real lack of those sites in an area that may not yet have been part of Bronze Age woodland clearance, or again a bias of visibility in the archaeological resource

2.3.3 Iron Age

Hillforts are one of the archetypal features of Iron Age Britain and there are several examples in the Greensand Country. Three are located on the steep ridges overlooking Sandy in the east of the study area. These are Galley Hill, Sandy Lodge and Caesar's Camp. A further good example, Danesborough Camp, lies within Buckinghamshire on the western edge of the ridge. Craddocks Camp is a possible hillfort overlooking the River Ouzel to the west of Heath and Reach.

For the first time in the history of the Greensand Country, there is unequivocal evidence for the existence of farms, practising a mixed arable/pastoral regime, and settlement density increases towards the end of the Iron Age. Not only are long-settled areas like the river gravels more intensively exploited but sites also appear in previously under-exploited areas, such as the Greensand Country. There are a relatively large number of cropmark sites, all situated on the upper slopes of the ridge. These are undated but on morphological grounds most likely represent Iron Age to Roman settlement sites and agricultural features.

In a few cases, where archaeological investigations of those cropmarks have taken place prior to development, Iron Age and Roman occupation was confirmed. Iron Age pits and ditches and a late Roman corn drying oven were recorded north of Haynes Church End (HER 15840). Several ditches and two cremations dating from the Iron Age/Roman period, part of a larger cropmark complex, were excavated at Sweetbrier Farm (HER 16752) west of Old Warden.

2.3.4 Roman

The infrastructure of small towns and roads was a major innovation, which firmly embedded the county into the administrative and political structures of lowland Roman Britain. The two major north-south routes beneath the present-day A5 and A1 trunk roads both cross the Greensand Country, the A1 in its east and the A5 Watling Street

in its west. These roads would have been supplemented by a network of minor roads and trackways, the precise extent and nature of which have been the subject of considerable debate. A small section of Roman road was excavated west of Sandy (HER 11984)

The two towns in the county were both strategically positioned on the major routes. Sandy (HER 444) was located at the point where the River Ivel cuts through the Greensand escarpment, close to a group of Iron Age hillforts. By the 3rd century AD it was over 10ha in extent, and featured two cemeteries on its outskirts. The second major Roman settlement was Dunstable to the south of the Greensand Country.

A smaller, 4th century fortified town was located within the Ouzel Valley to the south east of modern Fenny Stratford. Magiovinium lay either side of the Roman Watling Street. No large scale excavations have yet been undertaken within the settlement but painted wall plaster, tesserae, tiles, pottery and coins have been found during fieldwalking. The town also had a cemetery outside its defences.

Beyond the towns there was a variety of settlement forms, including large villages and smaller farmsteads. Ruxox (HER 918), on the southern dipslope of the Greensand Country close to the River Flit, represents an extensive area of Roman settlement. The amount of pottery, tile and fragments of "Venus" pipe clay figurines suggest that it was a villa as well as a temple site.

Farmsteads, some comprising quite extensive linear arrangements of enclosures, were also a common feature of the countryside, perpetuating the mixed arable/pastoral economy which had developed during the preceding Iron Age. Similar to the Iron Age period, many of the cropmark complexes recorded within the study area are likely to be Roman in date. The location of those sites along the northern edge of the central ridge plateau, just set back from the steep scarp slope, is noticeable.

Another distinctive site type which occurs in the Greensand Country, and which has only been identified through excavation, is the kiln. Several pottery kilns have been excavated, noticeable examples being located in Woburn (HER 11867, 18268), Ampthill (HER 6743) and Hillfoot Farm (HER 9156). All sites are located in areas of clay overlying the Lower Greensand bedrock and are examples of the early industrial exploitation of the ridge.

2.3.5 Anglo-Saxon

There are very few heritage assets dating to the Anglo-Saxon period recorded in the Greensand Country. The only evidence for early Saxon occupation was uncovered during trial excavations at the site of Ampthill Castle (HER 810). This comprised a series of linear features with fragments of domestic pottery vessels dating between the 5th to 7th centuries AD. The features could either represent timber slots for a substantial building, or the remains of an enclosure with a series of internal divisions. It is possible that the features represent a settlement pre-dating the castle.

Postholes, a hearth and two parallel ditches dating to the Saxo-Norman period (850 – 1150 AD) were excavated at Haynes park in advance of the construction of a new

access road (HER 15840). They were part of a multi-period settlement with preceding Iron Age and Roman occupation.

The scheduled monument of Quince Hill (HER 972) at Old Warden consists of an earthwork forming a central enclosure c. 80m in diameter surrounded by two sets of banks and ditches. Ringworks date to between the late Saxon period and the 12th century AD and it is likely that they represent either military fortifications or defended manorial or aristocratic settlements.

Many of the villages and hamlets of the Greensand Country are listed in the Domesday Survey of 1086 AD, showing that they have late Saxon origins. However, archaeological evidence for those early settlement cores is only slowly coming to light and often depends on development-led investigations.

2.3.6 Medieval

The medieval period is characterised by a much greater visibility and physical presence of sites. The impact of the Norman conquest is reflected in the emergence of fortified sites, which are found throughout the country. Some take the form of simple mottes without a bailey and may represent early Norman mounds capped with wooden towers. Some of the more highly fortified motte and bailey castles were superimposed upon existing village or town settlements. There are two Norman castles in the Greensand Country, one is Cainhoe Castle (HER 225) at its southern edge and the other is a motte in Exeter Wood on top of the northern scarp slope (HER 9263).

The very mixed pattern of rural settlement within Bedfordshire could suggest that individual styles of lordship were an important factor in the development of the county's rural landscape. Overall, the settlements within the county may be classed as mainly dispersed with some nucleation. However, patterns often vary widely from one parish to another even within the similar terrain of the Greensand Country.

The county is especially rich in moated sites, with one of the densest concentrations in England. Moats are often associated with patterns of dispersed settlement and irregular field systems; some have manorial associations. The origin of many is probably associated with assarting, the creation of new farmland out of woodland in the 12th and 13th centuries. The main concentration of moats is in the north of Bedfordshire on the clay soils but many are found in the Greensand Country.

The marginal and secluded nature of land in the Greensand Country led to establishment of a relatively large number of monastic sites. These are Woburn Abbey, Old Warden (both Cistercian), Chicksands (Gilbertine), and Bushmead (Augustinian).

After the dissolution of the monasteries the monastic land was either given to members of the gentry for services rendered to the king, or acquired by them. Large country houses with surrounding parks were established in the post-medieval period which are still in private hand. None of the monastic sites in the Greensand Country have been extensively studied or investigated archaeologically, but work is currently undertaken by an amateur historian on researching the history of Old Warden.

Evidence of the rural economy survives in a large range of features within the landscape of the ridge. Fishponds, wildfowl lakes, rabbit warrens and mill sites are often associated with manorial and ecclesiastical establishments. Only about 50% of the countryside was farmed in open fields. Woods were also an important element of the rural economy, supplying raw materials and supporting a range of industries and crafts.

2.3.7 Post-Medieval and Industrial

A notable feature of the post-medieval landscape is the development of parks and gardens usually associated with the larger and grander houses in the county. These spread throughout the county but the most extensive and often most innovative and striking are found in the centre of the county in the Greensand Country. Part of the reason for this the location of medieval monastic houses in this area which at the Dissolution became the centre of new aristocratic estates; for example Woburn and Chicksands. Other important parks in central Bedfordshire include Wrest Park, Ampthill Park and Southill.

The existence of large country estates and also of smaller manorial estates meant that much of the agricultural land in the Greensand Country was enclosed from the medieval period onwards. Much of this enclosure was small scale and led to the creation of a distinctive pattern of irregular fields. In a small number of parishes this field pattern still survives. Examples are the fields to the north-west of Maulden in the parishes of Maulden and Haynes, and land along the north-eastern edge of the Greensand Country where the parishes of Cardington, Cople and Willington extend up to the ridge and created arable fields through assarting.

In other parishes this pattern, and the remaining open field system, was later replaced by a new system of large rectangular fields and straight roads. In a process that is symptomatic for the large country estates on the ridge, in particular those owned by the Duke of Bedford, this large scale re-organisation was undertaken by the estates themselves, leading to a similar pattern of fields to Parliamentary enclosure.

The 8th Duke of Bedford in the mid-19th century was part of the agricultural revolution and restructured his lands to take full advantage of modern farming methods, including the steam plough. He also built a large number of "model farms" designed for optimum efficiency. Many of the farms have a very distinctive E-shaped ground plan and some are accompanied by steam engine houses. A good examples is Park Farm in the parish of Steppingley, where a possible steam engine house still survives.

Many of the rural buildings of this period bear witness to post-medieval economic activities. They include dovecots, lock-ups, animal pounds, smithies, windmills, watermills, horse engine houses, donkey wheel houses, barns and other farm buildings. Many of them were built of brick.

Brick making is another indicator of the increasing importance of rural industry at the time. Clay pits for the extraction of clay are recorded in several areas in the Greensand Country. Other materials that were quarried and exploited in the post-medieval period were sand and gravel, pockets of which occur all over the ridge, and Fullers Earth. Rich deposits of Fullers Earth existed at Wavendon Heath, Aspley Heath and Clophill. It was first mined in the Roman period and in 1765 the Duke of Bedford

began commercial mining. The deposits were exploited commercially until the turn of the 21st century (Bedfordshire and Luton Geology Group 2010).

Sandstone was probably first quarried on a large scale in the medieval period in order to construct the many parish churches within the Greensand Country which are predominantly built of sandstone. However, Garrand notes that the majority of churches were extensively restored in the 19th or early 20th centuries. This continued the demand for locally produced stone, even though many of the pits exclusively devoted to the extraction of building stone had ceased working by the late 19th century (Garrand 2015).

Another major development in eastern Bedfordshire was the emergence of large-scale market gardening. The rivers Great Ouze and Ivel was made navigable in the 17th and late 18th century respectively, stimulating the urban development of Bedford and many of the smaller centres along the waterways. Brewing, malting, tanning, straw plaiting and hat making were all important industries carried out in Bedfordshire's towns. Historic town buildings survive in various places and in many cases their date may be earlier than so far assumed. When timber-frames became unfashionable in the 18th century, many town buildings were completely refaced with brick and stone, masking the earlier structure behind their facades.

The introduction of the railways in the middle of the 19th century was crucial to the development of the county's towns and the growth of several of its industries, for example quarrying, brick making and the transport of many of the goods from its smaller scale industries. The steam engine also revolutionised many of the industrial processes carried out in Bedfordshire's rural environment like cultivation and milling.

3. HISTORIC ENVIRONMENT CHARACTER AREAS

3.1 Introduction

The Historic Environment Character Areas (HECA) are predominantly based on the HECAs which were defined as part of the Mid Bedfordshire Green Infrastructure (GI) Plan 2008 (Greensand Trust 2008) which covers the area of the Greensand Country. The Mid Bedfordshire GI Plan supports the regional Bedfordshire and Luton Strategic Green Infrastructure Plan (BLGIC 2007) and is in turn supported by GI plans drawn up on a parish level.

The zones applicable to the Greensand Country in Bedfordshire as defined for the Mid Bedfordshire GI plan have been re-used for this study. Their boundaries were refined to an appropriate scale for this project, for example making them fit field boundaries. They were also refined to avoid 'slivers' of HECAs at the edges of the project area, and to remove 'artificial' boundaries along the Bedfordshire County boundary.

During the refining process, the boundaries of RBECAs, ACAs and HLCAs were also taken into account. A summary table of which zone and sub-area make up each HECA and how the different elements are nested is given in Appendix 6.4. As there are so many different boundaries involved, a figure showing all elements superimposed would not be illustrative.

The areas have been given new unique numbers, but the numbers are cross-referenced with those given in the Green Infrastructure report (Greensand Trust 2008), where applicable, and prefixed with GI. A total of seven HECAs were identified across the Greensand Country.

Parts of the Greensand Country which lie in Buckinghamshire, Milton Keynes and Cambridgeshire have been incorporated into the HECAs. The HECAs therefore cross county boundaries. The location and extent of the HECAs are shown on Figure 1.

Opportunities of enhancement for each area, as identified in the relevant Green Infrastructure plan for each county are given at the end of each area description. The level of detail of the opportunities reflects the level of detail given in the Green Infrastructure plans. They are intended to highlight certain elements, characteristics of or sites within a HECA but do not provide a detailed exploration of each opportunity.

3.2 Descriptions

3.2.1 HECA I (GI 37): Buckinghamshire Ouzel Valley and western wooded slopes and quarry lands

Key Characteristics:

 Wooded Greensand upland / former heathland to west of Woburn and north of Leighton Buzzard.

- Ironstone- and brick-built settlements at Aspley Guise, Aspley Heath, Heath and Reach.
- Former and extant sand quarries on the SW side of A5;
- Duke of Bedford land to NE is unquarried.
- Rushmere Country Park. Remains of medieval woodland management.
- Bisected by Watling Street (A5).

Opportunities:

- Improve and create interpretation and trails to highlight:
 - o Remains of extractive industries, including narrow gauge railway.
 - Links into Milton Keynes where Greensand escarpment overlooks the Ouzel Valley.

3.2.2 HECA 2 (GI 36): Bedford Estate parkland and farmland

Key Characteristics:

- Woburn Park and Bedford Estate land.
- Estate settlements, e.g. Husbourne Crawley, Ridgmont, Tingrith, Milton Bryan etc and model farms.
- Woburn Experimental Farm.
- Steppingley Park.
- Traversed by M1.
- Archaeological potential largely untapped.
- Deserted medieval settlement at Potsgrove and Segenhoe (latter includes a ruined church).
- Eversholt parish: fossilised medieval landscape with early enclosure fields and dispersed small settlement pattern.
- WW2 black propaganda wireless station at Milton Bryan.

Opportunities:

- Improve and create interpretation and trails to highlight:
 - History of agriculture.
 - History of the impact of the Duke of Bedford (agriculture and estate architecture).
 - Medieval sites and earthworks
 - WW2 dimension

3.2.3 HECA 3 (GI 33): Northern scarp slope, Ampthill Park and Maulden farmland

Key Characteristics:

- Block of Greensand / Boulder Clay upland between Clophill and Lidlington.
- Centred on Maulden and Ampthill, with smaller settlement at Millbrook.
- Former heathland (with warrens), later given over to timber plantations.
- Historic woodland at Maulden Wood and King's Wood.

- Houghton House and Park.
- · Ampthill Park and House.

Opportunities:

Relatively well researched and presented archaeological landscape.

3.2.4 HECA 4 (GI 32): Flit valley and valley slopes

Key Characteristics:

- Flit Valley between Shefford and Flitwick.
- Much narrower floodplain than, for example, the Ivel Valley.
- Meadowland.
- Important palaeoenvironmental remains at Flitwick Moor, preserving good pollen data.
- Significant late prehistoric and Roman sites in upper reaches (e.g. Ruxox Farm and Ampthill bypass).
- Flitwick and Cainhoe castle earthworks.

Opportunities:

- Improve and create interpretation and trails to highlight:
 - Ruxox Roman site
 - Flitwick and Cainhoe Medieval castle earthworks.
 - Views in and out.
 - Recent agricultural history (including market gardening and peat cutting.)
 - Flit Valley Walk

3.2.5 HECA 5 (GI 27): Monastic estates and parkland

Key Characteristics:

- Large block of Greensand upland to north of River Flit.
- Attractive mixed landscape of marginal heathland, arable, pasture and woodland plantations, formerly extensive monastic estates.
- Characterised by ancient woodland, extant (and former) parkland/estates and country houses.
- Moggerhanger Park, Shuttleworth, Southill Park, Chicksands Priory, Haynes Park, Old Warden.
- Some arable land amongst the woodland.
- Complex network of minor roads.
- Varied settlement pattern; Ickwell Green;
- Much evidence for medieval assarting.
- Buildings of a variety of ages.
- Main building stone is ironstone.
- Limited archaeological fieldwork but where undertaken (e.g. Haynes Park) has revealed settlement from late prehistoric onwards.

Opportunities:

- Improve and create interpretation and trails to highlight:
 - Parkland, country houses (where accessible), development of monastic estates.
 - Woodland management.
 - Long views to north-west across Bedford.

3.2.6 HECA 6 (GI 21): Ivel Valley

Key Characteristics:

- Western side of the Ivel valley between Sandy and the Flit / Ivel confluence.
- Extensive glacial and river gravels.
- Long standing extraction industry at Manor Farm (Sandy) has produced a wealth of prehistoric and Roman archaeology.
- Extensive market gardening with surviving onion sheds.
- East-west grain to the landscape.
- Crossed by historic transport routes: Roman road, Great North Road, East Coast Mainline.

Opportunities:

Relatively well researched archaeological landscape.

3.2.7 HECA 7 (GI 19): Greensand upland east of Sandy

Key Characteristics:

- Characterised by heathland (Sandy Heath, Potton Heath, Great Heath (Cambs.)).
- History of sand extraction.
- Parkland associated with Woodbury Hall, Hazells Hall and Sandy Lodge. Tetworth Gardens.
- Settlements of Everton and Potton (the latter an historic town in its own right).
- Late medieval pottery production at Everton.

Opportunities:

- Improve and create interpretation and trails to highlight:
 - o Iron Age hillforts (x3) controlling the gap in the Greensand Ridge.
 - Market gardening provides interesting social history dimension.
- Non-intrusive investigation of and research into Gamlingay Park archaeological remains (Farmer 2015).

4. HISTORIC ENVIRONMENT CHARACTER ZONES

4.1 Introduction

The HECZs draw on the same strands of evidence used in the definition of the HECAs. With the latter there is a tendency to agglomerate subtle variations which can be looked at individually and in more detail within the framework of the HECZ. Of course, even the HECZs themselves could, theoretically, be broken down into smaller units.

The descriptions of the HECZs seek to highlight their key characteristics and any particularly significant aspects of their historic environment resources. A condition assessment tries to identify any key issues relating to the management and protection of the historic environment resource of each individual zone. Each description comprises an overall summary, and summaries of the relevant characterisation strands.

The precise methodology for the condition assessment of each HECZ is given in Appendix 6.5.1. A summary table of which HECZs and sub-areas make up each HECA and how the different elements are nested is given in Appendix 6.4. The boundaries of the HECZs within the Greensand Country are shown on Figure 2.

4.2 Descriptions

4.2.1 HECZ 1.1: Ouzel River Valley and Slopes

Description

This HECZ is located at the western end of the Greensand Country. It includes the valley floor of the river Ouzel (which contains the Grand Union Canal), and the sloping fields between the Ouzel valley and the woodlands of the Greensand Country. The HECZ is predominately farmland, with hedged fields giving a well-vegetated feel. It forms the setting of the Greensand Country in views from the west. The river valley location means that archaeologically there is a comparatively large number of cropmark complexes, suggesting prehistoric to Roman settlement. The known Roman small town of Magiovinium lies straddling the A5/Watling Street in the northern part of the HECZ. The historic landscape comprises flood meadows and pre C18th irregular enclosure with some parliamentary enclosure in the centre of the HECZ. There is some survival of medieval ridge and furrow. The HECZ is also traversed by the Grand Union Canal.

Field Patterns

Valley floor flood meadows and pre 18th century irregular enclosure. Some Parliamentary and C.19th enclosure fields with some modern boundary loss.



Looking south-west towards the Ouzel Valley and Grand Union Canal from near Orchard Mill

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 1

Archaeological Character Areas (ACAs): 15

Rural Built Environment Character Areas (RBECAs): 15

Historic Landscape Character Areas (HLCs): 95

Main Archaeological Notification Areas (ANAs): Old Linslade Deserted Medieval Village, Gravelly Ground possible Neolithic/Bronze Age ring ditch, Three Locks Golf Course Roman farmstead and field system, Chelmscote medieval manor and fishponds.

| Criteria | Description | Score |
|-----------------------|---|-------|
| Diversity of historic | Due to river valley location a relatively wide | 2 |
| environment assets | range of assets, ranging from prehistoric to | |
| | post-medieval. | |
| Survival | Some disturbance by quarrying and | 2 |
| | construction of Grand Union Canal. But also | |
| | surviving cropmarks and sites. | |
| Documentation | Mainly HER data, some excavation reports, | 2 |
| | historical records. | |
| Group value | Wide range of unassociated assets, defined by | 1 |
| association | river valley location but no group value as such. | |
| Potential | River gravels and known | 2 |
| | settlements/cropmarks have good potential for | |

| | investigation. | |
|-----------------------|--|---|
| Sensitivity to change | Low lying area and closeness to Milton Keynes may facilitate development. However, on river floodplain which is sensitive to change. | 2 |
| Amenity value | Grand Union canal walk and Milton Keynes boundary walk plus other footpaths. Good views of Greensand Country western scarp slope. | 2 |



The Grand Union Canal at Willowbridge Marina. The Greensand Country can be seen in the distance, above the narrowboat

4.2.2 HECZ I.2: Aspley and Brickhill Settled Wooded Heathlands

Description

This HECZ is located at the western end of the Greensand Country. It is a relatively large HECZ, extending from Aspley Guise in the north to the edge of Leighton Buzzard in the south. It includes the settlements of Aspley Guise, Aspley Heath, Bow Brickhill, Little Brickhill and Great Brickhill, linked by winding and often sunken lanes. It is a relatively densely-wooded area, with a number of medieval settlements, often elevated, and a concentration of historic buildings. The villages contain a mixture of building materials and styles, including timber frame, thatch, brick, clay tiles, and sandstone plinths. There are relatively few estate cottages. Unusual buildings include C19th sanitoria around Aspley Heath, which developed so people could take the 'beneficial air' (with the smallest annual variation in air temperature in Britain). The HECZ includes the Iron-Age hillfort at Danesborough. It also contains extensive ancient woodland, plantations, and some parkland. Some have been adapted for recreational use, including extensive Country Parks and a golf course.

Field Patterns

Regular and irregular pre 18th century enclosure, fossilised strips and occasional assarts. Parliamentary and 19th century enclosure north of Great Brickhill and at Bragenham. Some ancient woodland, and from C.18th onwards extensive Duke of Bedford plantations. Occasional recent field boundary loss.



Great Brickhill village centre

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 1

Archaeological Character Areas (ACAs): 18

Rural Built Environment Character Areas (RBECAs): 13,14,15,18

Historic Landscape Character Areas (HLCs): 505,506,507, AVLCAs 5.2, 5.3, 6.1, 6.2

Main Archaeological Notification Areas (ANAs): Danesborough Camp Iron-Age Hillfort; Medieval Settlements

| Criteria | Description | Score |
|-----------------------|---|-------|
| Diversity of historic | Mainly medieval and post-medieval. | 1 |
| environment assets | Danesborough Camp SM only known | |
| | prehistoric asset. | |
| Survival | Some disturbance by quarrying and tree | 2 |
| | plantation, golf course construction, expansion | |
| | of settlement, but good preservation of other | |
| | assets like medieval woodbanks and | |
| | Danesborough Camp. | |
| Documentation | HER data, historical documentation | 2 |
| Group value | Assets are of a similar date, forming a very | 2 |
| association | distinctive landscape, but not closely related to | |
| | be of high group value. | |
| Potential | No significant disturbance but limited by | 2 |
| | woodland cover which restricts possible range | |
| | of sites and investigation opportunities. | |
| Sensitivity to | Distinctive ridge edge location and woodland | 2 |
| change | means medium or large scale development | |
| | would have a considerable impact on the | |
| | historic environment. | |
| Amenity value | Large number of footpaths and country parks. | 3 |
| | Historic environment is part of sense of place | |
| | and can be promoted (woodland, woodbanks, | |
| | heath, settlement development) | |



Medieval wood bank at King's Wood



Sunken Lane near Bow Brickhill



C.19th sanitorium, Aspley Heath

4.2.3 HECZ 1.3: Heath and Reach Quarried Landscape

Description

This HECZ is located in the south-west of the Greensand Country. It includes the settlement of Heath and Reach, and the land to the east of the village. Extensive sand quarrying has had a major impact on this landscape, with resulting loss of historic landscape features. There are good views across the area from the A5 (which follows the line of the Roman road of Watling Street) and forms the eastern boundary of the HECZ.

Field Patterns

Parliamentary enclosure, much destroyed by quarrying and quarry restoration.



Looking towards Heath and Reach from the A5. The face of a quarry can be seen on the horizon. The line of pine trees screens an active quarry.

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 1

Archaeological Character Areas (ACAs): 14

Rural Built Environment Character Areas (RBECAs): 14

Historic Landscape Character Areas (HLCs): 93

Main Archaeological Notification Areas (ANAs): Post-medieval quarries; Medieval settlement; some ridge and furrow surviving.

| Criteria | Description | Score |
|-----------------------|---|-------|
| Diversity of historic | Mainly medieval settlement and agricultural | 1 |
| environment assets | heritage assets. | |
| Survival | Large scale quarrying has removed much of the | 1 |
| | historic landscape and its assets. | |
| Documentation | HER records and historical documentation | 2 |
| Group value | No distinctive groupings of related assets. | 1 |
| association | | |
| Potential | Some potential for investigation in undisturbed | 1 |
| | areas. | |
| Sensitivity to | Could accommodate medium to large-scale | 1 |
| change | development but area still lies adjacent to | |
| | extant heritage assets and landscape features. | |
| Amenity value | No public footpaths. Heath and Reach | 1 |
| | settlement and quarry history could contribute | |
| | to understanding of the historic environment. | |



Historic small-scale farm buildings close to edge of disused sand pit.



Winding lane running between sand pits.

4.2.4 HECZ 2.1: Potsgrove Farmlands

Description

This HECZ is located in the south-west part of the Greensand Country, between the heart of the Woburn Abbey estate and the A5. It includes the hamlet of Potsgrove, and Battlesden Park. It is a landscape of late C.16th- mid C.18th enclosure, reorganised in places by the Duke of Bedford, and with some more recent field boundary loss. There are long views across arable fields, towards parklands and woodlands/plantations beyond this HECZ. The hamlet of Potsgrove now lies on a dead-end road, following the re-design of Battlesden Park, which cut off the road south from the village. Potsgrove contains some Duke of Bedford estate cottages, as well as a church and manor farm. Evidence survives of medieval moated sites, including one which is a Scheduled Monument.

Field Patterns

Good survival of late C.16th-mid C.18th enclosure. Extensive parkland (Battlesden) and parkland-influenced landscape.



View north-west from near Hill Farm

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 2

Archaeological Character Areas (ACAs): 17

Rural Built Environment Character Areas (RBECAs): 12

Historic Landscape Character Areas (HLCs): 62

Main Archaeological Notification Areas (ANAs): HER 37 'The Hoult' moated site-Scheduled Monument.

| Criteria | Description | Score |
|-----------------------|--|-------|
| Diversity of historic | Low number of known assets, all of which are | 1 |
| environment assets | medieval in date. | |
| Survival | Little disturbance and well-preserved assets | 3 |
| | (Potsgrove moat, SM). | |
| Documentation | HER records | 1 |
| Group value | Assets of similar date and nature (medieval | 2 |
| association | moats) but no distinctive grouping | |
| Potential | Well surviving known assets and little | 3 |
| | disturbance probably preserves archaeological | |
| | assets. | |
| Sensitivity to | Undulating and largely unchanged landscape | 3 |
| change | with few settlements and surviving post- | |
| | medieval enclosure patterns. | |
| Amenity value | A large number of footpaths, but not well- | 2 |
| | documented or accompanied by information. | |
| | Historic environment could play larger role in | |
| | defining a sense of place in this area. | |



View towards Woburn from the south

4.2.5 HECZ 2.2: Husborne Crawley Farmlands

Description

This HECZ is located to the north-west of the Woburn Abbey estate, towards the western end of the Greensand Country. It includes the village of Husborne Crawley and the adjoining farmland to the south. It comprises a narrow strip of open farmland between the woodland and plantations of HECZ 1.2 to the west, and the well-treed parkland of the Woburn Abbey estate (HECZ 2.2) to the east. Church towers are often prominent features in views, with the tower of Husborne Crawley church notable for the green glauconitic minerals within the ironstone leading to a distinctive green colour. Enclosure patterns are fairly mixed, reflecting a long process of enclosure and reorganisation.

Field Patterns

Mixture of medieval or post-medieval private enclosure, Parliamentary enclosure and Duke of Bedford enclosure and re-organisation. Occasional small plantations create further estate influences on the landscape



View towards Woburn from near Aspley Guise, large open field created by Duke of Bedfordshire enclosure

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 2

Archaeological Character Areas (ACAs): 17

Rural Built Environment Character Areas (RBECAs): 12,18

Historic Landscape Character Areas (HLCs): 59,62

Main Archaeological Notification Areas (ANAs): HER 3926 Birchmoor medieval village (DMV). Roman kilns.

| Criteria | Description | Score |
|-----------------------|--|-------|
| Diversity of historic | Few known assets, all of which are medieval to | 1 |
| environment assets | post-medieval in date | |
| Survival | Mainly undevelopment agricultural landscape | 2 |
| | with small settlement cores. | |
| Documentation | HER records and historical records | 1 |
| Group value | Assets are spread out and do not form a group. | 1 |
| association | | |
| Potential | Limited known assets but little disturbance | 2 |
| | means good potential for investigation and | |
| | preservation. | |
| Sensitivity to | Rural location with little settlement and location | 3 |
| change | of Husborne Crawley in undulating hills or | |
| | northern scarp slope means area is highly | |
| | sensitive to change. | |
| Amenity value | Large number of footpaths but no guided | 2 |
| | footpaths. Mainly agricultural. Apart from | |
| | Husborne Crawley no extant heritage assets. | |



View towards Ridgemont



Husborne Crawley church (©Claire Poulter)



Detail of Greensand in Husborne Crawley church tower

4.2.6 HECZ 2.3: Woburn Park and Bedford Estate Heartland

Description

This HECZ is focussed on Woburn Park. It includes the heartland of the Duke of Bedford Estate, largely within the estate wall which surrounds Woburn Abbey deer park, and the village of Woburn. Woburn Abbey was granted to the Russell family (Dukes of Bedford) following the dissolution of the monasteries in 1588, and the present house dates from 1747. The grounds were extended and landscaped mainly by Humphrey Repton, but Woburn is also associated with the names of Capability Brown, Henry Flitcroft and Henry Holland, amongst others. Woburn Abbey includes lakes, avenues, trees, deer, vistas, formal gardens and a home farm. Today, recreational use of the park continues at the safari park and 'Go Ape' visitor attractions. The attractive red brick buildings of Woburn village date from rebuilding after a fire in 1724, and the large church was built by the 8th Duke of Bedford between 1865 and 1868.

Field Patterns

Extensive parkland landscape, with earlier enclosure patterns lost. Prior to expansion of the park in 1747, the northern part comprised the fields and outlying houses of Husborne Crawley.



Woburn Abbey parkland

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 2

Archaeological Character Areas (ACAs): 17

Rural Built Environment Character Areas (RBECAs): 12

Historic Landscape Character Areas (HLCs): 62

Main Archaeological Notification Areas (ANAs): Woburn Abbey (HER 40); Woburn village; Roman kilns

| Criteria | Description | Score |
|-----------------------|--|-------|
| Diversity of historic | Mainly medieval and post-medieval assets with | 1 |
| environment assets | a small number of Roman assets | |
| Survival | Good potential below-ground survival due to | 3 |
| | rural landscape and parkland, good | |
| | preservation of distinctive historic landscape | |
| | and buildings, some re-organisation of earlier | |
| | landscape patterns. | |
| Documentation | HER records, historical records, Bedford Estate | 2 |
| | records | |
| Group value | Woburn Park and Bedford Estate architecture | 3 |
| association | serves as a unifying feature. All very distinctive | |
| | and related elements in the landscape. | |
| Potential | High quality assets with good survival. | 3 |
| Sensitivity to | Highly distinctive parkland landscape very | 3 |
| change | sensitive to introduction of modern | |
| | development. | |
| Amenity value | Parkland, Woburn Abbey and Park, Woburn | 3 |
| | town, large number of footpaths, historic | |
| | environment very important for sense of place. | |



Woburn Village



Estate wall around Woburn Park



Home Farm within Woburn Park

4.2.7 HECZ 2.4: Eversholt Medieval Settlement and Mixed Enclosure

Description

This HECZ is located to the south-east of Woburn Abbey, to the west of the M1 corridor. It comprises a relatively small-scale and ancient settled landscape where Parliamentary and Duke of Bedfordshire reorganisation has been less influential than elsewhere in the western part of the Greensand Country. It has irregular field patterns and a surviving late 16th- mid 18th century enclosure pattern, although there has been some boundary loss. There is some parkland north of Tingrith, and a remnant parkland landscape around Linden Lodge at Eversholt. The landscape structure includes narrow, winding lanes, and a relatively strong pattern of mature hedgerows. It is relatively well-wooded, including ancient oak/ yew woodland. 'End' place names and settlement pattern suggests gradual woodland clearance and/ or common-edge settlement, or the survival of an Anglo-Saxon settlement pattern. There are some surviving timber-framed houses, and estate architecture is less dominant.

Field Patterns

Mixture of medieval enclosure (near Milton Bryan) and late 16th-early 18th century private enclosure, limited Duke of Bedford enclosure and parkland. Some ancient woodland. Some C. 20th reorganisation and field boundary loss.



View south-east from Tyrells End

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 2

Archaeological Character Areas (ACAs): 13

Rural Built Environment Character Areas (RBECAs): 12

Historic Landscape Character Areas (HLCs): 62, 63

Main Archaeological Notification Areas (ANAs): Medieval 'end' settlements; HER 41 moated site at Wakes End (SM)

| Criteria | Description | Score |
|-----------------------|--|-------|
| Diversity of historic | Known assets exclusively relate to medieval | 1 |
| environment assets | settlement and field organisation. | |
| Survival | Well preserved known assets of medieval/post- | 2 |
| | medieval date with little disturbance by modern | |
| | landscape re-organisation. | |
| Documentation | HER data, historic documentation | 1 |
| Group value | Good group value association as distinctive area of | 3 |
| association | medieval "end" settlements in a largely unchanged landscape. | |
| Potential | Little disturbance of the landscape means there is potential for medieval and Anglo-Saxon settlement | 3 |
| | origins and earlier archaeological remains to survive. | |
| Sensitivity to | The remote rural landscape with small winding roads | 3 |
| change | and dispersed settlement pattern of small hamlets is | |
| | highly sensitive to change. | |
| Amenity value | Area traversed by Greensand Country walk and | 2 |
| | various other footpaths. Very small size settlements | |
| | means there are no public houses or shops. | |



Brick and timber-framed buildings, Witt's End



Ancient oak, ash and yew woodland, Palmer's Shrubs

4.2.8 HECZ 2.5: Ridgmont and Steppingley Bedford Estate Farmlands

Description

This HECZ is located in the western central part of the ridge, on either side of the M1. It includes the villages of Ridgmont and Steppingley. It comprises the Duke of Bedford's estate farmlands, and there is a strong estate influence on architecture, farms, field patterns, woodland blocks and plantations (often planted as game cover). Ridgmont is an estate village, with houses, school and church all built by the Dukes of Bedford. Ridgmont Church steeple is a local landmark and prominent on the northern scarp of the Greensand Country. Most Bedford estate buildings are built of brick, often with the Bedford monogram. Despite their gables and lattice windows, they are fairly austere in appearance when compared with the estate buildings further east along the Greensand Country. The Bedford Estate model farms typically have an E-shape plan. Many of the fields were re-organised by the Bedford Estate into regular shapes which were more efficient to farm, and enabled the use of steam ploughs.

Field Patterns

Predominantly Duke of Bedford 19th century field reorganisation. Some Parliamentary enclosure west of Flitwick and at Lidlington, and small pockets of Late C.16th – Early C.18th private enclosure west of Steppingley. Some parkland influences on landscape.



View south from Top Farm, near Lidlington

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 2

Archaeological Character Areas (ACAs): 2,12,13,16

Rural Built Environment Character Areas (RBECAs): 11,12

Historic Landscape Character Areas (HLCs): 59,60,62

Main Archaeological Notification Areas (ANAs): HER 2811 SM moated site at Malting Spinney; Segenhoe old church HER 753; prehistoric flints along M1 (HER 15833, HER

16086); some possible Iron-Age or Roman cropmark complexes.

| Criteria | Description | Score |
|--|---|-------|
| Diversity of historic environment assets | Predominantly medieval and post-medieval assets but some prehistoric flint assemblages and Iron Age/Roman sites revealed during intrusive investigations. Undated cropmark complexes. | 2 |
| Survival | Main intrusive development is M1 motorway. To either side good survival of assets in a rural landscape with little modern development. DoB re-organisation of landscape. | 2 |
| Documentation | HER records, archaeological records. | 1 |
| Group value association | Few historic assets of a similar date or nature. | 1 |
| Potential | No significant disturbance and good potential for heritage assets. | 2 |
| Sensitivity to change | Some potential for infill of settlements near M1 but otherwise rural landscape is sensitive to development impact. | 2 |
| Amenity value | Greensand Country Walk and John Bunyan trail plus other footpaths traverse the area. Specific elements add to historic environment like Ridgmont and Segenhoe | 2 |



Ridgmont Village school and church



Duke of Bedford Estate Cottages, Ridgmont



Model Farm, Boughton End

4.2.9 HECZ 3.1: Millbrook Wooded Scarp and 20th Century Recreational Landscape

Description

This HECZ is located in the north-central part of the Greensand Country, to the north-west of Ampthill. It comprises the northern scarp slope and steep valleys set into it, as well as part of the wooded plateau top, and has good views northwards across Marston Vale. This HECZ contains the estate village of Millbrook, with its church set high on a hill and estate cottages below. It is a well-wooded area, with deciduous and coniferous tree cover. Millbrook Warren Plantation is the location of Center Parcs, and Millbrook Golf Course is within the wooded scarp to the north. Together these form a popular recreational landscape, set within an older estate framework.

Field Patterns

Dominated by influence of former parks and heathland (the latter now heavily planted). Some Duke of Bedford enclosure around Millbrook.



View west from Millbrook

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 3

Archaeological Character Areas (ACAs): 12,16

Rural Built Environment Character Areas (RBECAs): 10,11

Historic Landscape Character Areas (HLCs): 55

Main Archaeological Notification Areas (ANAs): Millbrook and Lidlington churches and settlement.

| Criteria | Description | Score |
|-----------------------|--|-------|
| Diversity of historic | Few heritage assets all of which are medieval- | 1 |
| environment assets | post medieval in date. | |
| Survival | Disturbance by railway line, holiday village and | 2 |
| | modern farming/plantations and Millbrook | |
| | Proving ground. Good preservation in and | |
| | around Millbrook village and on scarp slope. | |
| Documentation | HER records. | 1 |
| Group value | No assets in any obvious association. | |
| association | | |
| Potential | Some potential in and around Millbrook village | 1-2 |
| | and on undisturbed scarp slope, but probably | |
| | not an area rich in assets due to topography. | |
| Sensitivity to | Areas near railway and Ampthill less sensitive | 2-3 |
| change | to change than scarp slope. | |
| Amenity value | Greensand Country walk and holiday village. | 1-2 |
| | Assets on scarp slope have potential to shape | |
| | define sense of place for the zone. | |



Millbrook Village



Millbrook plantation (Center Parcs) - a former heathland, used a rabbit warren, later planted with conifers, and now used as a recreational landscape and rabbit warren

4.2.10 HECZ 3.2: Ampthill Park and Houghton House

Description

This HECZ is located in the north-central park of the Greensand Country, to the north of Ampthill. It contains high status landscapes associated with Ampthill Park and Houghton House. These are set on the north scarp slope of the Greensand Country, and have long views northwards over Marston Vale. Ampthill Castle was one of Henry VIII's favourite hunting parks, and Katherine of Aragon was imprisoned here in 1532. The castle does not exist anymore, only its location survives. The park was later redesigned by 'Capability' Brown, utilising the surviving great oaks from the hunting forest. Houghton House was built for the Countess of Pembroke in a prominent position on the northern edge of the Greensand scarp, with panoramic views across Marston Vale. The imposing brick house is now a ruin, managed by English Heritage.

Field Patterns

Dominated by influence of former parks and heathland (the latter now heavily planted).



The view north from Ampthill Park across Marston Vale

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 3

Archaeological Character Areas (ACAs): 4

Rural Built Environment Character Areas (RBECAs): 6,8,17

Historic Landscape Character Areas (HLCs): 55

Main Archaeological Notification Areas (ANAs): Ampthill Castle HER 810 and park,

| Criteria | Description | Score |
|-----------------------|---|-------|
| Diversity of historic | A limited range of assets all of medieval/post- | 1 |
| environment assets | medieval date. High quality assets. | |
| Survival | Good survival of some assets like Houghton | 2 |
| | House and Ampthill Park, some impact on | |
| | setting by modern development (Ampthill and | |
| | Lockheed Martin at foot of ridge). | |
| Documentation | HER records, historical records, well- | 2 |
| | documented high quality assets | |
| Group value | Assets in Ampthill Park have group value and | 2-3 |
| association | all assets are associated by their location on | |
| | steep northern scarp slope | |
| Potential | Little disturbance leaves good potential for | 2 |
| | below-ground assets to survive. | |
| Sensitivity to | High quality assets in a specifically designed | 3 |
| change | landscape are highly sensitive to change. | |
| Amenity value | Area is very much defined by its heritage | 3 |
| | assets, most of which are accessible and | |
| | documented for visitors. Greensand Country | |
| | Walk, John Bunyan trail and other footpaths. | |



Houghton House with views across the Marston Vale (image Albion Archaeology)



Katherine's Cross, Ampthill Park

4.2.11 HECZ 3.3: Maulden Farmlands

Description

This HECZ is located in the north-central part of the Greensand Country, east of Ampthill. It includes the historic village of Maulden, which has seen some modern growth and development. The rest of the HECZ is very rural with dispersed small hamlets and farms, often with medieval origin, and medieval moated sites. The central plateau also has a higher occurrence of prehistoric/Roman cropmark sites. Although there is a large block of woodland at Maulden Wood (including some ancient woodland), there are relatively few parkland influences or examples of estate architecture.

Field Patterns

Early private enclosure and parliamentary enclosure, much affected by post 1950s boundary loss. Montague Wood and parts of Maulden Wood are ancient woodland; the latter has been partially replanted.



View south from Limbersey Lane

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 3

Archaeological Character Areas (ACAs): 3,4,5

Rural Built Environment Character Areas (RBECAs): 6,9

Historic Landscape Character Areas (HLCs): 33,52,53,54,56

Main Archaeological Notification Areas (ANAs): HER 221 SM Bolebec farm moated enclosure; Iron Age/Roman pot and cropmark sites; medieval settlements and moated sites

| Criteria | Description | Score |
|-----------------------|---|-------|
| Diversity of historic | Diversity of heritage assets with several Iron | 2 |
| environment assets | Age/Roman cropmark sites, prehistoric flint | |
| | scatters and predominantly medieval/post- | |
| | medieval settlement. | |
| Survival | Rural landscape with little development impact | 2-3 |
| | (with the exception of Maulden). Some | |
| | medieval enclosure patterns survives. | |
| Documentation | HER records. | 1 |
| Group value | Good diversity of assets, some of which are | 1 |
| association | similar in nature, but none are part of a direct | |
| | group. | |
| Potential | Relatively little disturbance in most of the HECZ | 2 |
| | leaves good potential for below-ground | |
| | archaeology. | |
| Sensitivity to | Rural landscape with small scale, dispersed | 2 |
| change | settlement is sensitive to change. Some | |
| | modern fringe and roadside development | |
| | around Maulden may be able to accommodate | |
| | further small scale development. | |
| Amenity value | Greensand Country walk and footpaths. Few | 2 |
| | distinctive heritage assets but remote | |
| | landscape, northern scarp slope and woodland | |
| | and heathland could contribute to historic sense | |
| | of place. | |

4.2.12 HECZ 4.1: Flit River Valley and Ruxox Roman Settlement

Description

This HECZ is located in the south-central part of the Greensand Country, and is focussed on the flood plain of the Flit valley between Flitwick and the edge of Shefford. It includes the village of Clophill, and the lower parts of Greenfield and Flitton. The Flit valley has a long history of settlement, as shown in the archaeological record, which includes prehistoric finds, the Roman settlement and temple site at Ruxox, and a medieval moated site. Some medieval and post-medieval buildings are still visible, including Flitwick mill, and cottages on lanes leading down to the river, which may have originated as common-edge settlements when the valley floor 'moors' (e.g. Flitwick Moor and Flitton Moor) were common land.

Field Patterns

Former parliamentary enclosure, much affected by post 1950s boundary loss. Around Ruxox is an area of fields reorganised by the Duke of Bedford. Meadow and fen associated with Flit valley floor.



Site of Ruxox Roman settlement, north-west of Flitton

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 4

Archaeological Character Areas (ACAs): 2

Rural Built Environment Character Areas (RBECAs): 9

Historic Landscape Character Areas (HLCs): 56,60

Main Archaeological Notification Areas (ANAs): HER 918 Ruxox Roman settlement and HER 919 medieval moated site (SM); Prehistoric flints, HER 19668 Clophill medieval settlement.

| Criteria | Description | Score |
|--|---|-------|
| Diversity of historic environment assets | Fairly diverse heritage assets, prehistoric flint, Iron Age/Roman cropmarks, Ruxox high status rural settlement, medieval /post-medieval settlement and landscape. | 3 |
| Survival | Good survival in rural areas, but impact by A505, roadside development and settlement growth. | 2 |
| Documentation | HER records, historical records, archaeological records. | 2 |
| Group value association | Several heritage assets of similar date and form but no distinctive group. | 1 |
| Potential | Ruxox Roman site has high potential, but other areas, in particular road corridor less so. | 2 |
| Sensitivity to change | Areas where small scale development might be possible but would still have impact on heritage assets. | 1-2 |
| Amenity value | John Bunyan trail, footpaths, Flitwick Moor, medieval villages. A505 causes considerable loss of historic sense of place but this could be achieved in villages and more rural areas. | 1-2 |



Meadow on former common land at Flitwick Moor



The Flit Valley as seen from Flitton

4.2.13 HECZ 4.2: Flit Valley Southern Slopes

Description

This HECZ is located in the south-central part of the Greensand Ridge, including the village of Flitton. It comprises gently rising land to the south of the Flit valley, which contains a concentration of medieval features. These include Cainhoe Castle Scheduled Monument and its associated earthworks and deserted medieval village. Cainhoe Castle is an impressive Motte and Bailey with extensive surviving earthworks. It was constructed shortly after the Norman Conquest in 1066, and was the seat of the powerful D'Albini family for approximately 300 years. The associated village was abandoned after the Black Death in 1349, with an *inquisition post mortem* stating that 'the pestilence had wiped out the bondmen and cottars'. Flitton church has a Mausoleum built for the De Grey family from Wrest Park (also a Scheduled Monument).

Field Patterns

Some early private enclosure and parliamentary enclosure.



View west from Cainhoe Castle motte, with castle bailey earthworks in the foreground

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 4

Archaeological Character Areas (ACAs): 2

Rural Built Environment Character Areas (RBECAs): 9

Historic Landscape Character Areas (HLCs): 60

Main Archaeological Notification Areas (ANAs): HER 225 SM Cainhoe Castle, HER 16999 Flitton medieval settlement with De Grey Mausoleum (SM)

| Criteria | Description | Score |
|--|---|-------|
| Diversity of historic environment assets | Predominantly medieval/post-medieval settlement and landscape assets. | 1 |
| Survival | Little disturbance but few known assets. | 2 |
| Documentation | HER data, historical records. | 2 |
| Group value association | Assets of comparable date but no specific grouping. | 1 |
| Potential | Good potential due to little disturbance. Cainhoe Castle high quality asset. | 2 |
| Sensitivity to change | Distinctive landscape compressed into a small geographical space makes it highly sensitive to change. | 2-3 |
| Amenity value | Several good quality assets (Cainhoe Castle, Flitton, Westoning Manor) could help to define a sense of place in several areas of this zone. | 2 |



Cainhoe Castle motte



Flitton village, church and mausoleum

4.2.14 HECZ 5.1: Haynes to Northill Parkland and Farmland

Description

This extensive HECZ is located in the eastern half of the Greensand Country, and includes the villages of Haynes, Northill and Ickwell Green. It comprises parklands, including Haynes Park and Ickwell Park, interspersed with woodland and farmland. The overall impression is of a well-wooded landscape. The HECZ has distinctive cottages, often thatched and/ or rendered with "eyebrow" dormers, and village layouts around large greens. There are many surviving medieval features, including Northill fishponds, Ickwell village green with maypole, and houses, churches, lanes etc. At Old Warden Abbey, the remains can be seen of the post-dissolution Tudor house built on the site, which incorporated the Abbot's lodging. 'Warren' place names are associated with medieval rabbit farming.

Field Patterns

Mixture of early private enclosure, C19 estate reorganisation, parkland and parkland-influenced landscape. Much post 1950s boundary loss. The top of the scarp retains the remains of medieval assart closes created directly from woodland and still interspersed with the remains of those ancient woodlands.



Haynes Park and Church

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 5

Archaeological Character Areas (ACAs): 3,5,6

Rural Built Environment Character Areas (RBECAs): 5,6

Historic Landscape Character Areas (HLCs): 33,48,51,53,54

Main Archaeological Notification Areas (ANAs): Her 460 SM Old Warden Abbey; Iron Age/Roman cropmark sites, HER 1637 and 15840 excavated IA/R site; Medieval settlements; HER 972 SM Quince Hill ringwork, Old Warden; HER 429 SM medieval fishponds near Northill

| Criteria | Description | Score |
|-----------------------|---|-------|
| Diversity of historic | A mixture of Iron Age/Roman settlement and | 2 |
| environment assets | cropmark sites and medieval/post-medieval | |
| | settlement and landscape assets and parkland. | |
| Survival | Well preserved known assets with some | 3 |
| | archaeological assets suggesting good below- | |
| | ground survival. | |
| Documentation | HER data, historical records | 2 |
| Group value | Heritage assets of similar date and nature but | 2 |
| association | no obvious grouping. Exception could be | |
| | distinctive "green" settlements of lckwell, | |
| | Northill and Thorncote. | |
| Potential | Mainly undisturbed rural landscape, some high | 3 |
| | quality assets (Old Warden Abbey). | |
| Sensitivity to | Rural and remote landscape highly sensitive to | 3 |
| change | change. | |
| Amenity value | Greensand Country Walk and large number of | 2 |
| | other footpaths. Largely agricultural landscape | |
| | but some high status assets give sense of | |
| | place (Haynes Park, medieval settlements, Old | |
| | Warden Abbey). | |



Old Warden Abbey, extant remains of post-Dissolution house



Typical view within the HECZ, to the west of Ickwell



Medieval fishpond near Northill

4.2.15 HECZ 5.2: Chicksands Priory and Military Establishment

Description

This HECZ is located in the south-east of the Greensand Country, and includes Chicksands estate and military camp. It comprises a former monastic and estate landscape which now also has a strong military influence. There are also extensive areas of farmland and conifer plantations. The central part of the HECZ is currently difficult to access due to its military use, but the OS map still shows features of the estate landscape, including 'Temple Grove'; 'Druid's Grove'; 'Penseroso Grove' and two obelisks. Military installations included the site of the so-called 'Elephant's Cage' circular antennae, one of only five of its type across the world, but this is now dismantled. The Sandy Smith Nature Reserve lies on the floodplain and northern slopes of the Flit Valley between Clophill and Chicksands.

Field Patterns

Parkland and associated woodland, with intervening areas much altered by 20th century military use and boundary loss.



View south towards Chicksands Camp. The 'Elephant's Cage' was in the trees towards the right of the photograph.

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 5

Archaeological Character Areas (ACAs): 2,6

Rural Built Environment Character Areas (RBECAs): 7

Historic Landscape Character Areas (HLCs): 52

Main Archaeological Notification Areas (ANAs): HER 375 Chicksands Priory; some

Roman occupation and cropmarks; HER 16787 Roman burials and occupation.

| Criteria | Description | Score |
|--|---|-------|
| Diversity of historic environment assets | Predominantly medieval assets. | 1 |
| Survival | Extant and archaeological remains of Chicksands Priory but considerable modern development around military establishment and modern plantation. | 2 |
| Documentation | HER data, historical records, archaeological records. Time team. | 2 |
| Group value association | Chicksands Priory assets part of a group. | 2 |
| Potential | Chicksands Priory still has good archaeological potential. | 2 |
| Sensitivity to change | Although modern development is present, further medium-large scale development would have an impact on existing heritage assets. Hilly landscape to north and west of Chicksands is relatively undisturbed. | 2 |
| Amenity value | Chicksands Priory site not accessible but good views over Flit valley from north of zone. Greensand Country Walk and John Bunyan Trial run along edges of zone. Sandy Smith Nature Reserve. | 1-2 |



Chicksands military site from the A600

4.2.16 HECZ 5.3: Old Warden and Southill Parklands

Description

This HECZ is located towards the east of the Greensand Country, and includes Southill and Old Warden parks, and Old Warden village. It comprises almost continuous historic parkland associated with the Old Warden and Southill Estates. The parks were designed around country houses, and include grassland, woodland, lakes, avenues, ornamental trees, etc. Old Warden park is home of the Shuttleworth Collection and the Swiss Garden, and also Shuttleworth Agricultural College. Old Warden estate has very distinctive architecture, including elaborate rendered cottages in a rustic 'cottage ornée' style.

Field Patterns

C19 Estate enclosure, small pockets of old enclosure around hamlets. Some post 1950s boundary loss with relict features. Extensive parkland and parkland-influenced landscape.



Old Warden Park

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 5

Archaeological Character Areas (ACAs): 6,7

Rural Built Environment Character Areas (RBECAs): 5,16

Historic Landscape Character Areas (HLCs): 50,51

Main Archaeological Notification Areas (ANAs): HER 16774 Iron Age/Roman cropmark

| Criteria | Description | Score |
|-----------------------|---|-------|
| Diversity of historic | Only medieval/post-medieval heritage assets | 1 |
| environment assets | known. | |
| Survival | Excellent survival of parkland and its features. | 3 |
| Documentation | HER data, historical records. | 2 |
| Group value | Distinctive park landscape and architectural | 3 |
| association | assets have good group value. | |
| Potential | Little development means good potential for | 3 |
| | survival of below-ground assets. | |
| Sensitivity to | Highly designed and specialised parkland | 3 |
| change | landscape very sensitive to change. | |
| Amenity value | Old Warden Park, Swiss Garden and | 3 |
| | Shuttleworth aerodrome have good amenity | |
| | value. Also Southill Park and village but park is | |
| | less accessible. Old Warden Abbey is open to | |
| | the public at weekends in the summer by prior | |
| | arrangement. | |



Old Warden parkland



Old Warden Park



Estate cottage in Old Warden village

4.2.17 HECZ 6.1: Ivel River Valley and Sandy Roman Settlement

Description

This HECZ is located in the Ivel River Valley, to the south of Sandy. It includes the hamlets of Beeston and Stratford. It comprises the valley floor and shallow side slopes, which contain a concentration of Roman sites, including Sandy Roman settlement. Sandy Roman settlement is located on the valley floor, on the eastern side of the river Ivel below the wooded scarp. Most of the Roman site is under agricultural land and a cemetery. Roman archaeology has also been found on the gentle slopes on the western side of the river Ivel, including a stretch of Roman road. The valley floor is a mixture of meadows, lakes (in former gravel workings) and trees. The area around Sandy has strong associations with market gardening, including the growing of roses, with the earliest record dating from 1610. The industry thrived and spread into neighbouring parishes due to the fertile soils and good communications to London, initially by road and later by rail.

Field Patterns

Parliamentary enclosure with much post 1950s boundary loss. Ivel valley contains mixed riverside meadow and former gravel workings.



Chester Field, Sandy- site of Sandy Roman settlement

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 6

Archaeological Character Areas (ACAs): 1

Rural Built Environment Character Areas (RBECAs): 4

Historic Landscape Character Areas (HLCs): 48,73

Main Archaeological Notification Areas (ANAs): HER 444 Sandy Roman settlement, HER

| Criteria | Description | Score |
|-----------------------|--|-------|
| Diversity of historic | Higher diversity of heritage assets due to river | 2 |
| environment assets | valley location. Prehistoric and Roman | |
| | settlement and cropmark sites, Sandy Roman | |
| | village, medieval/post-medieval settlement and | |
| | landscape. | |
| Survival | Some disturbance by A1 motorway but in rural | 2 |
| | parts good survival. Most field patterns are | |
| | modern. | |
| Documentation | HER data, historical records. | 2 |
| Group value | Assets of similar date and nature but no | 1 |
| association | obvious groupings. No well preserved historic | |
| | landscape or setting. | |
| Potential | Good potential for below-ground assets | 2 |
| Sensitivity to | River floodplain and rural part of zone either | 2 |
| change | side of the A1 sensitive to change. Some | |
| | potential for development alongside A1. | |
| Amenity value | Greensand Country Trail and footpaths, some | 2 |
| | potential to include interpretation of Sandy | |
| | Roman town into historic sense of place. | |



The western side of the Ivel Valley as seen from Vinegar Hill

4.2.18 HECZ 7.1: Sandy Warren and The Lodge

Description

This HECZ is located in the eastern part of the Greensand Country, immediately to the east of Sandy and the Ivel valley. It includes a steep sandstone scarp containing prehistoric hillforts (Galley Hill, Caesar's Camp and the promontory close to Sandy Lodge) in important strategic locations overlooking the Ivel valley. The HECZ also includes the Sandy Warren estate, a former heath which was extensively planted with conifers in the early C.20th. Sandy Lodge is now the headquarters of the RSPB, and much of the area is managed as a nature reserve. This includes restoration of heathland and wetland habitats. Some broken-down sandstone estate walls can still be seen. Swiss Cottage (now the gatehouse to The Lodge, and the RSPB shop) was the home of Captain Sir William Peel RN, KCB, VC, one of the first recipients of the Victoria Cross for his actions at the Siege of Sebastopol in 1854.

Field Patterns

Woodland, former parkland, plantations and heathland, former warren.



Old estate wall, heathland and pine trees at The Lodge Nature Reserve

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 7

Archaeological Character Areas (ACAs): 8,10,11

Rural Built Environment Character Areas (RBECAs): 3

Historic Landscape Character Areas (HLCs): 40

Main Archaeological Notification Areas (ANAs): Hillforts: HER 442 Caesar's Camp, HER

445 Galley Hill (SM), HER 1164 Sandy Lodge (SM). HER 13670 ring ditch, cropmark complexes.

| Criteria | Description | Score |
|-------------------------|--|-------|
| Diversity of historic | Diverse heritage assets in form of Iron Age | 2 |
| environment assets | hillforts, Roman settlement, medieval/post-medieval warren and parkland. | |
| Survival | Good preservation of several high quality assets. | 3 |
| Documentation | HER data, historical records, archaeological records. | 2 |
| Group value association | Three Iron Age hillforts on scarp slope have group value. | 2 |
| Potential | Diverse heritage assets and their good survival provide good potential for research and investigation. | 3 |
| Sensitivity to change | Specialised and designed parkland area highly sensitive to change. | 3 |
| Amenity value | Greensand Country Walk and footpaths, RSPB nature reserve. | 3 |



View across the Ivel Valley from hillfort near Sandy Lodge



Hillfort ramparts



Swiss Cottage, Sandy Lodge

4.2.19 HECZ 7.2: Everton and Gamlingay Parkland and Farmland

Description

This HECZ is located at the eastern end of the Greensand Country, and includes Everton village. It comprises mixed farmland, woodland blocks and small-scale parkland along the northern scarp and plateau of the Greensand Country. There are several small parks within the HECZ, including Hazells Park, Everton Park, Woodbury Park, Old Woodbury and Tetworth Hall. Everton village contains some relatively late estate cottages (1918) opposite the church.

Field Patterns

Former early private and parliamentary enclosure, much post 1950s boundary loss. Parkland. Heath and former parkland, 20th century allotments.



Parkland, farmland and woodland blocks on the northern scarp of the Greensand Country, as seen when approaching from the north.

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 7

Archaeological Character Areas (ACAs): 9,10

Rural Built Environment Character Areas (RBECAs): 2,3

Historic Landscape Character Areas (HLCs): 35,38,501,502

Main Archaeological Notification Areas (ANAs): HER 805 Storey Moats (SM), HER 14785 Woodbury DMV earthworks, several cropmark complexes, HER 02312 Tetworth Hall.

| Criteria | Description | Score |
|-----------------------|---|-------|
| Diversity of historic | Good range of heritage assets ranging from | 2 |
| environment assets | prehistoric flint scatters and Iron Age/Roman | |

| | cropmark complexes to medieval/post-medieval settlement, landscape and parkland assets. | |
|-------------------------|---|-----|
| Survival | Some modern landscape re-organisation, development along roads and settlement growth, but generally good survival of assets. | 2 |
| Documentation | HER data, historical records. | 2 |
| Group value association | Assets of similar nature and date but no obvious group associations. | 1 |
| Potential | Good potential for assets to survive in rural, agricultural landscape. | 2 |
| Sensitivity to change | Area has seen some modern development but rural character and northern scarp slope are sensitive to change. | 2 |
| Amenity value | Greensand Country Trail, footpaths, historical settlement cores give some historic sense of place but zone is a largely agricultural working landscape. | 1-2 |







Estate Cottages at Everton



Everton Church

4.2.20 HECZ 7.3: Potton Settlement

Description

This HECZ is located at the eastern end of the Greensand Country, and includes the town of Potton. It comprises the historic core of Potton (rebuilt in the C.18th following a fire) and the surrounding more modern development. In the 1930s, the Land Settlement Association provided houses and plots of land for smallholding at Manor Farm, just outside the study area on the eastern side of the town. Unemployed miners from Co. Durham were invited to come and work the land. After training, men were to bring their families to 'settle in colonies of homesteads, with newly-created village greens'.

Field Patterns

Potton small town. Notable pattern of C.20th smallholdings to the east, outside the study area.



Potton Market Place

Archaeological/ Historic Environment Components (See Appendices for fuller descriptions)

Historic Environment Character Area (HECA): 7

Archaeological Character Areas (ACAs): 10

Rural Built Environment Character Areas (RBECAs): 1

Historic Landscape Character Areas (HLCs): 503

Main Archaeological Notification Areas (ANAs): Historic core of Potton town. Potton Manor, deserted medieval settlement.

| Criteria | Description | Score |
|--|--|-------|
| Diversity of historic environment assets | Predominantly post-medieval Georgian | 1 |
| Survival | Old Potton destroyed by fire but current small town has good survival of assets, mainly in the form of buildings and listed buildings. | 2 |
| Documentation | HER data, historical records. | 2 |
| Group value association | Good, unifying Georgian architecture of town. | 3 |
| Potential | Some potential for settlement origins but zone largely built up by post-medieval and modern housing development. | 1 |
| Sensitivity to change | Some potential for small-scale development along settlement edge | 1-2 |
| Amenity value | Potton town centre and its buildings could play a role in defining a sense of place for the zone. | 2 |



Georgian buildings in Potton town centre

5. OPPORTUNITIES

5.1 Introduction

One of the objectives of the Greensand Country Historic Environment Characterisation Study is the identification of opportunities for using the historic environment in the development of the Greensand Country Landscape Conservation Action Plan and subsequent delivery of the Landscape Partnership Programme.

Some opportunities have been given in the description of each Historic Environment Character Area given in Section 3. These are previously identified opportunities taken from the relevant Green Infrastructure Plans and are at a fairly broad level. However, they do highlight key themes, sites and characteristics of the historic environment in each HECA. They also provide a link between the Greensand Country Landscape Partnership and current frameworks including historic environment opportunities.

It is envisaged that the Greensand Country Historic Environment Characterisation study is used as a basis to inform third parties, such as landowners and local communities, to develop and take forward their own heritage projects, using the Third Party Grant Scheme (see below). The programme threads of the Greensand Country Landscape Partnership are uniquely designed to accommodate projects proposed by third parties.

5.2 Programme threads identified by the Greensand Country LP

The Landscape Partnership has seven programme threads, most of which include a significant heritage component. The threads are set out below.

- Living Heaths
- Working Woodlands
- Historic Parks
- Community Heritage
- Revealing the Greensand Country
- Celebrating the Greensand Country
- Heritage Skills

The Historic Environment Characterisation study will be of particular assistance when looking at the 'Community Heritage' thread of the Landscape Partnership. Its aims are set out below.

- To enhance our understanding of the heritage of the Greensand Country and to gain insights into little known or understood elements of the historic environment.
- To enable understanding, interpretation and management of historic environment features within communities.
- To give local communities the inspiration, skills and capacity to plan, project manage, fund and deliver heritage projects.
- To enable communities to broaden access to the historic environment through engagement in research, surveys, community events, presentations and open days.

5.3 Third Party Grant Scheme for Community Heritage projects

It is envisaged that the Third Party Grant Scheme, which is part of the Community Heritage thread funding opportunities, will focus primarily on Historic Environment projects. The general principles for projects funded by the Third Party Grant Scheme have been identified by Martin Oake, the Central Bedfordshire Council Archaeologist, and are summarised below.

- Projects must provide insights into little known or understood elements of the Greensand Country's historic environment.
- Projects could include the management and interpretation of sites and features, which are publicly accessible.
- Projects must provide a legacy of improved understanding, interpretation, access or management (preferably at least three of these) which goes beyond the resources and time span of the grant scheme.
- Projects must provide strong community engagement during their life.

Generic examples of projects could be:

- Improving access and interpretation of the historic environment. This could include providing interpretation of specific sites which are not well known especially where there is public access, developing specific historic environment based trails or walks or creating interpretation material for little known or understood classes of sites or features that are typical of the project area or parts of it. Opportunities for this in the Greensand Country could be Potsgrove moated site, Segenhoe deserted medieval village and Cainhoe Castle.
- Geophysical survey of a known but little understood archaeological site.
 Warden Abbey provides an opportunity for this, which has already begun to be addressed.
- Surface artefact collection either in conjunction with a geophysical survey or as a discrete project. Such a survey could concentrate on a known but little understood archaeological site or look at an area, e.g. around a village or particular location (such as a valley bottom) to identify sites and features.
- Earthwork survey of a known but little understood site or sites.
- Inventory survey of a class of sites or feature e.g. field boundaries, buildings or structures (e.g. onion sheds) and archaeological sites or features. An opportunity here could be the survey of and research into archaeological features within Gamlingay Park.
- Management of archaeological or historic landscape sites or features with the
 objective of bringing sites in poor or declining condition back into good and
 stable condition. This could include clearance of vegetation from earthworks
 and stabilisation of features subject to erosion.
- Small-scale biodiversity improvements (e.g. churchyards)

6. APPENDIX I - METHODOLOGY

6.1 Historic Landscape Character Areas

6.1.1 Methodology

This section is predominantly derived from Angela Simco's study of the character of Bedfordshire's historic landscape (Simco 2005). The study covered the modern county of Bedfordshire and the unitary authority of Luton, which were mapped as polygons on a GIS database. By reference to a series of Ordnance Survey maps dating from c1880 onwards, the modern-day historical character of each GIS polygon was identified. Up to three previous phases of landscape development were also noted, giving a time-slice of the origins of, or influences upon, modern-day character. On the basis of the detailed results of this characterisation process, a total of 108 broader historic landscape character areas (HLCA) were defined .

The study demonstrated that the Bedfordshire landscape is finely fragmented in terms of its historic character. The historical development of the areas defined by the polygons varied significantly within very small distances; there were very few areas with large contiguous blocks of polygons of similar character, particularly when time-depth was taken into account. Definition of the HLCAs, therefore, necessarily involved a high degree of subjective analysis, supported by a detailed knowledge of the history of the county's landscape, and by reference to information sources which were not used in the initial characterisation process. The latter included historic map transcripts which had been produced as part of the Bedfordshire Parish Survey Programme of the 1970s and 1980s, geological context and topographical context. No visual field assessment was undertaken.

Because of the fragmented nature of the Bedfordshire landscape, almost all HLCAs are a complex mixture, with the dominant landscape character interrupted by pockets of several other landscape types. The study recognised that the boundaries could be the subject of considerable further debate and cautioned that, as a rule, their boundaries should be treated as zones of transition rather than sharp dividing lines.

The numbering of Angela Simco's HLCAs has been retained for this report. In areas that were not covered by the study, new HLCAs have been defined and new numbers given. These have been started at 500, so they do not conflict with the existing numbering. The locations and boundaries of all HLCAs are shown on Figure 5.

For Buckinghamshire and Milton Keynes the areas identified in the Aylesbury Vale and Milton Keynes Landscape Character Assessments (AVDC 2008 and MKC 2006/7) have been re-used and re-purposed as Historic Landscape Character Areas for this report. Each Landscape Character Area description contained a considerable historic environment element which made their re-use straightforward. The areas have been given new numbers in the 500 range but are cross-referenced with their relevant Buckinghamshire and Milton Keynes Landscape Character Area.

6.1.2 Gazetteer of Historic Landscape Character Areas (HLCA)

HLCA 33 Greensand scarp and lower slopes

Character Type: early private enclosure Settlement pattern: n/a

- Oxford Clay slope, below Greensand scarp.
- Dominated by early private enclosure, retaining layout of furlongs of former open fields.
- Some woodland rising on to Greensand Country.

HLCA 35 Sandy and Everton modern fields

Character Type: modern Settlement pattern: n/a

- Oxford Clay, in east side of Ouse Valley, north of Sandy
- Extensive post-1950s boundary loss, in an area of former early private or parliamentary enclosure fields.

HLCA 38 Everton and Woodbury parkland

Character Type: parkland Settlement pattern: dispersed

- Greensand escarpment, with Oxford Clay exposed in valley edge to NW.
- Dominated by Hazells and Woodbury Parks and associated landscape on crest of Greensand.
- Some early private enclosure fields on lower ground to west.

HLCA 39 Everton Warren

Character Type: modern Settlement pattern: n/a

- Greensand plateau.
- Former warren, enclosed in late 18th/early 19th century.
- Much 20th century reorganisation and boundary loss.

HLCA 40 Sandy Warren

Character Type: parkland Settlement pattern: n/a

- Greensand plateau, and steep slopes dropping to Ivel valley.
- Parkland, plantations and heathland, on former warren.

HLCA 48 Northill enclosure fields

Character Type: modern Settlement pattern: dispersed

- Extensive glacial and valley gravels in Ivel valley; Oxford Clay exposure to north.
- 18th century parliamentary enclosure fields, with much post-1950s boundary loss.
- Pockets of old enclosure.

HLCA 49 Hill (Old Warden)

Character Type: early private enclosure Settlement pattern: dispersed

- Glacial gravels on low land on west side of Ivel valley.
- Good survival of early private enclosure.

HLCA 50 Southill estate fields

Character Type: parliamentary enclosure Settlement pattern: dispersed

- Mostly glacial gravels at confluence of Ivel and Flit; some Boulder Clay in west.
- Mainly late 18th century parliamentary enclosure fields, distinctive for their triangular game coverts.
- Some post-1950s boundary loss, with relict features.
- Small pockets of old enclosure round hamlets.

HLCA 51 Greensand Country parks

Character Type: parkland Settlement pattern: mixed

- Boulder Clay-capped part of Greensand Country, between Moggerhanger, Haynes and Southill; some Greensand and Oxford Clay exposures.
- Extensive parkland and parkland-influenced landscape, with ancient woodland and old enclosures.

HLCA 52 Chicksands Park

Character Type: mixed Settlement pattern: monastic

- Area defined by two streams converging to east. Greensand near the confluence, Boulder Clay on spur to west.
- Parkland and associated ancient woodland, with intervening areas much altered by 20th century military use and boundary loss.

HLCA 53 Haynes Plateau

Character Type: modern Settlement pattern: dispersed

- Boulder Clay ridge.
- Formerly early private enclosure and warren.
- Much post-1950s boundary loss, with some relict features.

HLCA 54 Maulden and Clophill

Character Type: old enclosure Settlement pattern: dispersed

- Greensand exposure on north side of Flit valley, rising to Boulder Clay to north.
- Small irregular fields associated with linear settlement spread along Greensand dip slope.
- Maulden Wood and associated plantations are prominent in centre of area.

HLCA 55 Ampthill/Millbrook parks and heath

Character Type: parkland Settlement pattern: n/a

- Area defined by Greensand escarpment to north and Flit tributary to south; mostly Greensand, with Boulder Clay capping on ridge-top to NE.
- Dominated by influence of former parks and heathland (the latter now heavily planted).

HLCA 56 Maulden and Flitwick Moor

Character Type: modern Settlement pattern: n/a

Oxford Clay and alluvium in floor of Flit valley.

- Former 18th/19th century parliamentary enclosure fields, subject to much post-1950s boundary loss.
- Pockets of older landscape, e.g. Ruxox, Water End.

HLCA 59 Bedford Estate agricultural heartland

Character Type: parliamentary enclosure Settlement pattern: nucleated

- Boulder Clay ridge, with Greensand exposed on slopes; Oxford Clay in valley to NW.
- Parliamentary enclosure-type fields, but mainly originating from 19th century model farm reorganisation of former old enclosure.
- Cut by M1 corridor.

HLCA 60 Flit valley

Character Type: river valley Settlement pattern: n/a

- Flit valley alluvium.
- Meadow and fen associated with River Flit.

HLCA 61 Aspley Heath

Character Type: woodland Settlement pattern: n/a

- Greensand plateau and scarp to east.
- Ancient woodland, with plantations on former heathland.

HLCA 62 Woburn Park and environs

Character Type: parkland Settlement pattern: mixed

- Boulder Clay upland, with Greensand exposures to north.
- Extensive parkland, and parkland-influenced landscape.
- Good survival of old and early private enclosure.

HLCA 63 Tingrith/Wood End

Character Type: modern Settlement pattern: dispersed

- Boulder Clay, drained to NE by several streams.
- Extensive 20th century reorganisation and boundary loss.
- Some pockets of old enclosure

HLCA 73 Ivel Valley

Character Type: river valley Settlement pattern: n/a

- Alluvium and valley gravels.
- Mixed riverside meadow and former gravel workings.

HLCA 92 King's Wood and heath

Character Type: woodland Settlement pattern: n/a

- Greensand Country.
- Ancient woodland and heath.

HLCA 93 Heath and Reach quarries

Character Type: 20th century mineral extraction Settlement pattern: n/a

• Boulder Clay and Gault Clay over Greensand.

Extensive sand quarrying.

HLCA 95 Ouzel valley Bedfordshire

Character Type: river valley Settlement pattern: n/a

- Alluvium.
- Meadow land along River Ouzel north of Leighton Buzzard.

HLCA 501 Gamlingay Heath and plantations

Character Type: Former parkland and heath Settlement pattern: n/a

- Lower Greensand
- Gamlingay Heath, large open fields on land which must have been part of Woodbury Park, as include "Park Plantations" and enclosed by "Park Lane".
- Allotments in corner of Everton Road and Potton Road.
- Gamlingay brick and tile works on heath.

HLCA 502 Gamlingay fields

Character Type: Fields and allotments around Gamlingay Settlement pattern: n/a

- Lower Greensand
- Some old and some Parliamentary enclosure fields. Residential properties and small plots along main roads.

HLCA 503 Potton

Character Type: small town (Potton). Settlement pattern: nucleated, urban.

HLCA 504 Land south of River Flit

Character Type: Upland south of river Flit Settlement pattern: nucleated

- Lower Greensand, Gault Clay to south
- Spans two of AS' HCLAs (66 and 68), settlement on higher ground, including Flitton, Cainhoe Castle, a moat and farms.
- Some old enclosure, 19th century enclosure and modern boundary loss.
- Warren Wood ancient woodland.

HLCA 505 Sutton Park and land to the south

Character Type: Parkland and modern fields on slope Settlement pattern: n/a

- Sutton Park, now modern golf course
- Greensand ridge slopes steeply west of Biggleswade Road and Carthagena Road, accommodating woodland plantations
- Smallholdings to east of Biggleswade Road

HLCA 506 Woburn Sands and Aspley Guise

Character Type: Village settlement and steep scarp slope Settlement pattern: nucleated

- Separate HLCA crated to distinguish distinctive settlements from HLCAs 55 (they are part of in Simco's classification).
- Area has more 'urban' and built up character than rest of ridge.

HLCA 507 (AV LCA 5.2 Ouzel Valley Buckinghamshire)

Character Type: River valley Settlement pattern: n/a

- The historic landscape is predominantly historic flood meadows and pre 18th century irregular enclosure.
- Some parliamentary enclosure fields exist in the centre of the area.
- Northern end of this area lies within 500m of the Roman town of Magiovinium on Watling Street
- Prehistoric and Roman occupation along the valley is indicated by cropmarks, finds and an Iron Age sites on the Stoke Hammond Bypass.
- Several known mill sites.
- Area is traversed by the Grand Union Canal, opened in 1805
- Listed canal structures at Fenny Lock and Three Locks.

HLCA 508 (AV LCA 5.3 Ouzel Valley Lower Slopes)

Character Type: Arable fields on lower slopes Settlement pattern: dispersed farmsteads

- Northern end of this area lies within 500m of the Roman town of Magiovinium on Watling Street.
- Predominantly parliamentary and 19th century enclosures.
- Some pre 18th century irregular enclosures on the northern fringe.

HLCA 509 (AV LCA 6.1 Brickhills Scarp)

Character Type: Steep scarp slope, woodland and pasture Settlement pattern: nucleated.

- The historic landscape is a mixture of regular and irregular pre 18th century enclosure, fossilised strips and occasional assarts.
- Extensive areas of parliamentary and 19th century enclosure north of Great Brickhill and at Bragenham.
- Great Brickhill, conservation area. The village was involved in the manufacture of pottery and tiles in the medieval period.
- Small deserted medieval settlement a Bragenham Farm.

HLCA 510 (AV LCA 6.2 Stockgrove Wood and slopes)

Character Type: Woodland and parkland Settlement type: Dispersed farmsteads

- Extensive secondary woodland cover on former heathland with much pre 18th century enclosure and some assarts in the north of the area.
- Some modern enclosures and prairie fields
- Stockgrove Park House built 1929-38 lies in a park of earlier 19th century origins.
- Watling Street Roman road forms the area's north eastern boundary

HLCA 511 (MK LCA 6a Southern Clayland Fringe)

Character type: Low lying and gently undulating area of clayland Settlement type: Urban fringe and dispersed

- Extensive and open views up to the wooded Brickhills Greensand Ridge
- Mixed arable, pasture and recreational land uses
- Smaller areas of pasture for horses and stabling
- Extensive views towards Milton Keynes City
- Mix of villages characters

- Wide range of urban fringe activities and uses including garden centres, allotments individual industrial premises, theatre, horticulture etc.
- Limited woodland cover
- Few field trees except in the vicinity of Wavendon House
- Locally more intact historic landscape to east of Wavendon

HLCA 512 (MK LCA 7b Brickhills Greensand Plateau)

Character Type: Woodland Settlement type: dispersed

- Some ancient woodland with secondary woodland created in 18th 19th century and 20th century coniferous plantations. Some parcels of pasture.
- Danesborough Camp and Bow Brickhill church are distinctive heritage features
- Medieval brick and tile kilns near Little Brickhill
- Bedford Estate land.

HLCA 513 (MK LCA 7a Brickhills Greensand Slopes)

Character Type: Pasture Settlement type: nucleated

- Some organic pre- 18th century enclosure for pasture.
- Mixture of deciduous and coniferous woodland with pockets of pasture on the lower slopes
- Presence of greensand 'sandstone' in local buildings

6.2 Archaeological Character Areas

6.2.1 Methodology

Archaeological Character Areas (ACA) have been defined predominantly by looking at the combined criteria of changes in underlying geology and topography. For example, most of the geology of the southernmost part of the county is lower and middle chalk, but changes towards boulder clay and clay-with-flints in the northern and southern edges of the area respectively. Within Luton, the Lea Valley consists of an area of river gravels which defines the nature of the archaeological resource in this area.

The scale of the ACAs has been kept fairly large. The boundaries of the ACAs are mainly formed by marked changes in topography and geology, but administrative or modern landmarks are also taken into account where no other deciding criteria exist. ACAs also transcend the limit of the study area where this makes sense in terms of topography and geology in order to arrive at well defined entities.

Information on the archaeological resource of each area has been obtained from the Bedfordshire Historic Environment Record (HER). Specific use was made of the Archaeological Notification Areas (ANA) identified by Steve Coleman. This was supplemented by distribution plots of HER entries and their short descriptions, as they currently exist on the HER database. No paper HER records were consulted.

Scheduled Monument numbers given in brackets are Bedfordshire HER numbers (DBD stands for Designation BeDfordshire) unless otherwise indicated.

The locations and boundaries of the ACAs are shown on Figure 3.

ACA 1 River Ivel valley occupation.

- Sandy Roman settlement on low lying ground east of Ivel. West of Ivel low lying ground extends westwards with very gently slope onto Greensand Country.
- There are several cropmark sites indicating further prehistoric/Roman settlements.
- Several ring ditches and a possible prehistoric square barrow in river valley location.
- Slightly arbitrarily drawn around 35m AOD mark and using modern roads as boundaries.
- No Scheduled Monuments.

ACA 2 River Flit valley

- River valley location attracting a large variety of sites and settlements.
- Noticeably large number of findspots of early prehistoric flints, all found due to commercial projects: HER15835 and HER 15844 found during fieldwalking prior to pipeline, HER 15610 in Simpsonhill Planation Quarry, HER 2595 during road widening.
- Prehistoric ring ditches (three known sites).
- Large Roman settlement site including a possible villa and temple complex (Ruxox).
- Two Medieval monastic sites of Beadlow Priory and Chicksands Priory.
- Scheduled monuments: Cainhoe Castle (DBD1302), Ruxox Farm moated site (DBD1277), Chicksands Priory (DBD3529), Newbury Farm Silsoe with moated enclosures, fishponds and leats (DBD467), de Grey mausoleum Flitton (DBD1660).

ACA 3 Central-eastern Plateau and southern slope

- Iron Age/Roman settlement sites (identified as cropmark sites and through excavation) along northern edge of this ACA, where ridge turns into plateau.
- Old Warden Abbev site, in similar location to R settlement sites.
- Medieval moats and settlements located throughout.
- Medieval villages based around "greens".
- Scheduled Monuments: Warden Abbey (DBD3537), Bolebec Farm, Maulden, moated enclosure and assoc earthworks (DBD460), Home Wood Northill medieval fishery and warren (DBD1812), Quince Hill ringwork, Old Warden (DBD1283), Old St Mary's Church Clophill (DBD2888).

ACA 4 Northern scarp slope with monuments

- High status sites utilising position on ridge: Ampthill Castle and Houghton House.
- ACA extended eastwards to include dodgy prehistoric round barrow and pillow mound (latter more likely to be a medieval rabbit warren) – however steep edge continues so sites like this could be likely.
- Scheduled monuments: Houghton House and formal garden (DBD1659), Ampthill Castle (DBD1295), Long barrow (DBD1306) and bowl barrow

(DBD1307) south-east of Bury Farm – the latter are more likely to be medieval rabbit warrens.

ACA 5 Northern scarp slope east of A600

- Very steep slope but becoming less so as it travels eastwards.
- Roman settlement/kiln sites on steeper slopes.
- No known high status sites, possible exception is Scheduled Monument of mottle castle in Exeter wood (HER 9263).

ACA 6 Old Warden, Southill and Chicksands parkland

- Parks and woodland.
- Because of parkland little investigations and not much known therefore largely "blank" area archaeologically.
- No Scheduled Monuments.

ACA 7 South of Southill Park

- Prehistoric/Roman cropmarks and settlement sites.
- Medieval manorial site and "fortlet" at Stanford Bury Farm.
- Relatively steep slope overlooking Shefford.
- No Scheduled Monuments.

ACA 8 Steep scarp slope overlooking Sandy

- · Caesars Camp unscheduled hillfort.
- Scheduled monuments: Galley Hill hillfort (DBD1665), Sandy Lodge promontory fort (DBD1664).

ACA 9 Northern scarp slope east of Sandy

- Defined to be compatible with ACA 5 (steep northern scarp slope) in central ridge, however, no defining high status sites in this zone that make use of this ridge position.
- Weaveley Park (medieval).
- Deserted Medieval Village (HER 14785) with location at top of slope.
- Scheduled monuments: Storey Moat: medieval site located on edge of ridge (DBD3578). Moat in Tetworth park at edge of ridge (Cambs HER 00937).

ACA 10 Eastern plateau

- Mesolithic and Neolithic flints along eastern edge of ridge.
- Prehistoric/Roman cropmark sites, hence possible settlements.
- Medieval settlement sites.
- Woodbury park, Gamlingay old deer park (medieval) and 18th century park.
- No Scheduled Monuments.

ACA 11 Sandy Warren

 Very similar to ACA 10 but separated to highlight WWII archaeology within warren woodland. WWII archaeology also extends into ACA 8.

ACA 12 Northern scarp slope west of Ampthill

- Defined by steep scarp slope and short valleys.
- Millbrook and Lidlington churches, deliberately set on high ground.

- Boughton End medieval settlement and obscure oval feature.
- No other discerning archaeological features.
- No Scheduled Monuments.

ACA 13 Eversholt

- Numerous dispersed medieval hamlets/"ends" suggesting survival of Anglo-Saxon settlement forms.
- Scheduled monuments: Moated site at Wakes End (DBD1280).

ACA 14 Heath and Reach

- Characterised by quarries.
- Medieval settlement and some surviving ridge and furrow in areas unaffected by quarrying.
- No Scheduled Monuments.

ACA 15 Ouzel River Valley

- Defined by Roman settlement and undated but possibly prehistoric/Roman cropmarks.
- Site of *Magiovinium* Roman town, where A5 (Roman Watling Street) enters Fenny Stratford.
- Scheduled Monument: Canal Bridge at Old Linslade (NHLE 1005396).

ACA 16 Central Plateau west of Ampthill

- Several assemblages of early prehistoric flint, in particular large assemblage at Ampthill and flints found during M1 during road widening works (HER 15833, HER 16086). Also some to the west of Flitwick (not ANA, check aggregates report). Ampthill flints: two collections: Cooper's Hill, Laurel Wood Ampthill park. Latter over 1000 items collected by amateur archaeologist.
- Dispersed cropmark complexes which could be IA/R in date.
- Small number of medieval nucleated settlements (Ridgmont and Steppingley)
- Scheduled monuments: Malting Spinney medieval moat and earthworks, Ridgmont (DBD3948), All Saint's Church Segenhoe (DBD4501).

ACA 17 Woburn Park, Battlesden park and land to the west

- Woburn Park and Woburn Abbey.
- Battlesden Park and some land to the west, bordering onto heaths and woodlands of ACA 18.
- Roman kilns.
- Medieval settlement.
- Scheduled Monument: Moated site known as "The Hoult" and associated field system (DBD1813).

ACA 18 Wooded western slopes

- Mainly defined by medieval settlement and woodland.
- Brickhills medieval settlements. The first element in the main name may be the British 'brik' (same source as Welsh 'brig' i.e. 'top or summit' (Mawer and Stenton 1925).
- Wooded parks, medieval woodbanks in Rushmere Country park.
- Scheduled Monument: Danesborough Camp Iron Age hillfort (NHLE 1011302).

6.3 Rural Built Environment Character Areas

6.3.1 Introduction

The Rural Built Environment Character Areas (RBECAs) were defined through analysis of settlement patterns and building types. This was partially informed by patterns distilled in the Historic Landscape Character Areas (see Section 6.1). Further decisions for the Rural Built Environment were based on the comparison of the first edition Ordnance Survey maps and present-day maps to determine if and in what form settlement patterns have survived to and changed in the present day.

Information on building types and materials was used to further characterise each area. Conservation Area assessments were used to inform this part of the study.

A variety of building materials exist throughout the Greensand Country and it is difficult to identify clear distinctions between areas on the ridge. There is a clear distinction between the parish churches, which are almost exclusively built of the local sandstone, and vernacular buildings, which are largely of brick. The extensive clay geology to the north and south of the ridge led to brick production being one of the main industries within Bedfordshire in the 19th and 20th centuries. The ready availability of this building material led to the majority of houses in the Greensand Country being built of brick. The overall distribution of of buildings and building materials usually follow the chronology and pattern described below.

Surviving older buildings from the 16th-18th century usually are timber framed, often with later brick panels, whitewashed and with thatched roofs. 19th century and later buildings are predominantly of red brick with clay tile roofs, and later Welsh slate roofs. A small number of brick buildings have thatched roofs.

Red brick buildings are interspersed with yellow brick buildings and some buildings utilise a mixture of both. Yellow brick buildings are slightly more numerous along the southern edge of the Greensand Country, for example in Flitton. Outcrops of Gault Clay, which produces a yellow brick colour, lie to the south of the ridge.

Parish churches are predominantly built of the local sandstone. This is a soft stone that ranges in colour from a deep yellow to a rusty brown and a distinctive green. There are exceptions, such as the Stone Jug public house in Clophill and Sandstone Lodge at the entrance to Southill park. Boundary walls within villages are also often built of sandstone.

The large number of manorial houses within the parks in the Greensand Country are built using ashlar sand and limestone blocks, sometimes with ancillary brick buildings. Often these are in yellow brick to match the colour of the ashlar, but red brick buildings are also numerous. Later manorial buildings, or replacement buildings such as Ickwell Bury, rebuilt after a fire in 1937, are entirely of brick.

Southill Park house was extended using Totternhoe Stone, a local chalk stone found just to the south-west of the ridge. Totternhoe Stone was also used in Woburn Abbey.

The location and boundaries of the RBECAs are shown on Figure 4.

RBECA 1 Potton

Geology: Lower Greensand.

- Georgian market town and conservation area
- Building materials:
 - Parish church: sandstone;
 - Surviving evidence of medieval timber framing, some encased in later brickwork;
 - o largely red brick due to large-scale rebuilding after fire in 1783'
 - 19th century houses red and yellow brick, latter reflecting Gault Clay outcrop to south of ridge.
- Grown considerably in 20th century with modern fringes and estates.
- Conservation Area: Potton.

RBECA 2 Everton, Gamlingay and eastern end of Greensand Country

Geology: Lower Greensand with outcrop of Oxford Clay along northern edge of ridge.

- Everton and land and hamlets up to NE end of Greensand Country.
- Includes Woodbury park.
- Red brick Woodbury estate cottages in Everton.
- Dispersed settlement pattern.
- Isolated parliamentary enclosure, some ancient enclosure to the north west and estate reorganisation besides and heathland and parkland..
- Building materials: largely red brick. Everton parish church: sandstone.
- 20th century infill in Everton and along main roads.
- No Conservation Areas.

RBECA 3 Sandy Warren + heath and Hazells Park

Geology: Lower Greensand with outcrop of Oxford Clay along northern edge of ridge. Buildings defined by needs and deliberate design of parkland.

- Building materials: Sandy Lodge largely yellow Gault brick. Hazells Park: main house red brick, ironstone Stone Lodge.
- Small groups of whitewashed thatched cottages and 19th century and modern red and yellow brick houses along main roads.
- Stratford in valley floor: Medieval hamlet strung out along Stratford Road.
 Buildings are timber framed with later brick facing, or wholly brick built (red brick with one yellow brick) and tile roofs.
- No Conservation Areas.

RBECA 4 Ickwell, Northill, Thorncott and Beeston

Geology: Oxford Clay and Boulder Clay.

- A1 dual carraigeway eastern boundary.
- Includes Ickwell Bury and park, park originally part of Ickwell manor which was one of the 4 manors in parish of Northill.
- Dispersed settlement pattern.
- C19 and Modern enclosure. field reorganisation and some surviving parliamentary enclosure.
- Nucleated settlements.
- Settlements based around large greens.

- Building materials: Relatively high number of whitewashed, timber framed thatched cottages with eyebrow dormers. Other buildings: red brick, some yellow brick, modern infill. Churches: sandstone.
- Conservation Areas: Ickwell and Northill.

RBECA 5 Land to the west of Ickwell, Old Warden and Southill Parks

Geology: Boulder clay and Lower Greensand.

- Includes some land to the east of Old Warden park. A600 western boundary.
- Dispersed settlement pattern.
- Mainly rural farmland with dispersed large farmsteads and scattered woodland, some of it ancient woodland.
- Parkland influenced landscape with some old enclosure. Farms most likely enclosure era farms and most built mid-19th century.
- No conservation areas.
- Area traversed by dismantled railway.
- Buildings predominantly brick with tiled roofs, isolated thatched roofs and weatherboard barns.
- No Conservation Areas.

RBECA 6 Old Warden and Southill parks

Geology: Lower Greensand, some Gault clay outcrops

- Old Warden Park and Old Warden village.
- Old Warden Conservation Area.
- Typical Old Warden building style: cottage ornée style and Gothic revival architecture. Cream paint.
- Building materials: cottages: some are tiled, some are thatched, many are painted in the same livery of cream and white. Most are rendered and some have mock timber framing on the outside (sometimes concealing real timber framing beneath the render!). Some red brick buildings.
- Old Warden Park house: yellow ashlar stone, service wing partially in yellow brick.
- Park Farm house built in around 1600, timber framed and colour washed.
- Shuttleworth Agricultural College: modern agricultural buildings in grounds of Old Warden Park. More in line with farms to the east of park (which are in RBECA 5). Some in yellow brick to match main house.
- Southill Park. Southill Park house extended in Totternhoe limestone. Sandstone Lodge in pink sandstone.
- Southill village: a large number of buildings are rendered in a yellow wash (as close to Old Warden village actually outside of GR polygon.
- Conservation Areas: Old Warden, Southill (outside of project zone).

RBECA 6 Haynes

Geology: Lower Greensand, superficial deposits of chalky boulder clay.

- Dispersed settlement pattern with numerous "ends" placenames.
- Dispersed farms.
- Includes Haynes more nucleated modern settlement.
- Boulder clay ridge

- Early settlement enclosure and warren but much modern boundary loss.
- Now largely agricultural with some ancient woodland at northern edge of ridge.
- Buildings predominantly brick and rendered brick with tiled roofs; isolated sandstone buildings, few thatched roofs.
- Haynes Park country house: red and white brick with ashlar dressings.
- Conservation Area: Haynes Church End.

RBECA 7 Chicksands

Geology: Lower Greensand, peat and river gravels, some chalky boulder clay.

- Landscape with monastic origin. Includes remains of monastery and grounds.
- Modern military installations.
- Does not include modern residential areas (which are part of RBECA 9).
- No Conservation Area.

RBECA 8 Houghton House

Geology: Lower Greensand and superficial deposits of chalky bounder clay

- Houghton House noticeable (amongst other things) for early use of red brick.
- Row of modern houses along access road, red brick with tile roofs.
 Modern barn building.
- No Conservation Area.

RBECA 9 Maulden, Clophill and Flitton

Geology: Lower Greensand, some river valley gravels, Gault Clay outcrop to south of ridge.

- Originally dispersed settlement, now more nucleated, villages have grown into larger villages. A lot of area characterised by A507.
- Mix of a great variety of building materials. More common occurrence of yellow gault clay bricks in Flitton very noticeable (close to gault clay outcrop south of GR).
- Eyebrow dormers on thatched brick cottages as well as timber framed cottages. Some tiled eyebrow dormers (thatched roofs replaced with tiles?).
- Conservation Areas: Maulden, Clophill, Flitton.

RBECA 10 Northern scarp slope with Millbrook village

Geology: Lower Greensand, some Ampthill Clay

- Millbrook medieval origin with distinctive location of church on promontory overlooking village in short valley.
- Bedford Estate land and many estate cottages in distinctive Bedford estate style (red brick).
- Lidlington similar situation topographically but not Bedford Estate village and most of village outside project area.
- Conservation Areas: Millbrook.

RBECA 11 Land West of Flitwick

Geology: Lower Greensand and Boulder Clay.

- Tingrith and small tip of land to the west of M1.
- Includes M1 and land to east of M1.
- Duke of Bedfordshire land and farms.
- Dispersed settlement and farms.
- More "modern" than Duke of Bedfordshire heartland and Woburn Estate.
- Steppingley: timber framed houses with brick panels, some thatched, predominantly red brick houses with tile roofs, some yellow brick.
- Tingrith: buildings mainly brick or roughcast with much white and cream wash, and with tile or slate roofs. Modern housing estate now on site of old manor house.
- Conservation Areas: Tingrith, Steppingley.

RBECA 12 Woburn Estate

Geology: Lower Greensand, superficial deposits of chalky Boulder Clay

- Includes surrounding DoB agricultural land and estate villages.
- Dispersed settlement, many "ends" to east of Woburn Park
- Woburn only "nucleated" settlement in area.
- Ridgmont and Woburn limestone churches, late 19th c.
- Cobblestone surface at 'The Pitchings' in Woburn (JDE 1994)
- Bedford estate architecture very distinctive in all settlements.
- Conservation areas: Eversholt and Ridgmont (estate villages) and Woburn.

RBECA 13 Aspley Heath and Woburn Sands

Geology: Lower Greensand with outcrop of Oxford clay along northern edge of ridge.

- Aspley Heath and Woburn Sands health resorts large number of sandstone houses. Limestone church. History as health resorts. More 'towny' feel than rest of Greensand Country.
- Building materials: predominantly red brick with clay and slate tile roofs, isolated whitewashed timber-framed cottages with thatched roofs.
- Aspley Heath: a large number of detached villas, converted to or erected as convalescent homes. 19th century hence predominantly red brick.
- Settlement pattern: nucleated. More dense than other areas on the ridge.
- NOT Duke of Bedfordshire estate villages.
- Associated with heath, located on northern edge of Greensand Country.
- Conservation Area: Aspley Heath, Woburn Sands.

RBECA 14 Heath and Reach

Geology: Band of Gault Clay along N-S spine of parish, surrounded by Lower Greensand. Very sandy soil therefore a large number of quarries are around Heath and Reach.

- Heath and Reach are two settlements grown into one. Heath settlement grown around a Green.
- Typical mix of building materials, early buildings timber-framed and thatched, moving to brick in 18-19th century. Mainly red brick with some yellow and blue/grey brick. Quite a few brick buildings white rendered.
- It is likely that the bricks were produced locally and there are 5 recorded brickfields (also producing clay roof tiles) within three miles of Heath and

Reach. Indeed, two brickfields are recorded within Heath and Reach with one operating in 1579.

- Sandstone in vernacular residential buildings and boundary walls.
- A number of dwellings and agricultural buildings are weather boarded.
- Late medieval St Leonards Church: grey brick with red brick pattern walls covered in a grey render NOT a sandstone church!
- Important sandstone wall near church.
- Conservation Area: Heath and Reach.

RBECA 15 - Brickhills

Geology: Lower Greensand. Topography: Interspersed with woodland, quarries and golf courses.

- Name allegedly comes from the Anglo-Saxon "spur" and "hill" but there are also a lot of quarries in the area plus brick making (Mawer and Stenton 1925).
- Distinctive historic walls and buildings of reddish brown sandstone are associated with the villages.
- Other building materials: red and yellow brick, timber buildings with brick panels, tile roofs.
- Like Heath and Reach all settlements are on steep slopes with views over surrounding land.
- Conservation Areas: Great Brickhill, Little Brickhill.

Little Brickhill: linear settlement along Watling Street. Historically a lot of pubs, some now residential buildings.

- Very noticeable sandstone boundary wall along church. Church built predominantly of a rusty red iron-rich sandstone with limestone patchwork.
- One sandstone vernacular cottage.
- Most buildings red brick. Yellow brick building at western entrance to village.
- Some modern housing infill on main street

Great Brickhill: village amongst steep slopes of GR with views over surrounding land.

- Distinctive sandstone boundary walls within village
- Some small sandstone outhouses.
- Most buildings are red brick, some timber framed with brick panels.
- Church: sandstone with grey rendered tower.

Bow Brickhill: Village on lower slopes below distinctive western scarp slope of Greensand Country.

- Lower, western part largely modern, brick built 1930s houses at western entrance to village, more modern houses along main road.
- Old part of village in east and climbing up Greensand Country.
- Most houses built of red brick, some yellow brick and sandstone boundary walls and plinth foundations to buildings.
- Church: sandstone, on hill to east of village.

RBECA 17 Ampthill Park

Geology: Lower Greensand.

- Mainly parkland, designed by Capability Brown.
- Ampthill Park House, at the northern edge of the park, is a late 17th and early 18th baroque country house built of red brick with a Georgian façade. Not publicly accessible but visible from Marston Vale looking northwards toward Greensand Country.
- The rest of the park does not contain buildings as such, apart from modern tea room and a sports ground. Historic buildings, such as Ampthill Castle, have disappeared and only their sites survive.
- Katherine's Cross in Ampthill Park is in the Gothic Revival style and was erected in 1773.

RBECA 18 Husborne Crawley Church End and Aspley Guise

Geology: Lower Greensand with outcrop of Oxford clay along northern edge of ridge.

- Nucleated settlements
- Both "village/hamlet" like feel
- Aspley Guise very distinctive chequerboard brick pattern buildings
- Aspley Guise part of health resort trio of settlements (with Aspley Heath and Woburn Sands) – actually no buildings related to health resorts in Aspley Guise
- Aspley Guise, Duke of Bedfordshire owned some cottages and woods
- Conservation Areas: Husborne Crawley Church End and Aspley Guise
- Very green sandstone in Husborne Crawley Church.
- Conservation Areas: Husborne Crawley, Aspley Guise.

RBECA 19 Ouzel Valley

Geology: Alluvium and River Terrace Deposits sand and gravel over Oxford Clay Formation Mudstone bedrock.

- River Ouzel and Grand Union Canal with towpath historic bridges and locks.
- No major settlements but dispersed farmsteads and former mills.
- Building material predominantly red brick.

6.4 Summary Table of Areas and Zones

| HECA | HECA name | HECZ | HECZ name | ACA | RBECA | HECA |
|------|---|------|---|------------------------|-------------------|---|
| 1 | Buckinghamshire Ouzel Valley and western wooded slopes and quarry lands | 1.1 | Ouzel river valley and slopes | 15 | 15 | 95, AVLCA: 5.3 |
| | | 1.2 | Aspley and Brickhill settled wooded heathlands | 18 | 13, 14, 15, 18 | 505, 506, 507, AVLCA: 5.2, 5.3, 6.1, 6.2 |
| | | 1.3 | Heath and Reach quarried landscape | 14 | 14 | 93 |
| 2 | Bedford Estate parkland and farmland | 2.1 | Potsgrove farmlands | 17 | 12 | 62 |
| | | 2.2 | Husborne Crawley farmlands | 17 | 12, 18 | 59, 62 |
| | | 2.3 | Woburn Park and Bedford Estate heartland | 17 | 12 | 62 |
| | | 2.4 | Eversholt medieval settlement and mixed enclosure | 13 | 12 | 62, 63 |
| | | 2.5 | Ridgmont and Stepplingley Bedford Estate farmlands | 2, 12, 13, 16 | 11, 12 | 59, 60, 62 |
| 3 | Northern scarp slope, Ampthill Park and Maulden farmland | 3.1 | Millbrook wooded scarp and 20 th century recreational landscape | 12, 16 | 10, 11 | 55 |
| | | 3.2 | Ampthill Park and Houghton House | 4 | 6, 8, | 55 |
| | | 3.3 | Maulden | 3, 4, | 6, 9 | 33, 52, |

| HECA | HECA name | HECZ | HECZ name | ACA | RBECA | HECA |
|------|--------------------------------|------|---|-----------------|-------|--------------------------|
| | | | farmlands | 5 | | 53, 54, 56 |
| 4 | Flit valley and valley slopes | 4.1 | Flit river valley and Ruxox Roman Settlement | 2, | 9 | 56, 60 |
| | | 4.2 | Flit valley southern slopes | 2 | 9 | 60 |
| 5 | Monastic estates and parkland | 5.1 | Haynes to Northill parkland and farmland | 3, 5, | 5, 6 | 33, 48, 51, 53, 54 |
| | | 5.2 | Chicksands priory and military establishment | 2, 6 | 7 | 52 |
| | | 5.3 | Old Warden and Southill parklands | 6, 7 | 5, 16 | 50, 51 |
| 6 | Ivel Valley | 6.1 | Ivel river valley and Sandy Roman settlement | 1 | 4 | 48, 73 |
| 7 | Greensand upland east of Sandy | 7.1 | Sandy Warren and The Lodge | 8 ,10, 11 | 3 | 40 |
| | | 7.2 | Everton and Gamlingay parkland and farmland | 9, 10 | 2, 3 | 35, 38, 501, 502 |
| | | 7.3 | Potton settlement | 10 | 1 | 503 |

6.5 Historic Environment Character Zones Scoring

The HECZ are described in detail in Section 4 of the main report. The following paragraphs describe the methodology employed in their creation and the criteria used for their Condition Assessment.

6.5.1 Scoring of the Historic Environment Character Zones

Each HECZ has been scored on the range of criteria developed for English Heritage's (now Historic England) Monuments Protection Programme, modified for use with larger zones rather than individual monuments. The seven criteria are:

- Diversity of historic environment assets
- Survival
- Documentation
- Group value association
- Potential
- Sensitivity to change
- Amenity value (including conservation, enhancement and green infrastructure opportunities)

Each criterion is scored 1, 2 or 3; 1 being the lowest and three the highest.

6.5.2 Diversity of historic environment assets

This indicates the range of historic environment assets within a zone. The range may be chronological or functional. For example, a zone with multiperiod settlement sites, or a zone with a range of assets, such as church, village, farmstead, field systems, industry etc. of the same date would both score highly. A zone with a limited range of historic environment assets would score low.

- 1 = Very few known assets or many assets of a limited range of categories.
- 2 = A range of assets of different date or character.
- 3 = A wide range of assets of different date and character.

6.5.3 Survival

Survival relates to the completeness of the range of historic environment assets within a zone. They may be relatively well preserved or may have been disturbed by detrimental land-use / development and / or erosion. Even where such factors have adversely affected the historic environment resource within a zone, potential may still exist for well preserved, deeply buried archaeological deposits.

- 1 = Extensive disturbance by, for example, quarrying or other development. Likelihood is that whilst many or most of the historic environment resource has been disturbed or destroyed, there is the potential for survival in some areas or of some types of assets.
- 2 = Little disturbance but with few known assets. Or, many known assets but some disturbance by, for example, quarrying or development.

3 = Well preserved known assets.

6.5.4 Documentation

The level of documentation for a zone reflects the extent of investigations that have taken place. This may include: archaeological excavation, field survey / recording, historical documentation, or research project work (e.g. the National Mapping Programme, the Defence of Britain survey etc.)

- 1 = Little or no documentation.
- 2 = A range of documentation containing elements of the above.
- 3 = A wide range of documentation.

6.5.5 Group value association

Two forms of association are considered: historic environment assets of a similar nature or historic environment assets of a similar date. For example, a zone with multi-period surviving earthworks or a zone with a number of medieval churches would both score highly. By contrast, a zone with a wide range of diverse, unassociated assets would score low.

- 1 = Few historic environment assets of a similar date or nature.
- 2 = A limited range of historic environment assets which are related or are of a similar date.
- 3 = A range of historic environment assets which are related, such as moats within well preserved field systems or settlement sites of different dates.

6.5.6 Potential

Potential is assessed with reference to the expected average circumstances within a zone. The score considers the nature of the historic environment resources, based on current evidence, and indicates the likelihood or further assets being present.

- 1 = The potential for surviving historic environment assets within the zone has been significantly reduced by, for example, quarrying or development.
- 2 = There are limited known historic environment assets. However, the zone has not been significantly disturbed and the current absence of evidence is more likely to be the result of lack of investigation rather than poor preservation.
- 3 = Current evidence and the low level of disturbance indicate that a range of high quality assets probably survive within the zone.

6.5.7 Sensitivity to change

Each zone is assessed in terms of its sensitivity to medium to large scale development, e.g. urban expansion. The score is an indication of the vulnerability of the historic environment resource to this type of change. A low level of sensitivity to change should not be taken as an indication that development could be accommodated without any mitigation of the impact on the historic environment resource. Where relevant, sensitivity to other types of change, e.g. flood risk management, are considered.

- 1 = The historic environment could accommodate medium to large scale development. However, specific historic environment assets may suffer adverse effects.
- 2 = Medium to large scale development is likely to have a considerable impact on the historic environment.
- 3 = The historic environment is highly sensitive to medium to large scale development.

6.5.8 Amenity value

Relates to the actual and / or potential amenity value of the historic environment resource. Specific assets which would warrant enhancement are included in the zone's description. The score may relate to uniqueness, historical associations, key landmarks, good access, interest for visitors, educational value etc.

- 1 = The historic environment does not lend itself to display or visitor attraction. Current knowledge means there is limited potential for the historic environment to play a significant role in creating a definable and promotable identity for the zone.
- 2 = The historic environment does or could help to define a sense of place for the zone. There may be specific elements which are or could be promoted, such as woodlands, castles etc.
- 3 = The historic environment plays or could play a key role in the zone's sense of place for local people or visitors. The zone contains assets which are or could be promoted for the benefit of local people or visitors.

7. BIBLIOGRAPHY

- Aylesbury Vale District Council (AVDC) & Buckinghamshire County Council 2008. *Aylesbury Vale Landscape Character Assessment.* [Online]. Available at: http://www.aylesburyvaledc.gov.uk/landscape-character-assessment. [Accessed 22 January 2016].
- Bedfordshire and Luton Geology Group 2010. *Bedfordshire's geological industries: Fullers Earth* (leaflet). Available at:
 http://www.bedfordshiregeologygroup.org.uk/leaflets/BLGGFullersE.pdf.

 [Accessed 20 January 2016].
- Bedfordshire Federation of Women's Institutes. 1988. *The Bedfordshire Village Book*. Countryside Books.
- Bigmore, P. 1979. *The Bedfordshire and Huntingdonshire Landscape*. Hodder and Stoughton.
- BLGIC (Bedfordshire and Luton Green Infrastructure Consortium) 2007.

 Bedfordshire and Luton Strategic Green Infrastructure Plan. [Online].

 Available at: http://bedsrcc.org.uk/wp-content/uploads/2015/03/Beds and Luton Strategic Green Infrastructure

 Plan P1 tcm5-15234.pdf. [Accessed: 8th April 2016].
- BRCC 2015. 'Secrets of the Sands' The Greensand Country Landscape Partnership. Brief for Historic Environment Characterisation Study.
- Buckinghamshire County Council 2009. Buckinghamshire Green Infrastructure Strategy. [Online]. Available at: http://www.buckscc.gov.uk/media/1470112/ Green-Infrastructure-Main-Report-April-2009.pdf. [Accessed: 22 January 2016].
- Buckinghamshire County Council 2013. Buckinghamshire Green Infrastructure Delivery Plan. [Online]. Available at:
- http://www.buckscc.gov.uk/media/1521901/5326-Bucks-GI-Delivery-Plan-FINAL-ISSUE_2013_08_07_low_res.pdf. [Accessed: 22 January 2016].
- Cambridgeshire County Council 2011. Cambridgeshire Green Infrastructure Plan. [Online]. Available at:

 https://www.cambridge.gov.uk/sites/default/files/documents/RD-NE-020%20Main%20document.pdf. [Accessed: 22 January 2016].
- CBC Archaeology Team 2011. *The Bedfordshire Aggregates Archaeological Resource Assessment.* Report EH 5759MAIN.

Greensand Trust 2008. *Mid Bedfordshire Green Infrastructure Plan*. [Online]. Available at:

- http://www.centralbedfordshire.gov.uk/images/mid%20bedfordshire%20green% 20infrastucture%20plan_tcm6-8581.pdf. [Accessed: 19 November 2015].
- Mawer, A. Stenton, FM (eds). 1925. *The Place names of Buckinghamshire*. English Place Name Society, Gen.
- Mawer, A. and Stenton, F.M 1926. *English Place-Name Society. The Place Names of Bedfordshire and Huntingdonshire*. Cambridge University Press.
- Mawer, A. and Stenton, F.M 1943. *English Place-Name Society. The Place Names of Cambridgeshire*. Cambridge University Press.
- Medlycott, M. (ed), 2011. Research and Archaeology Revisited: A Revised Framework for the East of England. East Anglian Archaeology Occasional Paper 24.
- Milton Keynes Council 2006/7. *Draft Landscape Character Assessment*. [Online]. Available at: http://www.milton-keynes.gov.uk/planning-and-building/draft-landscape-character-assessment. [Accessed: 22 January 2016].
- Milton Keynes Council 2008. *Milton Keynes Green Infrastructure Plan.* [Online]. Available at: https://www.milton-keynes.gov.uk/assets/attach/7116/Final_Report-11%5E4%5E08.doc. [Accessed: 22 January 2016].
- Simco, A. 1984. Survey of Bedfordshire in the Roman Period. Bedfordshire County Council, RCHM.
- Simco A. 2005. *Bedfordshire Historic Landscape Characterisation*. Unpublished report prepared for Bedfordshire County Council.
- Oake, M. et al, 2007. Bedfordshire Archaeology Research and Archaeology: Resource Assessment, Research Agenda and Strategy. Bedfordshire Archaeology Monograph 9.









