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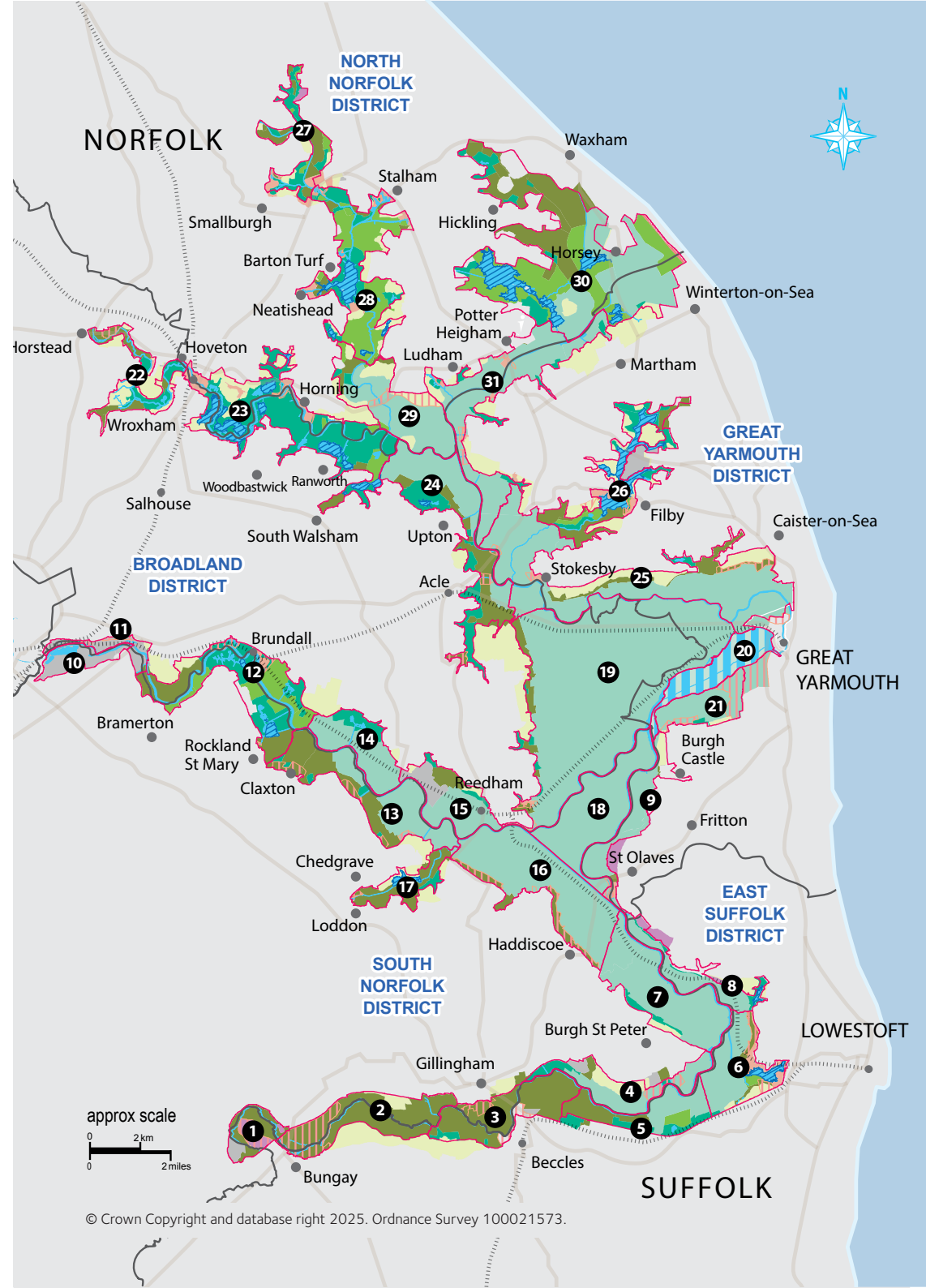
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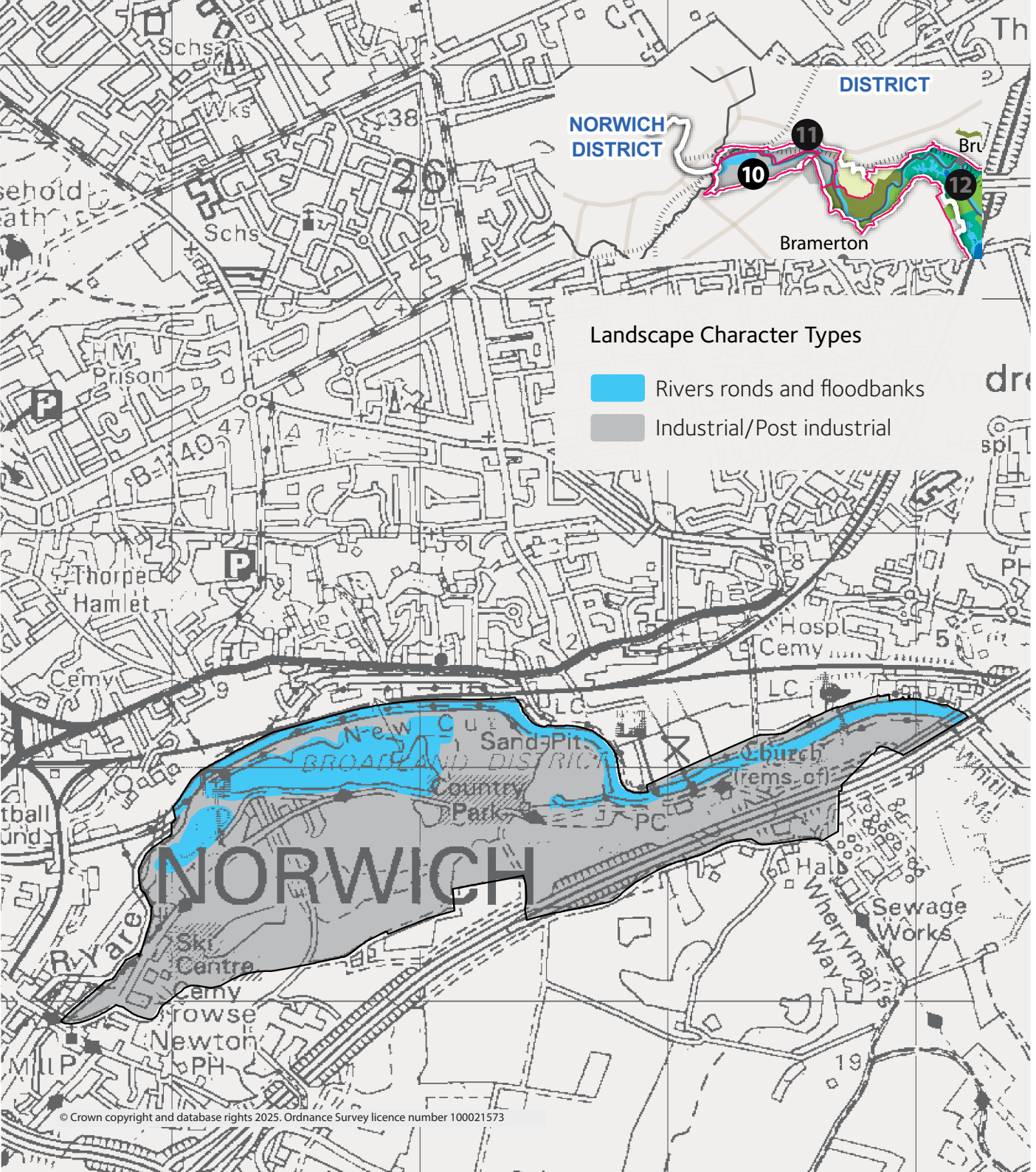
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10. Yare - Whitlingham Lane and Country Park

Whitlingham chalk workings used to be located in this area. It was a large industrial concern which included lime kilns and a narrow gauge railway. Some of the chalk extracted was burnt on site and some transported by wherry to other riverside sites in the Broads. The chalk deposit has meant that this area has a distinctive local building material used in both the medieval buildings and the later estate cottages.

Why is this area special?

Whitlingham Country Park is an important open space on the edge of Norwich. It is a mixture of modern sports facilities within a late 18th and 19th century parkland setting. The area was originally called Crown Point Park, and it was developed successively by the Money, Harvey and Colman families, surrounding a house rebuilt in the 1860's. In 1955 the house and grounds were sold by the Colman family to become Whitlingham Hospital and later redeveloped as flats, while the wider estate was retained.

Parkland features are still evident throughout as witnessed by the lime tree avenue which runs between Whitlingham Lane and Crown Point Hall and the early 19th century parkland plantation (Coronation Belt) which covers the ridge within the park. To the west the area has remained as grazing land with mature parkland trees.

At a similar time to the building of Crown Point Hall, Trowse Newton Hall, a mid-15th century

country house of the Priors (later Deans) of Norwich Cathedral, was deliberately ruined to form a feature in the landscape park.

This area also contains the remains of medieval church of St Andrew, Whitlingham set on the hillside surrounded by overgrown chalk pits. Although the church was in ruins from the early 17th century, it must also have been adopted as a picturesque ruin in the 19th century as contemporary photographs show Victorian window tracery and the masonry tidied up.

On the eastern boundary of the parkland there was a popular tavern called Whitlingham White House which also marked the site of a

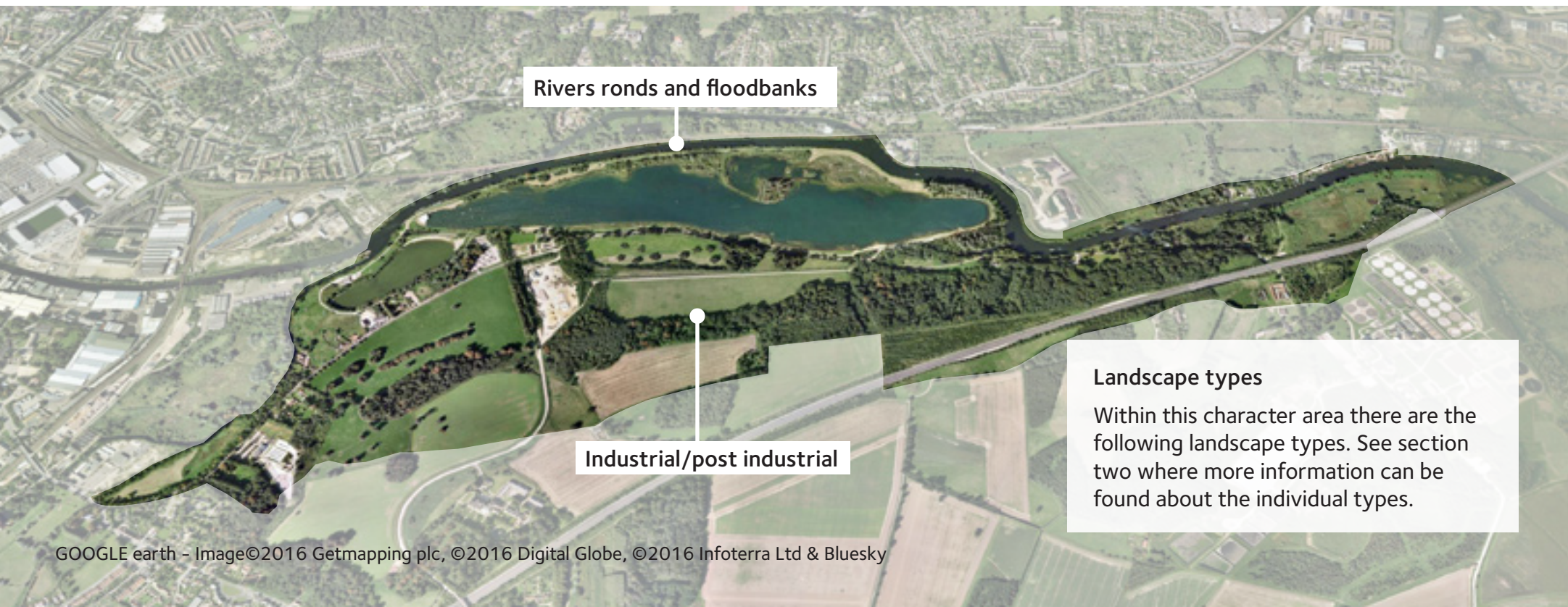
ferry across the Yare (shown on Faden's Map published 1797 and later maps). In 1845 it was noted that 'Pleasure parties often visit this spot to enjoy its romantic scenery and remarkable echo' (White's Directory, 1845). By the 1880's it had been pulled down and its site annexed to the Crown Point Estate. The present rebuild may be the work of architect Edward Boardman who certainly carried out alterations to the main Hall and Gardens in the early 1900's. This area with its rich variety of subject matter was a well-known beauty spot and favourite of many of the Norwich School artists including J.S Cotman, J.J Cotman, M.E. Cotman, Stannard and Ninham.

In relatively recent years, the Norwich southern

bypass cut through the park and a major aggregate extraction scheme was completed at the northern side of the area. The Whitlingham Broads, now providing a popular recreation area, are a product of the scheme.

The area is busy all the year but is especially so during the summer period, as a greater number of water sports activities, including sailing, take place on the Great Broad and the camping site becomes busy. A dry ski slope is located to the western end of the area. As a result of the area's popularity, car traffic can be significant.

There is a definite 'edge of city' feel to the area but the presence of large areas of scrub





◀ *The area lies on the boundaries of Norwich City and provides an important open space for local residents. The broads formed by gravel extraction are significant landscape features in the area and along with the river, cater for a range of water sports /activities. Images by Bill Smith and Matthew Chadwick - Geograph.org.uk*



valley side rises up relatively steeply to crest at around 40–45m OD, whilst the valley side to the south rises gently to low wooded ridge (20–25m OD) where Whitlingham Hall is located. The overall width of the valley floor is approximately 700 metres making it relatively narrow in Broad's terms.

The skylines to the north are defined by the settled, wooded south facing slopes and valley tops within Norwich. The slopes are mostly developed and a complex skyline character has been created by the mixture of residential roofs and mature structural and garden vegetation. This has a significant influence of the character of this area due to its close proximity and the availability of views.

The flood embankments along the river valley can truncate lower level views.

To the south, skylines are defined by the gently rising parkland on the southern valley slopes which terminate in the low wooded ridge at Coronation Belt. To the west, taller buildings and industrial development within Norwich are prominent skyline features.

Views out from the area are often framed due

to the wooded nature of the parkland and the embankments to the edge of Whitlingham Great Broad, although large scale development associated with the urban edge is visible from within the area (taller buildings within Norwich to the west). The parkland within and beyond the Country Park is essentially severed visually and aurally from the wider Broads landscape by the southern bypass (A47).

Geology and soils

Chalk underlies this area at an accessible depth. The valley floor is silty clay and sand and gravel river terrace deposits. The presence of both of these types have deposits have shaped the landscape of this area as over the centuries the rich deposits have been extracted.

Enclosure, scale and pattern

This is landscape of medium scale in Broads terms created by the mix of the land cover including the broads, areas of woodland and mature, vegetated parkland all within this relatively narrow stretch of the valley. A sense of enclosure is created by the wooded areas within Whitlingham Country Park which include wet woodland and relict parkland vegetation. This is reinforced by flood banks along the river and more widely by the wooded, south facing ridge overlooking the valley, within the Norwich settlement boundary, as well as by the low wooded ridge to the south.

The River Yare (both its historic course and the 'New Cut') and the Whitlingham Great and Little Broad are large areas of water within an

and woodland help to diffuse the effects of the urban environment on the landscape. The Country Park provides an important transition zone between the City and countryside.

Topography and skyline

The valley floor of the southern side of River Yare floodplain lies at around 0 OD. The northern



▲ *The valley sides, which lie outside the area, make a significant contribution to the character of the area.*

otherwise wooded landscape. The interplay of these creates local variation in light, shade and reflectivity within the landscape.

A mix of urban edge development, transport infrastructure corridors, water based recreational activity and amenity space has resulted in loss of cohesion of the original landscape patterns and much contrast is created by the sometimes abrupt juxtaposition of such elements.

Main features of land cover and use

The legacy of the recently finished extraction works is a prominent feature of the landscape, particularly on the northern side, as a result of the creation of Whitlingham Great and Little Broads which allied to the presence of the

River Yare create significant areas of open water.

Elsewhere, there is early 19th century parkland with a woodland plantation covering the valley ridge and orientated in a northeast/south-west through the park. Beyond this to the north, the land falls gradually towards the River Yare. Wet carr woodland and scrub vegetation on former industrial and boat yard sites can be found.

To the west there is a good remaining area of “upland” grazing with mature parkland trees and estate type metal fencing along Whitlingham Lane.

The land use is predominantly leisure related - walking, water sports and dry ski slope but outside these specific uses, the area is managed for nature conservation. A camping site exists to the south of Whitlingham Lane. Being an exceptionally popular area, large number of cars have needed to be accommodated in a series of car parks along the length of the park. The more extensive car parks being sited at the busier western end.

The area lies to the east and south of the main urban and suburban development of Norwich



▲ *The valley side to the south (much of it woodland) gradually rise up to provide elevated long distance views across the area. Photos by Evelyn Simak - geograph.org.uk*

and Thorpe. Settlement within the area itself is largely confined to various (mainly Colman style) estate cottages along Whitlingham Lane. The tented water sports centre provides the focal point of the sports and leisure activities and was constructed at the edge of the Great Broad in 2005. This has added to existing facilities of dry ski slope in the western corner of the parkland and Norwich Rowing Club on Whitlingham Lane.

▼ *The late 18th and 19th century parkland provides a historic backdrop to the leisure and sporting activities today. Image by Alison Yardy*





▲ A brick tunnel under Whitlingham Lane apparently through which chalk was taken along a railway to be loaded onto wherries. Image by Evelyn Simak - geograph.org.uk.

◀ Distinctive Colman estate cottages reflect the availability of flint from local chalk workings. Image by Alison Yardy.



▲ Trowse Newton Hall, a mid-15th century country house of the Priors was deliberately ruined to form a feature in the landscape park. Image by Graham Hardy - geograph.org.uk

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

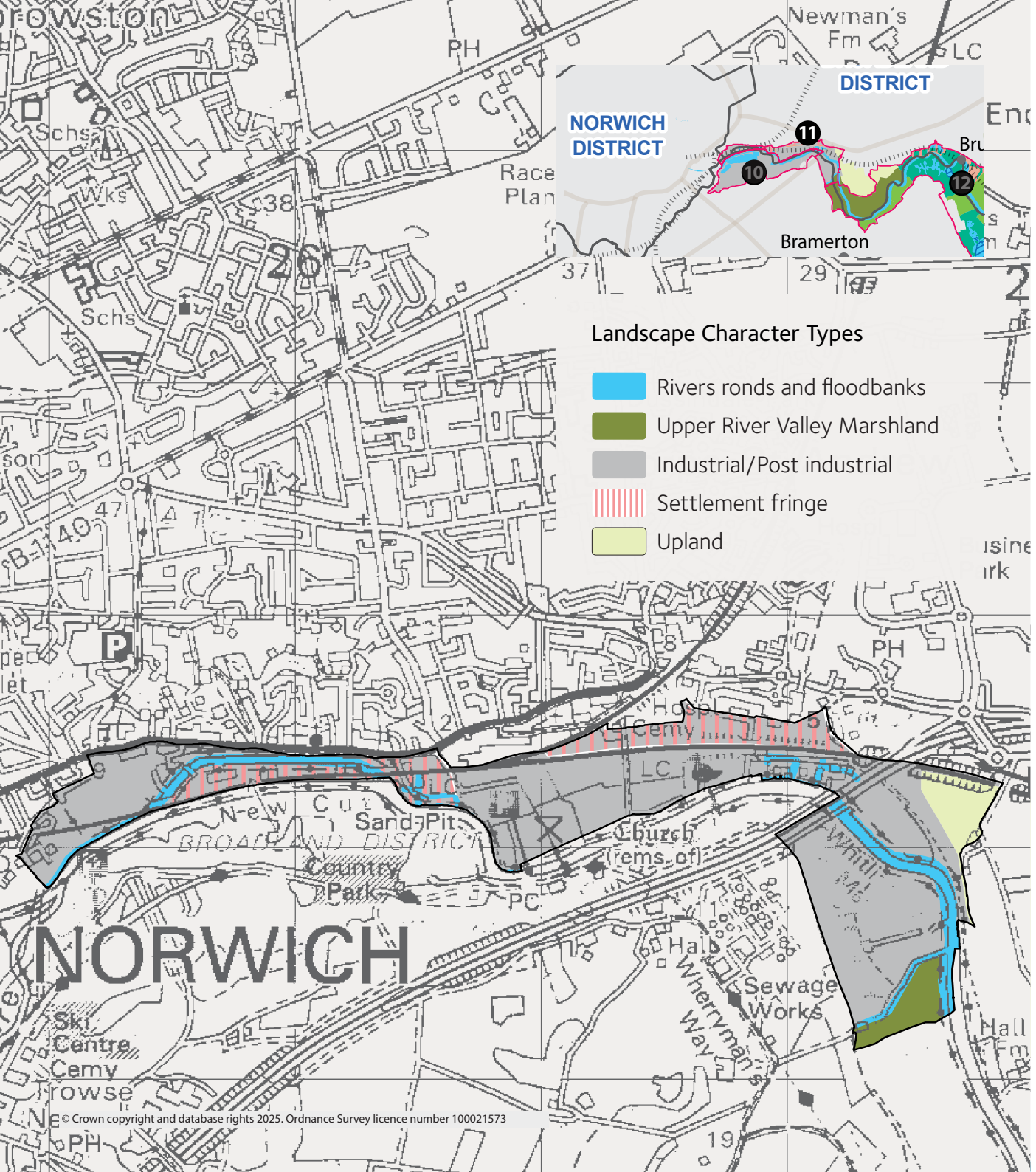
Landscape - elements such as the southern bypass, the railway and tall buildings are visible from within the character area and reduce the sense of tranquillity, although wet woodland in the valley floor and mixed woodland on the sides of the valley within the Country Park provides a degree of attenuation. Opportunities to improve the existing visual buffers between the park and the urban areas should be sought.

The valley sides, lying outside the character area, make a significant contribution to the area's character. Significant change within these areas as a result of development has the potential to affect the local landscape character.

Any development which intensifies or extends existing recreational or leisure uses within the park will need to carefully assess their effect on the area. Projects should consider mitigation proposals which help to reinforce traditional parkland features and limit the suburbanisation of the area.

Historic environment - Much of the parkland associated with the Crown Point Estate is designated as a Registered Park and Garden and

it is important that future development seeks to reinstate and consolidate its character. The Grade II Listed ruins of St. Andrew's church is on the buildings at risk register. Only the south side of chancel wall and east end remain along with south side of chancel arch. A tall fragment of the southwest nave wall also survives. The ruins are heavily overgrown and some consolidation of the masonry is needed.



Landscape Character Types

- Rivers ronds and floodbanks
- Upper River Valley Marshland
- Industrial/Post industrial
- Settlement fringe
- Upland

11. Yare - Cary's Meadow to Postwick Grove/Whitlingham Marsh

The entire valley between Thorpe and Brundall with its steep and well wooded valley sides was once regarded as some of the most picturesque and desirable in the county. This area encompasses some renowned former beauty spots such as Postwick Grove which was a very popular beauty spot for picnicking and was exceptionally well photographed and painted throughout the 19th century.

Suffling (1895) describes it as 'a long red sand hill, covered with gorse and wild plants, and crowned with patriarchal oak and elm trees... the surroundings are such as to frame the picture formed by the picnic party and their craft'.

In more recent years many of the sites they depicted have been revisited by renowned artist Colin Self who came to prominence with the Pop Art movement in the 1960's and who is strongly influenced by the changing landscape. The Tate holds an extensive collection of his work.

Why is this area special?

This area provides an important buffer zone between the growing City of Norwich and the open countryside. Once it would have been more closely associated in character with the Whitlingham Park area (LCA 10) but now the two areas have a separate identity. The area accommodates a chain of urban uses (some existing and some defunct) interspersed with

grazing marsh which creates a landscape mosaic which has surprising diverse habitat. Despite, some significant landscape detractors such as the Postwick flyover (noise and visual) the area provides important urban fringe recreational areas.

Some of the areas which have been subject to intensive urban uses have been reclaimed or evolved into valuable habitat. Cary's Meadow was used during the 60's and 70's as a tip for building materials - adding considerably to the height of the land whilst Whitlingham Marsh is a former Victorian refuse site for the city. Refuse was apparently brought here by river and road and moved via a narrow gauge railway. A

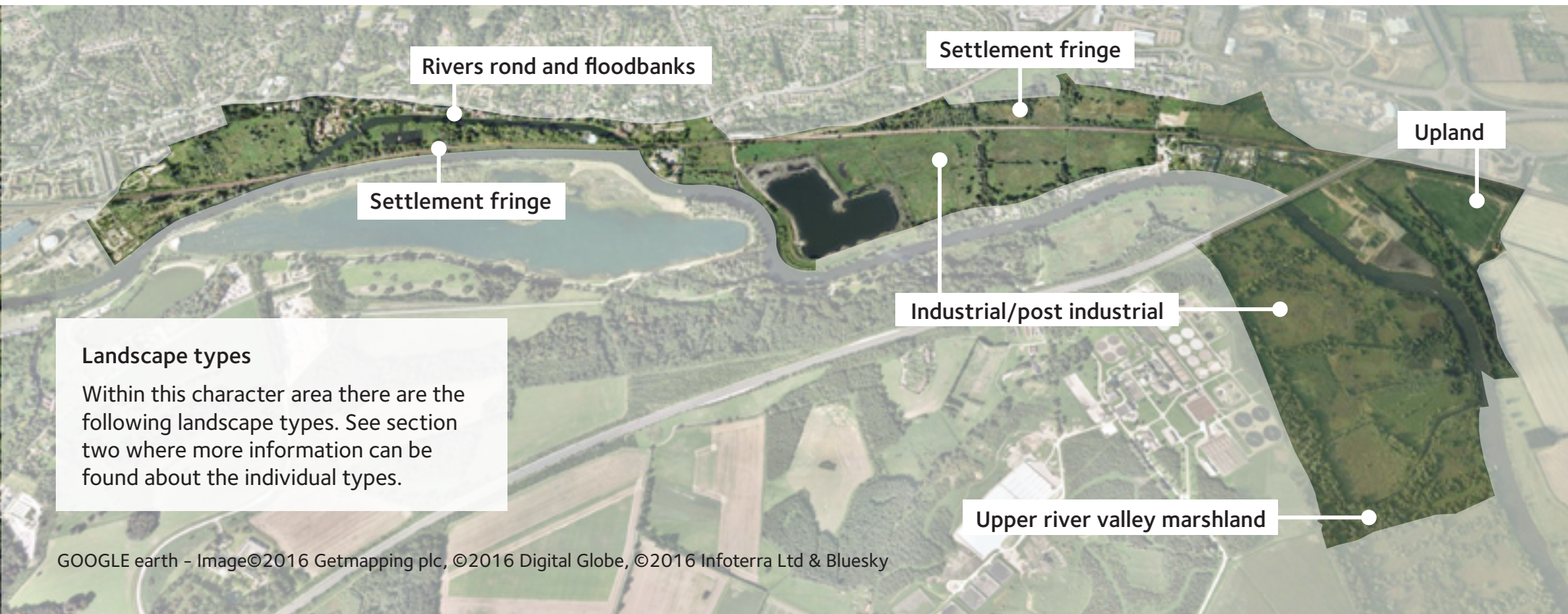
wooden gantry and sunken barge are still visible. Despite high levels of field boundary loss, today these areas have returned to traditional grazing with some areas of scrub and carr woodland. Both sites are run as nature reserves and recreational spaces but because of the tendency to scrub up, they are lightly grazed by cattle - rather an unexpected sight on the edge of Norwich.

Thorpe Island resulted both from construction of the 'New Cut' - a navigable section of the Yare - and from the railway in the 1840's. The historic vernacular settlement at Thorpe River Green lies immediately to the north, alongside the old course of the Yare. This area and the adjacent



▲ The former beauty spot of Postwick Grove painted by John Joseph Cotman (1814 -1876) from the Norwich Castle Museum collection.

riverside built development south of A1242 also form part of the Broads Authority's Executive Area, however their character is more associated



Landscape types

Within this character area there are the following landscape types. See section two where more information can be found about the individual types.



▲ *Cary's Meadow looking towards Norwich.*

with that described in the neighbouring Broadland District Council Thorpe St Andrew Conservation Area Appraisal.

Access to the river is available via Thorpe River Green, associated historic pubs and moorings and by public footpaths which run down to and alongside the river. A public footpath runs south through this area leading to a former ferry crossing at Woods End, Bramerton which itself had extensive pleasure grounds in the 19th century. Other areas are more 'private' e.g. the wooded Thorpe Island and associated moorings and house boats. The area is well used for recreational boating, with the river front being served by a number of boat yards.

► *Thorpe Marshes (an old gravel extraction site) and Whitlingham Marshes (an old refuse disposal site) are now being managed for nature conservation. Image by Jeremy Halls - geograph.org.uk*

Topography and skyline

The area forms part of upper river valley floodplain with average ground levels being 1–2m OD, but land has frequently been disturbed and land levels changed. The valley sides are quite steep in part. The northern valley crest at 15m OD lies within the character area, with the foot of the slope ending in a relatively narrow valley floor. The southern slopes rise more gradually with the crest lying at 20m OD, outside of the Executive Area, and broadly following the route of the Wherryman's Way at this point.

The meandering course of the river, the relatively narrow valley and well-defined valley sides have the effect of framing views, although

there is a degree of visual connection with areas beyond the Broads Authority Executive Area. For example, to the north of the river, the wooded skylines within the Broadland District Council area are visible. To the south and west, woodland and valley sides provide a greater degree of visual filtering, truncating views here.

Development and built structures characterise a number of elements of the skyline in this area. The most prominent skyline feature is the Postwick Viaduct, which dominates the eastern horizon when sailing downstream. Other detractors include the sewage works within the valley floor and which is clearly visible, forming part of the southern skyline.



Geology and soils

This area is underlain by chalk at an accessible depth, river terrace deposits of sands and gravels, silty clay for most of Thorpe Marshes and upriver, and peat for the remainder. However, a number of these areas are disturbed or made up ground.

Enclosure, scale and pattern

In the Broads context, this is a medium scale landscape due to structural tree belts and boundary vegetation.

The area is formed by a steep, well wooded section of the Yare Valley; the valley floor being around 800m in width. It is a relatively enclosed landscape due to the wooded nature of the skyline on the valley sides to the south and west of the river (presence of well wooded gardens

▼ *Within this narrow stretch of the valley, development lying outside the Broads executive area can affect the landscape.*

and former landed estates beyond the character area), and due to vegetation associated with waterside properties on the northern side of the river.

Original land patterns has been largely erased through the changing nature of land use. Today a diverse landscape pattern (not all positive in landscape terms) is created by the mix of the river and wetland vegetation, areas of open water, industrial sites, boatyards, plus the vernacular and mixed settlement at Thorpe River Green and Bungalow Lane.

The River Yare provides considerable variation in light, reflectivity and movement in this otherwise enclosed, landscape which has little variation in light and shade.

Main features of land cover and use

There are significant areas of industrial and post-industrial sites some, as at the Utilities Site to the west, are derelict and are awaiting redevelopment. The former extraction site at

Thorpe Marshes has now been worked out and is now managed by the Norfolk Wildlife Trust. It is a mix of habitat types including flower-rich marshes crossed by dykes that are home to many dragonfly and damselfly species, including the rare Norfolk hawk, and the even larger emperor dragonfly. Several species of common butterfly can also be encountered on a good day. The reserve contains a large area of open water; the former gravel working which is known as St Andrew's Broad. This hosts a variety of waterbirds, particularly in winter, including great crested grebe, pochard, cormorant, grey heron, gadwall and tufted duck. The surrounding scrub and carr woodland is home to reed buntings and a few Cetti's warblers.

With the exception of the traditional small scale riverside settlement at Thorpe River Green, the area is otherwise relatively lightly settled but varied in type and includes riverside chalet development such as at Bungalow Lane, small boat yards and mooring basins and commercial uses such as the Broads Authority's own



dockyard at Griffin Lane. The yard contains a small Listed timber thatch building latterly occupied by May Gurney's yard foreman John Fox (the previous owners of the site), but originating as a Victorian summerhouse. The building was once in danger of demolition but has now been restored and relocated to this location.

Postwick Grove was a famously photographed and painted 'beauty spot' during the 19th century. It displays evidence of it having once been used as a sand pit. However, part of the area is now used as a dredging disposal site for depositing material dredged from the river. Those areas not in use for this purpose, have maturing woodland vegetation and overgrown grassland.

Infrastructure in the area, such as the Postwick

► *The A47 flyover at Postwick. Image by Evelyn Simak -geograph.org.uk*

▼ *Cary's Meadow has mix of habitats encouraging a rich biodiversity in an urban environment.*

flyover and the railway line, introduce significant features into the landscape, whilst the Park and Ride and its associated infrastructure have resulted in a change to the more rural character to the south of the Postwick junction. The construction and use of features such as this has extensively modified the character of this area. These two features alone have affected existing landscape patterns and land use; visually this separated parts of the area; had an adverse impact on both the tranquillity (noise generated by train and road traffic) and the visual amenity of the area. The presence of the A1242 on the northern boundary compounds the noise impacts.

The Utilities Site, previously the site of a power



station, lies to the western end of the area. It now lies derelict, having had all the main buildings and structures removed. Despite large areas of hard standing and remnant industrial artefacts, the site has seen extensive re vegetation which filters views of the railway line to the north and integrates the site with the more "natural" surroundings of the adjacent Whitlingham Country Park and the river corridor.

Thorpe Island was created from part of Trowse Marsh when the railway line was built in the 1840's and a new section of river, the New Cut, was dug to the south of that. The island has a number of buildings including a former boatyard complex, a mooring basin and other Settlement fringe activities and land uses.

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Landscape – The connection between the different sites in this areas is a result of the adverse effects on the landscape caused by development (of all types) over the years. The effects include noise and visual intrusion from the flyover, sewage works, aggregate works (now ceased), dredging disposal and at the eastern half of this Character Area, the visual impacts caused by some buildings in the Broadland Business Park area (including lighting).

The area will continue to face a number of



▼ Thorpe “island” (to the left of the picture) lies opposite Thorpe River Green. Prior to the construction of the “New Cut” and the railway line the area was part of Trowse marshes (now Whitlingham Country Park).

Image by Bob Crook – geograph.org.uk



▼ Boat yards and boat moorings are some of the land uses in the area. Image by Lesley Marsden.



challenges relating to its proximity to a growing city. However, positive landscape change is gradually happening in some locations as gravel extraction and domestic landfill operations in the area have now ceased and UKPN have undergrounded the overhead electricity cable that crossed the river to the west of the area. These areas are now developing a new character as they are being managed for nature conservation and recreational purposes.

Proposed development of the Utilities Site will have a significant effect on the landscape in the vicinity. Care will need to be taken to ensure any built elements are well integrated into the surroundings, considering the scale of built form and soft landscape elements that could help integrate new development into the wider landscape.

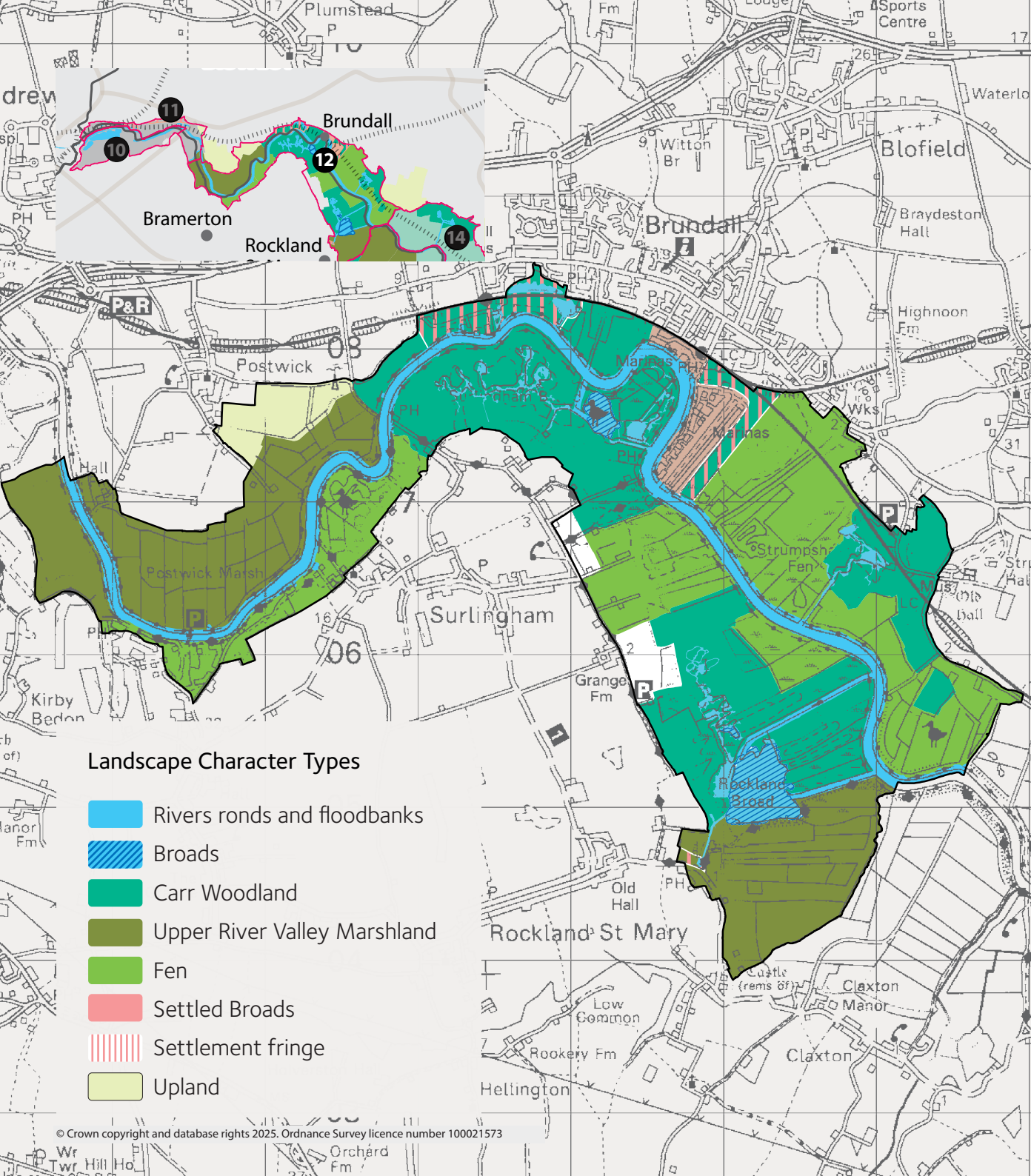
Opportunities should be sought to promote appropriate landscape enhancement of river frontage development – both commercial and domestic, to create an effective transition between urban and rural environments.

Enhancements to the Postwick Grove area, such as increased public access or interpretation about its history would be beneficial.

Nature conservation – areas previously extracted for gravel or used for landfill, have now been restored. Management of these areas is now primarily for conservation management providing valuable space for nature and people in a semi-urban environment.

▼ The construction of the railway line along with the construction of the “New Cut” created major landscape change in the area.





12. Yare Valley - Kirby/Postwick to Rockland/Strumpshaw River Yare

“8,500 to 10,000 years ago the Yare between Postwick and Surlingham was a steep sided fast flowing river with falls of over a metre over a kilometre as opposed to 6cm over the same distance today” - Tim Holt-Wilson, geologist

Why is this area special?

It includes both sides of the narrowing valley of the river Yare and is completely different in character to the open grazed marshes to the east and the areas lying further upstream to the west, whose character is influenced to a far greater extent by development around Norwich.

It is a remarkably diverse area in terms of the patterns in the landscape and the various habitats which is in part a result of the mix of soils and geology.

Aside from areas of open fen vegetation, this area includes a series of small broads, considerable carr woodland and grazing marsh. The area has an enclosed and inaccessible feel because of this untamed carr woodland which is a significant feature of the area.

Rockland Broad, on the south side of the river, is a flooded medieval peat extraction site. It is now the largest area of open water in the Yare Valley. The line of parallel islands to the northwest of the broad are the overgrown hulks of wherries sunk in 1931 and later, to improve tidal scour. It is one of the lesser known broads in the system

and can be accessed from the River Yare by Short Dyke and the Fleet Dyke.

Much of the land within this area is now under the ownership or management of nature conservation bodies and is subject to many nature conservation designations covering most of the area. Wheatfen, located between Rockland and Surlingham is the former home of the famous local naturalists Ted and Phyllis Ellis. Ted being widely regarded as Norfolk's greatest naturalist.

The large settlement of Brundall lies on the steep valley side to the north of the river. Its proximity and good rail links have led to an

extensive development along the river's edge known as Brundall Riverside which is a curious mix of small chalets on one side of the road and marine businesses and moorings on the other.

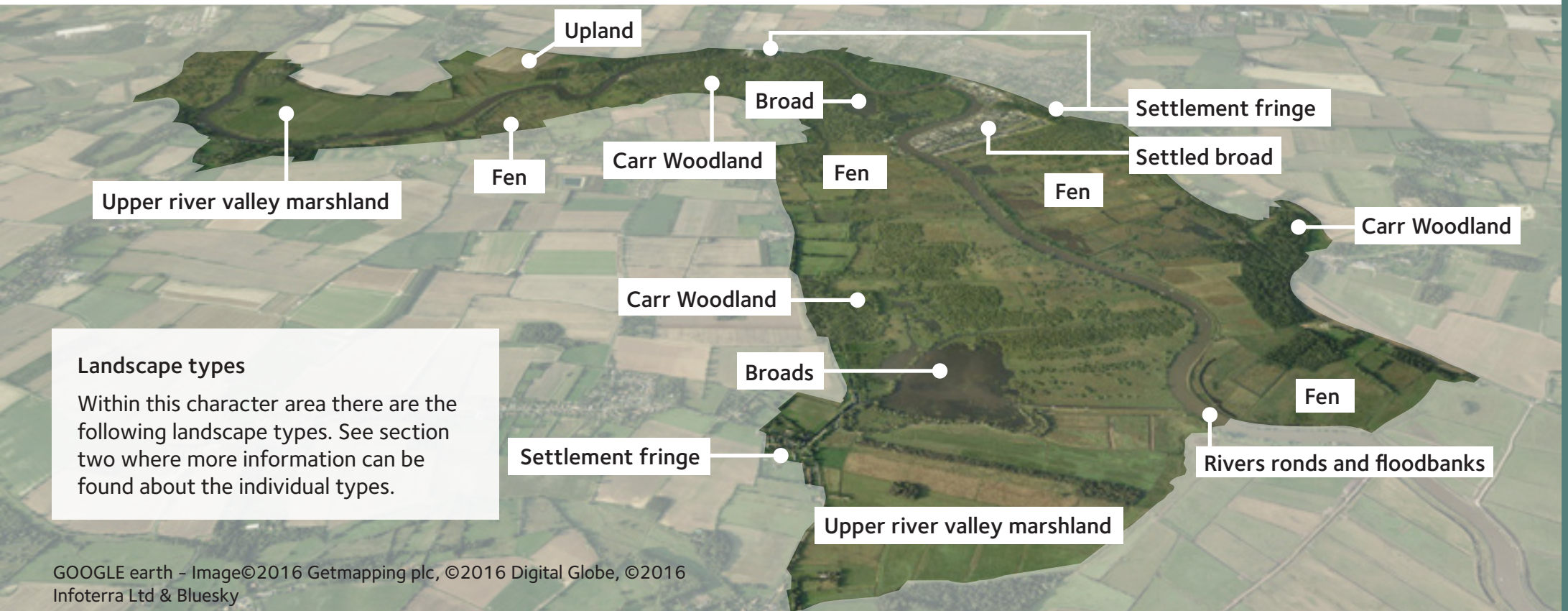
In the past, the area was associated with former beauty spots and pleasure grounds which made the most of the steep valley sides and the views that they provided.

Other than the traffic noise which occasionally can be heard and the effects of the bustling Brundall Riverside, the area as a whole is relatively tranquil.

The area is popular for fishing bream, roach,



▲ Bramerton Common. Photo by Peter Tarleton - geograph.org.uk



tench, perch as well as pike. In 1912 a thirty one and a half pound pike was landed.

There are few public rights of access into this area. Tracks down to the Ferry House and Coldham Hall pubs on the southern side of the river, offer the opportunity to view the river as does the road which hugs the river from the Water's Edge pub at Bramerton which leads to Bramerton Common. Even the Wherryman's Way has to turn inland to follow the higher ground before being able to access the river south of Rockland Broad.

Topography and Skyline

The valley floor at around 0 OD, narrows the further upstream you travel. Around 1.5 km at its widest and 0.5 km at its narrowest. On the southern side of the river the valley slopes rise shallowly up to high points around Rockland St Mary at about 25 to 30 metres above OD. On the northern bank the river tucks itself into the valley side at Brundall with the slopes rising steeply up to around 15 metres above OD.

Despite the proximity of development in the area including significant redevelopment and expansion around the Postwick roundabout, skyline views out of the valley are remarkably free of development. This is due to extensive intervening carr woodland vegetation in the valley bottom, and adds to the sense of isolation in the area. Within the more open grazing marsh areas on lying on the eastern and western edges of the area there will be some glimpsed views of

► *Brundall Church Fen. Image by Alison Yardy.*

major power lines in views lying to the south and other development on the skyline.

Geology and Soils

The area has generally peat soils with sands and gravels towards the uplands. The extraction of peat has created the open water bodies in the area. On the southern valley side around Bramerton shelly silts and sands known as Norwich Crag can be found. The area is of particular importance as Bramerton Common Pit has been recognised as the type site for the Norwich Crag. This is recognised in its status as a SSSI. Nineteenth century maps indicate that there were sand and gravel pits on the valley sides and the vegetation in these areas today is characteristic of such sandy conditions.

Enclosure Scale and Pattern

The central part of the area has a generally enclosed feel to the landscape, with steep valley sides in part and a narrowing valley floor



▲ *Surlingham Church Marsh. Image by Evelyn Simak - geograph.org.uk.*

allied to dense blocks of woodland. In contrast the landscape opens up at the most easterly (Rockland Marsh) and westerly (Postwick Marsh) ends of the area. There is a rich landscape mosaic of landscape patterns formed by long parallel dykes and small rectilinear grazed blocks interspersed with large blocks of carr woodland, fens, water bodies, open grazing and settlement, creating a complex pattern which is not necessarily evident in views at ground level. Whilst the Yare, following a meandering course through the area, has a reflective quality which is a distinct contrast to often wooded areas of the landscape.

Main features of land cover and use

Most of the land cover in this area is a mix of untamed carr woodland interspersed with open fen, marsh and small broads. The large percentage of these areas are owned by nature conservation organisations and managed for wildlife. The plethora of flora and fauna



that these habitats support have resulted in international, national and local designations covering much of the area.

Kirby Marshes is an area that appears to have been drained, presumably for use as rough grazing in the past. There is still a rectilinear dyke pattern and a drainage mill is marked on the 1st edition 6inch map where it is shown as rough ground. It has since scrubbed up although there are still open clearings and the site may be managed for shooting. The site is private with no public access and little information is readily available.

Brundall Church Fen designated as a Local Nature Reserve and is a tangle of wet woodland, Brundall Broad and more open fen areas containing Brundall Dyke lined with moorings

and a snaking area of dyke with a number of semi-derelict houseboats.

Strumpshaw Fen which is managed by the RSPB. It was previously navigable to a staithe near the upland. The area which forms Strumpshaw Fen today was once drained and used as marshland apparently until the 1912 floods damaged the mills and sluices. The best surviving steam engine house in the Broads is situated within the fen area with good views available from across the river in Rockland.

Surlingham Church Marsh which is another RSPB site is a mixture of open water, overgrown reed and scrub. It is understood that the area was formerly drained by 4 mills and was grazed until the 1950's when there was a failure in the floodwall. To the west of Surlingham there

▲ *Ruin of the Church of St Saviour at Surlingham. Image by Bill Smith.*

◀ *Surlingham Broad and Brundall Riverside. This area has generally an enclosed inaccessible feel in part due to the extensive areas of Carr woodland. Brundall Riverside is a completely contracting landscape forming a very congested area of development. Image by Mike Page*

is strong contrast between steep valley sides and valley floor. The ruins of St Saviours Church make a striking feature in the landscape.

Norwich and District Parabellum & Full Bore Club have a lease on an area here and shoot into a quarried area in the valley side that was formerly part of a brickworks. Between Church Marsh and Surlingham Broad, there is an area of privately owned land excluded from the National Nature Reserve (NNR) designation.

Surlingham Broad and Wheatfen

The majority of this area appears never to have been drained. Both enclosure and tithe maps show a striking pattern of doles. These presumably were marked by uncut baulks of peat (as appears to be the case on Upton Broad). The lines can still be discerned on aerial photographs, particularly earlier ones. The site is owned by Norfolk Wildlife Trust and leased to the RSPB who operate a management policy of non-intervention. Much has succeeded to carr woodland. The basin of the main broad has shrunk considerably. The Surlingham parish dyke access is suitable only for canoes although other boats can enter part of the area via two dykes from the river. Boating appears to be concentrated on the Bargate area. The area mapped as Bargate Broad and the Outmeadows at the eastern end does appear to have been drained in the past and is still relatively open today. There is no land-based access within this entire area.

The Surlingham Broad area is flanked by public house/ferry crossing sites. The 18th century Surlingham Ferry Public House was a chain ferry that ceased operation in 1939 after a collision with a coaster. At the eastern end, the Coldham Hall ferry was a rowing boat 'foot ferry', which crossed between the public house and Brundall. The area around Coldham Hall is largely open with tall and sometimes scrubby fen vegetation becoming increasingly wooded towards the Wheatfen Nature reserve, a 102 acre site of mixed land cover – fen, carr woodland, open water, dry woodland, which was the former



▲ *Wheatfen Nature Reserve.*

home of naturalists Ted and Phyllis Ellis from 1946.

Rockland Broad

Rockland Broad is managed by the RSPB but is rather more accessible than some of the other Yare Valley sites. The southern side of the Broad has scrubbed up and has recently been enclosed in a hard concrete floodwall leading to a bird hide. Beyond the hide the scrub vegetation opens up towards short dyke where the public footpath leads to the river and there are open views across to Strumpshaw on the north side of the river. The broad itself is quite colourful and gently active, attracting fishermen and sailors. It is the route to Rockland staithe; a popular mooring place for boats.



▲ *Rockland.*

Grazing marsh used to be more predominant in the area as at one time the area was drained for grazing being well populated with drainage windmills, which were probably short-lived timber skeleton types.

Postwick Marsh lying on the western end of the area appears something of an anomaly in this location. Its appearance is of typical grazing marsh with some areas of carr woodland. It is in fact peat like its neighbouring areas but appears to have been drained over a long period. The drainage pattern is one of long parallel strips possibly doles although rationalised in recent years. The only other significant area of truly open grazing marsh lying at the eastern



▲ *Rockland Staithe and sculpture. Photo by Adrian Hodge - geograph.org.uk*

end of the area is Rockland marsh which lie adjacent to Rockland Broad. Within these marshes are a series of fossilised fen doles. The grazing marshland is excluded from the various designations applying to this wider area.

Settlement is only significant in this area of the Yare Valley at Brundall Riverside. Origins of this area seem to be in the establishment of Brundall as a boatbuilding centre in the late 19th century. The area is the home of Broom Boats established in 1898 and being one on of the first companies in the Broads to start up a hire fleet in the early 1900's.

Until that time Brundall was little more than a hamlet with a population of only 58. The Yare public house, a brick and slate roofed building

dates from the later nineteenth century when it was the Yare Hotel, a favourite angling centre.

The Riverside estate occupies what was formerly part of parish wet common, and is quite an intensively developed area relating to the riverside location in three quite distinct roughly linear zones. One is a development of waterside chalets alongside the River Yare. These were first developed by the firm of J. S. Hobrough in the 1930's although most appear to have now been replaced by modern versions. Running down through the centre of the site and in an area between the railway and the river is a more industrial area of boatyards and boatbuilding. The third area is the more recent marina development. Within the site, there is a strong sense of enclosure.

The railway line has separated the main residential area of Brundall from this holiday/leisure area and the density of chalets and their tall rear fencing prevents any visual connection with the river. The footpath that runs along the rear of the chalets was to the

▼ *Footbridge and level crossing at Brundall station. Photo by Hugh Venables - geograph.org.uk*



Coldham Hall ferry crossing although this area too seems to have now been developed. The intensive development of the site makes the fragments of semi-natural and other vegetation particularly important as over the years there has been gradual encroachment on the carr woodland that fringes the built up area to the east. Numerous overhead wires are particularly apparent as are the variety of roofing materials, boundary treatments and road surfaces, all of which create a lack of cohesion from within the site although from the waterside perspective, much is hidden and softened by the backdrop of carr valley side vegetation.

Over the last few decades the size of the area of moorings has expanded as both the size and private boat numbers have increased. Some isolated boat yards exist amongst the carr woodland at Brundall Gardens marina. These too have recently expanded their operations building larger and consolidating smaller mooring basins and developing very large boat sheds.

Brundall Gardens

Brundall Gardens was probably the largest and most significant of a series of late nineteenth/early twentieth century pleasure grounds on the River Yare. The Brundall Pleasure Gardens, consisted of 76 acres of designed landscape including an Arboretum, a series of tiered ponds and large lake. These were established by Dr Michael Beverly in the 1890's on the site of Brundall Wood and later popularised by Frederick Cooper. The height of their popularity was during the interwar period attracting 60,000

people in 1922 (Muter, 1987). A Brundall Gardens Steamship Company was formed and the Brundall Gardens rail halt opened in 1924. Pleasure steamers could stop at a landing stage near a vast tearooms (demolished 2005/6) on the waterside.

The site was later requisitioned by the War Office and a pillbox is still set into the hillside overlooking the lake. Redclyffe House (right) burnt down in 1969. Today the site is in fragmented ownership. A series of substantial dwellings have been built around the northern perimeter of the site, while the riverside area has become integrated into boatbuilding/marina development. Part is designated a Historic Garden by Broadland District Council.

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Natural Heritage - Much of the area is owned and managed by nature conservation groups which have led to sites within the area of very high nature conservation value. Water quality is one aspect which is less within the control of the organisations. Poor water quality can have detrimental effects on the flora and fauna.

Built heritage – the focus within this area has tended to be on the natural environment and as such built and cultural heritage has sometimes

been neglected. The area is rich heritage features and cultural history. Opportunities to conserve the built heritage and capture the cultural history of the area should be sought.

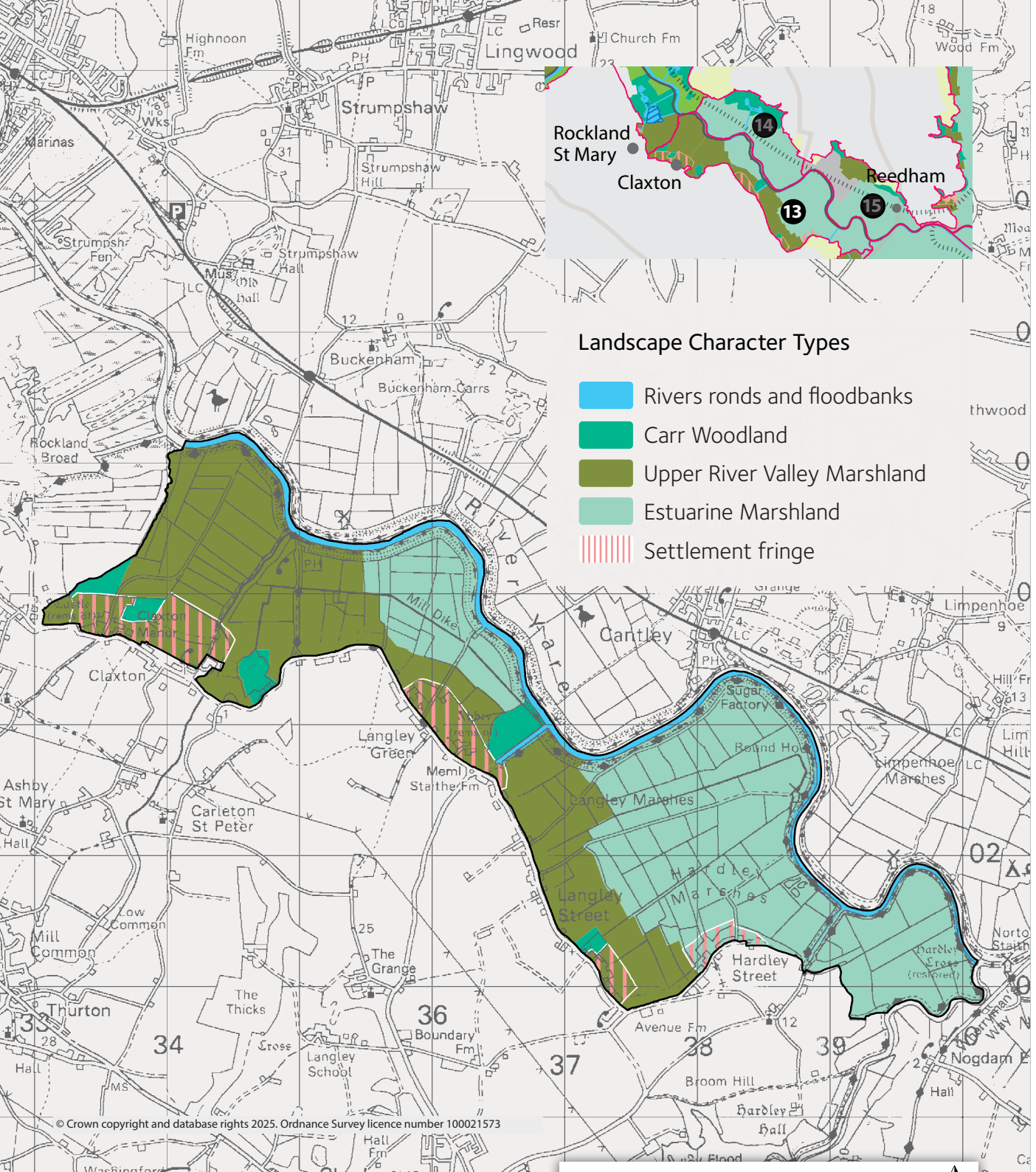
Settlement - Brundall Riverside Estate and adjacent boatyards has an unusual and unique character borne out of its location, mixed use and piecemeal development. Future and existing development need to ensure that the impacts on the landscape character, particularly in relation to effects on the carr woodland, peat resources, water quality and visual amenity are minimised.



▲ Image by Alison Yardy.

▼ Old Redclyffe House. Image courtesy Broadland Memories.





13. Yare Valley - Claxton to Hardley Marshes

The ancient Hardley Cross at the junction of the Yare and Chet marks the historic boundary between jurisdiction of the City of Norwich and Great Yarmouth.

Why is this area special?

The marshes form an extensive area of low lying grazing marshes of Claxton, Langley and Hardley with blocks of woodland towards the upland on the southern side of the River Yare.

An embanked parish boundary between Rockland and Claxton to the west, the River Chet to the east and the River Yare to the north separates this area from the adjacent character areas.

Unusually for the Broads, this was an area where windmills were replaced by stand-alone steam plant from the mid nineteenth century (all now demolished). Hardley Mill is an exception and it has recently been restored and has a visitor centre.

▼ *Hardley Cross. Image by James Bass.*



The settlement in the vicinity (much of it located just outside the National Park boundary) and much of ancient origin, lies in a ribbon of development along the valley edge road influencing the character of the area.

There are 3 scheduled ancient monuments in and on the edge of the area. These are Hardley Cross, Claxton Castle and Langley Abbey.

Surprisingly there used to be a small railway in the marshes.

A number of the local buildings have been built in a distinctive Langley estate style with distinctive decorative drip mould dressings around windows and decorative barge boards.

There are two navigable dykes terminating in

staithes at Langley and Hardley. These were created probably in mediaeval times to provide access to the rising land of the valley side for the easier transport of goods and materials by boat.

There is a strong sense of tranquillity and wildness within this remote landscape, albeit with localised encroachment of valley settlements and their ancillary land uses and the dominating presence of Cantley Sugar Factory in certain views on the northern side of the valley.

Topography and Skyline

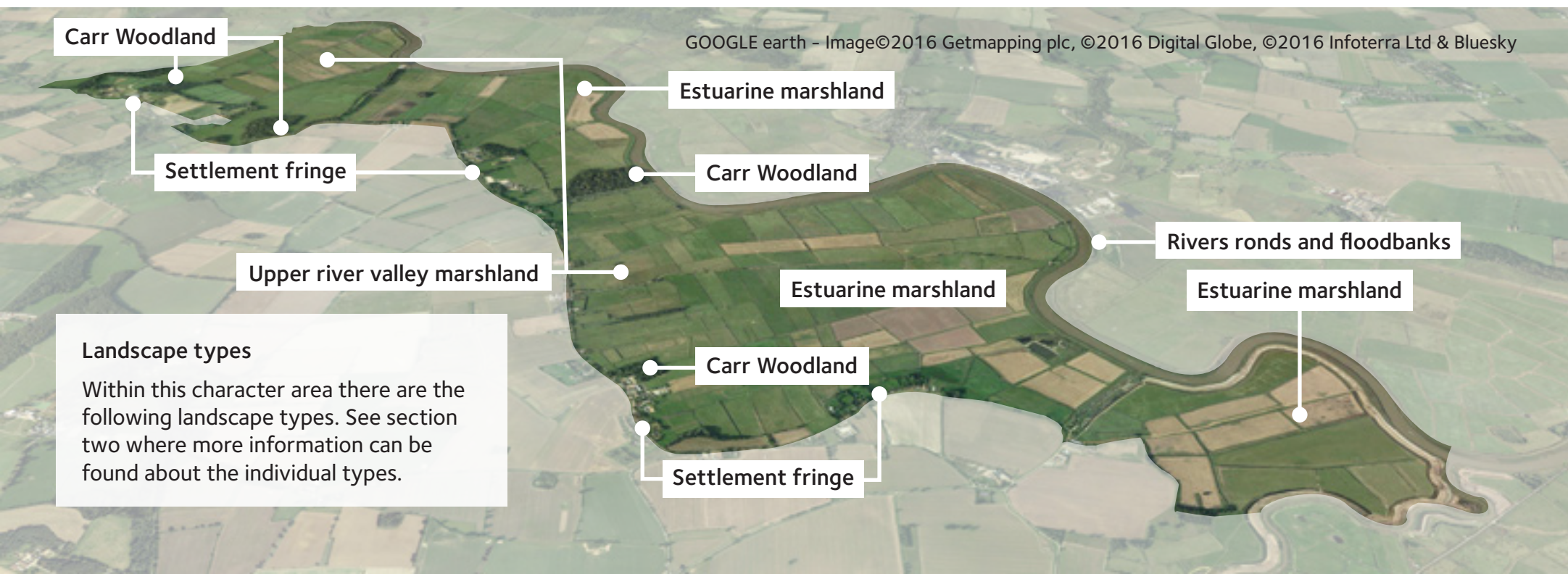
The area is part of the level southern valley floor of the Yare floodplain. This is some of the lowest-lying land in the Broads area. The majority is between 1 to 2 metres below OD



▲ View towards Cantley across Hardley Dyke and the marshes. Image by James Bass.

although lower in part. The land gently rises to around 1-2 metres above OD along the low lying road following the valley edge to the south.

The skyline to the north is formed by the rising



GOOGLE earth - Image©2016 Getmapping plc, ©2016 Digital Globe, ©2016 Infoterra Ltd & Bluesky

Carr Woodland

Settlement fringe

Upper river valley marshland

Estuarine marshland

Carr Woodland

Estuarine marshland

Carr Woodland

Settlement fringe

Rivers ronds and floodbanks

Estuarine marshland

Landscape types

Within this character area there are the following landscape types. See section two where more information can be found about the individual types.

land to the north of the Yare. The woodland, mainly the blocks of carr, are important features as they filter views of settlements and any development in the area. The only exception being the vast mass of Cantley Sugar Factory. To the south, woodland blocks to both “upland” and lowland, interrupted by occasional intervening vegetation on the marshes, create the skyline.

There are wide open views available under “big” skies with the river and its flood banks forming a strong visual division between the north and south bank when on the lower land of the marshes.



▲ *Claxton Manor and marsh. The area still has a significant proportion of grazing marsh. Image courtesy of Claxton Manor Estate.*

Geology and soils

Forming the lower strata there are sands and gravels of the Crag group with a lens of clay silt and sand lying to the south of Cantley.

The soils in general are a mixture of silty clays and peats. In general, the clays are located closest to the river grading into peats towards the upland and along the tributary valleys.

Enclosure, scale and pattern

The low lying landscape has generally an open character although, where carr woodland exists, a greater sense of enclosure prevails. There is a strong rectilinear dyke pattern evident within this large scale marshland landscape and parallel doles are apparent throughout. The River Yare which has a wide meandering course in this part of the valley contributes to the reflective qualities of the area.

The wide reedbeds, and reeded ronds and soke dykes, tree lined tracks down to the river, historic dykes with their associated staites

▼ *Hardley Mill. Image by James Bass.*

and small clusters of carr woodland all provide localised variation in colour and texture.

Main features of land cover and use

The area has a significant proportion of grazing marshland with its dykes networks used by commercial farming concerns. The Langley tithe map of the 1840's shows a number of sinuous dykes still present, however by the 1880's these had been replaced by the rectilinear type.

Unusually for the Broads, this was an area where windmills were replaced by stand-alone steam plant from the mid nineteenth century. As a result the only remaining drainage mill is Hardley Mill.

▼ *The decline in the dairy industry has brought about crop changes in the area. Image by Evelyn Simak - geograph.org.uk*





▲ *The remains of Langley Abbey today.*

Much of this area was formerly part of the Beauchamp Proctor family's Langley Park Estate and until such time as the estate was broken up, was farmed by tenant farmers. This area was also until relatively recently, a dairy farming area (the Langley Conservation Area Appraisal refers to 22 dairy herds in the 1950's) with the Cantley Sugar Beet factory built in 1912, providing additional employment.

The decline of the dairy industry has meant a significant proportion of the former grazing marsh has become arable land put under the plough to grow cereals. This arable land tends to be more of a feature of the silty-clay areas closest to the river, which are better able to be more successfully drained.

On the peat fen areas towards the upland, a number of relict fen characteristics can be found. There are areas of former dole ground which retain their close-set parallel dyke pattern, albeit now in a more subdivided form. There are also various named blocks of carr woodland. The sites around Claxton Castle on the basis of map evidence, appear to be more than 200 years old. Faden's Map also shows there was rather more carr woodland in this area in the 1790's marking a block that ran most of the eastern side of Langley Street as 'Alder Cars'. One of the blocks of woodland at Claxton Castle appears to have contained a decoy while the site of the former Carleton Broad is now engulfed in woodland.

Poplar Farm Marshes is the only area with a conservation designation in the area and is

a small 'island' of spring fed calcareous fen vegetation near the margin of the floodplain at Langley.

Today the settlement in the area is mainly linear marsh-edge development which continues from Claxton through to Hardley and consists of mainly farms or former farmsteads and cottages. The road between the settlement affording views across the marshland.

Much of the settlement along Langley Street is located on the west side of the road and outside the Broads Executive Area. However it contributes to this area's character.

A number of the local buildings have been built in a distinctive Langley estate style with distinctive decorative drip mould dressings around windows and decorative barge boards.

The area includes Claxton Manor and Castle. The Castle was castellated in 1333 by William de Kerdiston. A 40 metre section of wall and five bastions survive and earthworks give evidence of a complex structure which incorporates an inner moat and possibly an outer ditched enclosure. In the late 16th or early 17th century a mansion with a porch tower was built at right angles to the remaining castle wall. The mansion was demolished and replaced with Claxton Manor.

Settlement fringe activities are tending to encroach on the marshland environment which are having an effect locally on the grazing marsh character of the area. These activities include horse keeping, allotments, parish facilities and

excavation for ponds and shooting areas.

The flood banks in the area along the River Yare with their associated soke dykes and reed ronds are a prominent linear feature in the area. As well as acting as functioning flood defences for the marshes, the banks are the location for the Wherryman's Way which follows much of the flood bank within this area providing elevated views of the marshland to the north and south of the river.

There are two major well-used staithe in this area, lying perpendicular to the river and providing a connection to the upland. Staithe (derived from the Old English *steath* "landing place") were once used for loading and unloading goods and materials transported around the Broads and beyond. They are now home to the moorings for boats used for recreation and also

▼ *The River Yare meandering through a widening valley, brings a reflective quality to the Landscape. Image by James Bass.*



provide access for fishing. Langley Dyke is quay headed and private although a public footpath runs along the east side of it. Hardley Dyke is not quay headed and instead has a number of landing stages which are in various states of repair. Both staithe have had their old functional staithe buildings demolished, apparently only in recent years.

There has been greater connection between north and south of the river in the past with three former ferry sites in this area. The most significant was that between the Beauchamp Arms and Buckenham known as Buckenham Ferry, which is marked on Faden's Map of 1797. The approach routes to this are still clearly defined both sides of the river. Another ferry site was located opposite Cantley Reedcutters public house which allowed those south of the river to make use of Cantley Railway station. A further



▲ *Hardley Staithe and dyke is not quay headed. The mooring facilities being provided by small landing stages for each boat. Image by James Bass.*

later site existed near the Round House which was used to transport workers to the Cantley factory (latterly a self-service rowing boat).

A narrow gauge railway used to cross the marshes to the river from the "upland" along what now serves as an access road to Claxton Manor Farm. Operating between 1926 and 1936 it ran 1.6 kilometres from Claxton Manor Farm to the south bank of the River Yare using a converted Model T Ford as motive power. The railway transported sugar beet which were loaded onto wherries and transported to the Cantley sugar factory which is situated 3.5 miles to the south-east.

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.



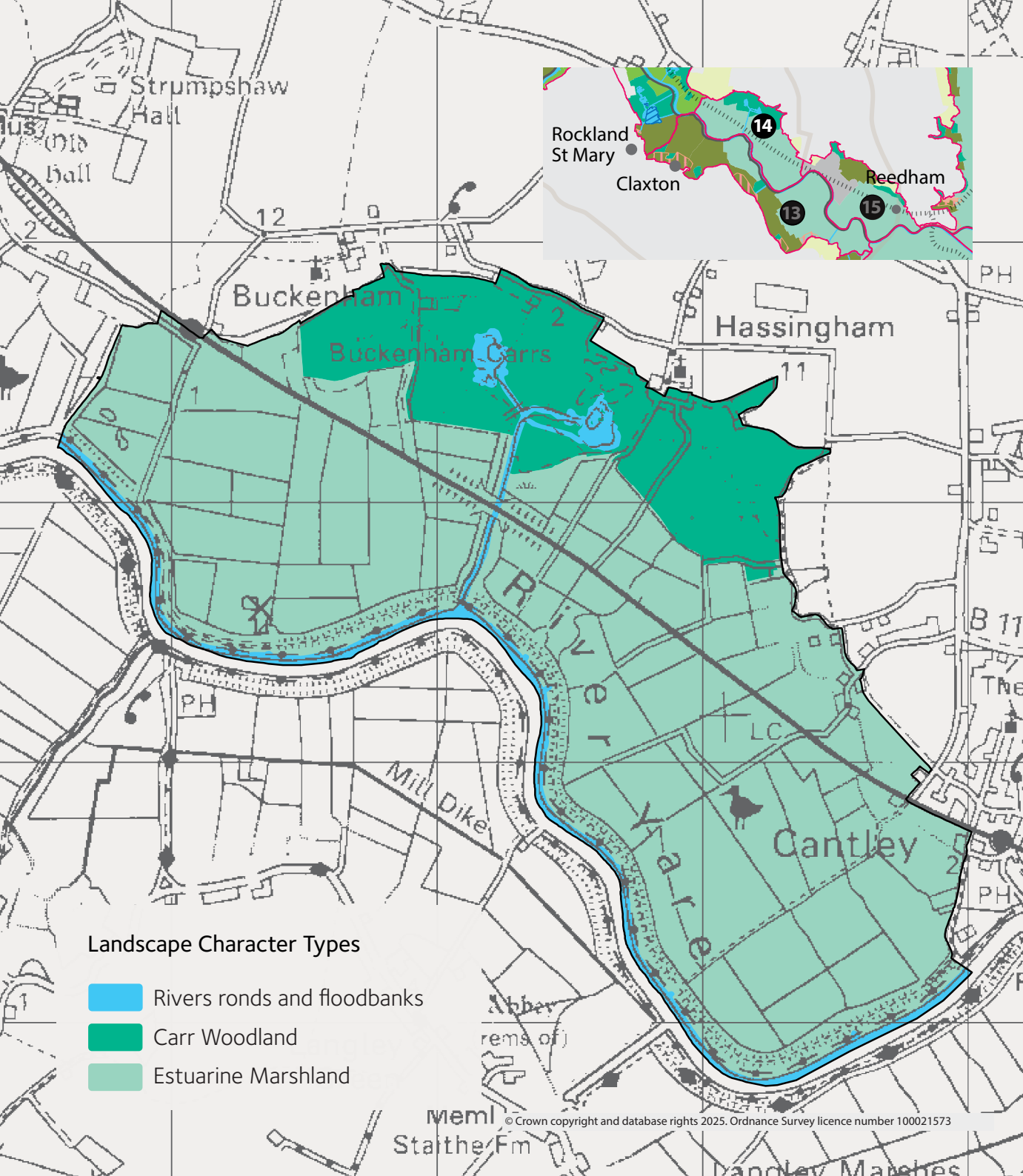
Natural heritage – Much of the area is used as grazing marsh or for arable purposes. The water levels and quality of the drainage dykes affect the habitat value of these dykes. There are opportunities to enhance the habitat value of the area through farming practices sympathetic to the environment.

Built heritage – Hardley Mill has recently undergone extensive renovation. A “friends” group runs the mill with the purpose of ensuring the mill’s survival for generations to come.

Landscape – promoting landscape enhancement schemes to enhance the positive physical characteristics of the area such as removal of overhead power lines within the open grazing marshes.

Settlement – Ensuring that any changes to land use close along the linear settlements from Claxton to Hardley are both appropriate and well designed to enhance the landscape character and not have an impact on the prevailing character of the marshland environment. Ensuring that farm development located along the valley edge is of a scale and layout to minimise any landscape impacts.

◀ *Langley Staithe and dyke is on the route of the long distance footpath, The Wherryman's Way.*



14. Yare Valley - Buckenham and Cantley Marshes and Carrs

The area is home to “one of the most astonishing natural spectacles of the season”.

Simon King - BBC Autumn Watch of the event of around 55,000 rooks roosting overnight in the area.

Why is this area special?

This is a character area of extensive grazing marsh and dyke networks managed sensitively for nature conservation purposes resulting in a range on international and national nature conservation designations. There is an abundance of wildlife, particularly birds some of which are rare to our shores, which are attracted to the matrix of wetland habitats.

The nature of the local landform provides panoramic views of grazing marsh framed by carr woodland at the valley edges and long distance views to landscape beyond the Broads whilst water in both the dykes and river provide reflective qualities all under “big skies”.

▼ *Grazing marsh dyke at Cantley Marshes.*
Image by Lesley Marsden



It is often a remote and tranquil landscape with few 20th/21st century visual intrusions other than at locations at the eastern end of the area where the village of Cantley and the Cantley Sugar Factory complex are located.

The area has a sense of mystery, as its past importance in relation to the “uplands” has been hinted at as a result of the findings of the English National mapping programme.

It is home to the spectacular event of thousands of rooks flying in to roost during the winter period.

Topography and Skyline

The area is an expanse of open grazing marsh sited within a 1.2 km wide valley floor. It is low lying land even in Broads’ terms, between 1 and 2.6 metres below OD. The northern valley side rises to about 20 metres above OD where arable farming predominates.

The skyline in both views north and south is formed by landscape outside the Broads Executive area. On the northern valley side woodland tends to feature in views. To the eastern edge of the area the massive buildings at the Cantley Sugar Factory break this skyline.



▲ Views southwards towards the valley side in South Norfolk are extensive. Image by Jeremy Halls - geograph.org.uk



GOOGLE earth - Image©2016 Getmapping plc, ©2016 Digital Globe, ©2016 Infoterra Ltd & Bluesky

Carr Woodland

Carr Woodland

Estuarine marshland

Rivers ronds and floodbanks

Estuarine marshland

Landscape types

Within this character area there are the following landscape types. See section two where more information can be found about the individual types.

To the south woodland and arable fields tend to form the skyline but in very long distance views, electricity pylons can be seen.

Geology and Soils

The underlying strata are of the sands and gravels of the crag group with a lens shaped area to the south of Cantley of clay silt and sand. To the west of the main track to the river at Buckenham peat soil predominate as they do to the north of the railway line. In these areas there is a large block of carr woodland which enclose two broads, which were originally connected to the River Yare via Fleet dyke. The remainder of the valley floor has a silty, clay soil typical of the estuarine marshes landscape type.

Enclosure, scale and pattern

The area has a simple landscape pattern created by the rectilinear dyke networks which at the most western and eastern extents of the area have been simplified into larger blocks. The typical grazing marsh feature of timber marsh gates and sloping wing walls identify the crossing points of the dykes. At the valley edge and on peat soils, the dyke network pattern is masked by alder carr woodland.

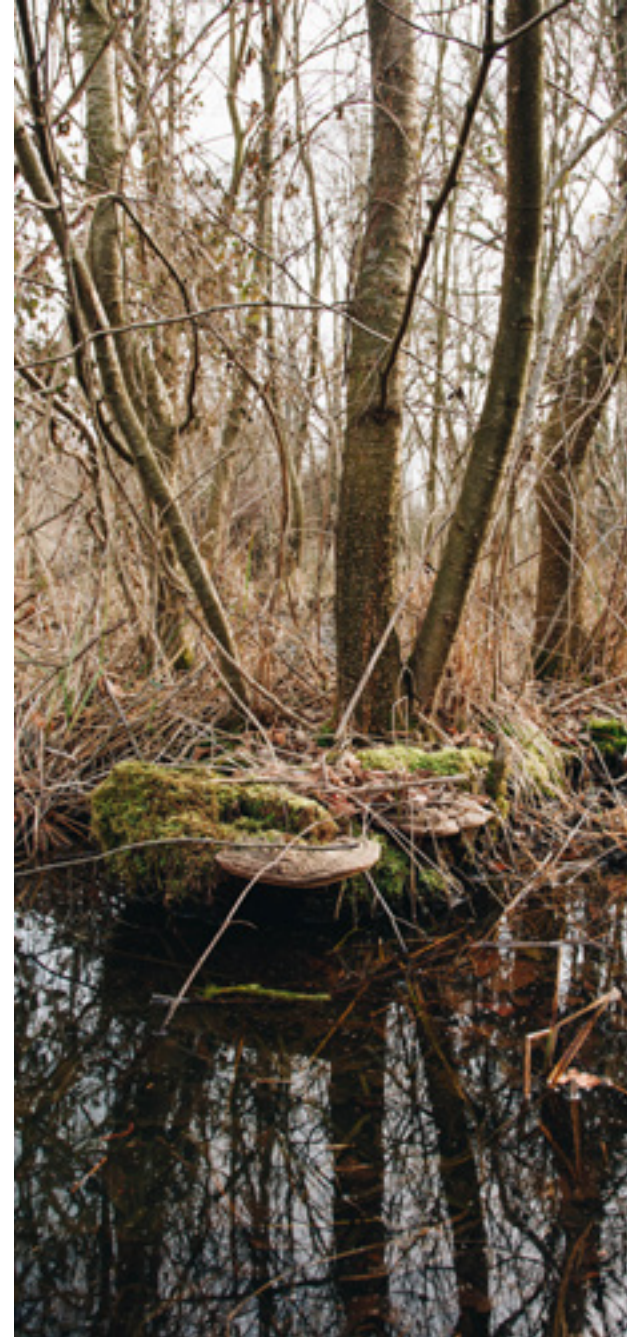
Whilst walking at the lower level of the marshes, the floodbanks with their associated soke dykes and reed ronds can create more of a sense of enclosure, but this sense is lost once walking on the footpaths on the banks as the full extent of the valley width can be appreciated.

Main features of land cover and use

The majority of the area is down to grass. The marshland being seasonally grazed by cattle. Most of it is owned by the RSPB and traditionally managed for nature conservation. At various times of the year it is home to large numbers of breeding wading birds, ducks and geese in winter. The Buckenham Reserve boasts the only regular winter flock of bean geese in England (November to February), together with white-fronted geese and up to 10,000 widgeons. The area is a magnet for birdwatchers.

Buckenham and Hassingham Carrs which are privately owned, comprise 220 acres of predominantly carr woodland. Within this secret area there is a mosaic of habitats including: reedbeds, clearings, 'rides', mature and young woodland and managed and unmanaged areas and is used for shooting and nature conservation purposes. The ground is spongy underfoot and reputedly contains a depth of 17 feet of peat. To the north on the higher ground, the woodland species change and there is more ornamental planting and metal estate fencing alongside the roadside. The woodland and its immediate surrounds are primarily managed for shooting purposes.

Throughout the winter period a spectacular sight can be seen as around 55,000 rooks fly in en masse on an evening to use this woodland



▲ Carr woodland, located on peat soils, surrounds small broads at the valley edge.



▲ *Views northwards from the marshes are panoramic. The skyline only interrupted by the Cantley Sugar Factory. Image by Lesley Marsden.*

and its surrounds to roost at night. This makes it possibly the largest rook roosting population in the UK.

Water bodies have different forms and uses in this area. The River Yare, although not the busiest area on the Broads is important for boating. It is also a popular area for fishing. The water levels in the dykes in this area are managed to promote nature conservation interests on the marshes although the aquatic habitat is important in its own right therefore good water quality is important to maintain. The small broads in the carr woodland were created within the when peat was extracted during the medieval period and scrapes (very shallow excavations) created by the RSPB to attract particular bird species. During the winter period much of the marsh is covered by water purposely to provide suitable habitat for overwintering birds.

Flood banks along the River Yare with their associated soke dykes and reed ronds are a prominent linear feature in the area. As well as acting as functioning flood defences for the marshes the banks are the location for the main footpath routes in the area with occasional

footpaths/tracks crossing the marshes to meet up with them.

Settlement is limited within the floodplain other than at Cantley. It tends to be located on higher ground on the valley sides. The settlements were traditionally built on the lower more sheltered valley sides in close proximity to the river which used to provide a transport route. However as the pressure for more housing has



increased, development has moved higher up the slopes sometimes impinging on the skyline in views from the Broads.

Infrastructure such as sewerage works (near Cantley) and power supply lines are all relatively recent introductions to the landscape. Wind power for water management in the dykes was originally generated by drainage mills such as the one at Buckenham.

Fadens Map shows a drainage mill in the same place as this mill which is the furthest mill upriver on the Yare both then and now, although the present mill dates from an 1823 rebuild. The 1880s O.S map shows this mill later operated in partnership with a steam engine sited to the west (now gone). The mill that drained the Cantley Marshes is lost although its site is still

◀▼ *The old windmill at Buckenham Ferry and the electric pumping station at Cantley marshes. Image by Hugh Venables - geograph.*



marked by a cut from the river at the end of a long mill drain.

Today the water is pumped from the marshes via electric powered pumps housed in small brick buildings along the rivers edge.

The “Wherry “railway line bisects the area. Built in 1844 by the Yarmouth & Norwich Railway it was the earliest railway in Norfolk and was built for the carriage of coal (which would arrive at Yarmouth by sea), bricks, iron, stone, fish and cotton as well as passengers.

The River Yare has a large number of former ferry crossing points, some simple rowing boat ‘foot ferries’, others such as Surlingham Ferry were more substantial chain ferries that could move vehicles. The former Buckenham Ferry was of the latter type. The crossing site south of the river is marked by the termination of the riverside footpath opposite the Beauchamp Arms public house. The track to the ferry on

the Buckenham side survives although was previously tree-lined and ran to a staithe/ferry house (now lost). This is one of the few former ferry routes not marked by public footpath. Another ferry crossed between Cantley and Langley Marshes to allow those living south of the river to use Cantley Railway station.

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area’s unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities

Natural Heritage – much of the area is owned and managed by nature conservation groups which have led to sites within the area of very high nature conservation value. Nature conservation activities need to be carefully considered to ensure that they are not of detriment to

historic landscape features.

Water quality – is one aspect which is less within the control of the organisations. Poor water quality can have detrimental effects on the flora and fauna.

Built heritage – consideration of how to ensure the future survival of Buckenham Mill as a landscape feature.

Landscape – promoting landscape enhancement schemes to enhance the positive physical characteristics of the area such as removal of overhead power lines within the open grazing marshes.

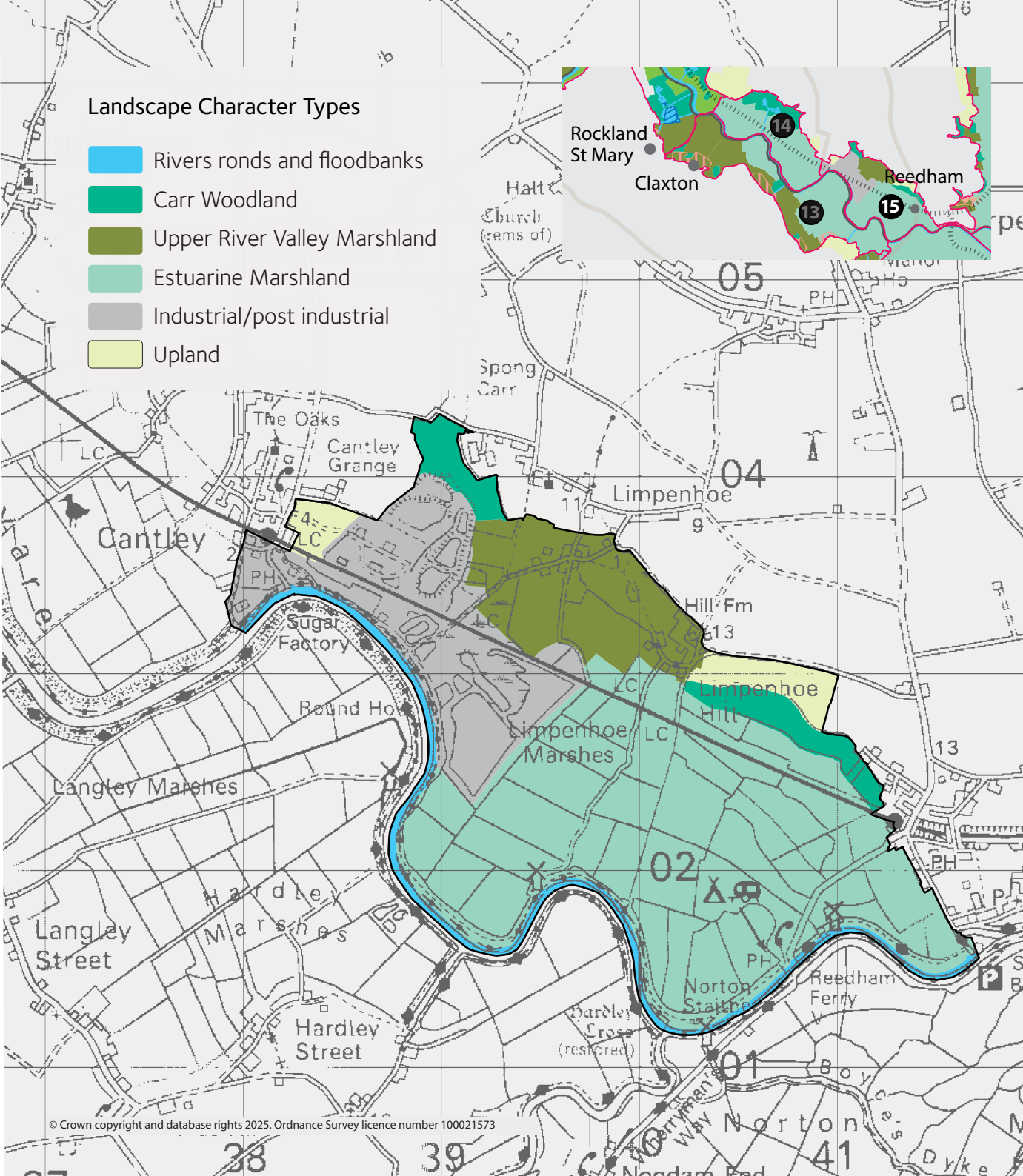
Settlement – ensuring that any changes to land use close to the settled area on the edges of the marshes (settlement fringe) are appropriate and well designed to enhance the landscape character.

▼ *The railway at Buckenham Station. Image by Glenn Denny - geograph.org.uk*



Landscape Character Types

- Rivers ronds and floodbanks
- Carr Woodland
- Upper River Valley Marshland
- Estuarine Marshland
- Industrial/post industrial
- Upland



15. Yare Valley - Cantley to Reedham

The Cantley Sugar Factory built in 1912 was the first to be built in Britain.

Why is this area special?

This character area forms part of the northern floodplain of the river Yare. The area is flanked by the waterside settlements and developments at Cantley and Reedham.

British Sugar's Cantley Factory is a significant built feature in the Broads landscape, the 4 tall chimneys being especially visible.

To the east of the area the River Yare meanders to the edge of the valley side and it is here that the settlement of Reedham lies on the steeply rising ground to the north. A significant proportion of the residential properties lie adjacent to the River Yare behind flood defences. Those set back from the river often have open views of the marshes and the land southwards as a result of their elevated position.

Lying in between the two settlements is an area of grazing marsh, which is bisected in an east west direction by the Norwich to Yarmouth railway.

This area includes Reedham Ferry, the last remaining vehicle crossing on the River Yare between Norwich and Great Yarmouth.

It is an accessible area. The road to the ferry crossing allows access across the marshes. The ferry itself provides a connection between north and south of the river for vehicles and it is the

crossing point for the long distance Wherryman's Way footpath. There is network of footpaths in the area, including a riverside footpath from which the factory can be seen.

Topography and Skyline

Much of the area lies in level floodplain marshland at around -1m below OD with quite steep valley sides rising to around 20 metres at the valley crest outside the Broads area. A small tributary valley extends to the north through the village of Limpenhoe.

The skyline to the north at the western edge of this area is dominated by the sugar factory complex. Otherwise intermittent woodland lying

on the valley side forms much of the skyline between Cantley and Reedham. However the large farm complex at Hall Farm Limpenhoe is very prominent in views where this woodland is not present.

The skyline to the south is formed by a landscape of woodland and arable field with the occasional pylons. Most of these features lie on land outside the Broads area.

Geology and soils

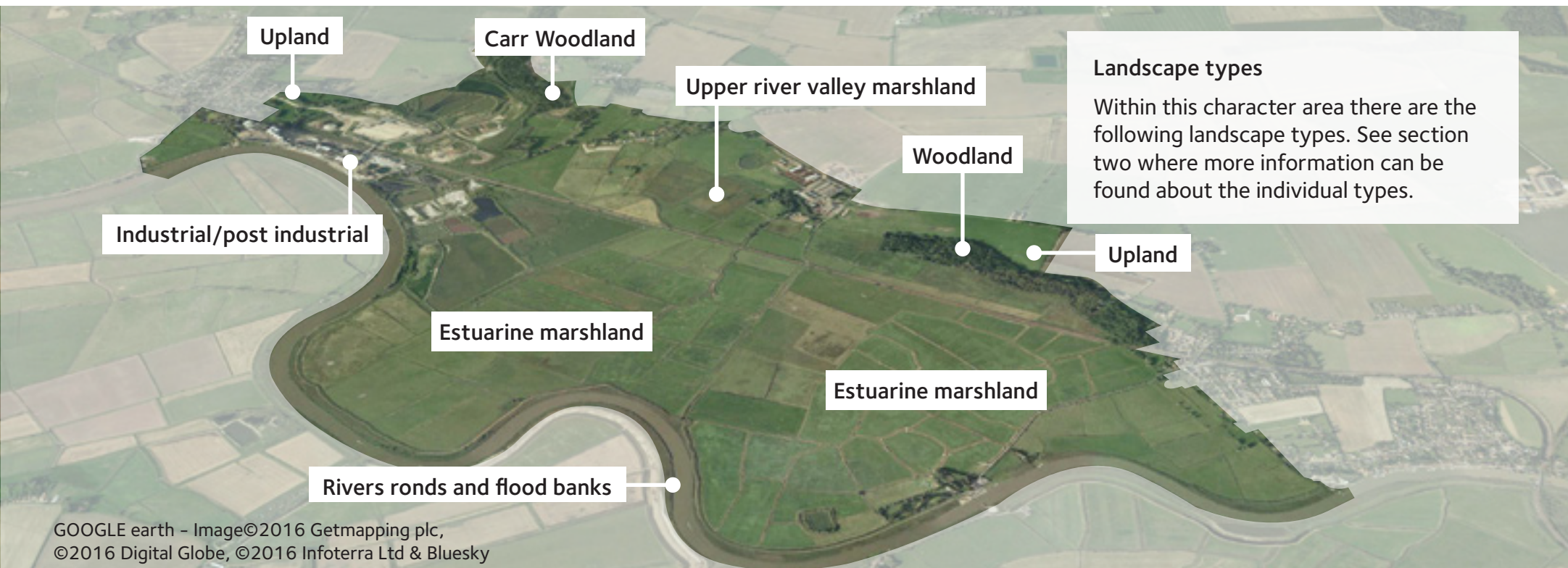
The underlying strata are of the sands and gravels of the crag group with a lens shaped area to the south of Cantley of clay silt and sand. The remainder of the valley floor has a silty, clay soil

typical of the estuarine marshes landscape type.

Enclosure, scale and pattern

The marshland area has generally a simple landscape pattern. One long sinuous dyke running north-south between Limpenhoe Hill and the river separates the more rectilinear dykes to the west from those of a more curvilinear form to the east. The marshland to the west however has been greatly modified by the formation of settlement lagoons for the Cantley factory.

Within the marshland environment some sense of enclosure is provided by the valley sides lying at about 2 kilometres apart. Within the proximity of the settlements of Reedham and Cantley





▲ *Reedham Ferry and pub*

that sense of enclosure is marginally increased.

Main features of land cover and use

Although much of the area is in use as grazing marshland the industrial land use of the Cantley Sugar Factory with its associated buildings, plant, chimneys and lagoon facilities are well-established in the area. The industrial buildings, particularly the six silos are larger in scale than the buildings in Cantley village. The sense of remoteness and tranquillity of this area is as a consequence strongly influenced by the factory.

A number of the settling basins for the Cantley factory have been established in what was formerly part of the Limpenhoe Marshes. The drainage arrangements for these marshes was detailed by J E G Mosby in the 1930's as part of the Land Utilisation Survey for Britain as a case study of how the broadland marshes were drained and worked.

The Cantley factory was built in 1912 as the first sugar beet factory in Britain. The site originally provided important winter employment for the local agricultural workforce. Today it directly employs 90 people rising to 120 during the

annual 150 day processing 'campaign' in addition to 80 off-site indirect jobs within the catchment area and 350 local farmers and several haulage companies. Until recent years a self-service ferry (consisting of several rowing boats) brought workers across from south of the river near the Round House on Langley Marshes.

During the campaign period, the site operates round the clock accepting 320 lorry loads of beet each day. from local beet producers. As a result of the factory operating 24 hours a day during the campaign, there is light pollution in the local area. Measures could be taken to mitigate the impacts of the lighting required through rationalisation and better lighting design. There is also odour and traffic noise during the campaign.

The large village settlements of Reedham and Cantley and the smaller settlement at Limpenhoe Common can be found in the area. Farms can be found dotted around the marshes as well as on the valley sides. These include the farm complexes at Limpenhoe which lie in a visually prominent location.

The marshland between Cantley and Reedham were originally the Limpenhoe, Southwood and

▼ *Large farm buildings at Limpenhoe dominate the skyline. Image by Nigel Thompson - geograph.org.uk*



Reedham Marshes known as the Limpenhoe, Emeris and Reedham Levels. Two mills survive in this area, one (Limpenhoe) is derelict but internally is largely complete, the other (referred to by Mosby as Gurney's Mill) has been rather elaborately converted into a house.

To the north of the railway line (see LCA 14), there is one heavily designated part of the marshes, Limpenhoe Meadows comprising 28 acres of unimproved fen grassland. The site marks the transitional area between peat fen where springs emerge and the alluvial clays of the valley floor. It is home to a range of vegetation types.

To the west of Reedham is a pollarded willow lined road leading to Reedham Ferry and the 18th century public house. The road was realigned into two straight sections following the Reedham enclosure of 1840. A small leisure area has developed around the ferry including the Reedham Ferry public house and a touring caravans and camping site. The latter is partly enclosed by trees.

View southwards from the valley side of the historic rail bridge at Reedham and the marshland on the south side of the river. Image by Evelyn Simak - geograph.org.uk



Cantley Red House (public house) is located on the river's edge – traditionally a popular fishing base and well photographed by all the Broad-land photographers. The building today has been painted white and is now called The Reedcutters.

Flood banks along the River Yare with their associated soke dykes and reed ronds are a prominent linear feature in the area. As well as acting as functioning flood defences for the marshes the banks are the location for the main footpath routes in the area with occasional footpaths/tracks crossing the marshes to meet up with them. Within the village of Reedham at the quay the flood defence is formed by a small wall. In times of flood the access points have to be manually closed off.

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Landscape – The landscape and visual impacts of the Cantley factory are documented above. Technological and economic drivers dictating new plant and facilities will continue to be a force for change. There are also visual impacts from settlement built on high ground at Reedham, recent residential development at Cantley and a series of large agricultural buildings on the valley side at Limpenhoe.

Impacts of new development proposals should be mitigated. Opportunities to mitigate existing

and future impacts should be sought where possible, for example through changes to existing buildings, appropriate design of new buildings and landscape enhancements.

It is important that changes to land use close to the settlements (settlement fringe) and farm buildings are appropriate and well designed to enhance the landscape character.

The pollarded willows on the road to Reedham Ferry are now discontinuous and invaded by scrub; opportunities could be sought to reinforce this feature.

Woodland located on the valley edge provided a valuable landscape (physical and visual) buffer between the Broads and the arable land beyond. The sense of remoteness and tranquillity is strongly influenced by the Cantley Sugar Beet Factory complex to the west of the area, visually, aurally and through traffic intrusion, and also seasonally during the 'campaign' when the sugar beet is processed. Light pollution is also a by-product of the factory's 24-hour industrial operation.

Natural Heritage – The grazing marsh landscape with their historic network of drainage ditches and dykes are a significant landscape feature and have the potential to provide a valuable wildlife habitat. Much of the marsh area is managed through traditional grazing techniques some

► *Cantley factory buildings dominate the river Yare frontage and can be seen from a distance. Image by Adrian S. Pye - geograph.org.uk*

of which may be the subject of agricultural subsidies.

Built heritage – The drainage mills are nationally, and perhaps internationally, an important landscape and historic feature. Opportunities to conserve and enhance these structures for future generations should be sought.

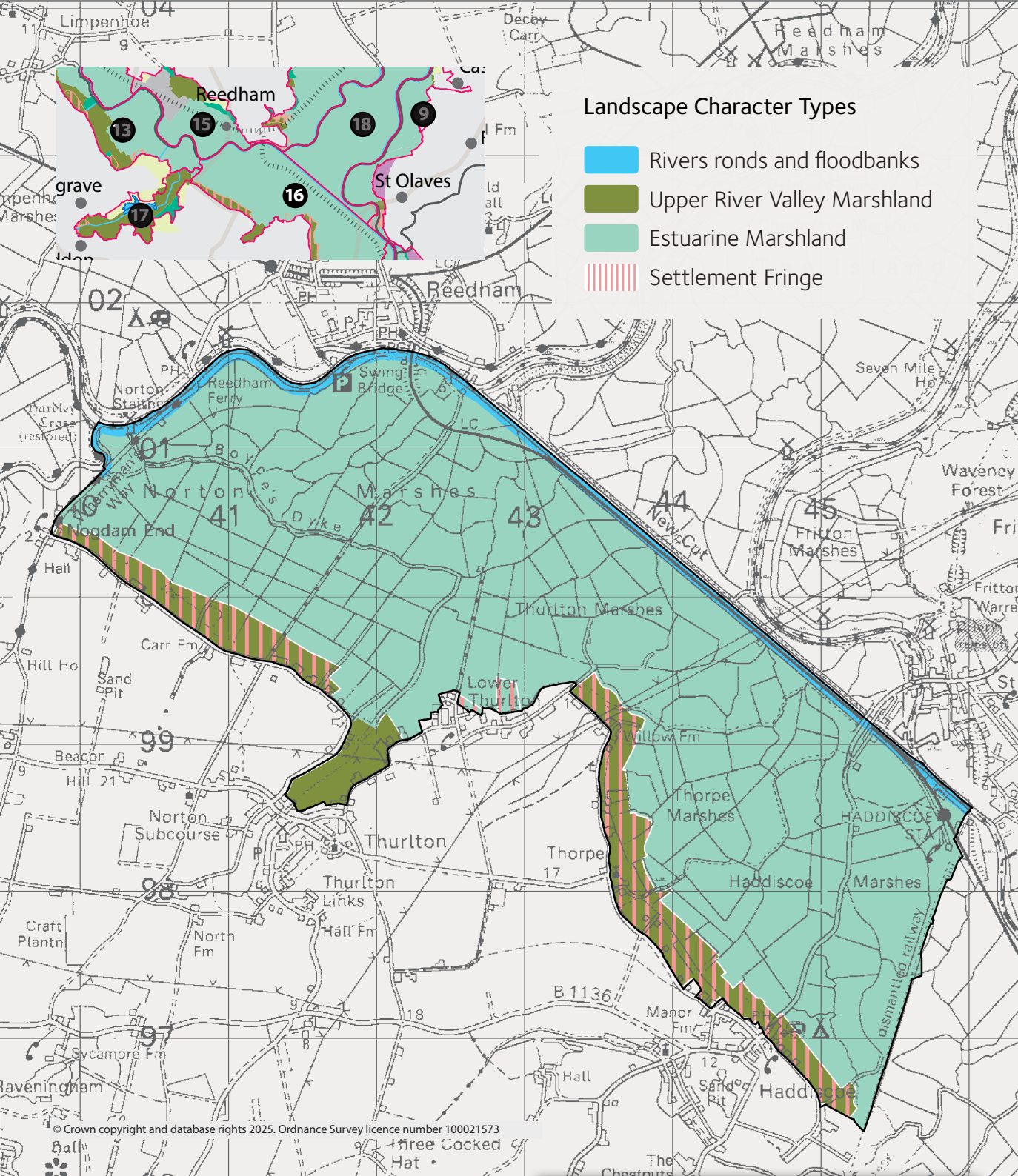
The historic Reedham rail swing bridge on the Wherry railway line, opens to allow taller boat traffic to travel along the Yare. Over the years it has become increasingly unreliable and it may need to be replaced at some time in the future. The design of any new structure will need to take account of its prominence within the landscape.

Archaeology – The hinterland to Cantley and Reedham appears (national mapping project) to be a rich source of undiscovered archaeology.

The BFAP scheme has introduced very wide foldings (the area between the flood bank and the soke dyke); should these not be managed in the long term by grazing or cutting scrub could develop.

Ensuring that development outside the area (the landscape setting of the Broads), both north and south of the river, does not impact adversely the special character of the area as it provides its setting.





16. Yare Valley - Norton Marshes to Haddiscoe Dismantled Railway

This area inspired the artist Sir J. A. Arnesby Brown (1866–1955) who lived each summer at The White House, Haddiscoe.

Why is this area special?

This is a vast area of largely drained marshland which lies to the south of the Rivers Yare and Waveney. It traditionally formed part of the parishes of Norton (Subcourse), Thurlton, Thorpe and Haddiscoe along with a detached part of Raveningham. It would have had a direct connection to what is now known as Haddiscoe Island, prior to the construction of the New Cut which connected the Yare and Waveney together to avoid having to travel across Breydon Water.

There are few houses within this marshland area. Those that exist are confined to those locations where there were, or are transport links across the rivers. The remainder of the settlements have developed in a linear way hugging the edges of the southern river valley side.

The Haddiscoe Dam road provides the main connection north-south from Haddiscoe village to St Olaves.

A journey on the train line from Norwich to Lowestoft which follows the line of the New Cut and then hugs the northern side of the Waveney Valley provides a glorious way to view this area as public rights of way into the middle of the marshes (other than the fully navigable river)

are few and far between.

Central to the area there are a series of significant structures which detract from the sense of isolation and tranquillity which can be found within the majority of the area. These structures include the massively tall pylons which carry the power lines over the rivers and the New Cut and the modern road bridge at St Olaves. This busy intersection of road, rail and river has also been the focus of a significant amount of commercial development.



▲ The dead straight New Cut with the Norwich Lowestoft Line running parallel and pylons carry electricity cables over the river. Haddiscoe Island lies to the right of this photo. Image by Keith Evans.

Topography and Skyline

This is a level area forming part of the extensive former estuary with three tributary valleys to the south. Much of the area of marshland lies at around -1m below OD and is slightly lower in parts. There is a broad valley floor of up to 2.7km in width. The valley sides rise up to a crest of about 10m above OD beyond the Broads area.

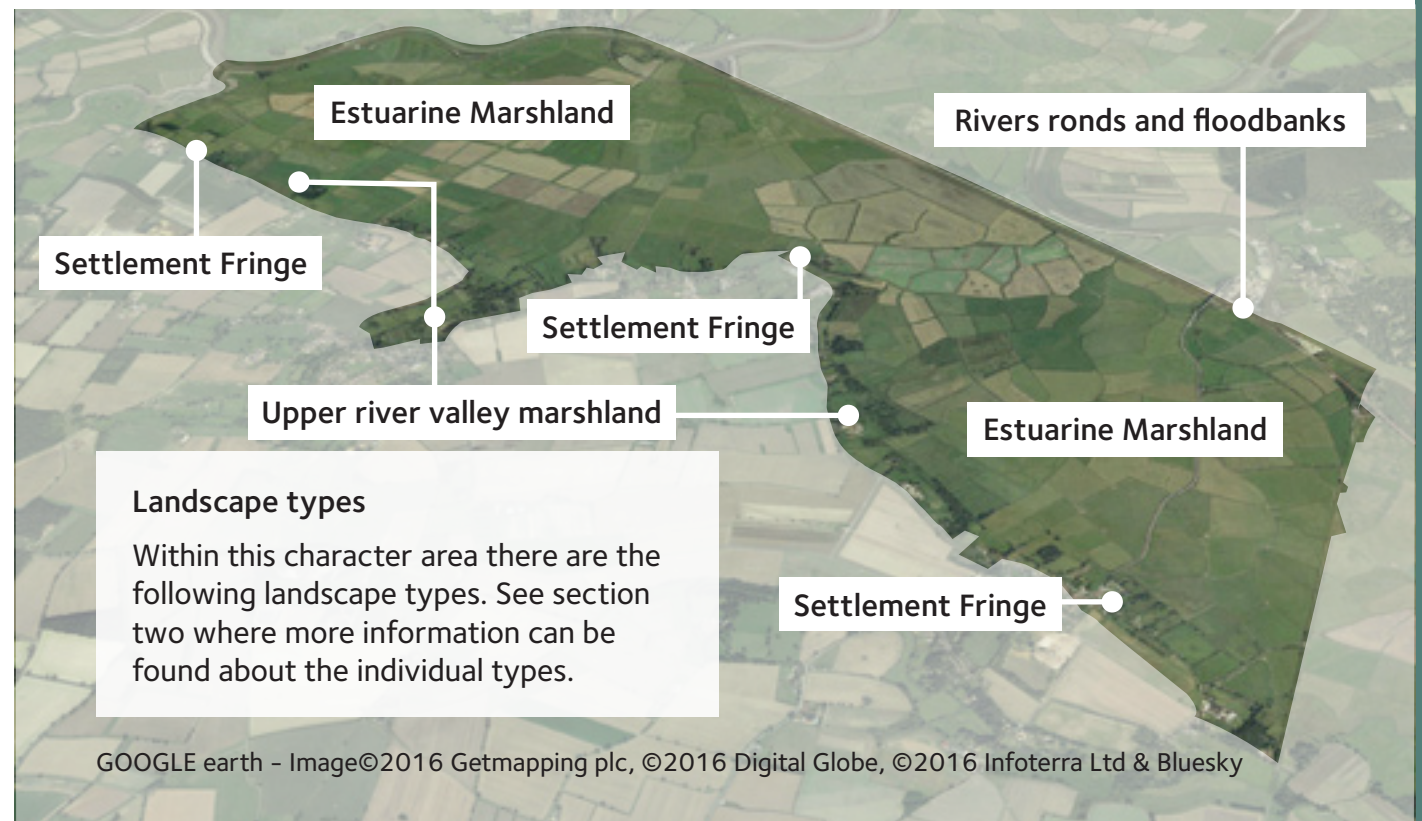
The southern skyline is formed by gently undulating arable farmland beyond the valley floor outside the Broads Executive area. At certain locations the carr woodland fringing the valley interrupts the views beyond.

To the north, skylines are formed either

by a continuation of the grazing marshes of Haddiscoe or Halvergate or by the low wooded ridge beyond St Olaves, some of which is outside of the Broads area associated with Waveney Forest and land within the Somerlayton Estate. This ridge is defined by mixed and plantation woodland and forms a prominent skyline element in these views.

However there are significant interruptions to these skylines from very prominent elements such as road and rail routes and bridges (particularly the A143 overpass at Haddiscoe Cut Bridge), pylons, electricity lines and the dismantled Beccles to St. Olaves railway.

The Cantley Factory is visible in views north



west from within the area, and movement of traffic along the A143 including the tall bridge over the Waveney at Haddiscoe Cut, is a feature in views to the north and east.

Geology and soils

The underlying strata are of clays, sands and gravels. This area is uniformly Breydon formation silty clay thinning at the valley edges towards the upland to form narrow fringes of peat and in addition along the minor tributaries.

Enclosure, scale and pattern

This is large scale landscape with wide valley floors, extensive views and big skies. There is marginally a greater sense of enclosure in the southern parts of this area than the north, due to the presence of the wooded valley ridges. Localised sense of enclosure is created when near to the flood banks of the River Yare and the railway embankment.

The area is a mixture of some rectilinear dyke pattern and areas with long sinuous boundaries derived from minor watercourses and creeks.

Two of the more significant dykes here are Boyce's Dyke and the Thorpe and Haddiscoe Fleet.

There has been considerable boundary loss to the north of the area and the area adjacent to the New Cut, associated with conversion to arable, which has created some particularly large irregular-shaped marshes.

The colours in the landscape are muted with the

rivers and dykes reflecting light.

Main features of land cover and use

The land use is essentially for farming, both as grazing marsh and arable. Where land has been converted to arable use, dyke networks have been rationalised.

There are some small blocks of carr woodland along the peaty area nearer the upland although these are less of a feature here than in many of the other marshland areas.

Infrastructure - Aside from the river, this area contains a number of other significant communications routes - road, rail and water. The most dramatic is the New Cut which forms the north-eastern boundary of this area. The Cut is a major piece of 19th century engineering creating a completely straight link between the Yare at Reedham and the Waveney at St Olaves. It was designed by William Cubitt and formed part of a larger scheme to provide a direct link between Lowestoft and Norwich. The Cut was

completed in 1832, and followed by the railway beside it in 1847. It was never a commercial success and was damaged by the floods of 1953 and nearly closed.

Haddiscoe Dam by contrast is a more winding medieval route, crossing the marshes between Haddiscoe and St Olaves. The Dam was built by St Olaves Priory in association with a new bridge at St Olaves in the thirteenth century. The Dam has become part of the A146 and is lined for much of its course by pollarded willows. However hawthorn scrub, established on the embankments, detracts from the unique visual qualities of the pollards, a historic wetland feature, and is also spreading out into the marshes changing their character.

This area also includes the former railway line

▼ *A small section of the linear settlement that exists along the valley boundary.*

Image by Rodger Jones - geograph.org.uk





▲ *Norton Drainage Mill (now a holiday let) with the internal drainage board pump house how now been demolished. Image by Evelyn Simak - geograph.org.uk*

between St Olaves and Beccles (1859 to 1959) that ran approximately north-south across the marshes and is very much a feature of the landscape. Two rail lines crossed at Haddiscoe Station where the bridge piers are still in situ across the Waveney and the signal box remains. There are also some terraces of railway housing. The course of the railway line has been used to form the boundary between this area and LCA 7 although the transition is actually more gradual.

Settlement within the area is generally linear in form and largely restricted to the marginally higher ground on the edge of the floodplain around the tributaries which flow into this area and form the parish boundaries. Much of this

settlement (allied to the woodland on the valley edges) restricts views of the marshes from the valley side. However, a short area towards the ferry road at Norton Subcourse is unusually open, allowing views across the marshes from the road.

Elsewhere there is some terraced railway housing around Haddiscoe Station, properties along Ferry Road and Norton Subcourse and an isolated farmhouse on Haddiscoe Dam Road.

There are two drainage mills in this area both along the Ferry Road at Norton Subcourse. Mills are not a particular feature of this area although this has not always been the case. There are numerous lost mill sites. It may be they were superceded by large steam plant as was the case further upriver on the Yare, whereas areas such as Halvergate and Haddiscoe Island, where steam engines were not such a big feature, have retained many more mills.

Built heritage features include Reedham Swing Bridge which carries the railway line across the Yare; Haddiscoe Thorpe Church – noted for some early (Romanesque) features; Boyce's Dyke Mill & Engine House derelict tower which was adapted and extended to form an engine house; Norton Black Mill, a tarred tower fitted with a boat-shaped cap. This mill was particularly well photographed in its working days and is now used as a holiday home.

Helping to keep it special

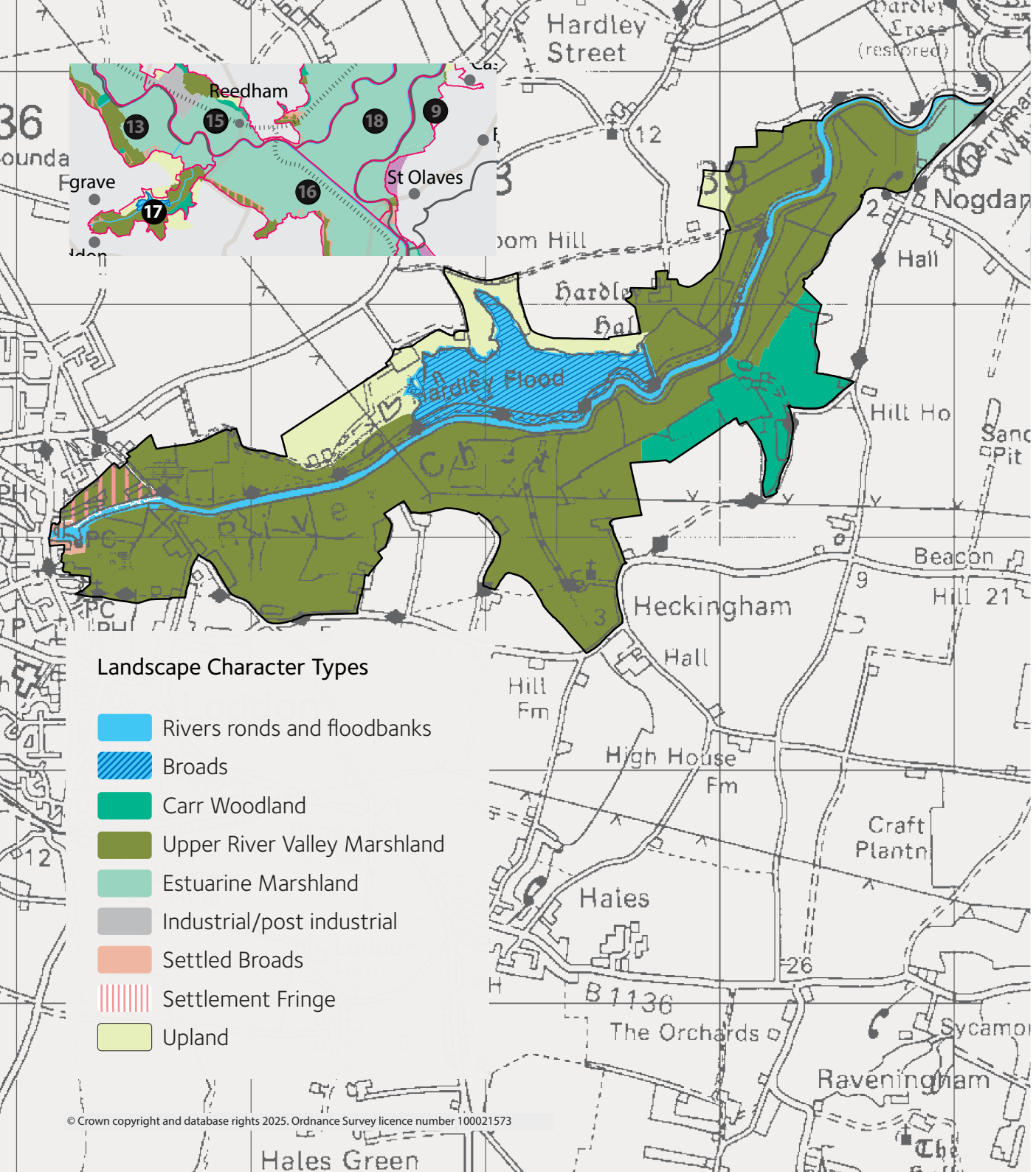
Care needs to be taken when landscape change occurs, to ensure that those positive

characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Natural Heritage – Much of the area is used as grazing marsh or for arable purposes. The water levels and quality of the drainage dykes can affect the habitat value of these dykes. There are opportunities to enhance the habitat value of the area through farming practices sympathetic to the environment. Arable cultivation of the marshes has also caused a loss of unity, a lowering of the land levels and loss of historic boundaries and boundary features. Dykes in the area are sometimes overgrown and hawthorn scrub from the Haddiscoe Dam is spreading out into the marshes.

Landscape – Visual impacts of built development and infrastructure have at certain locations detracted from the perceived naturalness of the area. These include the settlements of Reedham and St Olaves, the Cantley Factory and various pylons and electricity poles and wires crossing the marshes. Tranquillity is also impacted upon by the frequent traffic movements and noise on the A146.

Some dereliction can be found allied to settlements along with the various mixed uses of land along the settlement edge. This can have an effect on the character of the grazing marsh environment.



17. Chet Valley

The Chet Valley is the location of the very recent, significant archaeological find of an oak boat constructed by skilled craftsmen between 1020-1155 AD.

Why is this area special?

The Chet Valley is a tributary valley of the River Yare which is particularly notable for Hardley Flood, a large area of tidal washland to the north of the river which is a SSSI. It supports nationally important breeding populations of shoveller, pochard and gadwall. The Wherryman's way, one of the long distance footpath routes, which passes through the Broads follows the length of the northern river bank from Loddon and Chedgrave at the western end of the area to the junction with the River Yare to the west.

A large proportion of the area has a remote, isolated character but towards Loddon and Chedgrave the river and the adjacent area becomes much more developed and busier. Businesses catering for the leisure/recreation industry and boating have tended to expand out into the adjacent grazing marsh area.

The River Chet rises in Poringland and was once minor enough to be forded near to Pye's Mill, Loddon. Between the Yare and Loddon/Chedgrave, the river was widened, deepened and straightened to make it fully navigable for trading wherries serving two firms of seed merchants, in the late nineteenth century. Prior to this, transportation by road to and from Hardley or Langley Staithe was necessary.

Most of the alteration in the course has been in the section from Hardley Flood towards the settlement area, partly moving the course northwards in doing so creating an area of riverside heathland area at Chedgrave.

Topography and Skyline

It is a small scale, narrow valley landscape. The valley floor width is around 300m, although widening slightly in the area around Hardley Flood. The valley, lying at around 2m OD, has gently sloping valley sides bound together and defined by an intricate network of small woodland blocks creating a relatively enclosed landscape. The valley crests fall just outside the

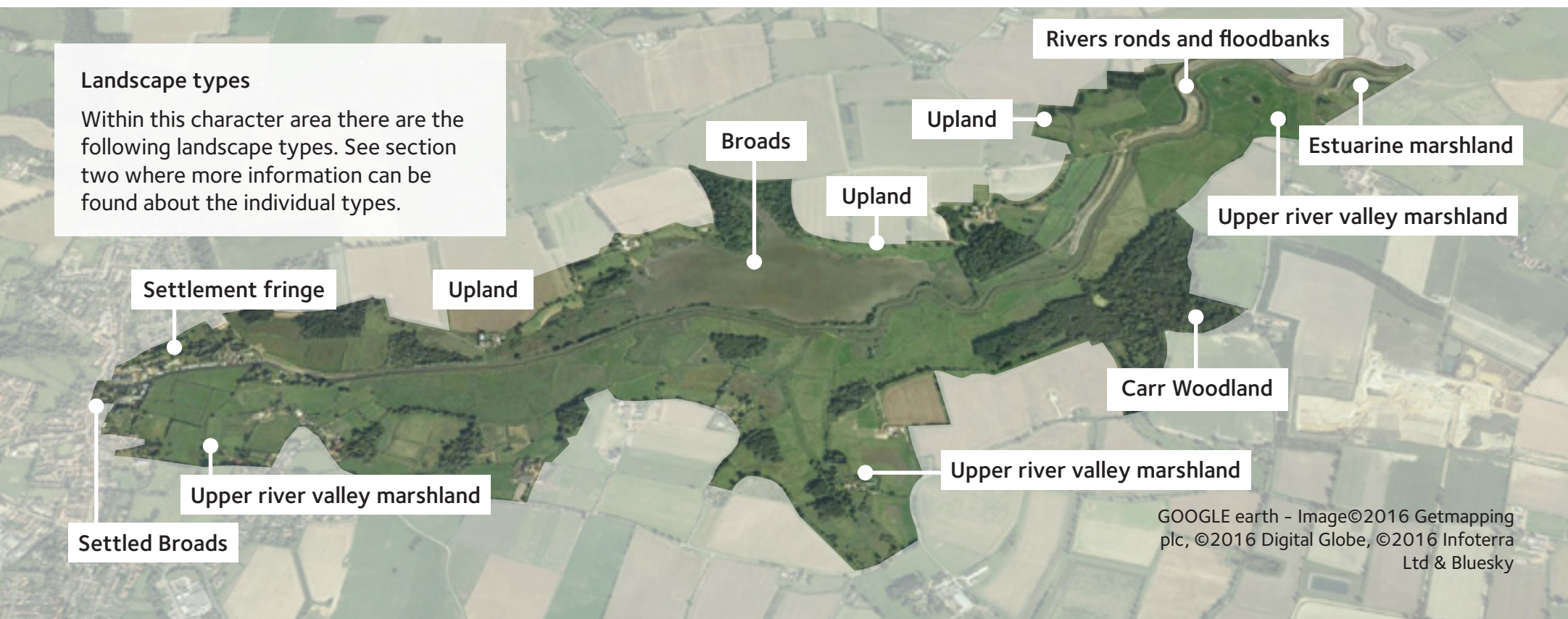


▲ Views over grazing marsh on the north bank showing some of the different landscape elements in the area. Image by Evelyn Simak – geograph.org.uk

Executive Area at 10–15m OD and are visually prominent in more open views such as to the west of Hardley Flood.

Skylines, notably in views west from Hardley Flood in views east from Loddon are interrupted

by pylons and electricity poles forming a locally intrusive element within the area. At other locations the skylines are partly defined by carr woodlands within the valley floor and by rising areas of open arable farmland on the upper



► *Hardley Flood which changes with the tides.*

valley sides beyond the Broads area. Views are mostly contained within the valley due to the enclosed nature of the landscape, although breaks in the woodland create visual links with adjacent landscapes.

Geology and soils

The valley floor is peat with sands and gravel valley sides. Sands and gravels lie at a deeper level.

Enclosure, scale and pattern

Comparatively the Chet valley is a small scale landscape; the narrow river valley allied to the small scale woodland blocks create a relatively enclosed landscape.

Drained fens and arable land are spread across the north of the river, while rectilinear drainage pattern is evident to the south of the river.

▼ *The Wherrymans way on the north bank of the Chet, follows the route of the flood bank. The valley widens out as it joins the Yare valley. Image by Jeremy Halls - geograph.org.uk*



Hardley Flood is an area of shallow lagoons and reed beds, visible from the valley sides as a large plain of water north of the river. This and the meandering course of the River Chet, allied to small woodland blocks, create a strong variations in light and reflectivity in the valley. Combined, these elements create considerable textural variety in the valley floor, in contrast to the simple arable landscape on the upper valley slopes beyond the Broads area.

Main features of land cover and use

The land cover is quite varied within the valley and consists of the open water of Hardley Flood, carr woodland, wet fen, drained marsh and an area of heathland and common. Land use of the more “natural” areas tends to be split between management for nature conservation purposes and farming which utilises the marshes for grazing. Some unmanaged areas do exist however.

The main areas of settlement in the area are linear in form and concentrated at the western end of this navigable river whilst smaller scale boatyards, boat moorings, camping facilities, public open spaces are all located at the western end of the area.

At the head of the navigable extent of the Chet is Loddon Watermill and a roughly linear settlement area which extends across the river (Bridge Road) joining up Loddon with Chedgrave. There are smaller scale boatyards, boat moorings and new riverside apartments





▲ *Mooring facilities for boats at the end of navigation at Loddon/Chedgrave are tightly packed. Image by Lesley Marsden*

along the river frontage, whilst camping facilities and public open spaces can also be found in the locality.

There appears little trace of the nineteenth century Loddon industry. Most riverside development here appears to be relatively new and of contemporary design contrasting with the well preserved town of Loddon. Farmsteads can be found dotted around the edge of the floodplain on both sides of the valley.

Floodbanks and defences – Much of the Chet was timber piled to provide support for the peat soils that form the valley floor. Recent flood alleviation work has provided an alternative remedy along the southern edge of the river. The flood bank has been set back further into the marsh and the quay heading will ultimately be removed providing a more sustainable solution.

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Landscape – Skylines and horizons of the Broads area often lie outside the national park area. Lack of development on skylines can help reinforce the sense of isolation and tranquillity which is a valued characteristic of the area. Opportunities could be sought to enhance the area through the removal of those features that visually impact on the area, which may be located external to the boundary.

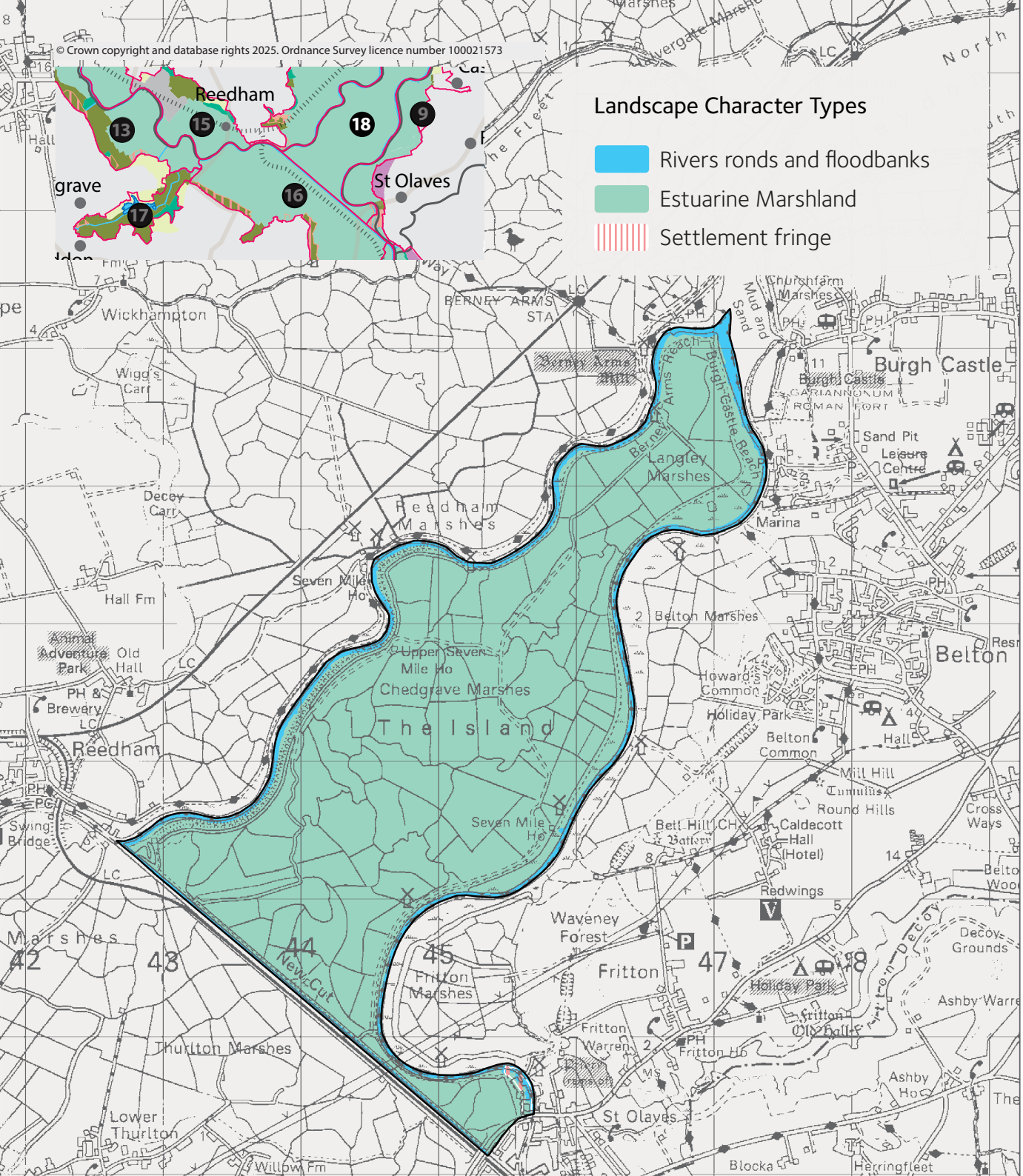
Areas of settlement inevitably create pressure on the neighbouring less developed areas. It is important that any changes to land use close to the settled area on the edges of the marshes are appropriate and designed to enhance the landscape character.



▲ *Boat moorings to the east of Chedgrave village extend beyond the settlement boundary. Image by Evelyn Simak – geograph.org.uk*

▼ *New housing development on the Chedgrave bank has brought a different development style to the area. Image by Lesley Marsden*





18. Haddiscoe Island

Haddiscoe - an Island created by the merchants of Norwich.

Why is this area special?

The 'island' was created by the construction of the New Cut in the 1820's/1830's, which linked the River Yare at Reedham with the river Waveney at St Olaves. The New Cut was constructed to avoid the port of Great Yarmouth's handling charges and a means to reduce the distance travelled by about 10 miles.

Historically, the island was the location of "detached" portions of the parishes of Loddon, Langley, Toft Monks, Reedham, Raveningham, Chedgrave, Stockton and Haddiscoe but since 1935 it has formed part of Haddiscoe civil parish.

The Island shares a number of physical characteristics with Halvergate Marshes such as the large expanse of estuarine marshland which is around 2000 acres in size and the panoramic views of the wide open landscape and "big skies".

Despite these similarities it's heavily embanked watery boundaries, restricted access and the New Cut all serve to give it a unique sense of place with a distinct identity of its own.

There is a strong sense of continuity of a traditional way of life here. The marshes are retained in grazing use and around half are still let at the annual marsh letting auctions at the Bell public house in St. Olaves where the terms

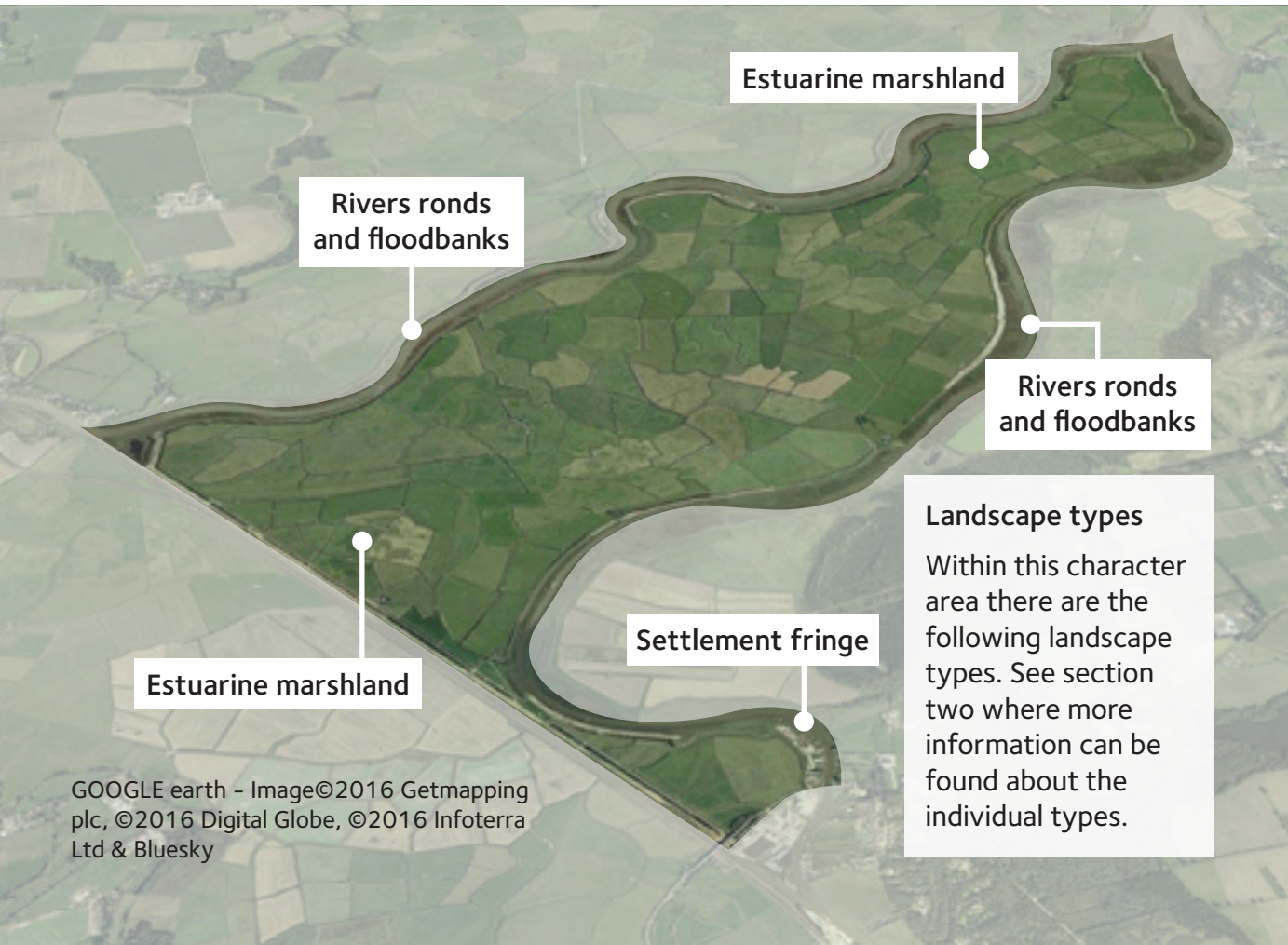


▲ A key landscape feature of the area are the extensive views and "big skies" only interrupted by drainage mills and limited vegetation. In views to the north the skyline is formed by the wooded northern valley sides of the River Bure. Image by Evelyn Simak - geograph.org.uk

of the leases restrict the uses of the marshes.

A distinctive feature of the section of island bounding the river Waveney is the exceptional width of reed ronds. These areas between the river and the river embankments provide an area of washland and were periodically grazed in the past. Today they provide an expanse of reedbed, which used to be cut commercially.

Away from the influences some forms of development on the edges and outside the area (including the exceptionally tall pylons) the area has a strong sense of tranquillity.



Topography and Skyline

The island is level floodplain marshland at around 1m below OD to 1m above OD, bounded by the River Yare to the north, the Waveney to the south and the New Cut to the south-west.

The skyline in views to the north are limitless as the rising land which forms the relict cliff edge to the Great Estuary lies many kilometres away.

Views to the east are truncated by a similar relict cliff edge upon which grows woodland which includes the large expanse of coniferous plantation of the Waveney Forest. Towards the northern tip of the island the Burgh Castle Roman Fort and nearby boatyard both stand out as significant features visible for some distance.

Views to the south are interrupted by the massively tall pylons erected to ensure that the electricity cables that they support did not affect the boat traffic on the river and Cut.

To the east the valley of the River Yare narrows

GOOGLE earth - Image©2016 Getmapping plc, ©2016 Digital Globe, ©2016 Infoterra Ltd & Bluesky

Landscape types

Within this character area there are the following landscape types. See section two where more information can be found about the individual types.

and there are views of the rising landform in the Great Yarmouth District, fringing carr woodland which lies at the foot of the valley side is present in views.

Geology and Soils

The deep layers are gravels sands silts and clays and the soils are uniformly Breydon formation silty clay laid down at the time when this area was part of the Great Estuary. A video of the story about this estuary which existed during Roman times can be found via this link.

www.youtube.com/watch?v=kce_Uu5Rb-8

Enclosure scale and pattern

Haddiscoe Island is a large scale, open, flat marshland landscape which is bounded by

▼ *Toft Monks drainage mill, now undergoing full restoration.*



embanked rivers of the Yare and Waveney lying metres above the low lying grazing land. It is a simple landscape of muted colour palette, with comparatively little variation in light and reflectivity, due to the relative absence of features breaking up skylines or casting shadows.

There is little sense of enclosure other than on the eastern edge of the area where the valley edges of the Great Estuary rises up as slopes and steeper cliff faces. Other visual boundaries are generally at some distance due to the broad valley floor, which is several kilometres across.

Overall the island retains a significant number of sinuous curving dykes anciently harnessed from natural creeks. Those that survive tend to correspond with former parish boundaries and can often be traced for some distance across the marshland. The northern tip of the island has been largely reorganised into a rectilinear scheme, possibly in association with the rebuilding of the Langley Detached Mill by the Beauchamp Proctor Estate.

It is a simple landscape pattern of mostly grazing marsh with significant areas of reed ronds near the river courses, and which create localised visual interest and variations in colour and light.

Main features of land use and cover

Water, drainage mills and marshes are the most significant features of the area. The remains of four drainage mills and one steam engine survive on the Island all of which were working into the 1940's.



▲ *Six Mile House surrounded by water. Image by Mike Page*

The mills are known as Toft Monks, Langley Detached, Pettingells and Six Mile House. The latter two are derelict, the former two have been houses converted to holiday use. Near Toft Monks mill there is also the remains of a 'Humpback' vertical steam engine made by the firm of Smithdales which, although broken and incomplete is a rare survival. The marshes are now pumped by two electrically powered pumps although over the next few years the pumping arrangements may be rationalised.

Visually the drainage mills on the island combine with those on the adjacent marshes adding to their significance in views of the area as a whole.

The main land uses on the Island are cattle grazing and until relatively recently commercial harvesting of the reed ronds. Unlike most other areas of marshland in the Broads there is a notable absence of arable cultivation.

The rivers Waveney and Yare are heavily embanked. These flood banks have been modified over the past decade and half as a



◀ *The New Cut forms the south western boundary of the Island. Some of the high surge tides over the past few years have caused the water in the Cut to overtop. The Island is the location of the tall electricity pylons which can be viewed from a great distance. Reedham and Cantley Sugar factory can be seen on the horizon. Image by Alison Allen – geograph.org.uk*

result of the Broadland Flood Alleviation Project (BFAP). All the banks stand metres above the marsh level restricting not only views from the marshes across the rivers when in close proximity to them, but also views of the marshland when on the river visually isolating the Island.

Material for the banks for the BFAP scheme was sourced from the adjacent soke dykes which have increased significantly in width. In the early days of the flood alleviation project this led to Six Mile House Mill being surrounded in water.

For such an isolated area there is a significant amount of infrastructure in the area. The New Cut, allied to the railway line, forms a very unnatural boundary to the area, and is crossed by the A143 to the south eastern most extremity of the area. The Cut is a relentlessly straight waterway, contrasting strongly with the sinuous form of the two rivers.

As a feature the Cut is not visually appealing but is a significant piece of engineering. It appears noticeably higher than the surrounding land, presumably resulting from land shrinkage. A partially concrete road runs parallel with the cut on the Island's interior and provides access to

the two marshman's dwellings on that side.

The only formal public access is the 18 kilometre walk around the island's perimeter. This is accessed under the Haddiscoe flyover.

Vast pylons cross the marshes where the Waveney and New Cut are closest near to the entrance. The combination of the New Cut, access under the Haddiscoe flyover and the industrial nature of part of St. Olaves creates a rather bleak functional feel to this part of the Island.

There is little settlement on the marshes. Although the Island technically includes a riverside boatyard and industrial area opposite St. Olaves, this has been included with the description of the adjacent area as its features have more in keeping with development on the opposite bank of the River Waveney.

On the main part of the Island there are only four isolated marsh dwellings and four former drainage windmills, two of which are now holiday homes. All of these buildings are located around the perimeter of the island.

Vehicular access is closely restricted by the marshmen and this is very much a working,

rather than a leisure landscape infrequently visited by the public.

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Natural Heritage – The expansive grazing marsh landscape with their historic network of drainage ditches and dykes are the most defining feature of Haddiscoe Island. Much of the area is managed through traditional grazing techniques which could change in years to come. The BFAP scheme has introduced very wide foldings (the area between the flood bank and the soke dyke), should these not be managed in the long term by grazing or cutting, scrub could develop.

Built heritage – The drainage mills are nationally, perhaps internationally, important landscape and historic features. To ensure their survival for future generations, new purposes need to be found for some of the structures, thereby providing an economic incentive for maintaining them; conservation work needs to be undertaken to some whilst their historical importance needs to be publicised generally.

Landscape – promoting landscape enhancement schemes to enhance the positive physical characteristics of the area such as removal of overhead power lines within the open grazing marshes.

► In this view northwards the skyline is formed by the crest of the Bure valley over 3 kilometres away. Fringing woodland on the valley edge is often a feature in the longer distance views. Image by Evelyn Simak - geograph.org.uk



The importance of this area for wildlife is recognised by its numerous international and national nature conservation designations. The area is also part of a huge built heritage conservation area, so designated in recognition of its drainage mill and dyke network which are of national perhaps international importance.

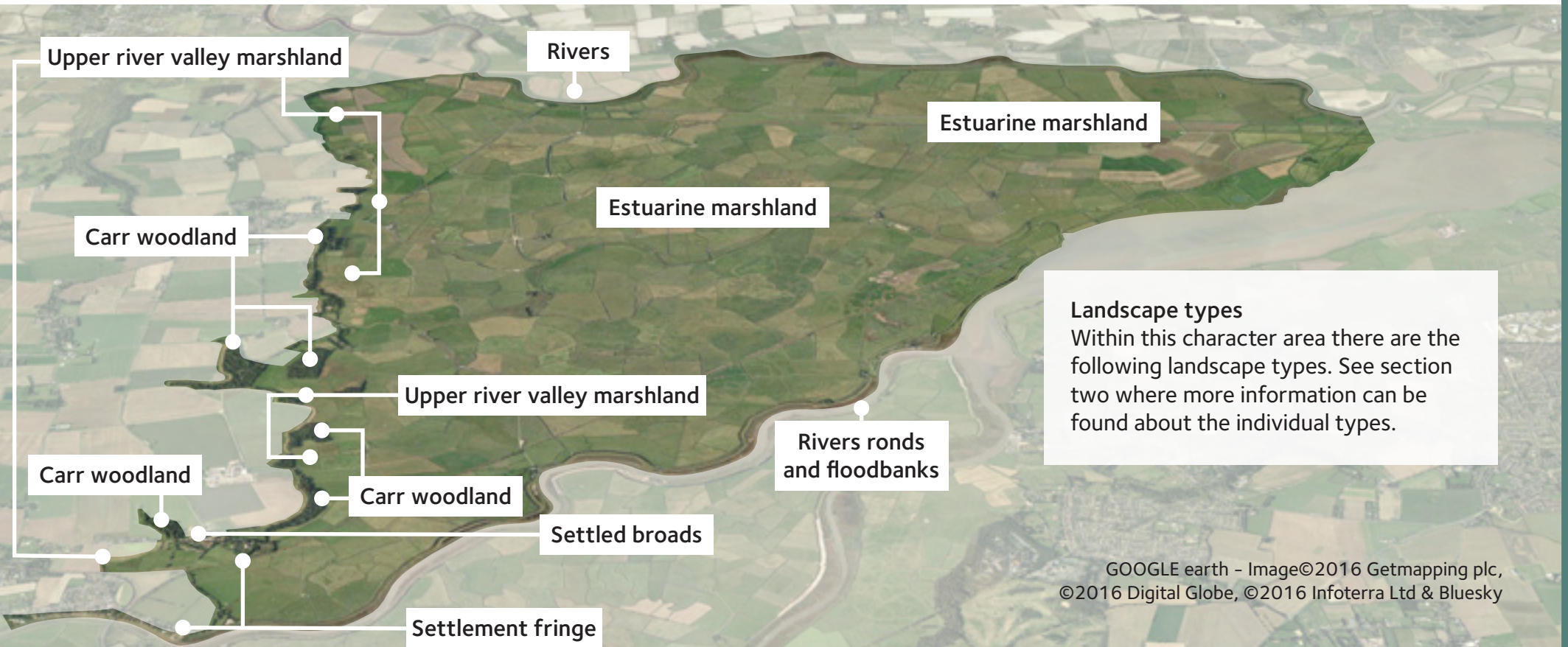
Topography and Skyline

Halvergate marshes are a vast, level estuarine

marshland lying at around 1 metre below OD except for the flood banks on the River Yare and Bure which stand a few metres in height above the grazing marsh. Views out and across the marshes are often expansive. On good clear days, when stood in the middle of the area, views to the west are terminated by bands of carr woodland, although farm buildings which are sited on particularly high ground can be also seen. To the east the silhouette of Gt. Yarmouth

can be made out with the backdrop of Scroby Sands offshore wind turbines.

To the south, at St. Olaves, pylons and industrial development associated with boat yards lie in the foreground of views of the woodland lying on the valley sides near Burgh Castle. To the



GOOGLE earth - Image©2016 Getmapping plc, ©2016 Digital Globe, ©2016 Infoterra Ltd & Bluesky



◀ *Highs Mill adjacent to a dyke are two of the key landscape features in this area. Image by Julian Claxton*

silty clay thinning and giving way to a narrow band of peat along the western upland edge. These marshes are consequently wetter with rushy and alder carr areas as they are harder to drain.

Enclosure scale and pattern

The marshes are of a vast scale compared to some other areas in the Broads comprising of a very open landscape with little or no woodland cover apart from the aforementioned areas of carr on the western edge and pockets of vegetation around buildings. Only at the very edges of the area is there any perception of the valley sides and an associated sense of enclosure.

north, the valley sides of the river Bure can be made out. Traffic movement, the occasional train and power lines, which all travel in an east west direction can be made out in the foreground of these views. The skylines, are generally largely undeveloped and simple in character adding to the sense of isolation.

Geology and soils

Lower lying strata are the crag group sands and gravels. The soils of the marshes are uniformly

▼ *Traditional management of the marshes for grazing often helps to promote the development of the species rich dykes. Image by Jeremy Halls - geograph.org.uk*



▲ *Typical gates and wing walls are often the only upstanding features in a treeless landscape. Image by Evelyn Simak -geograph.org.uk*

The marshes display a high percentage of the older curvilinear dyke networks although these are not evident from ground level. Marsh gates with side wings are one of the features repeated throughout the area. The only two metalled roads in the area (Acle Straight and Tunstall to Halvergate Branch) are lined (sometimes intermittently) with pollarded willows which allied to the mills, form the only visual breaks in the foreground of views in an otherwise simple, open landscape.

Main features of land cover and use

Water, drainage mills and marshes are the main landscape features in the area. The marshes retain a high proportion of sinuous dyke boundaries, which were harnessed from natural saltmarsh creeks. The most significant of these, the Halvergate Fleet, acted as a main drain embanked with summer and winter walls with an area of rond in-between to act as a washland. A former probably similar watercourse to the north of the Fleet, can be traced across much



▲ *Berney Arms Station has to be one of the most isolated in the country. Image by Stephen McKay - geograph.org.uk*

of the marshes and may explain the otherwise strange positioning of Kerrison's Mill and Marsh Farm there. Certainly by the eighteenth century, a series of drainage windmills moved water from their separate drainage levels into the Fleet which in turn drained into Breydon water via a sluice and from the 1930's, a diesel pump. Four of the Fleet mills survive.

Although there are some areas of arable land, the marshland is predominately pastoral (grazing marsh) with an intricate network of reed fringed dykes. The grazing marsh is used for agriculture (cattle grazing). Large tracts are now owned by the RSPB who allow seasonal grazing. In some areas conservation measures have resulted in the excavation of scrapes (shallow excavations) to support wading bird communities.

The RSPB's management for nature conservation purposes has gradually created change in those areas they manage, as a higher water table

is maintained, wet scrapes are created and a number of small wind powered pumps have been introduced, designed to do the reverse of the job of the traditional mills and instead "lift" water onto the marshes.

The river Yare forms the southern and the Bure and Tunstall Dyke the northern boundary to this character area both of which are relatively wide stretches of river contained by large banks. These flood banks have been modified over the past decade and a half as a result of the Broadland Flood Alleviation Project (BFAP) which involved increasing their height, and rolling or setting them back or on line strengthening.

All the banks stand metres above the marsh level restricting not only views from the marshes across the rivers when in close proximity to them, but also views of the marshland when on the river. Material for the banks was generally sourced from the adjacent soke dykes which have significantly increased in width.

Infrastructure within the area includes the A47 Acle Straight, as it is known, which was built as a

▼ *Two long distance footpaths, the Weavers and Wherryman's Way meet at Berney Arms and continue along the same route into Gt Yarmouth. Image by Adrian S. Pye - geograph.org.uk*



Turnpike Road in the 1830's. It has a significant impact upon parts of this area and further afield, both from constant rapid traffic movements and from noise although this can vary considerably depending on the wind direction. The road which connects the A47 to Halvergate is known as the Branch Road. This road is like a switchback with many ups and downs as the unstable ground below has caused the road to settle in places.

19th century "soft" engineering techniques i.e. the planting of willow trees, were used as their root structure can help to "hold up" the road embankments. These willows have become a landscape feature in their own right being pollarded on a regular basis by the County Highways Authority.

Two railway lines cross the marshes and like the A47 cut across existing dyke networks, these are the Norwich to Yarmouth via Acle line and Norwich to Yarmouth via Reedham line. Their presence overall has relatively little visual or noise impact on the surrounding area. To the south of the area there is a halt which is

probably the most remote one in the country. It is located near Berney Arms, where formerly there was a station. Both here and to the north of the Reedham group of mills were blocks of railway cottages. Those north of Reedham Marshes remain albeit half demolished.

Two of the long distance trails in Norfolk (the Wherryman's Way and the Weaver's Way) cross Halvergate Marshes. Rights of Way are more plentiful in the southern part of the area than the north and their routes tend to reflect the linking up of settlements on the eastern and western edges of the Broads.

There is a small amount of intermittent carr woodland on the western edge of the floodplain. That which lies between Reedham and Wickhampton is older, being shown on both

Faden's and Bryant's Maps. It is now mapped as Park Carr, Ashyard Carr, Decoy Carr, Drover's Carr, Miller's Carr and Wigg's Carr. The presence of this woodland on these old maps indicates that the woodland land cover in this area has been there for many centuries.

Settlement today is restricted to isolated marsh houses within the marsh and a series of marsh edge settlements along the western boundary. Archaeological evidence suggests however, that the marshes have been settled for at least 1000 years and much was in private ownership from a relatively early date.

Over time the marsh economy has developed from salt industry and (predominantly) sheep grazing and by the 16th century to a major cattle-grazing district.

A series of distinct mounds in the marshes existed until recent years, which have been tentatively suggested as saltworking sites. Unfortunately these have now been almost entirely levelled leaving only shards of pottery to be found. One survives near Ash Tree Farm, north of the Acle Straight with a WWI pillbox set on top.

Tunstall, Halvergate, Wickhampton, Freethorpe and Reedham are located along or near the western boundary with adjacent blocks of the marshland within their parish boundaries. Other areas of the marshes were detached portions of various local parishes. These were often some distance away; Postwick, South Walsham and Cantley being examples. This can be explained by the value of the land for salt production (Williamson and Yardy, 2024)

Significant landscape feature in this area are the numerous drainage mills which were often associated in the past with small scale settlements. Settlement along the Yare clusters into two distinct groups - that around Seven Mile House on the Reedham Marshes and that around Berney Arms. The north wall of Breydon Water also included a large marsh farm with various cattle compounds and later a mill and cottage as well as numerous houseboats of which only the mill and a fragment of the cottage remain.

The grouping on the Reedham Marshes is largely based around the drainage of the area and includes three drainage mills, a steam engine house and a diesel engine shed as well as the

▼ *Polkey's Drainage Mill and Seven Mile Steam Engine House are part of this assemblage of structures which in past times used to help drain the marshes. Image by Jeremy Halls - geograph.org.uk*





▲ *Muttons Mill, one of the many isolated features of Halvergate Marshes*

Seven Mile House and some remains of a further marshman's house. The site was a particularly remote one until the diesel pump was replaced by an electric pump in the 1980's and concrete Internal Drainage Board access roads were built.

A small hamlet at Berney Arms developed around Thomas Trench Berney's 19th century Reedham Cement Works which at one time included 11 dwellings and a chapel. The tall Berney Arms Mill, a scheduled monument which formed part of this complex, survives along with Ashtree Farmhouse and the Berney Arms Public House. Chalk from Whitlingham was brought to the cement works by wherry, mixed with silty mud dredged from Breydon or Oulton Broad and burnt in kilns before being ground in the mill. The mill is now in the care of English Heritage and

managed by the RSPB.

The Fleet also used to be an area of settlement with a series of marsh farms from which the mills were later run, established along it. This was the situation until the mid to late 1940's when the introduction of an electric pump and the reduction of the Fleet to a lesser drain, meant the drainage mills and marsh houses, were gradually abandoned. In the following years, derelict and demolished buildings became a feature of this area, as with much of Halvergate. The situation has somewhat reversed today, with three of the four surviving marshman's houses now permanently occupied, the fourth as a holiday home although the rubble heap of a fifth remains.

Various access points onto the marshes are

found along this side of the valley. The main one being the Stone Road from Halvergate which provided access to the Fleet Road, historically the main route across the marshes, and later connected to the Acle New Road by the Branch Road.

The River Bure and Tunstall Dyke form the northern boundary to this character area. A number of mills and potentially early settlement sites are situated along the Bure usually corresponding with the Mile house locations.

The valley sides and settlement edge to the north (outside the area) are visible and the mills combine visually with those on the north side of the Bure although the floodbanks mean only the upper part of the mill across the river is visible. At the north-western extent of this area is Tunstall Dyke, formerly connecting the Bure with Tunstall upland. The dyke apparently survived the building of the road and railway across its route as provision was made to allow wherries underneath, however its use still died out in the late 19th Century. The dyke is now dry and overgrown, its staithe house and buildings gone. Two mills remain here, one to either side although a plantation immediately west of the dyke limits their landscape contribution.

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Natural Heritage – The expansive grazing marsh landscape with their historic network of drainage ditches and dykes are one of the most defining features of Halvergate. Much of the area is managed through traditional grazing techniques currently supported by subsidies which are not guaranteed for the future.

Large areas are managed for nature conservation purposes and land management techniques used sometimes has the potential to affect the historic environment in both positive and negative ways.

Conversion or reversion to arable land, driven by changing land economies, require lower water levels in the dyke networks or even their total removal, which has an effect on the historic drainage patterns and loss of potential habitat.

Built heritage – The drainage mills are nationally perhaps internationally important landscape and historic features. To ensure their survival for future generation's new purposes need to be

▼ *Lockgate Mill, isolated by the expansive marshland and Breydon Water. Image by Tim Heaton - geograph.org.uk*



found for some of the structures thereby providing an economic incentive for maintaining the structures; conservation work needs to be undertaken to some and their historic significance needs to be publicised generally.

Archaeology – much is still to be explored about the use of this area over time. Some of the historic landscape features of the area remain a mystery. Balancing the needs of nature conservation and their impacts on the historic features of the area.

Landscape – promoting landscape enhancement schemes to enhance the positive physical characteristics and features of the area such as removal of overhead power lines within the open grazing marshes. Pollards lining the roads provide an important function because of their root structures and provide local features.

The BFAP scheme has introduced very wide foldings (the area between the flood bank and



▲ *Howards Mill. Image by Tim Heaton - geograph.org.uk*

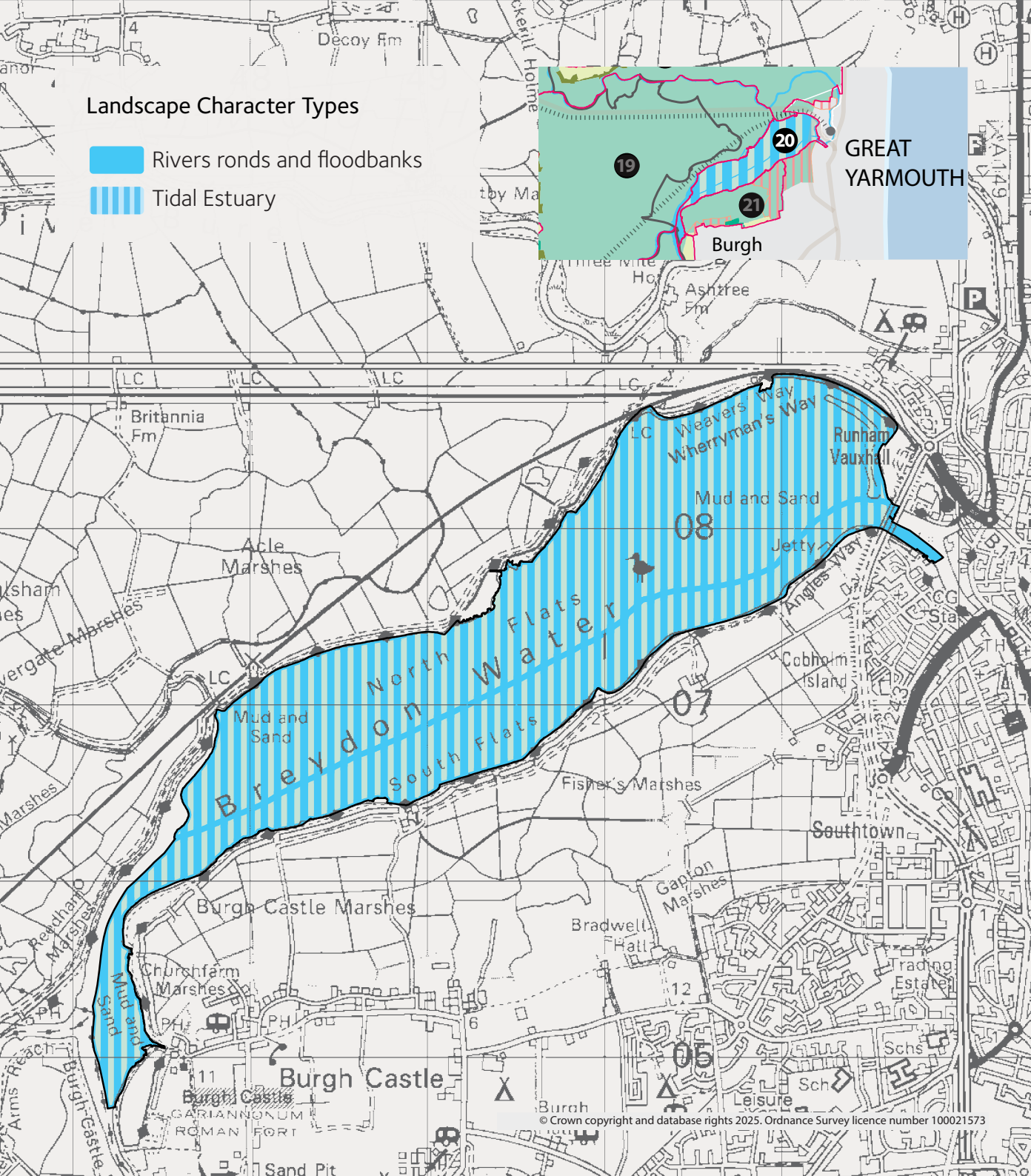
the soke dyke), should these not be managed in the long term by grazing or cutting, scrub could develop.

It is important that changes to land use close to the settlements (settlement fringe) and farm buildings are appropriate and well designed to enhance the landscape character.

Ensuring that development outside the area does not impact adversely on the special character of the area as it provides its setting.

The construction of a dual carriageway along the same alignment of the A47 "Acle Straight" is a highway enhancement that has been discussed for many years. A scheme of this scale has the potential to have significant adverse effects on the character of the area and habitats.

Mitigation measures in landscape terms are likely to prove exceptionally difficult resulting in significant adverse effects.



20. Breydon Water

The treacherous nature of Breydon’s channels is captured by Hugh Money-Coutts in his 1919 verse account of a holiday on the Broads.

‘On Breydon Water, when the tide is out,
 The channel bounds no sailorman can doubt.
 Starboard and port, the miry banks reveal
 Where safety lies beneath his cautious keel.
 But when the flood has wiped the water clean,
 - Hiding the muddy haunts where seagulls
 preen. Their wings, and shake their heads
 - black pillars mark. The channel’s edge for
 each adventuring bark. Beware; the channel
 shifts, and now and then. A post deceives the
 hapless wherrymen.’

Why is this area special?

Breydon Water is a hugely imposing and unique gateway to the Broads network. It is all that remains today of the Great Estuary that existed during Roman times which covered all of the areas occupied by Halvergate Marshes, Haddiscoe Island and extended a significant distance up the Bure, Yare and Waveney.

Despite its proximity to the urban edge of Great Yarmouth and the associated impacts of development in the area combined with the low level noise, sometimes apparent when the wind is in a particular direction, the majority of the area retains a stark, isolated character and a remote feel more in keeping with a coastal experience.

Its character changes with the ebb and flow of the tides. At low tide the area reveals extensive mud flats on which growths of green algae, eel grass and invertebrates attracting tens of thousands of wintering ducks, geese and flocks of Bewick's swans. It also provides an internationally significant staging post for migratory birds.

At the western end of Breydon the waters of the River Yare and Waveney join forces ultimately meeting up with the River Bure at Vauxhall Bridge in Great Yarmouth to discharge into the North Sea.

The eastern end of Breydon Water is also the meeting of the ways for three of Norfolk and

Suffolk County's long distance footpaths; the Wherryman's Way, the Weaver's Way and the Angles Way which use the floodbanks to the north and south of Breydon giving expansive and elevated views over water and marshes alike.

The Breydon birdlife has long attracted wildfowlers and naturalists, a number of whom kept old gunpunts and makeshift houseboats dotted around Breydon North Wall and are now part of local folklore.

Topography and Skyline

The area is enclosed by flood banks which lie at 2-3m OD. These tall heavily engineered banks always lie in the foreground on views



▲ *The remains of wrecks can be seen at low tide creating a sense of mystery. Image by Alison Yardy*

from the water but because of their horizontal nature they appear to reinforce the panoramic views available and vast skies. The skylines to the north and west appear limitless with no interruptions save the occasional drainage mill.

Landscape types

Within this character area there are the following landscape types. See section two where more information can be found about the individual types.

Tidal Estuary

Tidal Estuary

Rivers ronds and floodbanks

To the south the relict estuary cliff at Burgh Castle can be seen. Views towards the east encompass the urban area of Great Yarmouth. Breydon Bridge is a main feature in views as are the tall modern buildings on the edge of the town. However, from time to time this skyline can oddly change as vast vessels or equipment servicing the offshore development can sometimes be seen in the deep water port. The off shore wind turbine development at Scroby Sands can also be seen in the backdrop to development along the coast.

▼ *Breydon Water at low tide reveals a large expanse of mud flats that must be avoided by boaters by navigating the marked channel. They also provide a rich feeding ground for wading birds. Image by Mike Page.*



Enclosure, Scale and Pattern

This vast expanse of tidal open water and mudflats is up to 1.3km wide where the edges are surrounded by hard flood defences which vary between 2-3m above OD although due to fluctuation in water levels these flood defences do not reduce the overall sense of openness within the area.

To the west and north, the area opens out to the expansive Halvergate Marshes, while to the east the pre medieval mouth of the estuary has been

reclaimed over the centuries by silting up, and built upon with the coastal settlement at Great Yarmouth. To the south, views across Burgh Castle and Fisher's Marshes are apparent, with the cliff edges of the former estuary rising in the distance.

The landscape pattern is primarily formed by the sinuous creeks visible in the mud at low tide, which also exposes mysterious wrecks. There is a fascinating transient quality to the colour and texture of the water, patches of saltmarsh and reed bed created by the changes in seasons, weather and tides.

Main features of land cover and use

Water is the main feature of this area and with the ebbing and flowing of the tides its use by people and birds fluctuates. Breydon Water in the past was much more integrated into the local economy as a busy hub of waterborne trade, fishing and wildfowling. Today it is predominately used by tourists travelling between the northern and southern broads or even to obtain access to the North Sea.

It is more safely crossed by boat users on a low or slack tide when the currents are less fierce. At particular times in the day therefore boat traffic becomes more evident as boat users hurry across the waters to the relative safety of the river systems.

The navigation channel is way-marked by coloured conical top marker posts. Straying from the marked routes can potentially lead boats to run aground on the deceptively extensive



▲ *Breydon Bridge signifies the entrance into Gt. Yarmouth. The buildings and infrastructure impart on the sense of isolation to be found on other parts of the estuary. Image by David Medcalf - geograph.org.uk*

mudflats.

Wading birds also make use of the low tides when the exposed mud flats provide rich feeding grounds. Its importance in nature conservation terms is reflected in its international and national and local designations: RAMSAR, Special protection areas (SPA), Site of Special Scientific



Interest (SSSI) and Local Nature Reserve (LNR). Today birdwatchers descend from afar to witness the range of birds that use the area through the seasons.

The flood banks which defend the lower lying land beyond are heavily engineered sometimes with small upstanding walls to provide added height. It is into Breydon that the Halvergate Fleet, an important drain on Halvergate Marshes, drains via a sluice through the floodbank on the north side.

Excluding the engineered banks the other infrastructure of note is the railway line from Reedham to Great Yarmouth which skirts the northern edge of Breydon joining with

◀ *Breydon Water has heavily engineered flood defences some of which are only visible on low tides. Image by Christine Johnstone - geograph.org.uk*

the Norwich to Great Yarmouth line south of Scaregap. The easterly end of the A47 also wraps around the north eastern corner beside the rail line before joining the A12 across the river channel via the cantilevered Breydon Bridge built in 1985 to alleviate the traffic flows across Gt. Yarmouth's Haven Bridge.

With the waning importance of Breydon for waterborne trade, fishing and wildfowling, the cultural interest has reduced with the life and personalities and buildings of Breydon disappearing or being cleared away. A number of wreck sites, houseboats, marsh farms and mill cottages on both north and south sides have gone in recent decades. The derelict remains on the Breydon North Wall of Lockgate Mill, also known as Banham's Black Mill after matshman Dan Banham who worked the mill, and some wrecks along the south side.

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Landscape – The area of Breydon is heavily embanked for flood defence purposes. These are not the only human constructions that can be found in the area. There are remnant jetties and navigation posts within the area and to the most north easterly end the development within and on the edge of Great Yarmouth starts to influence the estuary character. As

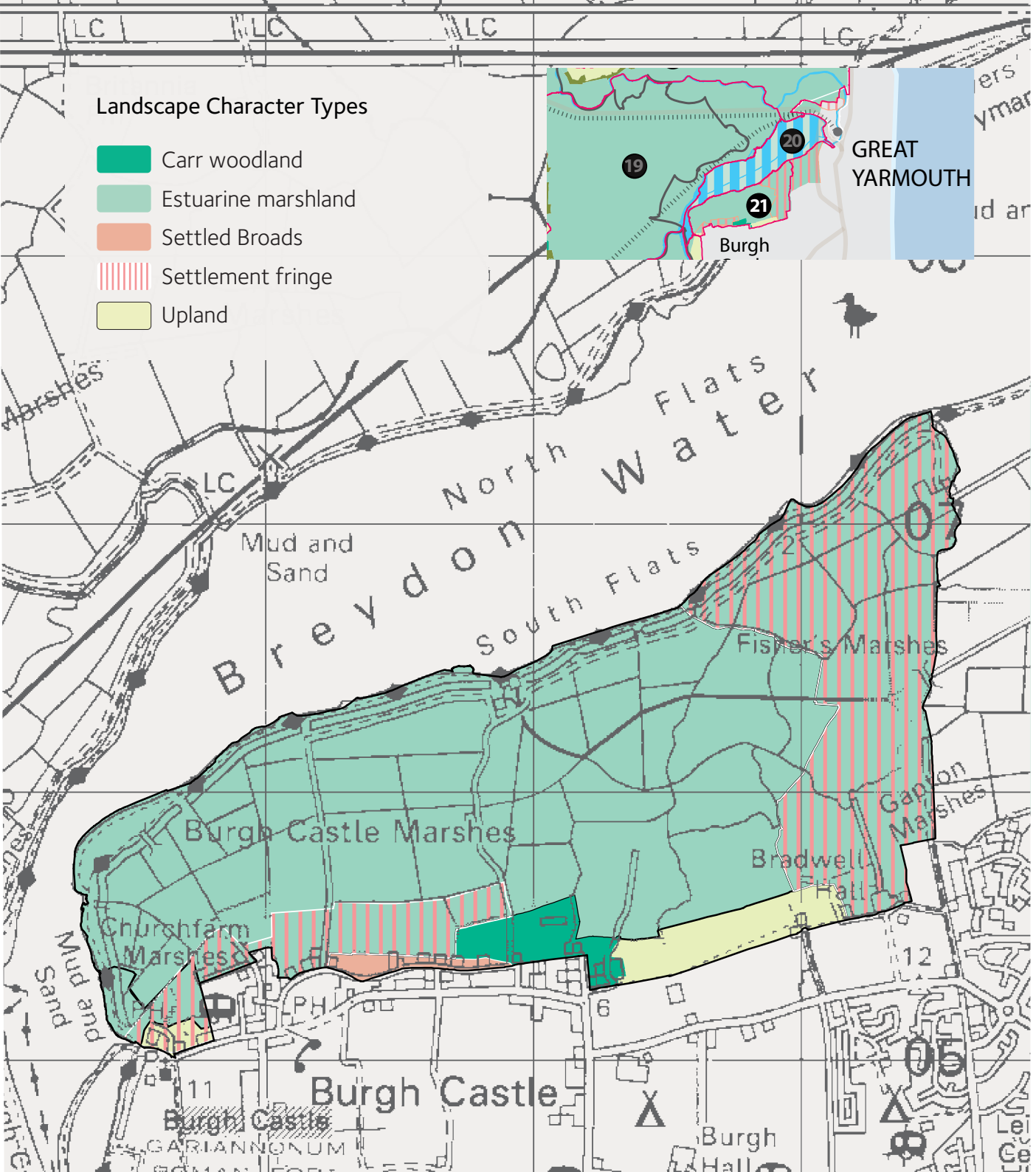
with any settlement there are continual and growing pressures on the land, and water in this case, which lie in adjacent areas. The prevailing character of most of the estuary is still predominantly of a stark, isolated nature. However future development on the edges of Great Yarmouth and at the farms located within the grazing marsh e.g. Humberstone Farm needs to be carefully considered to ensure that any potential landscape impacts are assessed and mitigated.

Natural Heritage – Breydon Water allied to the surrounding grazing marshes provides an immensely important habitat for bird life. Tens of thousands of wintering ducks, geese and swans visit the estuary and surrounding grazing marshes. The mudflats, exposed when the tides are out, provide a rich food supply. In spring, the adjacent marshes are filled with the atmospheric calls of lapwings and redshanks. It is internationally and nationally designated for nature conservation reasons. As well as unconsidered actions by humans which may affect the quality of the area as a habitat, the area is likely to be subjected to effects of climate change including storm events the impacts of which cannot be effectively predicted.

Historic environment – Breydon Water was in the past much more integrated into the local economy as a busy hub of waterborne trade, fishing and wildfowling. It has been recognised by historians that there is a considerable scope to learn more about the social and cultural history of the area as well as recording and assessment of the hulks and hulk assemblages that can be found on the edges of the estuary.



▲ *Breydon Water used to be much more integrated into the local economy. This P.H. Emerson photo captures smelters and houseboats on the edge of the estuary. Image by P. H. Emerson*



Landscape Character Types

- Carr woodland
- Estuarine marshland
- Settled Broads
- Settlement fringe
- Upland

21. Yare - Burgh Castle Marshes

The marshes today still bear the scars of bombs dropped during the Second World War

Why is this area special?

These marshes lie to the south of the imposing Breydon Water providing an important buffer strip between the built up areas of Cobholm, Southtown and Bradwell near Great Yarmouth and Breydon Water which has a number of nature conservation designations because of its importance for bird life.

Both Cobham and Southtown to the east of the A12 have grown up on what was formerly part of this marshland area.

The area is bounded to the north by imposing floodbanks of Breydon Water with wide soke dykes. These banks provide the route for the Angles Way the long distance footpath. However there is no formal public access to the interior of the marshes.

To the south the area abuts the valley side at the remnant cliff face of the Great Estuary.

The marshes share a number of physical characteristics with the Halvergate and Haddiscoe Marshes including the presence of both linear and curvilinear dykes of medieval and post medieval form. The character of the area differs east to west as despite the proximity of settlement along the upland edge, there is a general emptiness about these marshes in the west but to the east the visual impacts from Great Yarmouth and its satellite settlements'

built development is significant affecting the character of the area.

Topography and Skyline

As with the adjacent estuarine marshlands the area is level at between 1 metre below OD to 1 metre above OD.

The former southern edge of the estuary rises up to around 10m above OD although not as sharply as the area around Burgh Castle Fort which is why the site was chosen for both its defence capabilities and the panoramic views it gave of the Great Estuary during the Roman period.

Views north and west are of a simple undeveloped skyline punctuated by drainage

mills. The horizons to the north and west lie well outside the area. The western skyline is interspersed with bands of woodland near Halvergate.

Great Yarmouth is clearly visible on skylines to the east while the rising topography and linear settlement of Burgh Castle define the southern skyline.

Geology and soils

The deep bedrock are gravels, sands, silts and clays and the soils are uniformly Breydon formation silty clay laid down at the time when this area was part of the Great Estuary.

A video (www.youtube.com/watch?v=kce_Uu5Rb-8) of the story about this estuary,

which existed during Roman times, can be found via the link above and more detail about the geology of the area can be found in section one.

Enclosure, scale and pattern

This is a marshland landscape of a large scale. They are “enclosed” on its northern boundary by Breydon Water and its flood defences which are very prominent and dominating in close proximity and to the south by the rising land where the ridge or former ‘cliff’ edge of the Great Estuary’s historic extents is a prominent feature, forming a defining edge to the area.

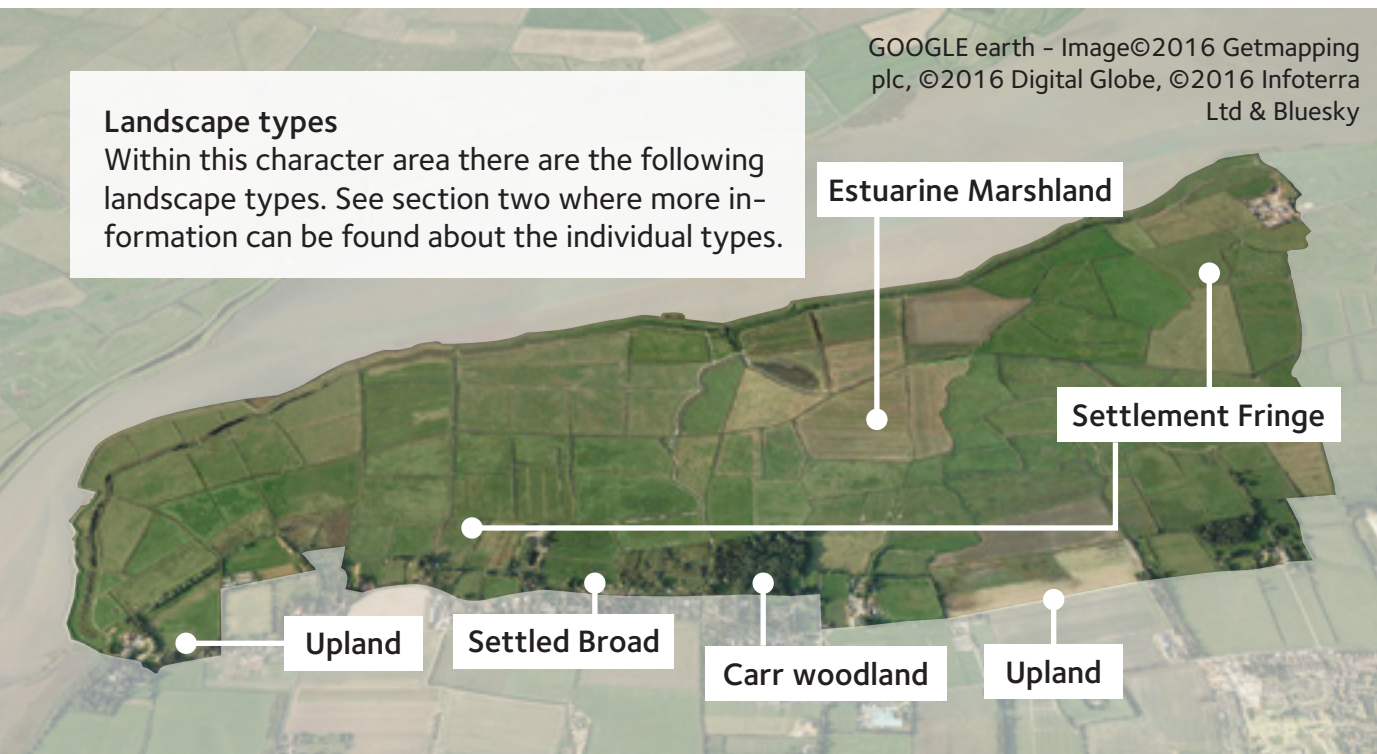
This edge in the adjoining Great Yarmouth Borough creates a level of local enclosure, scale and pattern which contrasts totally with the open expansive landscape across the marshes and into Breydon Water itself.

The patterns of the medieval and post medieval dyke networks are simple with some local variations; for example, the sinuous nature of the dole pattern lined by willows in the east (Fisher’s Marshes) are in contrast to the more linear pattern to the west (Burgh Castle Marshes) where reedbeds fringe the edge of field boundaries.

In areas in closer to proximity to Great Yarmouth, the marshes have additional patterns which are the scars of bombs dropped during the Second World War.

Main features of land cover and use

The larger percentage of the marshes are mainly still in pastoral use the remainder down to





◀ *Part of the Angles Way long distance footpath route which is much elevated over the marshes. Panoramic views across Breydon Water are available.*

arable. Some small blocks of carr woodland exist towards the upland edge. However some areas appear to be totally unmanaged. Anecdotally it is understood that the area of Humberstone marshes used to be home to many horses as the land was used as grazing for beasts that were used for transport purposes before the advent of the combustion engine. Further to the east of Humberstone Farm is an area of marsh which was formerly tipped ground now contains a small park, sports field, allotments and areas for

horses. Despite being located in the Broads this area is now so modified that it is of significantly different character and has not been included in this character area.

The northern and western boundaries of the area are formed by the hard Breydon floodbanks along which the Angles Way long distance footpath runs. Inside the floodwalls there is a particularly wide soke dyke on the marsh side as far as Humberstone Farm. A track running approximately north-south which appears to

follow the line of a sinuous water course broadly divides the two with Church Farm and Burgh Castle Marshes rectilinear in form to the west and the Fishers and Humberstone containing a greater number of curving dykes, to the east. Another long sinuous dyke forms the parish boundary between Burgh Castle and Bradwell.

The western edge of Great Yarmouth, specifically the industrial estates and business parks on the edge of the town can be seen from the area, and creates a local detracting



▲ *View north from Burgh Castle marshes towards the Breydon Water floodbanks and a small pump house. Images by Lesley Marsden*

from the area's otherwise remote character. However within the south western part of this area despite the proximity of local settlement along the upland edge, which is partly filtered by vegetation, there is more of a perception of emptiness about the marshes. There are no drainage mills surviving here but others from the wider area are visible on the horizon. The modern redbrick electric pump house has been built adjacent to the site of one. Settlement

to the south west at Burgh Castle, is linear in form and follows the upland edge along with marsh farms/manorial sites dotted along to the east. Surviving farms within the marshes have become part of this fringing settlement to this south western edge.

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive

characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Landscape – The area lies within close proximity to Great Yarmouth and its surrounding villages. Visual impacts of buildings and infrastructure from these adjacent locations is very prominent in certain views from the marshes and footpath routes thereby reducing the sense of



▲ Sometimes land adjoining settlements becomes a dumping ground or open to abuse. Image by Evelyn Simak - geograph.org.uk

tranquillity and affecting the character of the area. Opportunities should be sought within existing developments to improve the landscape buffers between the sites and the “natural” environment”. New development within these areas need so be sympathetically designed to ensure that adverse effects on the landscape and the nationally and internationally designated areas in the vicinity are assessed and fully mitigated.

There are land use pressures relating to

settlement fringe activities such as the provision of recreation facilities and allotments. These pressures are directly related to the proximity of settlement and most likely increase over time. These land use types can have the effect of changing completely the character of the area. This may be on an incremental basis over time.

Lack of access – The most significant point of public access in the area is the long distance Angles Way. From this footpath, spectacular views across Breydon and its wildlife can be seen. Promotion of the route (which takes in

Burgh Castle) should be encouraged in order that there can be general awareness raising of the area’s special qualities

Natural Heritage – Some of the marshes are under arable cultivation, others appear little used. Arable cultivation of the marshes can cause a loss of unity, a lowering of the water levels and loss of historic boundaries and boundary features. The area provides an important buffer zone between the settlement and Breydon Water. Enhancements to strengthen this purpose would be beneficial.

▼ Views across Church Farm marshes. Some of the small woodland blocks fringing the valley side can be seen in the distance. Image by Evelyn Simak - geograph.org.uk

