

NEWMARKET ROAD, ROYSTON

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

PUBLISHED LANDSCAPE CHARACTER ASSESSMENT (EXTRACTS)

March 2024

- NATURAL ENGLAND – NATIONAL CHARACTER AREAS (2014) – NCA 88
BEDFORDSHIRE AND CAMBRIDGESHIRE CLAYLANDS AND NCA 87 EAST ANGLIAN
CHALK
- EAST OF ENGLAND REGIONAL LANDSCAPE FRAMEWORK – CHALK HILLS AND
SCARPS
- HERTFORDSHIRE LANDSCAPE CHARACTER ASSESSMENT - AREA 228; SCARP
SLOPES SOUTH OF ROYSTON

87. East Anglian Chalk

Introduction & Summary

Description

Opportunities

Key facts
and data

Landscape
change

Analysis

Supporting documents



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NATURAL
ENGLAND

Summary

The East Anglian Chalk National Character Area (NCA) is characterised by a narrow continuation of the chalk ridge that runs south-west–north-east through southern England. The underlying geology is Upper Cretaceous and is covered in a surface deposit of ice and river-deposited material from the last ice age. This creates a visually simple and uninterrupted landscape of smooth, rolling chalkland hills with large regular fields enclosed by hedges, with few trees, straight roads and expansive views to the horizon.

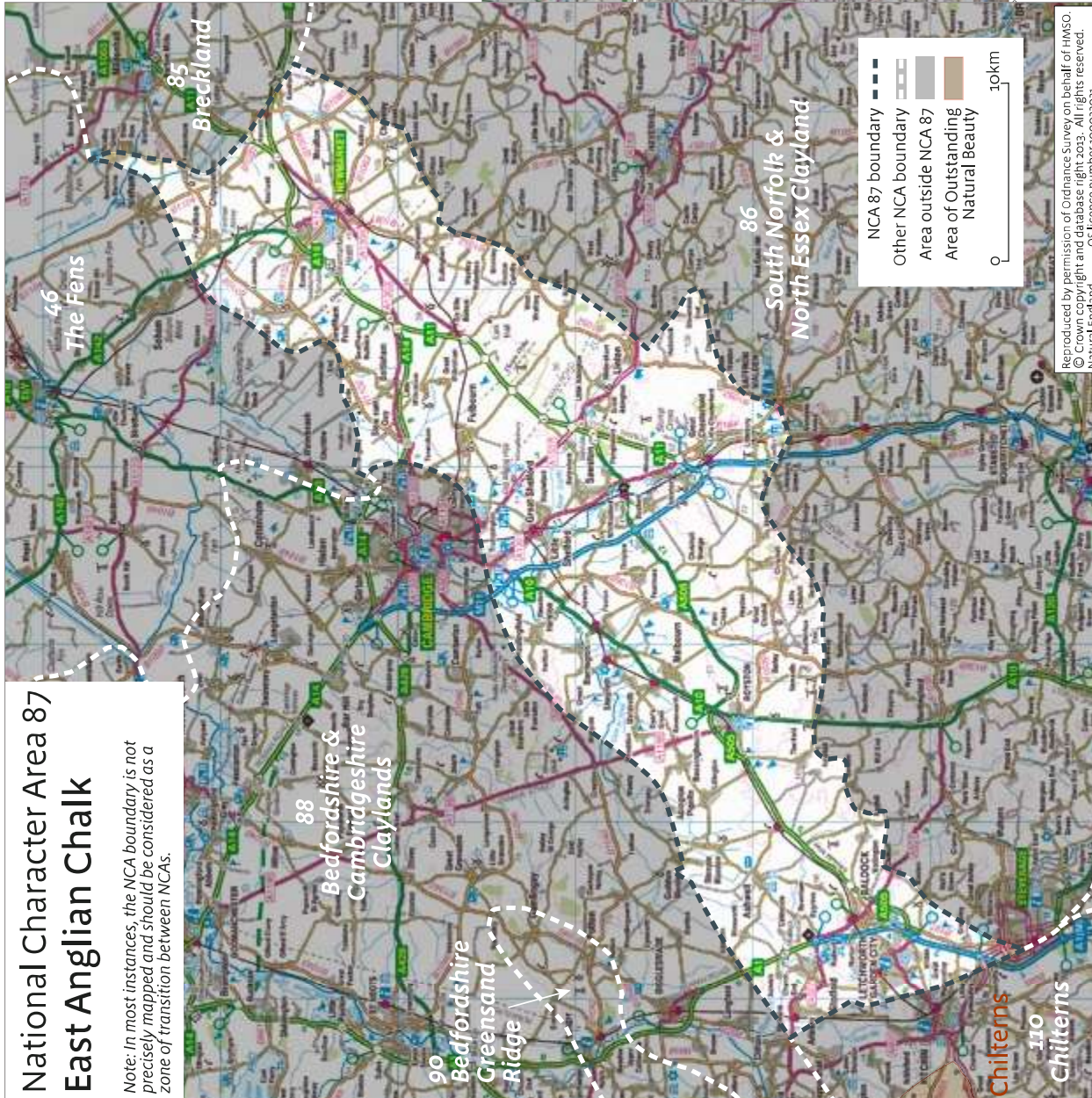
The vast majority of its landscape is open countryside, under current agricultural use. Sustainable farming practices are required to help to manage the land and support wildlife in the wider countryside. It is an open landscape with rolling hills on hill tops are visually distinct and characteristic. The smooth, rolling hills are dissected by the two gentle valleys of the rivers Great Ouse and Great Ouse converge to form the River Cam just south of Cambridge.

The porosity of the area's Chalk geology is one of its most noticeable features. It is largely absorbed through tiny, connected pores and natural fractures, leading to lying on the surface and forming rivers, lakes and ponds. Rainwater infiltrates through the thin chalk soils and slowly replenishes the strategic chalk aquifer below.

Historically, sheep rearing and corn production have shaped the landscape, leading to the creation of botanically rich grasslands, which are now often fragmented. Large-scale cereal production dominates the predominant agricultural landscape, and care must be taken to ensure that the landscape is maintained to support a viable and sustainable future for farming.

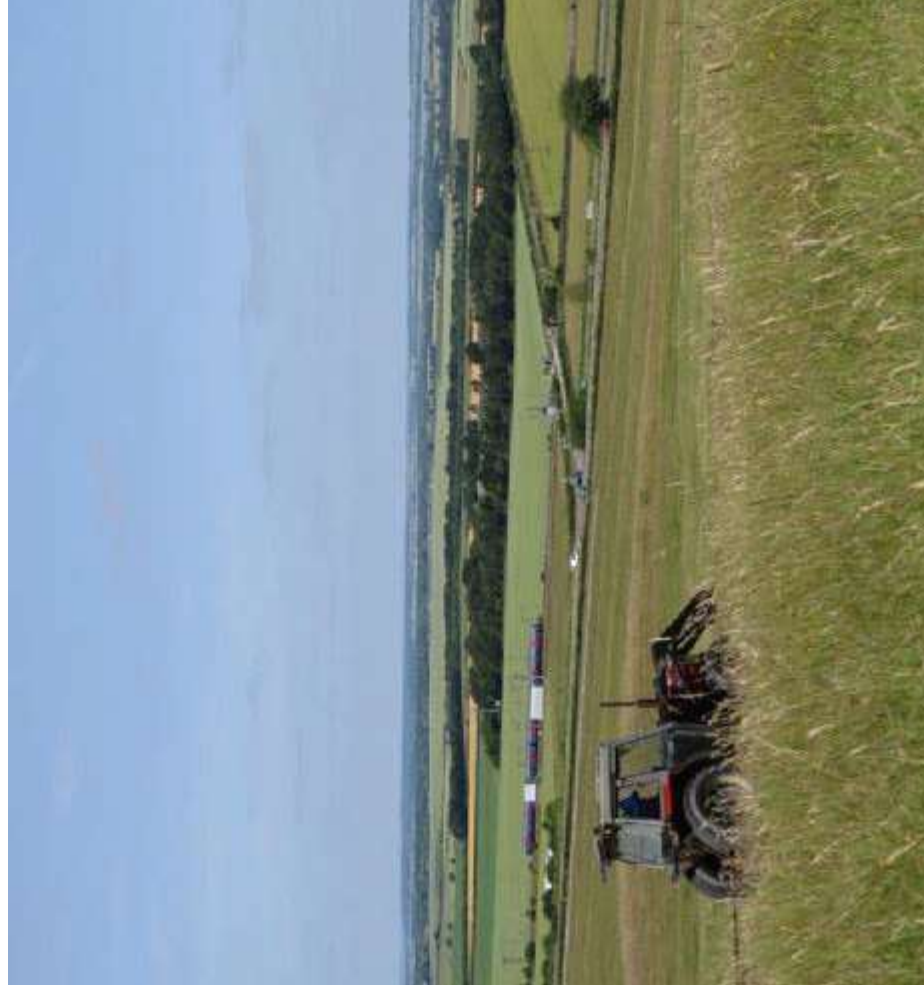
National Character Area 87 East Anglian Chalk

Note: In most instances, the NCA boundary is not precisely mapped and should be considered as a zone of transition between NCAs.



Statements of Environmental Opportunity

- **SEO 1:** Maintain sustainable but productive agricultural land use, while expanding and connecting the chalkland assemblage of semi-natural grasslands, for example by sensitive management of road verges and extending buffer strips along field margins, to benefit soil and water quality, reduce soil erosion, strengthen landscape character and enhance biodiversity and pollinator networks.
- **SEO 2:** Conserve the regionally important East Anglian chalk groundwater resource, by working in partnership to ensure that an integrated catchment-scale approach is secured for its enhanced long-term management, including the chalk streams, for the benefit of biodiversity, landscape character and recreational experience.
- **SEO 3:** Conserve and promote the landscape character, geodiversity, historic environment and historical assets of the chalklands, including the open views of undulating chalkland, large rectilinear field pattern and linear ditches, strong equine association and the Icknield Way prehistoric route. Improve opportunities to enhance people's enjoyment of the area while protecting levels of tranquillity.
- **SEO 4:** Conserve the settlement character and create or enhance sustainable urban drainage systems and green infrastructure within existing and new developments, particularly in relation to the urban fringe and growth areas such as south-east Cambridge, to provide recreation opportunities, increase soil and water quality and enhance landscape character.



Looking towards Cambridgeshire claylands and modern transport routes from Therfield Heath.

Description

Physical and functional links to other National Character Areas

The East Anglian Chalk of Bedfordshire, Cambridgeshire, Hertfordshire, Suffolk and north-west Essex forms a narrow continuation of the chalk ridge that runs south-west-north-east across southern England, continuing in the Chilterns National Character Area (NCA) and along the eastern edge of The Wash. The northern boundary is clearly defined by the base of the north-west-facing chalk scarp slope, around the southern limit of Cambridge and along the fenland edge. From the higher ground to the south-east there are wide panoramas across the Bedfordshire Claylands NCA and the adjoining Fens NCA. To the north-east, sandy soil is blown over the Chalk, exerting a shared 'breck' character with the neighbouring Brecks NCA, visible in characteristic knarled Scots pine hedgerows. To the south and east it is bounded by the overlying chalky boulder clay of the South Suffolk and North Essex Clayland NCA, which includes Saffron Walden. The Wadlow Wind Farm, north of Balsham in Cambridgeshire, is a prominent feature along the boundary between the two NCAs.

The chalkland landscape is united with the rest of the East Anglian NCAs as a major food producer, with arable farming being the predominant land use. The smooth, rolling chalkland hills are dissected by the two gentle valleys of the rivers Granta and Rhee, which converge flowing westward into the River Cam just south of Cambridge. The Rhee begins at Ashwell Springs in Hertfordshire, running north then east 19 km through the farmland of southern Cambridgeshire. The longer tributary, the Granta, starts in Essex and flows north into the East Anglian Chalk NCA near Saffron Walden. The underlying chalk aquifer provides functional links between these areas and the population of East Anglia, whose water the aquifer supplies.



Gallops, near Newmarket showing rectilinear field pattern, enclosed by tall hedges and currently species-poor grassland.

The East Anglian Chalk NCA is traversed by a major prehistoric routeway, the Icknield Way, which links the Peddars Way and The Ridgeway National Trails. Important strategic railways and road transport links still exist, including the M11, A14, A505 and A10 (Ermine Street).

Key characteristics

- The underlying and solid geology is dominated by Upper Cretaceous Chalk, a narrow continuation of the chalk ridge that runs south-west–north-east across southern England, continuing in the Chilterns and along the eastern edge of The Wash. The chalk bedrock has given the NCA its nutrient-poor and shallow soils.
- Distinctive chalk rivers, the River Rhee and River Granta, flow in gentle river valleys in a diagonally north-west direction across the NCA.
- The chalk aquifer is abstracted for water to supply Cambridge and its surroundings and also supports flows of springs and chalk streams; features associated with a history of modification include watercress beds, culverts and habitat enhancements.
- The rolling downland, mostly in arable production, has sparse tree cover but distinctive beech belts along long, straight roads. Certain high points have small beech copses or ‘hanger’, which are prominent and characteristic features in the open landscape. In the east there are pine belts.
- Remnant chalk grassland, including road verges, supports chalkland flora and vestigial populations of invertebrates, such as great pignut and the chalkhill blue butterfly.
- Archaeological features include Neolithic long barrows and bronze-age tumuli lining the route of the prehistoric Icknield Way; iron-age hill forts, including that at Wandlebury; impressive Roman burial monuments and cemeteries such as the Bartlow Hills; a distinctive communication network linking the rural Roman landscape to settlements and small towns, such as Great Chesterford; the four parallel Cambridgeshire dykes that cross the Chalk: the Anglo-Saxon linear earthworks of Devil’s Dyke, Fleam Dyke, Heydon/Bran Ditch and Brent Ditch; ridge-and-furrow cultivation remains of the open field systems of the earlier medieval period; and large numbers of later moated enclosures, park lands



Wandlebury Hill Fort from the air in 1980. The wooded concentric earth bank can be clearly seen.

created, sheepwalks, arterial routes and nucleated villages that emphasise the land use change of this period.

- Brick and ‘clunch’ (building chalk) under thatched roofs were the traditional building materials, with some earlier survival of timber frame. Isolated farmhouses built of grey or yellowish brick have a bleached appearance.
- Settlement is focused in small towns and in villages. There are a number of expanding commuter villages located generally within valleys. Letchworth Garden City is a nationally significant designed garden city.
- In and around the wider area of Newmarket, stud farms impose a distinctive geometric, enclosed and manicured pattern to the landscape.
- The NCA is traversed by the Icknield Way, an ancient route that is now a public right of way. Roads and lanes strike across the downs perpendicularly and follow historical tracks that originally brought livestock to their summer grazing. Today major roads and railways are prominent landscape characteristics of the NCA.



Chalk Hills and Scarps



Summary

Overall description:

Prominent chalk hills, in places forming a distinct edge, elsewhere incised by dry valleys to create a rounded rolling landform. Often well wooded with long distance views, this is a large scale landscape with an ordered pattern of fields and woodlands

Location:

Located in a narrow band running through the central part of the East of England, extending from Hertfordshire, through Bedfordshire, to south Cambridgeshire and west Suffolk.

Physical environment

Landform:

Comprises an elevated rolling chalk landscape exhibiting a rounded, rolling 'downland' topography, with localised steep-sided scarp slopes.

Natural / water features:

Free draining land with frequent dry valleys, some of which contain small seasonal watercourses that are often not visually obvious.

Vegetation and land use

Ecological character:

Much calcareous grassland found in this landscape, especially on shallow soils on steeper scarp and valley slopes (eg. Warden and Galley Hills). Lowland mixed woodland (often ancient comprising ash/beech/hazel) is also a predominant habitat type.

Primary land use :

Predominately arable land use, with permanent pasture and woodland on steeper slopes.

Tree cover:

Ancient semi-natural beech, lime and sycamore woods on summits and slopes, with more recent woodland blocks and shelterbelts around Newmarket.

Cultural pattern

Historic features:

Historic features such as tracks (eg. Icknield Way) and hill forts occur throughout this area.

Enclosure pattern:

A medium to large scale, regular field pattern defined by hedgerows, with post and wire fences on steeper slopes. Fields show a mix of rectilinear & sinuous patterns reflecting the process of planned surveyor enclosure from common fields.

Settlement pattern:

Low density settlement, rural in character comprising discrete historic villages and a scattering of large farms. General absence of settlement on steeper scarp slopes. Urban development associated with larger towns impinges on this landscape.

To be completed at a later date.

Historic development :

This is a landscape almost entirely dominated by late enclosure of former arable fields and common grazing. Some other enclosures are recorded and appear to represent early piecemeal enclosure of common fields.

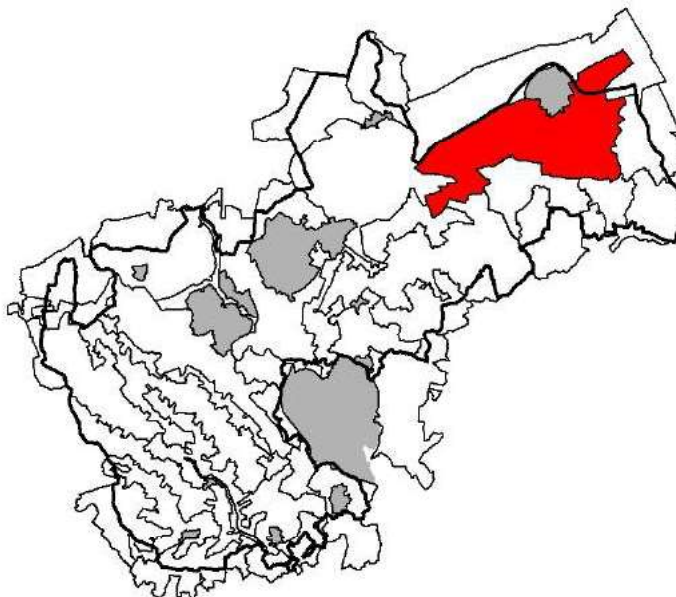
Perceptions

Tranquility:

A rural landscape which can feel empty and unpopulated in places.

Views:

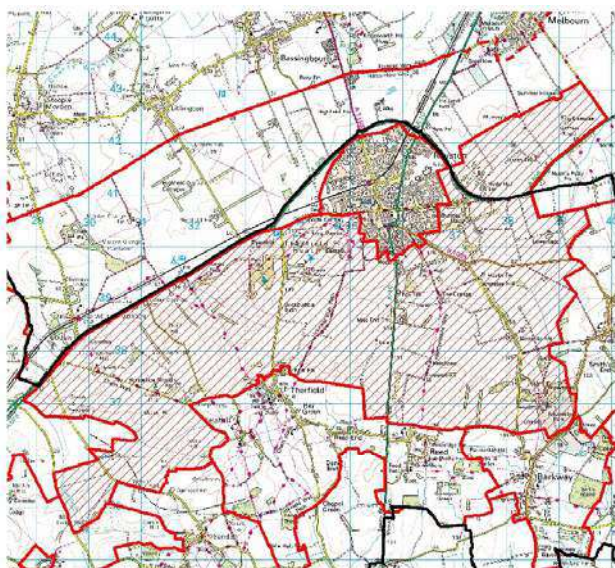
A simple, open landscape, affording long distance, panoramic views.

LOCATION

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LANDSCAPE CHARACTER AREA

An extensive area running parallel and to the south of the A505. The scarp extends from the Cat Ditch Valley in the west to the Wardlington Bottom Drain in the east. The area extends southwards, rising to meet the break of slope with the plateau landscape. To the east of Royston a small chalk outlier extends northwards, ending at Goffers Knoll.



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LANDSCAPE CHARACTER

Chalk scarp slope incised by dry water cut valleys. Undulating landform with steeper slopes towards the upper plateau edge. Large scale arable fields with ordered pattern of rectilinear field boundaries and lanes with straight boundaries. Occasional farmsteads. Small tree plantations set out in discrete coverts. Individual tree belts.

KEY CHARACTERISTICS

- Incised chalk scarp slope
- Large scale pattern of rectilinear fields
- Long straight roads, open and without hedge boundaries, climbing the face of the scarp
- Absence of larger settlements

DISTINCTIVE FEATURES

- Area abuts suburban boundary to Royston
- Therfield Heath, to the southwest of Royston - an area of uncultivated land designated as a SSSI
- Coombe Road sits within a deeply incised valley
- The A10, Roman road
- Historic earthworks
- Newsells Park

location	assessment	evaluation	guidelines
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ASSESSMENT

PHYSICAL INFLUENCES

Geology & soils

Chalk overlain by shallow rendzina soils and calcareous loams. Some areas of glacial gravels notably at Wardington Bottom.

Topography

Sloping landform falls from chalk plateau to rolling lowland landscape to the north.

Degree of slope

Typically 1:10 but slightly shallower in places.

Altitude range

70m to 160m.

Hydrology

No discernable water courses other than localised drainage ditches.

Land cover and land use

Predominantly arable.

Vegetation and wildlife

The principal habitat of importance is chalk grassland. An area of high biodiversity is centred around Therfield Heath and Coombe Bottom (Coombe Road, south west of Thrift Hill). Therfield Heath, SSSI is the single largest area of unimproved chalk grassland in the county. It comprises coombes, downland and areas of mixed scrub home to an array of plants and invertebrates including pasque flower, perennial flax, bastard toadflax and burnt tip orchid and the largest colony of chalkhill blue in the county. Coombe Bottom is another key chalk grassland area occurring on steep scarp slopes. Woodland communities on these slopes are primarily broadleaved, with beech being a notably successful species. Other important sites occur at Deadman's Hill, Heath Farm, Barkway Road, Whiteley Hill and the A505 cutting at Burloes.

Unimproved calcareous grassland occupies only 0.25% of the land use of North Hertfordshire and supports a number of rare plants and invertebrates, including fragrant orchid, dropwort, great pignut, juniper as well as nationally uncommon butterfly species such as small blue, chalkhill blue and Duke of Burgandy. Semi-improved calcareous grassland occurs at Newsells Park.

The open fields of the Character Area are noted for breeding quail, stone curlews, harriers, short-eared owl, merlin and grey partridge.

HISTORICAL AND CULTURAL INFLUENCES

Numerous cropmarks, revealed by aerial photographs, of prehistoric ring ditches linear features and enclosures including a probably prehistoric or Romano-British field system cover a large part of the Character Area.

Ancient earthworks cut into the chalk are common, including chalk pits and lynchets.

The best surviving ancient landscape in the county lies in the northwest. Surviving elements include Neolithic long barrows, a Bronze Age barrow cemetery and an Iron Age boundary called 'The Mile Ditches'. A medieval moated site lies to the south of the Barrow Cemetery. Springfield style enclosure, three bowl barrows and two pond barrows on Whiteley Hill lie to the east of the area. A prehistoric barrow cemetery and Cross Dyke also occurs in Five Hill Field, 290m southwest of Heath Farm.

Field Pattern

The historic agricultural landscape pattern is comprised of 18th century and later enclosure, post 1950s enclosure and prairie fields with post 1950s boundary loss. 20th century leisure use lies to the north with a 20th century stud farm and informal medieval parkland to the east. There are also pockets of 19th- 20th century plantation in the area.

Transport Pattern

Long straight roads open and without hedge boundaries, climbing the face of the scarp slope. The A10, Roman road cuts across the area.

Settlements and Built Form

The historic settlement pattern is characterised by occasional farmsteads. A small number of traditional buildings lie to the southeast in Newsells Park. Queen Ann House, burned in WWII, was replaced by a smaller NeoGeorgian house in 1954. 18th century outbuildings survive as part of Queen Ann House including stables, which are built of red brick with lantern and pediment archway. The timber framed and thatched Lodge was built in 1804. Newsells Bury lies to its west in the grounds, a small brick house of the late 17th century. To the north of Newsells Park lies a small hamlet of 17th century thatched estate cottages.

EVALUATION

VISUAL AND SENSORY PERCEPTION

Expansive open area with long distance views to the north.

Rarity & distinctiveness

* Chalk scarps are a rare landscape type within the region.

VISUAL IMPACT

Scarp provides a vantage point for views over Royston to the north.

ACCESSIBILITY

Pattern of roads and footpaths runs up and down the scarp face. Connections radiate out from Royston. Icknield Way and Hertfordshire Way long distance paths cross the Character Area.

COMMUNITY VIEWS

Hertfordshire County Council (HCC) have undertaken Tier B (Community of Place) consultations. Views of the local community have been sought and contributor's responses to each of the Character Areas will be analysed and a summary of the responses provided by HCC.

LANDSCAPE RELATED DESIGNATIONS

LC2	Landscape Conservation Area
SSSI	Therfield Heath
SAM 106	Triple ditches at Galley Hill: Sandon
SAM 20622	Gallows Hill Barrow: Kelshall
SAM 20630	Earls Hill Barrow part of the Round Barrow Cemetery on Therfield Heath: Therfield
SAM 20631	Two Bowl Barrows part of the Round Barrow Cemetery on Therfield Heath: Therfield
SAM 20632	Five Bowl Barrows part of the Round Barrow Cemetery on Therfield Heath: Therfield
SAM 20633	Bowl Barrow one or two Round Barrows on Penhills: Therfield
SAM 20634	Bowl Barrow one of two Round Barrows on Penhills: Therfield
SAM 20635	Long Barrow on Therfield Heath: Therfield
SAM 20640	Bell Barrow part of the Round Barrow Cemetery on Therfield Heath: Therfield
SAM 20641	Bowl Barrow part of the Round Barrow Cemetery on Therfield Heath: Therfield
SAM 20664	Bowl Barrow 1km south-west of Heath Farm: part of the Round Barrow Cemetery on Deadmans Hill: Sandon
SAM 29389/01 and 02	Springfield style enclosure tree bowl barrows and two pond barrows on Whiteley Hill: Barkway
SAM 33374	Prehistoric Barrow Cemetery and Cross Dyke in Five Hill Field, 290m SW of Heath Farm: Sandon
SAM HT 125	Mile Ditches: Therfield Heath

EVALUATION

CONDITION

Land cover change:	Insignificant
Age structure of tree cover:	Over mature
Extent of semi-natural habitat survival:	Relic
Management of semi-natural habitat:	Poor
Survival of cultural pattern:	Declining/Relic
Impact of built development:	Moderate
Impact of land-use change:	Low
Matrix Score:	Poor

ROBUSTNESS

Impact of landform:	Prominent
Impact of land cover:	Prominent
Impact of historic pattern:	Apparent
Visibility from outside:	Widely visible
Sense of enclosure:	Open
Visual unity:	Unified
Distinctiveness/rarity:	Frequent
Matrix Score:	Strong

CONDITION	GOOD	Strengthen and reinforce	Conserve and strengthen	Safeguard and manage
	MODERATE	Improve and reinforce	Improve and conserve	Conserve and restore
	POOR	Reconstruct	Improve and restore	Restore condition to maintain character
		WEAK	MODERATE	STRONG
		STRENGTH OF CHARACTER*		

GUIDELINES

STRATEGY AND GUIDELINES FOR MANAGING CHANGE:

Restore Condition to Maintain Character

- Maintain the general open character of the area and in particular the long distance views over the lowland landscape to the north
- Promote management of woodland to encourage a diverse woodland flora
- Promote the creation of buffer zones between intensive arable production and areas of semi-natural habitat and the creation of links between habitat areas
- Maintain and extend the rights of way network

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