

Norfolk Vanguard Offshore Wind Farm Landscape Character Assessment Documents

2. Breckland Council Part 4 of 5

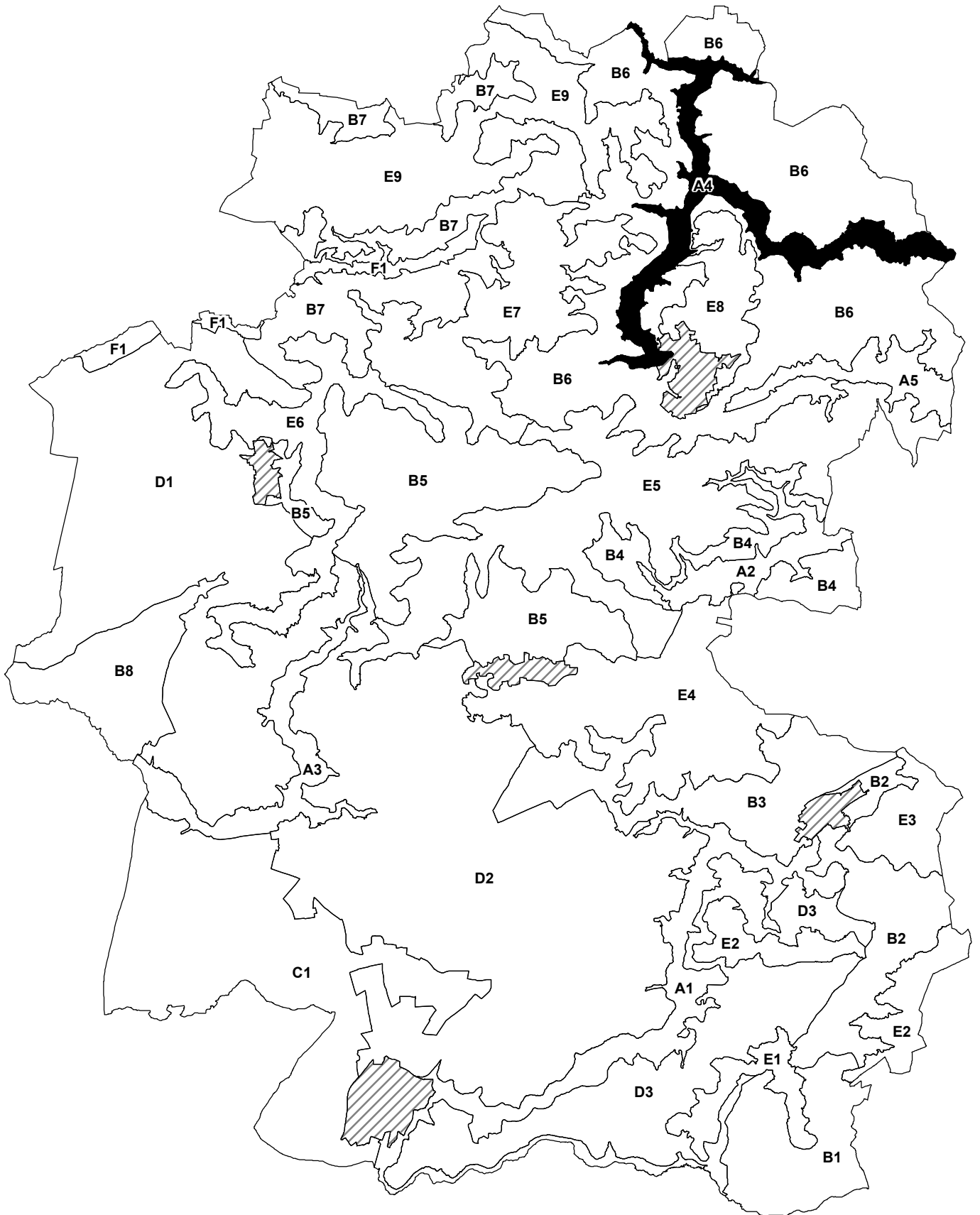
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Photo: Kentish Flats Offshore Wind Farm



A4: RIVER WENSUM AND BLACKWATER



A4: RIVER WENSUM AND BLACKWATER

Location and Boundaries

- A4.1 The *Wensum and Blackwater* is an easterly draining catchment in the north eastern part of Breckland District, flowing from North Norfolk in the north and continuing into Broadland District to the east. The valley character is distinct from the surrounding *Wensum and Tud Settled tributary farmland*.

Key Characteristics

- An easterly draining catchment carved into Upper Chalk and overlying chalky boulder clay. Glacial sands and gravel form deposits within the river channel, as well as alluvial sediments which are overlain by the silty/sandy soils of the valley.
- Glacial sands and gravels have been exploited through mineral workings, with a large number of active and disused pits. Redundant workings have created a chain of lakes with large parts of the valley floor being open water.
- Topography ranges from 20-40m AOD, and forms a broad, shallow valley.
- The presence of hedgerow trees and small blocks of woodland creates an enclosed character with framed views of the flat valley floor, and along the rural road network.
- There are occasional views up the valley sides to the crests with landmark buildings such as Swanton Morley church and Bylaugh Hall being visually prominent.
- Parts of the valley floor comprise small grazed fields, divided by ditches and dykes creating a distinctive landscape pattern and habitat. Willows, alder and poplar punctuate the flat open landscape. Black poplars are a distinctive feature.
- Remnant pockets of heath survive within the valley on areas of sand and gravel drift.
- The higher ground of the valley sides is characterised by arable cultivation, with some areas of pasture. Fields are bounded by mature hedgerows and hedgerow trees.
- The valley is ecologically rich, representing a variety of habitats. The entire river channel is designated as a SSSI and a SPA, with adjacent areas of wet unimproved meadow, fen scrub and alder carr (also a SAC). The valley also contains Bentley and Hoe Meadows SSSI, Dillington Carr SSSI and Mill Common SSSI.
- Within the valley floor there is one Scheduled Monument, a moated site south east of Spong Bridge. The mill at North Elmham indicates the history of human interventions on the Wensum and is indicative of a former network of mills along the river.

- Brick hump back bridges form characteristic bridging points, whilst weirs and brick and weatherboard mills are distinctive features. Verges and hedgerows lining the narrow rural roads are an important landscape and wildlife feature.
- Settlement is characteristically scattered farmsteads, hamlets and mills, plus occasional edges of villages (such as North Elmham and Beetley) which have spread into the valley from the adjacent *Wensum and Tud Settled tributary farmland*.
- Recreational opportunities are provided by rights of way although there is limited pedestrian access to the river. The commons (open access land) however provide a notable recreational opportunity.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- A4.2 The River Wensum is an easterly draining catchment cutting through the underlying Upper Chalk formation by two main periods of geomorphological activity. The river follows a meandering course through a broad, shallow and well defined valley and meets the course of the Blackwater Tributary near Billingford Hall. The boundaries of the *River Wensum and Blackwater* character area are topographically, with the 40m contour marking the valley crests. The change in landform is subtle with the valley sides dropping gently away to mark the transition from the more elevated areas of the adjacent *Wensum and Tud Settled tributary farmland* character area.
- A4.3 Drift deposits of sand and gravel were deposited by glacial meltwater and are a characteristic feature of the valley sides. The drift deposits have a strong influence on the soils in the valley and have significantly influenced both the early colonisation and the development of agriculture and industrial activity.
- A4.4 The sand and gravel drift geology has resulted in areas of heathy common land interspersed with woodland. The sands and gravels have also been excavated and there are numerous relict and operational sand and gravel extraction pits along the valley. Operational pits include the pit adjacent to Billingford Common, but there are a greater number of pits which have been abandoned. Vast expanses of open water, surrounded by regenerated tree cover are now a feature of the valley floor landscape.
- A4.5 Land within the floodplain is still traditionally managed for hay crops and by grazing, creating a range of important grassland habitats some of which are seasonally inundated. The mosaic of meadow and marsh habitats, including one of the most extensive reedbeds in the country outside the Broads, provides a niche for a wide variety of specialised flora and fauna. The pastoral fields on the valley floor are medium sized and irregular, defined by rural style fencing, ditches and occasional hedgerows. The higher ground of the valley sides is characterised by medium sized, geometric fields bounded by hedgerows and under arable cultivation.
- A4.6 The ecological importance of the character area is represented by the number of ecological designations, and the designation of the entire River Wensum as an SSSI and SPA (SAC). In addition, Bentley and Hoe Meadows, Mill Common and Dillington Carr are all designated as SSSI's. There are four areas of Registered Common Land,

the largest being Beetley Common. Important habitats include osier and alder plantations and carrs, pollarded willows which occur along the river bank and calcareous grassland on the valley floor. Alder carrs have been evident in Norfolk since the 13th Century. A small number of ancient woodlands occur within the character area, e.g. at Sennowe Park and near Worthing Mill. Woodland species also include ash, oak, hazel and birch.

A4.7 The entire character area falls into the core areas category of the Ecological Network Mapping Project for Norfolk due to its variety of riparian habitats and biodiversity value. It is also highlighted as an area for reedbed creation and coastal and floodplain grazing marsh. Reedbeds are identified as priority habitats within the Norfolk BAP.

A4.8 The course of the River Wensum as it flows through Breckland District has experienced relatively little human intervention in contrast to stretches of the river outside of the district which have been dredged and straightened. Certain sections of the river are being rehabilitated as at Bintree Mill.

Historic Character

A4.9 There is a long history of settlement and human activity in the Wensum Valley, with evidence of the valley being farmed during the late Iron Age. During the Roman Period, large areas of forest were cleared and this pattern of clearance continued through later centuries with substantial Saxon settlements found along the edge of the valley such as at North Elmham (Saxon Cathedral site).

A4.10 During the Medieval period, cultivation would have continued in places on the valley sides with grazed pasture land on the valley floor. Medieval enclosure is still evident in the landscape, in the form of very small fields surrounding settlements (e.g. south of Gressenhall) on the valley sides. Drainage of land within the valley during the last two to three hundred years using an extensive network of drainage ditches has lowered the water table, and made the pasture land more productive.

A4.11 Faden's 1797 Map of Norfolk has identified a number of commons at Hoe and Billingford, which are still extant, although reduced in area due to subsequent mineral extraction.

A4.12 Numerous weirs were constructed along the River Wensum in the 19th century to control the water level, providing an adequate head of water for the mills. Mills were used for a variety of uses, but particularly for the production of paper.

A4.13 Substantial areas of parkland were laid out in the 17th, 18th and 19th centuries, the houses themselves often being constructed outside of the *River Wensum* character area, but their grounds having a strong influence on character within the valley, for example Sennowe Park in the north (with Sennowe Hall itself located outside Breckland District). During the 19th century the river was dammed to create large lakes which are a feature of the floodplain today.

A4.14 During the 17th to 19th centuries, there is evidence of considerable industrial activity within the Wensum Valley, making use of the abundant water supply. The railway line which runs through parts of the *River Wensum and Blackwater* character area, was an important feature at this time linking the area to the rest of Norfolk.

The line no longer forms part of the mainline railway network, having been developed for recreational purposes by the Mid Norfolk Railway Group.

Settlement and Built Character

- A4.15 The River Wensum valley itself has a low settlement density, although the adjacent *Wensum and Tud Settled tributary farmland* character area has a higher settlement density which in places overlooks the river valley, and is visible from within it, with housing sometimes encroaching over the valley sides e.g. South Beetley.
- A4.16 Settlement within the valley comprises isolated farm buildings or small hamlets along rural roads and lanes. These are often associated with weirs and mills such as at Worthing Mill and Elsing Mill.
- A4.17 The local vernacular is red brick with flint and clay ridge tiles, examples of which can be seen in Lyng. Mills are characteristically red brick, often with white painted weather boarding e.g. Elsing Mill.

Perceptual/Visual

- A4.81 The character area retains a strong sense of enclosure due to the woodland blocks on the valley floor and the rural lanes bounded by mature hedgerow and hedgerow trees. Views out of the character area to the crest of the valley are limited by the woodland blocks and wooded lanes, but there are occasional framed views up to landmark buildings on the crest of the valley as at Swanton Morley Church and Bylaugh Hall.
- A4.19 A strong character is created by the meandering river course, associated wetland habitats, small scale grazed pastures and network of ditches and the traditional built structures such as the brick bridges and weatherboard mills. All of these features combine to create an intimate but varied landscape.
- A4.20 Although the river and immediately surrounding grazed pasture creates a tranquil quality, the visual intactness of the character area is reduced by occasional visual instances of unsympathetic after use design of the sand and gravel pits, and by encroachment of settlement in localised areas.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

The following are judged to be the key inherent landscape sensitivities which are fundamental to the character of the landscape.

- Natural meandering course of the River Wensum (SSSI/SAC) and associated floodplain habitats and landscapes which are especially sensitive to river engineering and changes in water quality and water flows;
- The riparian vegetation on the valley floor including willow/osier beds, carrs, grazed pastures and hay meadows (SSSI) which represent the traditional, historic land use, contribute to the small scale character of the valley and provide a valuable biodiversity resource;

- The tranquil rural character of the Wensum Valley and the sensitivities to incremental small scale change;
- The balance of open water within the valley and the need to ensure sensitive restoration and afteruse of sand and gravel workings;
- Areas of common land and associated heathy vegetation which are important as a historic feature, for recreation and biodiversity and require active management to sustain their character;
- Parklands such as Sennowe Park impart a historic and designed character to parts of the landscape;
- Low density of settlement comprising occasional scattered farm buildings and small hamlets clustered at bridging points and close to mills, which is sensitive to new development, particularly extension of settlement in the adjacent character area;
- The varied field pattern, including the small scale pattern of medieval ‘closes’ on the valley side associated with settlement, the pastures enclosed by ditches on the valley floor and medium scale hedged enclosures of the valley side which indicate historic processes and are especially sensitive to boundary change/loss;
- Network of narrow rural lanes bounded by mature hedgerow and hedgerow trees which contribute to the enclosed, small scale character of the valley, which are especially sensitive to upgrading/urbanising influences;
- Brick humpback bridges create a strong sense of tradition and historic character as well as serving as an important crossing point. They would be sensitive to road widening or an increase in traffic pressure;
- The site and landscape setting of historic features including the mills and occasional halls and churches on the valley crest which provide an important focus in views from the valley.

Visual Sensitivities

A4.21 The open views across the flat valley floor are sensitive to further built development or the creation of large areas of uncharacteristic woodland planting, which would jar with the existing small blocks of wet woodland and alder and willow carr. The framed views to an open/undeveloped valley crest are sensitive to encroachment by any form of development, particularly extension of residential development and tall structures which would be very dominant within the small scale context of the valley.

Current State of the Landscape

A4.22 Whilst areas of the landscape are interrupted due to the former mineral extraction, the remaining areas of valley floodplain are currently in good condition and there is little evidence of the condition declining. There is evidence that traditional management techniques are being used; the floodplain is characterised by active grazing and the traditional osier and alder carrs have been retained.

A4.23 There are various initiatives to maintain the character of the valley, including the Wensum Valley Project which is a partnership of Local Authorities aiming to conserve wildlife, landscape and heritage, improve countryside access and promote community action and involvement in the Wensum Valley.

Landscape Change

Past Change

- Loss of wetland habitats as a result of land drainage and agricultural intensification;
- More recently, positive agricultural management through the Broads ESA, including conversion of arable to grassland;
- Drainage and some dredging/straightening of sections of the river;
- Woodland planting including some conifer belts and planting/woodland regeneration on areas of common land;
- Extraction of sand and gravel, plus restoration/after use of schemes;
- Closure/loss of mills, the buildings often being converted for residential use;
- Spread of residential development from villages in the adjacent Settled tributary farmland landscape character area, down the valley sides;
- Positive Initiatives associated with the Wensum Valley Project e.g. rehabilitation of the river at Bintree;
- Closure of the Dereham branch of the Mid Norfolk Railway line and development for recreational purposes.

Future Change

A4.24 Potential future change may arise through the implementation of agri environment schemes. The cessation of mineral extraction and the ongoing after use design of extraction sites may affect the landscape and visual character of the valley. The Wensum Valley Project will continue to initiate positive landscape change in the valley. Potential open space sites are also identified in the valley, adjacent to the north western edge of Dereham, in the Breckland District Local Plan.

LANDSCAPE STRATEGY

The overall management objective should be to conserve the tranquil, pastoral, undeveloped character of the *River Wensum and Blackwater* and to manage and where appropriate increase natural floodplain habitats such as grassland, reedbeds, watermeadows, and grazing marsh, as well as areas of heathland associated with the commons. The wooded lanes of the valley sides should be conserved, ensuring that the hedgerows and hedgerow trees which create a sense of enclosure and historic character are maintained.

Guidelines

Landscape Management

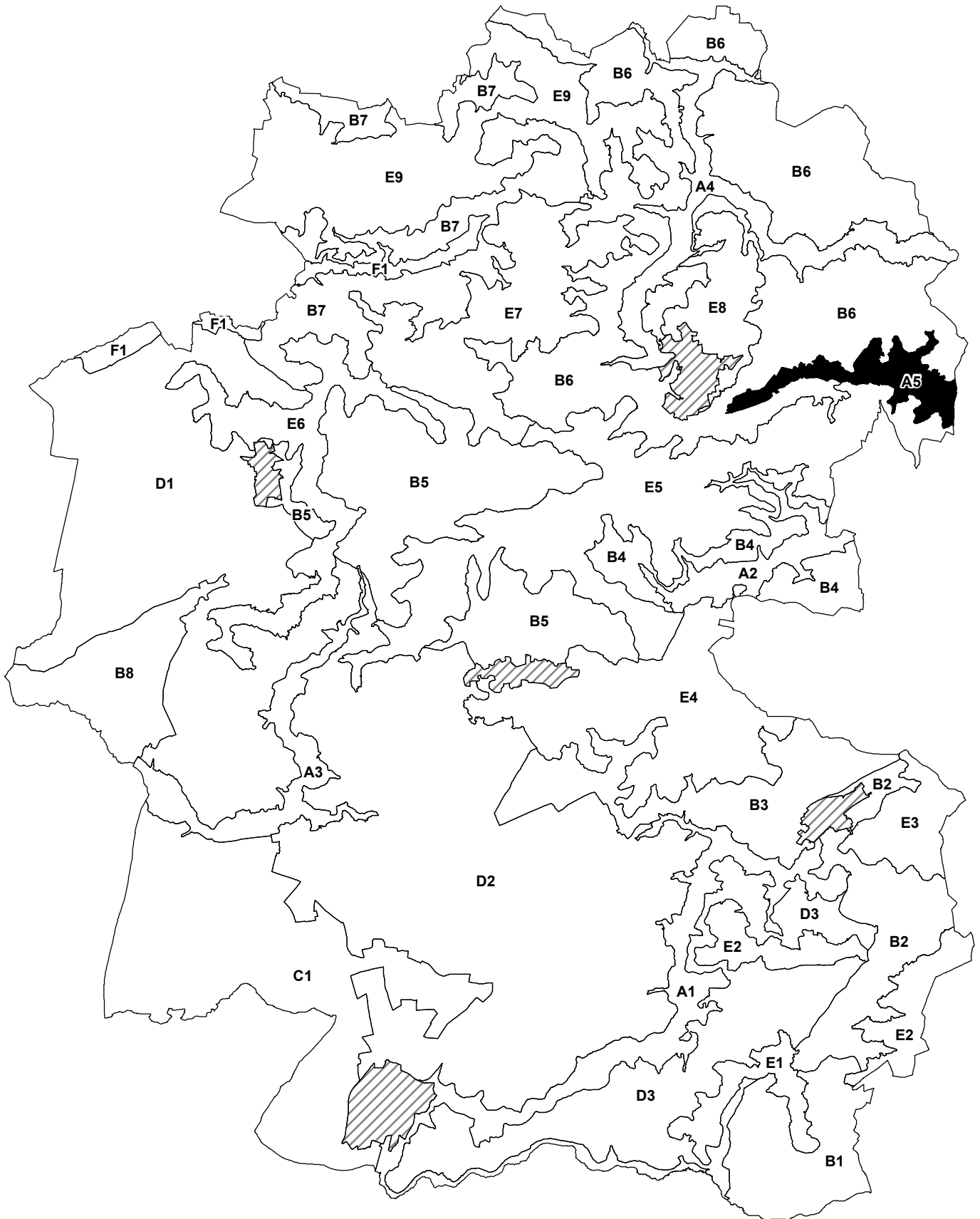
- Maintain hedgerow and hedgerow tree boundaries of the rural roads and fields on the valley sides, ensuring succession of hedgerow trees and gapping up hedgerows with native species where appropriate;
- Maintain the predominantly grazed pastoral valley floor; and seek to avoid further extension of arable cultivation down the valley sides;
- Maintain existing extent and quality of wet meadow and grazing marsh habitat;
- Seek to conserve the water levels and water quality within the river and associated ditches;
- Seek to create area of reedbed vegetation in areas of low nature conservation interest, to fulfil BAP/EcoNet objectives, subject to the provisions of agri environment schemes;
- Maintain areas of alder/osier carr at their current extent and seek to plant wet woodland species as part of the after use design of mineral extraction sites;
- Maintain the small scale field pattern, particularly the historic small scale 16th century enclosure found surrounding settlements.

Development Considerations

- Conserve the historic character of nucleated settlements on the valley floor associated with mills;
- Conserve views of the wooded character of the valley crest with occasional landmark buildings, ensuring that new development does not detract from this view;
- Monitor the expansion of Lyng and North Elmham to ensure that development does not extend across the floodplain along the rural roads;
- Ensure that any development of leisure and recreation facilities responds to and enhances its landscape setting, and explore opportunities for the sensitive after use design of gravel pits;
- Monitor the expansion/widening of the 'A' and 'B' roads crossing the landscape, and introduction of new roads, with particular attention being paid to the crossing points and the protection of the historic brick humpback bridges;
- Conserve the strong wooded context to settlements and use this as a template for integration of new development;
- Improve connectivity between the character area and the river to make use of its potential as a recreational resource. Ensure that any recreational development takes into consideration the number of ecologically important habitats in the character area.



A5: UPPER TUD



A5: UPPER TUD VALLEY

Location and Boundaries

A5.1 The *Upper Tud* Valley is an easterly draining catchment carved through the underlying chalk solid geology, overlain by drift deposits of silt, sand, gravel and clay. The watercourse forms a small component of the broad, contained but clearly defined valley which is bounded to the north and west by the *Wensum and Tud Settled tributary farmland* and to the south by the *Shipdham Plateau*. To the east the river crosses the District boundary and extends into the adjoining Broadland District and South Norfolk District.

Key Characteristics

- An easterly draining catchment carved through chalk solid geology which is overlain by glacial drift deposits of sand, silt, gravel and clay, with the valley floor lying at 30m AOD and the crests at 50m AOD.
- Due to the containment provided by landform and by vegetation within the valley floor, views are intermittent, although church towers (e.g. East Tuddenham/Hockering) are prominent, and the skylines of the valley crests are uninterrupted.
- Pastoral farmland is the predominant land cover, with areas of rough grazing and wet meadow, in addition to alder dominated strips to the river, which provide intermittent views of the watercourse.
- The network of pastoral fields is primarily of geometric pattern and is generally small to medium in scale, with boundaries defined by both mixed native hedgerows and by field drains and tributaries.
- A number of historic land cover elements survive such as the alder dominated carr woodlands and Warren Plantation. The ancient woodland at Hockering Wood SSSI extends into a small part of the character area.
- The meandering course of the Tud and its associated tributaries and wet woodland strips form distinctive elements within the valley floor, as do the narrow, historic river crossing points.
- Historic features include the moated site in the north western part of the character area and the remote church of East Tuddenham.
- Settlement pattern is associated with the junctions of narrow rural roads and has a nucleated form. A number of isolated farmsteads occur across the landscape.
- A textured wetland landscape, with the only views of the River Tud available from the crossing points. The Tud Valley has a peaceful, pastoral character with only localised intrusion from the A47 in the northern part of the character area.
- An extensive network of rights of way intersects the character area, both along the course of the river and across the valley sides.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- A5.2 The Tud Valley is an easterly draining catchment carved through the underlying chalk solid geology and overlain with glacial drift deposits of sand, gravel and clay. Topography is that of a broad shallow and well defined valley, lying between 30-50m AOD.
- A5.3 Landcover is predominantly pastoral farmland, with some areas of rough grazing and wet meadow/fen, in addition to alder dominated woodland strips and areas of carr woodland along the course of the river and minor tributaries draining into it.
- A5.4 Field pattern is predominantly geometric (occasionally irregular) and comprises small to medium scale fields. Small fields in particular are associated with settlement edges and may be of ancient or pre Enclosure 'close' formation. Mixed boundary hedgerows characterise a number of field boundaries, in addition to field drains and tributaries.
- A5.5 A number of areas of fen and wet meadow within the valley floor are designated as County Wildlife Sites, illustrating the ecological potential of parts of the character area. The course of the Tud lies within the Norfolk Ecological Network Mapping Project's Core Area, with the more intensively managed valley sides lying within the Enhancement Area for heathland, grassland and woodland re-creation. Carr and wet woodland which occurs within the valley is a priority habitat within the Norfolk BAP, as is broadleaf ancient woodland (e.g. Hockering Wood).

Historic Character

- A5.6 Faden's 1797 Map of Norfolk illustrates a number of historic land cover elements such as the commons of East Tuddenham and Badley Moor, in addition to a minor parkland associated with the parsonage at Honingham, to the eastern edge of the character area. A low density settlement pattern of nucleated villages and hamlets is also shown on the 1797 map, together with small areas of woodland to the north of Hockering (Hockering Wood).
- A5.7 This low density settlement pattern is extant although the landcover pattern has significantly changed due to subsequent Enclosure, with associated loss of heath/common land at Badley Moor and East Tuddenham. Hockering Wood is designated ancient woodland and remains today. Warren Plantation refers to the historic Breckland practice of 'warrening' or rabbit farming.
- A5.8 Areas of dead and regenerating elms and associated suckering indicate the historic distribution of species in the valley floor before the onset of Dutch Elm Disease in the 1970's.
- A5.9 A moated site in the north western part of the character area provides evidence of the historical continuity of settlement and human intervention within the valley landscape.

Settlement and Built Character

- A5.10 Settlement is small in scale and of a low density, generally nucleated pattern as at Hockering. Hockering has a characteristic isolated and visually prominent church and the village displays a small vernacular core, with a significant amount of mid-late 20th century expansion to the edges of the settlement. In terms of its relationship to the landscape this was historically based on a junction of rural roads although the village is now somewhat divorced from the valley floor due to the re routed A47 which creates an abrupt, artificial settlement edge.
- A5.11 East Tuddenham Church is also a prominent feature, being isolated from its settlement which largely lies within the adjacent character area. Settlement within the Tud Valley is otherwise represented by small, isolated farmsteads and the linear hamlet of Rotten Row.

Perceptual and Visual

- A5.12 The *Tud Valley* is a peaceful, rural landscape clearly defined by a broad shallow valley landform. Evidence of the wetland character associated with the Tud is apparent in the areas of wet meadow, grazed pasture and alder carr, although the course of the Tud is often largely concealed by wet woodland, with views of the river generally confined to crossing points.
- A5.13 A range of pastoral and wetland elements provides a strongly textured quality to the landscape. Small to medium scale geometric pastoral fields contribute to the relatively intimate quality, as does the containment provided by landform and boundary/wet woodland vegetation within the valley floor. In experiential terms, the well defined valley crests create a clear, distinct sense of valley character. As such intervisibility with other landscapes is confined to intermittent views to the *Wensum and Tud Settled tributary farmland*. Church towers on the upper valley sides or the valley crests form prominent components of views such as at East Tuddenham.
- A5.14 Overall the *River Tud Valley* is tranquil in character due to the sparsely settled character and the network of narrow rural roads, with only localised intrusion from the A47 which intersects the northern part of the character area.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

- A5.15 The following are judged to be the key landscape sensitivities and positive landscape features which are fundamental to the character of the landscape.
- Wet woodland and carrs along the river define the character of the lowland river landscape, creating a densely wooded river corridor.
 - Isolated churches to the valley crests and upper valley slopes create prominent and historic built features.
 - Narrow rural roads and river crossings, which represent historic bridging points and are illustrated on Faden's Map.

- Gently sloping pastoral fields to the valley sides represent historic post Enclosure landuse and landcover pattern.
- The valley crests, which clearly define the character area.

Visual Sensitivities

A5.16 Key visual sensitivities are considered to be the views to the churches at Hockering and East Tuddenham, in addition to the potential for intervisibility with other landscapes due to the largely open and unwooded skylines to the valley crests. Localised glimpsed views of the course of the Tud are also valued elements.

Current State of the Landscape

A5.17 This is a managed pastoral landscape with some localised areas of intact historic character, notably the areas of fen and carr woodlands in the valley floor and the ancient woodland at Hockering Wood on the upper valley slopes. Ecological integrity and habitat variety have otherwise been diminished by intensive land management.

A5.18 With the exception of some localised visual intrusion from the A47, this is a landscape of unified peaceful character.

Landscape Change

Past Change

- Agricultural Enclosure and associated loss of heath and common land;
- Dutch Elm Disease and its attendant implications for the former elm woodland cover in the valley floor;
- Arterial transport corridors and routes e.g. of the A47, which have created localised interruptions within the character area.

Future Change

A5.19 Potential future change may arise from the implementation of agri environment schemes and through the implementation of the Ecological Network Mapping Project's recommendations in respect of grassland restoration and woodland enhancement and re-creation.

LANDSCAPE STRATEGY

The overall landscape management objective should be to conserve the pastoral grazing lands and areas of fen, wet meadow and the carrs/ancient woodland. Opportunities should be explored to ensure sustained woodland cover in the valley floor through active management and new planting, as should the possibility for enhancing the settlement edge/landscape setting of Hockering.

Guidelines

Landscape Management

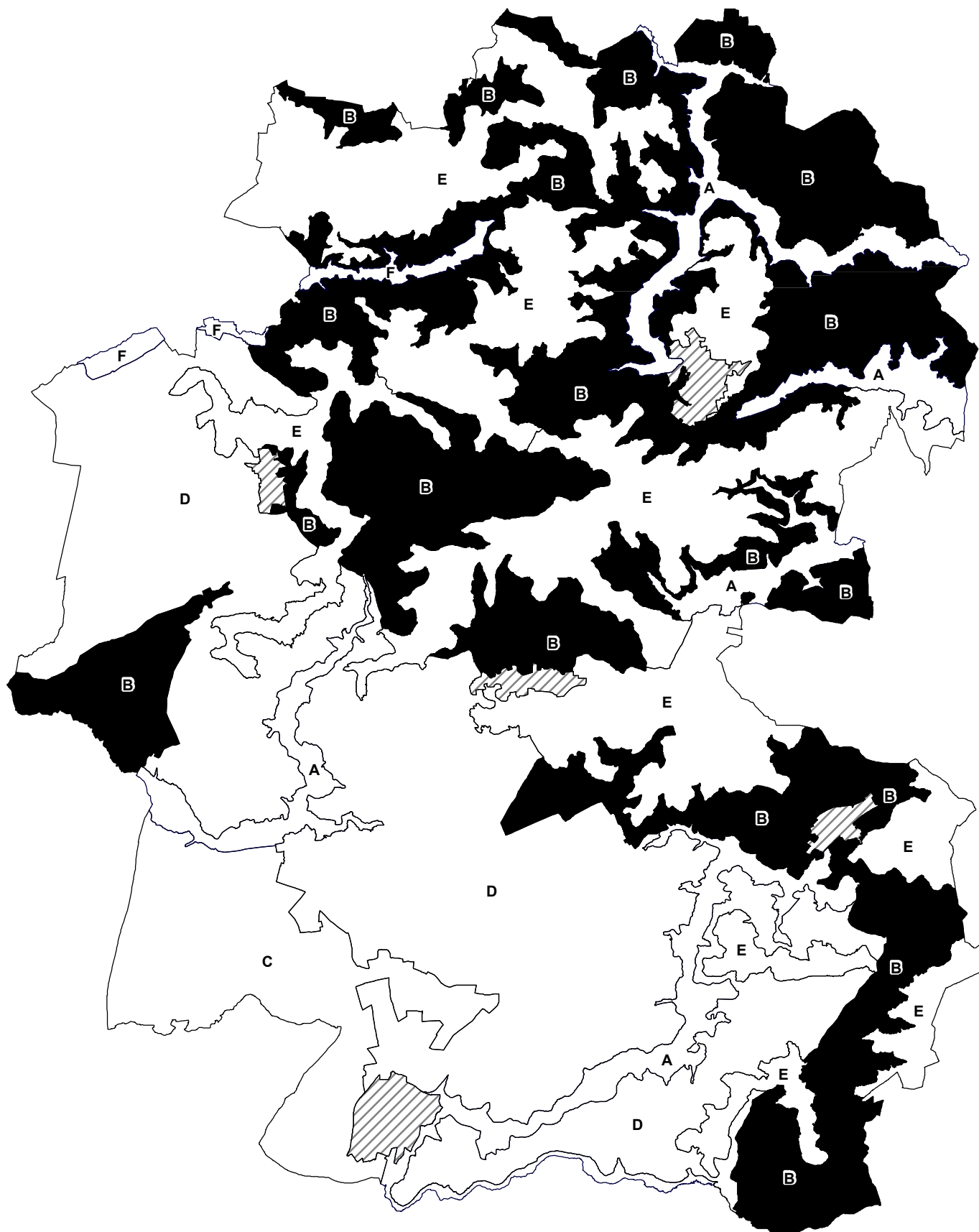
- Conserve existing ancient woodland and carrs through active and appropriate arboricultural management, reinforcing where appropriate with appropriate native species to ensure sustained woodland cover;
- Aim to reinforce and extend wet woodland along watercourses;
- Continue to maintain grazing pasture through traditional management techniques;
- Increase the biodiversity of more intensively managed grassland, creating and linking buffer strips along linear features such as hedgerows to provide a continuous network of wildlife corridors. Seek opportunities to re-create unimproved or semi improved species rich grassland and meadow.
- Conserve areas of fen and wet meadow through appropriate and traditional management practices;
- Conserve the small to medium scale pattern of fields, particularly early field systems which provide historic continuity in the landscape;
- Conserve the remaining field boundary hedgerows and reinforce/gap up where appropriate to ensure that they continue to provide a unity across the landscape as well as providing wildlife habitats;
- Conserve and manage the remaining field boundary ditches that are of importance for biodiversity as well as increasing the visual diversity of the landscape. Seek opportunities to extend/re-create areas of wetland habitat.

Development Considerations

- Conserve sparsely settled character of farmsteads and low density villages/hamlets;
- Conserve the network of minor rural roads, avoiding signage/highway works e.g. kerbs/traffic calming measures which could impair this character;
- Monitor settlement edges e.g. Hockering and ensure that where any new development takes place that it is of a high quality design and reflects the historic vernacular in terms of building materials and styles;
- Explore opportunities for enhancing the relationship of the A47 to the landscape through noise attenuation measures including native planting;
- Where views exist from the upper valley slopes account should be taken of these when planning any future change within the valley. The valley crests are also sensitive in terms of views from the valley floor.



B. SETTLED TRIBUTARY FARMLAND



LANDSCAPE TYPE B: SETTLED TRIBUTARY FARMLAND

B1 This landscape type is associated with the transition between both the river valley and plateau farmland landscape types, often encompassing a range of wetland features associated with tributary drains and fens in addition to larger scale landscape elements as a result of arable cultivation. Landform is distinctly undulating and this, along with field boundary vegetation, provides containment and limited intervisibility with other landscapes.

Key Characteristics

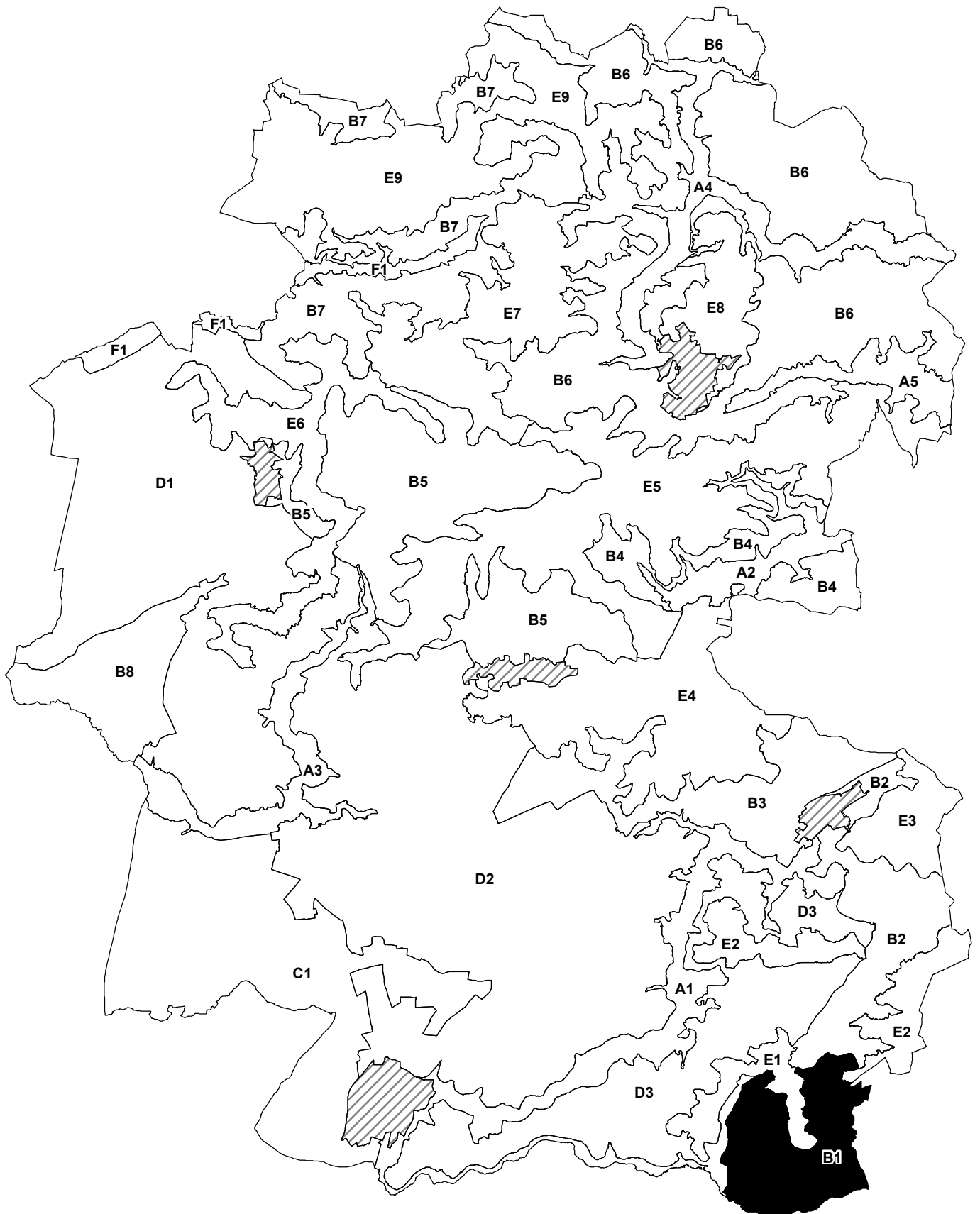
- Medium scale landscape, with variable enclosure/field boundary pattern.
- Topographic elevation ranges from 20-50 metres AOD, and landform is variable and undulating.
- Landcover is predominantly defined by arable agriculture with localised areas of pasture associated with tributary drains and more occasionally freshwater fen.
- Medium-large scale network of geometric fields.
- Remnant hedgerows and associated hedgerow oaks are often apparent.
- Settled character, with dispersed farmsteads and nucleated villages.
- Varied skyline, with church towers often forming prominent features of views.

Landscape Type B: Settled Tributary Farmland

Character Area

- B1 Little Ouse Tributary Farmland
- B2 The Buckenhams Tributary Farmland
- B3 River Thet Tributary Farmland
- B4 River Blackwater Tributary Farmland
- B5 River Wissey Tributary Farmland
- B6 River Wensum and Tud Tributary Farmland
- B7 River Nar Tributary Farmland
- B8 Gooderstone to Oxborough Tributary Farmland

BI: LITTLE OUSE SETTLED TRIBUTARY FARMLAND



BI: LITTLE OUSE SETTLED TRIBUTARY FARMLAND

Location and Boundaries

BI.1 The character area lies in the south eastern part of Breckland District, and the landscape type extends beyond the Breckland District Boundary into South Norfolk District to the east. The extent of the character area is defined by the valley of the Rivers Little Ouse and Waveney and adjoining Mid Suffolk District Boundary to the south, by the District boundary to the east, and by the more elevated landform of *Lophams Plateau* to the north west and *Snetterton Plateau* to the north east.

Key Characteristics

- Predominantly diamicton drift with sand and gravels, and peat/silty clay along minor tributaries of the River Little Ouse.
- This underlying geology is reflected in the soils, which comprise chalky till and glaciofluvial drift material, although there are localised areas of peat around Redgrave and Lopham Fen in the southern part of the character area.
- Topography is gently undulating, and ranges from 20-50 metres AOD, with locally enclosed areas associated with the tributary valleys contrasting with the more exposed plateau edges.
- Views are generally contained by landform variation and by field boundary vegetation. Intervisibility with other landscape character areas is relatively low, although the adjoining plateau farmlands, as at the Lophams, are locally visible.
- Landcover is predominantly arable, with distinctive areas of pasture and wetland vegetation, wet meadows and fens associated with the source of the Little Ouse and of the eastward flowing Waveney in the south.
- The importance and distinctiveness of the fenland habitats associated with the source of the Waveney at Redgrave and Lopham Fen are recognised in a number of nature conservation designations, including SSSI, SAC and RAMSAR site designations.
- Field patterns across the character area are highly variable, being small in scale adjoining the drains and tributaries, but otherwise medium to large in scale and geometric in pattern when associated with arable agriculture.
- The remains of the estate landscape associated with the Garboldisham Manor are distinctive elements.
- Mature oaks associated with the patchy/remnant field boundary hedgerows are locally distinctive features.
- Heathland was historically a feature of the character area, with Kenninghall Heath and Lopham Common, although this largely been lost to arable cultivation.

- Settlement pattern is defined by frequent, dispersed farmsteads and hamlets, and more occasionally linear or nucleated villages associated with the rural road network, notably South Lopham.
- Local vernacular includes red pantiles and timber framed buildings with render and brick skins.
- A tamed rural landscape, with a generally tranquil quality and more akin to Suffolk landscapes in character.
- Opportunities for recreation are provided by a relatively extensive network of rights of way, in addition to the Nature Reserve at Redgrave and Lopham Fen.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- BI.2 The physical geology of the character area is defined by glacial drift deposits, with the sands and gravels associated with the tributaries of the Little Ouse and the Waveney. The source of the Little Ouse rises in the southern part of the character area, as does that of the eastward flowing Waveney.
- BI.3 The landform is gently undulating, with topography ranging from 20-50 metres AOD across the character area and the tributary valley contrasting with the more elevated plateau edges.
- BI.4 In the southern part of the character area rows of distinctive hedgerow oaks associated with former hedgerows and the field boundary ditch system are present. Elsewhere, on higher areas many hedgerows have been removed.
- BI.5 The biodiversity interest of the wetland vegetation associated with the areas of unimproved fenland to the southern boundary of the character area has been recognised in the designation of the Redgrave and Lopham Fens as a SSSI and also as a SAC and a RAMSAR site.
- BI.6 In addition, a number of sites have been designated at County Level for their nature conservation interest (County Wildlife Sites or CWS), and these include a number of small pastoral fields adjacent to the Little Fen and The Banks, in addition to Hollands Wood.
- BI.7 The Norfolk BAP has identified a number of habitats as a priority for action within this character area, notably reedbed and floodplain grazing associated with the fen in the southern part of the character area. The fens of Redgrave and Lopham Fen are identified as part of a core area within the Norfolk Ecological Network Mapping Project, mainly in view of their international protection through designation as a RAMSAR site, and due to the relative scarcity of this habitat within Norfolk. Much of the remainder of the character area, encompassing the arable farmland and sites of former commons, falls within the Heath, Grassland and Wood Enhancement Area in view of the nature and extent of the arable cultivation.

Historic Character

- BI.8 The Historic Landscape Characterisation has identified a number of distinctive historic features within the character area, including unimproved freshwater fen and remnant unenclosed common land. These are set within a landscape of largely 20th Century field patterns as a result of arable intensification. Other historic landscape processes include piecemeal enclosure, reflected in areas of variable field pattern and scale, including small scale fields defined by drainage ditches in the south, and field boundary loss arising from agricultural intensification in the north of the character area.
- BI.9 Faden's 1797 Map of Norfolk identifies a number of commons and heaths within the character area, notably at Lopham Common and Lopham Fen. Lopham Fen is still extant and has been incorporated within the Redgrave and Lopham Fen Nature Reserve. The commons have otherwise largely been lost to agricultural intensification, although the rural lane network associated with these survives. The windmill at Lopham Common, identified on Faden's 1797 Map and formerly associated with the historic linen weaving trade, has been replaced with Mill Pond Farm.
- BI.10 A number of features associated with the historic settlement pattern are apparent, notably the moated sites at The Ling at South Lopham and the remains of the estate associated with Garboldisham Manor ('wilderness' woodland).

Settlement and Built Character

- BI.11 Settlement across the character area is defined primarily by small, scattered farmsteads and hamlets, in addition to the linear village of South Lopham which partly lies within the adjacent character area. South Lopham displays a range of timber framed buildings, in addition to later infill which has resulted in a 'ribbon' of development connecting it to North Lopham. The Norman tower of South Lopham Church is a prominent feature.
- BI.12 The settlements are related primarily to the rural road network and nodes/junctions. In terms of relationship to the landscape urbanising influences are occasionally apparent with gardenesque shrub and hedge species apparent to the edge of villages.

Perceptual/Visual

- BI.13 This landscape is characterised by intermittent and framed views, due to landform variation and more occasionally field boundary hedgerows. The scale of the landscape within the character area is variable and influenced both by land use and field boundary pattern, ranging from small scale in the areas associated with pasture and the fens along the minor tributaries, to relatively large scale and open landscape associated with arable cultivation.
- BI.14 Overall the character area has a fairly interrupted visual quality due to agricultural intensification and associated loss of historic field boundary hedgerows, although there are localised areas of intact and historic landscape, as at Redgrave and Lopham Fen.

BI.15 Areas of settlement are small in scale and essentially rural in character. As such the character area generally has a tranquil quality, being dissected only by a network of rural lanes.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

- Wetland features associated with Redgrave and Lopham Fen, such as fens, ditches, reedbed, tributaries and pollarded willows associated with watercourses, which are important for biodiversity;
- Grazing land and pastoral fields are apparent in the southern part of the character area, indicating historic land use;
- Remaining field boundaries, in particular the hedgerow oaks which form dense and distinctive lines in the southern part of the character area;
- The low density settlement pattern associated with the narrow rural road network;
- Tranquil, essentially rural character.

Visual Sensitivities

BI.16 The key visual sensitivities associated with this character area include the generally framed views, which are contained both by landform and to an extent field boundary vegetation, particularly in the more intact southern part. There are few instances of intervisibility with other character areas, although the adjoining plateaux are locally visible. There are some key views to local features such as the church tower at South Lopham.

Current State of the Landscape

BI.17 This is a landscape of variable condition. Much of the character area is relatively weak in terms of visual and aesthetic character in view of arable cultivation and agricultural intensification. The tributary valley associated with the source of the Waveney is considerably richer and more varied in terms of visual character and ecological integrity.

Landscape Change

Past Change

- Enclosure and attendant loss of commons and heathland;
- 20th Century agricultural intensification and associated boundary loss;
- Settlement expansion within South Lopham, creating a 'ribbon' of development.

Future Change

- BI.18 Potential future landscape change may arise through the implementation of BAP/EcoNet objectives for wetland and reed bed creation adjacent to existing fen systems. Potential enhancement of the arable landscape through agri environment schemes is a key opportunity.

LANDSCAPE STRATEGY

The overall landscape strategy for the *Little Ouse Settled Tributary Farmland* should be to conserve and enhance the intimate, small scale and pastoral landscape and associated wetland vegetation in the south of the character area around Redgrave and Lopham Fen, and to enhance the more extensive areas under arable cultivation in the remainder of the character area. The aim should be to link and extend the distinctive wetland landscapes and to enhance the tributary valleys where they run through the arable farmland landscapes.

Guidelines

Landscape Management

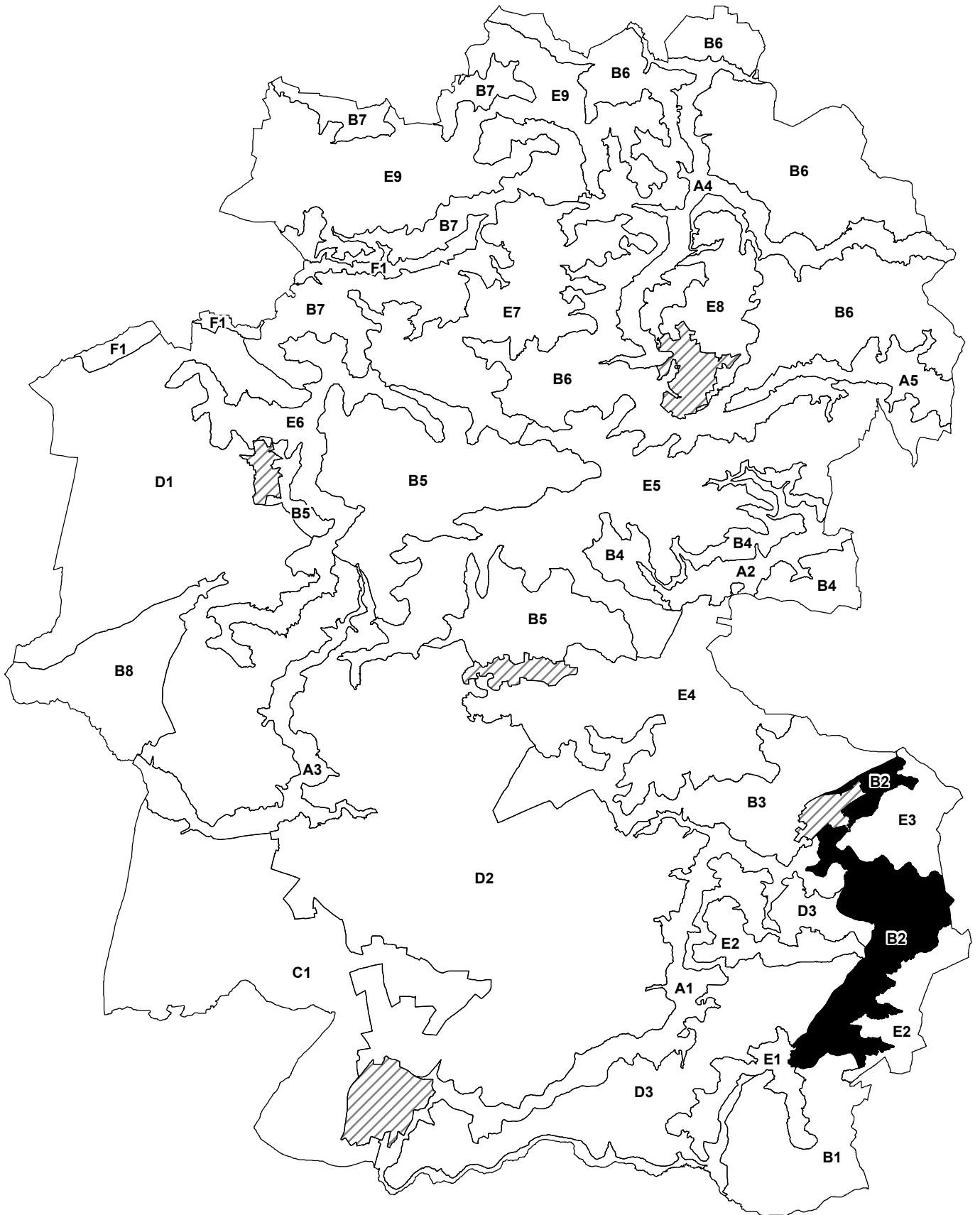
- Conserve areas of common land as at Redgrave and Lopham Fen;
- Encourage ongoing restoration and sensitive/appropriate management of freshwater fen habitat;
- Explore opportunities for creation of new areas of reedbed linked to existing habitat, and in areas of relatively low nature conservation interest;
- Encourage reversion to pastoral agriculture within the lower lying tributary valleys, creating buffers along the tributaries linking to the fens associated with the Upper Waveney;
- Conserve and enhance hedgerow trees through appropriate arboricultural management and reinforce through new mixed native hedgerow planting;

Development Considerations

- Conserve existing small scale rural pattern of settlement, monitoring edge expansion and potential suburbanising influences in terms of built elements and garden boundary vegetation;
- Maintain the rural road network in its current state and monitor/discourage traffic / road widening pressures which could have an urbanising influence, e.g. traffic calming, road signage.



B2: THE BUCKENHAMS SETTLED TRIBUTARY FARMLAND



B2: THE BUCKENHAMS SETTLED TRIBUTARY FARMLAND

Location and Boundaries

B2.1 *The Buckenham Settled Tributary Farmland* is located on the eastern edge of Breckland District to the south east of Attleborough. It is a gently undulating landform cut by numerous ditches and tributaries. This area of settled tributary farmland is distinct for the extent of small scale settlement. The boundaries define the area from the Breckland Heath landscapes to the west and the more elevated open plateau landscapes to the east.

Key Characteristics

- Lowestoft till glacial deposits creates a gently undulating landform interrupted by occasional shallow dry valleys and tributaries.
- Alluvium and river terrace deposits are a feature of the tributary valleys that cut the farmland as at Banham creating local landscape diversity.
- Distinctly undulating topography throughout character area, with topography ranging from 20-50m AOD reflecting the pattern of minor tributaries.
- Views are generally intermittent and frequently contained by landform and field boundary vegetation.
- Land cover is predominantly arable, with isolated blocks of mixed woodland and wooded strips to field boundaries, as well as shelterbelts.
- Surviving common land at New Buckenham and Old Buckenham are an important and distinctive feature of the villages. The common at Old Buckenham is considered to be the largest village green in England
- The common/green at New Buckenham is a large area of unimproved grassland, grazed by cattle and is designated an SSSI.
- Variable field pattern, ranging from small to medium-large scale. Drainage channels frequently supplement hedgerow boundaries.
- Historic sites (Scheduled Monuments) include the site of Buckenham Priory, the old castle, the later castle at New Buckenham and 'The Candle Yards' double moat at Kenninghall Place.
- Settlements with a strong historic character with a nucleated pattern at Old Buckenham, New Buckenham centred on historic village greens. Banham and Kenninghall, are by contrast linear in character.
- The town of Attleborough is a dominant influence in the northern part of the character area.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- B2.2 The underlying chalk geology of the character area is overlain by glacial drift deposits of sand, silt, clay and gravel. This gives rise to a gently undulating landform ranging from 20-50m AOD. In addition to the glacial deposits are alluvial deposits associated with the occasional tributaries which carve through glacial drift deposits to drain into the River Thet. Loamy and clayey Argillic brown earths provide good soils for cultivation. A clayey drift deposit associated with the southern part of the character area creates heavier clay soils.
- B2.3 Arable cultivation is the primary land cover, although there are small, isolated areas of mixed woodland, in addition to wooded field boundary strips and areas of shelter belt vegetation. Field boundaries are often defined by mixed hedgerows, with hedgerow trees, although there are extensive open areas where field boundaries have been lost.
- B2.4 Common land forms a localised, but distinctive land use, there being two examples within the character area at Old Buckenham and New Buckenham. New Buckenham Common is a large area of unimproved grassland grazed by cattle, designated as a SSSI. The character area is within the Ecological Network Mapping Project's Enhancement Area for woodland, heathland and grassland re-creation. There are a number of Norfolk BAP priority habitats within the area, including broadleaf woodland and cereal field margins. In addition at the local level, a number of areas of woodland are designated as CWS, in view of their local biodiversity interest.

Historic Character

- B2.5 Historic Landscape Characterisation (HLC) has been completed for the majority of the character area and illustrates a range of historic processes which have informed the present character of the landscape. These include piecemeal and parliamentary Enclosure. During the twentieth century there have been extensive areas of boundary loss resulting from agricultural intensification, although small areas of relict field boundaries have survived within these areas, notably to the south east of Kenninghall.
- B2.6 Faden's 1797 Map of Norfolk identifies large tracts of common land around the 'Buckenams' and the minor parkland of St Andrew's Hall at New Buckenham. HLC data shows this to have been enclosed and converted to arable use during the 20th Century.
- B2.7 A number of Scheduled Monuments within the character area denote the long history of settlement and the historic pattern of landed estates, notably the castle and Priory site at Old Buckenham and the earthworks of the castle at New Buckenham.

Settlement and Built Character

- B2.8 Settlement is generally low density and of nucleated formation, and centred on large historic village greens or commons as at Old Buckenham and New Buckenham. New Buckenham is an example of a planned medieval settlement, of nucleated

formation and grid pattern. Settlements comprise compact villages and hamlets or small groups of houses and display a range of vernacular materials, including dressed stone churches, red brick, clay tile and colour washed render. Settlement usually relates to the junctions of the narrow rural roads which traverse the character area. In addition a number of small buildings, associated with farms are scattered across the character area. The windmill at Old Buckenham is a distinctive feature.

- B2.9 Kenninghall is a linear village with a strong historic character. Local red brick, clay lump, wattle and daub, timber framing and colour render are all apparent.

Perceptual/Visual

- B2.10 This is a medium scale and semi enclosed landscape, with views essentially contained by landform and field boundary vegetation. Although primarily a productive arable, locally distinctive features include the commons, hedgerows and mature hedgerow trees, small blocks of woodland, in addition to minor tributaries crossing the farmland.
- B2.11 The area has a very rural character, within which are a number of settlements with a strong historic quality and vernacular character (Buckenham, Banham and Kenninghall). The stakeholder consultation held on 18/1/2007 noted that the colloquial name for the area between these settlements was 'The Golden Triangle'. The landscape has an essentially peaceful quality, albeit with localised interruption along the northern boundary as a result of noise and lighting associated with the A11 and the edge of Attleborough.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

The following are judged to be the key inherent landscape sensitivities that are fundamental to the character of the landscape.

- Nucleated settlements around village greens, which refer to the historic pattern of development.
- Historic vernacular and use of local materials, e.g. clay lump as at Kenninghall, which make a significant contribution to the sense of place of settlements.
- Surviving field boundary hedgerows and trees, which indicate the post Enclosure character of the landscape prior to agricultural intensification.
- The surviving areas of common land and the ecologically important grasslands.
- The Priory and Castle at Old Buckenham, together with the castle at New Buckenham, as a symbol of historic continuity.
- The narrow tributaries and associated wetland vegetation which transect the arable fields.
- Glimpsed views to focal points within the character area such as the church tower at New Buckenham.

- Essentially peaceful, rural character and dark skies.

Visual Sensitivities

B2.12 The containment provided by the undulating landform and field boundary vegetation, results in only intermittent views and limited intervisibility with other landscapes. Important views within the character area include glimpsed views of prominent features such as the church tower at New Buckenham and open views across the two expansive areas of commons. The stakeholder consultation (18/1/07) indicated a valued long distance view from Buckenham across to Winfarthing. Other long distance views include the wooded skyline of the *Harling Heath character area (D3)* to the west, and local views across Old Buckenham Fen in the *Thet Valley (A1)*.

Current State of the Landscape

B2.13 The landscape is essentially a managed, functional and productive arable agricultural landscape, although it retains localised areas of its historic character, notably with surviving Enclosure field boundaries and the commons associated with the historic settlements. Ecological integrity is relatively weak and there are opportunities for enhancement of woodland, heathland and grassland habitats.

Landscape Change

Past Change

- Parliamentary and piecemeal enclosure, and associated loss of common land.
- Agricultural intensification and attendant field boundary loss during the 20th century.
- The construction of the A11 and associated lighting and signage.
- Expansion of Attleborough;
- 20th century development and infilling within the villages.

Future Change

B2.14 This remains a predominantly rural area, although pressure for development is ongoing. In the north of the area the A11 corridor already has a considerable influence on the rural character in terms of noise/lighting and is considered to be a potential catalyst for further change/development. Restoration and enhancement of ecological habitats is a potentially positive future opportunity.

LANDSCAPE STRATEGY

The overall management objective for *The Buckenham Settled Tributary Farmland* is to enhance the landscape of the tributary valleys that thread through the agricultural land, with the aim being to create stronger links with the adjacent river valley landscapes. The rural character of the landscape with its small scale compact villages set around commons should be conserved to provide a contrast to the more open and exposed plateau landscapes. Opportunities for reinforcement of field boundary

hedgerows should be explored, as should restoration/enhancement of grassland and woodland habitats to strengthen visual and biodiversity interest.

Guidelines

Landscape Management

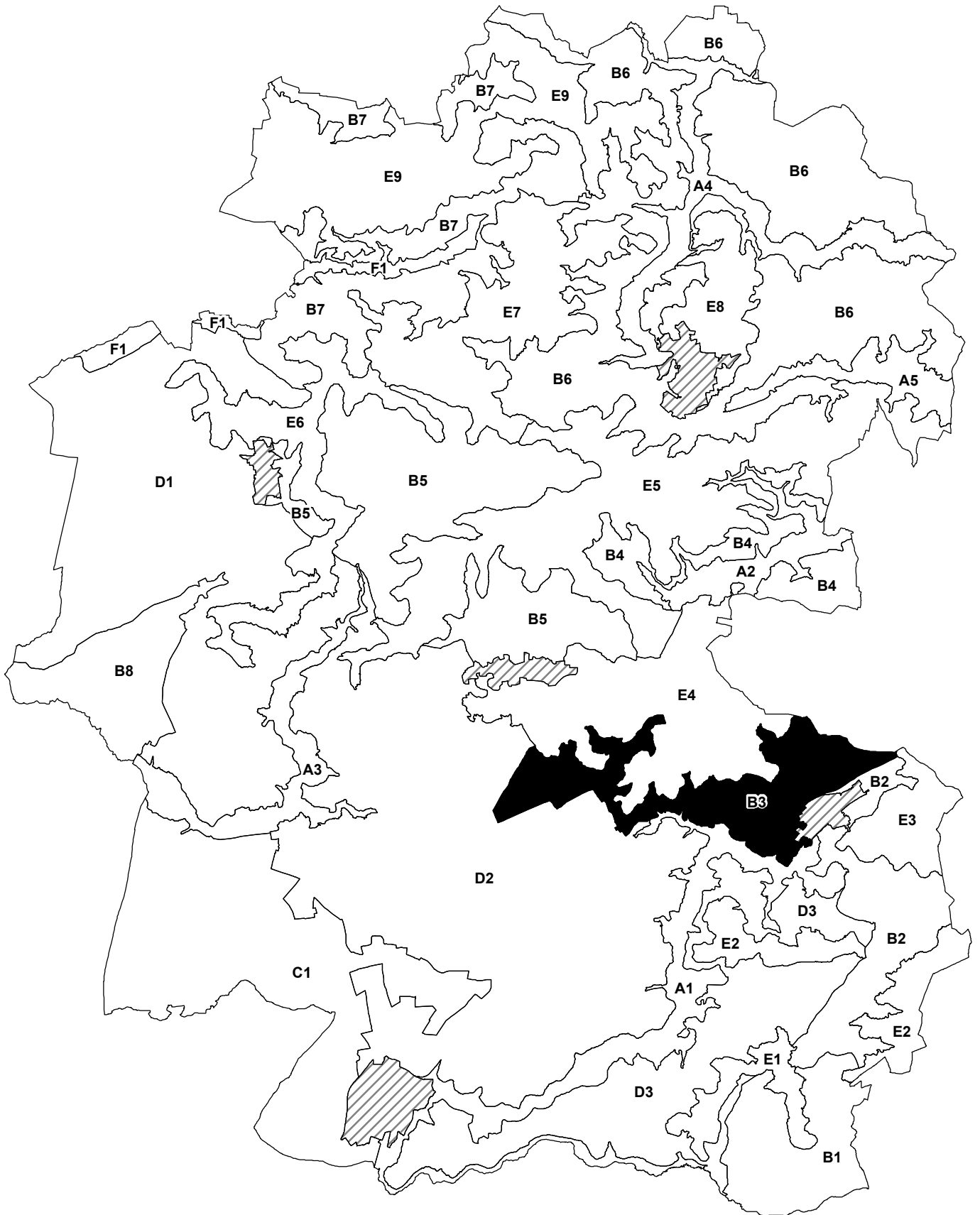
- Conserve and enhance existing field boundary hedgerows, trees and wooded strips through appropriate management;
- Seek opportunities to create/replace field boundary hedgerows where they have been lost, particularly to the east of Old Buckenham;
- Explore opportunities to improve biodiversity through creation of field set aside margins and buffers to the tributary watercourses;
- Explore opportunities to re create areas of heathland where appropriate relating to areas of former common land and linking into existing commons, e.g. at the Buckenhams;
- Conserve and enhance existing areas of common land and their relationship to settlements ensuring that any new development or changes to land use does not detract from their historic character.

Development Considerations

- Conserve existing small scale rural road pattern, resisting traffic upgrade/calming measures which could have an urbanising influence (signs, kerbing, lighting etc.);
- Ensure that new development within the settlements reflects the use of local materials, and that settlements individual and separate identities are preserved through avoiding coalescence;
- Conserve historic village signs;
- Conserve views to land mark features within the villages. Notably, views to the distinctive church towers;
- Monitor development and boundary treatments to the settlement edges and seek to reflect the surrounding rural character in selection of boundaries and planting palette.
- Seek to minimise lighting on the edges and within villages and adjacent towns/roads to conserve wider dark skies in this part of Breckland.



B3: RIVER THET SETTLED TRIBUTARY FARMLAND



B3: THET SETTLED TRIBUTARY FARMLAND

Location and Boundaries

- B3.1 Located in the south east of Breckland, *Thet Settled Tributary Farmland* forms a narrow band of gently undulating farmland intersected by tributaries draining southwards into the River Thet. The character area extends from Thompson in the west to Attleborough in the east, with the boundaries defined by topography. The landscape type extends northwards into South Norfolk District.

Key Characteristics

- Lowestoft till glacial deposits creates a gently undulating landform interrupted by occasional shallow dry valleys and tributaries carved by glacial meltwaters.
- Alluvium and River Terrace deposits are a feature of the tributary valleys contributing to the loamy and clayey Argillic brown earths.
- A gently undulating topography throughout the character area, ranging from 30 metres AOD in the tributary valleys to 50 metres AOD in the elevated areas.
- Views are generally intermittent and frequently contained by landform, field boundary vegetation and areas of wet woodland, although views to church towers in adjacent character areas are a feature, e.g. Great Ellingham.
- Land cover is predominantly arable, interspersed with numerous smaller scale elements e.g. wet woodland (at Thompson Carr), blocks of mixed woodland and meadows e.g. Swangey Shetland Meadows.
- Common land was once an extensive land use. Whilst diminished in area, some common land remains e.g. Thompson and Stow Bedon Commons (SSSIs).
- Variable field pattern, ranging from small to medium-large scale arable fields of both irregular and geometric pattern.
- Distinctive features include the minor tributary watercourses and drainage channels to field boundaries, in addition to historic green lanes.
- Pingo pools, created by contraction of frozen pockets of ground water during the thaw following the last Ice Age, are a characteristic feature.
- A generally linear settlement pattern e.g. Caston and Stow Bedon focused around the narrow rural roads, in addition to scattered farmsteads.
- A medium scale, semi enclosed landscape, defined by the arable agricultural land use and settled, though peaceful character, albeit with localised interruption by the A11 along the eastern boundary of the area.
- Opportunities for recreation are afforded by Stow Bedon Common (County Wildlife Site) and Thompson Common (NNR), whilst the Great Eastern Pingo Trail passes through Thompson Common to the west of the character area.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- B3.2 The underlying chalk geology of the character area is overlain by glacial drift deposits of sand, silt, clay and gravel. This gives rise to a gently undulating landform ranging from 30-50m A.O.D. In addition to the glacial deposits are alluvial deposits associated with the tributaries. The combination of glacial and alluvial drift deposits gives rise to the loamy and clayey Argillic brown earths which supports the essentially arable land use.
- B3.3 Arable fields are separated by hedgerows and hedgerow trees, and on wetter ground also by drainage channels. Numerous small scale features are found interspersed with the arable fields, including the wetland environment created by the tributaries, which are particularly important in providing a variety of land uses and habitats. Wet woodland associated with the tributaries is a feature of the character area, the woodland at Thompson Carr being of particular ecological importance (SSSI and SAC). Common land was once an extensive land use within the character area and remains in places e.g. Thompson Common and Stow Bedon Common. Periglacial features such as pingos are a distinctive feature at Thompson Common.
- B3.4 The majority of the character area is defined by the Norfolk Biodiversity Mapping Project as being a core area due to the distribution and variety of high quality extant habitats and wetland environments including rivers and streams and reedbeds.

Historic Character

- B3.5 Although not yet complete for this character area, the HLC information reveals a number of historic processes which have influenced the present landscape character, including 20th century agriculture, with attendant field boundary loss. Faden's 1797 Map of Norfolk illustrates large areas of common land within the character area e.g. Stow Bedon Common, Caston Common and Ellingham Common. Small areas of common land remain, but much has been lost, the HLC data demonstrating that common land has either been enclosed during the 20th century or planted with small blocks of woodland between the 18th and 20th century.
- B3.6 Breckles Hall is both a Grade II listed building and a Registered Historic Park and Garden.
- B3.7 Although isolated churches within adjacent character areas are a feature, the only example within the character area, St Andrews, to the south of Rockland All Saints, is now in ruins.

Settlement and Built Character

- B3.8 Settlement density is low, with settlement limited to small, generally linear villages and isolated hamlets scattered along the rural road network. Buildings display a range of vernacular materials, including dressed stone, red brick, clay tile and colour washed render.

Perceptual/Visual

- B3.9 This is generally a medium scale and semi enclosed landscape, with views essentially contained by landform and field boundary vegetation. The areas of wet woodland and carr woodland associated with narrow tributaries crossing the landscape create a smaller scale, more intimate and enclosed character, with interest and colour provided by the variety of vegetation cover. Historic green lanes provide recreational access into the landscape
- B3.10 Further visual variety is produced through the fairly settled character. The low density of settlement and the pattern of narrow rural roads create an essentially peaceful, contained and intimate character. As such it is generally unified in appearance, albeit with localised interruption due to the A11.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

The following are judged to be the key inherent landscape sensitivities which are fundamental to the character of the landscape.

- The large areas of arable fields bound by hedgerows which provide a rural setting to the character area, binding smaller elements together;
- The narrow tributaries and associated wetland vegetation;
- Views to church towers in adjacent character areas;
- Remaining common land, which indicates historic land cover;
- Historic village cores which are built from distinctive and characteristic building materials of red brick, render and dressed stone;
- The essentially peaceful, rural character.
- Breckles Hall and its setting, a Registered Historic Park and Garden.
- Green lanes, which are of historic interest as well as providing recreational access.

Visual Sensitivities

- B3.11 The key visual sensitivities within this character area are the variety of views, ranging from relatively long range views across arable fields where hedgerows have been degraded or lost, to small scale views within the enclosed areas of wet woodland. Although the undulating landform allows only occasional views out of the character area, glimpses of church towers in adjacent character areas provide a visual focus.

Current State of the Landscape

- B3.12 The landscape is essentially a managed, functional and productive arable agricultural landscape, although it retains localised areas of its historic character, notably with surviving Enclosure field boundaries and the commons associated with the historic settlements.

Landscape Change

Past Change

- Parliamentary and piecemeal enclosure and associated loss of common land.
- Agricultural intensification and attendant field boundary loss during the 20th century.
- The construction of the A11 and the associated lighting and signage.
- 20th century development and infilling within the villages;
- The construction and later dismantling of the railway line in the west of the character area which has become part of the route of the Great Eastern Pingo Trail.

LANDSCAPE STRATEGY

The overall management objective for the *Thet Settled Tributary Farmland* is to enhance the landscape of the tributary valleys that thread through the agricultural land, both to conserve the more intimate small scale wetland character associated with the minor watercourses and create stronger links with the adjacent river valley landscapes. Opportunities to improve biodiversity through enhancement of field boundary hedgerows and set aside field margins should also be explored, in addition to seeking opportunities to improve the ecological integrity of wetland environments through conserving and enhancing areas of carr woodland and meadow, in line with the objectives of the Norfolk Ecological Network Mapping Project.

Guidelines

Landscape Management

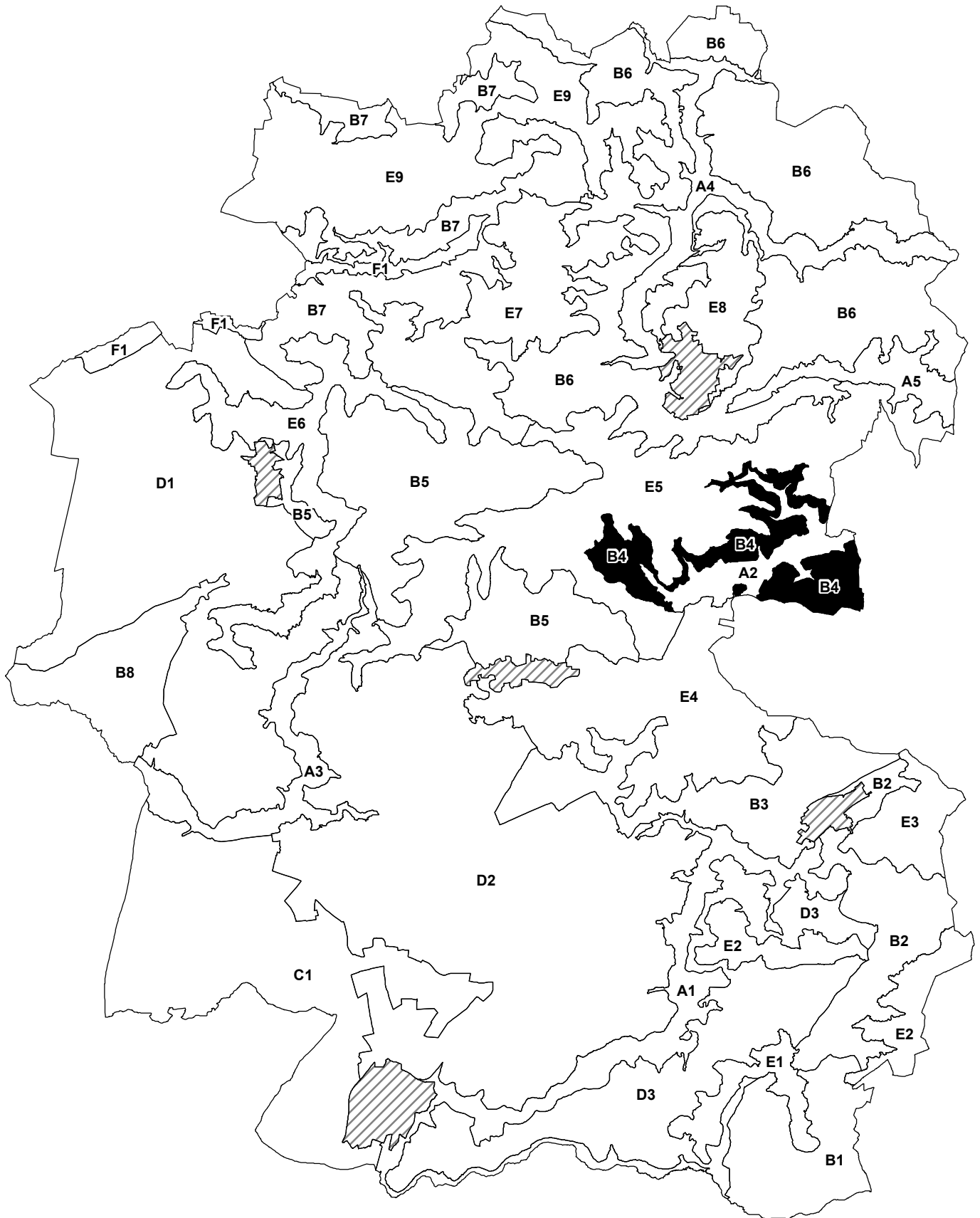
- Conserve and enhance existing field boundary hedgerows, trees and wooded strips through appropriate landscape management;
- Create new, species rich field boundary hedgerows to link existing hedgerows and areas of woodland and to provide habitat connectivity;
- Explore opportunities to improve biodiversity through creation of field set aside margins and pastoral buffers to the tributary watercourses;
- Explore opportunities to re create areas of heathland where appropriate and possible.
- Protect common land and associated historic character;
- Conserve woodland and meadows associated with the tributaries as an important ecological feature;
- Conserve historic green lanes that cross the area.

Development Considerations

- Conserve existing small scale rural road pattern, resisting traffic upgrade/calming measures which could have an urbanising influence;
- Seek options for better integration of the A I I through noise attenuation measures and less intrusive lighting;
- Ensure that new development reflects the existing material and stylistic vernacular within the settlements and that their individual and separate identities are preserved;
- Monitor development and boundary treatments to the settlement edges, resisting any materials and/or species which could have an urbanising influence on the rural landscape.



B4: RIVER BLACKWATER SETTLED TRIBUTARY FARMLAND



B4: RIVER BLACKWATER SETTLED TRIBUTARY FARMLAND

Location and Boundaries

B4.1 The character area is located on the eastern edge of Breckland, forming a narrow section of gently undulating land surrounding the upper course of the upper River Yare extending from Shipdham in the west to Hardingham in the east. To the north, south and west the character area is bounded by the more elevated arable plateau landscape type, defined approximately by the 50m contour and the transition to a flatter more open and exposed character. To the east, the boundary is formed by the administrative boundary - an area of similar character continuing into South Norfolk District.

Key Characteristics

- Deposits of chalky boulder clay glacial overlying the chalk creates a gently undulating landform topography ranging from 40-60m AOD.
- Tributary valleys form small scale local undulations in the landscape, characterised by alluvial deposits along the bed of the tributary.
- An enclosed landscape with views frequently contained by landform and field boundary vegetation.
- Land cover is predominantly arable interspersed with isolated blocks of mixed woodland and wooded strips to field boundaries.
- Woodland blocks are characteristically small. They include small areas of mixed plantation plus Ancient Woodland at Woodrising.
- Variable field pattern, ranging from small geometric fields e.g. adjacent to Reymerston to very large irregular fields.
- Hedgerows are in variable condition. Veteran trees are a particular feature of the area, as are historic green lanes.
- A number of historic sites including a Roman villa and deserted medieval village represent the long history of human habitation, plus areas of parkland.
- A low density of settlement in both a linear (Reymerston) and nucleated (Hardingham) pattern.
- A network of narrow rural lanes connects settlements and links to the adjacent River Yare/Blackwater valley.
- A generally, peaceful rural peaceful character.
- The network of rights of way is limited, but provides opportunities for connection with the River Yare in the adjacent character area.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- B4.2 The character area is defined by an undulating landform ranging from 40-60m AOD created by deposits of Lowestoft Till drift geology overlying chalk. The thick covering of clayey Lowestoft Till drift material informs the (clay enriched) stagnogley soils which are characteristic. Soils support the growth of arable crops, although the soils are prone to water-logging and in localised areas field drains have been introduced.
- B4.3 Arable cultivation is the primary land cover, although there are small, isolated areas of mixed woodland, particularly to the south of the character area surrounding the settlement of Hardingham and an area of ancient woodland at Woodrising. Information from the veteran tree survey shows there to be veteran trees of various species throughout the character area. Mixed hedgerows, with mature hedgerow trees define field boundaries, although in places drains and ditches are also a boundary feature.
- B4.4 The majority of the character area lies within the Ecological Network Mapping Project's Enhancement Area for woodland, heathland and grassland re-creation. An isolated area of settled tributary farmland in the western part of the character area, associated with the chalk watercourse of the River Yare, falls within the Core Area. Norfolk BAP priority habitats including broadleaf woodland and cereal field margins.

Historic Character

- B4.5 There are four Scheduled Monuments within the character area, representing human habitation at various points throughout history, including the remains of a Roman villa west of Woodrising and a deserted Medieval Village South East of Letton Hall.
- B4.6 Faden's 1797 Map of Norfolk identifies extensive areas of common land, the largest being at Hardingham. However, these have since been enclosed and converted to arable land.
- B4.7 Faden's Map shows two areas of parklands at Hardingham. The parkland setting of Hardingham Hall remains as a landscape feature today. The parklands of Letton Hall, a late 18th Century house by Sir John Soane, are an important landscape feature.

Settlement and Built Character

- B4.8 Settlement is scattered along the rural road network in both a nucleated and linear pattern. Settlement density is low, being composed of generally compact villages and hamlets, with a number of small Halls. There is some evidence of infilling and spread along the rural roads e.g. at Garveston. Settlement displays a range of vernacular materials, including dressed stone churches, red brick, clay tiled and colour washed render.

Perceptual/Visual

- B4.9 This is a medium scale and semi enclosed landscape, with views essentially contained by landform undulation and field boundary vegetation. It is essentially a productive

farmed arable landscape. The small scale settlement pattern, low density of roads and arable land use together result in a peaceful, rural character.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

The following are judged to be the key inherent landscape sensitivities which are fundamental to the character of the landscape.

- Nucleated settlements built around village greens, which refer to the historic pattern of development.
- Green lanes, which are an historic landscape feature.
- Surviving field boundary hedgerows, trees and wooded strips which indicate the post Enclosure character of the landscape prior to agricultural intensification.

Visual Sensitivities

- B4.10 Views within this character are generally contained by landform and field boundary vegetation. There are some more open views to village edges from surrounding arable fields. Views to parkland features at Hardingham create visual interest and diversity. There is generally a low level of visibility with surrounding character areas, although occasional views into the valley of the *Upper Yare* are possible.

Current State of the Landscape

- B4.11 The landscape is essentially a managed, functional and productive arable agricultural landscape, although it retains localised areas of its historic character, notably with surviving Enclosure field boundaries and the commons associated with the historic settlements. Apart from occasional areas of semi-natural woodland, there are few habitats of nature conservation value and ecological integrity is relatively weak.

Landscape Change

Past Change

- Parliamentary and piecemeal enclosure.
- Enclosure of common land and conversion to arable land.
- Growth and spread of villages.
- Agricultural intensification in the twentieth century and attendant field boundary loss.

Future Change

- B4.12 The Local Plan has not identified any specific future development requirements within the character area. Change will primarily relate to future agricultural management.

LANDSCAPE STRATEGY

The overall management objective for the *River Blackwater Settled Tributary Farmland* should be to conserve and enhance the peaceful rural character with small villages set within a managed agricultural landscape. Key opportunities are to enhance links to the Upper Yare Valley through conservation and enhancement of the intimate, small scale wetland character associated with the minor tributary watercourses, and to conserve and enhance the landscape pattern created by the field boundary hedgerow network. In line with the Norfolk EcoNet Project, opportunities should be sought to enhance woodland and grassland where possible to improve biodiversity value.

Guidelines

Landscape Management

- Conserve and enhance existing field boundary hedgerows, trees and wooded strips through appropriate landscape management;
- Conserve network of historic green lanes;
- Seek to enhance the tributary corridors by creation of pasture buffer land along water courses;
- Create new, species rich field boundary hedgerows where hedgerows have been lost to enhance connectivity with existing hedgerows and woodland site;
- Explore opportunities to improve biodiversity through creation of set aside margins to arable fields.

Development Considerations

- Conserve existing small scale rural road pattern of green lanes, resisting traffic upgrade/calming measures which could have an urbanising influence;
- Ensure that new development reflects the existing material and stylistic vernacular within the settlements and that their individual and separate identities are preserved;
- Monitor development and boundary treatments to the settlement edges, resisting any materials and/or species which could have an urbanising influence on the landscape.



B5: RIVER WISSEY SETTLED TRIBUTARY FARMLAND

Location and Boundaries

B5.1 The *Wissey Settled Tributary Farmland* is located centrally within Breckland District to the north and north west of Watton. It is a gently undulating landscape draining into the River Wissey and rising up to the elevated *Arable Plateau* character areas which form the boundary to the character area.

Key Characteristics

- Lowestoft till glacial deposits give rise to a gently undulating landform interrupted by occasional shallow dry valleys and tributaries. Alluvial deposits are also a feature of the tributaries, overlain with clayey Argillic brown earth soils.
- Topography varies between 35 m A.O.D at the base of the tributary valleys to 80m A.O.D to the adjacent plateau character areas.
- Views within and across the character area are largely contained by mixed enclosure hedges with hedgerow oaks. Hedged and treed skylines are a feature of the landscape.
- Arable agriculture is the predominant land cover. Fields are often medium to large in size and bounded by hedgerow and hedgerow trees, of variable condition. Localised areas of smaller fields are found on settlement edges and land adjacent to tributaries.
- Fenland is a small-scale feature which provides localised texture and ecological value e.g. at Carbrooke.
- The once extensive areas of heathland and common land have been replaced by farmland or woodland e.g. Common Plantation on Necton Common.
- Saham Mere and Wide Mere form part of a wider network of groundwater-fed meres forming a hydrological feature specific to Breckland on heathy land to the north of Thetford.
- Whilst population density remains low, the area is characterised by a number of villages (both nucleated e.g. Necton and linear e.g. Ovington) which show evidence of infilling and extension. Villages are connected by an extensive rural road network, and sunken lanes are often characteristic.
- The Peddars Way is an historically important National Trail which crosses the western extent of the character area before heading southwards towards Great Cressingham.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- B5.2 The character area is defined by an undulating landform ranging from 35-80m A.O.D created by deposits of Lowestoft Till drift overlying chalk. Clay enriched soils support the growth of arable crops, although these are prone to water-logging and in localised areas field drains have been introduced e.g. south of North Pickenham.
- B5.3 Arable cultivation is the primary land cover, with fields being of variable size, ranging from large open fields e.g. around Holme Hale to smaller fields characteristically associated with settlement edges or tributaries. Fields are bounded by hedgerows, although there is evidence of some boundary loss due to agricultural intensification.
- B5.4 An extensive network of rural roads crosses the character area, and lined with species rich hedgerows and ditches, both of which are important ecological habitats.
- B5.5 Woodland within the character area is generally sparse, characteristically including small scale plantation blocks, farm woodlands and wet woodland. Saham Wood is a larger block of Ancient Woodland.
- B5.6 Numerous additional small-scale features punctuate the predominantly arable landscape including tributaries, fenland (at Carbrooke) and Meres e.g. Saham Mere and Wide Mere. The meres are part of a wider network forming a geological feature specific to Breckland found on heathy land to the north of Thetford.
- B5.7 The majority of the character area lies within the Ecological Network Mapping Project's Enhancement Area for woodland, heathland and grassland re-creation. The remainder, land to the south west of the character area falls within the Core Area due to the tributaries which flow into the Wissey through this part of the character area.

Historic Character

- B5.8 There are four Scheduled Monuments within the character area, representing human habitation at various points throughout history, including 2 moated sites north of Bradenham and a military site at Carbrooke representing the commandry site of St John of Jerusalem. The Peddars Way is an important historic landscape feature within the character area.
- B5.9 Faden's 1797 Map of Norfolk identifies extensive areas of common land, the largest being Necton Common. Common land is no longer a feature of the character area, having been enclosed and converted to arable land.
- B5.10 A number of parklands are identified by Faden's Map. Necton Hall, the largest, has been demolished and the parkland given over to agriculture.

Settlement and Built Character

- B5.11 Settlement comprises small-scale linear (e.g. Ovington) and nucleated settlements. Necton is a larger village, historically of linear formation but increasingly nucleated due to 20th Century expansion. Local vernacular is characteristically red brick,

render and stone. To the south the character area adjoins the settlement edge of Watton.

Perceptual/Visual

- B5.12 *Wissey Settled tributary farmland* is an essentially tamed landscape composed of a number of elements and unified by the undulating landform. Although predominantly a large-scale landscape, variation and texture are provided by smaller fields with drainage channels, and by the tributaries and wetland vegetation. It has a tranquil quality due to its rural character and the network of narrow rural roads which link the compact areas of settlement and small distribution of scattered farmsteads.
- B5.13 Views are to hedged and wooded skylines, adjacent character areas being generally concealed except for occasional views in to the *Wissey Valley* and to the surrounding *Wayland Plateau* and *Central Breckland Plateau*. The church tower at Necton is a distinctive element of views, as are the wind turbines at Swaffham.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

The following are judged to be the key inherent landscape sensitivities which are fundamental to the character of the landscape.

- The historic cores of villages and the consistent vernacular;
- Surviving field boundary hedgerows and trees, which indicate the post Enclosure character of the landscape prior to agricultural intensification;
- Wetland vegetation and meres, e.g. Saham Mere, which are of significant biodiversity/hydrogeological interest;
- Isolated area of fenland at Carbrooke;
- The network of hedged and ditched rural roads which connect the settlements;

Visual Sensitivities

- B5.14 Key visual sensitivities within this character area are the containment provided by the field boundaries, and views to village edges from surrounding arable fields. Views to the church tower at Necton create visual interest and diversity. The character area is surrounded by plateau landscapes which are occasionally visible from the *River Wissey Settled tributary farmland* character area, with the wind turbines at Swaffham being a prominent element of views.

Current State of the Landscape

- B5.15 The landscape is essentially a managed, functional and productive arable agricultural landscape. Although isolated areas of smaller scale, historic field boundaries exist, 20th century agricultural intensification has resulted in areas of boundary loss, weakening the historic integrity of the character area. Smaller scale features such as tributaries, ditches and Saham Mere create localised pockets of ecological diversity.

Landscape Change

Past Change

- Enclosure of Common land and conversion to arable land.
- Agricultural intensification and attendant field boundary loss.
- Settlement expansion during the 20th century, e.g. Necton;
- The construction of turbines at Swaffham and North Pickenham and the resultant change in views from within part of the *River Wissey Settled tributary farmland* character area.

Future Change

- B5.16 A number of sites with planning permission for residential development within and to the edges of the settlements of Necton and Saham Toney are identified within the Local Plan. There are also views to the settlement edge of Watton.
- B5.17 Potential positive change may arise through the implementation of the objectives of the Norfolk Ecological Network Mapping Project.

LANDSCAPE STRATEGY

The overall management objective for *Wissey Settled Tributary Farmland* should be to enhance the landscape of the minor tributary watercourses that thread through the agricultural land, with the aim being both to conserve the more intimate, small scale wetland character associated with these watercourses and to create stronger links with the adjacent river valley landscapes. Opportunities should also be sought to enhance biodiversity value through new native field boundary hedgerow planting and through woodland and grassland creation.

Guidelines

Landscape Management

- Conserve and enhance existing field boundary hedgerows, and trees through appropriate landscape management;
- Create new, species rich field boundary hedgerows;
- Explore opportunities to improve biodiversity through creation of field set aside margins;
- Explore opportunities to enhance the ecological value of tributaries and ditches, and the potential for connectivity to other wetland features, e.g. fen and meres;
- Ensure the protection and enhancement of small scale wetland features such as Fenland at Carbrooke and Saham Mere;

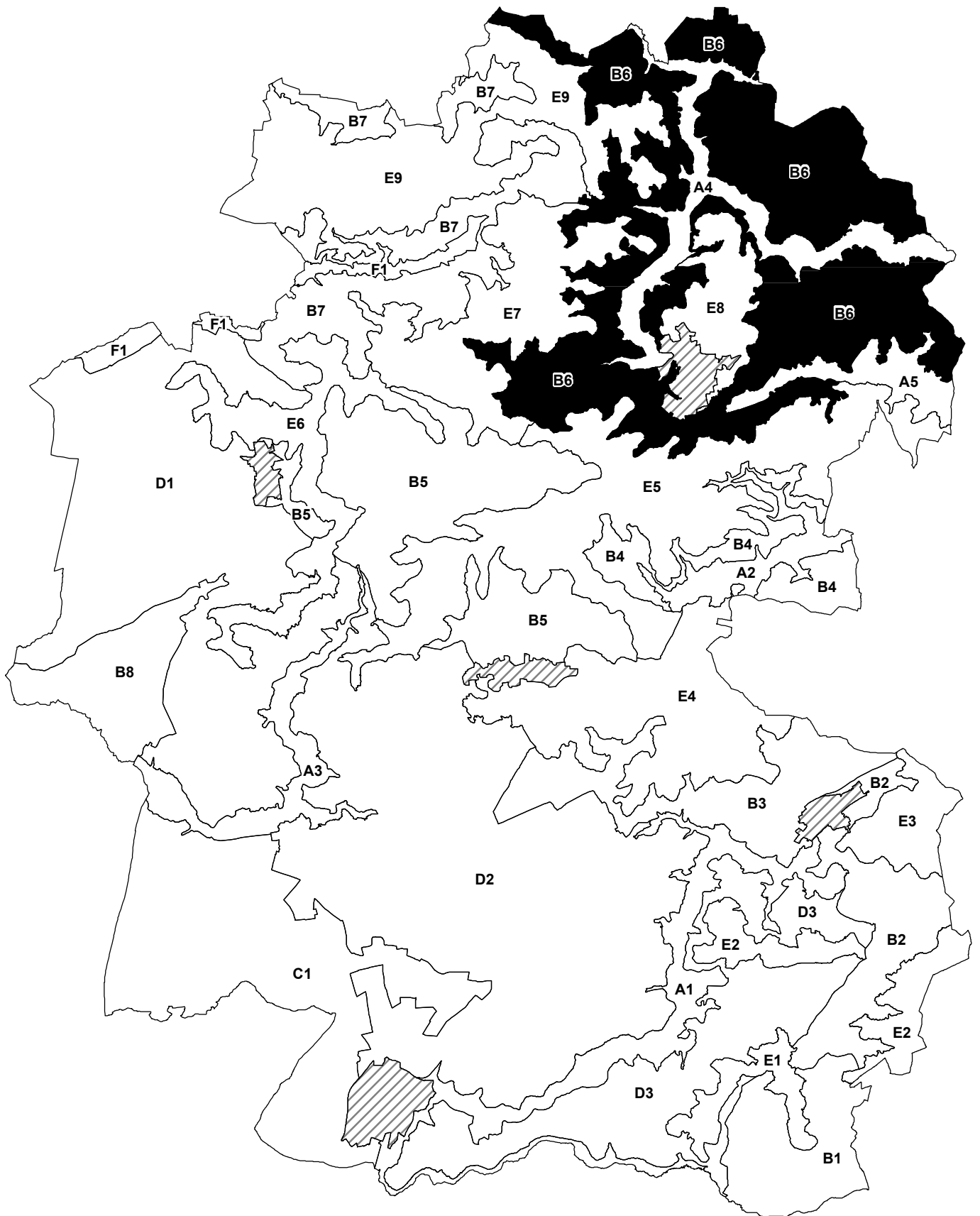
Development Considerations

- Conserve existing small scale rural road pattern, resisting upgrade/calming measures which could have an urbanising influence on the rural lanes;

- Ensure that new development within settlements reflects the existing use of local materials and that the individual and separate identities of settlements are preserved;
- Monitor development and boundary treatments to the settlement edges, and discourage any materials and/or species which could have a suburbanising influence on the landscape;
- Ensure that important views, e.g. to Necton Church and other landmark features are conserved;
- Seek to enhance settlement edges and integration within the landscape setting. Strengthening field boundary vegetation is a key opportunity.



B6: RIVER WENSUM AND TUD SETTLED TRIBUTARY FARMLAND



B6: WENSUM AND TUD SETTLED TRIBUTARY FARMLAND

Location and Boundaries

- B6.1 The *Wensum and Tud Settled Tributary Farmland* is located in the north eastern part of Breckland District and represents a large area of boulder clay drift deposits which have resulted in a gently undulating arable farmland landscape interspersed with tributaries. The boundaries of the character area are determined by river valleys (River Tud and River Wensum) and surrounding arable plateau character areas, with the landscape type extending beyond the District boundary into North Norfolk District to the north and Broadland District to the east.

Key Characteristics

- Lowestoft till glacial deposits give rise to a gently undulating landform interrupted by occasional shallow dry valleys and tributaries. Topography ranges from 20-50 metres AOD.
- Alluvial deposits are a feature of the tributaries and dry valleys. Argillic brown earths dominate the character area
- Views within the area are often to tree lined or wooded skylines, with the wooded skyline of Bylaugh Park being particularly distinctive.
- Arable agriculture represents the dominant land use, although pasture is also evident, particularly associated with the minor tributaries.
- Tributaries of the River Tud and Wensum cross the arable landscape creating small scale, ecologically diverse features e.g. wet meadow, wet woodland, and marshland a number of which are designated as County Wildlife Sites.
- Hedgerows and hedgerow trees bound fields of variable size. Occasional drainage systems on wetter land adjacent to tributaries create a smaller scale landscape pattern.
- Fields are characteristically medium to large in size, although small-scale fields adjoin the drains and tributaries e.g. surrounding Yaxham at the head of the River Tud.
- Occasional woodland takes the form of small blocks (including wet woodland alongside tributaries), or larger woodland blocks associated with historic features e.g. Hockering Wood SSSI (Ancient Woodland) and woodland associated with parkland e.g. Bylaugh.
- Gressenhall Park, Sennowe Park (partly within the character area) and the wooded, parkland setting of Bylaugh Park are the few remaining reminders of the past wealth and former estate influence within of the character area.

- Settlement pattern is characterised by frequent dispersed farmsteads and hamlets and larger villages clustered around the rural road network in both a linear (Clint Green) and nucleated (Gressenhall) settlement pattern.
- Distinctive vernacular building materials include Norfolk red brick and clay lump at Yaxham. Churches at East Bilney and North Elmham are distinctive elements.
- A network of hedgerow lined rural roads characteristically connect the settlements. The A47 crosses east to west across the character area and is a major route into Dereham.
- This is a tamed arable landscape that generally retains a tranquil rural character.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- B6.2 Glacial drift deposits of sand, silt, clay and gravel overlay the chalk solid geology and have given rise to a gently undulating landform, with topography ranging from 20-50m A.O.D. In addition to the glacial deposits are narrow bands of alluvial deposits associated with the tributaries that carve through glacial drift deposits to drain into the *River Wensum* and *River Tud*. Tributaries are numerous, creating shallow valleys on the edges of the character area, flowing into the adjacent *River Valley* character areas. The combination of glacial and alluvial drift deposits gives rise to the loamy and clayey Argillic brown earths.
- B6.3 Arable cultivation is the primary land cover, although woodland and small areas of pasture are interspersed with the arable fields. Woodland ranges from small scale farm woodlands to larger strips of wet woodland associated with tributaries. In addition there are two large areas of ancient woodland designated as SSSIs (Hockering Wood and Foxley Wood).
- B6.4 Although fields are characteristically medium to large in scale, localised areas of small-scale fields adjoin the tributaries, these fields being separated by drainage channels to drain the wetter soils e.g. surrounding Yaxham. Wet woodland, carr woodland, wet meadows and marshland are a feature of the land adjacent to the tributaries e.g. Wending Carr woodland adjacent to a tributary feeding into the *River Wensum*. A patchwork effects is created by the tributaries and associated small fields draining into the Upper Tud, to the east of Dereham.
- B6.5 Elsing Heath is one of the few remaining areas of heathland in what was once a landscape with extensive heathland and common land. The former importance of heathland within the character area is reinforced by the inclusion of the character area within the Ecological Network Mapping Project's Enhancement Area for woodland, heathland and grassland re-creation. There are a number of Norfolk BAP priority habitats within the character area, including broadleaf woodland and cereal field margins.

Historic Character

- B6.6 Faden's 1797 Map of Norfolk identifies large tracts of common land across the character area. Although small areas of heathland remain intact, woodland planting

has reduced their size e.g. Bylaugh Heath which is now largely wooded. Faden's Map demonstrates the former estate influence, with a number of parklands including Elmham. Bylaugh Park was laid out in the 1850s.

- B6.7 Three Scheduled Monuments exist within the character area, all located to the west of the River Wensum. The remains of an Anglo-Saxon church at North Elmham, and the remains of a Premonstratensian Abbey at Wendling dating from the 13th century demonstrate a long history of human activity. Fieldwork revealed a small-scale field pattern surrounding settlements bounded by hedgerows and mature hedgerow trees, with larger fields elsewhere. HLC data is not available for this character area. The veteran trees survey demonstrates that there is a concentration of veteran trees in the south east of the character area. In addition, woodland at Great Wood, Foxley Wood and Hockering Wood are areas of extant ancient woodland within the character area.

Settlement and Built Character

- B6.8 Settlement density is highest in the west of the character area. To the east of the River Wensum settlement is notably sparser, and limited to small nucleated villages. West of the River Wensum, villages are larger and occur more frequently, e.g. North Elmham, Beetley and Gressenhall. Isolated farmhouses along the rural road network are also a feature.
- B6.9 Red brick, clay lump and occasional colour rendered houses are a feature of the settlement cores although the historic character is eroded by 20th century infill development within the villages. Churches are a distinctive feature, such as at East Bilney and the perpendicular church of St Mary at North Elmham.
- B6.10 Settlement edge character is varied, although in a number of cases e.g. Elsing, the settlement edge is screened by woodland. The former Dereham-Fakenham railway line dissects the north western part of the character area.

Perceptual/Visual

- B6.11 Views are generally contained by the landform and field boundaries, but occasional glimpsed views into the river valleys are possible. Parkland at Bylaugh provides an attractive wooded skyline. The landscape is relatively colourful and textured due to the wet woodland, marshland and wetland associated with the tributaries.
- B6.12 The scale of the landscape is variable, and largely defined by the arable field pattern. In the south eastern part where land is wetter and drained by a network of drainage channels, fields are smaller, creating a more intimate and enclosed landscape than to the north and west where fields are larger.
- B6.13 The landscape has a distinct, small scale pattern around its settlements. The A47 creates a localised interruption within the landscape, although it does not detract from the overall sense of tranquillity.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

The following are judged to be the key inherent landscape sensitivities which are fundamental to the character of the landscape.

- Remaining historic parklands/estates e.g. at Bylaugh and Sennowe Park;
- The occasional large woodland blocks, a number of which include ancient woodland;
- The wet woodland and wet meadow habitats associated with the tributaries;
- Areas of grazing pasture.
- Small scale vernacular settlements.

Visual Sensitivities

B6.14 The key visual sensitivities are the wooded skylines. The most significant woodland is associated with Bylaugh Park and the large blocks of ancient woodland, but the smaller scale woodland associated with tributaries also contributes to the generally wooded character.

Current State of the Landscape

- B6.15 This is a productive, managed agricultural landscape, although the number of National and County level nature designations demonstrate the character area's ecological potential, and this is reinforced by the range of habitats present.
- B6.16 Interruptions due to the A47 and occasional harsh settlement edges locally disrupt the visual intactness.

Landscape Change

Past Change

- Construction of the A47 as a major route through Dereham;
- Parliamentary and piecemeal enclosure, and associated loss of common land;
- Agricultural intensification and attendant field boundary loss during the 20th century;
- 20th century infilling and expansion of settlements;
- Woodland planting on areas of former heathland and common land;

Future Change

B6.17 The Local Plan shows that sites with planning permission for residential development exist within a number of villages, although no further development pressures are

noted. There may be the potential for heathland and woodland creation through the implementation of EcoNet Objectives.

LANDSCAPE STRATEGY

The overall management objective for the *Wensum and Tud Settled Tributary Farmland* is to conserve and enhance the landscape of the tributary valleys that thread through the agricultural land, with the aim being to conserve and reinforce the small scale wetland character associated with the minor watercourses to create stronger connections with the adjacent river valley landscapes. The rural, settled character should be conserved to provide a contrast with the more open, exposed plateau landscapes. Opportunities to improve biodiversity through field boundary hedgerow planting and set aside field margins should also be explored, in addition to seeking opportunities for grassland, heathland and woodland opportunities where appropriate.

Guidelines

Landscape Management

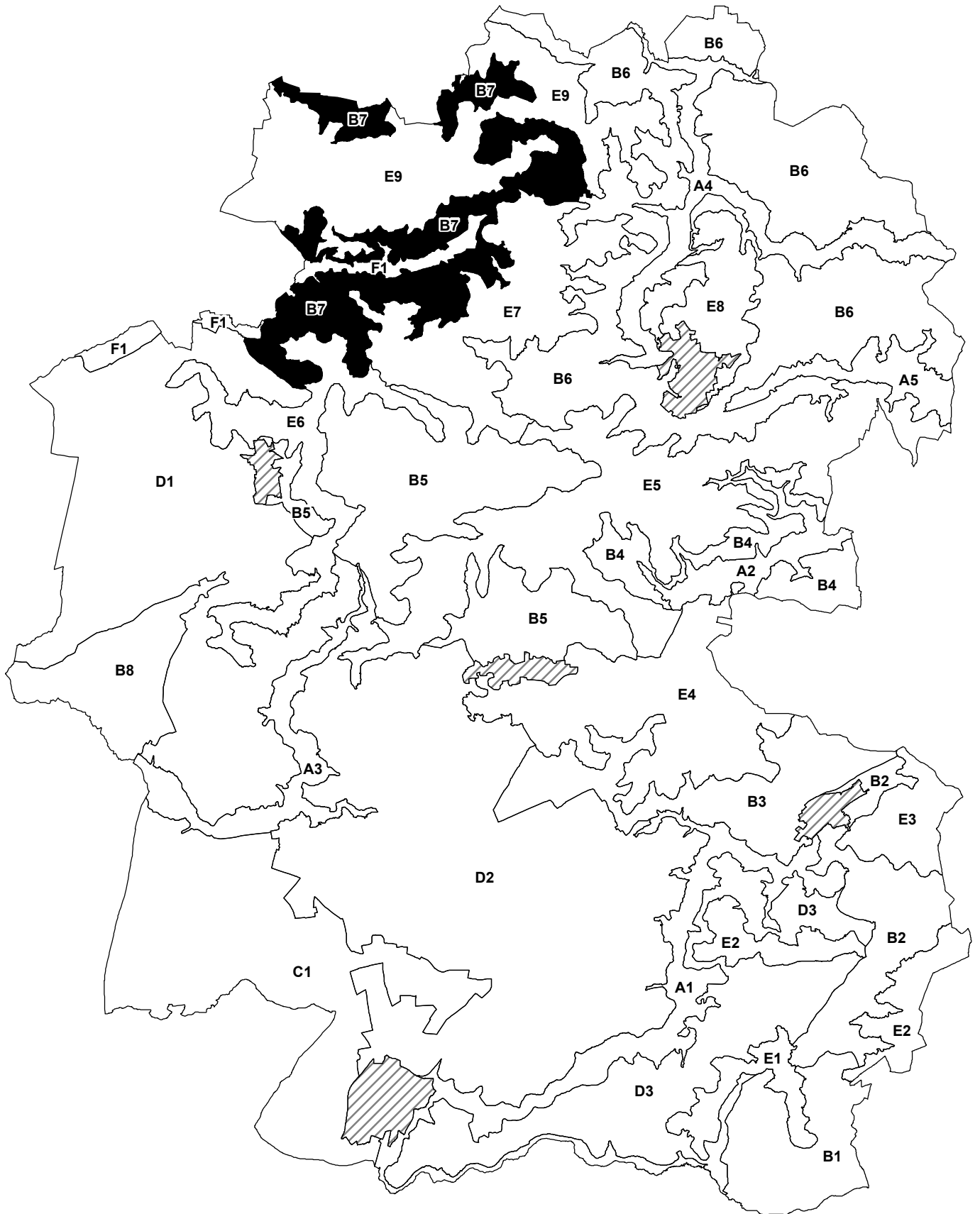
- Conserve and enhance existing field boundary hedgerows, trees and wooded strips through appropriate landscape management;
- Create new, species rich field boundary hedgerows to enhance and reinforce the existing network and to provide opportunities for habitat connectivity;
- Explore opportunities to improve biodiversity through creation of field set aside margins;
- Explore opportunities to re create areas of heathland where appropriate and possible.
- Protect common land, ensuring that any new development or changes to land use does not detract from the historic character;
- Conserve woodland and meadows associated with the tributaries as an important ecological feature and enhance connectivity through buffer strips to the tributary water courses.

Development Considerations

- Conserve existing small scale rural road pattern, resisting upgrade/calming measures which could have an urbanising influence;
- Ensure that any new development reflects the existing material and stylistic vernacular within the settlements (e.g. Norfolk red brick and clay lump) and that settlements individual and separate identities are preserved;
- Monitor development and boundary treatments to the settlement edges, resisting any materials and/or species which could have an urbanising influence on the landscape.



B7: RIVER NAR SETTLED TRIBUTARY FARMLAND



B7: RIVER NAR SETTLED TRIBUTARY FARMLAND

Location and Boundaries

B7.1 The *River Nar Settled Tributary Farmland* is located in the north western part of Breckland District, adjacent to character area FI: *River Nar*. It is characterised by a gently sloping landform, formed by glacial drift deposits of sand, gravel, clay and silt. The character area is bounded to the north by *Whissonsett Plateau* and to the south by *North Pickenham Plateau*, with the landscape type extending into the neighbouring authority of Kings Lynn and West Norfolk to the west and into North Norfolk District to the north.

Key Characteristics

- Lowestoft till glacial deposits give rise to a subtly undulating landform interrupted by occasional shallow dry valleys and tributaries.
- Alluvial deposits are a feature of the tributaries and dry valleys. Clayey Argillic brown earths dominate the character area and support a range of arable crops.
- The topography is gently undulating and sloping in places, particularly where associated with the course of the Nar, and ranges from 45-75m AOD.
- Due to landform and the varied range of landcover elements, views are essentially framed and intermittent, with wooded skylines often evident.
- A diverse range of landcover elements includes historic parkland (Lexham Hall, a large part of which lies in the adjoining *River Nar* character area), mixed plantation and grazing pasture, together with arable agriculture in the eastern part of the character area.
- Enclosure hedges with hedgerow trees define the medium-large scale arable field network, with some post and rail fenced boundaries associated with the Lexham Hall Estate.
- A number of sites within the character area are designated as County Wildlife Sites in view of their local biodiversity interest. These include the wooded common at Bilney Common and woodland at Fox Covert.
- The continuity of settlement and human intervention is illustrated by a range of historic features, including tumuli at Great Wood, Litcham Priory, the ruined church at Kempstone and a number of moated sites, in addition to Saxon round towered churches, e.g. West Lexham.
- Distinctive elements include the parkland of Lexham Hall and associated stands of parkland tree planting, together with a number of field boundary tributaries and wooded skylines created by pine belts.
- Settlement pattern is often nucleated and centred on an historic village core, as at Litcham and Tittleshall, and more occasionally linear, as at Stanfield. In

addition there is a scattered distribution of small farmsteads associated with the narrow rural road network.

- The range of landcover elements creates a distinctly textured, varied landscape, which is of a broadly unified and tamed, estate and agricultural character.
- Opportunities for recreation and access are provided by open access land at Litcham Common (Nature Reserve), in addition to a network of rights of way.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- B7.2 A gently undulating landform results from glacial till drift deposits which overlay the chalk solid geology, and which are carved by the tributaries draining into the River Nar. Topography ranges from 45-75 metres AOD.
- B7.3 The drift geology is overlain by clayey argillic brown earth soils, which influences the dominant landcover elements, both parkland grassland and arable cropping. Landcover includes parkland trees and mixed estate woodlands associated with Lexham Hall, in addition to parkland grassland. Arable agriculture predominates in the eastern part of the character area.
- B7.4 A medium scale arable field network is defined by mixed Enclosure hedges with hedgerow trees, in addition to localised areas of post and rail fencing associated with Lexham Hall. Scots pine belts define field boundaries at points, creating wooded skylines.
- B7.5 The character area is identified within the Norfolk Ecological Network Mapping Project as falling within an Enhancement Area for Heathland, Grassland and Woodland Creation. Ecological potential is illustrated by a number of sites which are designated as County Wildlife Sites in view of their local biodiversity interest. These include the wooded common at Bilney Common and the woodland at Fox Covert.

Historic Character

- B7.6 The Historic Landscape Characterisation (HLC) has not yet been completed for this character area. Faden's 1797 Map of Norfolk illustrates a number of historic features, including common and heath, woodland and parkland. In particular, Faden's survey identifies Lexham Hall as belonging to Sir John Wodehouse and a minor estate to the north of Litcham. Common land is also identified at Stanfield, Bilney, and Litcham/Mileham Common, in addition to blocks of woodland associated with Lexham Hall and parkland.
- B7.7 Of these Lexham Hall, parkland and woodlands are extant, as is Bilney Common, albeit reduced in area. Much of the other common land has however been lost to subsequent agricultural Enclosure and localised afforestation. The small scale, nucleated settlement pattern associated with the rural road network and identified by Faden is extant today.

Settlement and Built Character

- B7.8 Settlement is generally nucleated in formation, e.g. Litcham and Tittleshall, although linear development is also apparent e.g. Stanfield. Built form displays a range of vernacular styles and materials, including traditional red brick, flint, render and clay tile at Litcham. Pevsner identifies the most significant buildings as the late gothic parish churches of Tittleshall and Litcham.
- B7.9 Outside of these compact, low density villages, which are associated primarily with junctions and crossing points in the rural road network, settlement is confined to scattered and isolated farmsteads.

Perceptual and Visual

- B7.10 This is a varied landscape which is essentially unified by the undulating landform and the managed estate and farmland character. The well managed, designed landscape of Lexham Hall is an important and distinctive element of the local landscape, and its influence is extended through blocks of mixed estate plantation woodland.
- B7.11 Views are contained by landform and by woodland vegetation, either as plantation woodland or wooded field boundary strips and field boundary hedgerows. A wooded skyline is evident at points, with scots pine belts limiting instances of intervisibility with adjacent landscapes.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

- B7.12 The following are judged to be the key landscape sensitivities which are fundamental to the character of the landscape.
- Pine belts which are historic boundary features;
 - Intact field boundary hedgerows which indicate the Enclosure field pattern.
 - Small scale contained settlements of vernacular style and materials.

Visual Sensitivities

- B7.13 Key visual sensitivities include the prominent wooded skylines and the views across to Lexham Hall parkland and the course of the Nar within the adjacent character area.

Current State of the Landscape

- B7.14 This is essentially a well managed and productive landscape, although historical and ecological integrity vary across the character area. The landscape associated with Lexham Hall is more historically intact and ecologically diverse than the areas under arable cultivation in the eastern part of the character area.

Landscape Change

Past Change

- Enclosure of common and heathland;
- Agricultural intensification in the eastern part of the character area.

Future Change

- B7.15 Potential future landscape change may arise from the implementation of agri environment schemes, e.g. for the enhancement of hedgerows and field boundary margins. There may also be the potential for change through the implementation of EcoNet objectives for heathland, woodland and grassland re-creation and restoration.

LANDSCAPE STRATEGY

The overall landscape management objective for the *River Nar Settled Tributary Farmland* should be to conserve remaining historic landscape features, such as common land and the trees and woodlands associated with the Lexham Hall Estate, and to enhance areas under arable cultivation. The landscape of the tributaries that thread through the agricultural land should be conserved and enhanced, to reinforce connections with the River Nar. The settled, rural character should be conserved. Opportunities to enhance and extend recreational provision should also be explored.

Guidelines

Landscape Management

- Conserve remaining areas of heathland and common through appropriate management, investigating the viability of traditional management techniques such as grazing;
- Conserve and enhance the tributary systems and associated vegetation;
- Enhance and reinforce existing field boundaries with an appropriate species rich native hedgerow mix, gapping up with native species where appropriate to promote habitat connectivity;
- Explore opportunities for woodland and heathland creation, both to connect to existing and to satisfy the objectives of Norfolk Ecological Network Mapping Project.

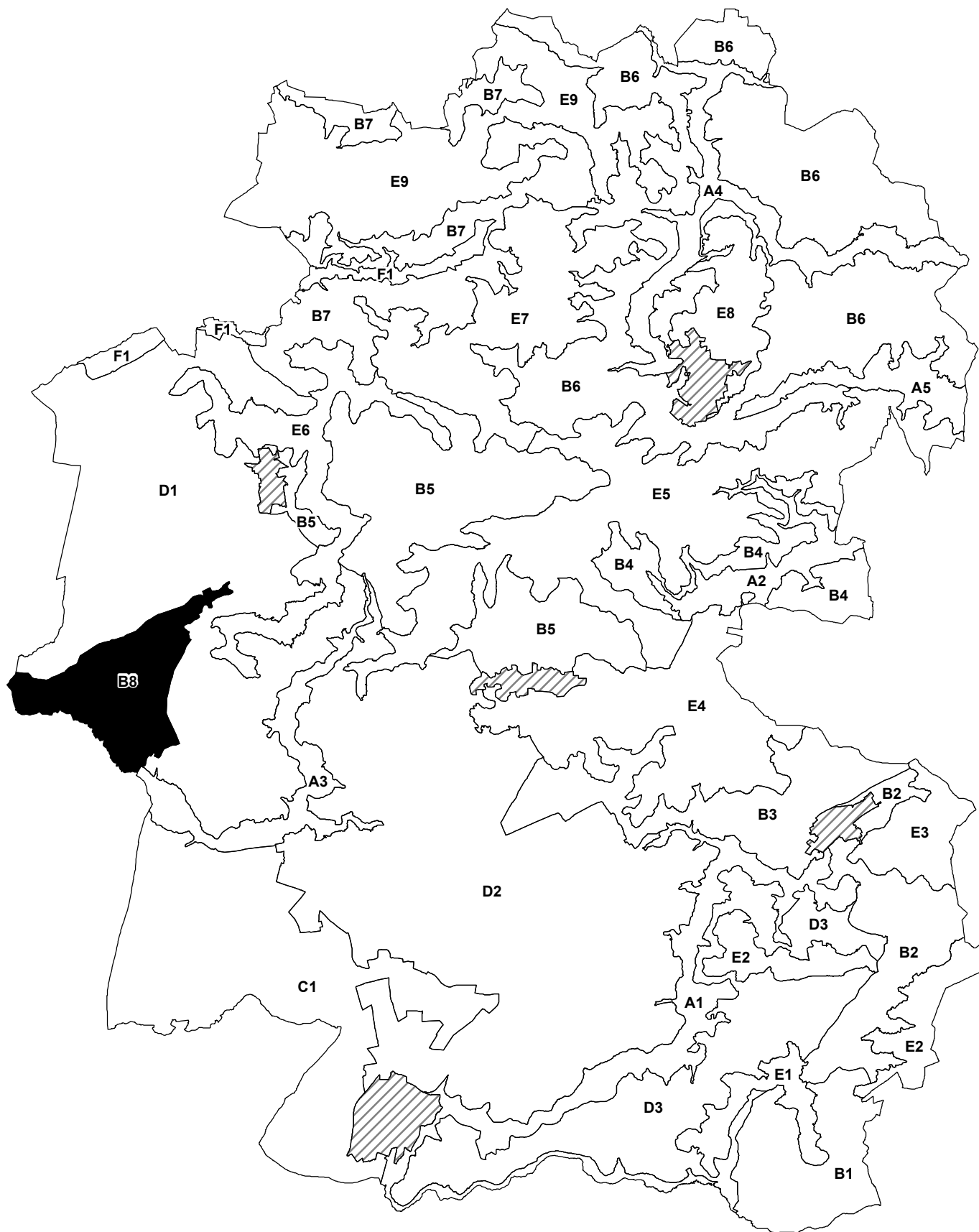
Development Considerations

- Conserve small scale rural road network, resisting upgrading pressures which could have an urbanising influence, such as edges and signage;
- Ensure that wooded skylines are conserved when planning for change;

- Any new development should respond to local vernacular in terms of materials and scale, and should seek to maintain the existing tightly nucleated settlement pattern.



B8: GOODERSTONE TO OXBOROUGH SETTLED TRIBUTARY FARMLAND



B8: GOODERSTONE-OXBOROUGH TRIBUTARY FARMLAND

Location and Boundaries

- B8.1 *Gooderstone-Oxborough Tributary Farmland* covers the undulating farmland surrounding the Gadder tributary. It is located in the western part of Breckland District, the landscape type continuing over the district boundary into the Borough of King's Lynn and West Norfolk. The extent of the character area is defined by the district boundary to the south and south west, and by the *Swaffham Heath* character area, to the north and east.

Key Characteristics

- A low lying, undulating area of agricultural land interspersed with shallow tributary valleys associated with the River Gadder.
- Deposits of glacial till are sparse in comparison to other landscapes from this type, with diverse geological mosaic including Chalky soils supporting chalk grassland and acidic/sandy soils supporting areas of heathland.
- Views across the character area are essentially framed or channelled due to the variation in topography and pattern of vegetation.
- Landcover is mixed and includes grazed permanent pasture associated with the tributaries including areas of wet meadow at Cockley Cley, small scale woodland blocks and areas of common, chalk grassland and wooded heathland. Arable agriculture is dominant in some areas.
- The woodlands include linear areas of alder carr and mixed wet woodland associated with the Gadder tributary, plus areas of birch dominated woodland associated with localised areas of sandy/acid heathland.
- Field pattern is generally geometric and relatively small in scale, with some medium sized fields. Post and wire fences often form boundaries.
- Historic sites illustrate the influence of landed estates and the continuity of settlement, and include the moated manor house of Oxborough Hall and associated parkland, a number of moated sites associated with the Gadder Valley, in addition to Foulde Hall and moat and a ruined church at Cockley Cley.
- The water filled pingos of Foulde Common are a locally distinctive feature.
- Nucleated (e.g. Oxborough), compact and occasionally linear (e.g. Gooderstone) settlement pattern, with settlements often characterised by historic/vernacular cores and centred on imposing churches or halls.
- A landscape of a peaceful, very rural character, seemingly remote in places.
- A number of rights of way provide recreational access. Additional recreational opportunities are provided by common land, access land and by the water gardens

at Gooderstone. Drove roads are a feature of the area running perpendicular to the Gadder valley.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- B8.2 The underlying chalk solid geology is relatively sparsely overlain with glacial till drift deposits, meaning that the bedrock geology has significantly influenced the chalky brown rendzina soils although acid soils are also apparent creating distinctive contrasts in vegetation and land use. Topography ranges from 5-40 metres AOD across the character area, with the lowest areas associated with the River Gadder.
- B8.3 Landcover is variable across the character area, partly due to the distinctive alternating bands of acid and alkaline soils with grazed pasture, areas of small scale woodland, wooded heathland and colonising birch, commonland, chalk grassland and arable agriculture all represented within the character area. Wetland habitats associated with the course of the River Gadder are evident, including reeds, springs areas of wet woodland and alder carr and wet meadows.
- B8.4 A geometric field pattern of varying scale, predominantly small scale but also some medium scale fields is apparent.
- B8.5 The ecological diversity and potential of parts of the character area is recognised in the large number of wildlife designations. Foulde Common is designated as a SSSI on account of its diversity of habitats which encompasses open water (pingos), fen, chalk grassland, birch woodland and alder carr. Areas of remnant heathland also provides foraging and breeding opportunities for Stone Curlew, whose primary habitat is the adjoining Breckland Farmland SSSI/SPA, which is also partly within the character area.
- B8.6 Foulde Common also forms part of the Norfolk Valley Fen SAC, primarily due to the habitat opportunities it provides for whorl snails, but also due to its calcareous and acid heathland and the carrs.
- B8.7 The course of the Gadder and associated tributaries form part of the Core Area within the Ecological Network Mapping Project, as do the SSSIs. In addition, a number of the habitats which occur within this character area are also identified as priority habitats within the Norfolk BAP, e.g. alder carr calcareous grassland, lowland grassland and acid heathland.

Historic Character

- B8.8 The Historic Landscape Characterisation (HLC) is not yet complete, and only covers the central, southern and eastern parts of the character area. Historic processes identified include parliamentary fen enclosure, piecemeal parliamentary enclosure and 20th century Enclosure.
- B8.9 Faden's 1797 Map of Norfolk has identified a number of small parklands partly within the character area, notably Oxborough and Cockley Cley, in addition to common land at Gooderstone, and fen at Foulde. Areas of heathland are also apparent, as

are a number of warrens, which indicate the historic land use of rabbit farming which was once widespread in Breckland.

- B8.10 A number of these features are still apparent, notably the moated 15th century red brick manor house and crenellated gatehouse at Oxborough Hall and features of the designed landscape at Cockley Cley Hall, such as the lake. Areas of common land and heath survive, most notably at Foulde n Common, although much was absorbed in subsequent Enclosure or has been lost through lack of grazing and colonisation by scrub and woodland.

Settlement and Built Character

- B8.11 Settlements are generally compact and of low density forming hamlets rather than villages. They are either nucleated, as at Oxborough and Cockley Cley, which are both centred on historic village greens, or linear as at Foulde n and Gooderstone. Gooderstone is distinctive for its very long street with the River Gadder flowing parallel. The settlements generally display strongly historic cores with much traditional vernacular including flint, stone and red brick, with red clay tiled roofing. A number of settlements also display 1960s/1970s urban edge expansion. Large and often partially ruined churches are a characteristic feature, as Cockley Cley (ruined round tower) and Oxborough (Perpendicular, dressed stone, with ruined nave), and form a focus and landmark for settlement, as does the hall and parkland at Oxborough.

Perceptual and Visual

- B8.12 Opportunities for views are often limited by localised enclosure provided by wooded rural lanes at points. Views are often framed or channelled although there is some intervisibility with the adjoining *Swaffham Heath* character area. Overall, the character area has a very peaceful, tranquil, rural quality.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

- B8.13 The following are judged to be the key landscape sensitivities which are fundamental to the character of the landscape.
- Historic parklands associated with halls such as Oxborough, which provide historical continuity and have influenced the historic settlement pattern;
 - Small scale intact settlements and vernacular cores to the villages - prominent medieval churches provide a sense of historical integrity;
 - Pingos within Foulde n Common are a locally characteristic resulting from glacial thaw at the last Ice Age;
 - The combination of calcareous grassland and acid heathland at Foulde n Common refers to Breckland's distinctive geology and to the historic land cover;
 - Very rural peaceful character associated with this part of Breckland.

- The Gadder valley and its important wetland habitats – woodland and meadow and grazed pasture.

Visual Sensitivities

- B8.14 Key visual sensitivities include the settings of historic sites such as Oxborough Hall and the large, often partially ruined churches. Other visual sensitivities include the narrow and historic crossing points across the tributaries. The level of woodland cover limits views and intervisibility with other landscapes.

Current State of the Landscape

- B8.15 The character area generally has a strong character and sense of historic integrity, particularly along the Gadder Valley. SSSI designations at Foulden Common and part of Breckland Farmland recognise the ecological richness of parts of the character area. A number of field boundaries are eroded however, with hedgerows having often been replaced by post and wire fencing, and parts of the landscape are intensively managed arable farmland particularly in the north eastern part of the character area.

Landscape Change

Past Change

- Enclosure and associated loss of commons/heathland/fens;
- Lack of grazing and scrub/woodland development on areas of heath and chalk grassland
- Agricultural intensification and loss of field boundary hedgerows;
- Expansion to settlement edges, e.g. Oxborough.

Future Change

- B8.16 Potential future change may arise through the implementation of agri-environment schemes. The Local Plan has not identified any specific future forces for change within the character area.

LANDSCAPE STRATEGY

The overall landscape strategy should be to conserve the intimate, small scale and pastoral landscape and associated with the course of the Gadder, and to enhance the surrounding agricultural landscape. Areas of BAP priority habitat, such as calcareous grassland, acid heath and the alder carrs should be conserved and managed to maintain their current extent and quality, with opportunities for restoration/recreation where appropriate.

Guidelines

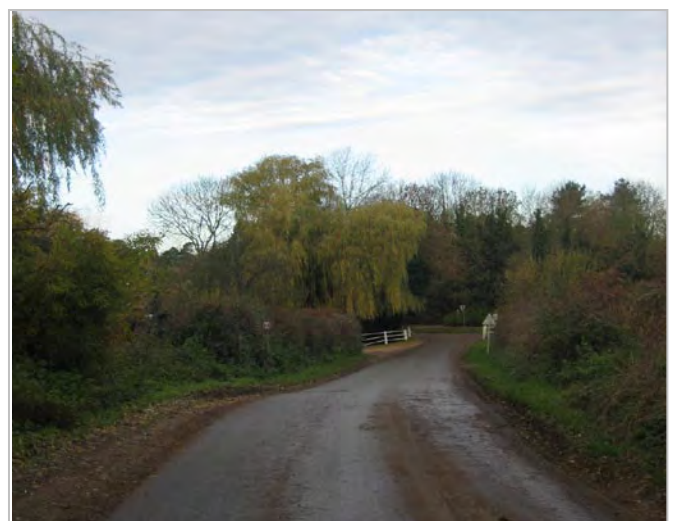
Landscape Management

- Seek to conserve and enhance the wetland landscape of meadows, grazed pasture and wet woodland along the River Gadder;

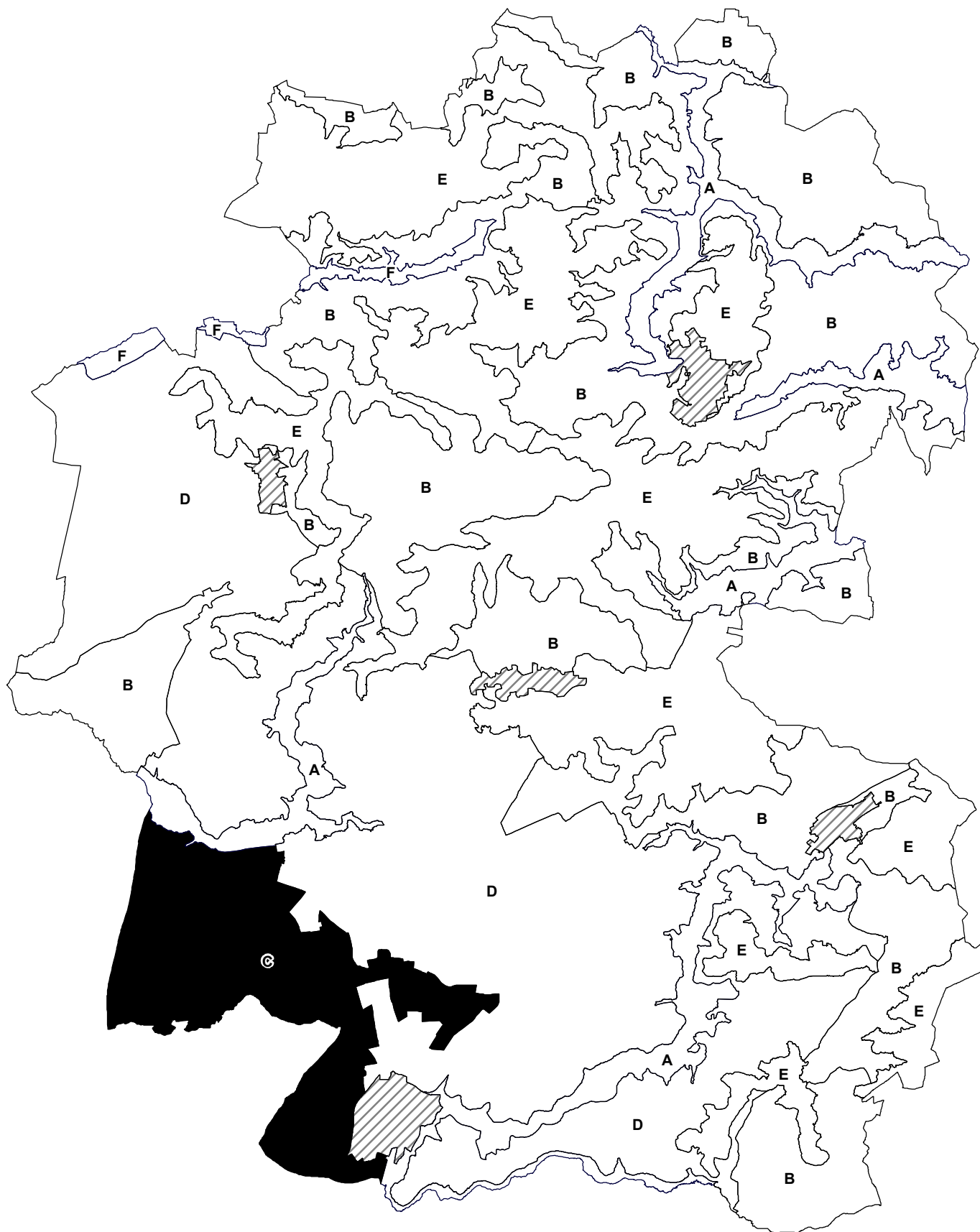
- Create new, species rich field boundary hedgerows where hedgerows have been lost to enhance connectivity with existing hedgerows and woodland site;
- Explore opportunities to improve biodiversity through creation of set aside margins to arable fields.
- Conserve and enhance areas of chalk grassland and acid grassland heathland and consider opportunities for reintroduction of grazing to these areas - seek opportunities for restoration of areas of habitats that have been lost;

Development Considerations

- Conserve the small scale low density settlement pattern which is integral to the peaceful, rural character of the area;
- Conserve the historic vernacular settlement cores centred on village greens, in addition to the settings of the historic/ruined churches, safeguarding these from any unsympathetic new development;
- Avoid further linear development of Gooderstone along the road network, or peripheral expansion which would result in loss of the distinctive linear character of the street;
- Monitor development to the settlement edges in terms of materials, character and garden boundary treatments;
- Conserve the existing network of narrow rural road, paying particular attention to the tributary crossing points, and avoiding traffic pressures/traffic calming schemes.



C. THE BRECKS - PLANTATIONS



LANDSCAPE TYPE C: THE BRECKS - PLANTATIONS

CI This landscape type is defined by large scale plantation forestry and a simple composition. Views are channelled and often contained by plantation blocks, creating an intimate spatial scale and quality. A strong geometric pattern is apparent due to the rectilinear road network and the bold, uniform plantation blocks.

Key Characteristics

- A simple, large scale landscape on both the horizontal and vertical plane defined by extensive tracts of coniferous plantations that offer a strong sense of enclosure.
- An uncomplicated landscape of repeated elements notably the dense plantations with high canopies, which draw the eye to provide glimpsed views to the sky.
- With an elevation range of 10m – 50m AOD, the landform gently slopes towards the adjacent river valleys but the subtle elevation change is not immediately obvious due to the almost blanket coverage of the plantations.
- The dominant and repeated geometric plantation blocks create a simple and monotonous land cover pattern that accommodates a range of land uses – predominantly commercial timber production but also areas for recreation and military training.
- Linear, right-angular tracks and access routes divide the plantation blocks but these are only perceptible at close range, with the woodland blocks appearing as one continuous tract.
- Views are channelled down the long straight roads – both primary and secondary - which form strong linear corridors through the forest.
- Weeting would be an exception to this, as the single large settlement in the character type.
- An unsettled landscape with the exception of small settlements and the occasional individual property.
- Looking towards this landscape from adjacent areas, the skyline is defined by straight, continuous edges of the plantations, which silhouette against the sky and provide dramatic landmarks. The canopy forms a simple contrast with the sky.
- Tree cover greatly restricts views and as such built structures and landmarks are for the most part not evident.
- Although the distinctive plantation edges are visible from adjacent landscapes, tree cover largely prevents views into adjacent landscapes.

- The main roads cutting through the plantations brings a distinct sense of movement, although away from these roads the landscape can appear isolated and peaceful.

Landscape Type C: The Brecks - Plantations

Character Area

CI The Brecks of Thetford Forest

CI: THE BRECKS OF THETFFORD FOREST



CI: THE BRECKS OF THETFORD FOREST

Location and Boundaries

- CI.1 *The Brecks of Thetford Forest* lies in the south-western part of Breckland District and the landscape type extends into the neighbouring authorities of Kings Lynn and West Norfolk Borough and Forest Heath District (Suffolk). The character area is defined primarily by the distinctive and extensive mixed plantation woodland cover, with the northern boundary marked by the *Wissey Valley*, and the eastern boundary defined by the more open and sparsely wooded character of the adjacent *Stanta Heath* character area.

Key Characteristics

- A gently undulating landscape with sparsely deposited glacial drift material including sand, clay and gravel overlying the chalk solid geology. Distinctive stripes of brown and chalk based soils are apparent in the heaths at Grimes Graves.
- Topography ranges from 20-30m AOD throughout the character area.
- Views are intermittent and generally contained by the dense mixed mature plantation woodland cover, although woodland rides create localised views. There is relatively low intervisibility with adjacent character areas.
- Mixed plantation woodland dominates the landscape, with coniferous species such as Scots Pine, Corsican Pine and Larch predominating, in addition to broadleaves such as oak, beech and birch.
- With the exception of small scale isolated areas of heathy grassland, there are relatively few areas of open land, due to the extensive plantings undertaken by the Forestry Commission throughout the 20th Century.
- Strips of mature broadleaf trees and woodland define both former field and parkland estate boundaries (West Tofts), indicating the historic landcover and landuse. Contorted historic Scots Pine windbreak hedgerows are apparent throughout the character area, and are a distinctive feature.
- Historic sites include the nationally significant Neolithic flint mines at Grimes Graves, a number of barrows, a Romano-British site at Leylands Farm, and a former moated settlement and church site at Santon Downham.
- There are few extant areas of settlement within the character area, with the exceptions of Weeting, Mundford and Lynford. Weeting is the only large settlement in the character area. A network of straight rural roads traverses the character area, with distinctive right angled junctions.
- Intimate, small scale and contained landscape, with a wide variety of texture and colours due to the mixed woodland canopy cover, and characterised by a strongly unified, almost monotonous quality in places.

- Recreational opportunities are afforded by a network of way marked routes and rights of way across the character area, in addition to extensive areas of open access land and an aerial assault course within Thetford Forest.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- C1.2 The physical geology of the character area is defined by glacial drift deposits of sand and gravel overlying a chalk solid geology. The area is generally characterised by a thin light covering of drift deposits in comparison to surrounding character areas which have a deeper drift layer and more pronounced landform variation. The contrast of acidic drift and chalks soils is one of the most distinctive features of Breckland with contrasting vegetation and habitats in close proximity.
- C1.3 Where drift material has been deposited it give rise to the dominant brown sand soil – a droughty soil which without irrigation is prone to wind erosion. The acidic soils are reflected in the species composition of the woodland blocks, with pine being the main species. Within the pine plantations there are also areas of broadleaved planting. Within the East Anglia Forest District (which the character area falls within) there is approximately 12% broadleaf tree cover.
- C1.4 Coniferous and mixed/broadleaf plantation are the main land uses within the character area, in addition to isolated areas of farmland heathland and grassland which are traditionally managed by rotational sheep grazing. A number of the woodlands within Thetford Forest indicate the historic practice of rabbit farming, e.g. Thetford Warren.
- C1.5 Thetford Forest’s ecological potential is recognised in the large number of nature conservation designations across the character area. The greater part of the character area is designated as the Breckland Farmland SSSI and Breckland Forest SSSI, which also forms part of the Breckland SPA. Breckland Farmland SSSI is designated as a breeding ground for Stone Curlew, whilst the Breckland Forest SSSI supports an important assemblage of nationally rare plant species, a number of which are restricted to East Anglia and occupying habitats characteristic of Breckland. The Breckland Forest also contains the only extant population of red squirrel in East Anglia.
- C1.6 A number of areas within the Breckland Farmland SSSI within the character area are designated both as National Nature Reserves (NNR) and SACs. These include calcareous grassland and acid grassland at Weeting Heath SSSI/SPA and an area of MOD land adjacent to Grimes Graves flint mine, which support a wide range of flora and fauna. This diversity of habitats is reflected in the remnant heath at Barnhamcross Common SSSI/SAC, which encompasses alternating bands of acid heath and chalk grassland.
- C1.7 The importance of calcareous grassland as a habitat resource is recognised by Natural England, and the Norfolk Ecological Network Mapping Project has identified much of the character area as falling within the core area in view of its SSSI designation. Acid grassland and lowland heathland are identified as priority habitats within the Norfolk BAP and the Norfolk Ecological Network Mapping Project.

Historic Character

- C1.8 A number of historic landscape processes are identified within the Historic Landscape Characterisation (HLC), including 18-20th Century woodland plantations, piecemeal 18-19th Century Parliamentary Enclosure and 20th Century agriculture, plus boundary loss and areas of managed wetlands in the southernmost part of the character area adjacent to the watercourse of the Little Ouse.
- C1.9 Afforestation now represents the dominant land use, interspersed with small areas of farmland and pastoral grazing. A more open and pastoral character occurs near to the River Little Ouse, although this represents only a localised variation.
- C1.10 Faden's Map of 1797 identifies a large tract of heathland at Mundford Heath, falling broadly north-south across the character area, the large parkland of West Tofts (partly in the adjoining *Stanta Heath* character area), with its distinctive wooded boundary belt. In addition Faden's map also identifies the two churches at Weeting, the ruins of the 12th Century fortified manor at Weeting Castle, together with the nearby hall and parklands belonging to the Earl of Monrath. The early 18th Century house at Lynford which was rebuilt in the 1850's as the neo-Jacobean seat of the Lyne-Stephens family, is also identified.
- C1.11 Of these historic elements, isolated areas of heathy grassland and the distinctive mature oaks along the A134 (which form the belt of the former West Tofts parkland) are extant, in addition to the fragmented ruins of Weeting Castle and All Saints Church. Weeting Hall was demolished in 1952 and its parklands subsequently absorbed within the later urban edge growth of Weeting, which now forms the setting for the round towered church of All Saints with St Mary and of Weeting Castle. West Tofts was acquired by the Ministry of Defence and Forestry Commission in the 1940s and subsequently extensively planted with mixed woodland. Lynford Hall, parklands and associated arboretum survive as an hotel and country club.
- C1.12 The relatively settled historic character is indicated by a number of Scheduled Monuments within the character area, including the nationally significant neolithic flint mines at Grimes Graves, round barrows at Mount Ephraim Plantation, the round barrow and associated banking at Blood Hill and a Romano-British site at Leyland Farm, in addition to the moated site and former medieval settlement at Santon Downham, together with the site of St Helen's Church, oratory and holy well.
- C1.13 Reference to the medieval practice of 'warrening' or rabbit farming is made by Thetford Warren, within the character area.

Settlement and Built Character

- C1.14 There is relatively little extant settlement within the character area, other than the nucleated, historic villages of Weeting and Mundford, and the hamlet of Lynford. Weeting is centred on the historic village green and displays a range of vernacular building styles and materials, including thatch and red brick, to the village core, although it is also includes modern urban edge development adjacent to the round towered church and Weeting Castle. Thatched cottages are also apparent at 'The Row'. Mundford contains a range of vernacular styles and materials to its core

including red brick and jettied half timber, together with later and modern infill and edge development.

Perceptual/Visual

- C1.15 The landscape is intimate in scale and of an enclosed character due to the prevalence of the plantation woodland. The plantations include a variety of broadleaf and coniferous species, creating a variety of textures and palette of colours.
- C1.16 The historic interventions within the landscape have created a number of visually distinctive features, notably the Neolithic flint mines at Grimes Graves and the double belt of mature oaks alongside the long straight roads which formerly marked the extents of West Tofts parkland.
- C1.17 The afforestation programme implemented from the 1940s to the present day has resulted in a visually unified and essentially contained landscape. Views are intermittent and framed, often limited to those from the long rides which are cut through the blocks of plantation woodland.
- C1.18 Due to the density of forestry woodland the character area has an empty, tranquil quality, although this is to an extent affected by the Stanstead Airport flightpath. The American Airforce bases at Mildenhall and Lakenheath are also significant disturbances in the locality.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

- Ancient contorted Scots Pine windbreaks, which indicate historic field boundary pattern;
- Very mature oak 'avenue' planting to network of long straight roads with wide grassed verges, in particular along the A134, marking the historic West Tofts Parkland boundary;
- Extensive afforestation by mixed plantation woodlands is an essential component in defining sense of place and spatial enclosure;
- The round towered Church and castle at Weeting provides a sense of historic built character, as do the thatched cottages at 'The Row';
- The juxtaposition of the contrasting habitats of heath/acid grassland and chalk grassland, relating to the underlying soils and geology.

Visual Sensitivities

- C1.19 The key visual sensitivities associated with this character area include the relationship of the edge of areas of settlement to the wider landscape, as at Weeting, in addition to the occasional long views provided by the woodland rides.

Current State of the Landscape

CI.20 The current state of the landscape is that of a managed and productive afforested landscape, with range of mature mixed and coniferous plantation woodlands. Harvesting and replacement/succession planting is evident within the character area. The landscape is representative of the type and generally intact and also retains a number of historic features including areas of remnant heath and broadleaf parkland and field boundaries. The ecological richness of the character area in terms of the habitats it affords for protected bird species is recognised through the SSSI, SPA and SAC designations.

Landscape Change

Past Change

- Loss of parklands and heathland to early-mid 20th Century afforestation by the Forestry Commission;
- Recent Forestry Enterprise Pilot Projects have included areas of heathland restoration;
- Conversion of Lynford Estate to a country club and adjoining caravan park;
- Absorption of historic landscape features and elements within later urban growth at Weeting;

Future Change

CI.21 Potential future change may arise from the implementation of future Forest Design Plans, with an emphasis on increasing biodiversity through areas of heathland creation, and gradual, staggered changes in the species balance within the plantations as they are felled and replanted on rotation. The Growth Point Status of Thetford and potential future urban edge growth may have landscape implications to the south eastern edge of the character area.

LANDSCAPE STRATEGY

The overall landscape strategy for the *Brecks of Thetford Forest* should be to conserve the existing balance of broadleaf and coniferous plantation woodland (in accordance with Forestry Enterprise objectives and Forest Design plans), and remnant historic elements such as the boundary oaks and deal rows. In addition, existing woodland cover should be enhanced through succession planting (again in accordance with Forestry Enterprise objectives) to ensure continuity of cover. The opportunity for the creation of areas of acid grassland and heathland is already being explored by Forestry Enterprise in two pilot areas and should be maximised where possible as some plantations reach the end of their productive cycle.

Guidelines

Landscape Management

- Conserve long vistas created by woodland rides;

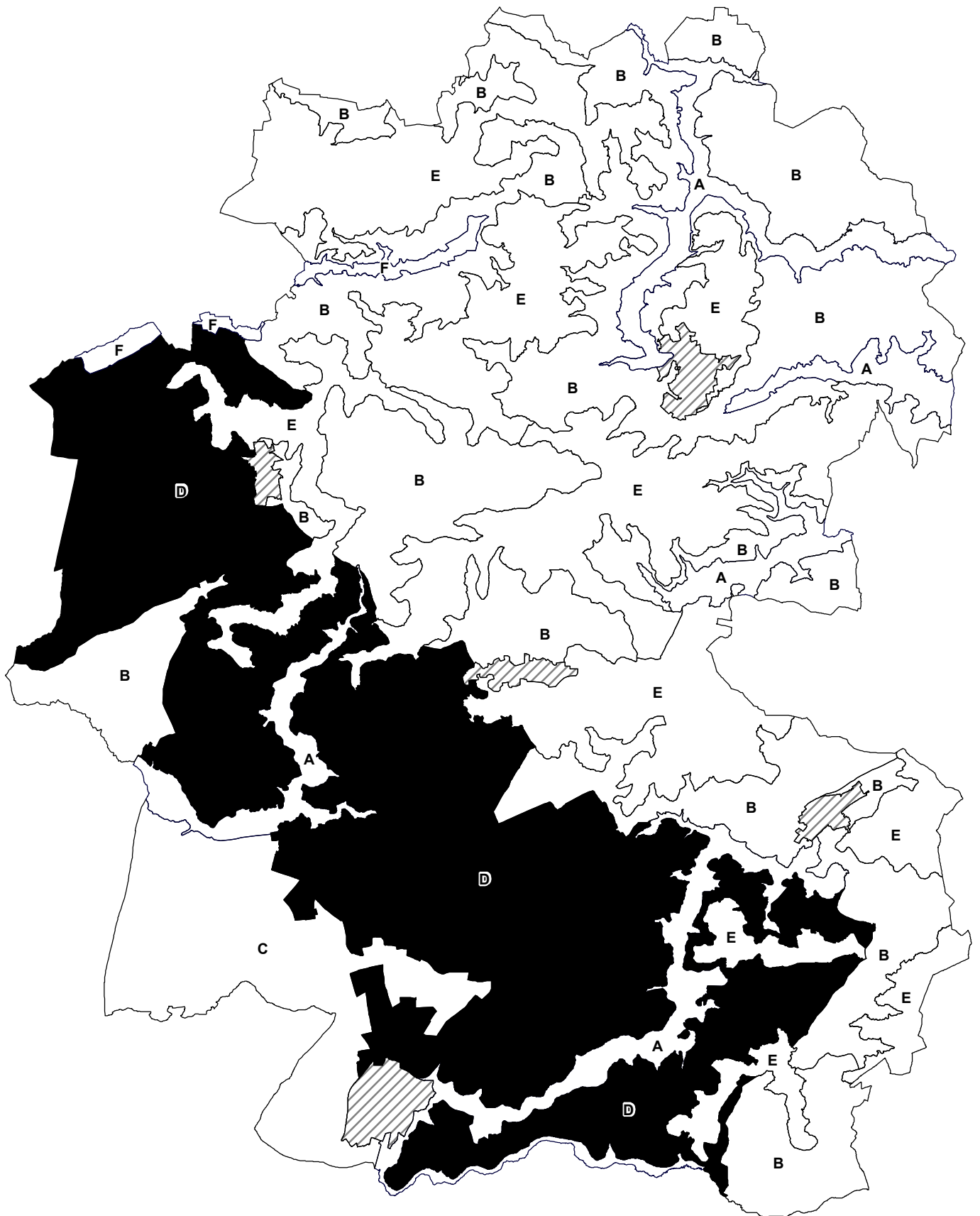
- Maintain existing balance of broadleaf and coniferous plantation woodland cover, and allow for sustainable canopy cover through succession planting as plantations are felled upon reaching the end of their productive cycle (subject to Forestry Enterprise objectives);
- Explore opportunities for further heathland restoration, in accordance with Forestry Enterprise Strategy and the objectives of the EcoNet Project;
- Maintain remnant historic features, including ancient pine hedgerows and distinctive oak avenues to roadsides, which mark the former extents of the West Tofts parklands;
- Conserve and enhance the setting of historic built elements within the landscape, such as the round towered church at Weeting.

Development Considerations

- Conserve wooded skylines to views and ensure that new development to the edges of defined settlements does not breach this;
- Conserve historic vernacular and ensure that any potential future development reflects these styles/use of materials;
- Conserve the predominantly 'remote' and unsettled/undeveloped character of Thetford Forest;
- Monitor existing pattern of urban edge to development and growth to settlements;
- Maintain existing rural character of the road network, resisting traffic pressures and traffic calming measures which could have an urbanising influence;
- Explore opportunities for enhancing recreational access, particularly to the historic drove road to the west of Weeting.



D. THE BRECKS - HEATHLAND WITH PLANTATION



LANDSCAPE TYPE D: THE BRECKS – HEATHLAND WITH PLANTATIONS

D1 This landscape type is defined primarily by the historic heathland land cover (now frequently replaced with arable fields), interspersed with small-medium scale blocks of mixed plantation woodland. The landscape type accommodates a range of land uses and has a less unified character than the *Brecks: Plantations* landscape type in view of this and the more open character created by the sparse, more varied woodland cover.

Key Characteristics

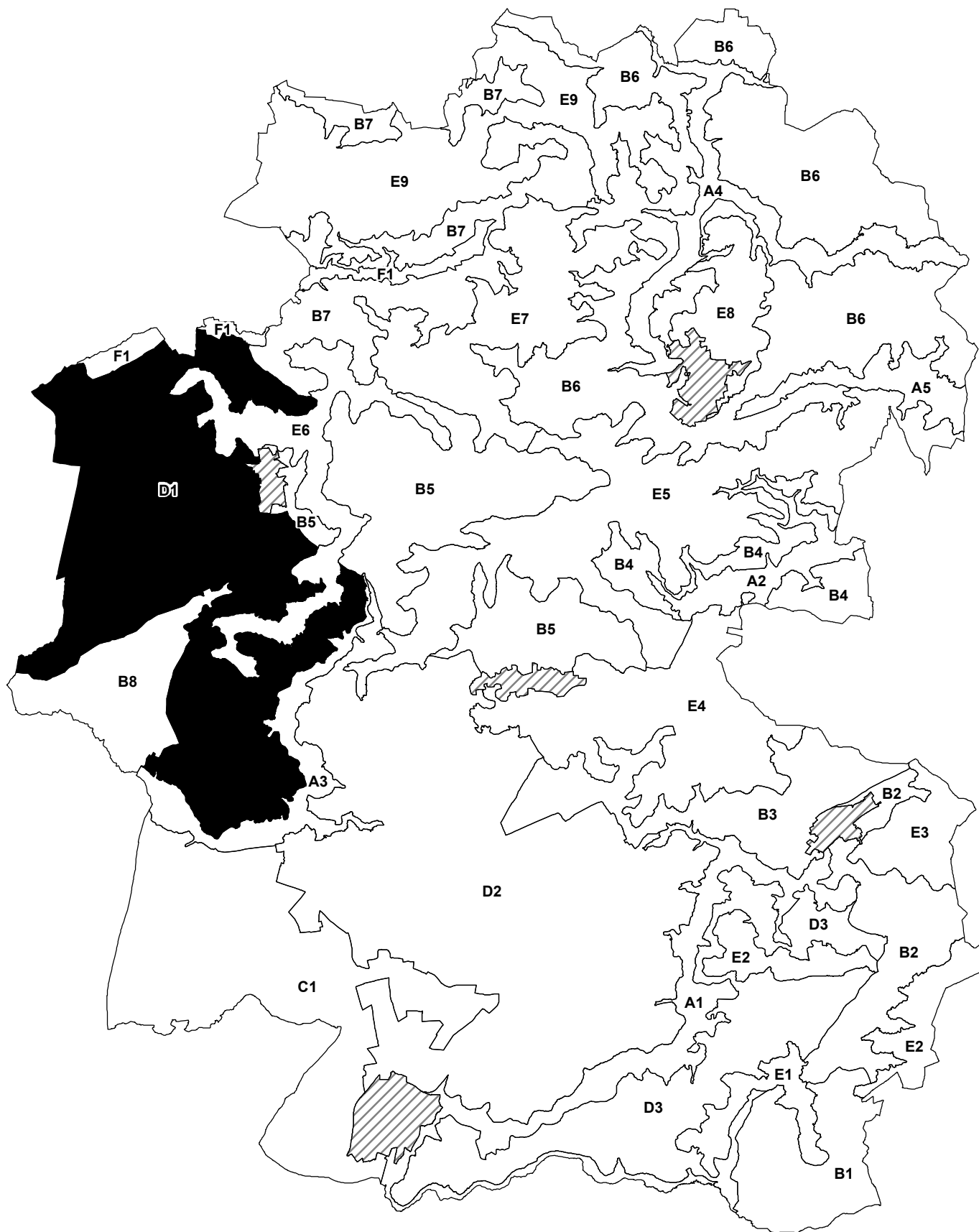
- A medium to large scale landscape characterised by areas of open farmland and heath and large coniferous plantations – changing perspectives from open to enclosed.
- River valleys cut through the Middle and Upper Chalk strata and plateaux rise to the north, creating a gently undulating landform with subtle slopes.
- Land cover is variable, ranging from intensively farmed arable fields, heathland and areas of coniferous plantation.
- Belts of twisted Scots pine, marking field boundaries and aligning roads, are sculptural features and points of focus.
- Settlement is dispersed and of low density but the urban edges of Swaffham and Thetford have an influence on the landscape.
- The skyline is prominent and for the most part wooded, defined by the solid lines of the coniferous blocks and shelter belt planting.
- Warrens, e.g. Beachamwell Warren and Gooderstone Warren are a distinctive feature.
- Views are often broken by tree cover allowing only glimpsed views into adjacent landscapes.
- Movement is variable –A roads and secondary routes bring a strong sense of movement to the landscape but away from these transport corridors, the area remains still and peaceful.
- Some large open, remote areas with few metalled roads or dwellings.

Landscape Type D: The Brecks – Heathland with Plantations

Character Area

- D1 Swaffham Heath
- D2 Stanta Heath
- D3 Harling Heathlands

DI: SWAFFHAM HEATH



DI: SWAFFHAM HEATH

Location and Boundaries

DI.1 A large area of the *Breckland Heathland with Plantation* landscape type located to the north-west, west and south west of Swaffham, with character defined primarily by the land use of arable farmland, historic parklands and plantation woodland and distinctive Scot's pine belts. To the north the character area boundary is marked by the adjacent *River Nar* character area and to the west by the district boundary and a change in character to a more settled area of farmland and plantations. To the south and east the landform falls towards the River Wissey.

Key Characteristics

- Drift deposits of sand, clay and gravel create a gently undulating landscape, with topography ranging from 10-70m AOD across the character area.
- Free draining sandy soils support the functional land cover of arable cultivation, pig farming and plantation woodland.
- Ancient, contorted scots pine shelterbelts and screening belts of trees provide shelter to the easily eroded brown soils and are a prominent landscape feature.
- At Cockleycley Heath and Swaffham Heath, the woodland plantation blocks create a visually prominent feature in the landscape.
- The large scale arable fields are delineated by hedgerows in variable condition from occasional species rich intact hedgerows with hedgerow trees, thorn hedges and pine lines.
- Breckland Farmland SSSI covers a large part of the character area – the cultivated land proving a habitat for stone curlew. A smaller area of Breckland Forest SSSI also covers part of the area.
- A large scale landscape, with an open, windswept character, quiet and seemingly remote in places.
- Historic parklands and parkland features such as lodge houses, rides/long vistas and parkland species are evident in the landscape.
- Sparsely populated - the settlement pattern is characterised by scattered Halls, farm buildings and a small number of nucleated villages and hamlets. Churches are often isolated.
- Distinctive building materials of knapped flint, clunch and brick
- The areas of open access land associated with plantations at Swaffham Heath and Coldharbour Wood provide opportunities for recreation.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- D1.2 The character area has an underlying solid chalk geology and a gently undulating plateau landform covered by a thin layer of glacial drift deposits including boulder clay and sands and gravels. The covering of drift deposits is shallower than in adjacent landscape character areas resulting in complex soils typically sandy free draining mixes of chalk, sand, silt, clay and flints.
- D1.3 The light, droughty soils are prone to wind erosion. The geology and soils are reflected in the species composition of the woodland blocks, with pine being the main species. The blocks of plantation woodland and coniferous shelter belts have protected the soil from erosion and has allowed much of the landscape to be given over to arable production. In addition to arable cultivation, a number of areas are used for outdoor pig raising.
- D1.4 Significant areas of the character area are covered by nature conservation designations, representing its ecological value. Large blocks of the character area are designated as part of Breckland Farmland SSSI (SPA), with the arable farmland notable for supporting almost half the stone curlews in Britain, nesting in the cultivated land favouring the areas of bare ground and very short vegetation. The majority of the Breckland Forest SSSI (SPA) lies outside of the character area, but plantation woodland at Cockleycley Heath and Swaffham Heath are parts of the SSSI. Gooderstone Warren is designated as a SPA.
- D1.5 Field enclosure is provided by hedgerows of various condition and species composition. Historic, contorted scots pine wind breaks form a strong vertical feature in the flat landscape, as are localised areas of hedges of fast growing coniferous species. The grassy banks and field edges are very important to the conservation of the remnant Breckland grass-heath habitats.
- D1.6 The entire character area falls within the 'Core Area' as defined by the Ecological Mapping Project for Norfolk. Core areas represent significant concentrations of high quality extant habitat. The high quality habitat represented within character area D1 is Breckland Forest and area of remnant heath.

Historic Character

- D1.7 Faden's 1797 Map of Norfolk identifies extensive areas of heathland and common within the character area, including Beachamwell Warren and Swaffham Heath. At this time it was an exposed open landscape. These areas have now largely been planted for commercial forestry and partly absorbed within arable cultivation. The HLC data (which is partially complete for the area) shows that the three most significant influences to be piecemeal parliamentary enclosure, 18th-20th century plantation woodland, and 20th century enclosure, some with resultant boundary loss. The landscape today, is one of medium to large sized fields often being bounded by 'gappy' and degraded hedgerows.
- D1.8 Plantations form significant blocks in two areas at Cockleycley Heath and Swaffham Heath. Conifer planting began in 1922 on areas of heath, and unstable sand dunes and marginal agriculture. The majority of the initial plantings reached the end of

their first rotation in the mid 1970s. Since then the harvesting of these and subsequent plantings has created a continuous supply of clear-felled areas and young plantations.

- DI.9 A number of parklands both extant and remnant signify the past wealth of this part of Breckland, notably the Historic Park and Garden at Pickenham Hall and the former estate of the now destroyed Didlington Hall. Various parkland elements are visible within the character area, such as the vista to Cockleycley Hall.

Settlement and Built Character

- DI.10 This is a sparsely settled landscape with a remote 'empty' quality in places. Settlement is characterised by a small number of nucleated villages generally located in proximity to and drawing on the resources of the intervening river valleys, as at Narborough (River Nar), Hilborough (River Wissey) and Cockley Cley (Gadder). In addition, there is a general pattern of dispersed farmsteads across the character area. The local vernacular is red/yellow brick and flint with occasional colour rendered buildings.

Perceptual/Visual

- DI.11 This is a large scale landscape with a strong geometry – with large regular fields defined by straight rows of Scot's pine or thorn hedges, interspersed with areas of conifer plantation. In places this creates a very open, exposed and windswept landscape. There is a relatively low density of woodland blocks, although where they do exist, they are large in scale and create a notable feature within the landscape.
- DI.12 Views both within the character area and to adjacent character areas are variable. In places views are distant, to the wooded skylines, to the elevated *North Pickenham Plateau* and to the *Wissey Valley*. However in other locations views are framed or contained by woodland blocks.
- DI.13 The low population density and the large swathes of farmland and woodland create a peaceful, even remote landscape. Views to the wind turbines north of Swaffham in the *North Pickenham Plateau* character area add a sense of movement and activity. Some noise disturbance from RAF Marham (within the adjoining Borough of Kings Lynn and West Norfolk) is apparent.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

- The historic boundary features - distinctive scots pine windbreaks and hedgerows;
- Remnant parkland features such as vistas to Cockleycley Hall, flint estate walls and lodge houses which provide a sense of historical integrity;
- The varied landcover mosaic created by the plantation woodland and farmland;
- Sparse settlement and rural character of the hamlets and villages;

- The narrow, often unmarked rural lanes and tracks;
- The ecological value of the arable farmland for birds, notably stone curlew;
- Areas of remnant heathland character.

Visual Sensitivities

DI.14 A predominantly an open large scale landscape with long, open views. Within the more enclosed wooded areas vistas which were designed into the landscape as parkland features, have in places been retained. These views create surprise historical markers within the landscape and would be sensitive to unsympathetic woodland management.

DI.15 The woodland blocks create an important focus to the landscape, particularly where views are across arable fields to woodland blocks on the skyline.

Current State of the Landscape

DI.16 This is a functional managed landscape with an eroding character in places due to loss of characteristic elements, notably heathland, degraded field boundaries, and changes in farming. The arable farmland provides a valuable habitat for farmland birds.

Landscape Change

Past Change

- Agricultural enclosure and loss of heathland, plus further loss of heathland with decline in grazing;
- Conversion of parkland and heath/commons to plantation woodland;
- Declining condition of remaining areas of parkland;
- Agricultural changes including outdoor pig raising and development of water storage reservoirs on agricultural land.
- Decline of distinctive Scot's pine hedgerows;
- An increasing influence of traffic upon the landscape character with the inclusion and widening of the A47, A1122 and A1065.

Future Change

DI.17 Potential future landscape change may result from the implementation of agri-environment schemes and management to enhance ecological value. Changes in Forestry Enterprise Strategy, including heathland restoration and renewal may also have a positive effect on landscape character.

LANDSCAPE STRATEGY

The landscape strategy should be to conserve the remote, open, sparsely settled character of the *Heathland with Plantation* landscape– restoring and enhancing the heathland character where appropriate and managing the arable farmland to enhance its ecological value, particularly for farmland birds.

Guidelines

Landscape Management

- Encourage take up of agri-environment schemes to improve the ecological value of arable farmland and to create habitat connectivity;
- Conserve and enhance the historic contorted pine wind break hedgerows through appropriate a management;
- Consider opportunities for heathland creation on areas where it has been lost, for example areas of plantation woodland;
- Ensure that any further recreation provision does not conflict with the sensitive species and habitats within the Breckland Farmland and Breckland Forest SSSI;
- Conserve the rides within parklands and plantations which provide attractive vistas to historic features, including those designated as Historic Parks and Gardens.

Development Guidelines

- Conserve the sparse settlement pattern of small villages associated with the edges of river valley and scattered farms;
- Ensure that any new built development fits with the local built vernacular, including use of materials (brick and flint);
- Conserve the existing rural road network, resisting traffic pressures and traffic calming measures which could have an urbanising influence;
- Consider the effect of tall or vertical structures within this very open, exposed landscape.



