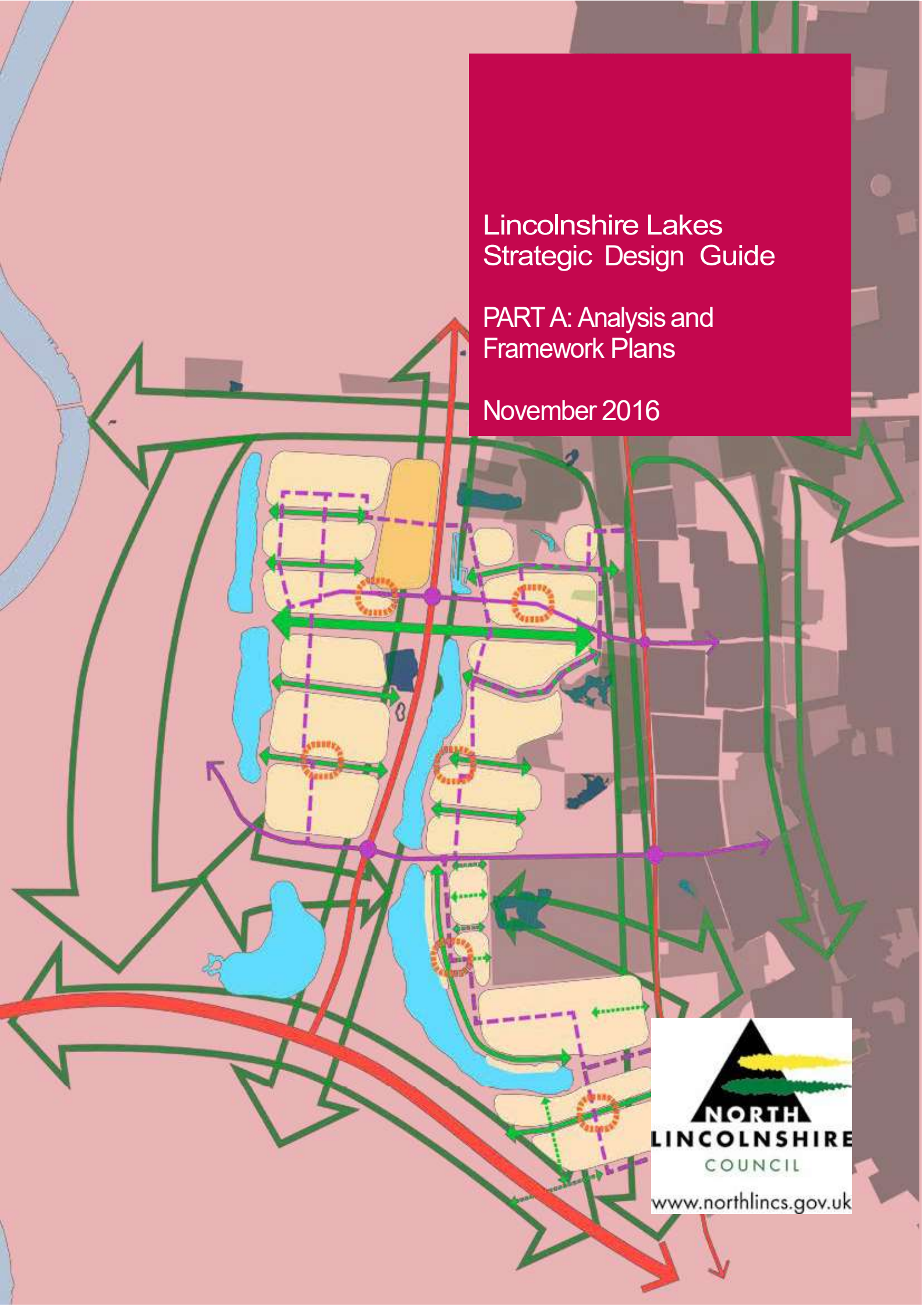
Lincolnshire Lakes Strategic Design Guide

PART A: Analysis and Framework Plans

November 2016



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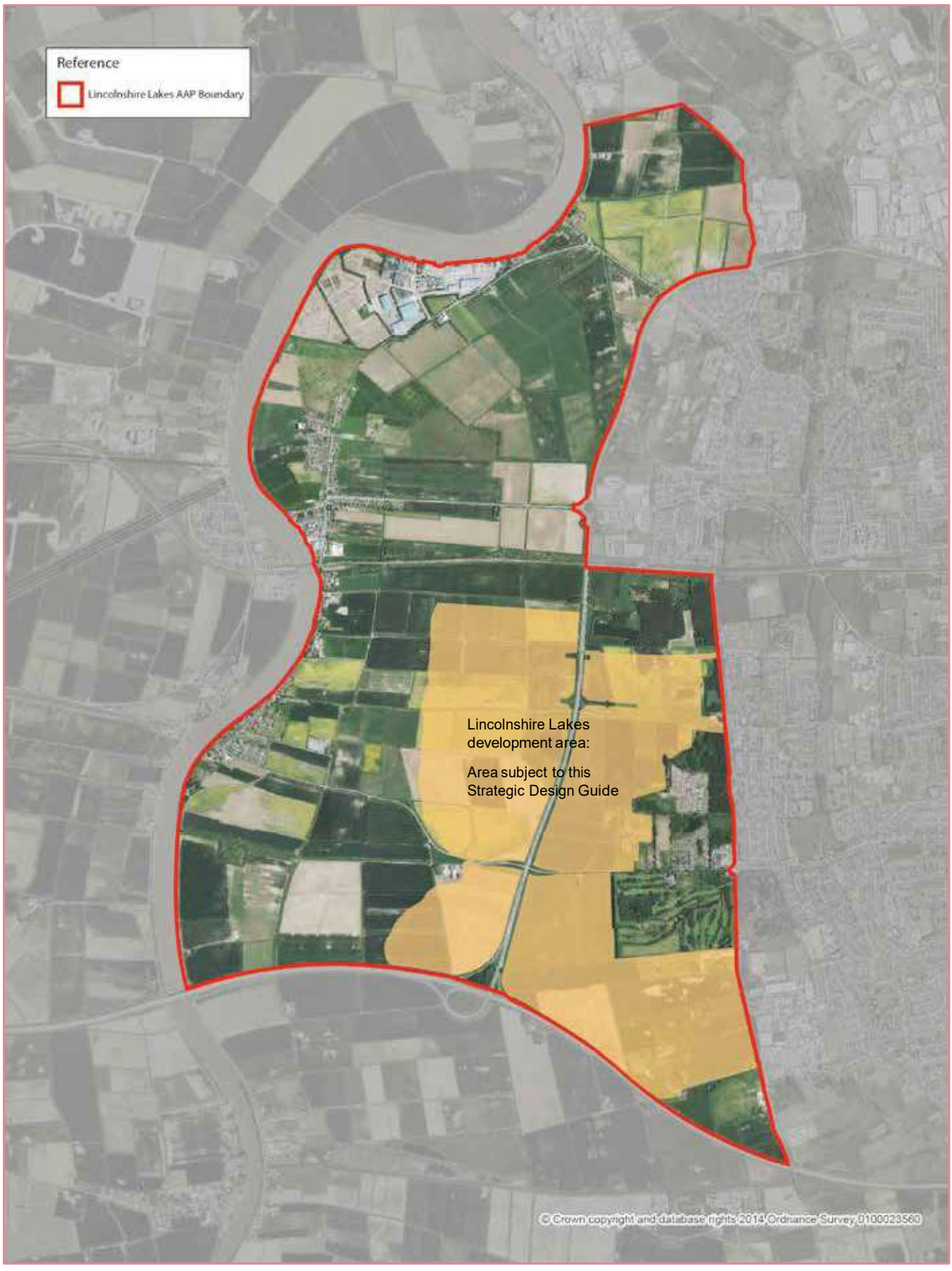
Lincolnshire Lakes AAP Boundary



01. Introduction

The Lincolnshire Lakes project is a strategic and transformational project. The Core Strategy and Area Action Plan have established a vision that will see 6,000 new homes built across a series of new villages in the Trent Vale.

The villages will be integrated within the unique landscape setting of the Humberhead Levels: a low-lying and flat landscape with large fields divided by ditches and dykes, where there are long and unbroken views of the horizon and sky.

Alongside delivery of the villages will be the creation of a series of Lakes, providing new ecological habitats, places of leisure and recreation. These will make for a high quality environmental setting, becoming an attractive place to live and visit.

The aspiration for growth and development at the Lincolnshire Lakes provides many opportunities to bring about positive change and deliver 'demonstrable good' for the area as a whole, for existing and new communities.

Purpose of the design guide

The Lincolnshire Lakes Area Action Plan (the 'AAP') includes a series of broad framework plans establishing development opportunity areas, primary land uses, route network, the location of open spaces and facilities. This document - the Strategic Design Guide (the 'SDG') - further develops the AAP and establishes a series of framework layers and guidance that will influence the scale and form of new development.

Lincolnshire Lakes is a large and ambitious project and has the potential to change the nature of the town and its setting. North Lincolnshire Council, and prospective developers, will want to ensure that future development is of a high quality, creating new neighbourhoods with their own sense of place and responding sympathetically to the setting.

Lincolnshire Lakes will take many years to develop, and several different developers, architects and designers are likely to be involved. In order to create high quality development with a coherent character, clear design guidance is required. This will be used both as a guide for prospective developers and as a means to help determine applications which, through the use of conditions, can help embed design quality through all stages of the planning and development process.

The SDG establishes the framework for development, the key elements and principles that tie the area together. The SDG is in two parts. This document, 'Part A', comprises analysis, design informants and a suite of framework plans. 'Part B', to follow at a later date, will develop the framework plans and present strategic design guidance.

The framework plans scope out proposed land uses, the layout of development blocks, movement network, open space and landscape, including the blue infrastructure unique to the setting, a village design framework and character area framework.

The vision and objectives for Lincolnshire Lakes

The vision for Lincolnshire Lakes as established through the Core Strategy and AAP is:

"The vision for Lincolnshire Lakes is to create an environment that will attract and retain skilled residents and investment in the sub-region and place North Lincolnshire on a new economic trajectory. The vision will create a major new sustainable waterside setting, with a strong network of linked blue and green spaces, high quality new social infrastructure, and a new commercial and leisure park, forming an urban fringe of national importance, providing a gateway entrance to the town and a focus for sustainable development."

The AAP expands upon the vision and includes a policies map and series of policies to guide development and change in Lincolnshire Lakes.

The objectives besides are derived from the AAP Vision and Objectives. These are grouped around (i) green infrastructure, (ii) 'place', and (iii) movement. These inform the framework plans and guidance within the SDG.

Green Infrastructure:

- Water and specifically lakes, should be a central characteristic and structuring element of the development that provide for multi-functional spaces, habitat and biodiversity enhancement and public use and enjoyment (for example, recreation, commercial leisure, arts, tourism, eating and drinking, working and waterside living).
- A cohesive and integrated landscape structure that responds to the differing landscape characteristics to the west and east of the M181 should be provided that:
  i. assists in linking the blue infrastructure with the green infrastructure and villages
  ii. creates a variety of green spaces and linkages (including enhancing the connecting role of Brumby Common Lane)
  iii. integrates advance and structural planting to mitigate the impact of development on neighbouring uses, enhance the setting of new buildings and help to mitigate the noise and visual impact of the M181.
- Existing woodland (Brumby Grove and Brumby Common), mature trees and hedgerows should be retained within the new development sensitively arranged around them to create a parkland character
- Existing ditches and drains should be integrated into the new development and landscape structure to provide for sustainable drainage, ecological enhancements and creating a distinctive character to the village developments
- The delivery of a robust flood mitigation and drainage solution should be a leading design and development consideration, building on the existing extensive network of drainage channels and considering future ground levels and the role of the new lakes.
- Ecological enhancements and new habitat creation to diversify the range of habitats (e.g. grasslands, wetlands, woodlands) and support biodiversity should be integrated into all proposals

Place:

- A high quality place with a distinctive 'waterside and woodland' character that balances existing townscape characteristics with contemporary and innovative design to provide a new vernacular for Lincolnshire Lakes
- Each village should have a well-structured layout and clear identity that responds to the site opportunities and landscape characteristics. A sense of place and clear orientation should be developed through the use of landmarks, gateways, key buildings, framing and enhancing views, and focal points and ensuring sufficient continuity and enclosure of spaces and streets.
- Development blocks should be designed to create continuous frontage into the public realm, protecting and enlivening it with activity and passive surveillance
- Building, street and space typologies should positively respond to and integrate with the water areas and distinctive design should make the most of the waterfront.
- The public realm, including hard and soft spaces, pedestrian routes and cycleways and lakes must be attractively designed and constructed with high quality durable materials with carefully defined thresholds between public and private space to avoid unusable left over space
- Spaces should be created for public art and public events that help to create a sense of place, express the identity of the area and support activity and interest.
- A series of strategic views and vistas should be created within and between the villages and lake areas to assist with integration, accessibility and legibility

Movement:

- Integrated walkable neighbourhoods with a mixture of housing densities, type and tenure linked to local facilities and the public transport network should be identified.
- Development should ensure sustainable transport routes are delivered within and beyond the site through a network of streets providing a choice of route with a presumption in favour of walking, cycling and public transport.
- A clear hierarchy of streets which incorporate the principles of Manual for Streets focusing on the spatial quality of streets and their place-making role should be developed (including street widths, on street parking, footpath/cycleways, tree planting, street enclosure and relative height width ratios)
- A permeable and high quality network of pedestrian and cycle connections should be provided across the development (north-south and east-west) to link the village areas together with the lakes, community facilities and services and existing settlements and facilities

- The design of the development should minimise the use of energy and maximise energy efficiency through the use of renewables and maximise solar orientation through optimal use of east-west street alignments and passive design within dwellings

The AAP development parameters

Six villages

The AAP policies map (see facing page) shows the development of the area comprising six separate but interconnected villages, each served by a small local centre and with a series of schools and open space spread across these. The broad development parameters for the villages as outlined in the AAP are:

Village 1:

Will accommodate approximately 690 dwellings across approximately 30 hectares as well as a local centre comprising 300sq.m gross retail floorspace.

Village 2:

Will accommodate approximately 1,188 dwellings across 60 hectares as well as a local centre comprising 500sq.m gross retail floorspace.

Village 3:

Will accommodate approximately 987 dwellings across 45 hectares as well as a local centre comprising 400sq.m gross retail floorspace. A primary school should also be accommodated.

Village 4:

Will accommodate approximately 769 dwellings across 35 hectares as well as a local centre comprising 300sq.m gross retail floorspace.

Village 5:

Will accommodate approximately 1,100 dwellings across 50 hectares as well as a local centre comprising 300sq.m gross retail floorspace. A primary school should also be accommodated.

Village 6:

Will accommodate approximately 1,570 dwellings across 65 hectares as well as a local centre comprising 500sq.m gross retail floorspace. A primary school should also be accommodated.

Five lakes

The AAP also shows a series of five new lakes created in the area. The intention is that these will have different roles and functions. The AAP establishes these as:

Lake 1:

Approximately 13 hectares in size, this will principally be used for leisure and sporting activities, and to provide surface water attenuation for Villages 1 and 2. It is anticipated that this lake will host events such as triathlon and will need to be designed with this use in mind.

Lake 2:

Approximately 27 hectares in size, this will principally be used for leisure and sporting activities, and to provide surface water attenuation for Villages 3 and 4.

Lake 3:

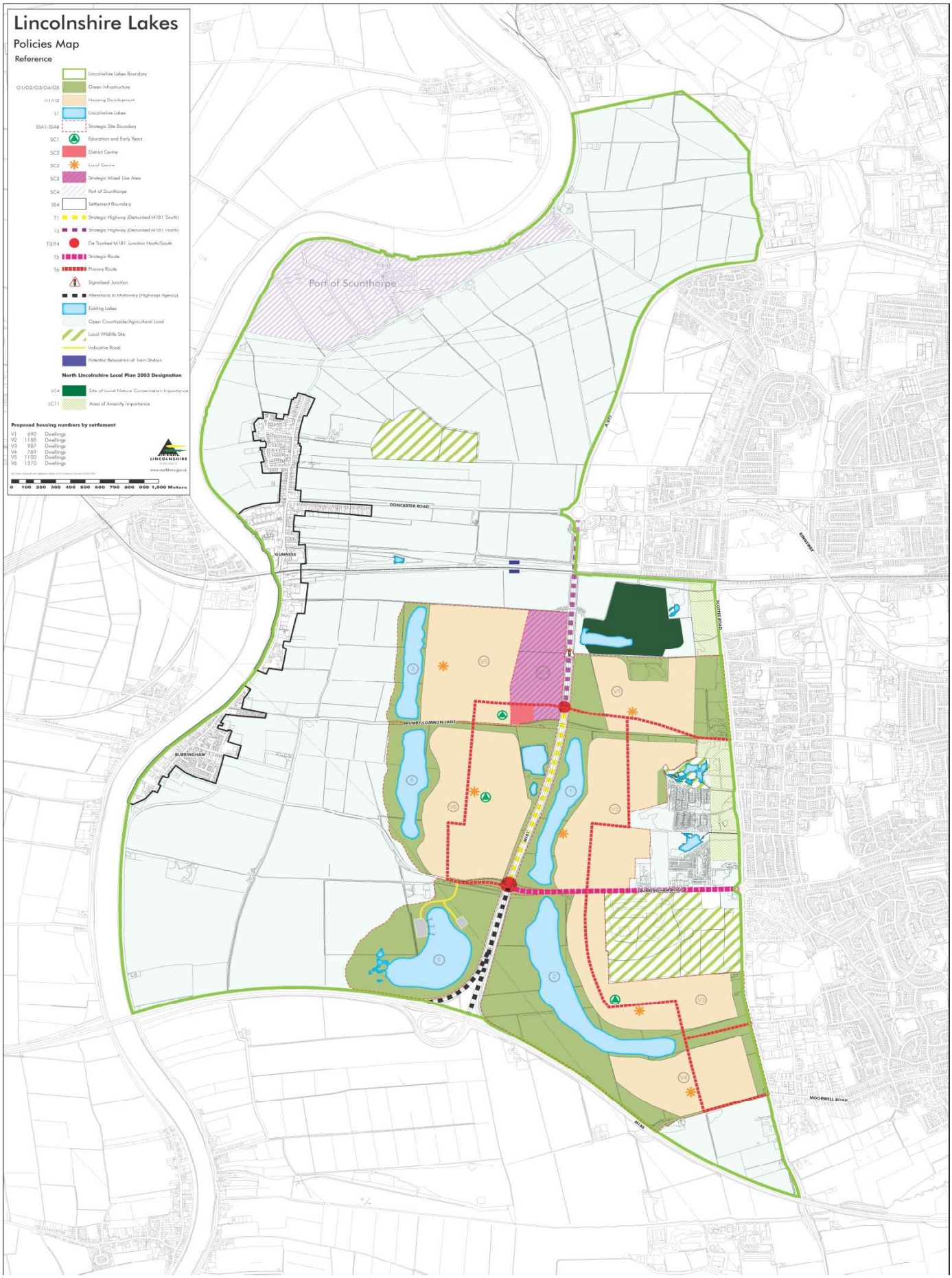
Approximately 10 hectares in size, this will principally be used as a wetland priority habitat and provide surface water attenuation for Village 5.

Lake 4:

Approximately 11 hectares in size, this will principally be used as a wetland priority habitat and provide surface water attenuation for Village 6.

Lake 5:

Approximately 20 hectares in size, this will principally be used for leisure and sporting activities, with a secondary ecology and biodiversity role It is intended that the lake will include an inland marina, providing a base for sailing and water-sports.


Lincolnshire Lakes
Policies Map
Reference
Lincolnshire Lakes Boundary
G1/G2/G3/G4/G5 Green Infrastructure
H1/H2 Housing Development
L1 Lincolnshire Lakes
SSA1-SSA6 Strategic Site Boundary
SC1 Education and Early Years
SC2 District Centre
SC2 Local Centre
SC3 Strategic Mixed Use Area
SC4 Port of Scunthorpe
SS4 Settlement Boundary
T1 Strategic Highway (Detrunked M181 South)
T2 Strategic Highway (Detrunked M181 North)
T3/T4 De Trunked M181 Junction North/South
T5 Strategic Route
T6 Primary Route
Signalised Junction
Alterations to Motorway (Highways Agency)
Existing Lakes
Open Countryside/Agricultural Land
Local Wildlife Site
Indicative Road
Potential Relocation of Train Station
North Lincolnshire Local Plan 2003 Designation
LC4 Site of Local Nature Conservation Importance
LC11 Area of Amenity Importance
Proposed housing numbers by settlement
V1 690 Dwellings
V2 1188 Dwellings
V3 987 Dwellings
V4 769 Dwellings
V5 1100 Dwellings
V6 1570 Dwellings
0 100 200 300 400 500 600 700 800 900 1,000 Meters
Port of Scunthorpe
DONCASTER ROAD
GUNNESS
BURRINGHAM
BRUMBY COMMON LANE
SCOTTER ROAD
BURRINGHAM ROAD
MOORWELL ROAD
A161
M180

Strategic mixed use area

The AAP also allocates part of the development opportunity as a 'strategic mixed use area and district centre'. The AAP identifies this as the focus of the majority of non-residential provision within the Lincolnshire Lakes area, providing a mix of services and facilities that complement North Lincolnshire's retail offer. The AAP states that the strategic mixed use area has the ability to be a key visitor destination for North Lincolnshire, including leisure and sporting facilities.

The AAP notes that this area should also include a district centre, accommodating a mix of shopping and eating establishments.

Access

The Lincolnshire Lakes area is bisected by the M181 motorway. It is intended that this will be 'de-trunked', with traffic speeds slowed down and new junctions provided that create access to the new villages and into the Trent Vale. The AAP shows a combination of new east west connections from the villages and the de-trunked M181 across to Scotter Road, enhancing access to and from the strategic road network. At the same time, a network of new streets is envisaged as linking into and connecting all of the villages.

Green space

Development in the Lincolnshire Lakes area should positively respond to the setting and incorporate a range of open space types. Across the area covered by the Lincolnshire Lakes development, the AAP envisages provision of approximately:

- 194.5 hectares of natural and semi-natural greenspace
- 25.34 hectares of parks and gardens, including children's play space
- 16.14 hectares of outdoor sports provision
- 2.5 hectares of allotments provision

Approved schemes

A series of planning applications have been approved for the northern part of the Lincolnshire Lakes area.

Developers Lucent have submitted (and have been granted planning permission for) an application in four parts covering:

1. Village 1, half of Village 2 and part of the land required for provision of Lake 1.
2. Village 5 and Lake 3.
3. The Strategic Mixed use area
4. Partial de-trunking of the M181 including two new road junctions on this.

Subsequent to this, Scunthorpe United Football Club have been granted planning permission for a new football stadium and associated uses, including new training facilities, hotel and gym, in the strategic mixed-use area. This supersedes the application made by Lucent for that part of the site.

The plans for these schemes are shown on the facing page.

The Lucent application comprises permission for an outline scheme. The parameter plans submitted as part of that application have been incorporated within this SDG.

The application for the strategic mixed use area comprises a hybrid: full planning permission for the football stadium which sites on the southern half of the allocation area, and outline for the remainder. The relevant plans are incorporated within the SDG.

In the event that these schemes are not delivered then alternative applications will be considered. These should be informed by the parameters and policies contained within the AAP, the principles and guidance contained within this document.

Above: Masterplan submitted by Lucent for villages 1, 5 and part of village 2, as well as the strategic mixed use area and de-trunking of the northern part of the M181 to include two new junctions.

Left: Masterplan submitted by Scunthorpe United Football Club for the strategic mixed use area, superseding the application made by Lucent for that part of Lincolnshire Lakes. The broad area covered by this application is highlighted on the Lucent masterplan above.

Content of the design guide

This document comprises 'Part A' of the emerging Strategic Design Guide. It includes:

Section 02: Analysis and design informants

This section presents an analysis of the site and the surrounding villages.
From this a series of design informants are identified and a concept plan for the Lincolnshire Lakes presented.

Section 03: Part A - Framework plans

This comprises 'Part A' of the strategic design guide and contains a series of framework plans that present the key structuring principles for the Lincolnshire Lakes area, including:

- Movement: street types and public transport
- Green and blue infrastructure: green space hierarchy, park system and flood management
- Place: village design and character area plans.

These are the elements that bind the area together and which will help create a cohesive approach to the development of the different villages and lakes.

'Part B' of the document will follow in due course and will provide more guidance around street types, the form and layout of the villages, and the design approach to the Lakes.

Above: Linked building frontages along main streets in Winterton

Above: North Lincolnshire's villages benefit from a network of generous green spaces.

Above: Grand residential properties, Burton upon Stather

02. Analysis and design informants

This section of the strategic design guide presents an analysis of the site and surrounding context, drawing out key design informants from the landscape, and surrounding villages. These then inform a concept masterplan for the Lincolnshire Lakes area.

The design informants and concept help set up the logic behind the framework plans and strategic guidance presented in subsequent sections of the report.

The design informants and concept should be used to help inform applicants, ensuring that if schemes for different parts of the AAP area come forward at different times, they strongly relate to each other and respond to the character of the area.

This should form a starting point for developers and applicants, who would be expected to further develop the analysis at the site specific level.

Above: North Lincolnshire village example.

Above: Buffer between residential neighbourhoods and road.

Above: Park and children's play area in village.

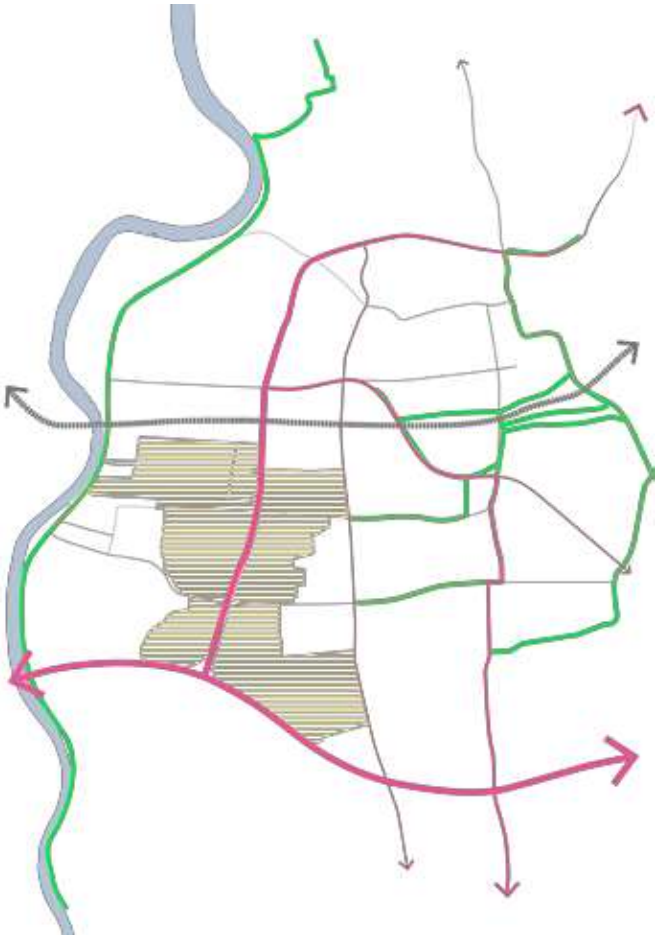
Above: Residential development around village waterscape.

Above: View from lake towards village

Above: Residential streets in North Lincolnshire village

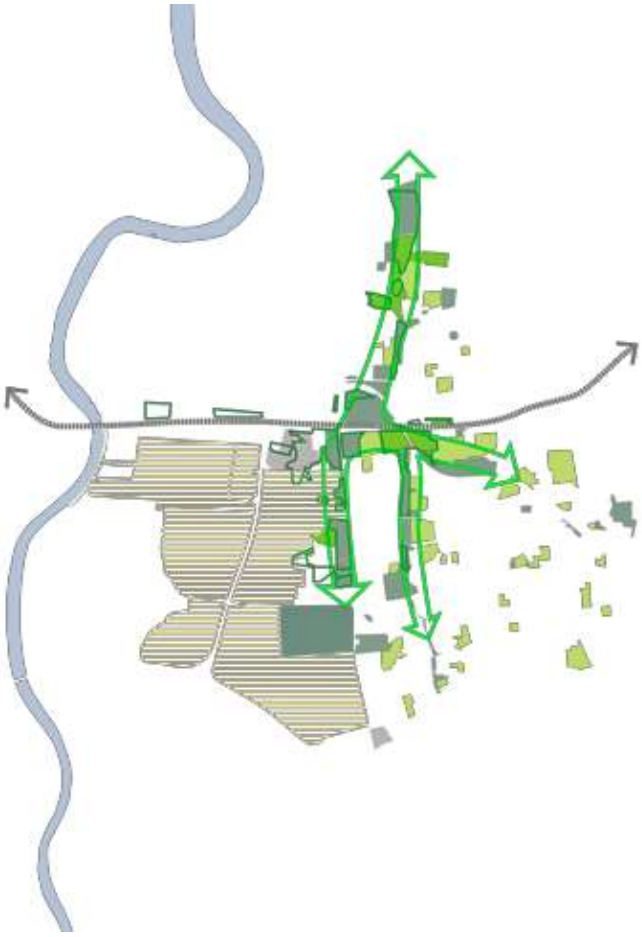
Context analysis

Development of the Lincolnshire Lakes area should be informed by the built form and local landscape. Key features and design informants are outlined below.



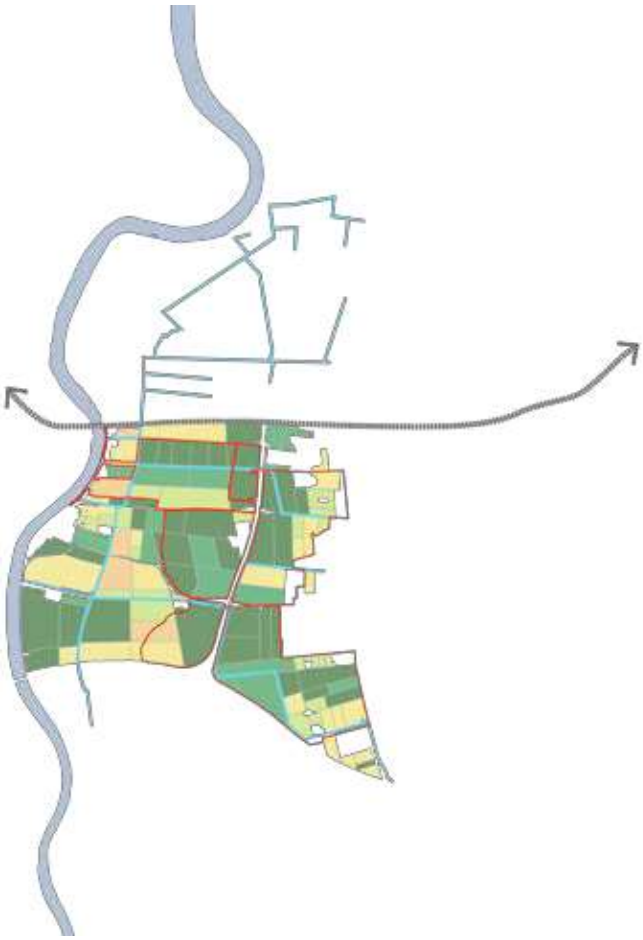
Route network

- There is a strong and well defined network of routes across the Trent Vale
- These take the form of formal north-south and east-west movement corridors
- The Kingsway / Queensway diagonal breaks the grid
- The main routes are relatively wide and well-landscaped
- Cycle routes are limited and do not connect across the Lincolnshire Lakes area
- Low density residential development is found between the main routes and centres



Trent Vale - wide green grid

- The Trent Vale benefits from a generous network of connected green spaces
- The green network follows north-south and east-west alignment, similar to the route network
- Smaller parks are well distributed throughout the villages
- The ridge-line creates an attractive green backdrop to the town when viewed from the site
- Planting along Scotter Road forms a strong and mature buffer to the Lincolnshire Lakes area



Landscape, field and drainage system

- The site is defined by regular, geometric field pattern and drainage ditches - predominantly comprised of flat drained farmland forming part of the Trent Levels landscape character area
- The site comprises a relatively level landscape with few hedgerows and open aspects to the west, providing long distance views
- There is some enclosure to the east of the Lincolnshire Lakes area, provided by irregular areas of woodland, particularly along Scotter Road
- The network of ditches comprise important habitats and corridors for species movement

The outlying villages

The Trent Vale is surrounded by a series of smaller villages. Three of these (Burringham, Burton upon Stather and Winterton) are discussed here. Aerial plans are shown, with the 400m catchment around the village centres marked on. t hese show that most of the historic village form falls within walking distance of the centre and the various facilities located here.

In summary, analysis of the central areas display the following characteristics:

- Higher density development in village centres (but not high rise).
- There are subtle variations in height between buildings.
- There is continuous street frontage in the centres, created through linked buildings.
- Street alignment and building fronts create framed squares: 'kinks' are evident in the street pattern, resulting in a well connected but off-set street grid
- Key buildings terminate views.
- Churches act as local landmarks and aid orientation, though these are located slightly off-centre.
- On-street parking is provided in the centres.
- The public realm in the centres tends to take the form of hard landscaping.
- Community facilities tend to be located fairly centrally.

Further findings and design informants from the villages are set out in the following sections.

Burringham

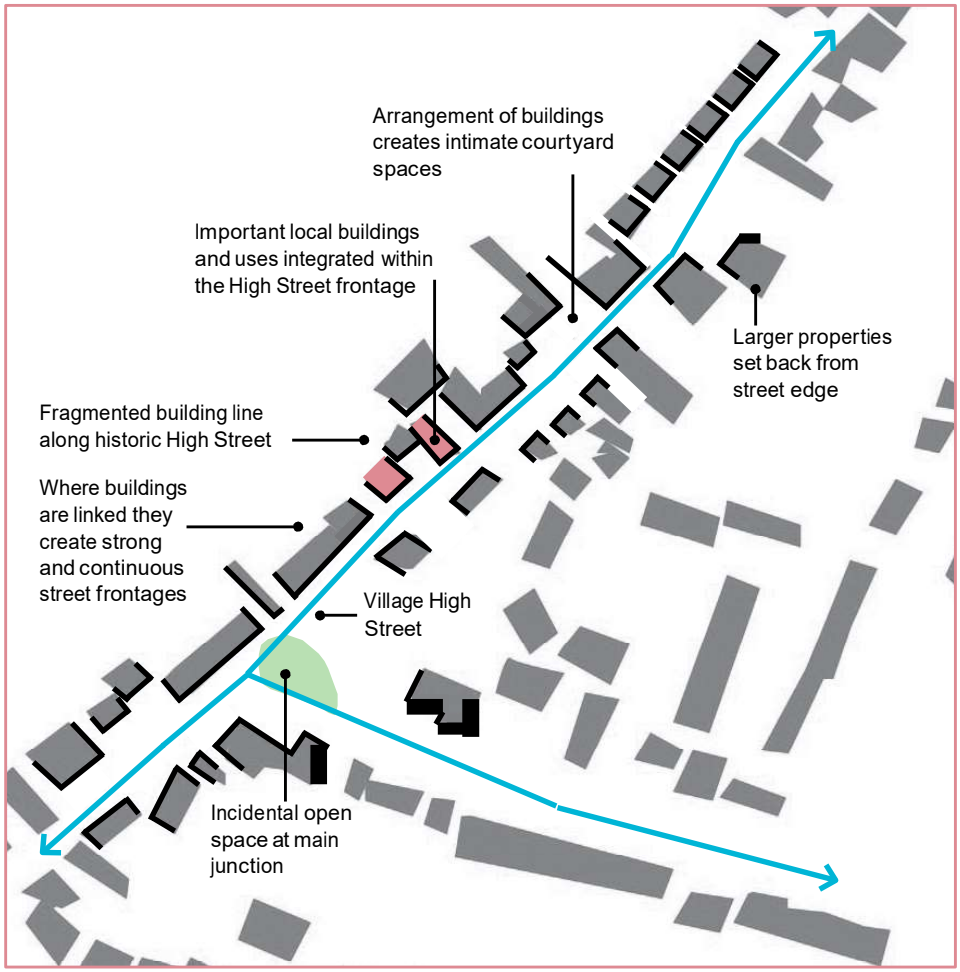
- Main structure is linear, running north south parallel to the River
- The High Street is relatively narrow
- There are a mix of building styles: some front right onto the street, some turn 90 degrees to the street with gable ends at the pavement edge and with small pockets of space between buildings, others include individual houses in their own plots, set slightly back from the street.
- Most buildings in Burringham are two storeys high, though building heights vary slightly.
- The historic village has been surrounded by more modern development, including bungalows, with generously proportioned and landscaped streets.

Above: Narrow spaces created by arrangement of buildings

Above: Feature buildings are integrated within the High Street frontage

Above: Aerial view of Burringham, showing 400m catchment around 'centre'. Burringham does not have a strong centre as such. The catchment is thus based on the geographical centre. Image source: Google

Above: Buildings arranged at right angles to the street in Burringham



Left: Analysis of Burringham shows that although the village is structured along a High Street there is no real defined centre. The building edge to the street is fragmented, with buildings set-back a variety of distances from the street. The arrangement of buildings on the northern side of the High Street creates interesting and intimate courtyard spaces, with buildings arranged at 90 degrees to the street. Where buildings are linked they create a strong and regular frontage and create a sense of enclosure along the High Street.

Burton upon Stather

- The High Street is relatively straight with views terminating on a grand building – in this case a pub – at the end of the street
- The High Street has a continuous frontage of linked buildings with subtle variations in height
- The High Street also includes a small selection of grander civic buildings, including Churches, which add variety
- The High Street has a narrow pavement, which becomes more generous towards the end of the village
- Parking is provided on-street
- The Church is the prominent building and landmark. This is very slightly off-centre, though all routes lead to it.
- The village also has a small village green, though again this is located slightly off-centre.
- The historic village centre has been surrounded by late twentieth centre residential development. The street form is broken up by private driveways to individual properties along tree-lined streets.

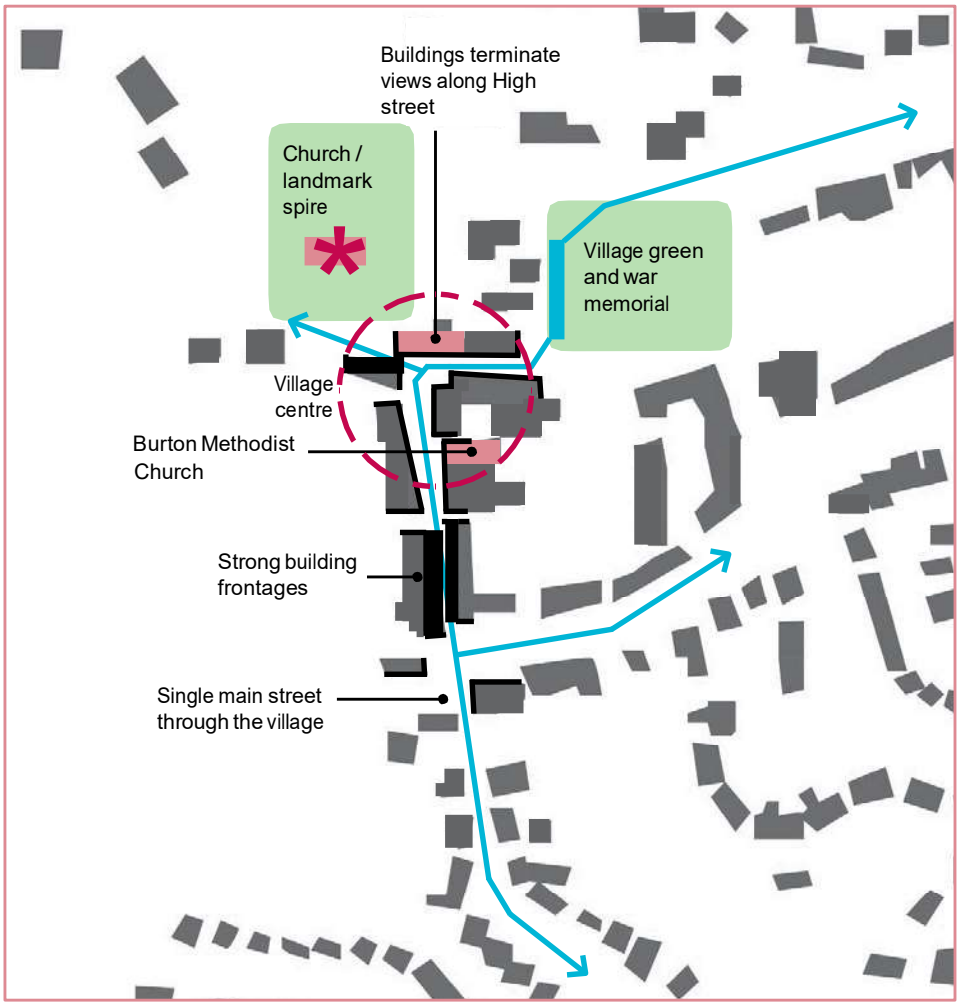
Above: Aerial view of Burton upon Stather, showing 400m catchment around the centre. Image source: Google

Above: The village green, Burton upon Stather

Above: The church, Burton upon Stather

Above: Linked building frontages along the High Street in Burton upon Stather, with views terminating on key buildings

Above: The High Street in Burton upon Stather is interspersed with grander community buildings which create interest



Left: Analysis of Burton upon Stather shows the village structured around a single main street with strong and linked building frontages along this. Views along the High Street terminate at the Sheffield Arms pub. The church, located to the west of this, forms the main landmark in the village. The church grounds and nearby village green comprise the main green spaces in the village centre.

Winterton

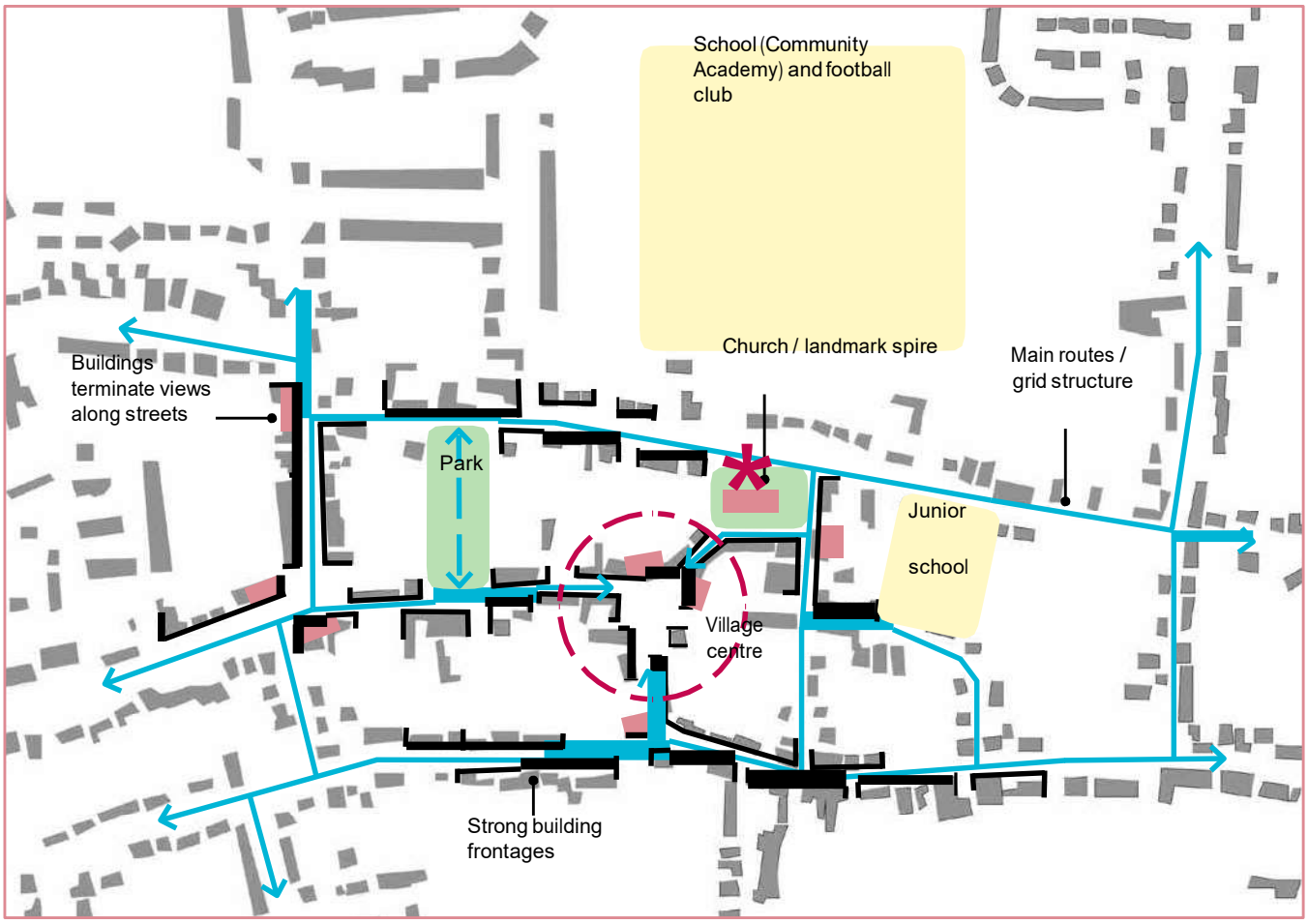
- The original village centre is quite linear (east-west) with a regular, though off-set, network of streets
- The High Street is well defined, with routes leading to a central market square and Church set slightly behind this. The primary traffic route through the town turns at right angles around the High Street. Views terminate on feature buildings.
- The market square is framed by linked buildings lining the street. This pattern continues along the High Street and creates a continuous frontage. Subtle variations in height help create interest, though most buildings have two storeys.
- The High Street is relatively narrow, with quite a hard landscape, though with some planting in the central market square
- Gaps between buildings are relatively small.
- The Church is the prominent building.
- The original village is surrounded by late twentieth century residential development that is much lower in density, with buildings set back from the street.
- Schools, parks and sports clubs are located in close proximity to the centre.

Above: Aerial view of Winterton, showing 400m catchment around the centre. Image source: Google

Above: Streets leading to / from the market square

Above: View along High Street

Above: View towards landmark church spire



Above: Analysis of Winterton reveals existence of a fairly regular and connected grid, oriented on an east west axis, though with some junctions off-set and key buildings located at these points, terminating views. The main routes through the village converge at a central square, enclosed by buildings. The main routes benefit from strong and consistent frontages. The church, located adjacent to the main central square, forms the main landmark in the village. The church grounds form one of very few green public spaces in the centre of the village. Schools are found just outside the centre, though within walking distance of this.

Landscape analysis

Wider landscape context

Lincolnshire Lakes lies within the Humberhead Levels (National Character Area: NCA)[1] as described by Natural England and comprises a flat low-lying and large scale agricultural landscape with the lower stretches of several major rivers (Trent, Ouse) draining across the area into the Humber Estuary. It is bounded to the east by the low ridge of the Northern Lincolnshire Edge with Coversands.

Key characteristics of this NCA, under the introduction and summary of the NCA profile, include:

- A low-lying, predominantly flat landscape, with large, regular and geometric arable fields without hedges but divided by ditches and dykes, many of which form important habitats and key corridors for species movement;
- Widespread evidence of drainage history, in particular the extensive drainage from the 17th century, revealed through canalised rivers, dykes, old river courses, canals, bridges and pumping stations; and
- Views to distant horizons are often long and unbroken, with big expansive skies, and vertical elements like water towers, power stations and wind turbines are very prominent.

Local landscape character

The finer grained North Lincolnshire Landscape Character Assessment and Guidance[2] shows the Strategic Site to be located in the Trent Levels landscape character area (see plan on facing page). The Trent Levels has been assessed as an expansive landscape with little diversity in character but with woodland blocks, rising ground and settlements creating distant enclosure. The area is dominated by linear features, long narrow roads flanked by drainage ditches, shelterbelts, overhead electricity pylons and major transport corridors but there is a tendency for enclosure and a more intimate landscape occurring around settlements.

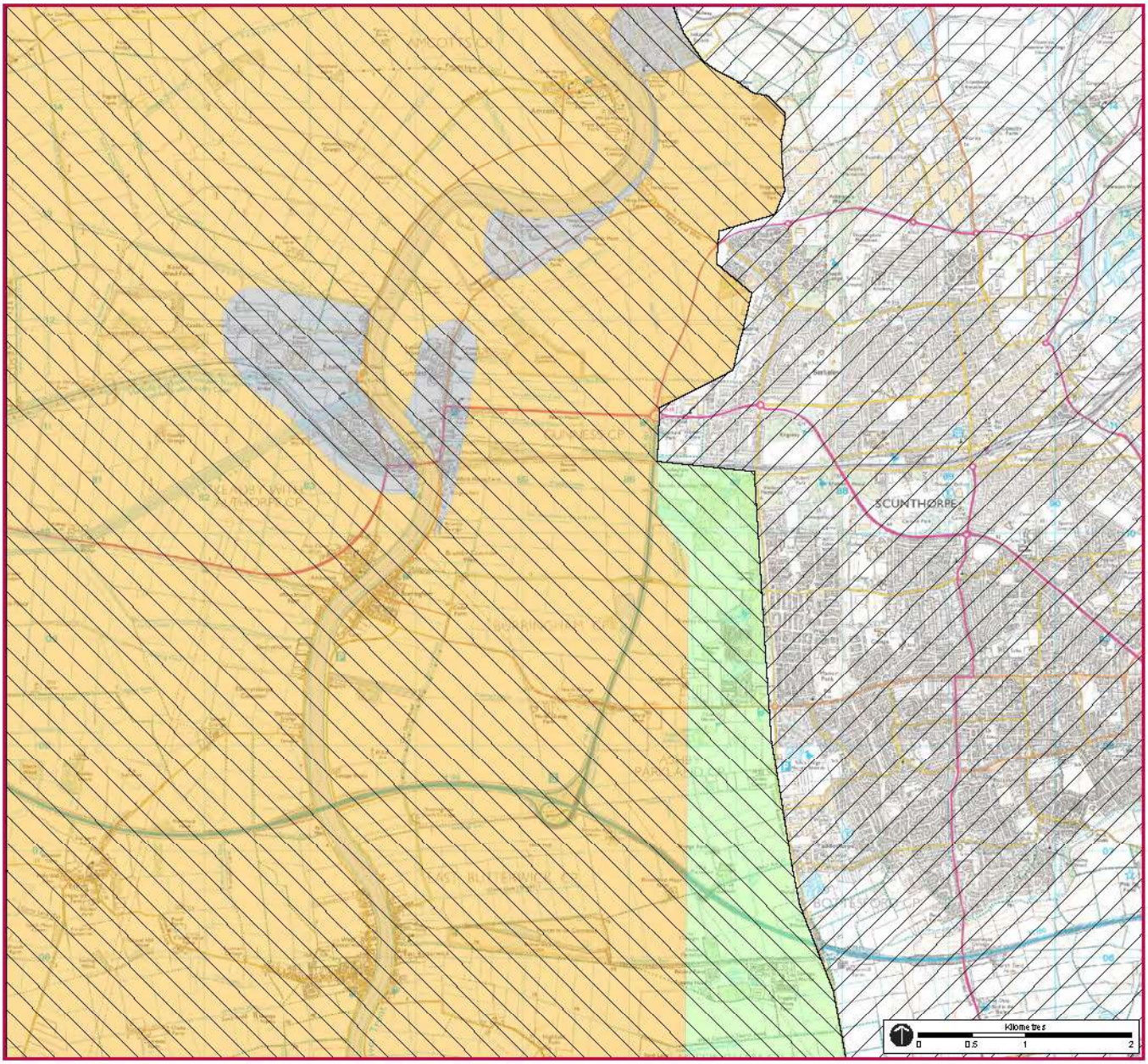
The landscape character area is further sub-divided into local landscape types, namely:

- Flat Drained Farmland
- Wooded Springline Farmland – Trent Vale

Some of those findings inform the analysis presented in the following section (site landscape character and views).

1. Natural England (2013) National Character Area Profile: 39 Humberhead Levels

2. North Lincolnshire Council (1999) Landscape Character Assessment and Guidance



North Lincolnshire Landscape Character Assessment and Guidance (1999)

Landscape Character

- Lincolnshire Edge
- Trent Levels

Landscape Types

- Wooded Springline Farmland - West of Scunthorpe
- Flat Drained Farmland
- Industrial Landscape - Burringham, Gunness, Keadby

Above: Extract from North Lincolnshire landscape assessment and guidance (1999)

Site Landscape character and views

The analysis of the existing landscape character and views at Lincolnshire Lakes reveals three distinctive areas with key linear features such as the M181, shelterbelts and woodland plantations forming the boundaries to those areas.

Brumby Common

The area to the north east (referred to here as Brumby Common) is characterised by mature woodland plantations (both deciduous and evergreen) with irregular edges. Areas outside woodland are occupied by arable use with some sense of containment by the wooded areas and sub-divided into medium size fields defined by north-south running drainage ditches. There are also some small lakes surrounded by woodlands to the edges of the character area. Views are short and enclosed to the east by the woodland plantations and the rising land of the ironstone scarp. There are relatively few visual connections with existing development to the east, with exception of the Burringham Road area where there are views towards isolated development. Views to the west are broad and expansive across the low-lying land.

Ashby Parkland

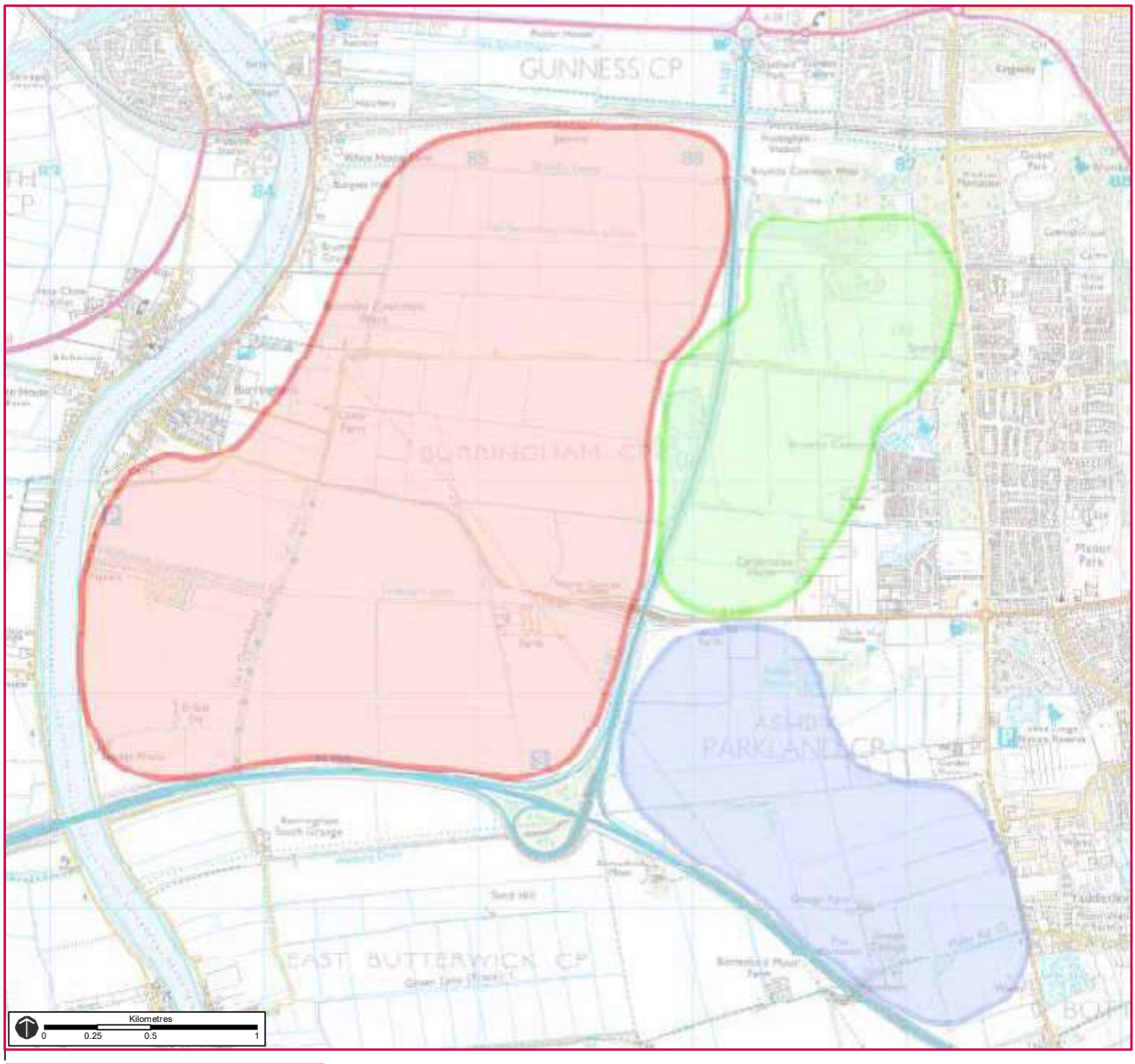
The area to the south east (referred to here as Ashby Parkland) is largely arable land and sub-divided into medium sized fields with boundaries defined by east-west running drainage ditches. The area is largely open but there are some shelterbelts along the edges to a small number of fields, notably a line of Lombardy Poplars along the eastern boundary with Ashby Decoy Golf Course. The M181, to the west, is prominent in this area, with noise from vehicles providing an impact, whereas the M180 to south is largely screened by roadside vegetation and its presence is less apparent. Near to Moor Road in the south, there are some isolated farmsteads partly surrounded by groups of trees. Views in the area are largely expansive, although the shelterbelts provide some enclosure, while the overhead power line running near to the motorway network is prominent in views.

Burringham

The area to the west of the M181 (referred to here as Burringham) is arable land and sub-divided into large and medium sized fields with boundaries defined by both north-south and east-west running drainage ditches. There is very limited vegetation in this area. The land extends to the west towards the village of Burringham and the embankments to the River Trent. In terms of character, this is the most uniform of the three character areas. To the west there are expansive views with the overhead power line and wind turbines (west of the River Trent) very prominent. To the east, there are expansive views towards Scunthorpe but these are largely of the woodland belt along Scotter Road and the wooded scarp. Views north are enclosed by the wooded railway embankment.

Above: view looking north west across the site (in the Ashby Parkland character area)

Above: View looking east across site from Burringham Road (in the Burringham character area)



Above: Landscape character areas

Character Areas

1 Ashby Parkland
Level landscape with regular feathered edge to east and more open aspect to west.
Views – some interrupted by rows of

2 Brumby Common
Level landscape, with enclosure from irregular wooded edge to east and more open aspect to west
Views – diverse and largely enclosed by nearby tree groups or woodland or wooded backdrop to the Trent Vale

3 Burringham
'Big sky' landscape with horizontal emphasis, wind turbines prominent
Views – expansive and uniform

Note – Names to character areas as suggested by TEP

Ecology

An assessment of the ecological resource near to Lincolnshire Lakes reveals a mosaic of statutory and non-statutory sites in close proximity (see plan on facing page). Within 1km to the north west is the Humber Estuary Site of Special Scientific Interest (SSSI) / Special Area of Conservation (SAC) / Ramsar designated for estuarine habitats, wintering birds (wildfowl and waders), breeding birds, fish (river and sea lamprey) and grey seal.

Next to the eastern edge of the site are a number of non-statutory designated sites, namely:

- Brumby West Common Site of Nature Conservation Interest (SNCI)
- Westcliff Lagoon Local Wildlife Site (LWS)
- Ashby Decoy Golf Course LWS
- Silica Lodge LWS
- Yaddlethorpe Fish Ponds SNCI

These sites provide a range of habitats from scrub, woodland, reedbed, heathland and various types of grassland.

A number of other non-statutory designated are located slightly further afield and described in Appendix A.

A desktop review of key habitats and species which are of principal importance under English Priority[3] and Lincolnshire Biodiversity Action Plan are:

Habitats

- Lowland mixed deciduous woodland
- Hedgerows
- Lowland dry acid grassland
- Standing water/ dry ditches/ running water
- Scattered scrub

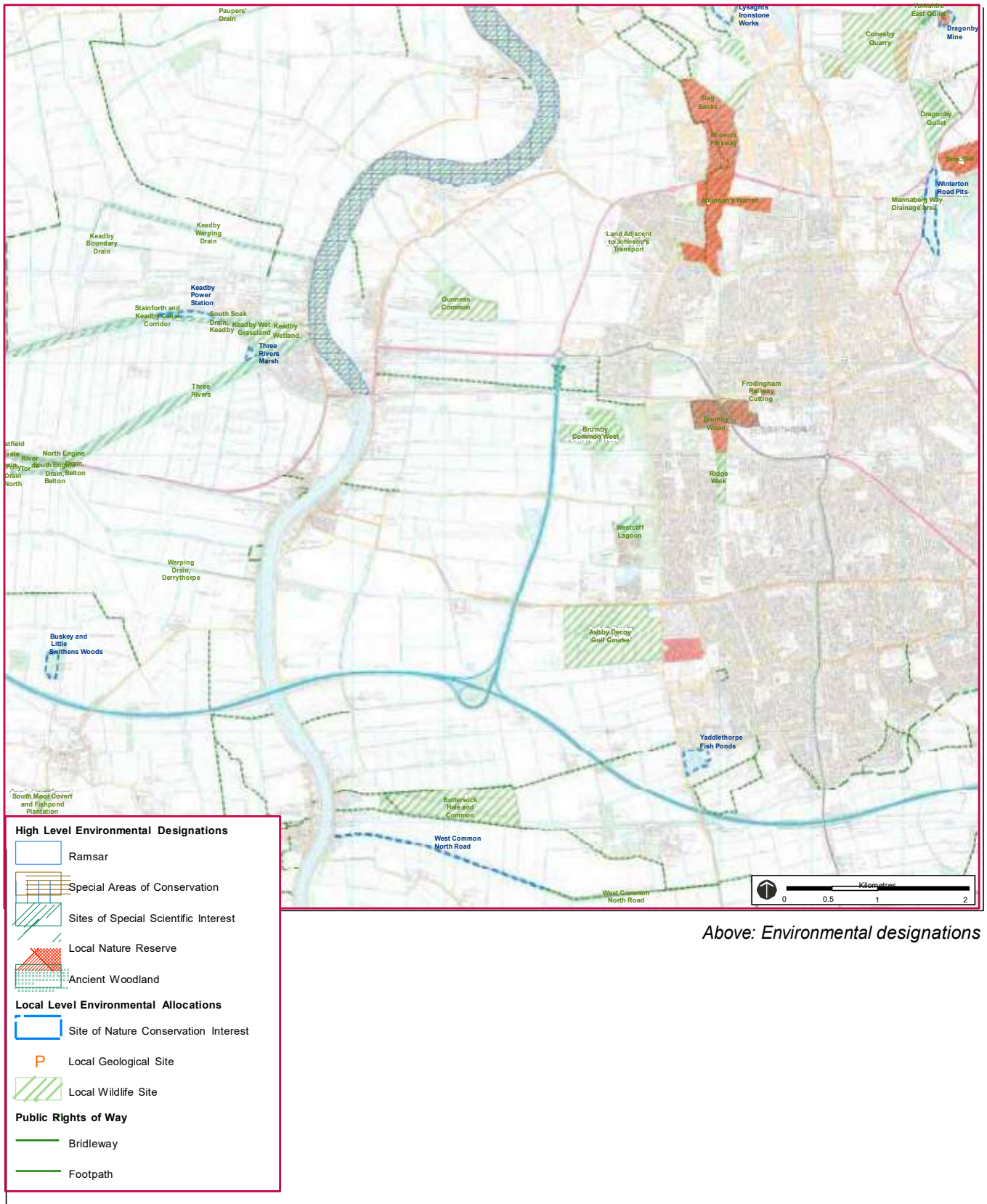
Species

- Smooth newts
- Common toad
- Breeding birds (grey partridge, skylark, yellow wagtail, dunnock, whitethroat and reed bunting)
- Bats (Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared, Noctule, Leisler's, Daubenton's and a further unidentified Myotis sp.)
- Brown hare
- Water vole

There is no evidence of otter but this species could be accommodated in the proposed development.

Further details of habitats and species is provided in Appendix A.

3. Section 41 habitat of principal importance under Natural Environment and Rural Communities Act 2006



Above: Environmental designations

Habitat Connectivity

Habitat connectivity is strongest down the eastern side of the Lincolnshire Lakes where the majority of protected sites exist. Both aquatic and terrestrial connectivity is more limited in the central and western parts.

It is recommended that north-south and east-west aquatic and terrestrial links are strengthened and enhanced to improve the ability for wildlife to move throughout the area and to join up isolated pockets of habitats.

Habitat plans are shown on the facing page

Historic Environment and Archaeology

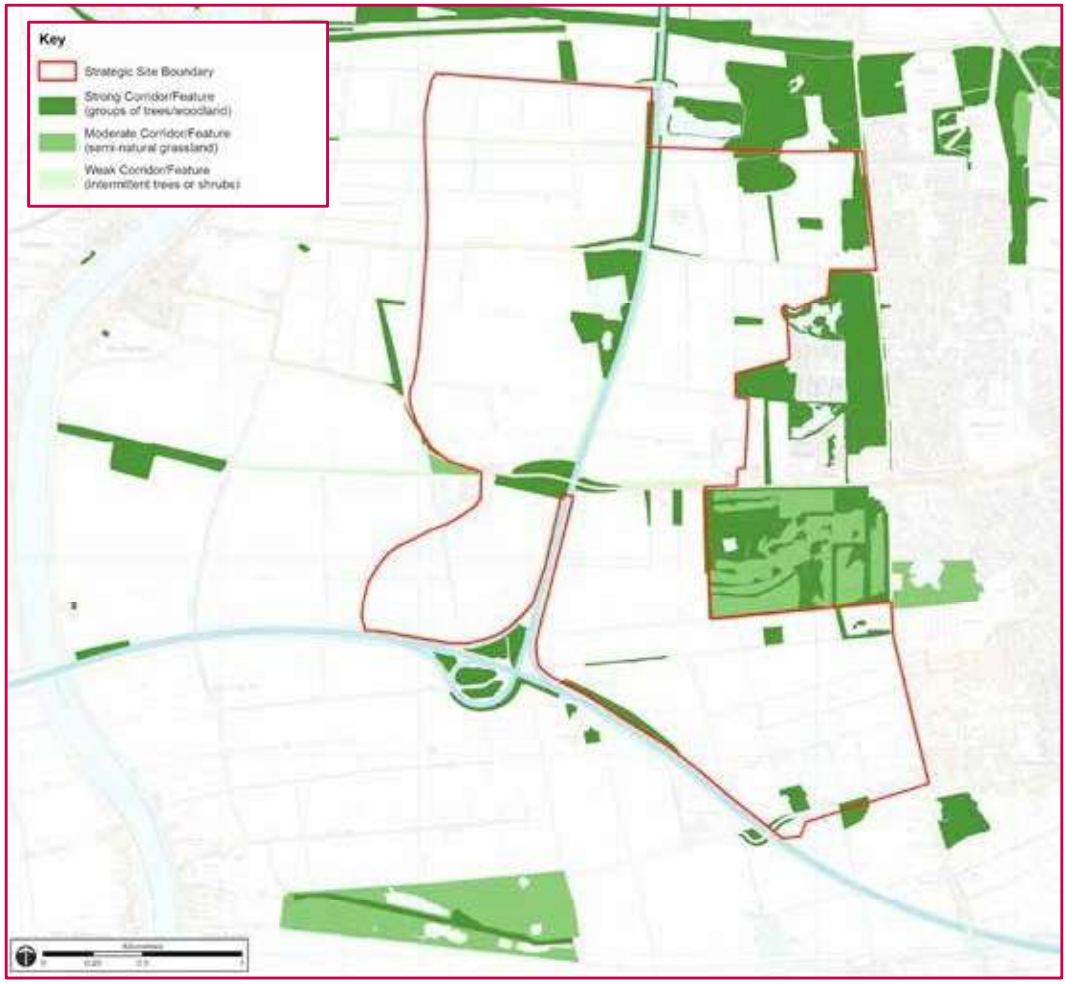
A review of the North Lincolnshire Historic Environment Record (HER) and National Monument Record (NMR) reveals a number of non-statutory sites in the Lincolnshire Lakes area which may comprise potential heritage assets. There are records of human activity and funerary remains from the Bronze Age (2,600 – 700BC), however the current condition and survival of this barrow is not known. The presence of the asset within this landscape means that it has a high potential to contribute to regional research objectives and is therefore considered to be of Medium Significance. Where development is proposed North Lincolnshire
Council's archaeologist will require some level of mitigation in order to identify unknown barrow locations.

There are also post medieval improvement drains (Warping Drains) mapped on historic records and remains of these are visible on site today including the large Earl Beauchamp's Warping Drain running in an east-west direction. These relate to the agricultural practice of managing land drainage post-flooding which would direct water back to the river, whilst capturing warp deposits for land improvement. Any proposed impact on these drains would require prior consultation with the Council's archaeologist.

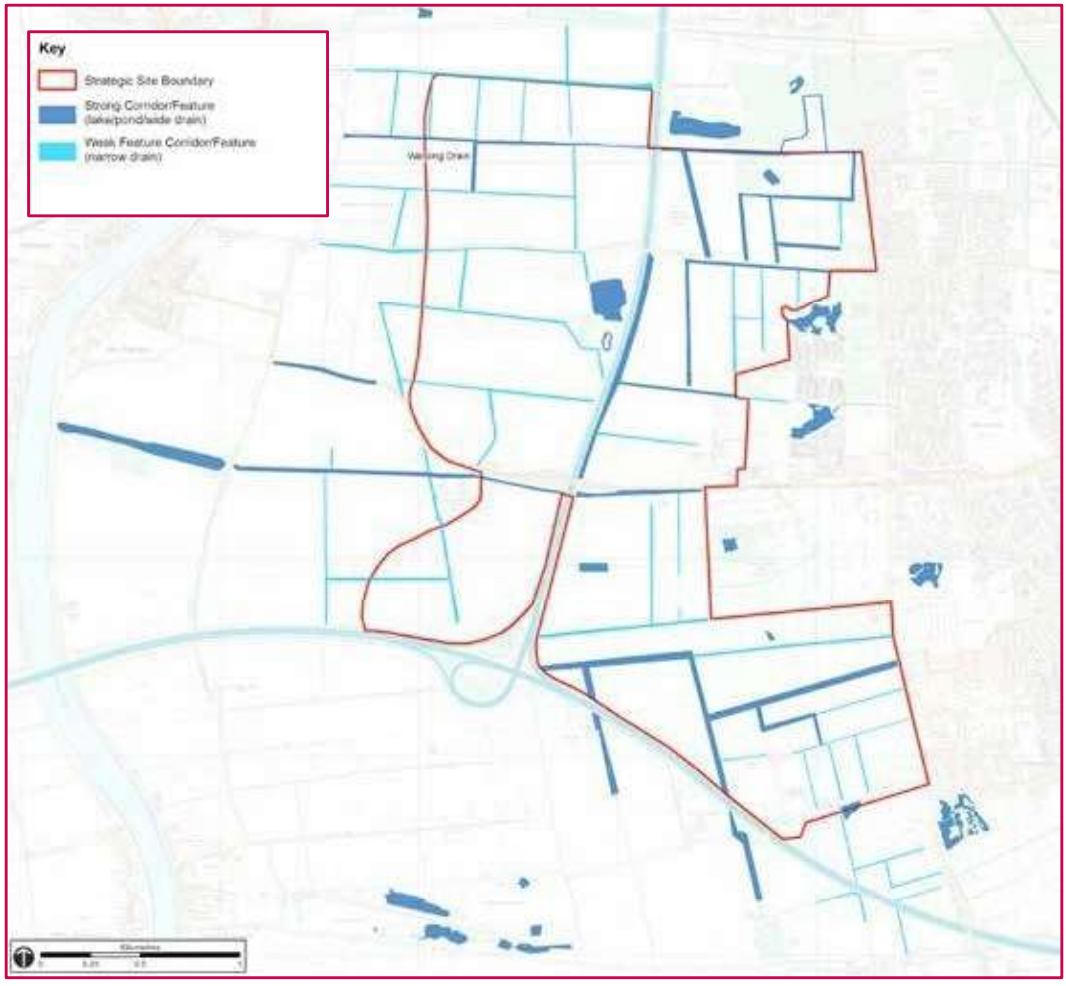
The site has remained largely undeveloped since at least 1890. Therefore, there is the potential for the survival of both below-ground and residual above ground archaeology on site.

A schedule of the non-designated heritage assets is located in Appendix B.

There are no statutory sites in the Lincolnshire Lakes strategic area.



Right: Existing green wildlife corridors / features



Right: Existing blue wildlife corridors / features

Movement, access and engineering

Baseline highway conditions

As part of the evidence base for the Lincolnshire Lakes AAP a Transport Assessment (TA) was undertaken by URS (now part of Aecom) in 2012. Manual, automatic and number plate recognition surveys have established the baseline peak period traffic flows on the local highway network; baseline traffic conditions on the M181 motorway were obtained from Highways England's TRADS database.

A refresh of the Transport Assessment has been undertaken by Aecom in order to update the evidence base and to assess the impact of an increase in the quantum of development at the Lakes to provide in excess of 7,600 dwellings and the relocation of the football stadium within the development. As before, the revised TA assessed the operation of fifteen junctions on the local road network.

The results from the updated TA have determined the following:

Opening year 2017 AM peak
At least one arm of the Scotter Road / Moorwell Road junction is operating at or over capacity.

Opening year 2017 PM peak
At least on arm of the Scotter Road / Moorwell Road junction is operating at or over capacity.

Future year 2033 AM peak
At least one arm of a junction is operating at or over capacity at eight junctions on the local road network. The eight junctions being:

- M181/A18 Doncaster Road/ A1077
- A1077/ Ferry Road West
- A18/Scotter Road/Doncaster Road
- Scotter Raod/Brumby Common Road
- Scotter Road/B1450 Burringham Road
- Scotter Road/Moorwell Road
- A1077 Phoenix Parkway/ Normanby Road
- Brumby Commom Lane strategic Access junction

Potential future highway mitigations required

Junction	Mitigation	Date Required
M181/A18 Doncaster Road/A1077	Increased capacity from north and south and on circulatory	2033
A1077/Ferry Road West	Convert from a priority junction to a roundabout	2033
A18 Doncaster Road/Retail Park	None	-
Ferry Road West/Scotter Road	None	-
A18/Scotter Road/Doncaster Road	Existing proposed mitigation amended for the Lakes	2017
Scotter Road/Brumby Common Lane	Convert from a priority junction to a roundabout or signals	2017
Scotter Road/B1450 Burringham Road	Improve existing roundabout or convert to signals	2033
Scotter Road/Moorwell Road	Convert from a priority junction to a roundabout or signals	2033
A1077 Phoenix Parkway/Normanby Road	Widen approach flares on the entry lanes to the roundabout	2033
Brumby Common Lane strategic access	New roundabout to be constructed	2017
M181/B1450 Burringham Road	New roundabout to be constructed	2017

Future year 2033 PM peak

At least one arm of a junction is operating over capacity at six junctions on the local road network. The six junctions being:

- M181/A18 Doncaster Road/A1077
- A1077/ Ferry Road West
- A18/Scotter Road/Doncaster Road
- Scotter Road/Brumby Common Road
- Scotter Road/Moorwell Road
- Bramby Commom Lane strategic Access junction

For the local highway network to able to accommodate the Lincolnshire Lake proposals a series of mitigation measures will be required at the junctions outlined in the table on the previous page.

Flooding and drainage

The Lincolnshire Lakes development area is a predominantly flat, low lying area to the east of the tidal River Trent which has a long history of both tidal and fluvial flooding. Flood alleviation and protection works can be traced back to the 19th century and currently the area benefits from extensive flood protection defences. These defences largely comprise gravity bunds along the east bank of the river although sections of piled wall are also present and additional sections are currently being installed following damage caused by the winter storms of 2013/ 2014. Surface water drainage of the site is currently achieved through a comprehensive network of linear ditches which convey water to pump stations adjacent to the River Trent.

The development area is currently at risk of flooding from overtopping of the river defences, breaching of the river defences, and groundwater flooding. Numerical flood modelling undertaken by URS Infrastructure & Environment Ltd on behalf of North Lincolnshire Council has shown that to facilitate development and provide protection against a 1 in 200 year plus climate change tidal flood event a combination of flood defence enhancements and land raising is required. The land raising is primarily required to the west of the M181 which is elevated above the surrounding land and thereby forms a barrier to flood water, however, to facilitate surface water drainage of the new development areas land raising is also required to the east of the motorway.

Groundwater flooding is currently controlled through the extensive network of ditches and pump stations which collect groundwater and discharge it into the River Trent. It is proposed that this strategy will be maintained within the new development and the land raising will provide additional protection against this form of flooding.

SWOT Analysis

The table below (presented across a double page spread) summarises the issues and opportunities emerging from the analysis, consideration of which helps inform the concept plan and subsequent framework and masterplan drawings. Applicants for development should seek to respond to these within their proposals.

Strengths

- A 'gateway' site to the Trent Vale visible from the road and rail network
- Brumby Common Lane and Burringham Road provide east-west links back into the Trent Vale
- Strong horizontal landscape features: regular network of drains, ditches and geometric field patterns
- Existing mature woodlands and plantations along Scotter Road corridor provide high quality setting
- Flat landscapes affords long distance and dramatic views
- The ridgeline and buffer along Scotter Road create a strong, green backdrop to the area
- Existing network of local wildlife site to east of Lincolnshire Lakes

Opportunities

- New sustainable housing growth location providing a new residential offer for residents from the South Humber Bank
- Creation of new villages presents opportunities to create new communities founded on traditional village models including walkable neighbourhoods and mixed-use centres
- De-trunking of M181 to create better east west connectivity
- Re-purpose existing road bridges to create new east-west walking and cycling links and link to wider local and national cycle network
- New green links and water bodies integrated within the development area presents an opportunity to create a new and distinctive area of development in the Trent Vale, including potential for new waterside living
- Integrate existing drains and ditches within the form of development as a way to mitigate flooding & to provide a connected network of blue & green infrastructure
- New landscaping and planting can help create a sense of enclosure and intimacy
- Enhanced access to leisure, recreation and countryside for all residents
- Reuse soil excavated from lakes to create new landscape setting around lakes, including gateway features to the area.
- Will allow the enhancement of existing bus services and the provision of new services for both the lakes and existing communities
- Use of excavated material to enhance flood defences
- Potential for transformation through innovative proposals
- Opportunities for biodiversity enhancements

Weaknesses

- M181 and Scotter Road are barriers to east-west movement
- Limited access to and routes through the area
- Flat landscape and limited vegetation, lacking enclosure
- Flat landscape and low-rise nature of existing built form means there are few points of orientation
- Poor access to public transport
- A number of junctions on the existing road network operate at capacity and will require improvement
- Poor quality cycle links and facilities
- Flood risk associated with the breaching of the right bank of the River Trent
- Currently no overarching design framework

Threats

- New east-west links increase congestion through new villages
- Impact of parking associate with the football stadium upon the local community
- Impact on the environment of the parking requirements for the leisure activities planned for the lakes
- Flood mitigation measures required, involving re-profiling of land
- Soil excavated to create lakes and water-bodies needs to be redistributed on site, but the ground is not suitable for use as flood mitigation
- Delivery of area requires multiple landowners, and developers, to respond to key structuring elements
- Limited separation between development parcels undermines concept of the creation of a series of villages in the area.
- Current lack of an overarching design framework may result in poor quality and disjointed developments

Design informants

This analysis generates some important design informants for the strategic masterplan, including:

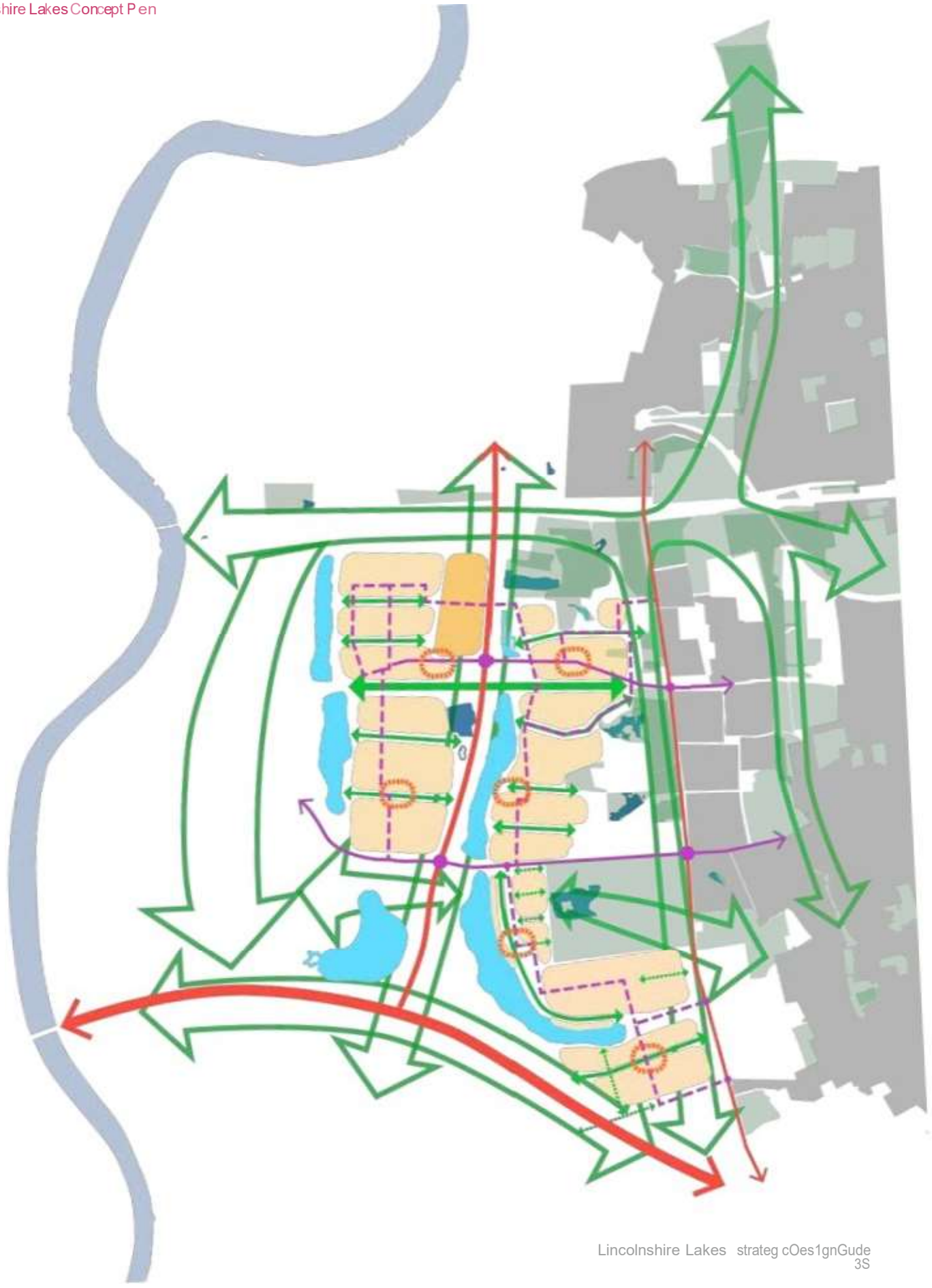
- The linearity of the traditional built form in the outlying villages
- Continuous building frontages or linked buildings in the centres
- The connected network of large green spaces and distribution of small parks throughout the surrounding villages
- Strong and well defined, and quite wide, well landscaped series of north south connections
- A relatively low density pattern of development, with buildings in looser arrangements further from the centres
- Buildings predominantly two-storeys in height, though with subtle variations in the centres
- This predominant height means community buildings, such as churches, act as landmarks, and these are often located slightly 'off-centre'
- Development in low-lying areas that responds to the regularity of the land form
- Walkable centres with community facilities provided in close proximity to the centre
- A regular field pattern and series of drainage ditches which lead to a regular block structure with potential for green links and fingers through these, where ditches can be integrated as part of the street pattern.
- Long distance views coupled with the need to provide local landmark features to aid orientation and sense of place. The design of the green space should also reflect existing site landscape character and views.
- Limited vegetation on site, though well defined and mature woodland edges along Scotter Road, the M181 and existing bridges over these
- Overall approach to design of connected green and blue infrastructure to accommodate priority habitats and species
- Drainage ditches to reflect characteristics of post medieval improvement drains

A concept plan and design principles for the Lincolnshire Lakes

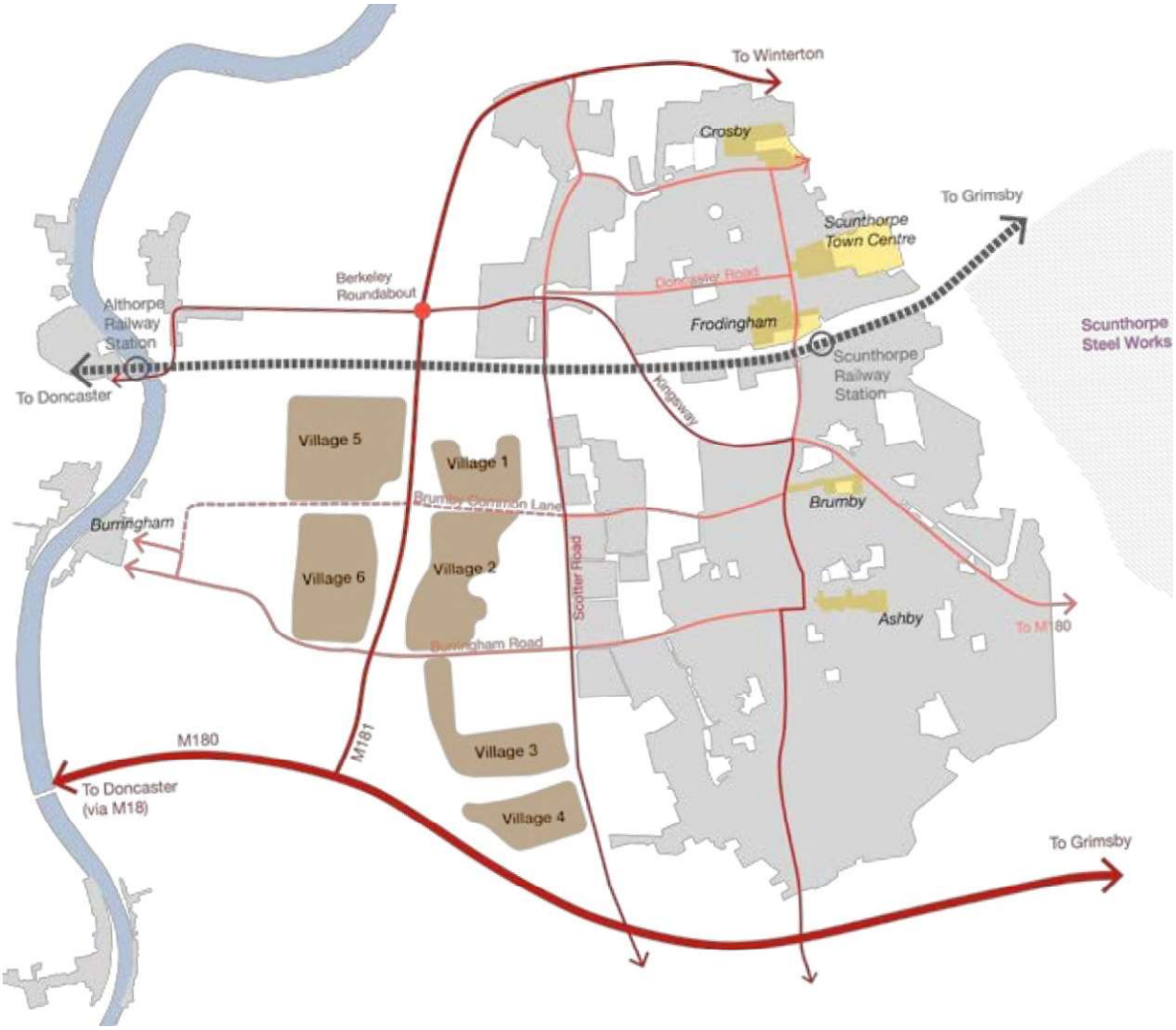
Based upon the analysis of the site and surrounds as outlined above, a concept plan and associated set of design principles have begun to emerge, which include:

- Green fingers should extend into the site and be used to help define the villages and help create separation between them.
- The structure of the villages should respond to the landscape, including the field pattern and drainage ditches, which lends itself to a series of regular blocks and linear centres
- Building heights should be predominantly two storeys, though with variation in the centres including buildings up to three storeys. Community buildings should be used to help create landmarks and aid orientation.
- The centres should be of a higher density than the village edges, which may have a more looser arrangement of buildings in larger plots.
- Villages edges and space around the Lakes should take on a more natural, rural feel. Where possible, existing landscape features and species should be retained and carefully integrated into the villages.
- The villages should be walkable, with a permeable network and grid of streets, with community facilities located close to the centre
- Primary routes should follow the strong north-south and east-west grid established in the urban area, but with some 'kinks' in the street pattern, reflecting the existing urban structure but also promoting walking and cycling above car use. These primary routes should form a strong organising element, connecting together the movement network to create a legible, pedestrian and cycle friendly environment.

The Lincolnshire Lakes concept plan is illustrated on the facing page.



Lincolnshire Lakes Strategic Context Plan



PART A: Framework plans

This section of the Strategic Design Guide presents a series of framework plans for the Lincolnshire Lakes area. These present the key structuring principles for the development area, illustrating how the area, the different villages and land parcels within this should come together to create a well integrated place.

The framework plans presented in this section of the document comprise:

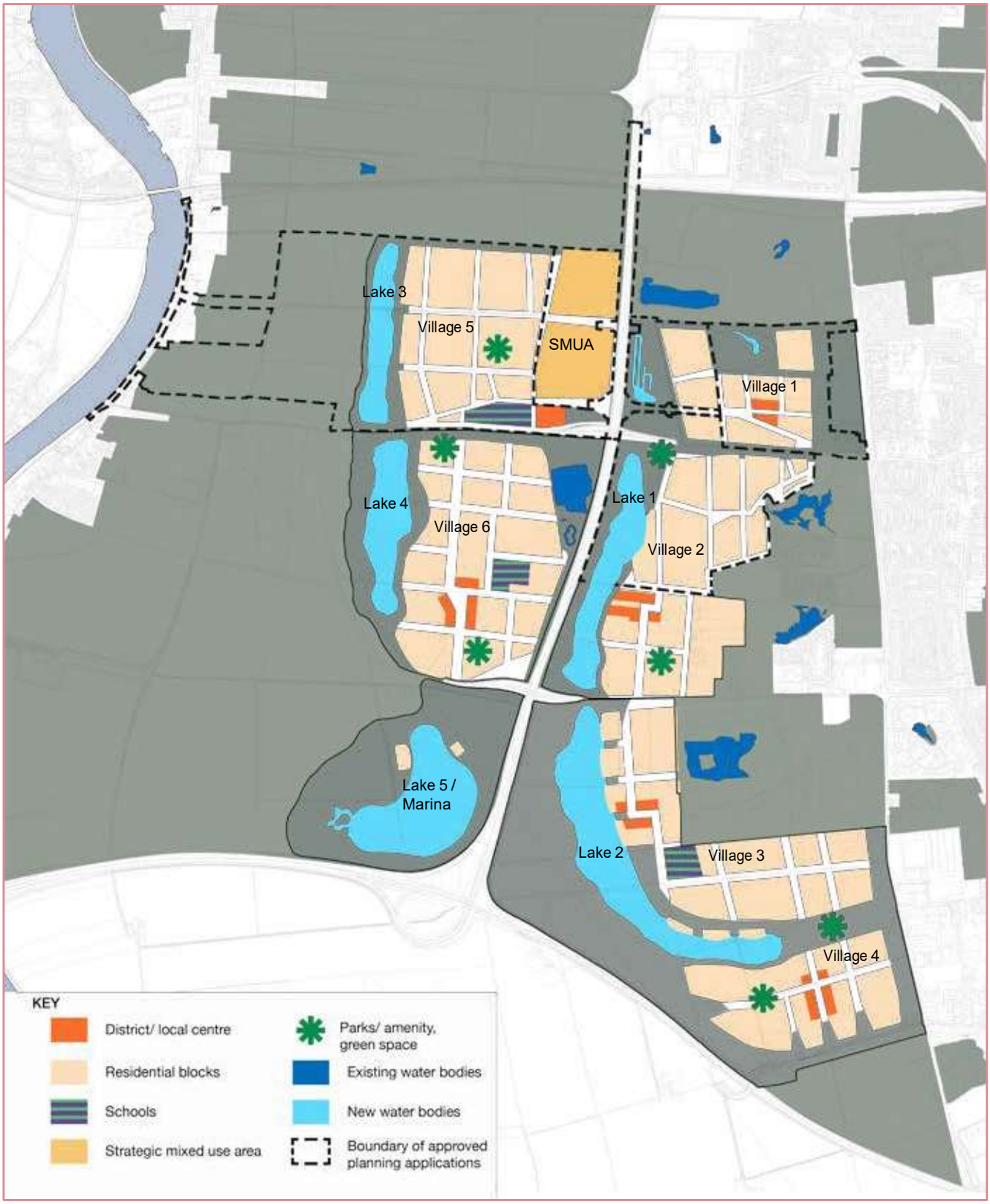
- An overarching masterplan.
- Movement framework.
- Public transport network.
- Green and blue infrastructure network.
- A Park system.
- Green space hierarchy.
- Village design Framework.
- Character area framework.

The structuring elements shown in these plans help bind the area together and should be used to help shape and inform planning applications and the development management process.

The framework plans are purposely strategic: that is they provide a strong steer on the form of development that is expected within the Lincolnshire Lakes area, but they also allow for some interpretation and flexibility within this.

The plan on the facing page shows the new villages within the wider context: they present a major opportunity for change and transformation in the Trent Vale. The creation of six new villages responds to the original form and growth of North Lincolnshire's villages. They present the opportunity for new, walkable neighbourhoods integrated within an attractive and accessible landscaped setting, with excellent links into the Trent Vale and the wider area.

Lincolnshire Lakes Masterplan Framework Plan



Masterplan framework

The overarching masterplan framework shown on the facing page identifies the main block structure, broad location of local centres, major parks, schools and the lakes. The series of framework plans that follow in the remainder of Part A of this document further develop the overarching masterplan drawing. The masterplan integrates the parameter plans approved for the northern part of the area (outlined in black on the framework plan).

A fairly formal grid structure is shown, responding to the analysis and concept plan outlined in the previous section. This breaks the villages into a series of regular development blocks, served by the main movement network and allowing for a highly permeable development structure. Potential then allows for the block to be further broken down, with more localised street and building types. The land budget for the area is shown in the table below. An average net density of around 21 dwelling units per hectare would accommodate 6,000 dwellings within the footprint of the villages. This measure of density includes land for the local centres, supporting facilities and small play spaces integrated within the villages.

Lincolnshire Lakes masterplan : Broad land budget

	Village 1 (ha)	Village 2 & Lake 1 (ha)	Village 3 & 4, & Lake 2 (ha)	Village 5 & Lake 3 (ha)	Village 6 & Lake 4 (ha)	Marina / Lake 5 (ha)	SMUA (ha)	Total (ha)	%
Development area*	26.8	60.6	50.6 (v3) 32.6 (v4)	50.4	64.4	-	19.3	304.7	
Schools	-	-	2	3	2	-	-	7	
Development area exc schools	26.8	60.6	48.6 (v3) 32.6 (v4)	47.4	62.2	-	19.3	297.7	
Development area exc SMUA	26.8	60.6	50.6 (v3) 32.6 (v4)	50.4	64.4	-	-	285.4	48.4%
Development area exc schools & SMUA	26.8	60.6	48.6 (v3) 32.6 (v4)	47.4	62.2	-	-	278.4	
Green / blue infrastructure outside of development areas	32.1	26.3	109.1	18.1	40	59.8	-	285.4	
Lakes	-	13.1	27.2	8.6	11.4	11.4	-	80.6	13.7%
Green infrastructure outside development areas, excluding the Lakes	32.1	13.2	81.9	9.5	28.6	28.6	-	204.8	34.7%
Total area	58.9	86.9	192.3	68.5	104.4	59.8	19.3	590.1	-

** In this table, 'development area' refers to the villages and includes the residential blocks, schools, centres and any play / park space integrated within the village*

Lincolnshire Lakes Movement Framework

Movement framework

Streets as places

Streets should be thought of as 'places' and not just as movement corridors, helping to make the villages in Lincolnshire Lakes easy to get to and move through.

Much of the surrounding villages tend to be well connected, with a network of streets and lanes creating places that are easy and attractive for pedestrians and cyclists to move around in.

The network of streets should also be easy for people to understand, both in relation to where they are and how they move around the villages. Streets that lead to key destinations, such as the local centres, should, for example, look more important than those that don't.

Equally, spaces that are a focal point in a village should look more important and 'public' than spaces meant for a group of dwellings.

Street types

The streets and spaces in Lincolnshire Lakes should thus respond to and reflect their position in a hierarchy related to location, role and function. The movement framework displays a variety of different street types. These include the following 'tiers' in the hierarchy:

1. Strategic routes, which is the main east west link along Burringham Lane, connecting a new southern junction on the de-trunked M181 back to Scotter Road and the wider highway network
2. Primary routes, comprising (1) a new east west connection from Scotter Road to the de-trunked M181, the district centre and strategic mixed use area / football stadium, and (ii) the network of streets connecting the villages with the east west routes and back to Scotter Road. These are referenced here as 'village connectors' and comprise the primary movement loop in t he Lincolnshire Lakes area.
3. Secondary routes, which comprise the network of main streets in Villages 1 and 5 as set out in the planning application for these villages, providing a secondary access across the de-trunked M181 and to Scotter Road.
4. A series of tertiary streets, which comprise internal streets within the villages, providing for local access, They include:
   i. Residential streets
   ii. Green streets
   iii. Neighbourhood streets
   iv. Edge streets / green lanes

The role and function of these streets will be described further in the forthcoming Part B.

In addition to the hierarchy of streets outlined above the villages should also incorporate a network of walking and cycle routes, as well as public transport provision. Indeed, and in line with Manual for Streets, a user hierarchy should be established with pedestrians and cyclists considered first, followed by public transport users and then other road users.

Walking and cycling

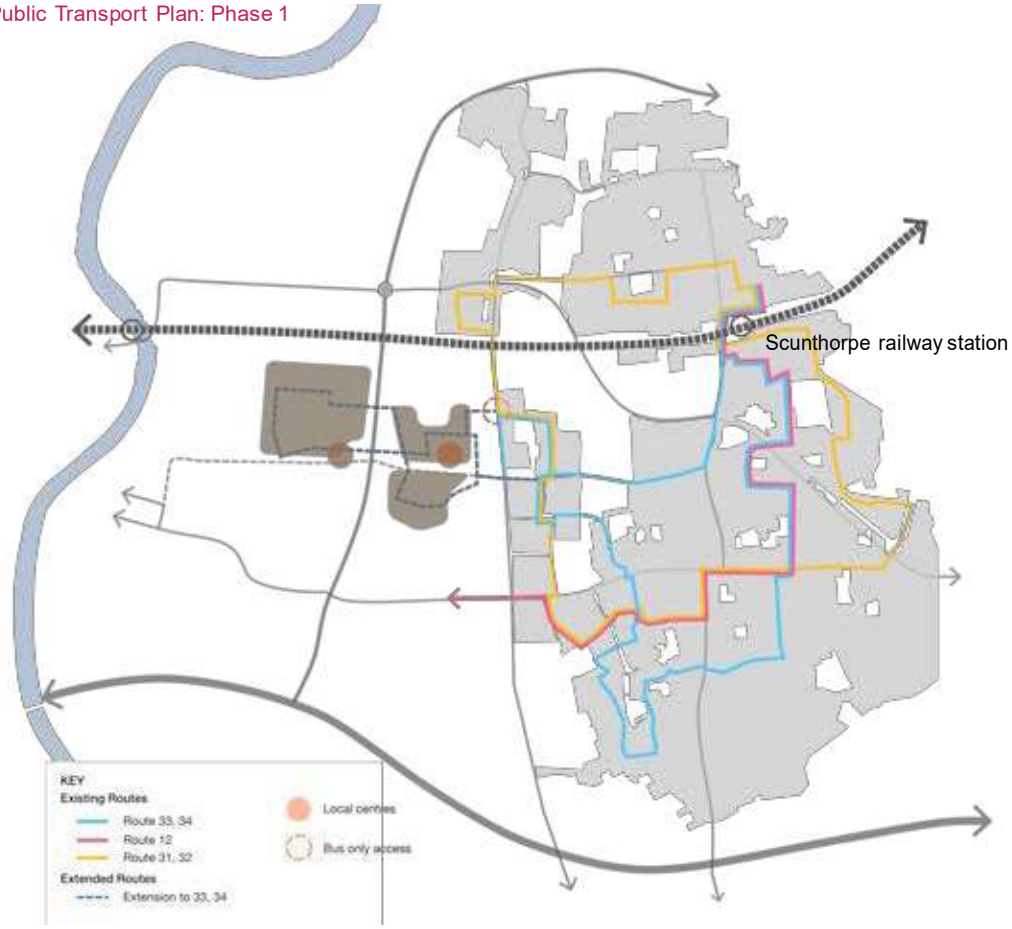
Pedestrians and cyclists should feel comfortable using all streets and spaces within the villages. A network of connected streets and spaces should be designed to encourage people to walk and cycle, particularly for local trips.

Provision should also be made for walking and cycling only routes around the lakes and across the de-trunked M181. Existing bridges along Burringham Road and Brumby Common Lane should be re-purposed for pedestrian and cycle use, providing safe crossing points and connecting with the existing cycle network in and around Scunthorpe. However, the Burringham Road bridge will also be retained for local through traffic.

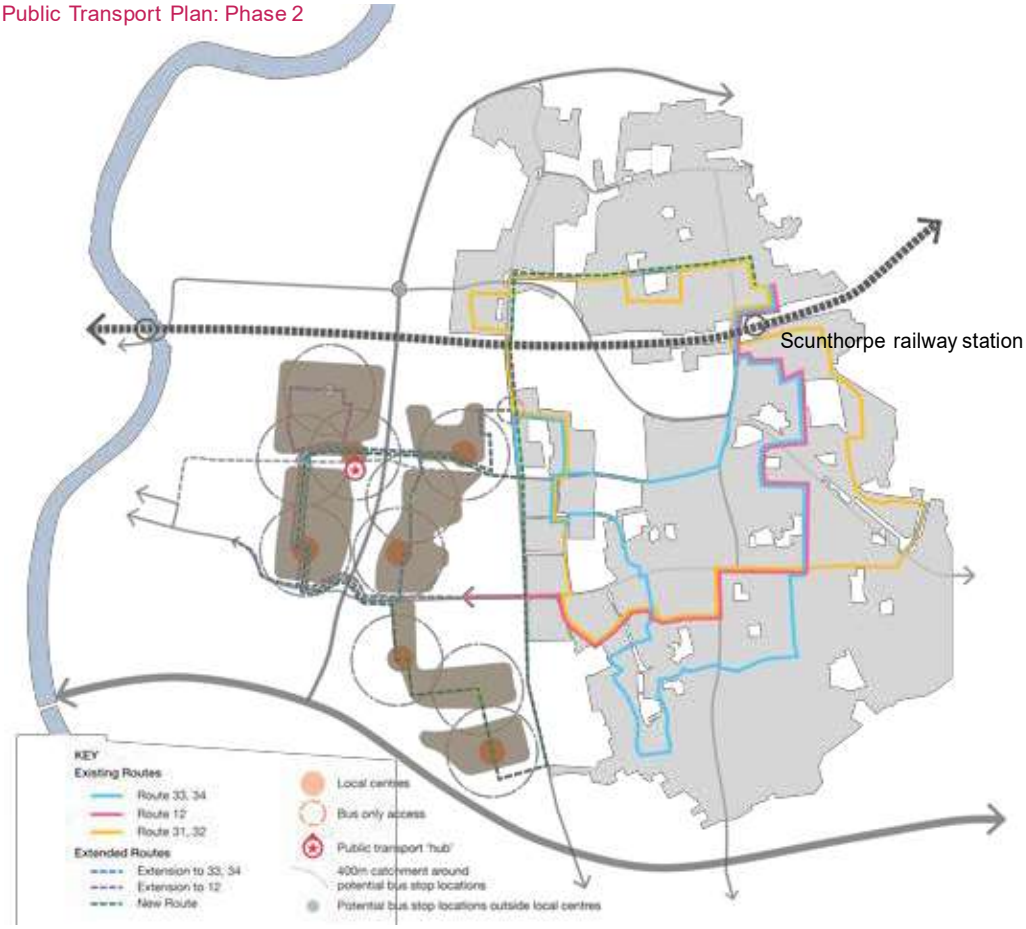
Equally, new junctions on the primary route network form important connections and direct links between communities and facilities. They should incorporate best practice thinking that allows safe and easy crossing for pedestrians and cyclists of all ages and abilities.

Within the villages all streets should be designed with a 20mph speed limit in mind, enhancing safety and comfort for all, and allowing cyclists to share the street space. The neighbourhood streets should follow the ideas behind the home zone concept, designed for a maximum speed of 10mph. Design that helps to reduce speed further should be explored. This includes reducing the width of carriageways, the use of on-street parking, landscaping, a variety of materials and limited use of central road markings.

Lincolnshire Lakes Public Transport Plan: Phase 1



Lincolnshire Lakes Public Transport Plan: Phase 2



Public transport

The street network should allow for good penetration and circulation of bus routes, linking with and extending existing services. The east-west strategic links and primary routes form the basis of new routes running through the local centres and residential areas.

Bus stops should be provided in locations such that all premises are located no more than 400 metres (equal to a five minute walk) from them. This 400 metre target will be achieved through the design of a well-connected grid of streets together with a network of interlinked footways. Bus stops should be located to allow passengers to board and alight safely and conveniently. Ideally they should also be situated near places of particular need such as local shops, health facilities and sheltered housing.

All bus stops will be required to have a bus stop flag and the provision of bus shelters should be positively considered for all locations and will be required wherever there are likely to be 'reasonable numbers of passengers' (15 to 20 per day).

To assist the bus in retaining their position on the highway and provide a convenient platform for boarding and alighting passengers, consideration should be given to the provision of Bus Boarders. There are two conventional types of bus boarder, full width and half width. The full width boarded offers the best solution for both bus and passenger access. The design and provision of bus boarders also provides increased opportunities for the provision of bus shelters and provides additional footway space for pedestrian flow.

To enable easy access, level boarding/egress and allow the bus to align parallel with the kerb, 'Kassel kerbs should be provided at bus stop locations.

The routes of five of the existing bus service could be extended or diverted to serve Lincolnshire Lakes; the existing services being Routes 31,32, 33, 34 and 12. Routes 31 and 32 have the potential to serve the northern areas of Lincolnshire Lakes; routes 33 and 34 could serve the central areas with route 12 serving the southern areas. New routes could also be introduced that access Lincolnshire Lakes from Doncaster Road and the de-trunked M181.

The public transport plan indicates the recommended bus routes and bus stop locations in Lincolnshire Lakes.

The extension of and the introduction of new services is likely to be phased. Phase 1 would be the extension of routes 33 and 34 to serve the Villages 1, 2 and 5 and the Football Stadium and District Centre. This reflects the proposals contained in the planning applications for the northern part of the Lincolnshire Lakes area. The route would loop around the primary street network to connect the village centres. A bus only link connecting with Scotter Road would also be provided as part of this phase.

The extension of route 12 and the introduction of a new express route would take place during Phase 2 of the public transport strategy.

The new express route will be expected to enter Lincolnshire Lakes via Doncaster Road and Scotter Road and, running via the primary road network, would serve villages 1,3,4,5 and 6 and their local centres together with the District Centre and the Football Stadium. The new route would provide a limited stop service between Lincolnshire Lakes and Scunthorpe railway station, town centre and the bus station via Doncaster Road.

Route 12 will be extended to enter the Lake development from Burringham Road and, via the primary road network, would serve villages 5 and 6.

A new bus hub through which all bus routes will pass should be provided as part of the District centre and football stadium complex. The bus hub will help to regulate the bus services and also provide crew facilities. Bus stops on all routes will be located so that no dwelling is more than 400 metres from a bus stop. Bus stops will be expected to have real time bus information and designed to provide easy access for all users.

The street network

The movement framework shows the creation of a network of connected streets that help make walkable neighbourhoods, and which provide legibility and variety. This provides travel choice for residents and visitors.

A strategic east west link is shown, connecting the villages with the M181 and Scunthorpe via Burringham Road. This will require the provision of new junctions and the improvement of existing junctions. This is part of the wider strategy to enhance access to the motorway network and relieve pressure on section of the road network.

A primary network of 'village connectors' then link with the strategic link and runs through the villages, forming the main central spine through which traffic, of all classifications will move.

The new street network within the Lincolnshire Lakes development area must create effective linkages between the new village centres and provide ready access to the wider highway network whilst enabling the villages to develop individual identities and maintaining the landscape and ecological quality of the area. It is thus important that the village connectors are not used as 'rat-runs' between Scotter Road and new junctions on the de-trunked motorway. In particular, the connector between Villages 3 and 4 could be seen as a 'cut-through'.

In response to the historic built form of the surrounding villages, as well as the landscape character, the movement network is based upon a fairly regular grid of streets. However, the village connectors also include a series of 'kinks'. This off-set street network will help break up the regularity of the grid but also reflect local street patterns. This, alongside the use of junction control measures and frequency of junctions with residential and other streets in the hierarchy, as well as design features such as continuity of enclosure, use of materials, parking and landscaping should lower speeds and limit the attractiveness of these routes as 'cut throughs'. The design of the network and junctions should reinforce Scotter Road and the east-west link as the main routes to and from the M181 and wider motorway network.

A mix of street types are accessed from the village connectors, each with slightly different responses to built form, parking, house types and landscaping. A mix of street types is encouraged as it will add variety to the villages.

The landscape and, in particular, network of drainage ditches, is a strong informant for the development of Lincolnshire Lakes. The street network seeks to integrate these, forming part of the overall green and blue infrastructure framework for Lincolnshire Lakes.

As noted above, the street network should also be supplemented by pedestrian and cycling routes which enable direct linkages between the lakes and villages, and provide significant recreational opportunities with minimal impact on the nature of the landscape surrounding them.

The de-trunked M181

In order to achieve access to the Lincolnshire Lakes development area from the strategic road network and reduce the severance caused by the M181 running through the centre of the development area, a significant section of the M181 Motorway will be de-regulated to remove its motorway status and allow it to become part of the local road network. This will be undertaken with the cooperation of Highways England.

To allow this to happen, two new roundabout junctions are required to be constructed allowing the current motorway to be divided into three sections; the southernmost roundabout will be constructed in the area where Burringham Road crosses the M181. The second northern roundabout will be constructed just to the north of the location where Brumby Common Lane crosses over the M181. Both roundabouts will provide the opportunity to provide access to the six villages and connections to Scotter Road which will allow the re-routing of traffic to enable better management of traffic flow and capacity on the local road network.

The southern section of the M181 between this southern roundabout and the M180/ M181 interchange will remain as motorway. The southern roundabout will also provide access to villages 2, 3, 4 and 6.

The section of the existing M181 between the two roundabouts will be reclassified and de-trunked to become an all-purpose road with a speed limit of 50-mph. The

northern roundabout will allow provide access to villages 1, 2, 5 and 6 and Scunthorpe United football stadium.

The northern section of the existing M181 between the northern roundabout and Doncaster Road will also be de-regulated and de-trunked to an all-purpose road with a 40-mph speed limit.

As work on the Lincolnshire Lakes scheme and elements with this progresses, the de-trunking of the M181 and delivery of new junctions along this will be subject to further discussion with Highways England.

Strategic junctions

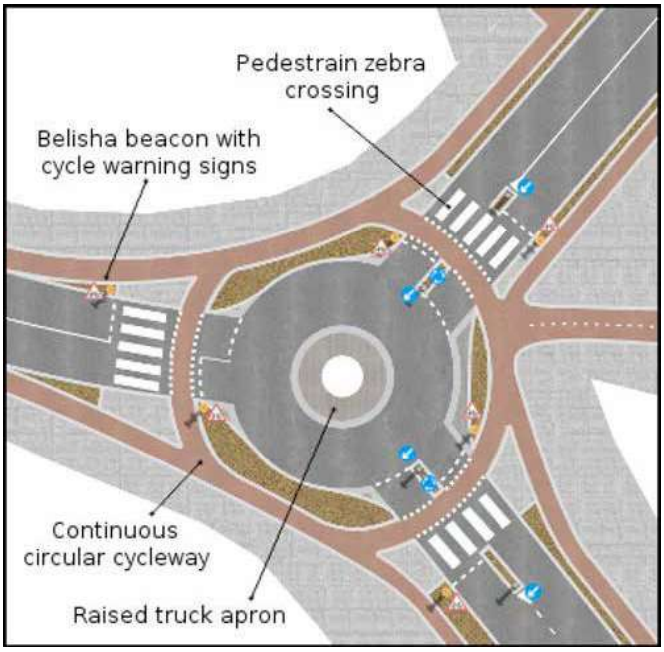
As described above, the proposed junctions on the de-regulated M181 will take the form of conventional large diameter roundabouts. The strategic junctions and principal junctions on Scotter Road will be required to safely accommodate pedestrians and cyclists; this is likely to be better achieved by the provision of traffic signal control with advance stop lines and Toucan crossing facilities.

The strategic junctions and junction on roads with a speed limit of 30-mph or greater will need to be design in accordance with the requirements set out the 'Design Manual for Roads and Bridges' particularly in relation to Stopping Sight Distances (SSD) and visibility splays. All other junctions should be design in accordance with the principals set out in 'Manual for Streets'. All junctions should be designed to safely accommodate the movement of the more vulnerable users (pedestrians, cyclists and the physically and visually impaired)

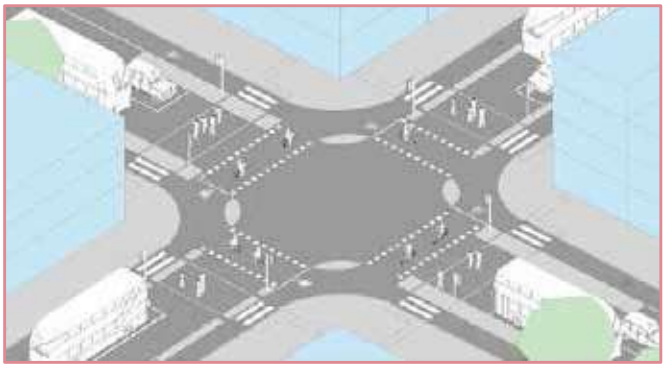
Safe and designated crossing points and facilities for pedestrians will need to be provided at all junctions. Junctions and particularly those on the strategic and primary routes will also need to:

- Facilitate all cycle turning movements, including right turns and turns from nearside segregated cycle infrastructure;
- Address left – and – right hook collision risk from turning motorised vehicles; and
- Be designed for all types of cycle.

The illustrations beside show design principles that might be used to accommodate cyclists at junctions on the strategic and primary road network within the Lakes.

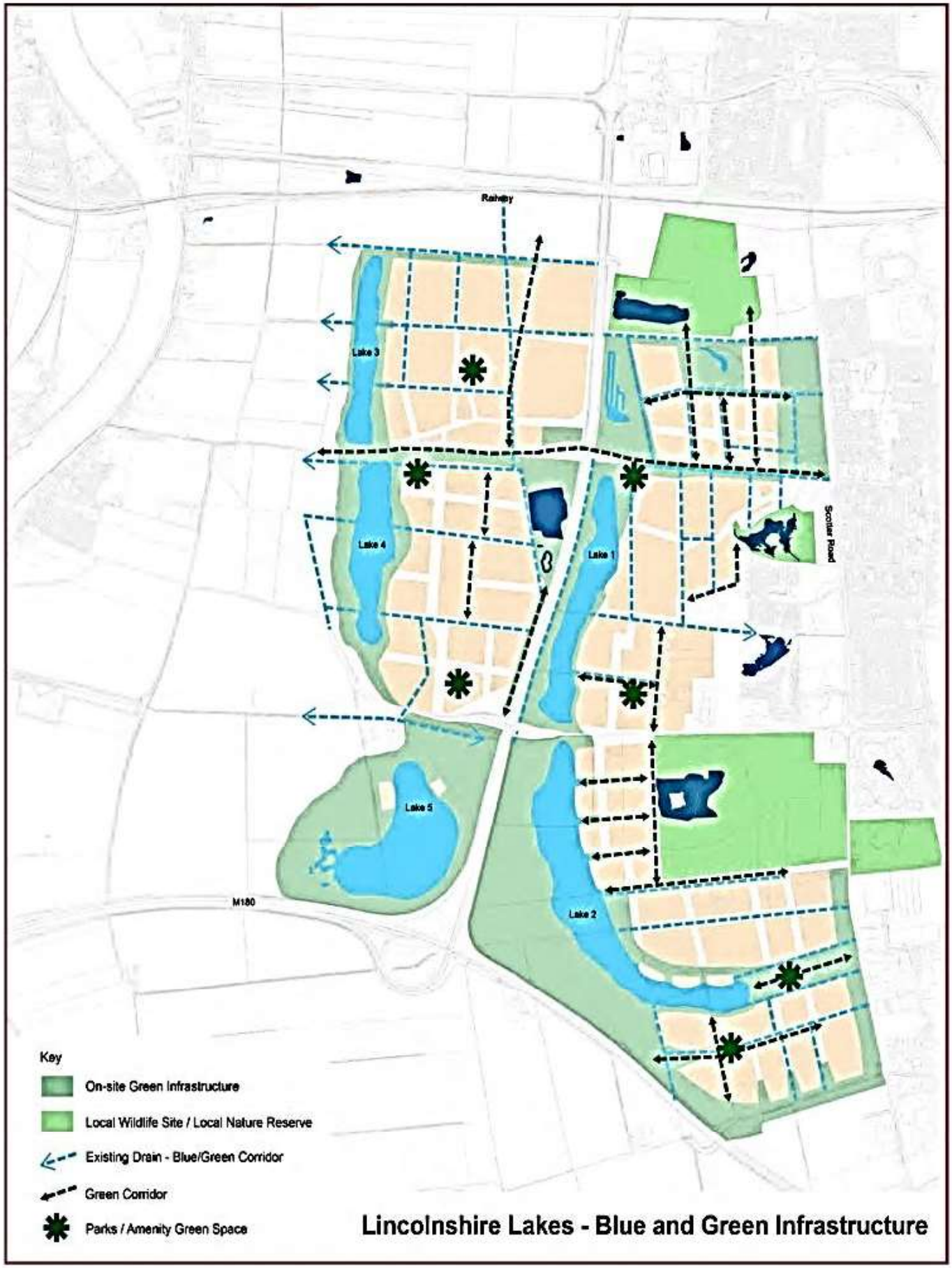


Above: Illustrative cycle and pedestrian friendly roundabout design



Above: Illustrative cycle and pedestrian friendly signal junction design

Lincolnshire Lakes Green and Blue
Infrastructure Framework Plan



Green and blue infrastructure framework

The Lincolnshire Lakes area has a number of existing green infrastructure assets including the areas of mature woodland along the Scotter Road corridor and the local wildlife sites to the east at Brumby Common West, Westcliff Lagoon and Ashby Decoy Golf Course providing a range of habitats for biodiversity. There is also a comprehensive network of drains to the fields across the site that links the east side over towards the River Trent in the west. There are some gaps in the connectivity of the green and blue resource particularly in the north-south direction.

The AAP envisages a connected multi-functional network of green and blue spaces for people and wildlife. The green and blue network should provide a number of social, economic and environmental benefits for Lincolnshire Lakes and should contribute to placemaking.

When planning and designing green and blue infrastructure the range of benefits should be considered including:

Economic

- Economic growth and employment
- Tourism and recreation
- Increased land and property values

Environmental

- Climate change adaptation and mitigation
- Protection and enhancement of the landscape and natural environment
- Conservation and enhancement of biodiversity

Social

- Community cohesion, life-long learning
- Quality of living and learning environment
- Increased health and wellbeing
- Recreation and leisure assets
- Creation of community resources

Flooding and drainage

The Lincolnshire Lakes site is currently subject to both tidal and fluvial flooding with a long history of flood alleviation and protection works dating back to the 19th century. These works have shaped both the form and function of the area with a network of linear drainage ditches controlling fluvial flooding which are in turn pumped out into the River Trent through the river's tidal defences.

To facilitate the proposed development it is necessary to strengthen the existing tidal defences and provide appropriate provisions for fluvial flood water. Within the previously submitted planning applications it has been proposed that extensive soft SuDS drainage features are provided together with a series of raised development platforms that will create new areas of land above the flood plain whilst concentrating flood water in more restricted areas of greater water depth. Five new lakes are proposed to supplement the area's flood water storage capacity and the development platforms are proposed to be created between the existing ditches which in turn would maintain and potentially emphasise the current subdivision of the landscape.

To create a safe, attractive environment which functions with the minimum of maintenance it is necessary to fully integrate the provisions for drainage and flood water storage and the designs of the development plots. By providing features that store water at different storm return periods it is possible to create landscape diversity, recreational amenity space and diverse ecological habitats which can all enhance the sustainability and public enjoyment of an area.

Significant opportunities exist to create a variety of interfaces between the development plots and the surface water features and thereby gain the maximum benefits for wildlife and ecological habitat creation, public and recreational access, and communal and private enjoyment.

Surface water drainage for the Lincolnshire Lakes development is to be provided based upon sustainable drainage principles. URS Infrastructure & Environment Ltd have analysed two drainage strategy options on behalf of North Lincolnshire Council and these are described within their report "Lincolnshire Lakes Flood Management and Drainage Strategy".

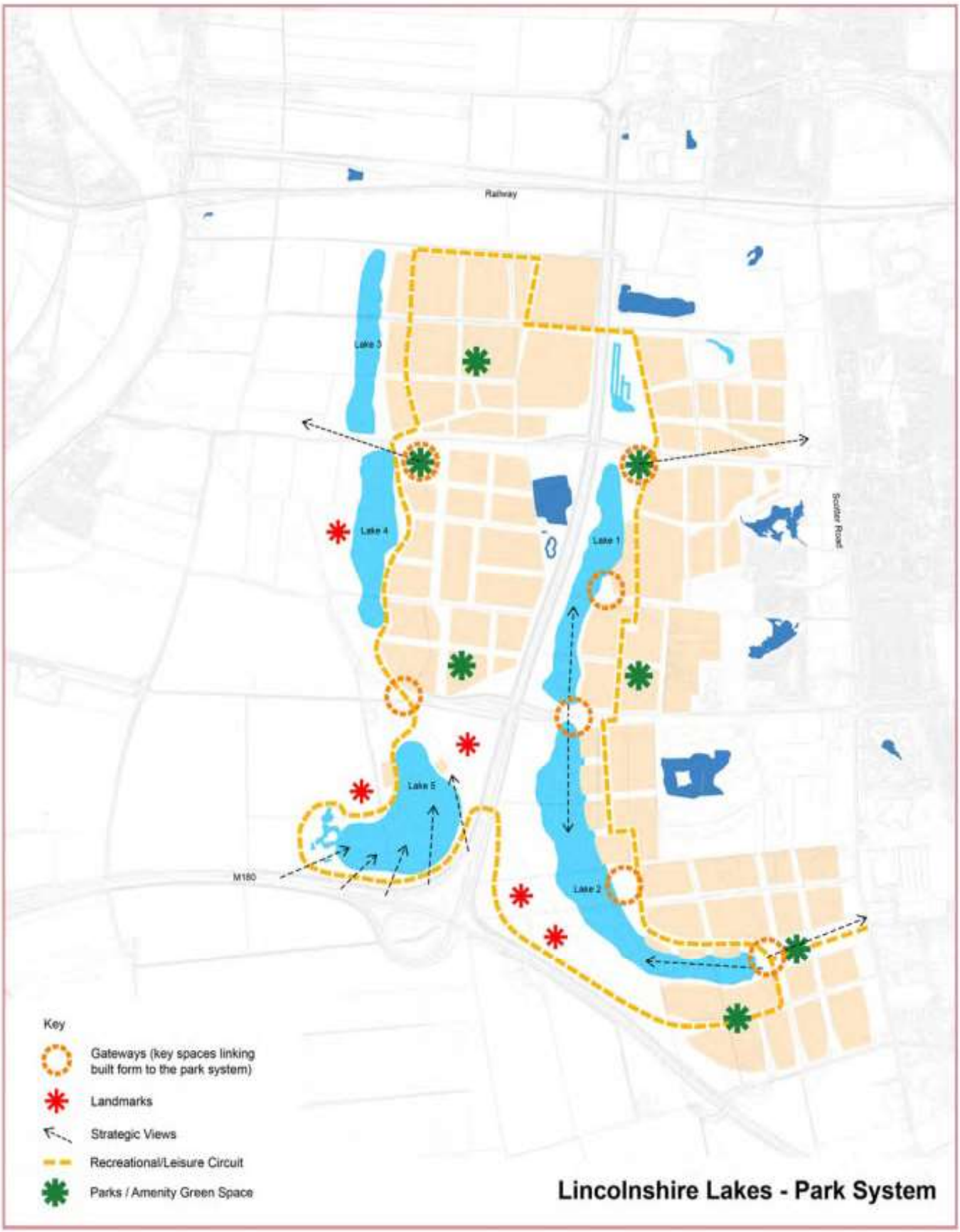
The risks of tidal and fluvial flooding from the River Trent are to be addressed through enhancements to the existing flood defences which are to be agreed with the Environment Agency and all other relevant statutory authorities together with land raising within the development area.

By providing enhancements and amendments to the existing ditch network water is to be conveyed into the series of new lakes (numbers 1 to 4) whilst maintaining and potentially emphasising the current subdivision of the landscape. Surface water is to be attenuated within these new lakes with discharge to the downstream ditch network from each lake restricted to the equivalent greenfield run off rate for the corresponding catchment area. Attenuation within the lakes will result in significant changes in water level within the lakes in addition to seasonal variations reflecting adjoining groundwater levels.

Within the villages to create a safe, attractive environment which functions with the minimum of maintenance it is necessary to fully integrate the provisions for drainage and flood water storage with the designs of the development plots. By providing features that store water at different storm return periods it is possible to create landscape diversity, recreational amenity space and diverse ecological habitats which can all enhance the sustainability and public enjoyment of an area. Significant opportunities exist to create a variety of interfaces between the development plots and the surface water features and thereby gain the maximum benefits for wildlife and ecological habitat creation, public and recreational access, and communal and private enjoyment. Notwithstanding the need to create landscape diversity through a range of surface water features, however, the overall design of these systems is to be such as to contain surface water without surface flooding in the developed areas for all storm events up to and including the 1 in 100 year plus climate change event and to control the discharge of water into the lakes so as to prevent adverse effects on the lake ecology and environments.

Above: The Watercolour development in Redhill, Surrey, where SUDs are integrated within the layout of development and form part of the character of the area

Lincolnshire Lakes Park System



Park system

'The composite landscape is the sum of the spatial framework created by framework, vegetation and built structures. It controls our unfolding experience as we move through a sequences of spaces and transitions'

(Robinson, 2004, the Planting Design Handbook)

More than 40% of the Lincolnshire Lakes area is devoted to blue and green infrastructure, which should be linked through a coherent and legible park system (see plan on facing page). This reflects North Lincolnshire's tradition of embedding 'green infrastructure' in its village footprint and the distinctive wooded ridgeline in the east. The introduction of a park system in the Lincolnshire Lakes area would have great presence and provide a memorable western approach to the Trent Vale.

The centrepiece of the park system are the lakes, each with their own distinctive focus of activity, footprint, lakeside spaces and setting. The lakes provide a sense of light, space and views and enable a distinctive environment for the park system and network of villages.

A number of gateways provide important spaces linking the movement network and different villages with the park system. They provide a 'window' onto the park system and intentionally draw people in for enjoyment and recreation. The gateways can be defined in a variety of ways and could include the use of public art.

Gateways associated with the lakes include that located on Burringham Road between Lake 1 and Lake 2. This would allow significant views north and south along the lakes for the pedestrian and cyclist, as well as providing glimpses of the lakes for those travelling by road. At the northern end of Lake 1, the south facing space would enjoy a sense of enclosure from the wooded area but with striking views both south along the lake and east towards the Trent Vales wooded ridgeline.

Other gateways should form part of the local centres, parks and green spaces next to the lakes and provide interesting views through their arrangement and design.

Landmarks should be provided within the park system and should comprise a mix of natural or built features that stand out from their near environment and which are visible from longer distances. A series of distinctive landforms around the southern lakes, planted or grassed, would provide interesting features above the otherwise flat landscape and help mitigate the adverse effect on views caused by the overhead power line. These would be seen by users of the motorway system approaching the Trent Vale and the varied topography would add value to the setting of the water spaces. These landforms could be created from the land that needs to be excavated to create the lakes.

A network of leisure and recreation routes for pedestrians and cyclists would allow movement through the park system, with the connectivity providing opportunities for a great variety of views, both near and distant. Open views from the motorway towards Lake 5 provide an introduction to Lincolnshire Lakes. Elsewhere, significant views of the lakes become available from the waterside gateway spaces and links to the wider Lincolnshire landscape, with views of the wind turbines to the west from Lake 4 and Brumby Common Lane.

Concept plans and guidance for the Lakes will be presented in the forthcoming Part B of this document.

Lincolnshire Lakes Green Space Hierarchy

Green space hierarchy

The green space hierarchy (see framework plan on facing page) considers the role and function of green and blue space across Lincolnshire Lakes and the importance of meeting standards of quantity, quality and accessibility. The green space hierarchy ensures that there is a sufficient range of green space to cater for the needs of people and nature.

The types of green space to be provided with specific standards for quantity, quality and accessibility are:

- Natural and semi-natural green space
- Amenity green space
- Parks and gardens
- Outdoor sports facilities
- Provision for children and young people
- Allotments

These types of green space should be provided in accordance with the standards of provision set out in the AAP. Where possible, sports pitches should be co-located with schools, allowing for economies of scale through the sharing of facilities such as car parking and maintenance/ management costs.

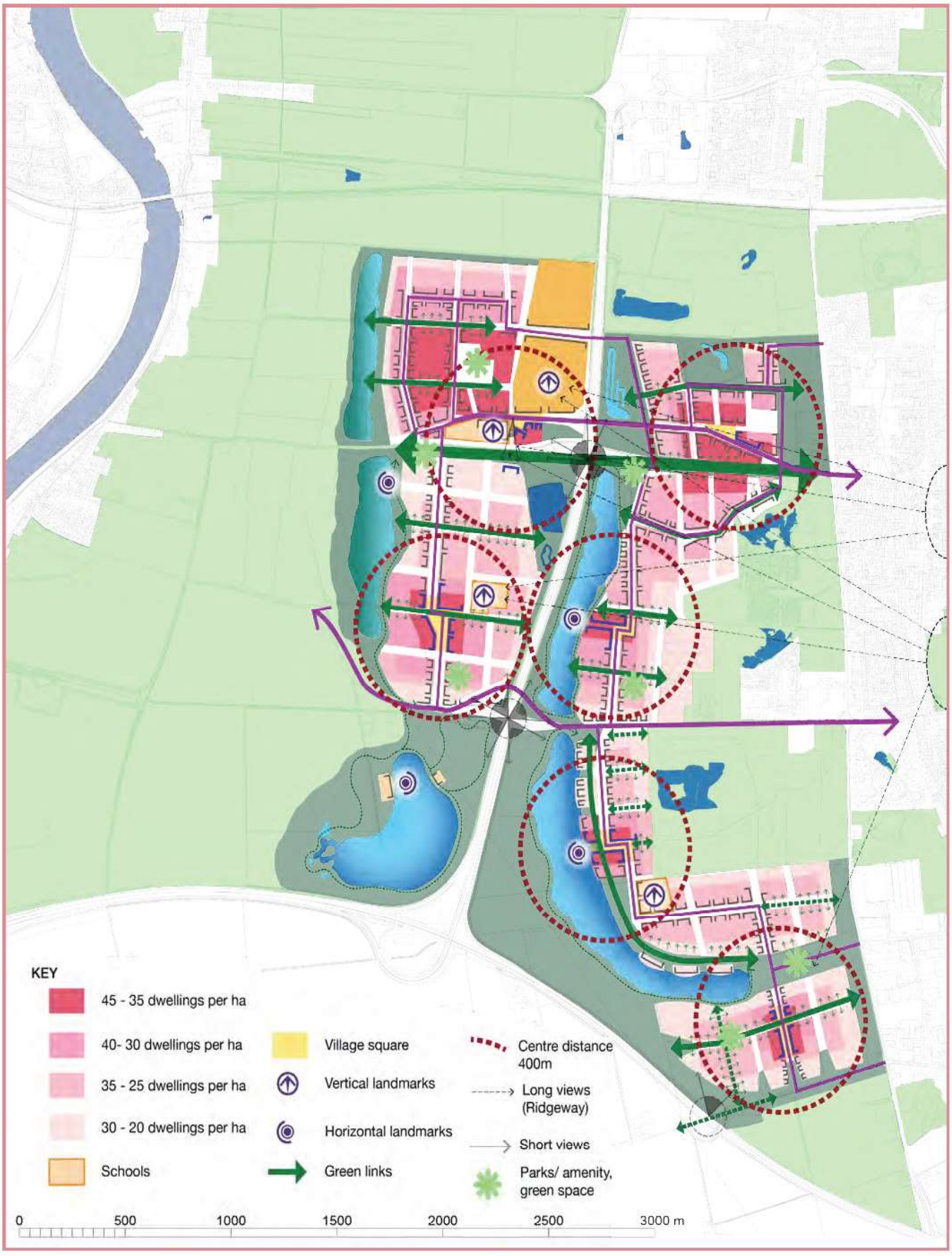
Other types of green space to be provided, but with no specific standards, are green corridors forming part of the overall green space network, and civic spaces typically found in the village centres.

Quality standards are based on the facilities and habitats needed for local people and wildlife. As an example, the provision of natural and semi-natural green space is to include broadleaved woodland around villages 1, 3 and 4, acid grassland around villages 1-4 and neutral grassland around villages 5 and 6.

Unusual for such a strategic development is the provision of an extensive lake system. Three of the lakes are to provide a range of water-based sports and recreation activities which provide an additional quantity and exceptional added value to the outdoor sports offer. Lake 3 and 4 are to focus on biodiversity needs and the footprint of the lakes add considerably to the quantity and quality of natural and semi-natural green space.

Accessibility is also key in the planning of green space and North Lincolnshire Council's specific policy for children and young people's facilities is to locate these within 600m of every home. This approach is to be achieved in Lincolnshire Lakes, although there is a preference in locating these facilities in the park system.

Lincolnshire Lakes Village Design Framework Plan



Village design framework

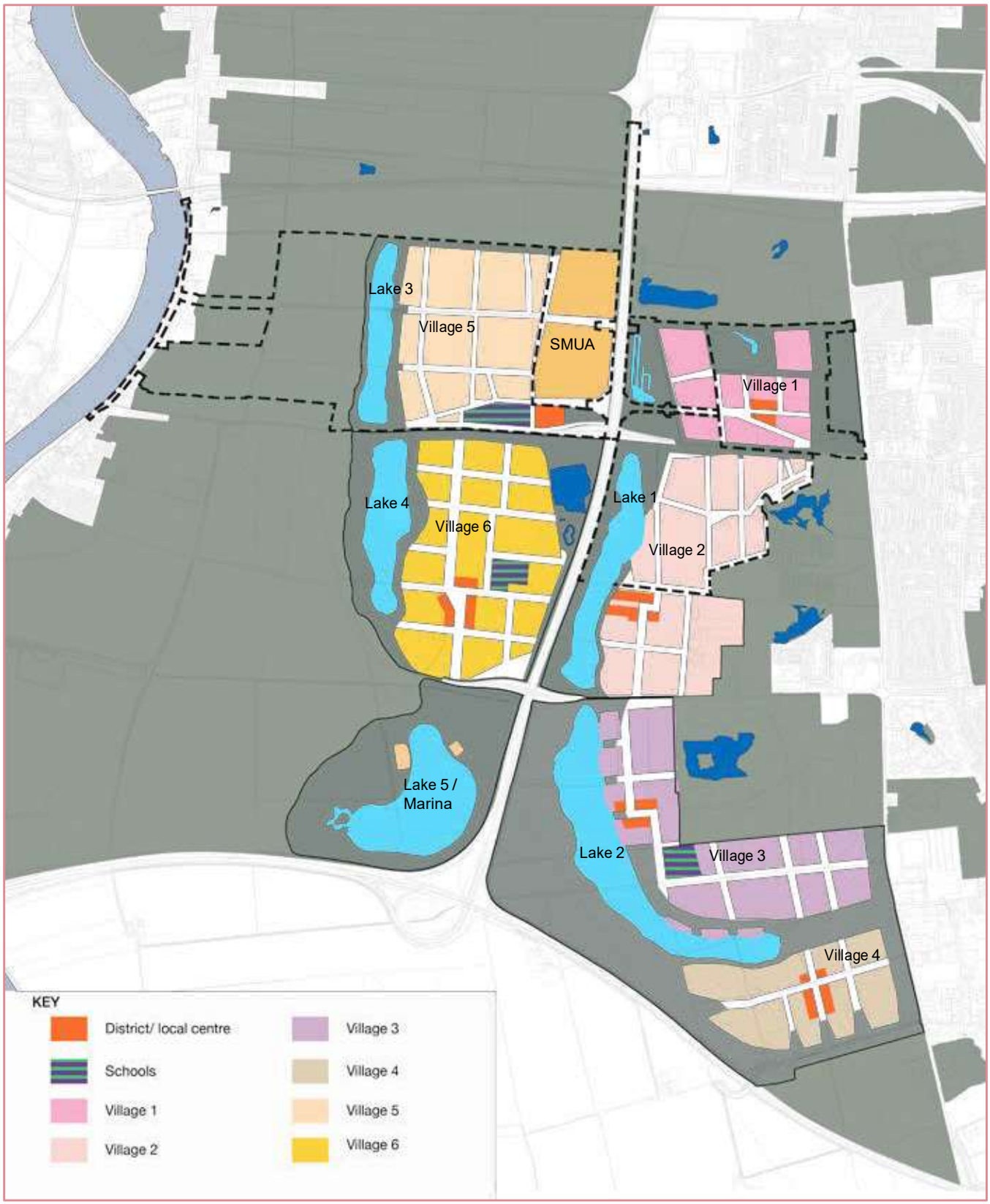
The Council is committed to delivering high quality new homes and places for people to live in. Character and distinctiveness are central to this. It is important that applicants demonstrate how proposals respond to the defining characteristics of the site and nature of the built form. The village design and character area framework plans illustrate a site wide response which should inform individual proposals.

The AAP anticipates the 'creation' of a series of villages, each with their own identity, centres and sense of place. Indeed, the broad structure of the area, which is influenced by the existing highways network, proposed green and blue infrastructure, lends itself to the creation of distinct places, but which should be bound together through landscaping and street design.

Villages around the Trent Vale and the wider area have a strong, recognisable character, with a rich variety of building forms and layouts. The village design framework seeks to capture this, responding positively, and sensitively, to local vernacular. This means:

- Locating local centres and services at the heart of each new village, based on traditional layouts around market squares or streets, and thus maximising walking catchments around these.
- Connecting new development areas positively to each other, to the wider countryside and to the existing built area, enhancing access for pedestrians and cyclists.
- Creating a clear transition in character, with more 'village' forms focused around key centres and nodes, and becoming looser and less urban to the village edge. This lends itself to a more orthogonal block structure in the village centres, moving to a softer and more informal, organic arrangement to the village edges.
- Providing direct and legible street networks between the centres, residential areas and new open spaces, including promoting a strong frontage along key streets and spaces.
- Integrating landscape and sustainable infrastructure within a network of east west green streets incorporating swales and SUDs that both create a high quality and locally responsive public realm, but which also effectively mitigate flooding and drainage issues.
- Treating the lakes in different ways, reflecting their leisure, flooding and ecological functions, with special points along these where development comes to the waters edge.
- Using a network of green fingers and spaces to help create separation between the villages.
- Integrating local landmarks within the village centres and at strategic points along the lakes to aid orientation and legibility.

Lincolnshire Lakes Character Area Framework Plan



Character area framework

Character should be informed by the locally distinctive pattern of development and landscape. New development in the Lincolnshire Lakes area should respond to the site and wider setting, including:

- *Responding to the land form.* The study area is relatively flat, with regular drainage ditches and field boundaries. The geometric pattern formed by the land should be reflected in the layout and structure of development. The rising land beyond Scotter Road might provide an opportunity to introduce new, sensitively located landforms that provide variety.
- *Integrating new development into the landscape.* Existing areas of woodland, planting and species should be integrated within the layout of the development area. Green fingers separating the villages and taking the form of green streets within the villages can make this connection to the wider green network.
- *Responding to local building forms and patterns of development.* The form of the historic villages should be reflected in the Lincolnshire Lakes, with higher density, more compact central areas, narrow plots and streets that are well defined.
- *Considering existing building heights, views and topography.* The villages should contain buildings that are in the region of two-three storeys high, reflecting the local built form. Taller buildings should be incorporated within the centres and at important gateway or landmarking locations, such as at the Lakes, to aid orientation and legibility.

Above: Proposals for development should be informed by the positive features of existing settlements local to the area, including the scale and massing of buildings, and the green infrastructure network.

The aspiration for Lincolnshire Lakes is to create a series of villages in the landscape. These should display the qualities of good, traditional settlement forms, including walkable and connected local centres, a clearly defined network of streets and spaces and mix of housing types. Design cues for the villages should be taken from building typologies, materials and features present in the surrounding villages. The built form should also vary according to location and response to the landscape, comprising both the new lakes, green spaces and existing network of ditches that form part of the local character.

Opportunities for new areas of character exist within each of the villages, particularly in the local centres and at the interface with the lakes. For example:

- Lake 1 will have a sports focus, being designed for use as a location for holding triathlons. The local centre and sports facilities in Village 2 should be linked to the waterside environment.
- In Village 3, potential exists to maximise the southern aspect presented by Lake 2 to integrate new waterfront properties.
- In Village 6, Lake 4 will take on an ecological function. Development should respond sensitively to the habitats that will be created.

Further information on character, particularly around the form and layout of local centres, development grain and density will be contained in the forthcoming Part B of this document. More detail on the Lakes and nature of the green spaces, as well as street typologies, will also be presented in Part B. Together, these will all contribute to the character of new development in the Lincolnshire Lakes.

Above: Housing, Winterton

Above: Building materials, Burton upon Stather

Above: View from the banks of the River Trent, Burringham

APPENDIX A: Ecology baseline

Ecology baseline – Lincolnshire Lakes

A high level ecological desktop study of the Lincolnshire Lakes Strategic Area (LLSA) and environs has been undertaken to gain an understanding of the existing ecological resource and to inform the design guide recommendations.

Method
The resources that have been accessed/reviewed as part of this study are presented in Table 1.

Table 1: Sources of Ecological Information

CONSULTEE/SOURCE OF INFORMATION	NATURE OF INFORMATION
Multi-Agency Geographic Information for the Countryside (MAGIC) Map	Statutory protected sites and priority habitat inventory
Where's the Path?	Satellite & OS imagery
Google Maps	Satellite imagery
Bing Maps	Satellite imagery
Section 41 Natural Environment and Rural Communities Act 2006 (S41)	Habitats and species of principal importance for the conservation of biodiversity.
Data files provided by client	From the Mapping CD folder: - Local Nature Reserves - Tree Preservation Orders - Wildlife Reserves From the Tibbalds data: - SNCIs - exSNCIs - LWSs - cLWSs
Lucent ES Biodiversity Chapter 12 and associated Appendices	Baseline information for the surveyed area

Results

Protected Sites
The Humber Estuary Site of Scientific Interest (SSSI)/ Special Area of Conservation (SAC)/ Ramsar site lies approximately 1km to the north west of the LLSA and is the closest statutory site.

Non-statutory designated sites which are adjacent to the eastern boundary of the LLSA are:

- Brumby West Common Site of Nature Conservation Interest (SNCI)

Pine plantation with some scrub, reedbed, deciduous woodland, grassland, arable and tall herbs;;

- Westcliff Lagoon Local Wildlife Site (LWS)
  Woodland, standing water, marsh/fen with some scattered/dense scrub, damp grassland, heathland and standing/fallen dead wood;
- Ashby Decoy Golf Course LWS
  Acid grassland with some woodland, scattered scrub, neutral grassland, standing water, mosses, lichens, standing/fallen dead wood and holes in trees;
- Silica Lodge LWS/Local Nature Reserve
  Semi-improved neutral & acid grassland, standing water with some plantation & wet woodland, scattered/dense scrub, semi-improved calcareous grassland and marsh/fen; and
- Yaddlethorpe Fish Ponds SNCI
  No citation available.

Non-statutory designated sites which are further afield and not adjacent to the LLSA:

- Gunness Common LWS (approximately 1km north)
  Unimproved acid grassland, purple moor grass and rush pasture, acid peatland with some semi-natural woodland, scattered scrub and running water;
- Land Adjacent to johnson's Transport LWS (approximately 1.5km north east)
  Acid grassland, woodland, scattered & dense scrub with some damp grassland, varied sward height, anthills, bare ground and seasonally wet/damp areas;
- Atkinson's Warren LWS/LNR (approximately 1.8km north east)
  No citation available;
- Brumby Wood LWS/LNR (approximately 500m north east)
  Semi-natural woodland, Semi-improved neutral grassland, with some plantation woodland, standing/fallen dead wood and veteran trees;
- Ridge Walk LWS (approximately 750m east)
  Semi-natural woodland with some semi-improved neutral grassland;
- Frodingham Railway Cutting LWS/LNR (more than 1km north east)
  Semi-natural woodland, scrub, unimproved neutral grassland, unimproved calcareous grassland, damp grassland/marsh/fen with some standing water, good structural diversity, anthills, steep slopes, southfacing slopes, areas with frequent/prolonged flooding and seasonally wet/damp areas;
- Butterwick Hale and Common LWS (approximately 750m south)
  No citation available; and
- West Common North Road SNCI (approximately 1km south)
  No citation available.

Key habitats and species

Key habitats and species within the area have been gleaned from review of the Lucent Biodiversity chapter and associated Appendices. Whilst these generally relate to their area of study, the intensive agricultural use of the area and uniform nature of the habitats present suggest that this information can easily be extrapolated to the LLSA.

Those which are important to accommodate within the design strategy are highlighted in red.

Habitats which are English Priority[1] and Lincolnshire Biodiversity Action Plan include:

[1] Section 41 habitat of principal importance under Natural

- lowland mixed deciduous woodland – mainly comprises silver birch, pedunculate oak, grey willow and Scot's pine
- hedgerows – hawthorn dominated with some elder and blackthorn and rarely dog rose, apple, wild pear. Generally unmanaged outgrown and gappy so opportunities to bring back into management and to create new diverse hedgerows
- lowland dry acid grassland - Common bent with indicator species such as sheep's sorrel, heath bedstraw, heath dog-violet, heath milkwort and common stork's-bill.
- Standing water/ dry ditches/ running water (LBAP – Rivers, Canals and drains/ IDB BAP – Drains and Ditches) – range of waterbodies ranging from choked and unmanaged to heavily managed by IDB. Main species common reed, reed sweet-grass.

Other habitats include:

- Scattered scrub outside of woods and hedges is scarce and comprises elder, dog rose, bramble, hawthorn, grey willow and goat willow. Scattered gorse and broom are also occasional.
- One pond in the area considered a semi-permanent waterbody with seasonal elements as it often dried out.
- Poor semi-improved grassland and tall ruderals along drains.

Notable species:

- Opposite-leaved pondweed (recorded in several ditches) which is listed as Vulnerable on the Vascular Plant Red Data List for Great Britain
- Beaked tasselweed, a species classed as Local in Great Britain (i.e. recorded in 5% or less of the 10 x10 km squares), was also recorded from the more westerly sections of the Warping Drain
- Two species listed in the grouped dragonfly and damselfly action plan in the Scunthorpe IDB BAP were identified (common blue damselfly and large red damselfly).
- very low numbers of smooth newts (a Lincolnshire BAP species)
- high numbers of common toad (a S41 and Lincolnshire BAP species)
- very low population of Common Lizard and potential for low densities of grass snake
- 30 species breeding birds of conservation concern. Key are grey partridge, skylark, yellow wagtail, dunnock, whitethroat and reed bunting
- Site of low value for spring/autumn passage migrants and wintering birds, no SPA species (particularly lapwing/golden plover) in significant numbers.
- 4 schedule 1 birds – avocet, marsh harrier, peregrine, barn owl; but use of site not significant
- At least seven species of bat positively recorded either foraging or commuting on the Site : Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared, Noctule, Leisler's, Daubenton's and a further unidentified Myotis sp. Three of the species identified (Brown Long-eared, Noctule and soprano Pipistrelles) are listed under the S41. All species of bat recorded are included in the Lincolnshire BAP and they receive further conservation through a grouped action plan prepared under the Scunthorpe IDB BAP.

  Habitat features of greatest value to bats were recorded east of M181, around the margins of the plantation woodland at Brumby Common West, connecting hedgerows and tree-lines and the mature semi-natural broadleaved woodland and wetlands associated with Brumby Common and Westcliff Lagoon LWS. It is likely that Ashby Decoy Golf Course LWS would also provide suitable foraging and commuting habitat.

Environment and Rural Communities Act 2006

- High population to west of M181 of brown hare – S41
  Incidental sightings of brown hares were made during the Lucent surveys, within the large arable fields of M181 and north of Brumby Common Lane. Young cereal crops provide a potential food source and adjacent woodland blocks, long, rank grassland along field drains and hedgerows provide suitable habitat for sheltering hares. It is likely that brown hare will also be present in the wider LLSA to the west of the M181.
- Moderate population of water vole - WCA Sch 5 and S41. Area could be a regional stronghold.
  The Lucent studies indicated that suitable habitat for water voles was found across the drainage network within their study area and presence of this species was confirmed at various locations north of Brumby Common Lane (in the form of burrows, latrines as well as sightings of the animals themselves on several occasions). The majority of these records were associated with the Earl of Beauchamp's Warping Drain although presence was also confirmed on a number of other main drains. It is likely that the system of drains in the LLSA will also be suitable for water voles and that they will be present at other locations within this area.
- Water shrew of some conservation interest
- No evidence of otter but they could be accommodated in design.
  The Lucent studies indicated that habitats along the River Trent, as well as potentially local fishing lakes and Westcliff Lagoon LWS could potentially support otters. Habitats within the study area itself were considered sub-optimal for Otters due to lack of suitable aquatic habitat as well as sufficient cover for lay-up and holts. However, some of the main drains, including the Earl of Beauchamp's Warping Drain, could potentially be used by otters as part of wider territories, and as a corridor for movement.

Aquatic and terrestrial wildlife corridors

Review of satellite imagery enabled an assessment of the presence of aquatic and terrestrial wildlife corridors within and around the LLSA. The following corridor features have been mapped:

- Strong corridor features (groups of trees/woodland)
- Moderate corridor features (semi-natural grassland)
- Weak corridor features (intermittent trees or shrubs)

Habitat connectivity is strongest down the eastern side of the LLSA where the majority of protected sites exist. Both aquatic and terrestrial connectivity is more limited in the central and western parts of the LLSA.

It is recommended that north-south and east-west aquatic and terrestrial links are strengthened and enhanced within the LLSA to improve the ability for wildlife to move throughout the landscape and to join up isolated pockets of habitats.

APPENDIX B: Archaeology

Lincolnshire Lakes, Archaeology Notes

a) There are no designated heritage assets within the strategic site boundary.

b) There are 14 non-designated heritage assets recorded within the strategic site boundary; 10 are in the Historic Environment Record, and 4 on the National Monuments Record. These are shown below in the table:

TEP ID	HER Ref	NMR Ref	Name and Description	Easting	Northing	Period
1	7767		Find spot. Flints, found on Brumby Common at some time before 1931	486000	410000	Neolithic
2		60808	A collection of Neolithic stone axes from the Bottesford area was in the possession of a Mr Max Peacock about 1898. Scunthorpe Museum holds a substantial portion of the Peacock collection, but it is not clear which items, if any, are the axes referred to above.	487000	407000	Neolithic
3		60769	A Neolithic polished flint axe or adze blade from Brumby Common, Scunthorpe is in Scunthorpe Museum	486000	409000	Neolithic
4			Huggate Archaeological Excavation 1853. Bronze Age barrow excavation. Journal of the British Archaeological Association 9, 1854.	486550	409530	Bronze Age
5	1042		Find spot. A wooden raft, possibly Bronze Age, found in the Yaddlethorpe Grange Farm area, 1815. Yaddlethorpe Grange Farm provenance. "Very primitive wooden raft fastened together with wooden pegs found about 1815 on a sandhill then called Greenhoe ... the owner of the property used the greater part of it for farm buildings which he erected on the sandhill". (de la Pryme, 65n.; Dudley 1949, 128). Enquiries yielded no further information, 1976.	486700	407000	Bronze Age
6	24680		Site of warping drains, Grange Farm. Soilmarks of a warping drain network, visible on aerial photographs in the Grange Farm area.	486300	407200	Post medieval
7	24681		Site of warping drains, Warp Farm. Soilmarks of a large warping drain network, visible on aerial photographs in the Warp Farm/Scunthorpe Golf Course area.	485790	408310	Post medieval
8	22491		Warping drain. A warping drain and a possible warping compartment, visible on aerial photographs. A set of linear cropmarks in a roughly square shape.	485400	409400	Post medieval
9	24683		Site of probable warping drains. Soilmarks of a probable warping drain network, visible on aerial photographs in the Brumby Common area	486860	409340	Post medieval
10	24682		Earl Beauchamp's Warping Drain. The remnants of a large 19th century warping drain, partly extant on Ordnance Survey mapping. Triple-ditched sections are visible as soilmarks on aerial photographs, Brumby Common West area.	484610	410140	Post medieval
11	10812		Warping Drain. Linear cropmarks, representing 19th century warping drains.	485900	410200	Post medieval
12		60777	A raft of very primitive construction, the pieces fastened together with wooden pegs, was found about 1815 at the foot of sandhill called Greenhoe' on Yaddlethorpe Grange Farm. The timber was in good condition and is said to have been used by the farmer for the erection of farm buildings on the sandhill. The site is no longer known.	486750	406820	Post medieval
13	22492		Warping drains, visible as cropmarks to the east of Burringham. Double ditched.	485600	408600	Modern
14	18441		Site of WW2 decoy, north of Grange Farm. A Second World War 'Permanent Starfish' bombing decoy, designated SF24C, was located in area SE 849 096. It was constructed in April 1941 to deflect enemy bombing from Scunthorpe. It is referenced as being in use between 01st August 1941 and 8th April 1943. Further 'Starfish' bombing decoys for Scunthorpe were located at Risby (SE 929 158) and Twigmoor (SE 921 058). Aerial photography shows that by 1990 the site had been given over to agricultural use and no features of the decoy survived.	485100	409600	Modern

The attached map shows the location of each asset using the TEP ID number for reference.

Summary of key factors:

1.

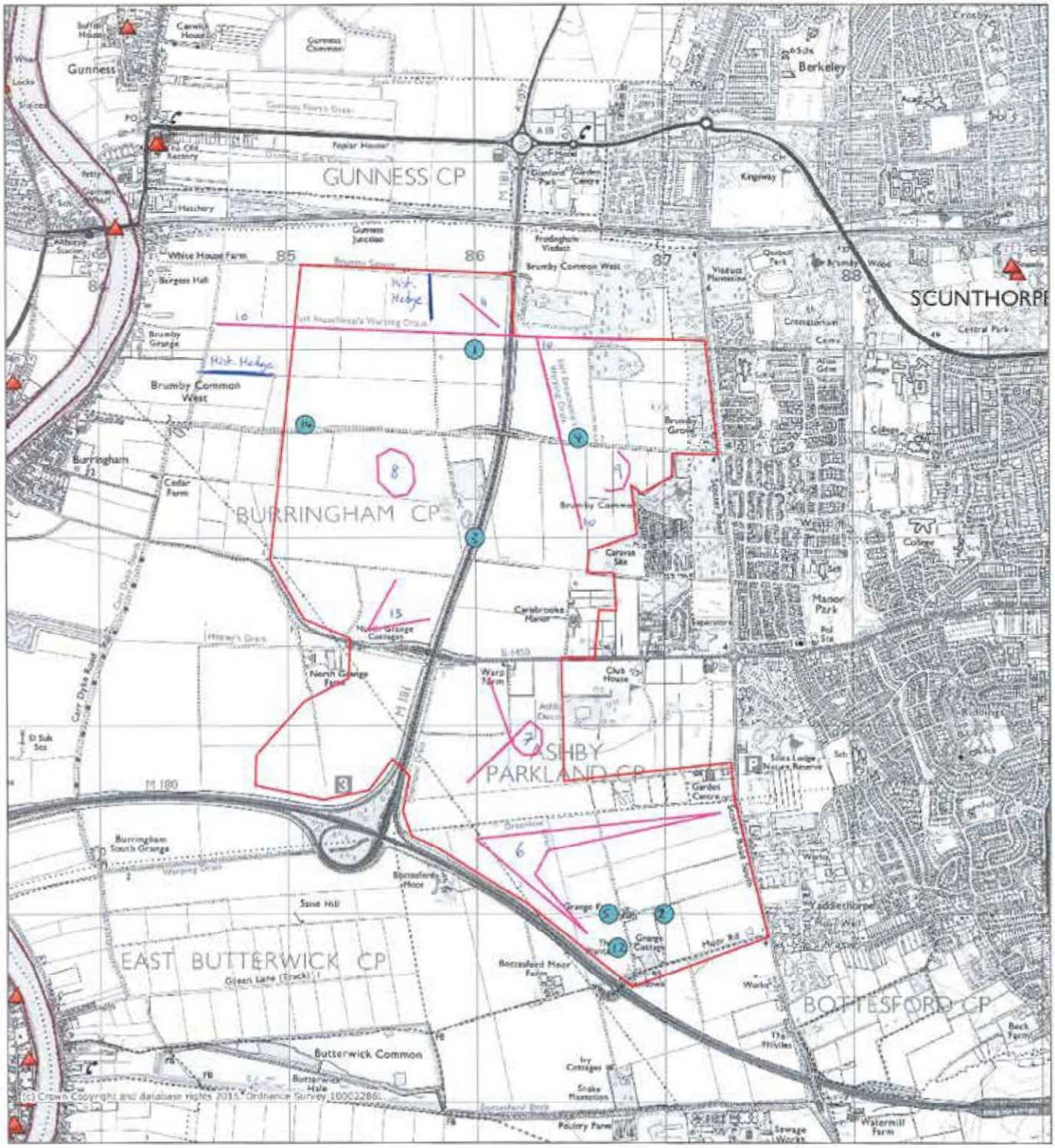
- There are records of human activity and funerary remains within the site boundary from the prehistoric period.
- There was an 1853 excavation of a Bronze Age (2,600-700 BC) barrow (prehistoric grave-type site).
- The Lucent Historic Environment Assessment notes that there are no traces of this barrow from air photography or from site visits.
- The extent of antiquarian investigation and the current condition and survival of this barrow, or of any others which may have existed in the vicinity, is not known.
- It is likely that the 19th century excavation only looked at part of the feature and that the asset still holds evidential value.
- The presence of the asset within this landscape means that it has a **high potentia**l to contribute to regional research objectives and is therefore considered to be of **Medium Significance**.
- It is likely that the county archaeologist will want to see some level of mitigation in order to identify unknown barrow locations.

2.

- The post medieval land improvement drains ('Warping Drains') seen in the historic record, on mapping and in some case still present are the most pervasive remains within the site boundary.
- These relate to the agricultural practice of managing land drainage post-flooding which would direct water back to the river, whilst capturing warp deposits for land improvement.
- The large Earl Beauchamp's Warping Drain is still seen in use in the landscape.
- It is possible that there would be finds within these drains from the post medieval period.
- Any proposed impact on these drains would require prior consultation with the country archaeologist.

3.

- Some of the boundaries within and around the proposed development area are considered to be historic hedgerows. Should any works require breaching or removing of a historic hedgerow, mitigation may be required.



legend

- Scheduled Monuments (England)
- Buffer Zone
- World Heritage Site
- Listed Buildings (England)
- Registered Battlefields
- Registered Parks and Gardens (England)

Projection = OSGB36
xmin = 481600
ymin = 406300
xmax = 490700
ymax = 411300

Map produced by MAGIC on 22 July, 2015.
Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGIC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details of information may be [illegible] this stage.

This document was prepared on behalf of North Lincolnshire Council by Tibbalds Planning and Urban Design in association with Campbell Reith and The Environment Partnership. Support was provided by the ATLAS team at the Homes and Communities Agency.

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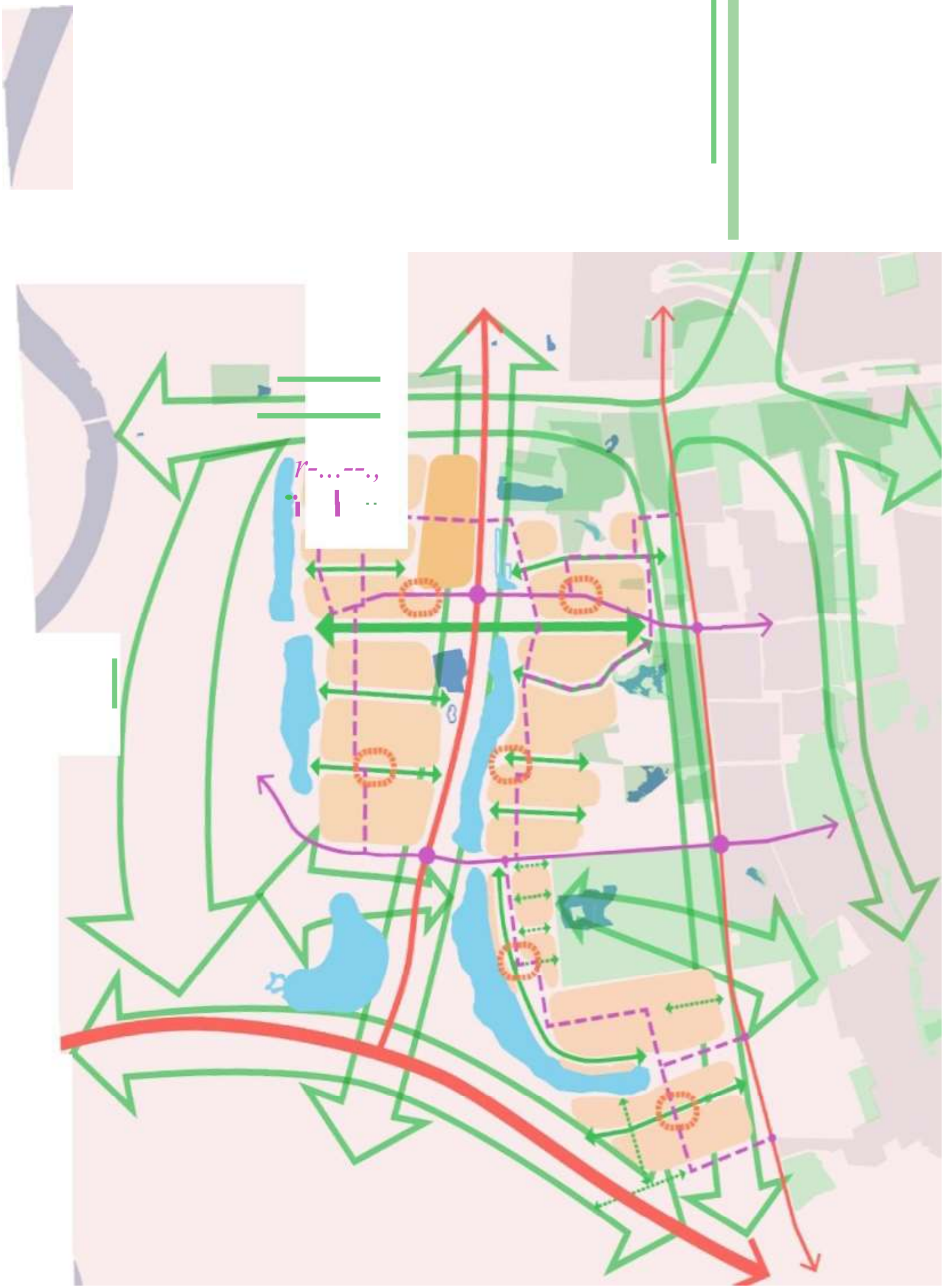
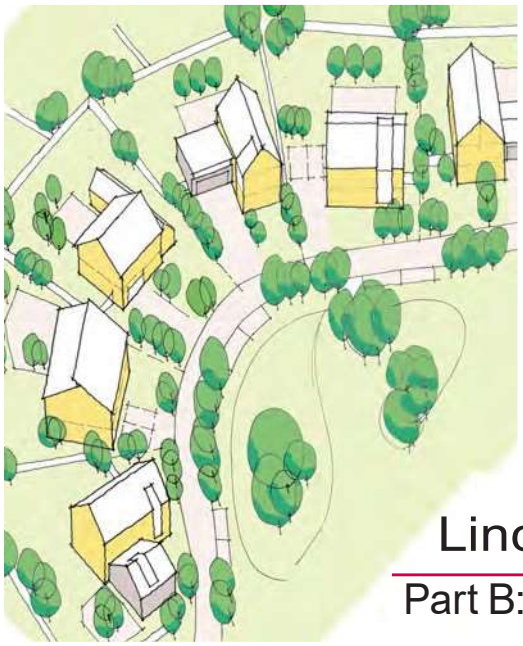




Lincolnshire Lakes: Strategic Design Guide

Part B: Village and Lake Design Guidance, November 2016

NORTH LINCOLNSHIRE COUNCIL

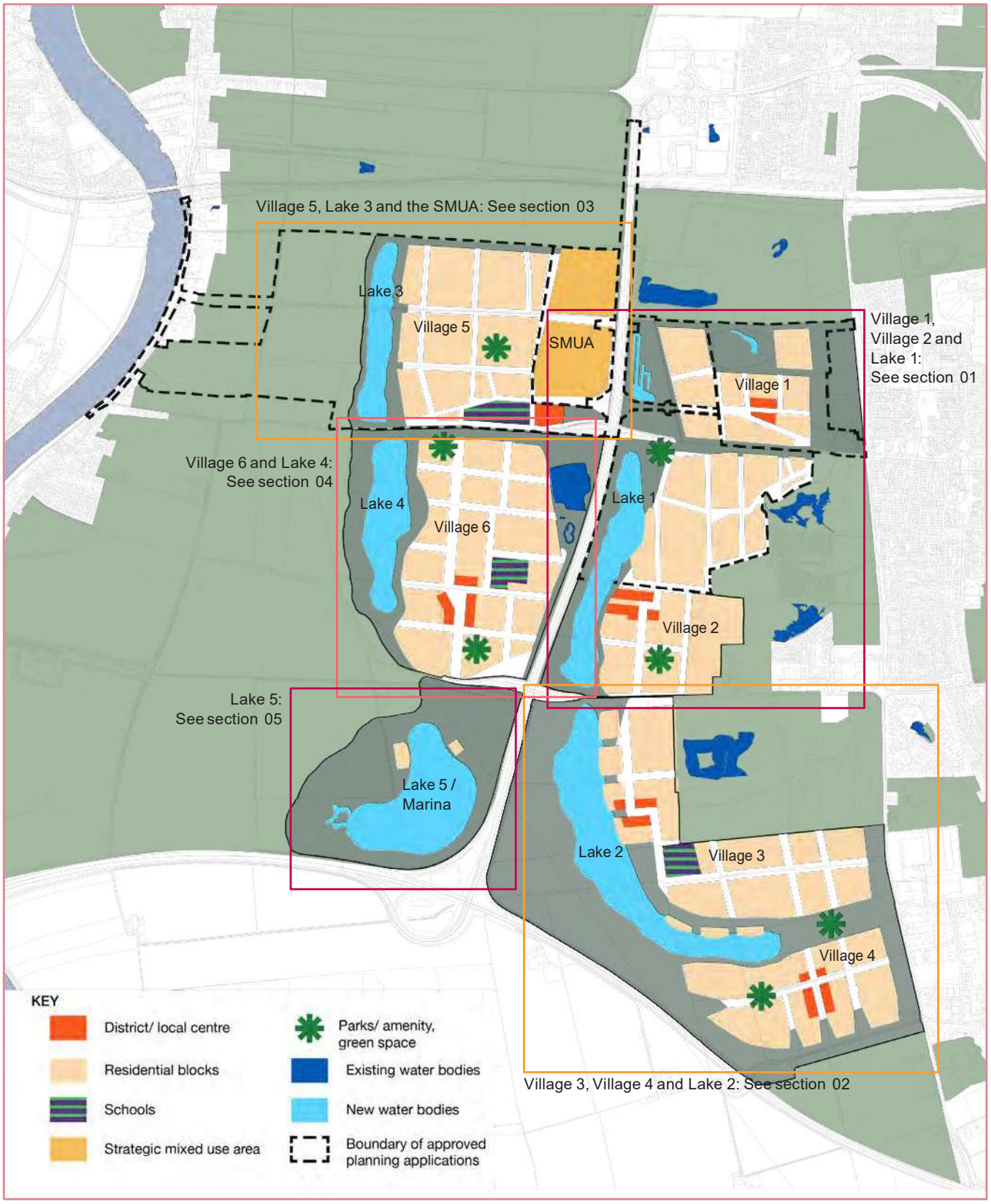
www.northlincs.gov.uk

Note

The strategic design guidance presented in this document reflects the development boundaries of planning applications for the northern part of the Lincolnshire Lakes area, covering Villages 1, 2 and Lake 1, and Village 5, the Strategic Mixed Use Area (SMUA), and Lake 3. The boundaries between Villages 1 and 2 are thus slightly different to those shown in the Lincolnshire Lakes Area Action Plan (AAP). Should the current applications not be implemented then scope may exist to review the boundaries and development areas, reconsidering their design and layout to reflect the village boundaries indicated in the AAP. Similarly, design guidance for the SMUA is based upon the planning application for the area made by Scunthorpe United Football Club. In the event that the application is not implemented an alternative scenario should be explored. This document includes an alternative option for the area, reflecting the aspirations of the AAP and previous planning applications for the area submitted alongside those for Villages 1 and 5.

Contents

Lincolnshire Lakes: document referencing to village and lake design guidance



PART B: Introduction

Following the framework plans outlined in Part A, this part of the Strategic Design Guide now presents more detailed guidance relating to the villages and lakes.

Information is presented on a village by village and lake by lake basis, with key design principles drawn out for each of these. Guidance and principles for the villages and lakes are grouped where appropriate, responding to the ordering in the Lincolnshire Lakes Area Action Plan and the dynamics between each village and lake. Lake 1 for example is related to both Village 1 and Village 2. These three components are thus presented together in one section. These groupings are presented in the plan on the facing page.

Following this, more general guidance and principles are then presented, relating to matters such as building heights, residential block typologies and street types.

Applicants should use this information to inform the key structuring principles within emerging proposals for development. This should be combined with the wider guidance contained in this strategic design guide to prepare a finer grained response that starts thinking about how the block structure should be further broken up with additional routes and streets running through these, the arrangement of buildings within these, the distribution of parks and play spaces.

This part of the strategic design guide concludes with a section that outlines the design expectations during the application process.

Above: Village 1 key design principles

01. Village 1 and 2, and Lake 1

Village 1

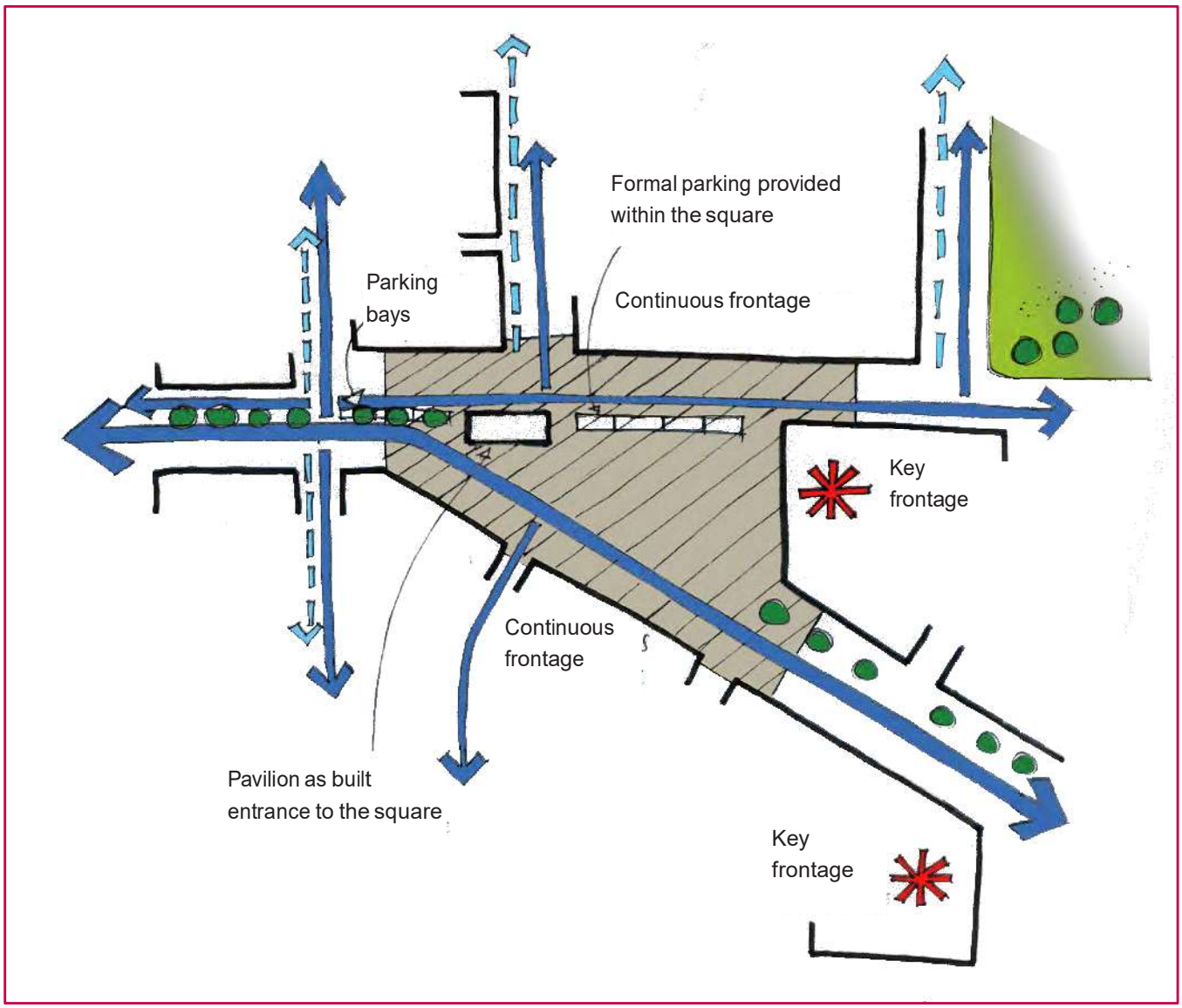
The strategic guidance presented for this village reflects the parameters within the planning application granted permission for this area. Should this application not come forward the Council will seek future proposals to reflect the key design principles outlined below and as indicated on the plan on the facing page. This village acts as a 'key link' between Scunthorpe and across to the de-trunked motorway, proposed new football stadium and Village 5. The village also has a strong waterfront setting, benefiting from views across to Lake 1.

Village 1 character drivers and features:

- Key connection from Scotter Road to the de-trunked motorway, strategic mixed use area and village 6.
- Network of green fingers with integrated drainage.
- Segregated east-west cycle routes in green setting along route of current Brumby Common Lane.
- Network of formal green squares and spaces.
- Development formality to street network.
- Proximity of development to waterfront.

Key design principles

1. Local centre alongside primary route, with strong frontage around this.
2. Formal square arrangement around existing woodland.
3. Key buildings located at village gateway / end of long distance views.
4. Green finger along Brumby Common Lane incorporating drainage ditch, pedestrian and cycle links. Overlooked with strong frontage from residential properties.
5. Local green space enclosed and fronted by residential development.
6. Looser, informal arrangement and street frontage at village edge, with varied setbacks and larger building plots.
7. Green buffer / finger to south of village, allowing for separation to village 2.
8. Key building framing green space and waterfront.
9. Primary route takes the form of a green street in this location, incorporating a drainage ditch and landscaped strip alongside this, providing a continuous green link through the village.
10. Waterfront park / green space, incorporating a potential spectator area for triathlon events at Lake 1.
11. Key buildings located on intersection of primary route network.
12. Important gateway building responding to views, waterfront location, adjacent green space and alignment of primary route.
13. Brumby Common Lane bridge retained but re-purposed for pedestrian and cycle links, incorporating links to the SMUA and associated car parking facilities for spectators and participants in potential triathlon events at Lake 1.
14. Formal frontage along all primary routes through the village.
15. Water habitat providing a compensation (and enhancement) site for water voles and other species, such as Kingfisher, aquatic plants and invertebrates.
16. Development set back from main route, allowing for provision of continuous north south green route through the village.
17. Looser, informal development frontage at village edges.
18. Retain existing woodland and acid grassland habitat, and manage as semi-natural green space.
19. Pedestrian, cycle and bus connection to Scotter Road.
20. Upgrade to the Scotter Road and West Common Lane junction, providing access to Village 1 and across to the de-trunked motorway.



Above: Example sketch configuration illustrating key design principles for the local centre in Village 1

Local Centre

The plan on the facing page shows a sketch configuration of the local centre in village 1. Key design principles are presented below. These should be used to inform concept and detailed designs through the planning application process:

- The arrangement of buildings and streets should create a public square.
- Buildings should frame the square and have active frontages which overlook the square. This should include the use of continuous frontages that provide a strong sense of enclosure to the space created.
- Buildings that terminate views should benefit from special care and attention. These can comprise taller elements to act as local landmarks and aid orientation.
- The primary route through village 1 runs to the south of the square, this will allow for use of new public spaces to benefit from the maximum amount of sunlight.
- A kiosk / pavilion, located at the apex of the primary and secondary street network to the west of the square will help further define the space.
- Key retail and other non-residential frontages should line the north and eastern sides of the new square, allowing for interaction with the square, including for example spill-out space associated with new cafés.
- Development to the south of the square / primary route could include residential at ground level, though will require direct frontages to the street.
- On street parking can be provided in the square, running parallel to the street network.

Further information on local centres within Lincolnshire Lakes is set out in Section 6, Part B of the strategic design guide. This should be read together with the principles for the village 1 local centre as outlined above.

Above: The centre in village 1 should take the form of an intimate and well defined local square.

Above: Village 1 key green spaces

Green infrastructure

Important new habitat areas and green spaces to be incorporated within village 1 are set out below, with the numbers corresponding to the plan on the facing page. The role and function of these, and the key characteristics of each space, should be used to inform the design process during the planning application stage.

H1

Type:

- Habitat area

Purpose (Role and Function):

- Sustainable drainage
- Supporting biodiversity

Key Characteristics:

- Wet grasslands, water bodies
- Habitat area
- Broad leaved woodland

GS 1

Type:

- Natural greenspace
- Main grassland areas for acid grassland priority habitat

Purpose (Role and Function):

- Supporting biodiversity
- Recreational space
- Location for children's play

Key Characteristics:

- Conifer plantation but longer term management to restore to broadleaved woodland
- Some broadleaved woodland
- Main grassland areas for biodiversity enhancement
- Grassland to perimeter managed for recreational access
- Informal footpath network to perimeter

GS 2

Type:

- Natural greenspace

Purpose (Role and Function):

- Recreational space
- Setting for development

Key Characteristics:

- Conifer plantation but longer term management to restore to broadleaved woodland
- Creation of woodland glades
- Informal footpath network to perimeter and through glades

GS 3

Type:

- Amenity greenspace

Purpose (Role and Function):

- Recreational space
- Active travel

Key Characteristics:

- Cycleway/pedestrian route
- 'Avenue' tree planting
- Hedgerow
- Small woodland blocks (where space allows)

GS 4

Type:

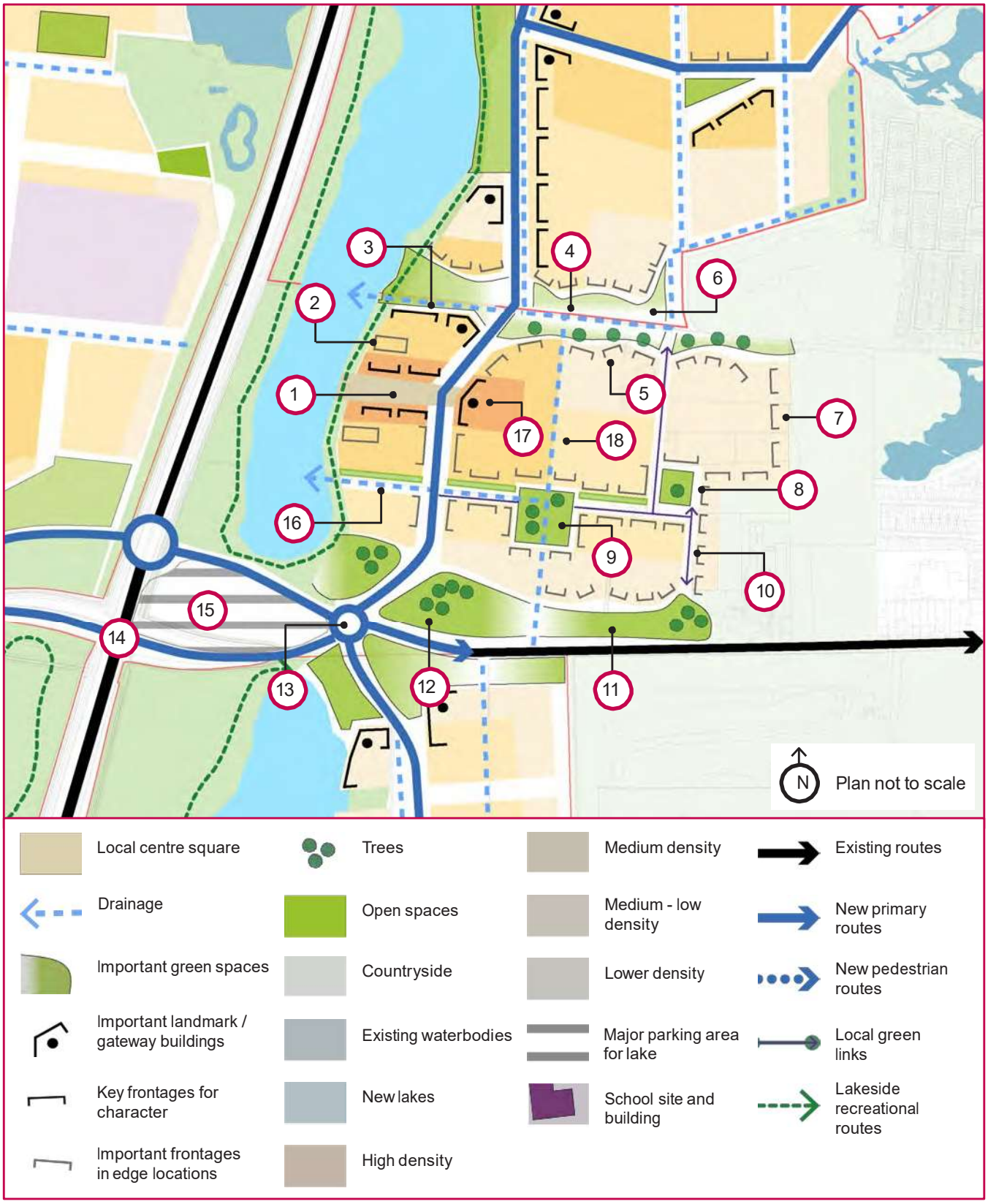
- Semi-natural greenspace
- Amenity greenspace

Purpose (Role and Function):

- Recreational space
- Scope to accommodate potential spectator area associated with lake 1 triathlon events

Key Characteristics:

- Perimeter route for cycling, running & walking
- Lakeside water sport facilities
- Woodland blocks
- Wet woodland species with appropriate trees, shrubs and ground flora
- Series of linked meadows
- Areas of reed bed to improve water quality and for biodiversity enhancement



Above: Village 2 key design principles

Village 2

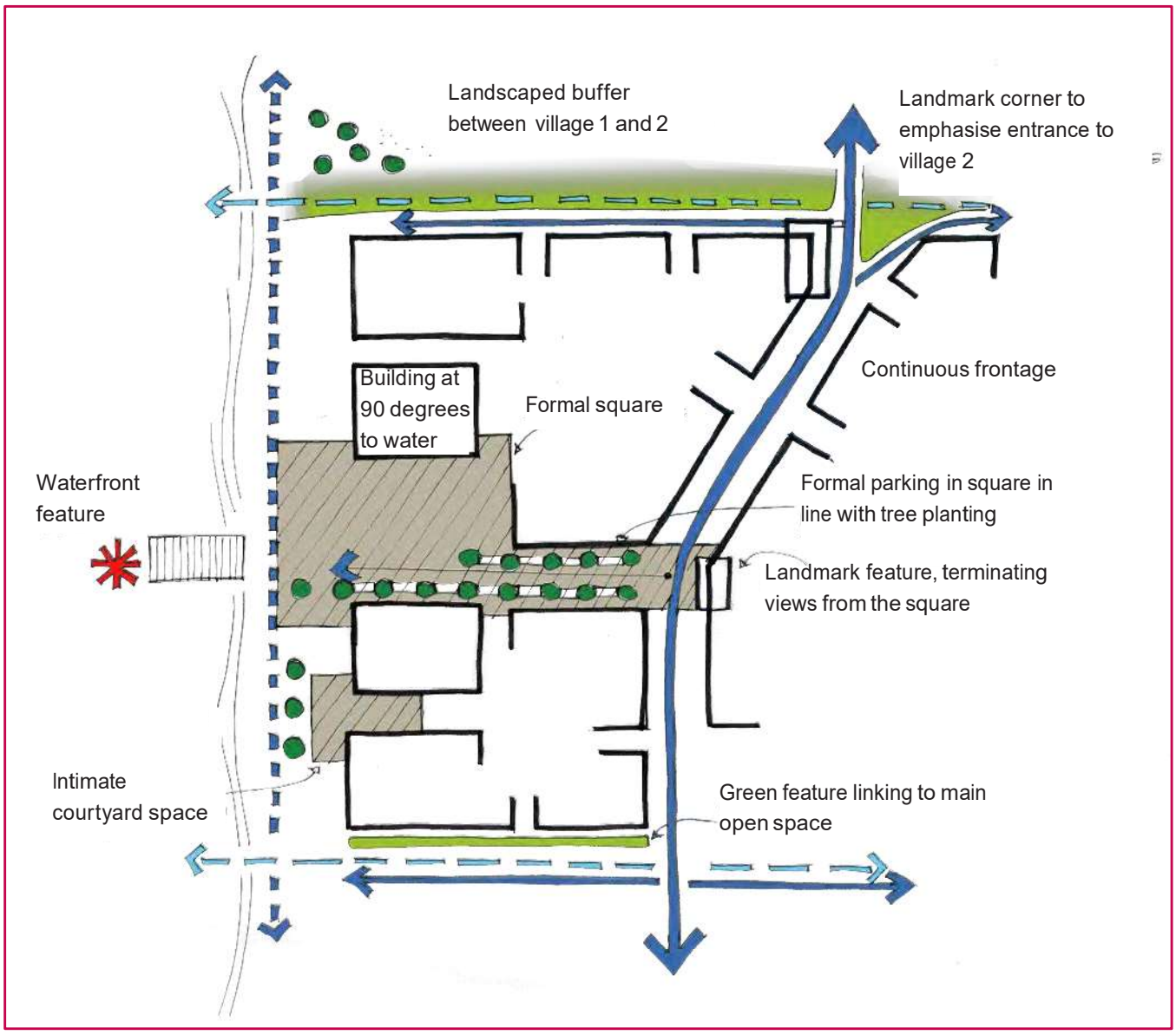
Village 2 has a strong relationship with Lake 1, including provision of a new local centre that incorporates buildings, uses and facilities that correspond to the recreational focus of the Lake. Landscaped edges to the northern and southern boundaries of the village allow for a form of separation between Village 1 and village 3 and thus a sense of identity. These spaces, coupled with smaller green fingers running alongside drainage ditches, connect the network of green spaces within the village and provide natural connections and routes through the village to the lake. The route of existing north south drainage ditches should be realigned and integrated within the village, helping to create a more regular development form and provide for a stronger relationship with the lake edge.

Village 2 character drivers and features:

- Waterfront local centre incorporating leisure activities and facilities.
- Orthogonal pattern of drainage ditches strongly integrated within parks, squares and open spaces.
- Series of formal squares and street edges within the village.
- Lower density and more informal development arrangements to village edge.
- Landscaping and edge treatments create intimate scale village.

Key design principles

1. Waterfront local centre.
2. Waterfront pavilion type buildings for leisure use and triathlon activities.
3. Formal edge to park providing a connection to the waterfront and with key building at gateway entrance to the village.
4. Drainage ditches incorporated within and comprise a key feature of green finger between villages 1 and 2.
5. Looser, informal development frontage and arrangement at village edge.
6. Green finger providing separation between village 1 and 2.
7. Development arranged so it backs onto surrounding area, creating well fronted residential streets within the village.
8. Small, local green space, fronted by residential development, and with residential streets extending north and south from this.
9. Larger, formal square, well overlooked by residential development creating a strong frontage on all sides.
10. Street and green space provides pedestrian and cycle link to Burringham Road and across to village 3.
11. Green buffer to Burringham Road, which also acts as a form of separation between villages 2 and 3.
12. Landscaped green space around new road junction and at entrance to the village from Burringham Road. This provides scope for provision of segregated pedestrian and cycle links between the villages and a wider recreational circuit around all lakes.
13. New Burringham Road junction.
14. Existing bridge retained for local traffic, pedestrian and cycle movement.
15. Location for possible car park associated with triathlon activities. Safe pedestrian routes and crossings will need to be provided between the car park and Lake 1.
16. Green finger alongside drainage ditch running through the village and connecting green squares within this.
17. Key building on primary route network encloses views along the local centre.
18. Existing drainage ditch realigned through the village allows for construction of Lake. This provides a secondary green route north south through the village.



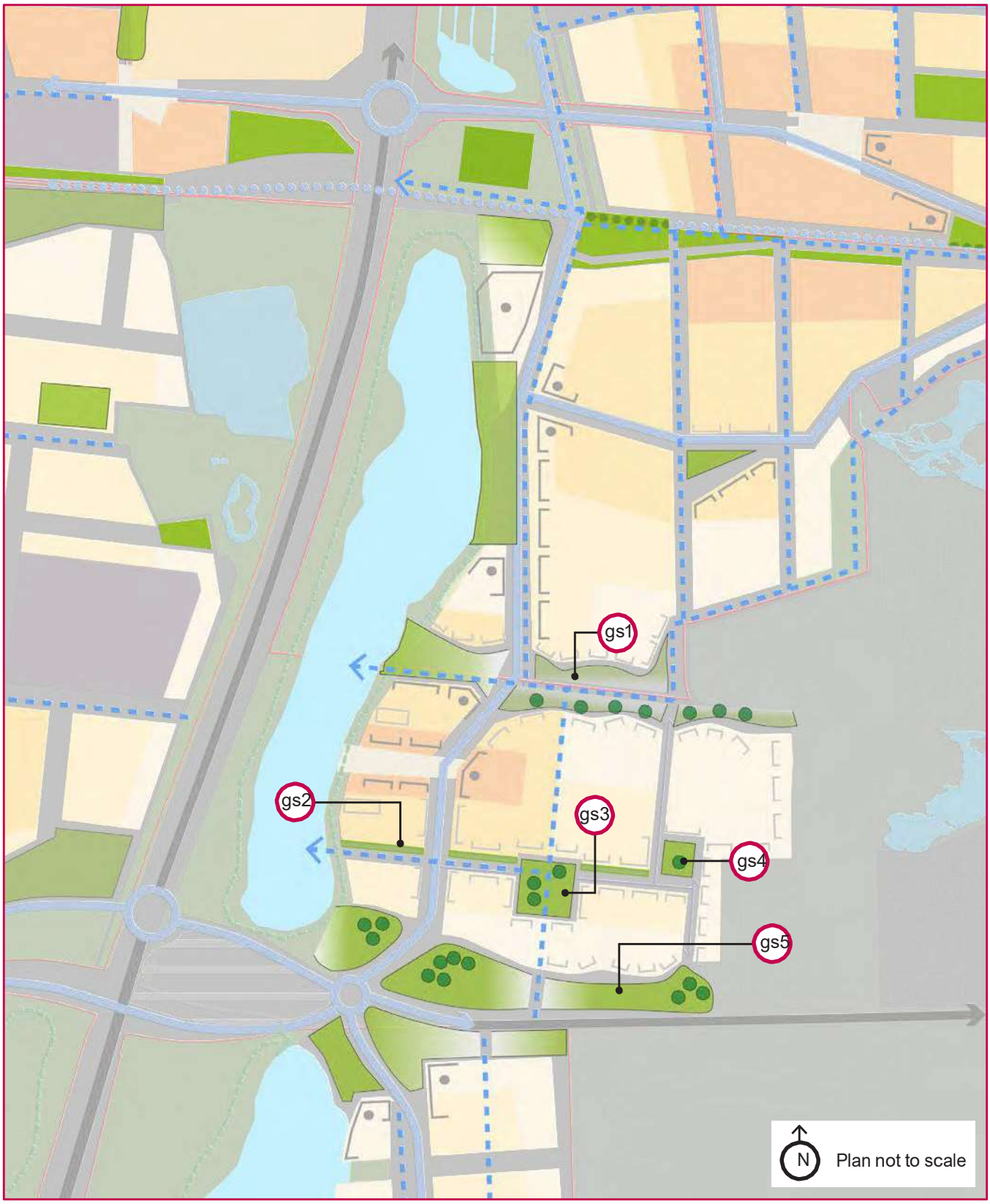
Above: Example sketch configuration illustrating key design principles for the local centre in Village 2

Local Centre

The plan on the facing page shows a sketch configuration of the local centre in village 2. Key design principles are presented below. These should be used to inform concept and detailed designs through the planning application process:

- The local centre is arranged to have a strong relationship with the waterfront, including leisure and recreational uses associated with the leisure role of the lake.
- The centre is set around a formal square which opens out on one side to the water. Buildings should frame the square and have active frontages which overlook the square. This should include the use of continuous frontages that provide a strong sense of enclosure to the space created.
- A jetty, pavilion or other feature at the waters edge should form a focal point, integrating the centre with the water and providing a view from the primary street to the east, drawing people into the centre.
- A network of smaller courtyard spaces are created in this local centre. These are associated with the creation of pavilion type buildings occupying leisure and recreation uses, such as a water sports-club. These buildings, turned at 90 degrees to the street, will help create the secondary spaces. This arrangement takes it cue from the centre of Burringham, located immediately to the west of the Lincolnshire Lakes alongside the banks of the River Trent. Where this approach is followed, building fronts must be active and blank façades avoided.
- The centre should create a short, formal edge to the water before taking on a more natural landscaped form.
- To the east of the square, building corners on the primary route should be well articulated, signalling entry to the centre.
- Formal parking can be provided within the square and or in bays parallel to the secondary street running through the centre. The secondary street runs to the southern side of the main square, allowing public areas to benefit from maximum sunlight.

Further information on local centres within Lincolnshire Lakes is set out in Section 6, Part B of the strategic design guide. This should be read together with the principles for the village 2 local centre as outlined above.



Above: Village 2 key green spaces

Green infrastructure

Important new habitat areas and green spaces to be incorporated within village 2 are set out below, with the numbers corresponding to the plan on the facing page. The role and function of these, and the key characteristics of each space, should be used to inform the design process during the planning application stage.

GS 1

Type:

- Natural & semi-natural greenspace

Purpose (Role and Function):

- Linear space linking wider area to Lake 1
- Visual link to lake
- Frontage onto Lake 1 and separating element between village 1 and 2
- Recreational space
- Supporting biodiversity

Key Characteristics:

- Drainage ditch following a series of more naturalistic meanders
- Footpath/cycle route following edge of ditch
- Occasional footpaths linking village 1 & 2 and bridging ditch
- Vehicular presence to outer edges of space
- Informally arranged 'naturalistic' tree planting using species associated with 'water'. Trees planted in groups to provide enclosure and to create a sequence of spaces. Occasional 'feature' tree.
- Accommodate acid grassland in greenspace

GS 2

Type:

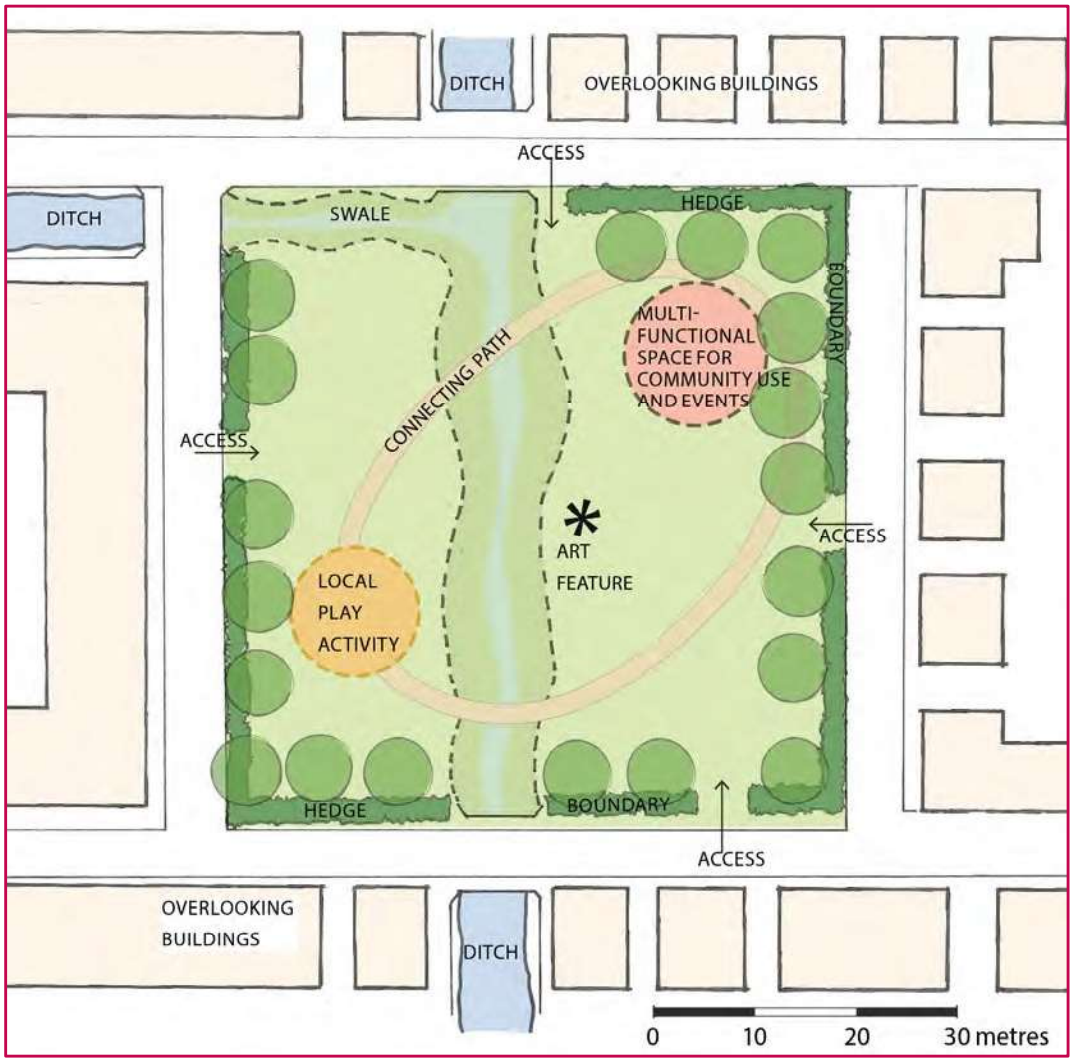
- Natural & semi-natural greenspace

Purpose (role and function):

- Linear space linking Village 2 to Lake 1
- Visual link to lake
- Frontage onto Lake 1 and unifying element for village 2
- Recreational route

Key Characteristics:

- Straight/linear drainage ditch
- Footpath/cycle route following northern side of ditch
- Vehicular route following southern side of ditch
- Formally arranged tree planting using species. Planted in 'avenues' to emphasise linearity of ditch.
- Occasional 'feature' tree near to bridges over the ditch.



Above: Sketch configuration of formal green space (GS3) within village 2, incorporating swales, play space, seating and public art. This arrangement takes the form of a formal square, with development enclosing and overlooking the square on all sides. In response to this the landscaping includes formally arranged tree planting.

GS 3

Type:

- Parks and gardens
- Children and young people

Purpose (role and function):

- Formal green space (approx. dims. 70m x 70m) serving central part of village 2
- Recreational space for play and focus of wider community
- Visual connection with wider neighbourhood

Key Characteristics:

- Intersected by ditch network
- Ditches become swales inside footprint of greenspace
- Public art features or landmark reflecting local character
- Formal, informal play areas and seating spaces
- Space to accommodate community events and recreation
- Some formal hedge planting boundary to edge of space to provide some enclosure
- Formally arranged tree planting, planted in 'avenues' to help articulate and enhance the footpath system. More 'naturalistic' planting near to swales
- Vehicular presence to outer edges of space, i.e.. streets to the perimeter
- Residential properties fronting street to perimeter and overlooking green space

GS 4

Type:

- Parks and gardens
- Children and young people

Purpose (role and function):

- Formal green space (approx. dims. 45m x 45m) serving eastern part of village 2
- Recreational space for play, etc.
- Setting for neighbourhood

Key Characteristics:

- Formal, informal play areas and seating spaces
- Some formal hedge planting boundary to edge of space to provide some enclosure
- Formally arranged tree planting using species. Planted in 'avenues' to help articulate and enhance the footpath system.
- Vehicular presence to outer edges of space, i.e.. streets to the perimeter
- Residential properties fronting street to perimeter and overlooking greenspace

GS 5

Type:

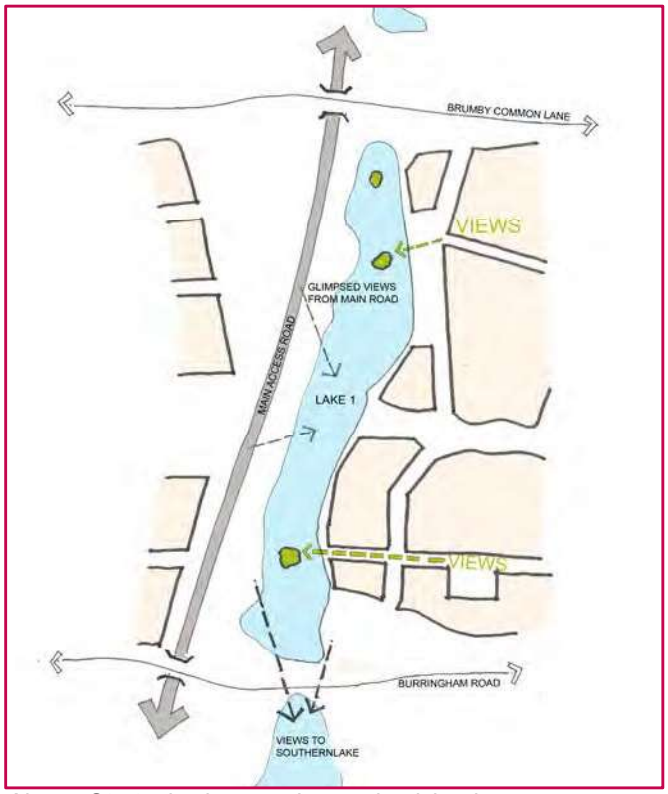
- Natural and semi-natural greenspace

Purpose (role and function):

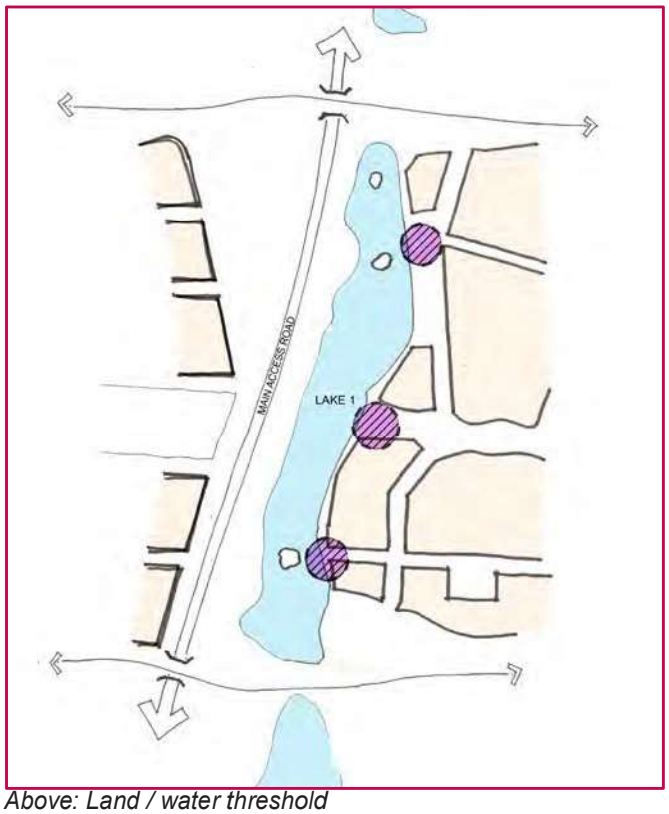
- Green buffer or 'Parkway' to Burringham Road
- Separating element between village 2 and 3
- Supporting biodiversity

Key Characteristics:

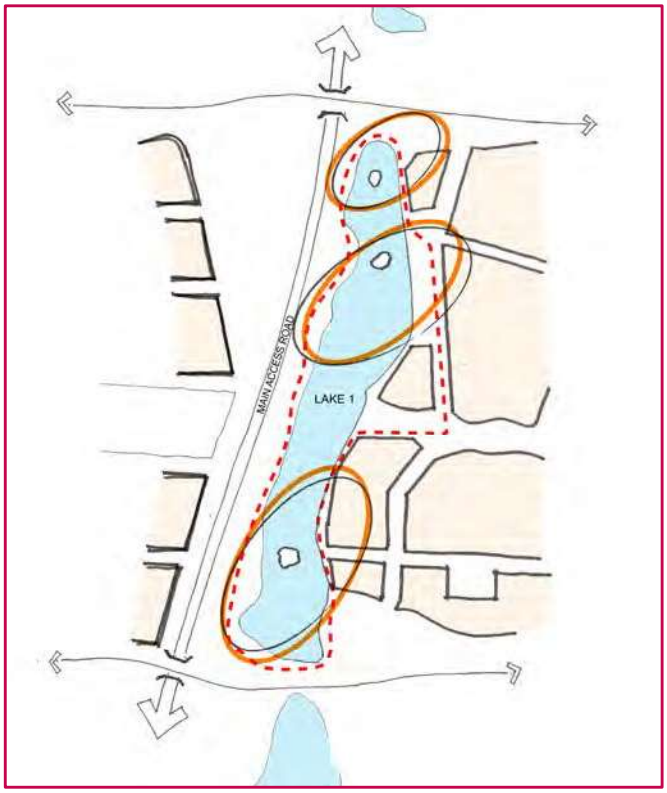
- Formal 'Avenue' planting next to road
- More natural character outside 'Avenue'
- Mosaic of woodland planting and open space closer to overlooking housing
- Accommodate acid grassland using a sandy substrate, in open spaces linking in with wider 'natural' corridors
- Limited footpath network but safe crossing of Burringham Road connecting village 2 and 3



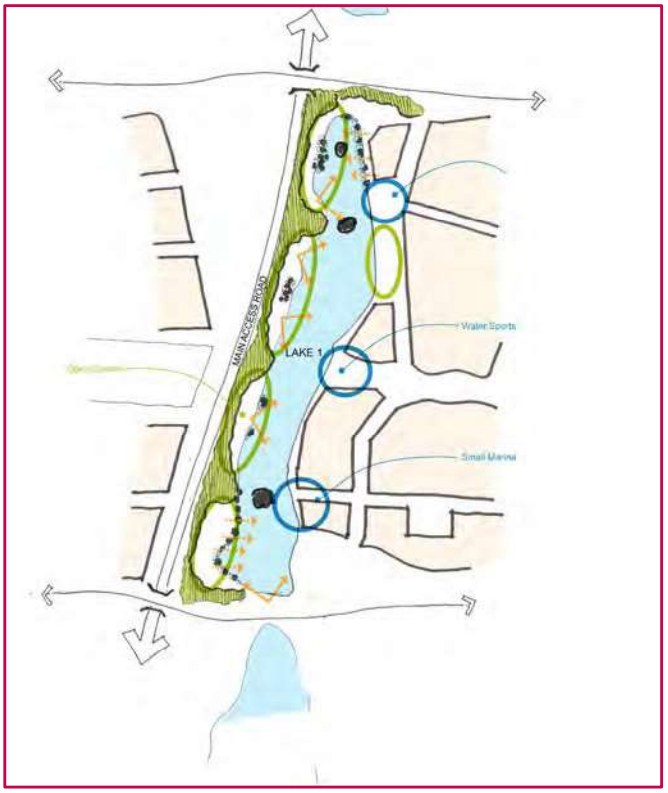
Above: Strategic views and emerging islands



Above: Land / water threshold



Above: Character areas and circulation



Above: Enclosure edges and lakeside spaces

Lake 1

The AAP notes:

- The lake will primarily be for non-motorised leisure and sports uses.
- The lake should be approximately 1km long, with a minimum width of 100m, with a surface area of approximately 13ha.
- The lake should have a minimum depth of 2.5m.
- The lake should be surrounded by publicly accessible space that is designed for safe access and to facilitate recreational walking, cycling and running along the lakeside.
- The lake will require supporting ancillary built facilities, which are likely to be suitably accommodated in a lakeside location.
- The lake will provide surface water attenuation for Villages 1 and 2 (approximately 35,150 cubic metres of attenuation must be provided as a minimum).

Lake 1 should be designed such that it has potential to stage triathlon events. Consideration should be given through the detailed design stage to providing space for spectators and incorporating routes to Brumby Common Lane and across to the parking facilities at the SMUA for both spectators and participants.

Key design principles for the lake are set out beside.

Description

- Non-motorised recreational/water based uses
- Minimum depth of 2.5m
- 1km length, minimum width 100m, surface area 13 hectares
- Semi-natural greenspace to perimeter of lake
- Accessible greenspace for walking, running and cycling
- Supporting ancillary built facilities for recreation at lakeside locations

Strategic views and emerging islands

- Maintain views east towards wooded backdrop of Scunthorpe
- Maintain glimpsed views of lake from de-trunked motorway
- Include visual links to Lake 2 in the south
- Provide islands for visual interest and depth to views

Land/water threshold

- Provide focus areas where public realm meets the lakeside
- Potential location of ancillary facilities
- Opportunity for seating areas, activities and viewpoints

Character areas and circulation

- Create distinctive character areas within lake environment
- Perimeter path to provide rich and varied experience to user

Enclosure, edges and lakeside space

- Sense of enclosure provided by woodland planting
- Sequence of 'meadow' spaces adjacent lakeside
- Varied treatment to lakeside edge using open space tree planting; open, filtered and treed

Above: Village 3 key design principles

02. Village 3 and 4, and Lake 2

Village 3

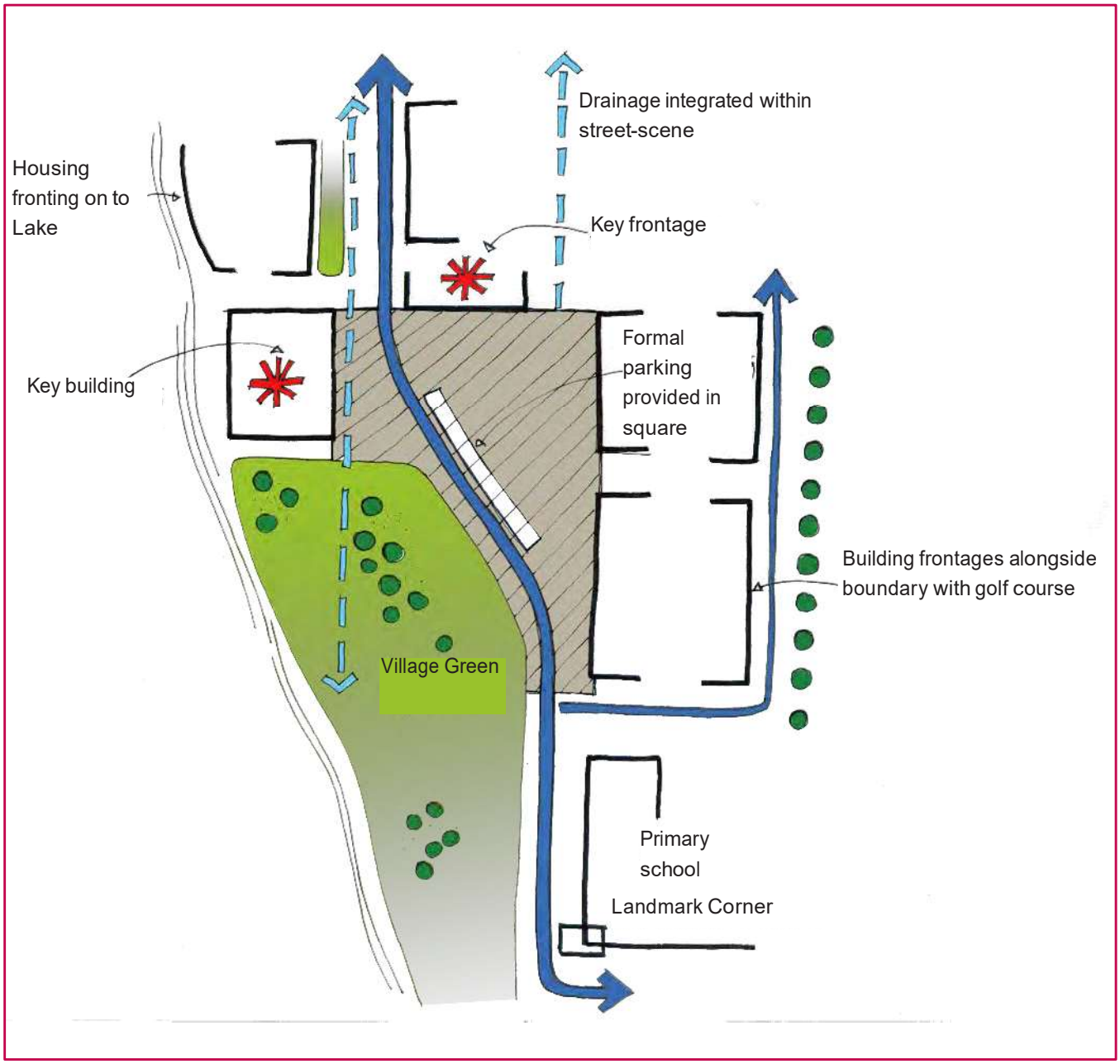
The structure of this village is strongly related to the sinuous nature of lake 2 and the presence of the Ashby Decoy golf club and nature reserve, around which the village is wrapped. The local centre is found at the apex of the village, maximising catchment areas. The local centre in this village includes a new primary school, with sports pitch provision co-located with this. The centre incorporates a village green which extends along the lake and out between village 3 and 4, creating a degree of separation between these. Opportunities exist to provide waterfront living overlooking the lake. The primary route will need to be designed to ensure that both the vertical and horizontal alignments, whilst aiming to deter HGV movements, will have the adequate width and required visibility to accommodate buses and other public service vehicles..

Village 3 character drivers and features:

- Potential for waterfront living.
- Network of green spaces linking into new local centre.
- Series of finer grain green fingers connect waterfront and wider network of green spaces into the development area.
- Integration of 'village green' into local centre.
- Drainage integrated alongside primary street network.

Key design principles

1. Local centre, framed by active building frontages.
2. Primary school fronting on to primary route and adjacent green space ('village green'). Sports pitches co-located with school. Access and parking provision to schools will need to be carefully considered through detailed design stages.
3. Village green.
4. Waterfront feature building enclosing northern end of square at local centre.
5. Green link along ditch integrated with primary route, providing green connection between the 'village green' and wider recreational route / circuit around the lake.
6. Key buildings at village gateway.
7. Realignment of Burringham Road and new junction, providing access to village 3.
8. Village set back behind green buffer along Burringham Road, providing a separation to village 2. Pedestrian and cycle links to Burringham Road and across to village 2 to be incorporated in this space.
9. Development should front onto distinctive line of Poplars at edge of golf course / local wildlife site.
10. Tree-lined residential / neighbourhood streets act as green fingers, connecting the local wildlife site through to waterfront and creating a series of finer-grain development blocks.
11. Strip of residential development backs onto school playing fields, creating a well defined edge and frontage to the primary route network.
12. Hard landscaped secondary square through which the primary route is aligned, with formal development frontage around this.
13. Looser, informal development frontage at village edge.
14. Planted buffer to Scotter Road to include broadleaved woodland and acid grassland.
15. New junction on Scotter Road providing access to villages 3 and 4 and forming part of the primary route network through Lincolnshire Lakes.
16. Formal development edge overlooking central green space between village 3 and 4. Central space acts as a form of separation between the villages (Also see GS1, page 33).
17. Key buildings at village gateway.
18. Green, tree-lined residential / neighbourhood streets leading to waterfront.
19. Landscaped green finger between development edge and lake, connecting with the village green and central park between village 3 and 4. Recreational route runs through this space.
20. Formal development edge to green finger alongside lake.
21. Opportunity for feature at end of primary route, integrated within the green space, terminating the view along the primary route.
22. Opportunity for waterfront residential properties overlooking and integrated with the water.



Above: Example sketch configuration illustrating key design principles for the local centre in Village 3.

Local Centre

The plan on the facing page shows a sketch configuration of the local centre in village 3. Key design principles are presented below. These should be used to inform concept and detailed designs through the planning application process:

- The arrangement of buildings and streets should create a public square.
- The north and eastern sides of the public square should be well enclosed with continuous and regular building frontages that overlook the space and include active ground floor frontages. This should include retail and non-residential uses at ground floor level, though with potential to integrate residential use above this. Uses that spill out into the space and interact with this should be encouraged.
- The new square should link into a waterfront village green, acting as a key green finger and connection through the village and around the lake.
- Buildings that terminate views - including that to the north of the square - should benefit from special care and attention. These can comprise taller elements to act as local landmarks and aid orientation.
- A waterfront building between the square, village green and lake should be designed as a key feature of the local centre. This will act as a key transition between the local centre, green, water and adjacent residential uses.
- The village 3 primary school is located to the south of the centre. This is reflective of traditional centre layouts in villages surrounding Scunthorpe, where community uses, particularly churches, are located close to but slightly off-centre. The main school entrance should be located on the primary street and the building aligned to following the line of buildings in the square, creating a consistent edge. Potential for a landmark corner as part of the school building should be explored, reinterpreting the positioning of and role of church towers in traditional Scunthorpe village layouts as an aid to orientation.
- On street parking can be provided in the square, running parallel to the street network.
- Drainage ditches should be integrated within the harder-landscape of the square but the sides will be planted to maintain habitat linkages.

Further information on local centres within Lincolnshire Lakes is set out in Section 6, Part B of the strategic design guide. This should be read together with the principles for the village 3 local centre as outlined above.

Above: Village 3 key green spaces

Green infrastructure

Important new habitat areas and green spaces to be incorporated within village 3 are set out below, with the numbers corresponding to the plan on the facing page. The role and function of these, and the key characteristics of each space, should be used to inform the design process during the planning application stage.

GS 1

Type:

- Parks and gardens
- Children and young people

Purpose (role and function):

- Village green (approx. dims. 250m x 100m) next to local centre
- Recreational space for play and focus of wider community
- Visual connection with wider neighbourhood
- Aspect onto Lake 2

Key Characteristics:

- Formal character closer to local centre
- Character becomes more informal to southern part of village green
- Network of direct linear footpaths
- Straight edged promenade next to lake (near to local centre)
- Piers and jetties connected to promenade
- More natural edge to lake to southern part of village green
- Natural corridor to eastern edge of space accommodating acid grassland
- Formal, informal play areas and seating spaces
- Multi-functional space to accommodate community events and recreation
- Ditch network reconfigured as swales through the village green and incorporating biodiversity enhancements
- 'Avenue' planting next to footpath system
- Groups of trees and specimen trees defining spatial arrangement of village green

GS 2

Type:

- Natural and semi-natural greenspace

Purpose (role and function):

- Common serving neighbourhood (approx. dims. 750m x 60m)
- Recreational focus
- Aspect onto Lake 2
- Supporting biodiversity

Key Characteristics:

- Linear corridor
- Pastoral landscape character (woodland blocks, specimen trees and meadows)
- Informal network of footpaths largely remote from lakeside
- But many visual links to lake
- Natural edge to lake
- Range of open, filtered and enclosed edges to lake (defined by planting)
- Occasional 'threshold spaces' where footpath meets lakeside coinciding with links north to village 3
- Accommodate corridors of acid grassland with sandy substrate and broadleaved woodland

Note: the drain running along the southern boundary of the golf course is described in the Farm Environmental Plan for the course as: Major ditch; common reed, reedmace and meadowsweet. Ditch dredging creates the sandy, south facing bank for invertebrates.

Above: Design principles for village green, showing relationship with the local centre and wider green finger around the Lake. Treatment of space, uses and planting within this area to be resolved during the detailed design stage

Lincolnshire Lakes Strategic Design Guide

Above: The new village green should relate both to the local centre (top) but also to the wider green finger around the side of Lake 2 which might take the form of a common (middle). Routes through these should provide for leisure and recreation (bottom)

Village green

A key feature of village 3 is the creation of a new village green, which is integrated with the local centre and provides a link to the wider green corridor and lakeside environment.

The plan on the facing page shows a sketch configuration for the village green. The role, function and key characteristics of this space are set out under 'GS1' within the green infrastructure section for village 3 above. The plan here shows how the village green integrates with the design principles for the local centre. These spaces should be designed as one.

Above: Village 4 key design principles

Village 4

This village comprises the southern gateway to Lincolnshire Lakes. As such, it is important that the primary route network is designed in such a way to discourage HGV movements using this as an alternative route to and from the motorway. The village includes a linear local centre structured along the primary route and around which highest density development should be located. This and development adjacent to the central park between villages 3 and 4 benefit from strong development frontages. Elsewhere, edge treatments are more informal. The planted buffer along Scotter Road extends along and around the southern edge of village 4, providing a continuous green connection with the landscaped setting of Lake 2.

Village 4 character drivers and features:

- Southern gateway to the wider Lincolnshire Lakes area.
- Linear local centre, with primary route running centrally through the village.
- Integration of drainage ditches with street types.
- Integration of parks and amenity space provides a connection to wider landscaped setting of Lake 2.

Key design principles

1. Linear local centre.
2. Landmark / important feature building at village gateway, terminating views along the primary route into the village from Scotter Road.
3. Looser, informal development frontage at village edge.
4. Park provides for village amenity space and acts as a green link between the village and wider network of green infrastructure.
5. Recreational route / circuit runs around lake edge within a landscaped setting.
6. Key buildings located at village gateway.
7. Central green space between villages 3 and 4. Provides a form of separation between these as well as being an opportunity for integration of local play space.
8. Primary route aligned along southern edge of the central green space, maximising the usability of the space and south facing aspect of it.
9. Formal development frontage overlooking the central green space. Existing network of drains and ditches integrated within the street cross section, but the sides will be planted to maintain habitat linkages.
10. Junction of Scotter Road and South Park Road upgraded to provide access providing access to village 3 and 4.
11. Extension of the Scotter Road planted buffer area to include broadleaved woodland and acid grassland.
12. Junction of Scotter Road and Moorside Road upgraded to provide access providing access to village 4.
13. Primary street network integrates existing drainage ditches. Structural work may be required to accommodate street construction in proximity to the drainage ditches. This will require further detailed consideration by developers.
14. Landscaped area to village edge and around the lake, forming an attractive backdrop to this and buffer to the motorway with pastoral character and a mix of broadleaved woodland, specimen trees and meadows.

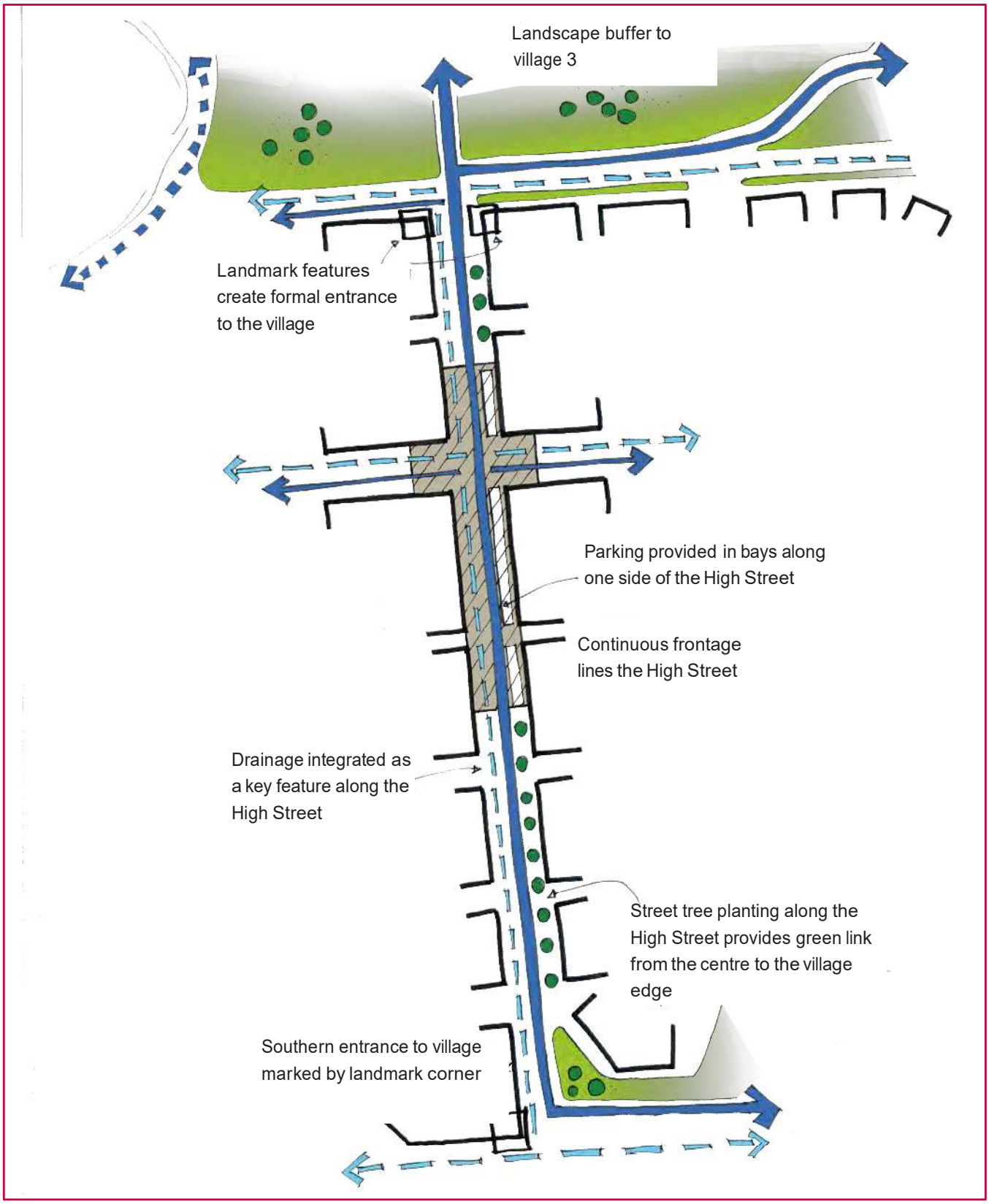
Above: Example sketch layout of 'looser' development edges to village 4 and use of green fingers connecting the village with the wider landscape. For illustrative purposes only.

Local Centre

The plan on the facing page shows a sketch configuration of the local centre in village 4. Key design principles are presented below. These should be used to inform concept and detailed designs through the planning application process:

- This should take the form of a linear centre located along the primary route through the village, with a focus on the cross roads formed with the secondary street and drainage ditch.
- Continuous buildings along the street should provide a regular building line, strong frontage and sense of intimacy.
- The cross roads forms the focal point to the village. Corner buildings should be well articulated and the intersection of the drainage ditches celebrated through design of the public realm.
- The public realm should take the form of a relatively hard landscape. Parking should be provided parallel to the street and follow the line of street trees along the primary street either side of the hard landscaped area. Intermittent planting of streets with the centre may be used to break up areas of parking.
- Views along the primary street to the open space at either end of the village should be unobstructed..

Further information on local centres within Lincolnshire Lakes is set out in Section 4, Part B of the strategic design guide. This should be read together with the principles for the village 4 local centre as outlined above.



Above: Example sketch configuration illustrating key design principles for the local centre in Village 4.

Above: Village 4 key green spaces

Green infrastructure

Important new habitat areas and green spaces to be incorporated within village 4 are set out below, with the numbers corresponding to the plan on the facing page. The role and function of these, and the key characteristics of each space, should be used to inform the design process during the planning application stage.

GS 1

Type:

- Natural and semi-natural greenspace
- Children and young people
- Allotment provision

Purpose (role and function):

- Common serving neighbourhood (approx. dims. 500m x 100m)
- Recreational focus
- Link from western edge of Scunthorpe to Lake 2
- Supporting biodiversity

Key Characteristics:

- Play area
- Sports pitches
- Common arranged into character areas with physical definition between areas
- Network of footpaths linking Scotter Road to lake and links between village 3 and 4
- Ditch to northern edge
- 'Avenue' tree planting associated with road network
- 'Natural' waterside character next to drainage ditch with biodiversity enhancements.
- Accommodating acid grassland on a sandy substrate, and broadleaved woodland

GS 2

Type:

- Parks and gardens
- Children and young people

Purpose (role and function):

- Park serving neighbourhood (approx. dims. 200m x 100m)

Key Characteristics:

- Intersected by drainage ditch network
- Ditches become swales inside footprint of greenspace with biodiversity enhancements.
- Public art features or landmark reflecting local character
- Formal, informal play areas and seating spaces
- Space to accommodate community events and recreation
- Informal character reflected in footpath network and planting
- Vehicular presence to outer edges of space, i.e.. streets to the perimeter
- Residential properties fronting street to perimeter and overlooking greenspace

The Wixams, in Bedfordshire, is based around the concept of four interlinked villages. The development includes a series of new lakes which are fronted in a number of limited locations (see top). Stretches of waterfront development are relatively short, after which the edge becomes more 'natural' (middle). A similar concept is taken in Derwenthorpe, Yorkshire (bottom). These schemes make a positive response to the waterfront. They overlook the water, allow access and, because the amount of waterfront development is limited, become special locations within those developments.

Above: Examples of locations (top: Vathoorst, in The Netherlands, and bottom: Devon) where residential development truly integrates with the water. Opportunities exist to explore similar concepts and design responses at the interface of village 3 with lake 2, creating an attractive residential environment and completely new residential offer for Scunthorpe.

Lake 2

The AAP notes:

- The lake will primarily be for non-motorised leisure and sports uses, if there is demand for such uses over and above Lake 1.
- The lake should be approximately 1.5km long, with a minimum width of 120m, with a surface area of approximately 27ha.
- The lake should have a minimum depth of 2.5m.
- The lake should be surrounded by publicly accessible space that is designed for safe access and to facilitate recreational walking, cycling and running along the lakeside.
- The lake will provide surface water attenuation for Villages 3 and 4 (approximately 94,050 cubic metres of attenuation must be provided as a minimum).

At the detailed design stage applicants will need to investigate how best to make use of the spoil resulting from excavations to create the lake, and to develop appropriate solutions that balance the need to reuse the spoil with wider ecological concerns.

Key design principles for the lake are set out beside.

Description

- Non-motorised recreational/water based uses
- Minimum depth of 2.5m
- 1.5km length, minimum width 120m, surface area 27 hectares
- Semi-natural greenspace to perimeter of lake
- Accessible greenspace for walking, running and cycling
- Provision of water attenuation to villages 3 and 4 (approx. 94,000 cubic metres)

Constraints

- Overhead power line routed to south side of lake
- Storing excavated fill for lake on site

Strategic views

- Maintain views east towards wooded backdrop of Scunthorpe
- Maintain glimpsed views of lake from M180

Lakeside views

- Unfolding views of lake from lakeside
- Views of ends of lake concealed by land

Landform and path network

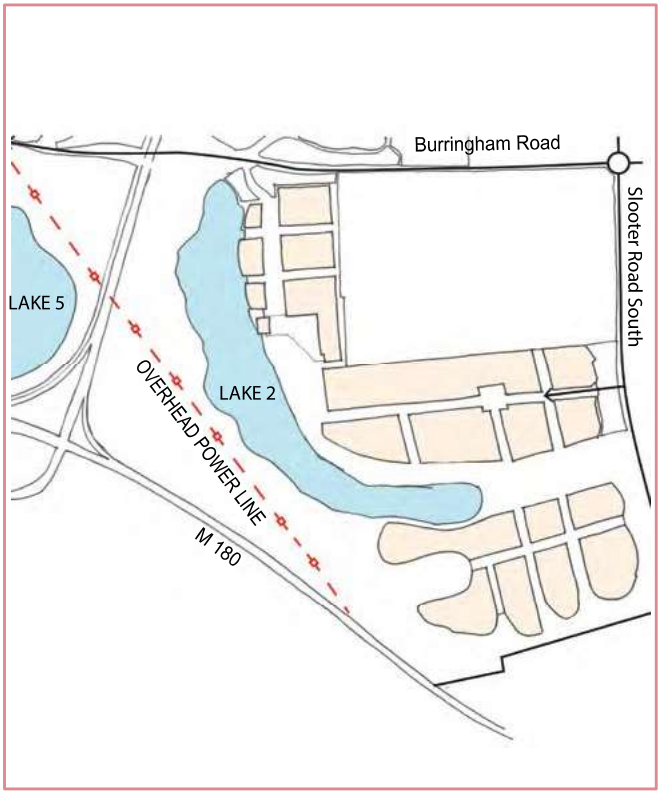
- Potential to create new landforms, sensitive to ecological concerns, to accommodate excavated fill
- Creation of islands using same fill
- Varied location of perimeter path; adjacent or remote to lakeside

Wider views

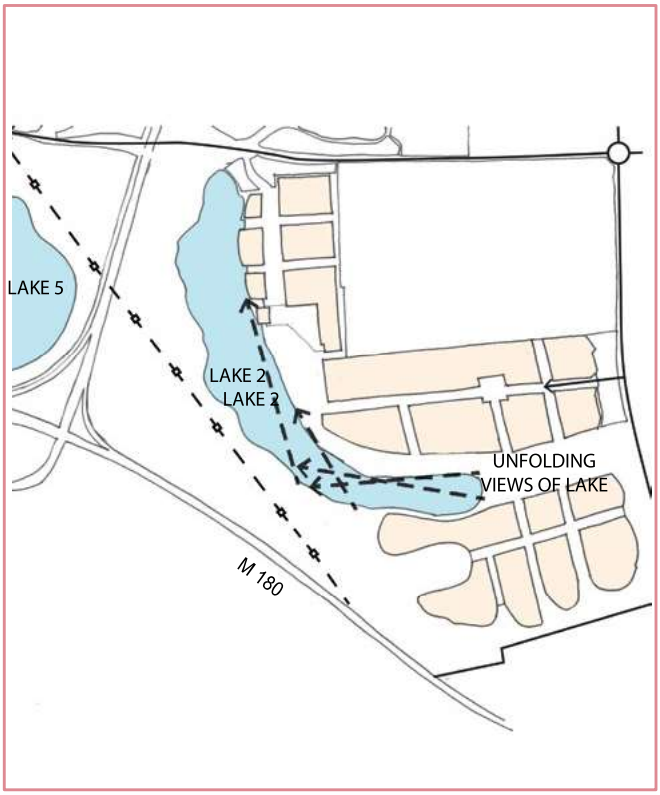
- Distinctive landforms and islands provide visual interest and depth to views

Planting of landforms

- To contribute to varied character to lakeside



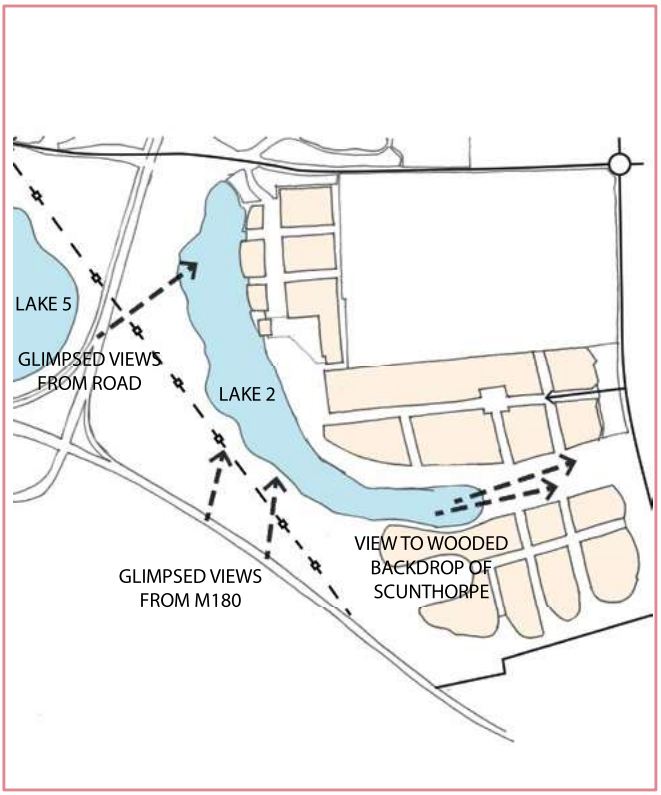
Constraints to Lake 2 proposals



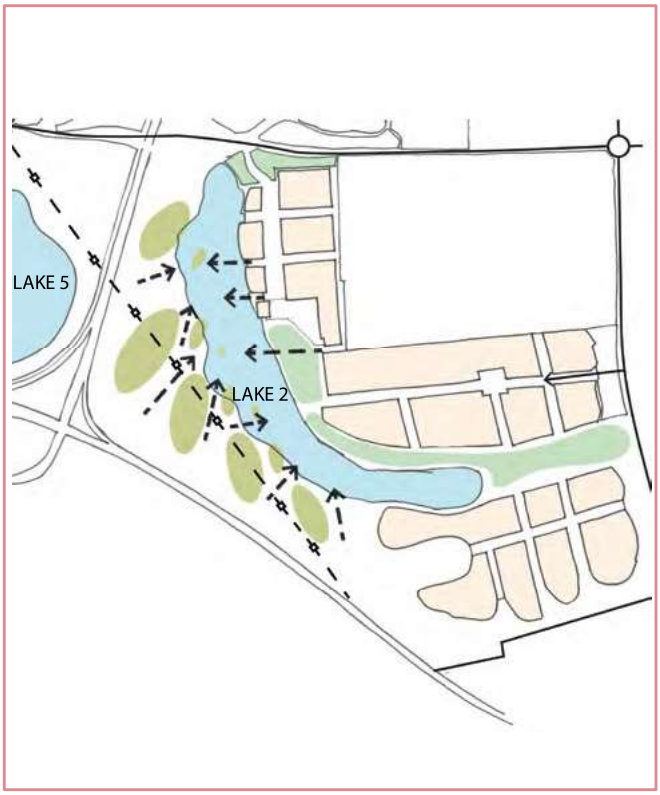
Lakeside Views
Strategic Views

Landform +

Slooter Road South



Strategic Views

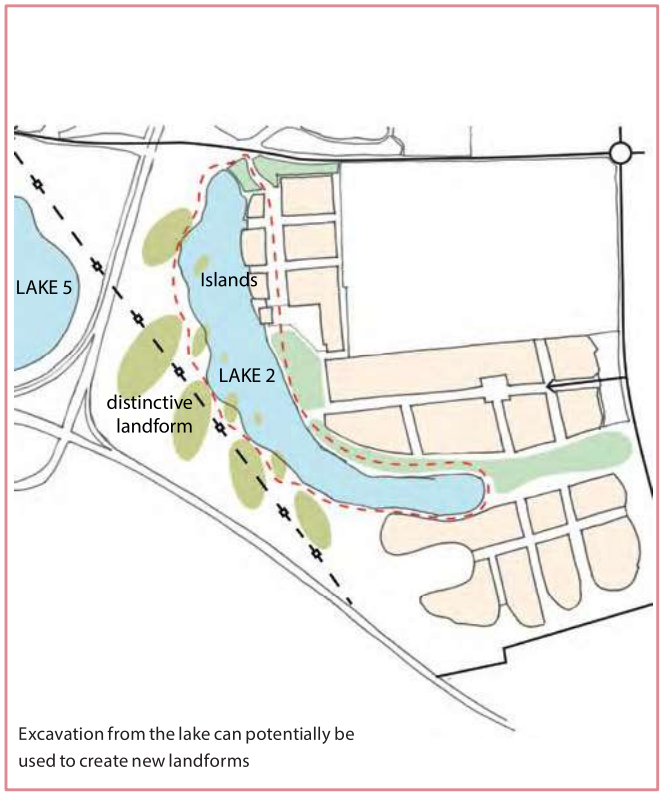


Wider views

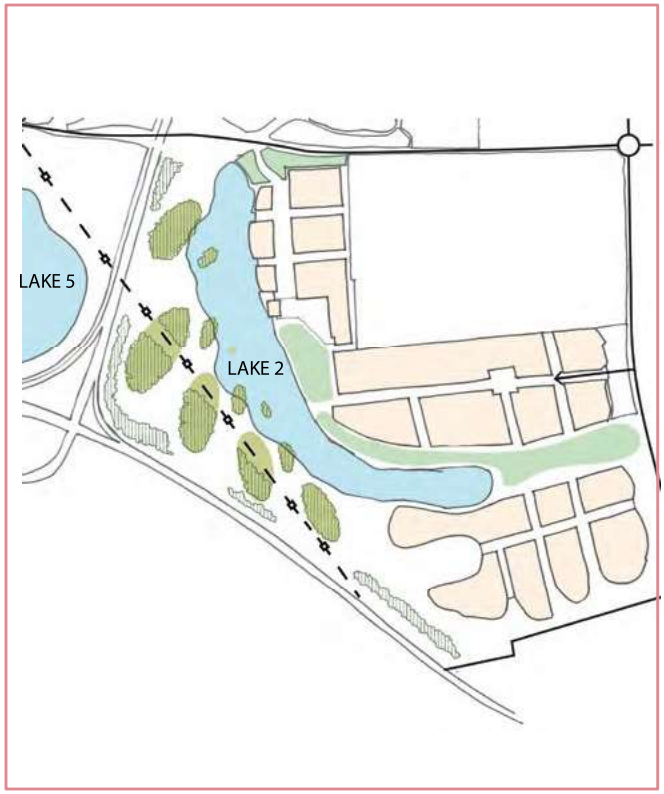
LAKE 5

Planting of

NG
AKE



Landform + Lakeside Path Network



Planting of Landforms

Above: Village 5 key design principles

03. Village 5, Strategic mixed use area, and Lake 3

Village 5 and the SMUA

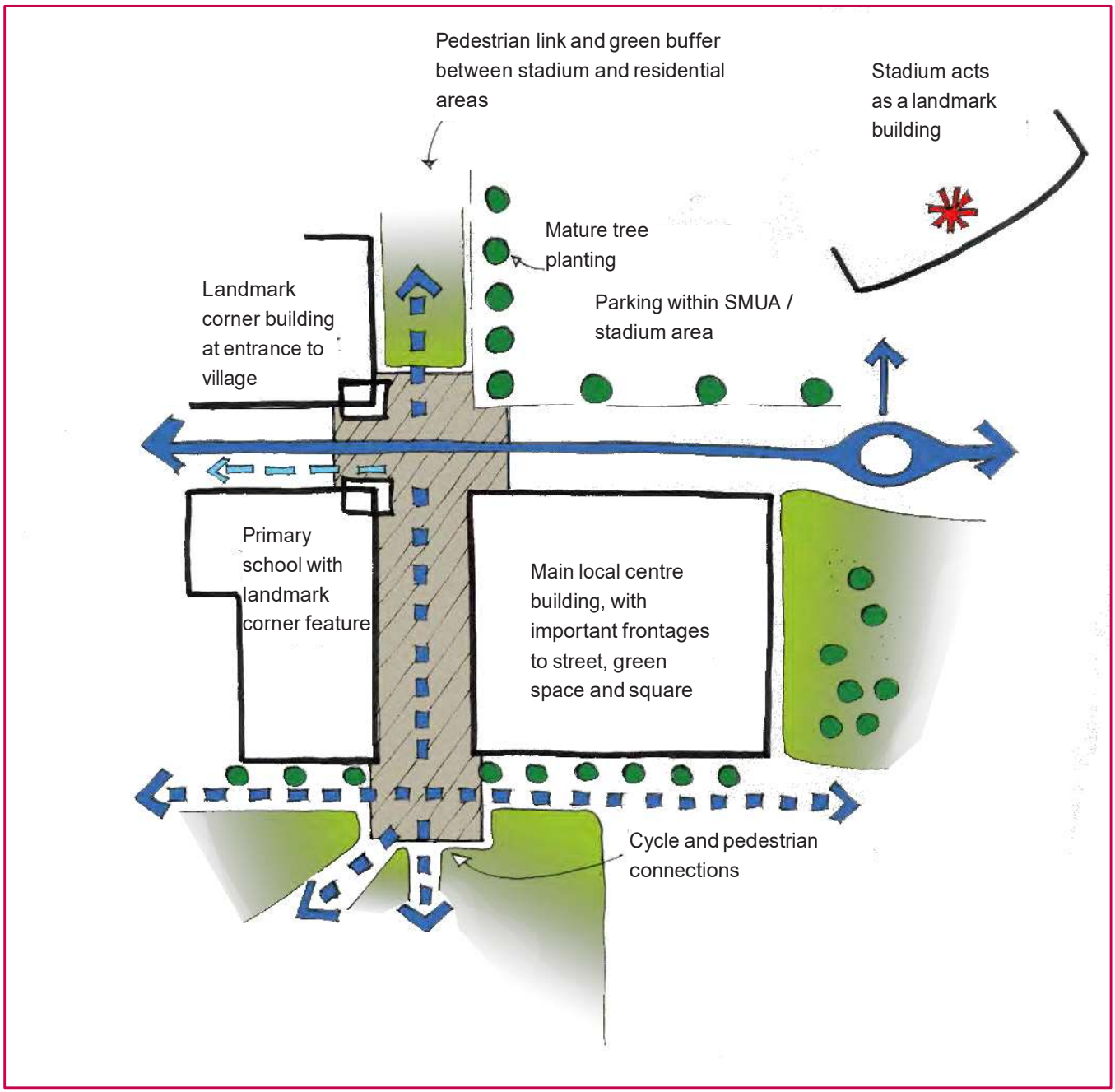
The strategic guidance presented for village 5 reflects the parameters within the planning application granted permission for this area. Should this application not come forward the Council will seek future proposals to reflect the key design principles outlined below and as indicated on the plan on the facing page. Equally, the guidance for the SMUA reflects the planning permission granted for that area. This includes a new football stadium and associated parking, sports pitches and other ancillary facilities. Should this application not come forward the guidance contained within the Core Strategy and AAP should be referred to.

Village 5 / SMUA character drivers and features:

- Major destination and landmark presented by proposed new football stadium.
- Regular street pattern responding to geometric field boundaries and alignment of drainage ditches. Ditches well integrated within streets.
- Formal development frontage along streets and spaces within the village and more informal development towards the village edge.
- Formal central green park.
- Long distance views out to west from village edge.

Key design principles

1. Linear local centre / square
2. Perimeter block within local centre to have important and well articulated frontages on all sides relating to surrounding streets, movement structure and views into the village.
3. Pedestrian and cycle access across the former alignment of Brumby Common Lane to village 6. Also provide a direct pedestrian and cycle link to the SMUA.
4. Primary school with main frontage onto local centre 'square'. Shared use could be made of parking facilities within the SMUA.
5. Key building at village gateway, terminating views along primary route from village 6.
6. Playing pitches.
7. Landscaped edge to village across to lake 3.
8. Looser, informal development frontage at village edge.
9. Key buildings at village gateway.
10. Landscaped buffer around training / sports pitches within the Strategic Mixed use area.
11. Important building front to sports centre at entrance to area.
12. New signalised crossroads incorporating pedestrian and cycle crossing facilities between Village 1, Village 5 and the SMUA.
13. New northern roundabout on de-trunked motorway.
14. Existing bridge along Brumby Common Lane retained and reused as a pedestrian and cycle route.
15. Important front to football stadium at gateway to strategic mixed use area, responding to views from de-trunked motorway and the bridge along Brumby Common Lane.
16. Gateway treatment to primary route network, indicating change in environment between the strategic mixed use area and village 5.
17. Landscaped buffer to rear of football stadium and associated area of car parking, providing a noise and visual separation to residential development in village 5.
18. Residential streets laid out on an east west axis. All buildings have a north and south frontage, softening the transition to the football stadium.
19. Central park within village, with formal development frontage all around this, overlooking and enclosing the space.
20. Formal street frontage on all primary routes.
21. Design solutions to conserve and enhance the Earl Beauchamp's Warping Drain will be required at the detailed design stage. This is an important habitat for water voles and uncommon aquatic plants.



Above: Example sketch configuration illustrating key design principles for the local centre in Village 5.

Local Centre

The plan on the facing page shows a sketch configuration of the local centre in village 5. Key design principles are presented below. These should be used to inform concept and detailed designs through the planning application process:

- A pedestrianised local centre set to the south of the primary route through village 5 (the new realigned Brumby Common Lane) and green cycle and pedestrian route to the south (the existing Brumby Common Lane).
- The village 5 primary school should front onto the pedestrianised space, with its front door / gate located here. Where the pedestrianised centre met the primary street the corner of the school building should be well articulated and has the potential to become a taller feature, acting as a local landmark and gateway both to the centre and the village.
- Retail and other non-retail uses as ground floor level should face the school building. This development block has important frontages on all sides. Blank façades must be avoided. Active ground floor uses and residential units above overlooking the streets and adjacent green spaces should be incorporated within the block.
- Pedestrian and cycle routes through the centre, particularly to and across the current route of Brumby Common lane must be incorporated. This will provide access to the pedestrian and cycle bridge over the motorway and also provide a link to residential units within village 6 that will be located within the catchment area of this centre. The walking and cycle routes must be designed with safety and convenience in mind.
- The public realm treatment within the village should be designed to extend across the primary street and incorporate safe crossing points that link with the football stadium and associated uses.
- Parking for the centre may be incorporated around the football stadium, though with potential for some parallel bays along the primary street.

Further information on local centres within Lincolnshire Lakes is set out in Section 5, Part B of the strategic design guide. This should be read together with the principles for the village 5 local centre as outlined above.

Above: Village 5 key green spaces

Green infrastructure

Important new habitat areas and green spaces to be incorporated within village 5 are set out below, with the numbers corresponding to the plan on the facing page. The role and function of these, and the key characteristics of each space, should be used to inform the design process during the planning application stage.

GS1

Type:

- Amenity greenspace

Purpose (role and function):

- Buffer to village 5 centre and main road network

Key Characteristics:

- Formal 'avenue' tree planting to outer edge
- Small block of woodland
- Network of meadows
- Footpath network to outer edge of space

GS2

Type:

- Amenity greenspace

Purpose (Role and Function):

- Recreational space
- Active travel

Key Characteristics:

- Cycleway/pedestrian route
- 'Avenue' tree planting
- Hedgerow
- Small woodland blocks (where space allows)

GS3

Type:

- Parks and gardens
- Children and young people

Purpose (role and function):

- Formal park to village 5

Key Characteristics:

- Public art features or landmark reflecting local character
- Formal, informal play areas and seating spaces
- Space to accommodate community events and recreation
- Some formal hedge planting boundary to edge of space to provide some enclosure
- Formally arranged tree planting using species such. Planted in 'avenues' to help articulate and enhance the footpath system.
- Vehicular presence to outer edges of space, i.e.. streets to the perimeter
- Residential properties fronting street to perimeter and overlooking greenspace

GS 4

Type:

- Outdoor sports facilities

Purpose (role and function):

- Recreational space

Key Characteristics:

- Sports pitches
- Woodland edge structure planting to perimeter of pitches

GS 5

Type:

- Natural and semi-natural greenspace
- Allotments

Purpose (role and function):

- Recreational space
- Supporting biodiversity
- Sustainable drainage

Key Characteristics:

- Shelter-belt to perimeter of area
- Water bodies
- Wet woodland species with appropriate trees, shrubs and ground flora
- Marginal planting to water bodies
- Reed beds, pools and channels near to water body

Note: Proposed developments should seek to conserve and enhance the biodiversity of Earl Beauchamp's Drain.

Strategic mixed use area

The plans included within this strategic design guide incorporate proposals for the new football stadium and associated complex proposed by Scunthorpe United Football Club. This scheme will transform this part of Lincolnshire Lakes, acting as a major destination, traffic generator, local and regional landmark.

It is crucial that the relationship between this and surrounding development is well managed and suitably integrated, particularly given the differing scale and uses proposed here and in Village 5 which immediately bounds the football ground site.

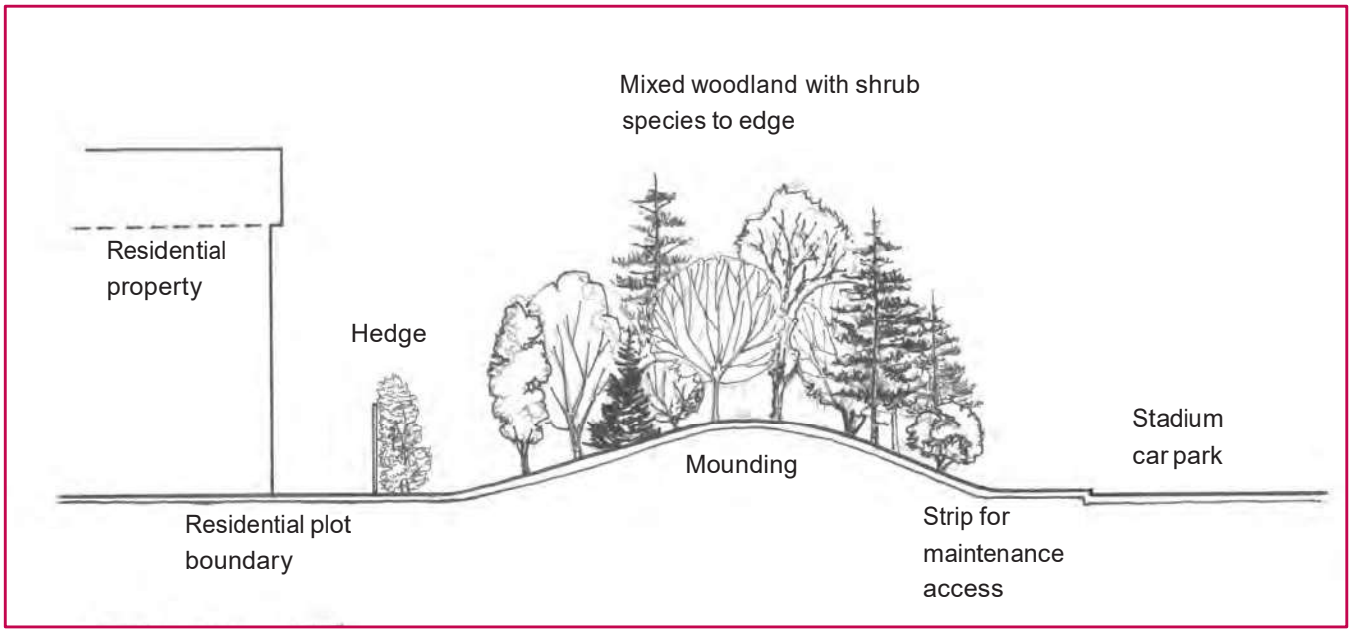
The nature of the boundary between the two application areas and treatment of this can help that relationship, acting as a noise and visual buffer between residential properties and the stadium complex.

When detailed design matters are prepared for Village 5 the nature of this edge should be fully considered, with the residential development set-back to allow for provision of a strong landscaped edge.

The cross section below indicates a potential approach to provision of a landscaped buffer between the football stadium and residential development in village 5.

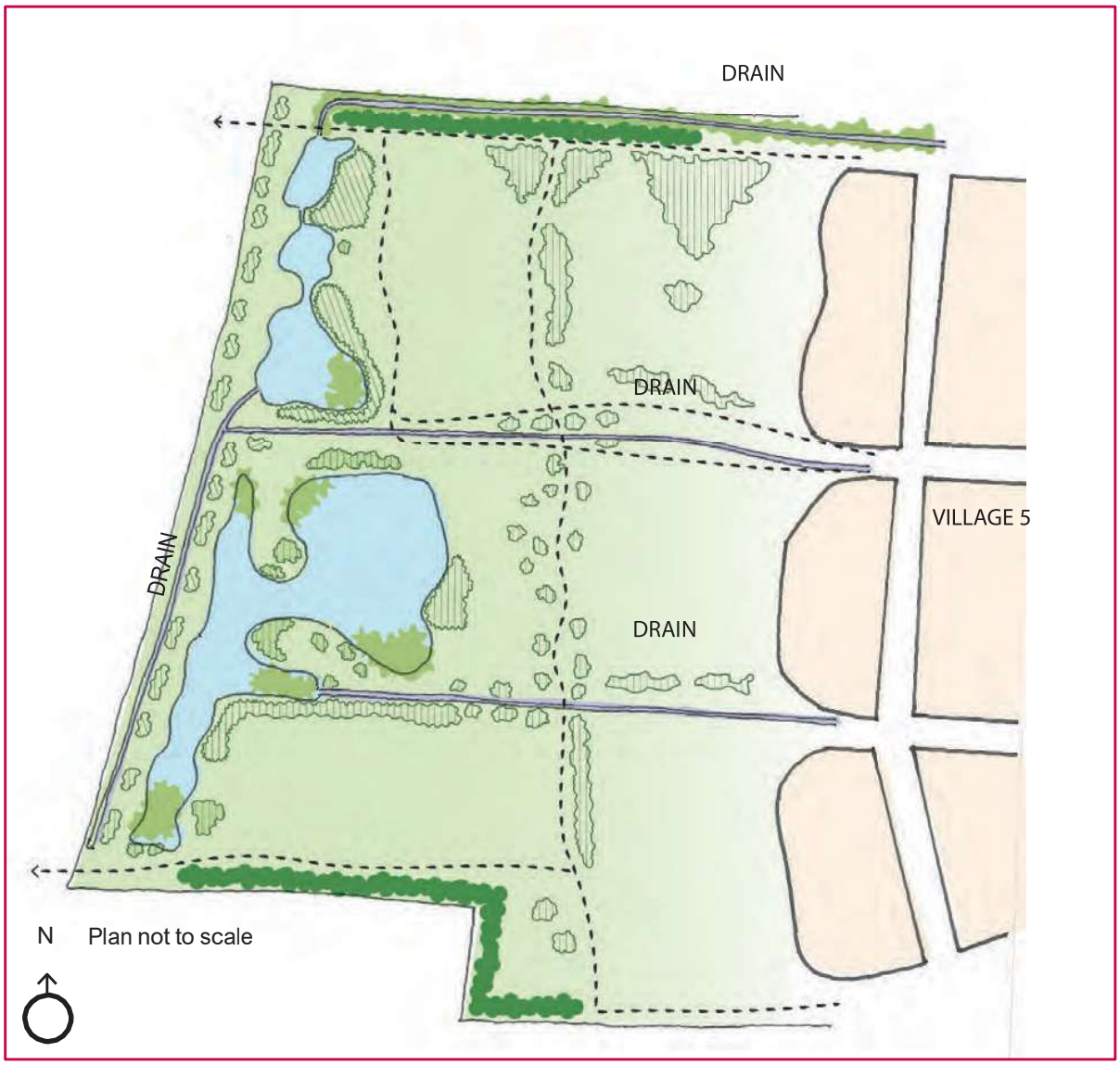
Should the proposal for the SMUA by Scunthorpe United Football Club not be implemented then alternative design solutions for the area should be considered. The plan overleaf presents an alternative set of design principles which reflect the AAP and earlier planning applications for this area.

Above: Visualisation of the new Scunthorpe United football stadium, looking west towards Village 5 to the top of the image.



Above: Cross section showing possible landscaping and buffer treatment between the football stadium and neighbouring residential development in Village 5. The green buffer shown here is approximately 10 - 15 metres wide. Where appropriate, this may incorporate drains with enhancements for water voles and aquatic plants.

Above: Alternative layout and design principles for the SMUA, should the Scunthorpe United Football Club proposals not be delivered



approximate footprint of water body

wet woodland

shelter belt (poplars)

vegetation reed

beds footpath

network

Lake 3

The AAP notes:

- The function of the lake is primarily for surface water management and ecological enhancement purposes.
- The lake should take the form of a wetland area with an undulating landform and variable water depths creating deeper and shallower areas with open water and patches of emergent vegetation.
- The lake should also provide a surface water attenuation function for the village and will cover an area of approximately ten hectares.
- New green infrastructure should be set around the lake and include planting buffers alongside the western fringe of the lake, making a positive contribution to the edge of the area.

The size, position and treatment of the lake presented in the strategic design guide reflects that within the planning application granted permission for the area.

Key design principles are set out beside.

Description

- For ecological enhancement
- Surface area approximately 10 hectares
- Provision of water attenuation for village 5 (approx. 76,000 cubic metres)
- Fluctuating water levels subject to water attenuation
- Limited and controlled public access

Design

- Fine grained approach to spatial arrangement and habitats
- Series of connected water bodies
- Habitat variation with lake, wet woodland, reed beds, grassland and scrapes
- Shelterbelt provided by poplars

Above: Village 6 key design principles

04. Village 6 and Lake 4

Village 6

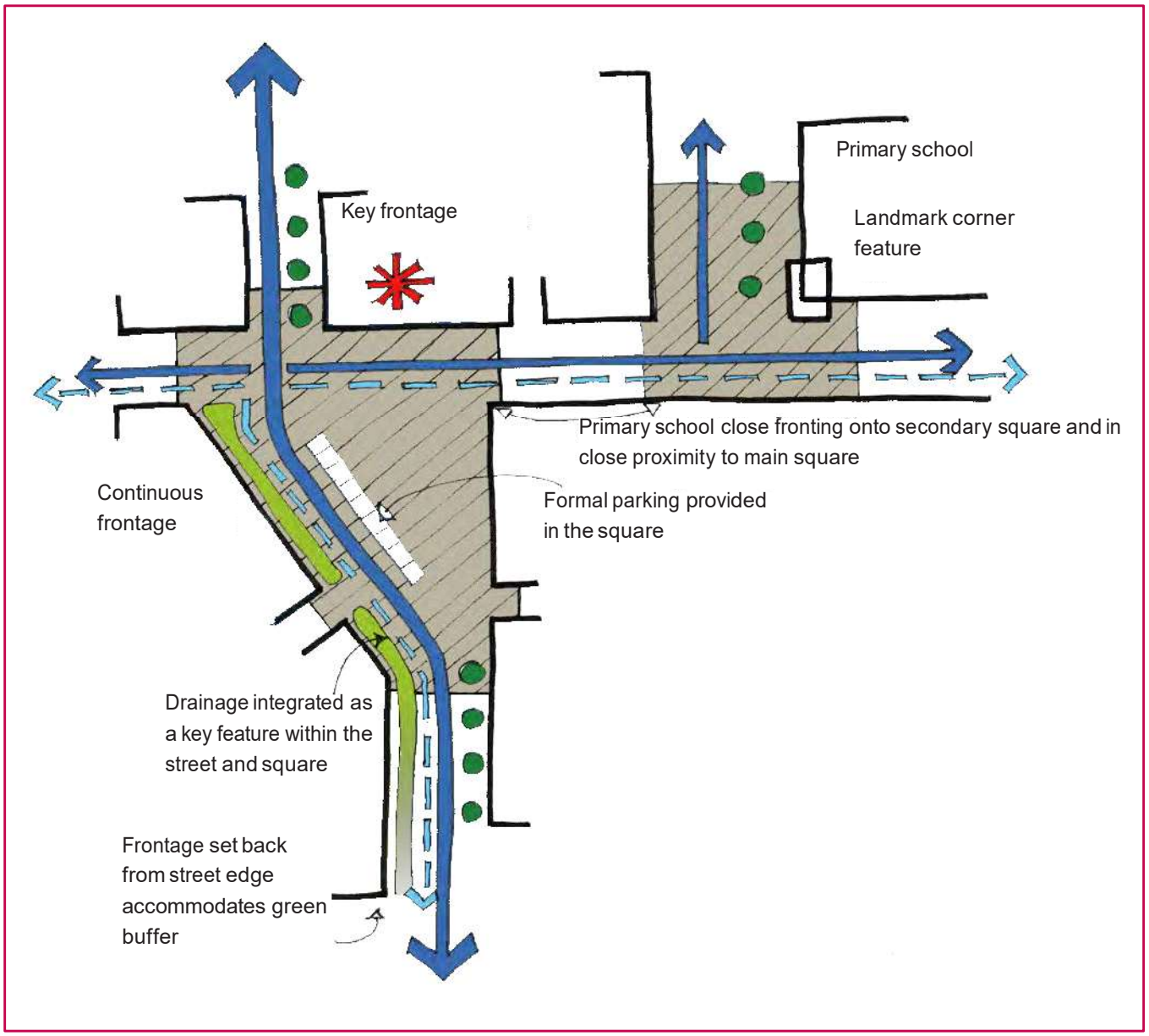
Village 6 presents a transition from the open countryside to the west and the start of the Lincolnshire Lakes development area. Views and edge treatments are important considerations in this location, as is the relationship of new development to the lake which will involve the creation of new ecological habitats. The local centre in this village will include a new primary school, incorporating co-located sports provision. The primary route network connects the village to Burringham Road and north to village 5. A secondary network will provide for pedestrian and cycle links, providing direct links with Brumby Common Lane, the local centre and SMUA in village 5.

Village 6 character drivers and features:

- Creation of new ecological habitats around Lake 4.
- Informal development edge to west of village, responding to lake environment.
- Formal edges to new parkland to north and south of village, and buffer planting to motorway edge.
- Network of green fingers through the village, integrating drainage ditches and connecting to the lake.
- Primary school located close to centre.

Key design principles

1. Local centre framed by active building frontages.
2. Key building terminates view along primary route.
3. Secondary square at entrance to primary school.
4. Primary school and co-located sports pitches.
5. Green finger connects east west through village.
6. New Burringham Road alignment and junction.
7. Existing Burringham Road bridge retained for local traffic, pedestrian and cycle use.
8. Formal edge to village, overlooking green space.
9. Green space provides a buffer to Burringham Road and allows for incorporation of local amenity space requirements.
10. New junction and access into Village 6.
11. Potential for wider recreational routes / circuit to connect across Burringham Road and link green spaces.
12. Key building at gateway location to the village.
13. Informal, looser development edge to west of the village, responding to ecological function of and landscaping around lake 4.
14. Development set back behind green finger alongside drainage ditch and primary route, providing a connection through to the lake. The existing ditch to be realigned at this location, allowing for integration as a key feature within the local centre.
15. Nature of green space should 'transition' from the village to the lake edge, reflecting the ecological nature of the lake and habitats to be created here.
16. Pavilion located in the park, providing space for an ecological centre or similar associated with the lake.
17. Park to north of village provides scope for provision of play space and provides a form of separation to village 5.
18. Key building located on primary route and gateway into the village.
19. Buildings arranged to provide a strong frontage to park edge.
20. Pedestrian and cycle links along former alignment of Brumby Common Lane and through new park.
21. Strong building lines along primary and residential streets.
22. Key pedestrian and cycle connection between village 5 and 6, providing access to the primary school and local centre in village 5.
23. Key buildings at gateway to village alongside pedestrian and cycle link.
24. Formal square arrangement, with strong residential frontage around this, overlooking the space.
25. Green finger through village and alongside drainage ditch integrated into the street.
26. Retain existing vegetation to motorway embankment and plant additional trees as appropriate
27. Development arranged to back onto school playing fields to create an active street edge.



Above: Example sketch configuration illustrating key design principles for the local centre in Village 6.

Local Centre

The plan on the facing page shows a sketch configuration of the local centre in village 6. Key design principles are presented below. These should be used to inform concept and detailed designs through the planning application process:

- The arrangement of buildings and streets should create a public square.
- Buildings should frame the square and have active frontages which overlook the square. This should include the use of continuous frontages that provide a strong sense of enclosure to the space created.
- Buildings that terminate views should benefit from special care and attention. These can comprise taller elements to act as local landmarks and aid orientation.
- The primary route through village 1 runs to the south of the square, this will allow for use of new public spaces to benefit from the maximum amount of sunlight.
- Key retail and other non-residential frontages should line the north and eastern sides of the new square, allowing for interaction with the square, including for example spill-out space associated with new cafés.
- Development to the west of the square / primary route could include residential at ground level, though will require direct frontages to the street. Development on his side of the square will be set back from the street as it incorporates the realignment of the existing ditch within the village.
- The east west route through the centre comprises a 'green street', incorporating drainage and providing a link to the lake. The form of the ditch through the centre should be carefully integrated. It will comprise a key feature and provide an opportunity for a locally distinctive design response. The incorporation of drains within an urban setting should be designed such that it does not lead to fragmentation of habitats and resulting isolation of plant and animal populations
- On street parking can be provided in the square, running parallel to the street network.
- The village 6 primary school is located to the east of the local centre. This arrangement echoes that found in some of the outlying villages around Scunthorpe, where community facilities are found just 'off-centre'. The school should front onto secondary, smaller square. The corner of the building provides an opportunity to integrate a local landmark to aid orientation.

Further information on local centres within Lincolnshire Lakes is set out in Section 6, Part B of the strategic design guide. This should be read together with the principles for the village 6 local centre as outlined above.

Above: These examples from Freiburg (Germany) show how water can be successfully integrated within a central area and become a key, unifying feature of the area.

Above: Village 6 key green spaces

Green infrastructure

Important new habitat areas and green spaces to be incorporated within village 6 are set out below, with the numbers corresponding to the plan on the facing page. The role and function of these, and the key characteristics of each space, should be used to inform the design process during the planning application stage.

GS 1

Type:

- Natural and semi-natural greenspace

Purpose (role and function):

- Recreational space
- Supporting biodiversity

Key Characteristics:

- Water bodies
- Fishing activities
- Woodland planting

GS 2

Type:

- Natural and semi-natural greenspace

Purpose (Role and Function):

- Separating element between village 5 and 6
- Recreational space
- Supporting biodiversity

Key Characteristics:

- Incorporating ecology café
- Footpath/cycle route network
- Formal tree 'avenue' next to main east-west pedestrian/ cycle route
- Woodland blocks and network of meadows

GS 3

Type:

- Natural and semi-natural greenspace

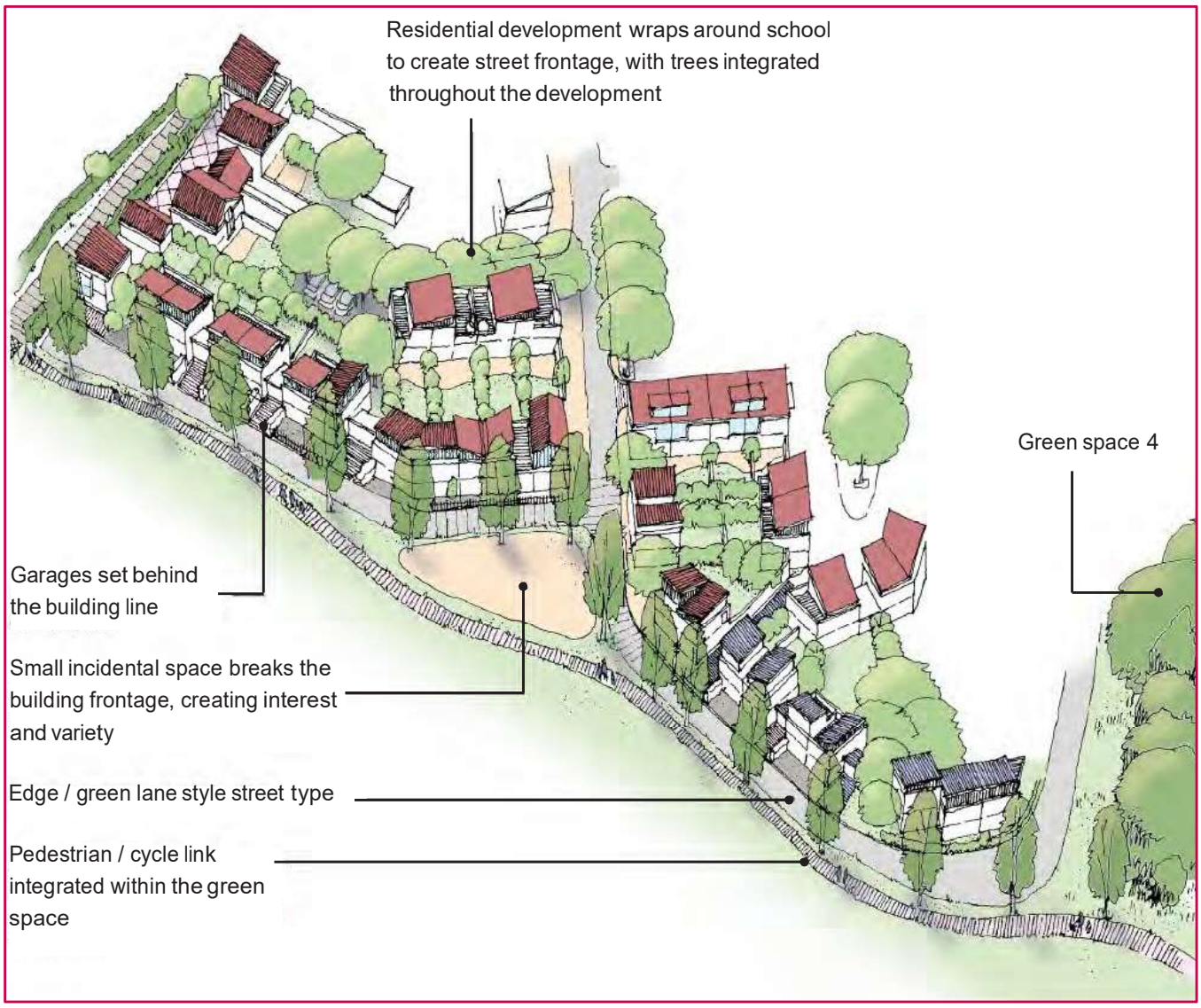
Purpose (role and function):

- Recreational space
- Supporting biodiversity
- Sustainable drainage

Key Characteristics:

- Water bodies
- Wet woodland
- Marginal planting adjacent to water body
- Wet grassland
- Bird hides
- Informal footpath network
- Section of recreation/leisure circuit

Left: Potential exists for inclusion of a visitor centre / ecology cafe or similar resource within GS2



Above: Possible sketch layout of interface between development and open space around eastern boundary of village 6, showing buffer to motorway and link round to greenspace 4 (GS4). For illustrative purposes only.

GS 4

Type:

- Parks and gardens
- Children and young people

Purpose (role and function):

- Formal greenspace serving central part of village 6
- Recreational space for play and focus of wider community
- Visual connection with wider neighbourhood

Key Characteristics:

- Public art features or landmark reflecting local character
- Formal, informal play areas and seating spaces
- Space to accommodate community events and recreation
- Some formal hedge planting boundary to edge of space to provide some enclosure
- Formally arranged tree planting using species such. Planted in 'avenues' to help articulate and enhance the footpath system.
- Vehicular presence to outer edges of space, i.e.. streets to the perimeter
- Residential properties fronting street to perimeter and overlooking greenspace

GS 5

Type:

- Amenity green space

Purpose (role and function):

- Network of amenity green space to southern edge of village 6
- Separating element from road network

Key Characteristics:

- Formal 'Avenue' planting next to road
- More natural character outside 'Avenue'
- Network of cycle/pedestrian routes linking to former Burringham Road bridge

Above: Lakeside environment

Key

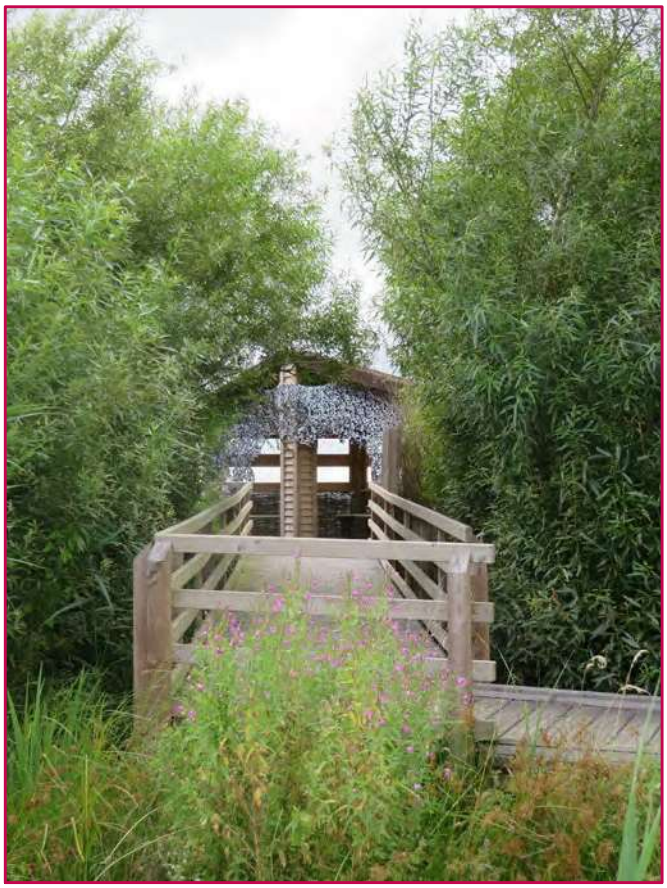
- approximate footprint of water body
- wet woodland
- reed beds
- linear ditches and scrapes
- approximate location of bird hide
- footpath

Lake 4

The AAP notes:

- The lake will primarily be provided for ecological enhancement purposes, and is likely to take the form of a wetland area with an undulating landform and sufficient depth of water to prevent weed growth.
- The surface area of the lake should be approximately 11ha.
- The lake will have limited and controlled public access, likely to be focused around the boundary that will front Village 6 and the east-west cycle link/bridleway to the north.
- The lake will provide surface water attenuation for Village 6 (approximately 59,580 cubic metres of attenuation must be provided as a minimum).

Key design principles are set out beside.



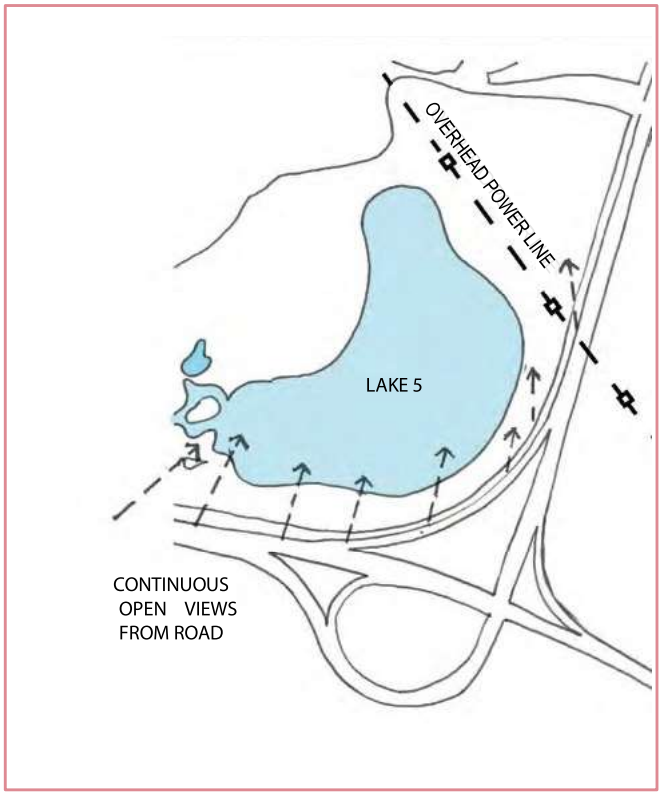
Description

- For ecological enhancement
- Surface area approximately 11 hectares
- Provision of water attenuation for village 6 (approx. 59,000 cubic metres)
- Fluctuating water levels subject to water attenuation
- Limited and controlled public access to the eastern side of lake

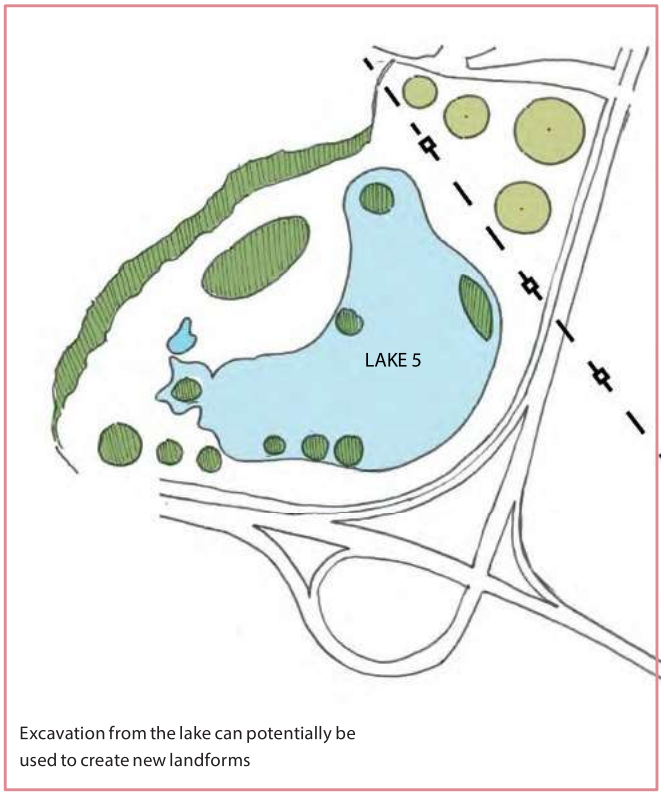
Design

- Fine grained approach to spatial arrangement and habitats
- Series of connected water bodies
- Habitat variation with lake, wet woodland, reed beds, grassland and scrapes
- Open western edge to allow birds to access water bodies
- Concealed bird hides facing west
- Wet woodland buffer between lake and village 6

Views from M180



Views from M180

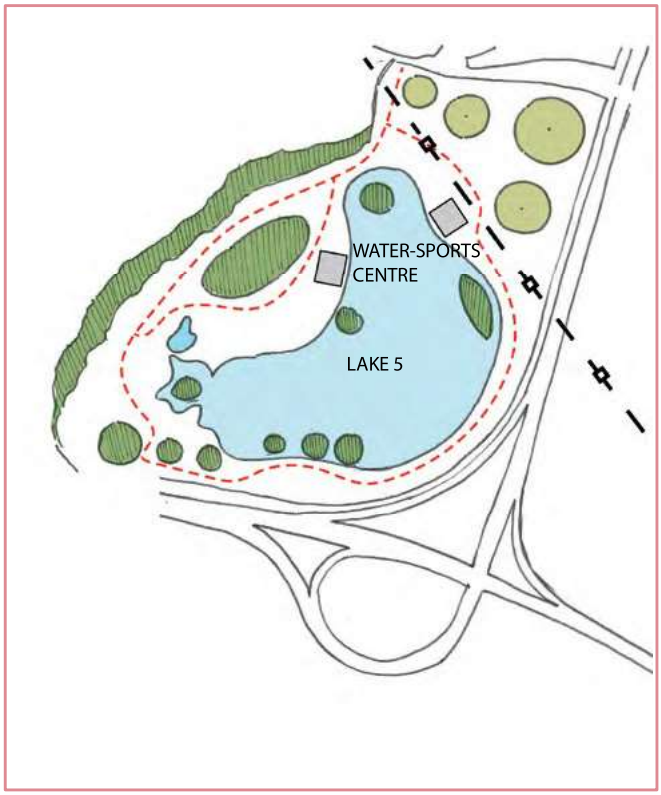


Landform

Lakeside Pa

Above: Lake 5 should be designed to allow for motorised and non-motorised water sports and activities.

Excavation from the lake
used to create distinctive
landforms



Lakeside Path Network

05. Lake 5

Lake 5

The AAP notes:

- The lake will primarily be for commercial leisure and active water-sports (motor-based), although non-motorised uses will also be supported where they are compatible with motorised uses.
- The lake should be approximately 600m long, with a minimum width of 150m, with a surface area of approximately 20ha.
- The lake should have a minimum depth of 2.5m.
- The lake will be a gateway feature for Lincolnshire Lakes and should be designed to a high standard with visibility maximised.
- The lake should be surrounded by publicly accessible spaces that are designed for safe access and to facilitate recreational walking, cycling and running along the lakeside.
- Lake 5 will require supporting ancillary built facilities, which are likely to be suitably accommodated in a lakeside location.
- Lake 5 is not required for surface water drainage attenuation purposes.

Key design principles are set out beside.

Description

- Motorised and non-motorised recreational/water based uses
- Minimum depth of 2.5m
- 600m length, minimum width 150m, surface area 20 hectares
- Highly visible gateway feature for Lincolnshire Lakes
- Semi-natural greenspace to perimeter of lake
- Accessible greenspace for walking, running and cycling
- Supporting ancillary built facilities for recreation at lakeside locations

Constraints

- Overhead power line routed to north side of lake
- Store excavated fill for lake on site

Strategic views

- Maintain open views of lake from M180

Landform and path network

- Potential to create new landforms, sensitive to ecological concerns, to accommodate excavated fill
- Creation of islands using same fill
- Varied location of perimeter path; adjacent or remote to lakeside

Wider views

- Distinctive landforms and islands for visual interest and depth to views

Planting of landforms

- To contribute to varied character to lakeside

06. General guidance

This section of the strategic design guide presents more general guidance that should be considered when preparing schemes and proposals for the villages. This section includes general guidance in regard to:

- Street typologies.
- Street network.
- Building heights, the arrangement of development fronts and backs, street fronts and green edges.
- Development density and residential block typologies.
- Parking arrangements within residential areas.
- Local centre uses, development quanta and mix, access and movement strategies.
- Landscape and ecology.
- Integration of drainage ditches within the development form.

These are a starting point which should be further developed to respond to the analysis, features and characteristics within each of the villages.

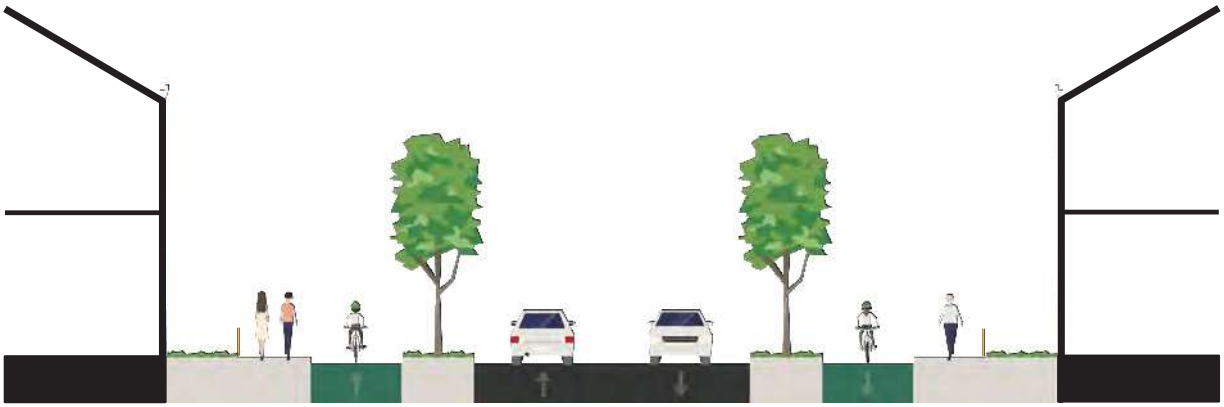
Street typologies

The following sections describe the broad street types in the Lincolnshire Lakes area as established in Part A. Flexibility exists to adapt these according to location, though the basic principles outlined should be adhered to. For each street typology the following information is provided:

- Cross section and plan view through the street, showing key dimensions and the relationship between the carriageway, public space and buildings.
- A description of the role and function of the street type.
- Overview of the users catered for within each street type.
- Overview of parking arrangements along the street and buildings fronting it.
- The building types, heights and set backs along each street type.
- The landscaping and public realm treatments to be considered along each street type.

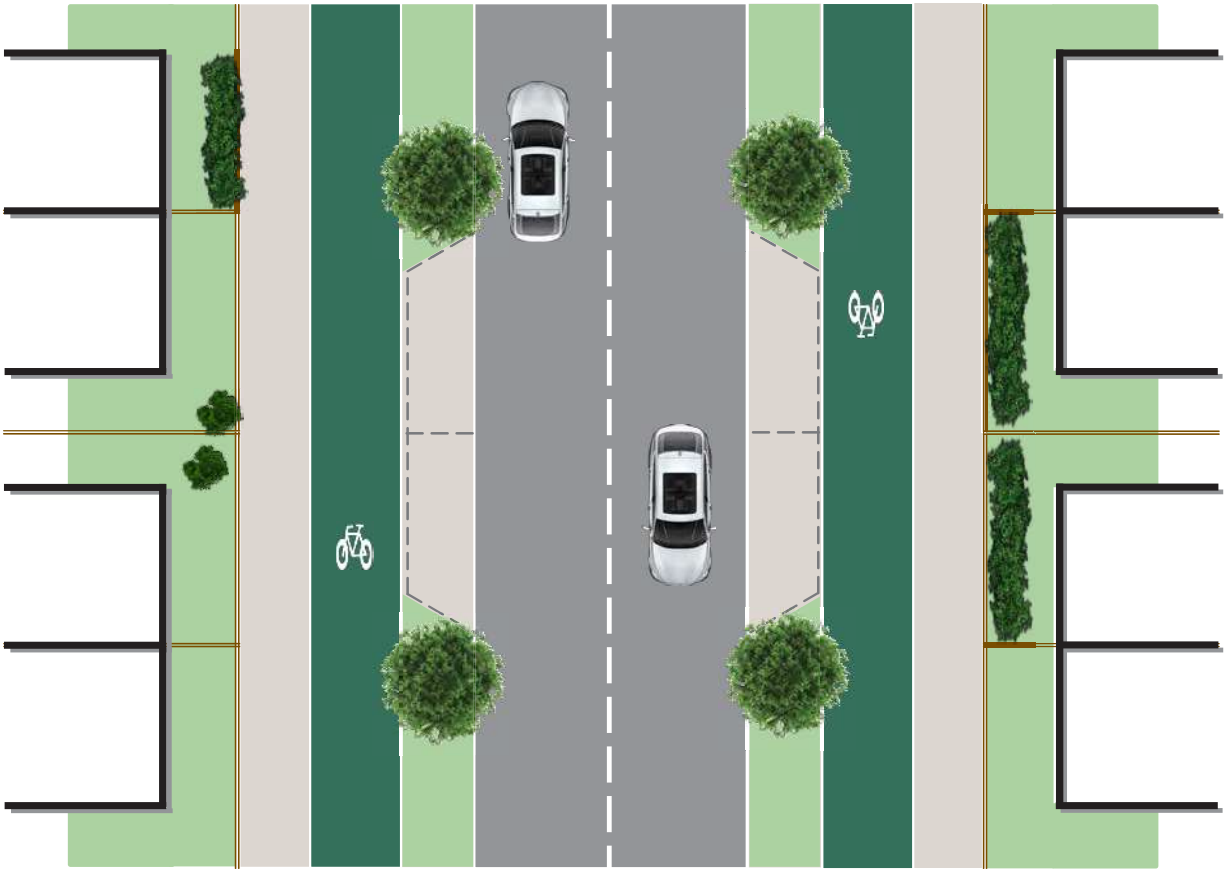
In instances where 'avenue tree-style' planting is indicated route containment systems will need to be provided and consideration given to maintenance arrangements. All green paces should be designed appropriately and to a high standard, with personal safety given due consideration. Wherever possible, green spaces should be overlooked, encouraging natural surveillance.

Main East-West Strategic Links



front garden	pave-ment	cycle lane	flexible zone*	carriageway	flexible zone*	cycle lane	pave-ment	front garden
2m	2m	3m	2-3m	7.3m	2-3m	3m	2m	2m

* Flexible zone able to accommodate a mix of landscaping, car parking and street furniture



Illustrative only

Strategic / Primary streets

Main East - West links

Applications

- Along Burringham Road, subject to existing street / property to property widths. Scope for this arrangement to be explored between villages 2 / 3 and across the motorway to village 6.
- Realignment of Brumby Common Lane through Village 1.

Description

These routes connect the villages to Scunthorpe and the de-trunked M181, via new junctions on the de-trunked M181 and along Scotter Road.

User types

These streets provide for all users, with bus routes on them connecting the villages to each other and Scunthorpe. Pavements should be provided on both sides of the carriageway, with segregated cycle lanes also incorporated linking with safer crossing points on the main strategic route network. Further information is provided with Part A of the Strategic Design Guide.

Parking

Where residential properties front the street they should have a mix of on-plot parking in garages set back from the street and some unallocated parallel on-street visitor parking. The number and location of unallocated on-street parking bays will need careful consideration through the detailed design and planning application stage.

Buildings

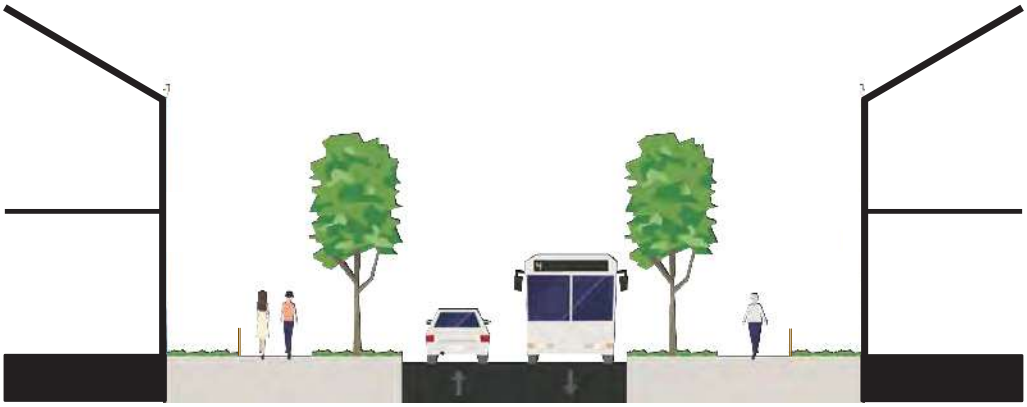
Where buildings front the street they should be predominantly two storeys high and provide a continuous frontage. A mix of house types may front the street, though all should benefit from provision of a front garden.

Where buildings come up to the edge of the highway but don't directly front it, blank walls and gable ends should be avoided.

Landscape

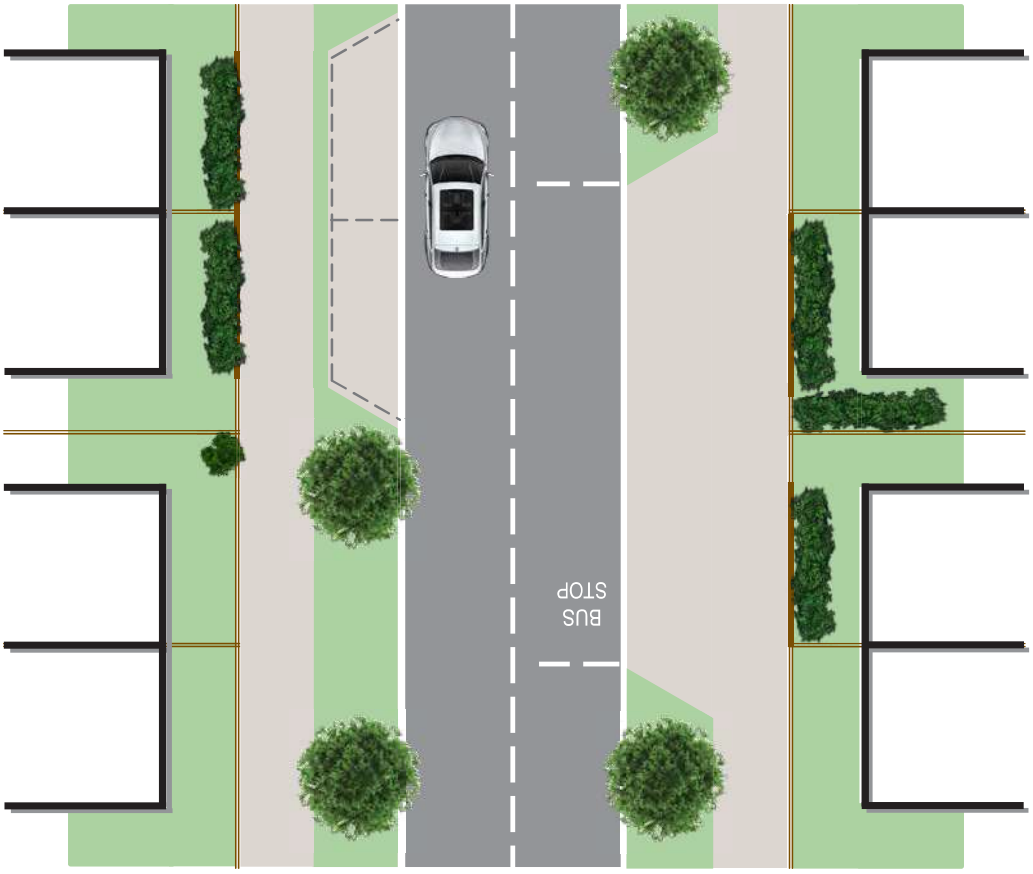
Green verges either side of the carriageway should incorporate tree species with scale and presence, and well maintained grass verges. Trees should provide biodiversity value and be acceptable in terms of highways maintenance. Pavements and cycle lanes should be treated with different materials to help define the two. The use on non-standard materials and the on-going maintenance of these will need agreeing through the detailed design stage.

Village Connectors



front garden	pave-ment	flexible zone*	carriageway**	flexible zone*	pave-ment	front garden
1-3m	2-3m	2.5m	6-6.5m	2.5m	2-3m	1-3m

* Flexible zone able to accommodate a mix of landscaping, car parking and street furniture, including bus waiting facilities
** Bus cages provided on carriageway



Illustrative only

Primary streets

Village connectors

Applications

- Central streets running through the villages and local centres, linking each village with the strategic network (Scotter Road and Burringham Road)

Description

These streets act as the main movement corridors through Lincolnshire Lakes, connecting the villages with each other and the strategic route network. They run centrally through the villages, providing access to local centres and community facilities.

User types

These streets cater for all users and movement types, incorporating bus routes. Bus cages should be provided on the main carriageway, with waiting facilities incorporated within green verges either side of this. Where space allows, cycling infrastructure should be segregated. Elsewhere, streets should be designed to encourage lower speeds and thus allow cyclists to share the space. Junctions should be designed to allow for safe cycle movements. See Part A of the Strategic Design Guide for more information.

Parking

Parking should be provided through a mix of on-plot spaces and garages set back from the main building line, and unallocated on-street parking parallel to the carriageway. This can be incorporated into the green verge either side of the carriageway. The number and location of on-street bays will need careful consideration through the detailed design stage.

Buildings

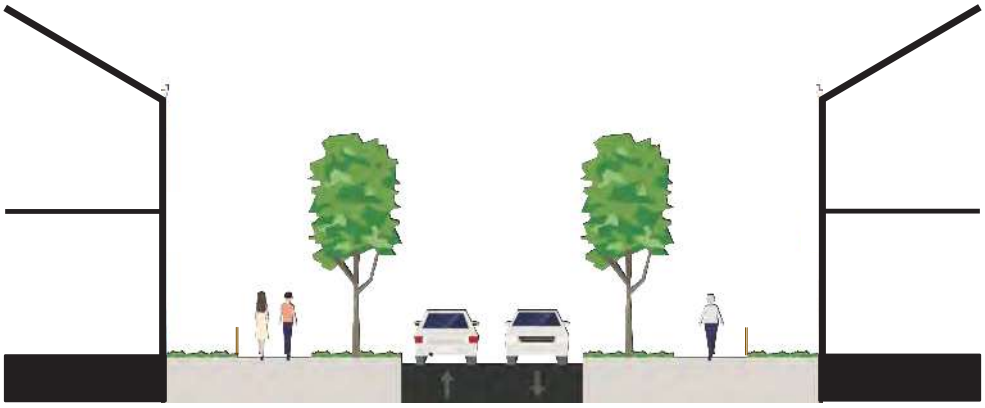
Buildings should be predominantly two storeys in height. Building types will vary along the route depending on village location, though a regular and consistent street frontage should be provided. Residential properties should have front gardens, which may increase in depth in lower density areas of the villages. Where the primary street passes through the local centre, residential properties should give way to retail, commercial and community uses. These should abut the pavement edge. In these locations the pavement can widen, providing the opportunity for provision of street furniture. Building heights should vary in central locations between two, two and a half and three storeys to create interest and variety.

Landscape

A planted green verge either side of the carriageway should include street trees with scale and presence, and parking bays in a different material to the main carriageway. Where the streets form part of the wider green infrastructure network, trees, shrubs and grass verge species should contribute to the wider biodiversity of Lincolnshire Lakes. Where the primary street passes through a local centre materials should change to reflect the function of the place: there will be fewer street trees and a harder landscaped approach. The use on non-standard materials and the on-going maintenance of these will need agreeing through the detailed design stage. Public realm strategies for the centres should be prepared.

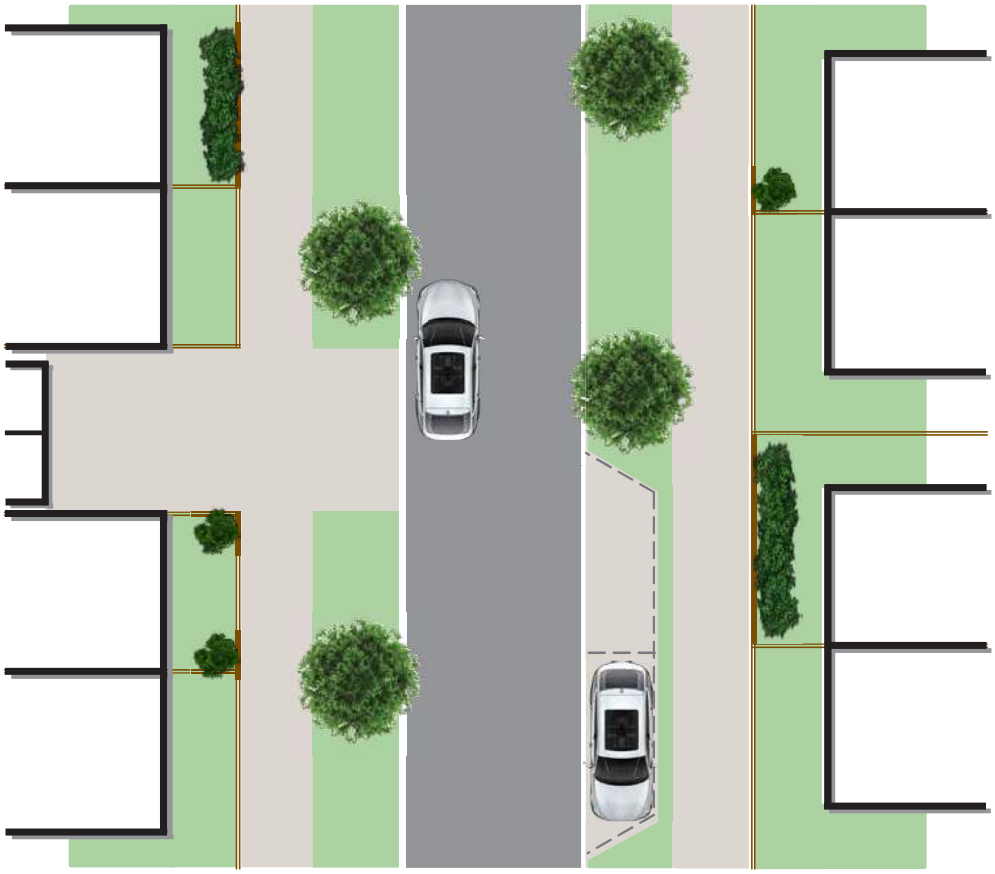
Above: Example of a primary street within a local centre context, incorporating public realm treatment.

Residential Streets



front garden	pave-ment	flexible zone*	carriageway	flexible zone*	pave-ment	front garden
1-3m	2m	2.5m	5.0-5.5m	2.5m	2m	1-3m

* Flexible zone able to accommodate a mix of landscaping, car parking and street furniture



Illustrative only

Secondary / Tertiary streets

Residential streets

Applications

- Secondary 'loop' within villages 1 and 5.
- Main residential streets within the villages, normally connecting with the primary street network and defining the edge of the residential blocks.

Description

These are the main residential streets within the villages and help define the main development blocks, providing local access to properties.

User types

Streets should be designed for relatively low speeds to allow cyclists to share the space. Pavements are provided either side of the street, with green verges between these and the carriageway.

Parking

Parking should be provided on-plot for most properties, with garages set back from the main building line. Short strips of unallocated on street parking, parallel to the carriageway, should also be provided for visitors. These should be incorporated into green verges between the carriageway and pavement. The number and location of on-street bays will need careful consideration through the detailed design stage.

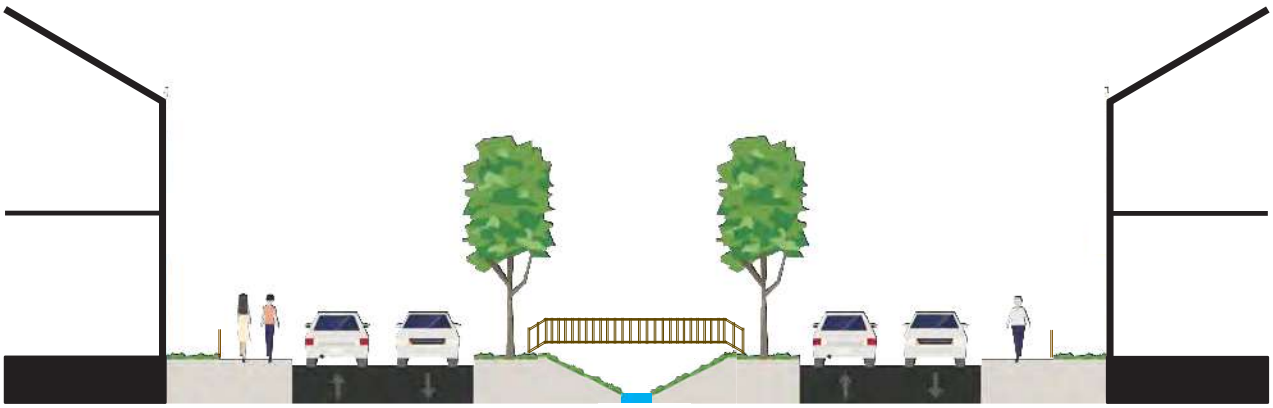
Buildings

Buildings should be primarily two storeys in height and may comprise a mix of terraced units, semi-detached or detached homes, depending upon location within the villages A regular and consistent street frontage should be provided. All properties should have front gardens, though these should be larger in lower density areas of the villages.

Landscape

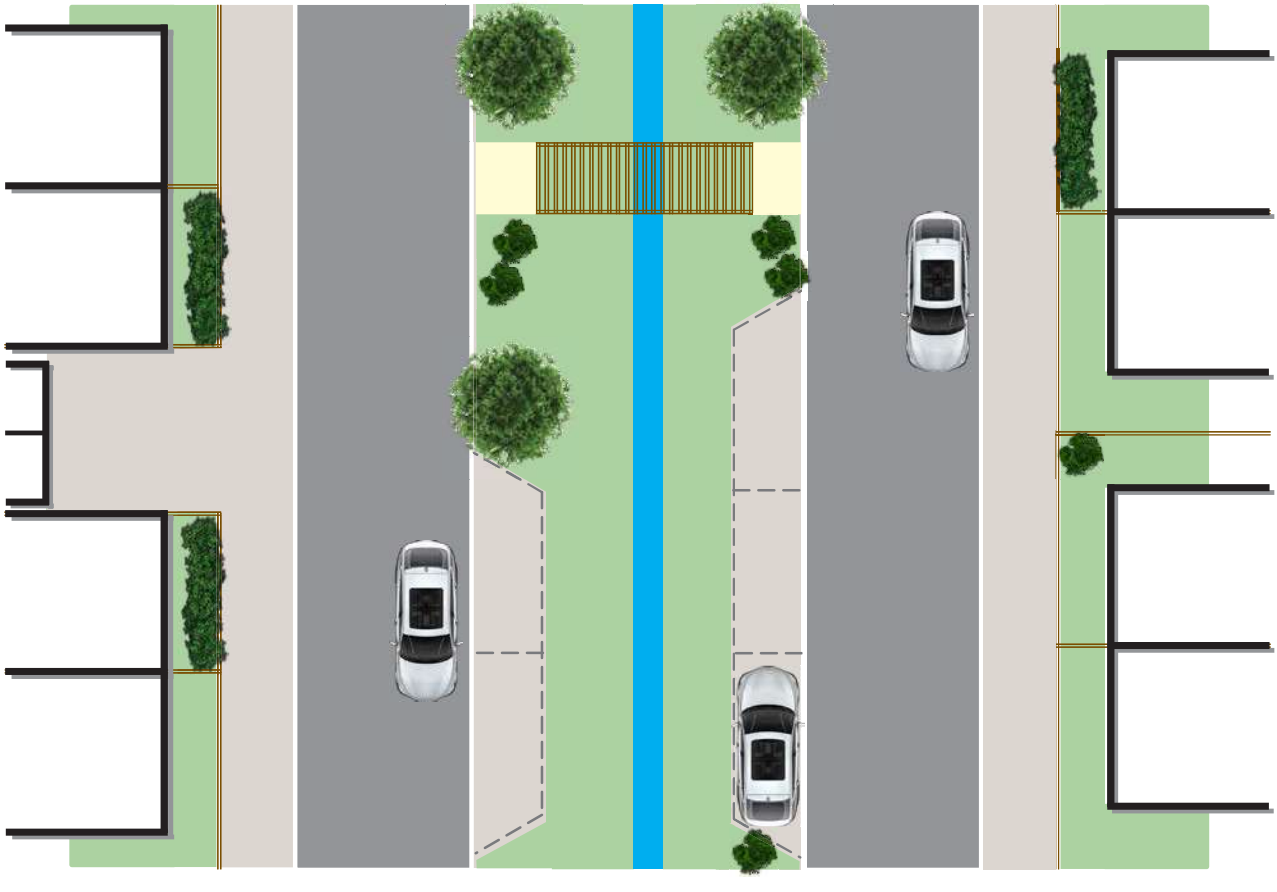
Street trees with scale and presence should be planted along the green verge between the carriageway and pavement. Where the streets form part of the wider green infrastructure network, trees, shrubs and grass verge species should contribute to the wider biodiversity of Lincolnshire Lakes. Flexibility allows to provide green verges on both or a single side of the street.

Green Streets (v1)



front garden	pave-ment	carriageway	flexible zone*	SUDs / Drainage ditches	flexible zone*	carriageway	pave-ment	front garden
1-3m	2m	4.8-5.5m	2m	3-8m	2m	4.8-5.5m	2m	1-3m

* Flexible zone able to accommodate a mix of landscaping, car parking and street furniture



Illustrative only

Tertiary streets (though with flexibility as Primary / Secondary street)

Green streets (v1 and 2)

Applications

- Within residential areas and alongside ditches, SUDs and swales within the villages. See for example village 2 and 5.
- A variation of this street type may also be applied along primary and secondary streets where they incorporate the network of ditches across the area. Examples include the primary street running through villages 3 and 4. In these instances the carriageway width and building set-backs should reflect dimensions within the primary and secondary street typologies outlined above.

Description

These streets integrate drainage ditches and the network of SUDs. They provide an attractive landscaped setting for buildings and routes for pedestrians and cyclists, forming part of the wider network of green spaces in the development area. Flexibility exists within this street type, allowing the carriageway to be provided on both sides of the central green space (v1, or just on one side with a wider pedestrian area opposite this (v2).

User types

These streets should be designed to provide local access to residential properties at low speeds. Bridges across the green space allow pedestrian movement between each side of the street. Pavements should be provided on both sides of the central green space in both variants of the street type.

Above: Vasalisstraat, Almere

Parking

Parking should be provided on plot in garages set back from the main building line. Unallocated visitor parking should be provide on-street. The number and location on on-street parking bays will need careful consideration during the detailed design stage.

Where the carriageway is provided on one side of the central green space only (v2), then parking for those properties should be provided in bays parallel to the green space. If rear parking is proposed it will need to be appropriately designed to encourage use (see principles for parking later in this document).

Buildings

Buildings should predominantly be two storeys in height and comprise mainly semi-detached properties with front gardens. Some taller buildings, up to three storeys, can also be provided to help create variety. All buildings should be fronted to overlook the street and green space.

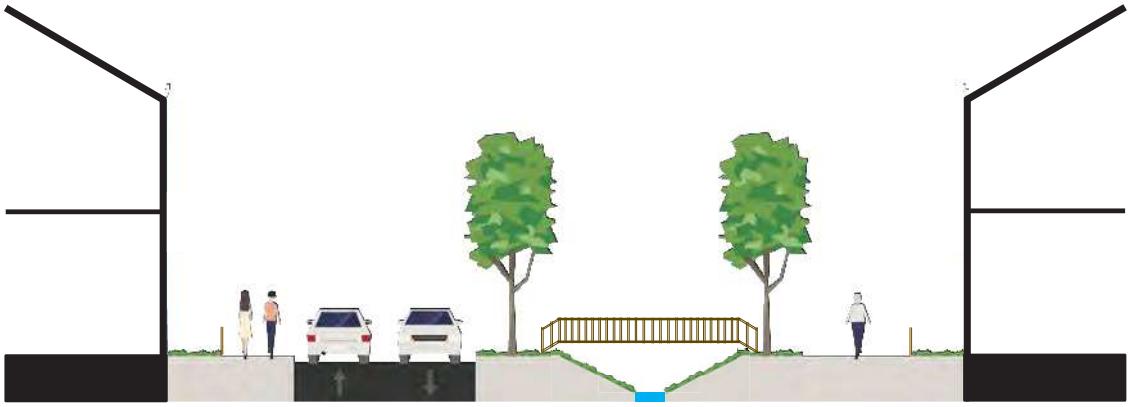
Where the carriageway is provided on one side of the central green space only (v2), buildings on that side should be primarily semi-detached, with a mix of semi-detached units and short terraces facing this.

Landscape

The central green space should be planted with species appropriate to and resilient to the water conditions, with occasional trees spaced to allow views across the space. On-street parking bays should be demarcated through subtle changes in materials. The use on non-standard materials and the on-going maintenance of these will need agreeing through the detailed design stage. Structural work may be required to accommodate street construction in proximity to drainage ditches.

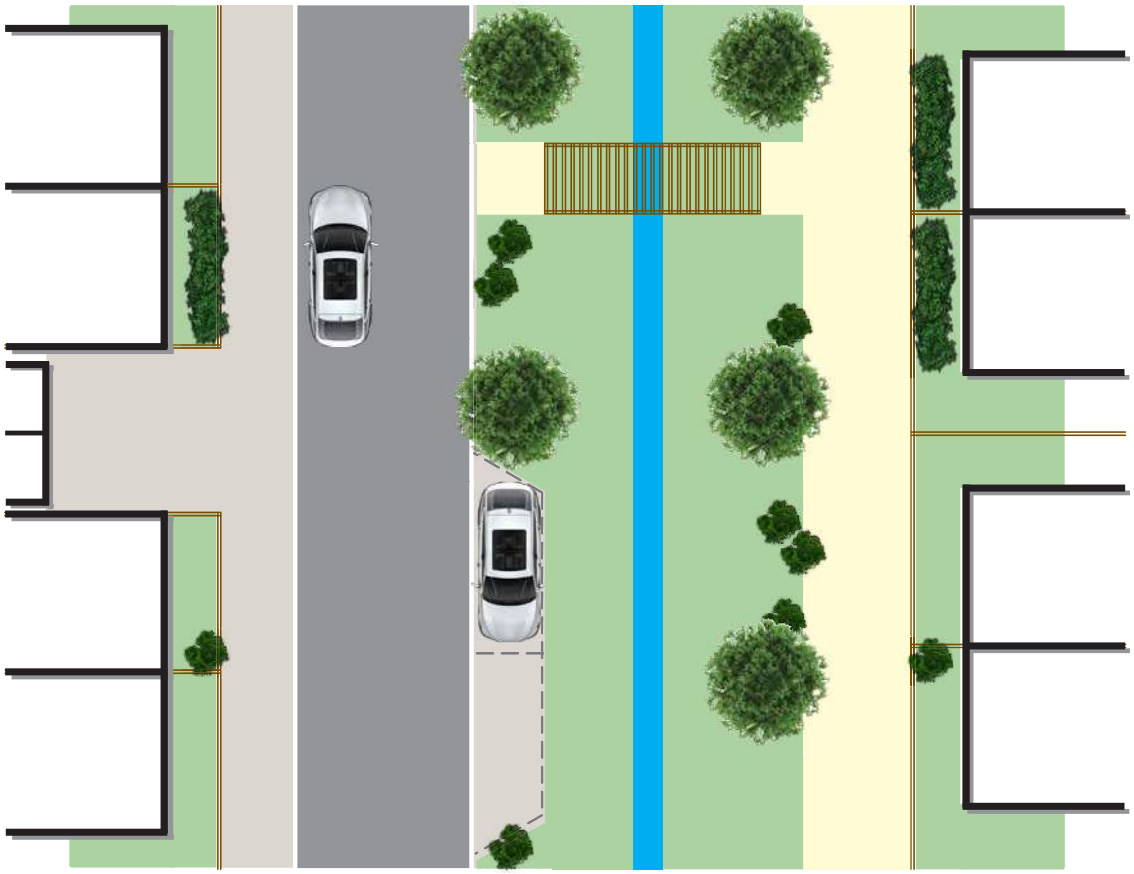
(Note: this spread shows v1 in cross section and plan view. V2 is illustrated overleaf)

Green Streets (v2)



front garden	pave-ment	carriageway	flexible zone*	SUDs / Drainage ditches	pavement	front garden
1-3m	2m	4.8-5.5m	2m	5-10m	3m	1-3m

* Flexible zone able to accommodate a mix of landscaping, car parking and street furniture



Illustrative only

Tertiary streets
(though with flexibility as Primary / Secondary street)

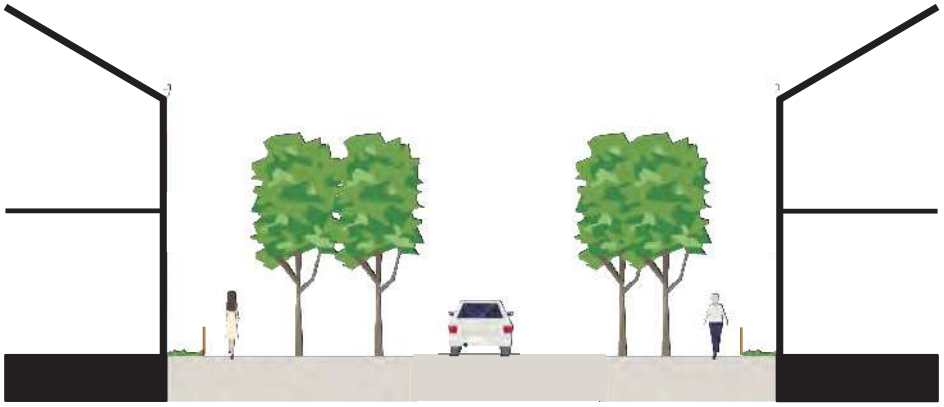
Note: this spread shows Green Street v2 in cross section and plan view. V1 is illustrated on the previous spread.

Applications

- Within residential areas and alongside ditches, SUDs and swales within the villages. See for example village 2 and 5.
- A variation of this street type may also be applied along primary and secondary streets where they incorporate the network of ditches across the area. Examples include the primary street running through villages 3 and 4. In these instances the carriageway width and building set-backs should reflect dimensions within the primary and secondary street typologies outlined above.

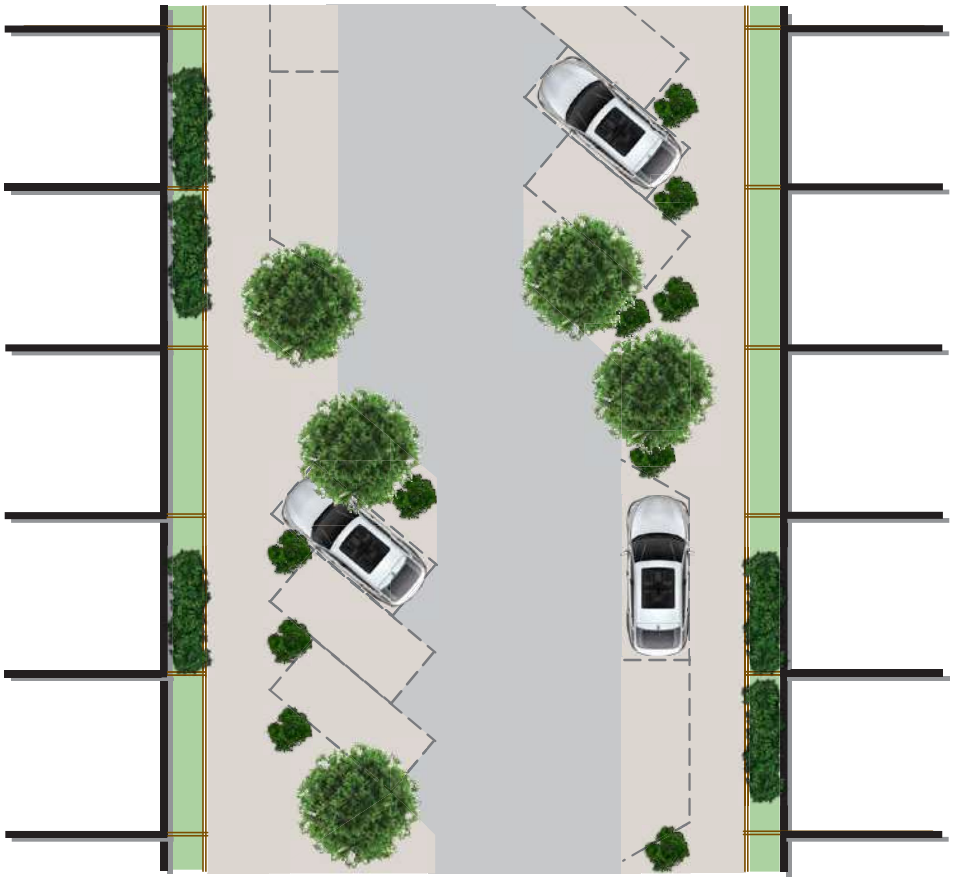
Above: Illustration from planning application for Villages 1 and 5 showing how drainage ditches might be incorporated within the street

Above: Upton, Northamptonshire (source: Princes Foundation)



privacy strip	pave-ment	space	parking	shared surface carriageway	parrallel parking	pave-ment	space	privacy strip
1m	1.5m		4-5m*	3.75-6m**	2.5m	1.5m		1m

* Dimension depends on whether echelon or 90° parking provided
** Where echelon parking provided a one-way shared surface area 3.75m wide can be provided. This should increase to 5m if two-way operation to be provided. Where 90° parking is provided, the carriageway should be 5.5-6m wide to allow sufficient space for reverse parking



Illustrative only

Tertiary streets

Neighbourhood / Mews streets

Applications

- Intimate and quieter residential streets, set back from the main street network. Example areas for application of this typology might include residential blocks within the northern part of village 3, providing a connection between the lake and nature reserve.

Description

Designed to take the form of homezones, these are quiet streets allowing for social interaction in a shared-surface area.

User types

Street should be designed for local movement and access to the residential properties, and allow all users to mix and share the space, though where priority is given to the pedestrian.

Parking

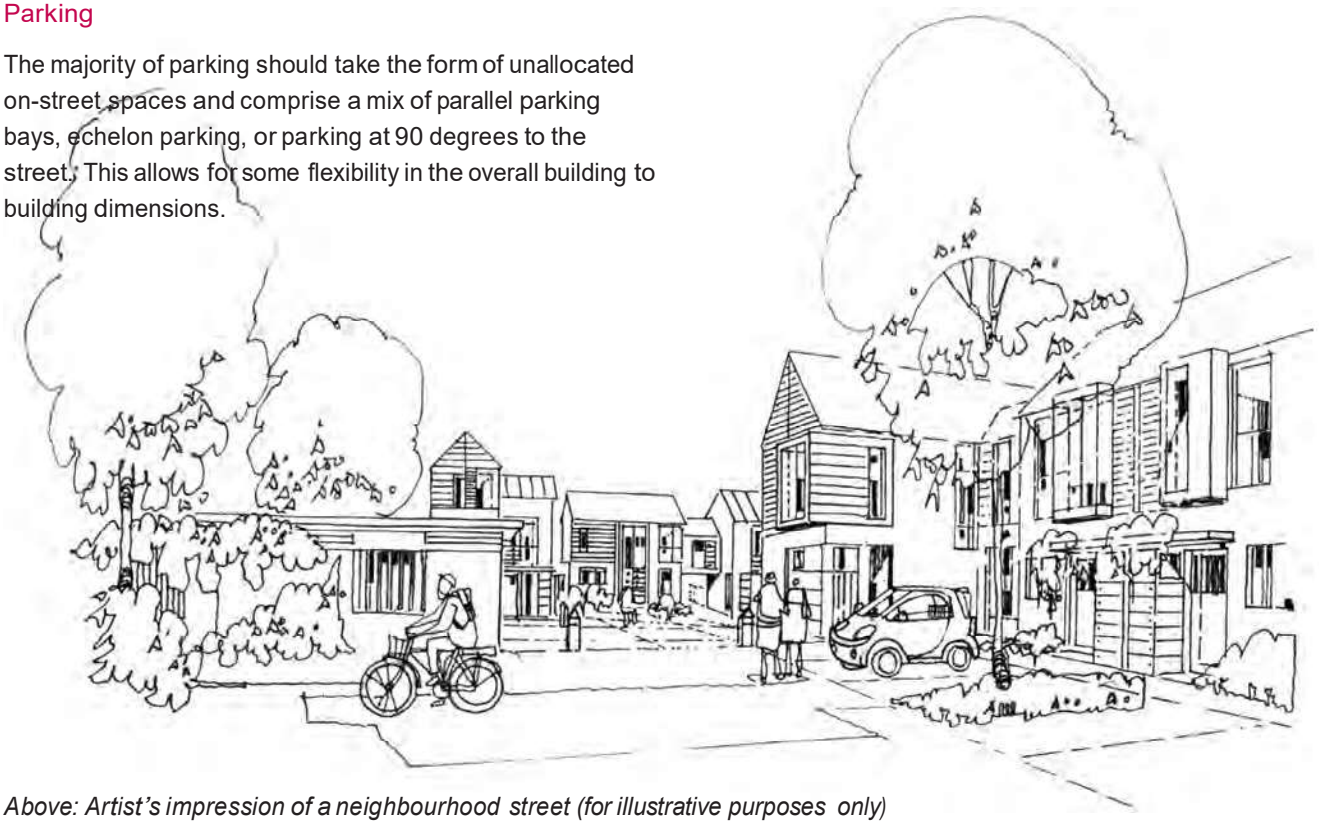
The majority of parking should take the form of unallocated on-street spaces and comprise a mix of parallel parking bays, echelon parking, or parking at 90 degrees to the street. This allows for some flexibility in the overall building to building dimensions.

Buildings

Buildings should predominantly be two storeys in height and benefit from a small privacy strip / planted buffer to the street. The street dimensions allow for some properties to benefit from larger front gardens. Buildings should comprise a mix of terraces with some semi-detached units, with continuous building frontages along the majority of the street. Taller three storey buildings on corner plots at the entrance to the street may be appropriate, providing variety and reinforcing the gateway to the street.

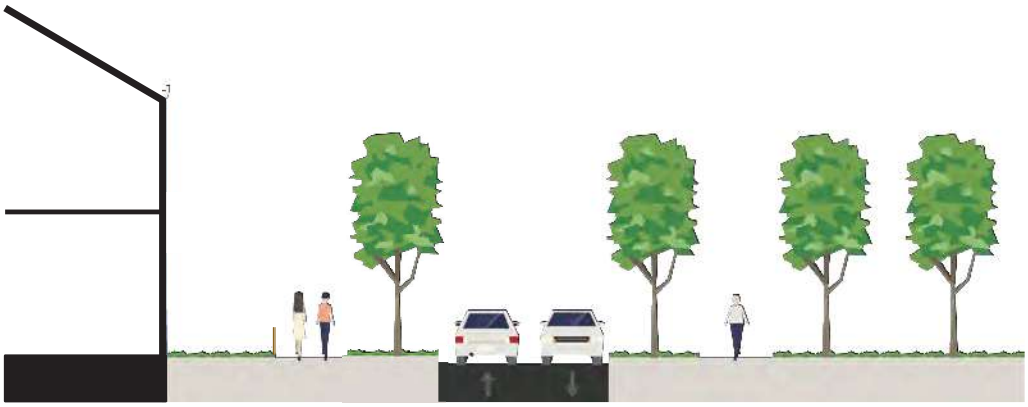
Landscape

Streets should take the form of a shared space but with different materials used to define the 'carriageway', parking spaces and pedestrian zones, reinforced by generous planting between parking bays and places where the alignment of the main carriageway changes. Street treatments and forms of traffic calming should be introduced at the entrance to the street. The use on non-standard materials and the on-going maintenance of these will need agreeing through the detailed design stage



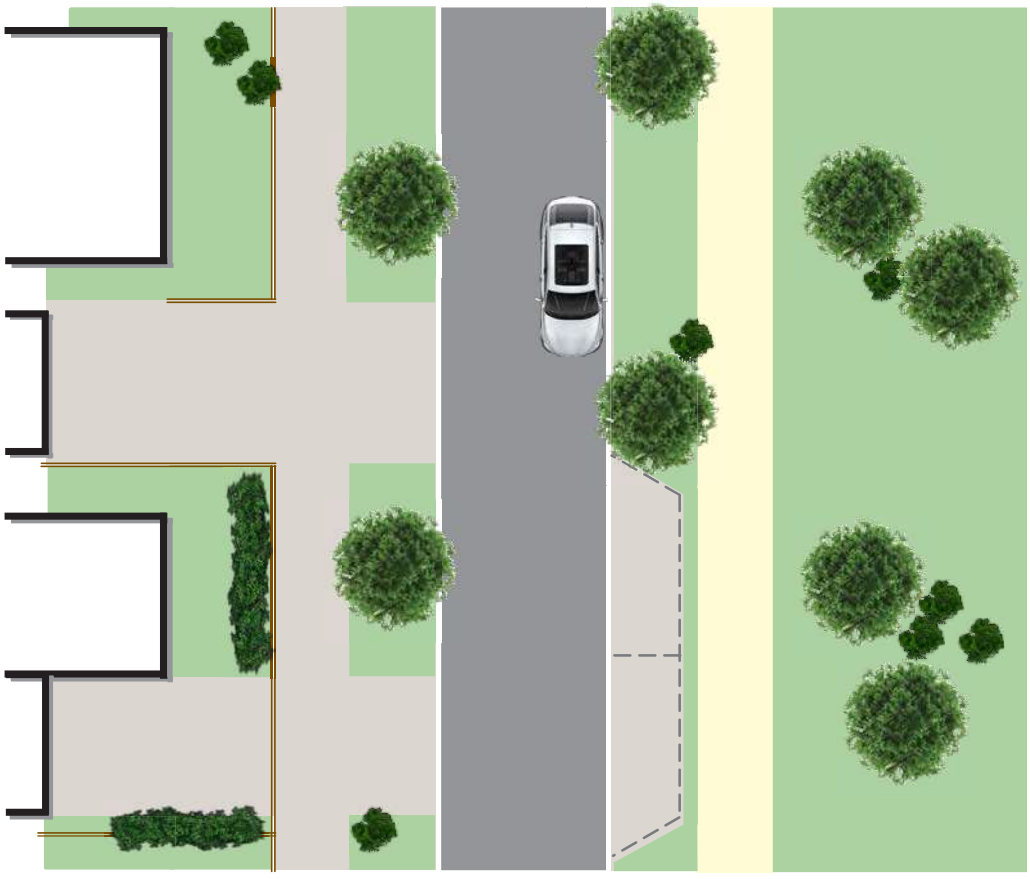
Above: Artist's impression of a neighbourhood street (for illustrative purposes only)

Edge Streets / Green Lanes



front garden	pave-ment	verge	carriageway	flexible zone*	pave-ment	village edge
3-5m	2m	2.5m	3.75-5.5m**	2.5m	2.5m	No set width

* Flexible zone able to accommodate a mix of landscaping, car parking and street furniture
** Dimension depends on whether one or two-way operation provided



Illustrative only

Tertiary streets

Edge streets / Green lanes

Applications

- Residential streets to the edge of the villages where a looser arrangement of buildings is provided for. See for example the western edges of village 5 and 6.
- Residential streets to the edge of villages and open spaces where a formal arrangement of buildings and consistent building line is to be provided. See for example the northern and southern edges of village 6.

Description

These are streets at the fringes of the development area overlooking the landscaped edges of the villages. The development grain is looser in these areas than elsewhere but, all the same, new homes should front the street. Can also be used in edge conditions where a more formal arrangement of buildings is appropriate.

User types

Streets should be designed for low speeds and low levels of traffic serving local movement to residential properties, allowing cyclists to comfortably share the space with vehicles. Pavement space for pedestrians provided on residential side of street, with country-walk / rural path provided through landscaped area.

Parking

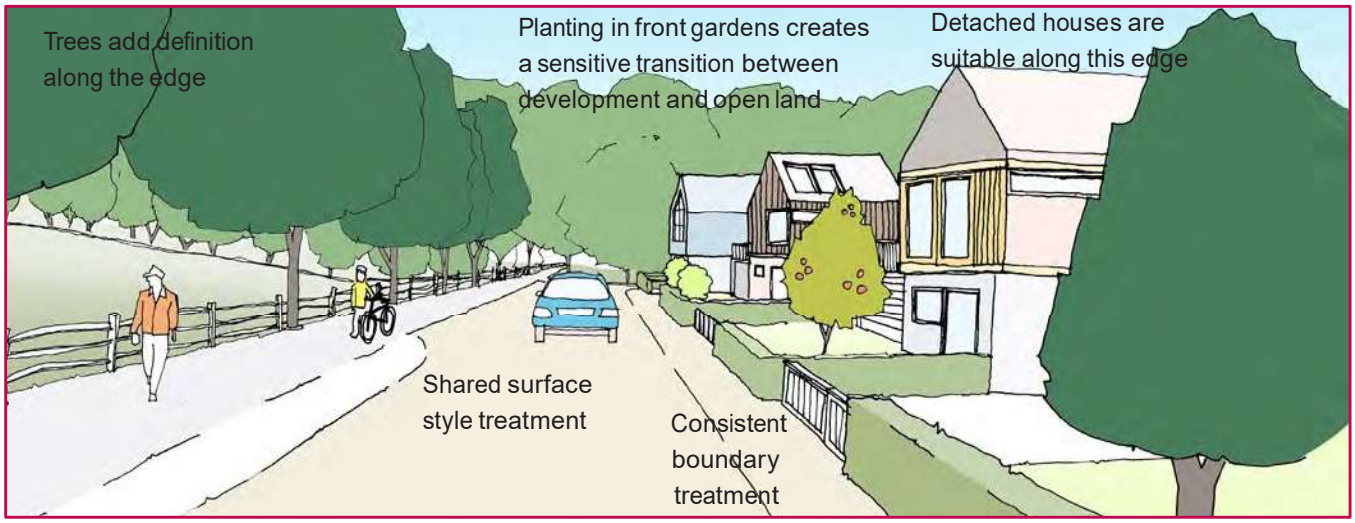
Parking should be provide on-plot with garages set back from the main building front so that parked cars on driveways do not dominate the street view. Unallocated / visitor parking provided on-street, incorporated within landscaped verge either side of the carriageway. The number and location of bays will need careful consideration through the detailed design stage.

Buildings

Buildings should predominantly be two storeys in height. Most homes are detached, though with potential for some semi-detached units. Larger front gardens should be provided, though there is flexibility to allow different building forms and variety. Where this street type is used in a location where a more formal and regular building line is required, a consistent set-back should be applied.

Landscape

Street surfacing and materials used should differ from other residential streets, signalling to users that they are in a different area. Landscaped verge separates pavement from carriageway. Verges should include locally native grasses and wildflowers. As an important location for biodiversity, swift boxes, bat bricks and bat lofts should be incorporated within adjacent buildings. Tree planting should be incorporated within the verge and within the landscaped area in line with wider landscape and planting strategy.



Above: Artist's impression of an edge street (for illustrative purposes only)

Street network

The street network developed for Lincolnshire Lakes is based upon a network of connected streets that create walkable neighbourhoods and provides travel choice for residents and visitors. The network comprises of a strategic east west link which connects the villages to the M181, Scunthorpe and the wider highway network via Burringham Road. A primary network of connecting roads then run through the villages to link with the strategic link to form the main central spine for the movement of traffic of all classifications.

Above: Example of informal village junction arrangements in Poynton

The de-trunked M181

Access to Lincolnshire Lakes from the strategic network is to be taken from the M181, and in order to achieve this a significant section of the motorway will need to be de-regulated and the speed limit reduced. The developers will need to work closely with Highways England and the Local Highway Authority to progress the detailed design of the works required to achieve this.

In line with the preliminary proposals approved as part of the planning application submitted by Lucent and Maltgrade, there will be a requirement to provide two new roundabouts designed in accordance with TD16/07 of the Design Manual for Roads and Bridges, and a signalised junction, designed in accordance with TD50/04. The two roundabouts and signalised junction will divide the road into four sections. To the south of the southern roundabout the road will retain its motorway status. The three sections to the north of the southern roundabout will be designated as an all-purpose road. The speed limit of the section of road between the two new roundabouts will be reduced to 50-mph; the speed limit of the section of road between the northern roundabout and the new signal junction will be reduced to 40-mph with the section of road between the signal junction and Doncaster Road having a speed limit of 30-mph. Road Traffic (Speed Limit) Regulation Orders will need to be applied for and implemented bring these reduced speed limits into operation.

To further emphasis the new status of the road there will be a need to reduce the existing traffic lanes down to 3.5 metres and potentially convert the hard shoulder to a segregated cycleway should it be desired that this forms part of the strategic cycle network. In this instance the cycle way will need to be segregated from the main carriageway using either full kerbed segregation or textured paving to provide a minimum separation of 0.75m. Both the roundabouts and the signal junction will have to be cycle friendly and facilitate all cycle turning movements, including right turns. The cycleway will also be required to connect to the cycle infrastructure within the villages.

Village 1

Two sections of the primary network are contained within village and east-west section that connects with the de-trunked M181 to the west and Scotter Road to the east, and a north-south section that connects village 1 with village 2.

The east-west section of the primary network will form the main vehicle access to Village 1 and will connect with the de-trunked M181 by a roundabout and Scotter Road by a four-arm signalised crossroads. The road will be a two-way single carriageway road with pedestrian footways on both sides of the carriageway and subject to a 30mph speed limit.

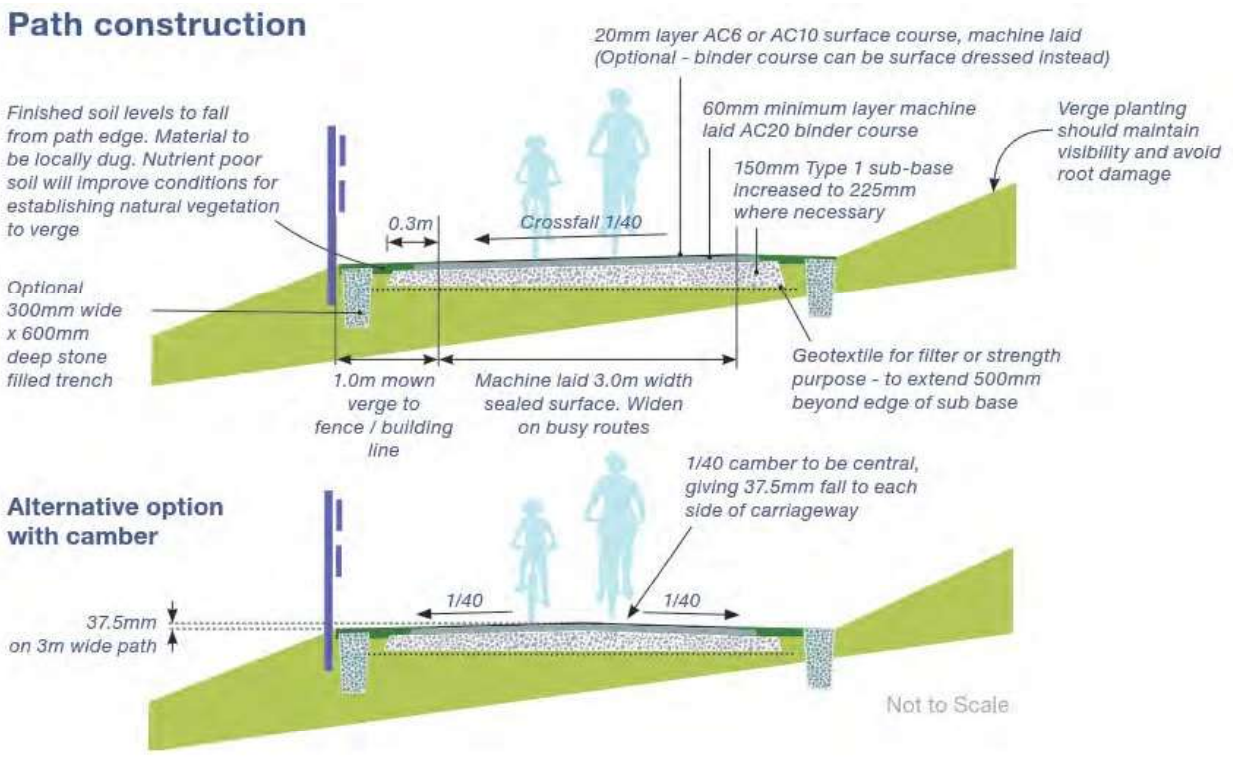
To the north of the east-west primary road the secondary road network allows the bus services to serve the local centre and connect with the bus only link to Scotter Road. The secondary road network will connect with the primary roads by major minor priority junctions or small island roundabouts. The secondary road network should be designed to encourage lower speeds, including surface treatments and incorporating measures that visually narrow the width of the carriageway.

Access to each neighbourhood will be via the tertiary roads which will give priority to pedestrian and cycle movement. These will, in the main, be shared surface streets with vehicle free links connecting each neighbourhood. Junctions between the tertiary and secondary road will take the form of a simple priority junctions with raised tables to facilitate pedestrian movement.

A major east-west pedestrian and cycle link is also provided within Village 1 by way of the 'green finger' and will utilise the existing Brumby Common Lane bridge over the M181.

Brumby Common Lane

As part of the movement network Brumby Common Lane will remain a public highway but will become a traffic free pedestrian and cycle link between the villages. The shared surface link will be required to have minimum width of 4.0 metres in order to allow groups of pedestrians or cyclists moving two abreast. The construction requirements for the traffic free route would be as per the sections below



Above: Construction requirements for new traffic free route along Brumby Common Lane

Village 2

The primary vehicular access to Village 2 will be from a new four arm roundabout junction on Burringham Road. Burringham Road itself will be realigned to form the east-west strategic link between Scotter Road and the M181. Burringham Road will connect with the M181 via a new large diameter 4 arm roundabout. The re-aligned Burringham Road will remain as a two-way single carriageway road with a segregated cycle and pedestrian footway provided on the northern side of the carriageway. The old alignment of Burring ham road and the existing bridge over the M181 will be retained for local through traffic as well as being a route for pedestrians and cyclists.

The primary road through Village 2 is located on the western side of the village and will provide a north-south long to Village 1 and will form part of the public transport route. The road is to be constructed as a two-way single carriageway road with formal footways on both sides of the carriageway and is to be the subject of a 30-mph speed limit. A number of green streets which will feature drainage ditches and swales will connect with the primary road on an east-west axis. These green streets will connect with the primary road by way of cycle friendly roundabout junctions. Pedestrian and cycle friendly tertiary streets will the connect to these green streets. The tertiary streets are to be design in accordance with Manual for Street principles as shared surface streets.

Villages 3 and 4

The primary access to villages 3 and 4 will be from the primary road and they will connect with the realigned Burringham Road in the north and Scotter Road to the east. The connection to Burringham Road will be via the fourth arm of the proposed new roundabout that will also provide the access to village 2. The primary road will have two points of access to Scotter Road. Both junctions are to be upgraded and should be cycle and pedestrian friendly. The primary road through villages 3 and 4 will also form part of the public transport corridor serving Lincolnshire lakes.

Village 5

Village 5 will have two principal vehicle access points located at the southern and northern ends of the village. The southern access will be from the new roundabout to be constructed on the M181. The northern access will be located immediately to the north of the proposed location for the new football stadium and will take the form of a signal controlled crossroads junction incorporating pedestrian and cycle crossing facilities.

The alignment of the primary road network through village 5 will take it immediately north and south of the site for the proposed new football stadium to connect with the new signal junction and roundabout on the de-trunked M181. Two new roundabouts are to be constructed on the primary road to provide access to the new stadium and the indoor training pitches.

To the west of the both of these roundabouts the design and surface treatment of the primary road will inform road users that they are leaving what is a ‘commercial’ area into the residential areas of the village.

The secondary and tertiary road within village 5 will take the same form as those within Villages 1, 2 , 3 and 4.

The major east-west pedestrian and cycle route that is a feature of village 1 will continue through village 5 passing to the south of the southern section of the primary road.

Village 6

There will be two principal vehicle access points to Village 6 both of which will be from the de-trunked M181 via a section of the proposed primary road network. The southern access will be from the proposed northern new four arm roundabout on the M181 via the primary road running east-west from the M181 to a new three arm roundabout. From this roundabout the primary road will run on a north south axis to provide access to the secondary and tertiary roads within the village. The primary road will then connect to the northern access to the M181 by way of a four arm signal controlled junction

Development form

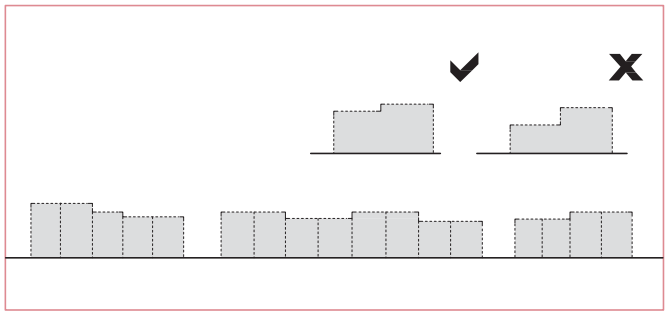
This section provides general guidance in respect of development densities, building heights, defining public and private space through clear arrangement of building fronts and backs, continuity of street frontage, the use of corner buildings, the relationship of development to green fingers, parks and open spaces, and residential block typologies.

Building height

Dwellings in the villages in Lincolnshire Lakes should generally be two storeys in height, though scope allows for two and a half and three storey buildings in places, adding variety and reflecting historic built form. Three storey buildings may be provided in range of locations, and the general principle is that they should be located where they serve a clear urban design purpose - e.g. terminating a key view-line or articulating a corner. A range of floor to ceiling heights might also be explored, particularly within local centres, to increase variety but not exceeding two to three storeys in height.

Where building heights vary they should gradually step up and down by now more than 0.5 storeys between adjoining buildings.

Taller buildings of four to six storeys may also be located within the villages but these should be limited to providing a landmarking function within the centres. This might be achieved through articulating the corner of a community building for example, reflecting the presence of church spires within the historic built form of the historic towns and villages in and around Scunthorpe.



Above: Building heights should vary by no more than 0.5 storeys in any step

Above: Subtle variations in building height are a strong design feature of the villages surrounding Scunthorpe. Buildings are generally two storeys high, though with variation in floor to ceiling heights and the pitch of roofs. Some three storey buildings are present in the villages, creating variety along the street profile.

Density

The urban design framework shows how development density varies across the villages. It is important that density is not confused with height: the vast majority of development should be two storeys in height, with some two-and-a-half and three storey buildings. High density areas are therefore those where building plots are smaller and include smaller house types. The areas of highest density are in the local centres, where it is important to create continuous street frontages in areas of high activity. Development densities should fall as you move from the centre to village edge. These locations will benefit from larger detached and semi-detached properties.

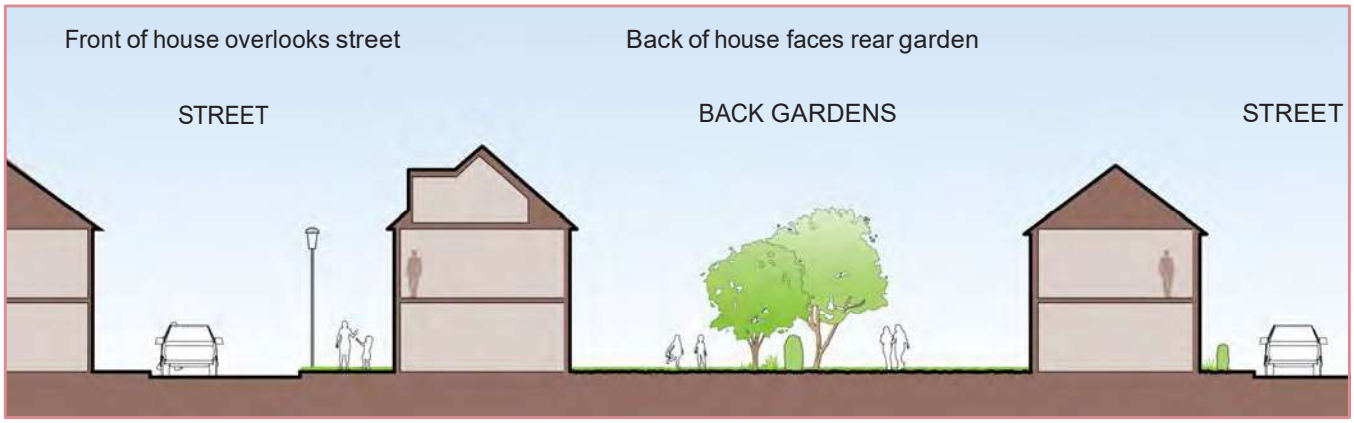
The boundaries between the different density areas are not intended to be create a rigid and distinct change in density: in reality, densities will be blurred across these boundaries.

Fronts and backs

Streets and spaces in successful towns and villages tend to feel safe because there are plenty of 'eyes on the streets' - i.e. the fronts of buildings overlook the street. Rear gardens usually back onto other private spaces, providing the building's occupants with privacy from public areas.

In the Lincolnshire Lakes villages, building fronts must overlook public space and private rear gardens should back onto other private spaces. Private back gardens onto public streets, footpaths and spaces must be avoided in most cases as this:

- results in a 'dead' frontage (such as a garden wall) to the street; and
- makes the private garden vulnerable, as it can be accessed directly from the public space.



Above: Preferred arrangement for the front and backs of buildings. This helps to clearly distinguish between public and private open space and ensures that streets and other public spaces are overlooked by the front of buildings.

Continuity of frontage

The way in which buildings enclose streets and spaces has a significant effect on character. The degree to which building frontages are continuous (such as a terrace) or discontinuous (such as detached dwellings) is an important part of enclosure.

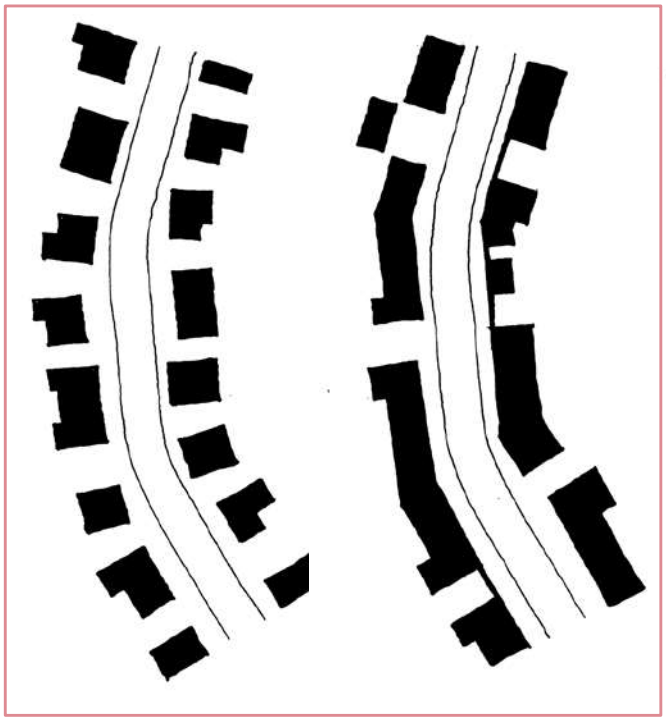
Within the local centres and along main / primary streets in Lincolnshire Lakes, efforts should be made to maximise continuity, reflecting the character of the five historic towns in Scunthorpe and the form of the outlying villages. Continuity may be increased by:

- Using terraced and linked buildings.
- Sparing use of good quality garden walls and outbuildings (such as garages) to increase the amount of continuous frontage, whilst taking care to avoid blank frontages dominating the street scene;
- Designing specific building types for corner locations.
- Using covered accesses (e.g. with bedrooms on the upper level) at the entrance to rear courtyards.

Corner buildings

Corner buildings have the potential to be a strong element within the villages, creating local landmarks and gateways in the local centres and transition areas between areas of different character and grain.

Standard house types in corner locations that result in blank flank walls to the public realm should be avoided. Instead, corner buildings should be designed specifically so that they 'turn the corner'.



Left: Detached building forms (far left) provide less continuity of frontage. More continuous frontages can be formed by linking building fronts, garden walls and outbuildings (right).

Above: Traditional villages often combine walls, outbuildings and dwellings to form continuous frontages that strongly enclose the street.

Green fingers, parks and 'rural' edges

Parks, open spaces and green fingers within the villages should be well overlooked and integrated into the development form. Strong building frontages, consisting of short terraces, should overlook these spaces, defining the edge of the space and enhancing the feeling of safety and security through overlooking and passive surveillance.

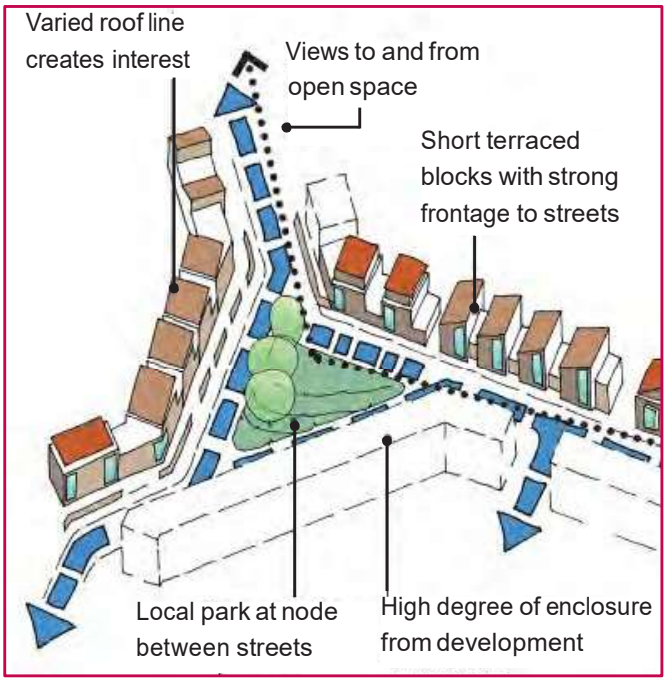
Links through the development blocks to the parks and open spaces should be provided at regular intervals, maximising permeability, local access to and views of green space.

Buildings should generally be two storeys high, though scope exists to explore three storey buildings on corner plots to help frame views of the green space.

Around the edge of the villages the grain of development should bleed out into the surrounding countryside. In these areas, larger semi-detached and detached dwellings provide a porous and informal edge. The frontages can be fragmented, with inconsistent set backs echoing a 'rural' treatment. Buildings in these locations should generally be two storeys in height and have generous front and rear gardens.

In places, these can be accessed from shared surface type drives and smaller lanes, reflecting a more rural and informal development edge.

Streets and links from the centre of the village should open up at the 'rural' edge. All green spaces should incorporate pedestrian and cycle links, tree and shrub planting of high biodiversity value. Landscaping should make full use of species of high biodiversity value. Swift bricks, nest boxes, bat bricks and bat lofts should be incorporated in these areas.



Left: Example sketch configuration of a well overlooked and fronted local square.

Above: Example of development creating a strong frontage to green space, using short terraces that overlook the space.

Development grain and residential block typologies

The grain of development should vary across the villages, responding to location and street type.

In central areas development density should be highest. Residential plots will be smaller and the development form more compact, with continuous frontages and enclosed, well defined spaces.

Moving away from the centre, towards the village edge, plots increase in size and frontages may become less continuous.

Moving from the centre houses will tend to take the form of terraces and semi-detached buildings, with small gardens providing a buffer and privacy strip to the street. Forming the transition between the local centres and more rural village edge, buildings here might be designed with adaptable ground floors, allowing for conversion over time to local facilities. In these areas, small play parks and pocket parks should be provided in line with the Councils open space standards.

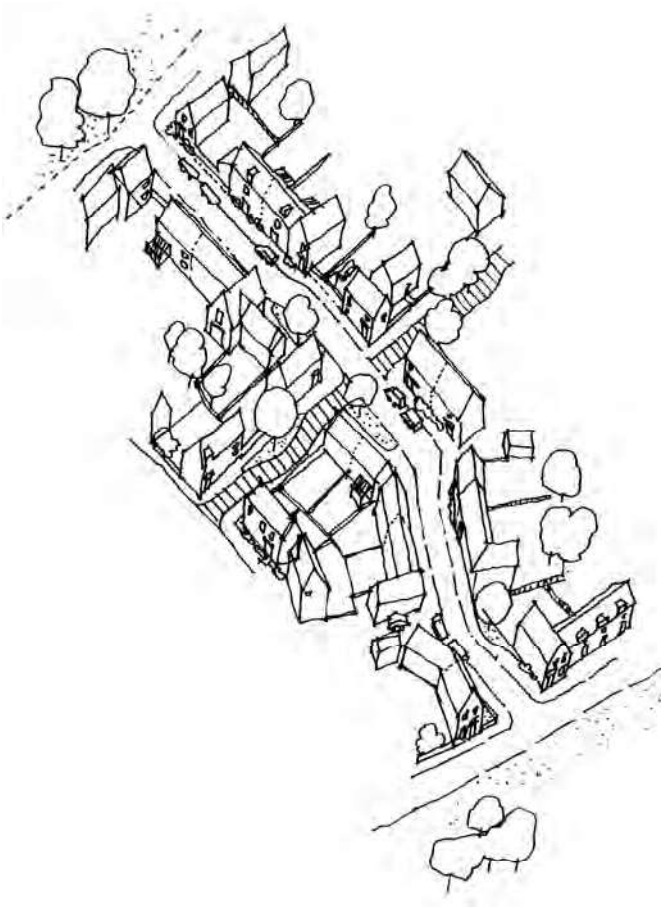
This grain of development will gradually move into a lower density area comprising mainly semi-detached houses and some terraces sitting in larger plots and with deeper front and back gardens. Streets in these locations should be well landscaped. Small play parks and pocket parks should be provided in these areas.

A more informal and fragmented arrangement of buildings and frontages might be appropriate on the village edge. Larger homes will be found here, comprising detached and some semi-detached houses. Houses here will benefit from larger front and back gardens, and be arranged to overlook well landscaped streets and open spaces. These streets and spaces should form attractive pedestrian and cycle routes, linking with the lakes and network of green fingers running through the development area. Larger parks, play spaces and sports pitches might be found in the green spaces around the village edge.

This arrangement is strongly linked to the street typology. Streets in village centres have a higher order movement function. Towards the village edges the streets are designed to cater for more localised movement and display more generous building set backs, gardens and landscaping. All streets and spaces should be designed to enable social interaction.

In terms of landscaping, amenity and ornamental trees, and shrubs, will be acceptable within and towards the village centre, but locally native species should be used at the village edge and in areas of open landscape. In both cases, there should be a preference for species of high biodiversity value.

The following block typologies show four different approaches to residential layout. These are not intended to be design preferences for Lincolnshire Lakes, rather they illustrate different responses to density and location, variations of which may be considered.

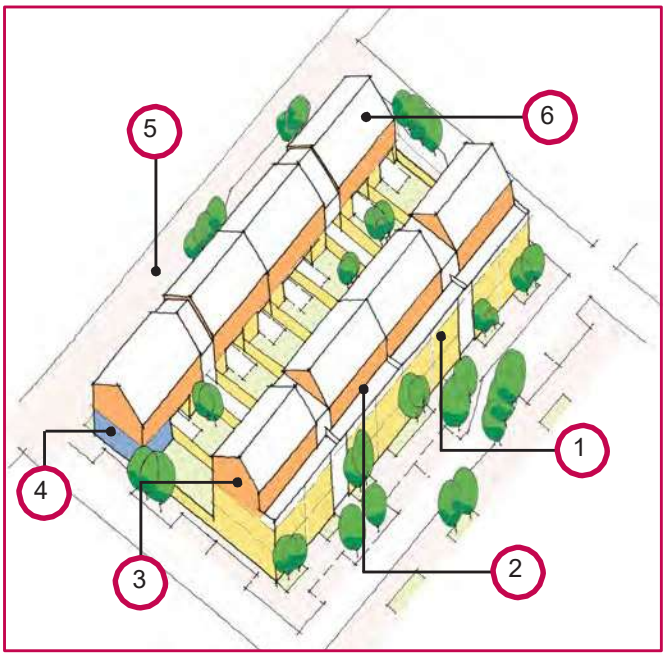


Above: Example sketch configuration of a well fronted residential street between green spaces. This type of arrangement might be suitable within villages 2, 3 and 4.

Highest density

This is an inherent flexible block typology, incorporating a range of unit types and sizes, and which have the potential to adapt to changing lifestyles or use types. This block typology might be found in and close to the local centres, with generous floor to ceiling heights on the ground floor allowing for retail, commercial, leisure or community use, with residential above. Equally, the buildings can be subdivided into flats, or act as larger town houses. The block incorporates private gardens and smaller units to the rear which might front a mews or neighbourhood type street. Units here might be linked to the main development frontage, or be split from this to provide separate residential accommodation or other appropriate uses, such as office space. Key features illustrated beside include:

1. Flexible residential units providing strong building frontage to the street, with parking provided on-street.
2. Potential for mixing uses, with residential above retail and other appropriate use types.
3. Family homes with gardens.
4. Garage to rear of block linked to family homes.
5. Flexible space to rear of block providing frontage to neighbourhood or mews type street, incorporating independent entrances suitable for residential or other use, such as office space.
6. Small flats can be used as separate residential units or linked to the main home (such as a granny flat or similar).



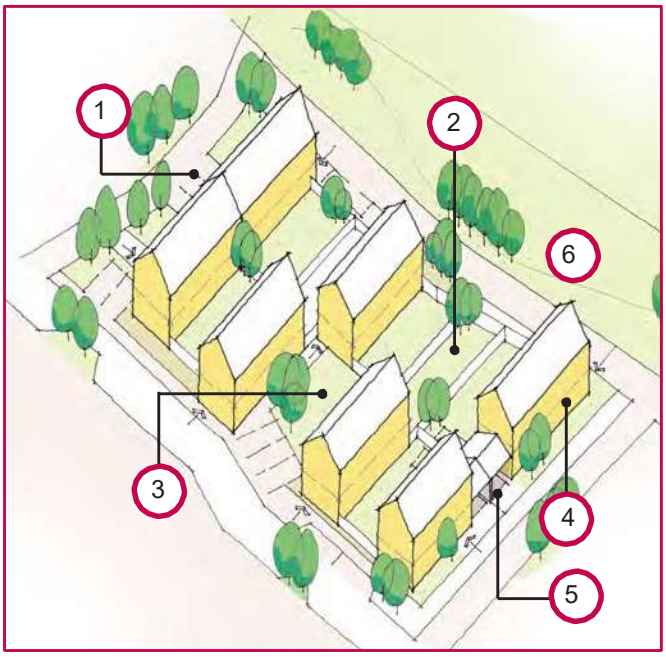
Above: Example block typology for higher density and central locations within the villages.

Right: Examples of higher density homes that might be appropriate for a central location within the villages.

Medium density

This typology allows for larger numbers of detached houses to be accommodated within a relatively small block. This is achieved by a non "conventional" placement of buildings around communal spaces and streets. It requires careful placement of windows to avoid blank gable ends and sensitivity to issues of privacy and overlooking. This arrangement allows for a continuous and regular built frontage to the main street, with secondary streets along the side of the block having a greener feel. This arrangement could be used alongside the green fingers and green streets within the villages. Key features illustrated beside include:

1. Detached houses with parking in courtyard / on street.
2. Communal green spaces.
3. Private gardens.
4. Detached houses with parking on plot or within garage.
5. Regular and consistent development edge to main / primary street.
6. More open, greener edges to secondary streets.



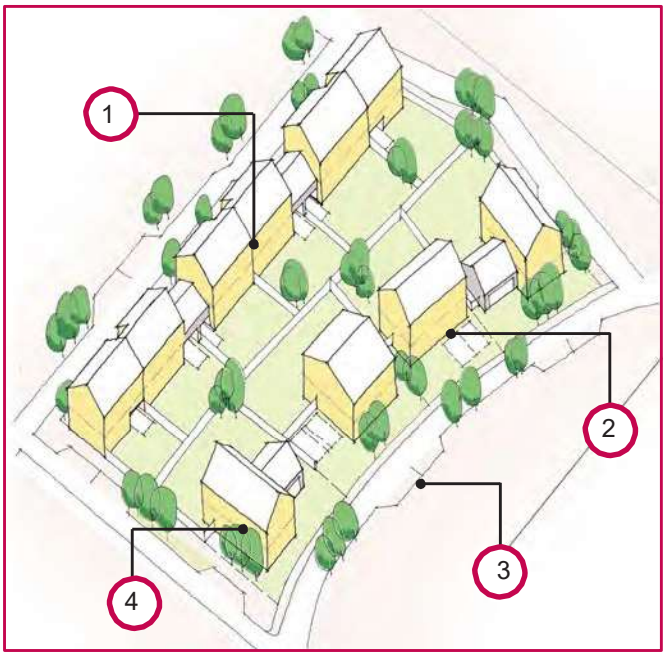
Above: Example block typology for medium density locations within the villages.

Above: Example of successful use of this block typology at Great Kneighton, Cambridge.

Medium - low density

These typology provides a transition between formal and informal streets. Detached and semi detached houses along formal streets integrate on plot parking or provision within garages and create a regular building line. Detached houses on the opposite side of the block can follow a less formal arrangement, and be grouped in small clusters or in a more organic, winding street. Key features illustrated beside include:

1. Combination of semi-detached and detached housing creating a regular building line to the street. Units incorporate on plot parking and or garages.
2. Detached houses with larger gardens and parking provided on plot and or in garages.
3. Some on street parking provision.
4. Corner buildings provide frontage and overlooking to both streets around the block.



Above: Example block typology for medium to lower density locations within the villages.

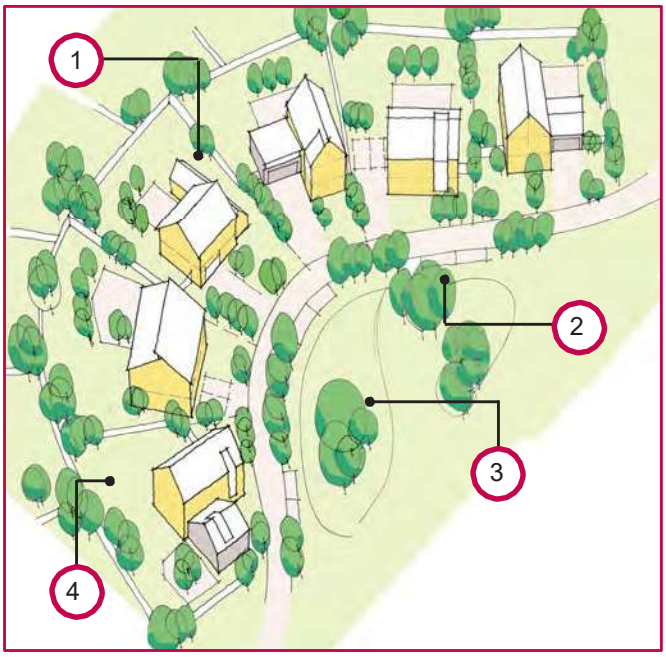
Above: Example of more organic, winding and looser development edge within this block typology.

Above: Example of semi-detached and detached units used to create a continuous and regular building line in a medium to low density area.

Low density

This arrangement of buildings results in the creation of a softer street. Larger detached houses can follow a less formal arrangement, with different setbacks and front garden dimensions, but with all buildings fronting the street and overlooking adjacent green space. The provision of open space and landscaping in and between housing is an important characteristic. Such an approach may be found towards the edges of the villages and where the design principles for the edge streets / green lanes are appropriate. Key features illustrated beside include:

1. Large detached family houses with parking on plot and or in garages.
2. Some on-street parking provision.
3. Green space overlooked by houses.
4. Generous back gardens.



Above: Example block typology for lower density and edge locations within the villages.

Left and above: Examples of development treatments at village edge.

Parking

Whilst the villages in the Lincolnshire Lakes area are designed to provide safe and attractive pedestrian, cycle and bus routes, residents will still own and use cars. Positively accommodating car parking within the development is one of the key design challenges to be addressed by applicants and developers. The aim should be to:

- minimise the visual impact of parked cars on the street scene;
- provide residents with safe and convenient access to their vehicles; and
- ensure that the public realm is useable and attractive for pedestrians.

The approach to parking in Lincolnshire Lakes is to avoid a single solution, and instead incorporate parked cars in a number of different ways. In this way, cars will be dispersed through the development and monotony avoided.

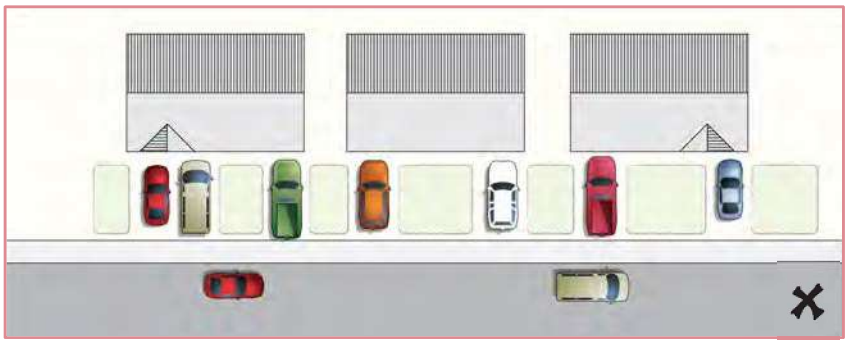
The different types of parking that should be explored across Lincolnshire Lakes are:

- on-plot parking;
- garage parking (both on plot and off plot); and
- on street parking; and
- courtyard parking arrangements.

All parking should be conveniently located and overlooked so that it is used in the way it is designed for, avoiding informal parking that undermines the quality of the street environment. Parking should also be unobtrusive, with garages set back and street trees used to soften the visual impact of parked cars. Use of different materials in parking areas should be considered and agreed through the detailed design process. Parking to the rear of properties should generally be avoided unless it can be accommodated in a courtyard style arrangement that incorporates housing overlooking the space, with front doors opening onto this.

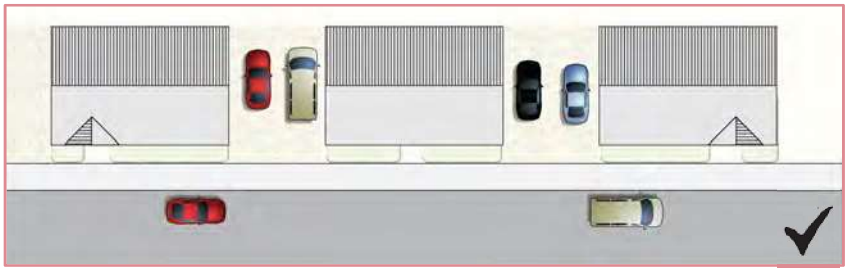
This section illustrates the general principles that should inform the design of these different types of parking

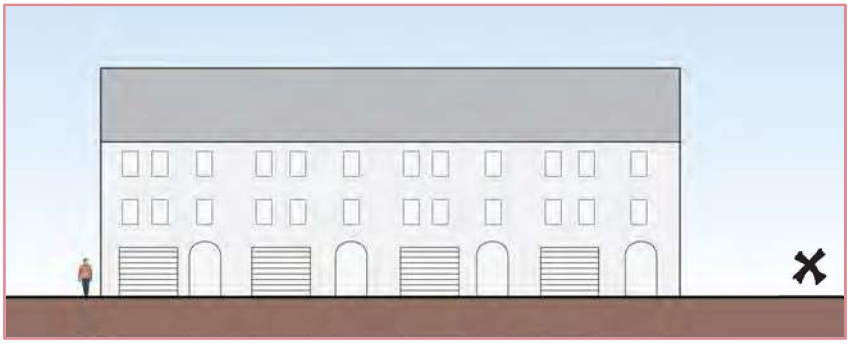
Above: Example of a new development incorporating on street parking in an unobtrusive way.



Left, above: Parking in front gardens results in cars dominating the street scene and is not acceptable.

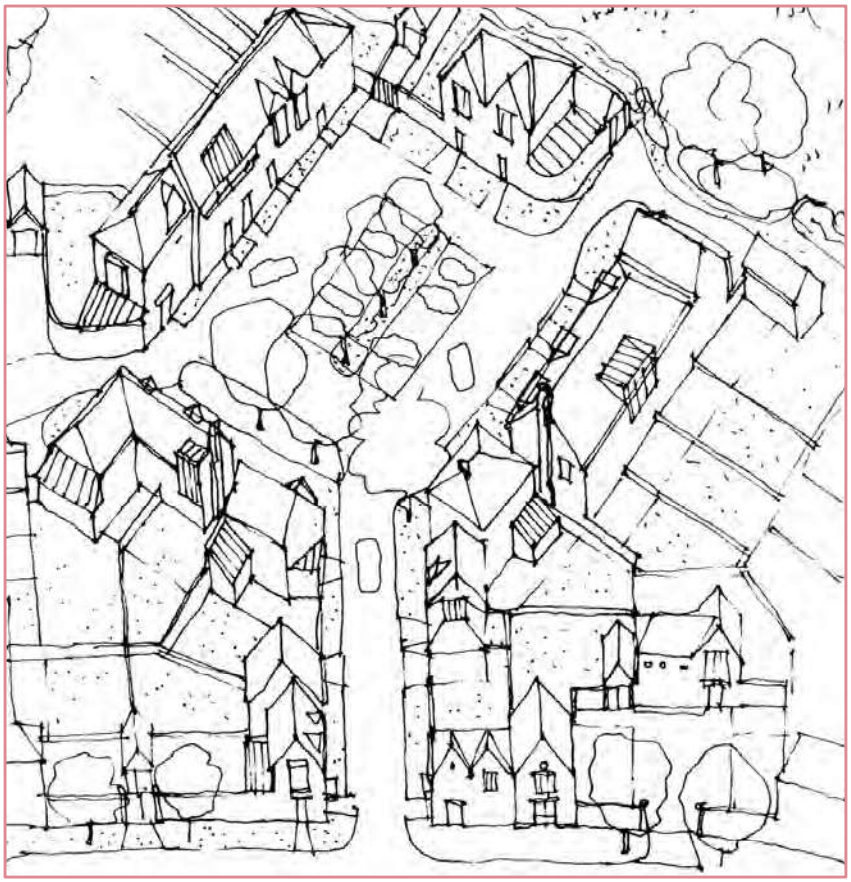
Left, below: Locating parking between or behind dwellings minimises the visual impact of parked cars and is the preferred approach to on-plot parking.

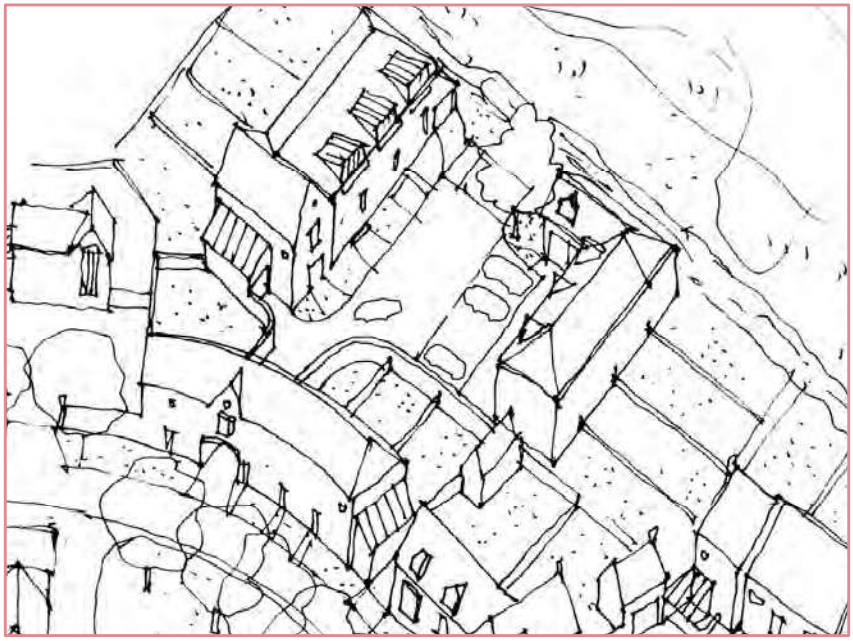




Left, above: Long uninterrupted rows of garages doors result in a 'dead' frontage and are not acceptable.

Left, below: Garage doors interspersed with active building frontages give a better street scene.





Left, above: Parking within a 'public' courtyard to the fronts of dwellings. The courtyard must be designed as an attractive space in its own right, and landscape is essential. It should take the form of a 'square', that is well overlooked from properties on all sides.

Left, below: 'Private' courtyards to the rear of dwellings should either be large enough to accommodate up to six dwellings to distinguish themselves from the example of 'public' courtyards above.

Where courtyard parking is used the following principles should be adhered to:

- *The entrance to the courtyard should be clearly defined, so that there is a sense of leaving a public area (the street) and entering a semi-private area (the courtyard) that 'belongs' to the dwellings surrounding it. This can be achieved in a number of ways, including: building over the entrance to form a 'gateway' through the dwellings; and locating a specifically designed corner building at the entrance so that it overlooks the area;*
- *Courtyards should be overlooked and designed to allow for passive surveillance / eyes on the he street from properties.*
- *Courtyard developments should include a mix of different house types, so that there is potential for different types of people (with differing patterns of being at home) to live close to one another, so broadening the potential for 'eyes on the street'.*
- *Courtyards must be well landscaped and designed as an attractive space around which car parking is accommodated.*

Left: Courtyards should be designed as places in their own right with good quality landscape and dwellings overlooking the space. Shown above is an example of successful courtyard style parking arrangement in Burton-upon-Stather.

The local centres

Analysis of the district, local and village centres in and around Scunthorpe is presented in Part A of the Strategic Design Guide. They display the following characteristics:

- Higher density development in village centres (but not high rise).
- There are subtle variations in height between buildings.
- There is continuous street frontage in the centres, created through linked buildings.
- Street alignment and building fronts create framed squares: 'kinks' are evident in the street pattern.
- Key buildings terminate views.
- Churches act as local landmarks and aid orientation, though these are located slightly off-centre.
- On-street parking is provided in the centres.
- The public realm in the centres tends to take the form of hard landscaping.
- Community facilities tend to be located fairly centrally.

The 'model' local centre layouts for each of the villages presented in sections 02 - 04 of this document take their cues from the existing villages and built form. They are not intended to be definitive design responses that should be embedded within proposals for development, but rather to help guide these.

Retail quantum

Each of the villages should include a local centre. The AAP establishes the quantum of retail floorspace to be accommodated in the local centres in each of the villages. This includes:

- Village 1: 300 sq.m gross shopping floorspace
- Village 2: 500 sq.m gross shopping floorspace
- Village 3: 400 sq.m gross shopping floorspace
- Village 4: 300 sq.m gross shopping floorspace
- Village 5: 300 sq.m gross shopping floorspace
- Village 6: 500 sq.m gross shopping floorspace

Above: Streets and buildings should be arranged to terminate views, as in this example in Winterton

Above: Local landmarks, such as the church in Burton-upon-Stather, help orientation and sense of place. Similar landmarking opportunities should be provided in the local centres.

Above: The use of different materials on this street in Scunthorpe defines the parking provision and visually narrows the carriageway, encouraging slower speeds.

Other local centre uses

The local centres should comprise a mix of other uses in addition to the retail floorspace, including community facilitates such as schools and healthcare, leisure and recreation, such as water-sports related activities, and residential.

Together, these uses can help create an active and lively central area, with the retail floorspace benefiting from shared trips generated by the other uses.

Buildings within the local centres should be built with flexibility and adaptability in mind, allowing for change to take place over time as demand and circumstances dictate.

Residential uses should be incorporated either in mixed use blocks, above the shop for example, or in single-use blocks (such as town-houses) but clearly forming part of a holistic approach to development in the centre. Front doors to residential development should be clear and well-defined, and form part of the street front. Where residential uses exist at ground floor level, floor to ceiling heights should be sufficient to allow for change.

Access and movement

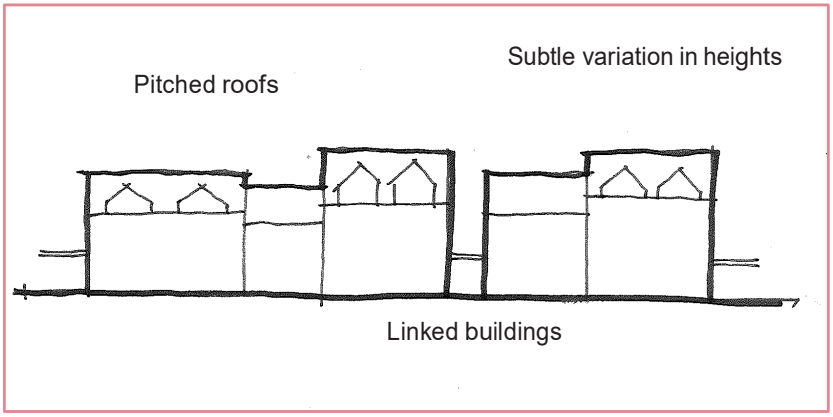
The local centres should be highly walkable, located within walking catchment of as much of the village as possible. Streets and spaces in the centre should be designed to reflect the place function of the centre, providing generous pavement widths and easy crossing of streets. Wide pavement space will also allow for uses such as cafés to spill out onto the street without obstructing pedestrians.

Public realm treatments should be developed for each centre that help define the central space and any formal square arrangements. The public realm should be designed such that traffic is slowed and drivers are aware that they are entering a different place and should act accordingly, giving priority to pedestrians and cyclists. Street furniture, including benches and small planters should be integrated within the public realm schemes, providing places for people to sit and interact with each other. The mix and arrangement of uses in the centre, and the way that streets are treated, should be done so in a way that provides opportunity for face-to-face contact.

Bus routes should serve each of the centres, with bus stops conveniently located in the main square or along the main street. Waiting facilities should be designed so that there is generous walking space around these, rather than becoming an obstacle to movement.

Cycle parking facilities should be provided in the centres. These should preferably be sheltered and in a visible location, with overlooking strengthening security.

Car parking should also be provided in the centres, either through a mix of on-street bays or formal parking within the squares.



Left: Linked buildings should front the main streets in the local centres, with subtle variations in height to create interest and variety.

Landscape and ecology

Key landscape and ecological objectives and principles to be considered within the design of the villages and lakes are set out beside. When developing scheme proposals applicants should consider these alongside the village and lake specific guidance outlined in previous sections.

Landscape

Strategic Objectives

- Retain existing landscape features of woodlands, hedgerows, grasslands and ditches and integrate with proposed development
- Create strategic east-west and north-south green infrastructure links
- Use landscapes to provide separation between villages
- Integrate wildlife habitats throughout the proposed development
- Prepare a typology of landscape planting to contribute to sense of place

Landscape setting

- Provide a landscape setting that contributes to the identity of each village
- Landscape setting to integrate development into wider area

Edges to Lincolnshire lakes

- Propose landscape edges appropriate to the location

Green infrastructure links

- Create green infrastructure (GI) links along existing network of ditches and drains
- Propose new links to extend GI coverage
- Use links to accommodate pedestrian and cycle movement

Village landscapes

- Network of village greenspaces to contribute to distinctive character

Ecology

Strategic Objectives

- Retain existing valued ecological features
- Create new habitats which contribute towards English Priority and Lincolnshire Biodiversity Action Plans
- Accommodate appropriate habitats in green infrastructure links to ensure connectivity between existing and proposed habitats.

Key elements to be delivered:

- Series of freshwater bodies
- Wetland habitat mosaics including open water, ponds, wet grassland, marsh, reed bed and wet woodland.
- Crossing points of built infrastructure for wildlife

Habitats creation and enhancement

- Appropriate broadleaved woodland including canopy trees, understorey, shrub layer, ground flora, dead wood, rides and glades.
  - Location – to greenspaces west and south of village 1 and greenspaces to the east and south of villages 3 and 4
- Acid grassland
  - Dry grasslands on sandier substrates
  - Seasonally flooded grasslands on deeper peaty soils
  - Location – east of villages 1-4
  - Greenspaces linking village 3 and 4
- Neutral grassland
  - Location – greenspaces west of villages 5 and 6
- Wetlands
  - Location – perimeter of lakes 3 and 4

Above: A mix of landscapes should be incorporated within the Lincolnshire Lakes area, responding to local characteristics.

Drainage

The existing ditch network comprises largely linear ditches which divide the landscape into discrete parcels of land and thereby contribute significantly to the distinct landscape character. The design of the new villages is to integrate the character and layout of the existing drainage system into the streetscape and to utilise the drainage ditches to form green corridors linking the formal and informal green and blue spaces. This will enable both the efficient storage and conveyance of surface water with the minimum of piped drainage and facilitate ecological and recreational connectivity throughout the Lincolnshire Lakes development.

The transfer of water within the ditch network is facilitated via the hydraulic head within the ditches and, hence, the movement of water is achieved with minimal channel gradients whilst allowing for the efficient control and storage of water. The characters of the ditches within the new development are expected to complement and enhance the quality of the different elements of the development with more formal channels and landscaping in the village centres and around the football stadium, and a more informal character within the green corridors and spaces. By varying the cross sectional profile different water conditions and environments can be created along the length of individual ditches and between the ditches within the network to support a range of flora and fauna.

Crossings of the ditches should be carefully sited, minimised in number and be designed to maintain the landscape and ecological integrity of the green corridor.

Defra has published (March 2015) a set of non-statutory technical standards for the design, maintenance and operation of sustainable drainage systems to drain surface water. This and other best practice - including the SUDs Manual (C7563) published by CIRIA (November 2015) - should be referred to when considering how to integrate drainage within the design of the villages and the lakes.

07. Implementation and design delivery

This section of the strategic design guide outlines what would be expected, in terms of design material, when developers and or landowners prepare and submit a planning application for the Lincolnshire Lakes area.

Lincolnshire Lakes is a major project for the Council. It has the potential to deliver transformational change, creating new neighbourhoods, socio and economic opportunities. The Council intends to grasp this as an opportunity to shape positive change and, as such, requires new development to be designed and built to the highest standards.

Pre-Application Stage

This Strategic Design Guide presents a series of framework layers (in Part A) and more detailed design principles for the villages and lakes (in Part B). These should form the basis of any applications for development that are prepared and submitted in the area. The Strategic Design Guide should be read alongside the wider suite of material comprising the policy framework for Lincolnshire Lakes, which includes the Council's Core Strategy and the Lincolnshire Lakes Area Action Plan. At the national level, the National Planning Policy Framework and additional material presented in the National Planning Practice Guidance must also be considered.

The Council welcomes pre-application discussions with applicants to help work towards submission of a scheme that meets the Council's planning and design objectives. The earlier these discussions take place the more beneficial they will be, helping to influence scheme design and concepts at an early stage.

Given the scale of opportunity the Council envisages applications to be submitted on a village by village basis (as opposed to parts of a village at a time). This will allow for a comprehensive approach to design. The Council will require masterplans to be prepared for each village that respond to the wider context, particularly the connections between villages, and the network of green and blue infrastructure. This will avoid inward looking schemes and help deliver the Council's vision for a coordinated and coherent package of interventions in the area.

The scale of the project will also require the involvement of and consultation with a wide variety of stakeholders, statutory consultees and cross-departmental input from the Council. To help facilitate this the Council will expect applicants to enter into a planning performance agreement with the Council. This will scope out the number of meetings to be held during the application process, their focus and who should attend. It will establish expectations for the applicant and Council, including what information is required for each meeting and when responses to this should be forthcoming.

Design review

As large scale and important development projects the Council will require emerging schemes to be assessed through design review. The Council will refer schemes to the Yorkshire Design Review Panel operated by Integreat Plus. Design review is an independent way of assessing the design quality of new developments. The Yorkshire Review Panel acts as a peer-review system; built environment professionals assessing the proposals of other built environment professionals. The Council will encourage design review to take place early in the process to allow scope for input into the emerging design. The final scheme submitted to the Council should include a report on the design review process and how the scheme has responded to this. Guidance on the Design Review process can be found via the Design Council Cabe and Integreat Plus websites.

Application material

The Council has a validation checklist which sets out the information that should comprise a planning application. This is a start-point and the scope of application material should be agreed with the Council during the pre-application process. In terms of design, the Council will require production of a Design and Access Statement, illustrative masterplan and series of parameter plans.

The design and access statement will be required to:

- Explain how the proposed scheme meets the Council's planing and design objectives.
- Explain the concept and principles underpinning the proposed scheme and clearly show how these have informed the proposed layout, scale, density, landscape and movement network.
- Explain how the proposed development sits within the wider Lincolnshire Lakes area, its relationship with the other villages and lakes, and it's relationship with Scunthorpe.
- Explain how the scheme has evolved over time, responding to consultation, pre-application discussions and the design review process.

The design and access statement should be well illustrated and include all necessary plans, elevations, cross-sections and perspective drawings as required to clearly communicate the design process and proposals.

Parameter plans will be required for outline applications and should establish the proposed extent of development, land uses, building heights, densities, movement framework, and open space. As part of detailed applications, the Council will expect a design code to be prepared. This will form a condition of planning permission at outline stage and will provide greater certainty and control over design quality in the long term.

Variety

The Council will actively encourage development proposals that establish bespoke design solutions and residential typologies as opposed to application of standard 'off-the-shelf' housing types and layouts. Schemes that respond to and reinterpret local design cues are welcomed. The Council will encourage applicants to run design competitions to generate a high quality architectural response to building design and layout.

Case studies

The Council encourages applicants to review and consider the lessons from good practice examples of large new residential-led schemes that have been designed and delivered in the UK and, where appropriate, internationally. A selection of possible references are included within this design guide. Applicants should not be limited to these and will be encouraged to draw upon new and other good practice.

New Hall, Harlow

Key facts

- Growth of medium-sized town will deliver 5,000 new homes when complete
- The landowners have divided the masterplan into small land parcels which have then been sold onto different developers who have employed different architects to help create neighbourhoods with variety and distinctive character.
- A design code was prepared for the entire masterplan area and this is enforceable through the legal agreement attached to the sale of land.
- The design code 'prohibits' the use of 'standard' products.
- The developers active at New Hall are smaller, more bespoke housebuilders.
- Key principles have been established through the code, such as a consistent block structure which makes for a legible street patterns, with compact blocks promoting walking and cycling. These common elements bind the area together, with different architectural responses to buildings then creating variety.

Images:

Above: Housing designed by Proctor and Matthews (Slo)

Top right: the masterplan has been split into a series of smaller development parcels

Middle right: Housing designed by PCKO architects (CALA Doums)

Bottom right: Housing designed by Alison Brooks Architects (Newhall Be:)

Upton, Northampton

Key facts

- A new development of 1,350 new homes.
- The masterplan for the site was informed by the use of 'Enquiry-by-Design' style charrettes.
- A detailed design code establishes principles relating to the layout, massing and appearance of development. This includes housing arranged around a traditional network of connected streets
- A network of SUDs is integrated into the street pattern. This helps control flooding and enhances green space and biodiversity. The SUDs form part of the wider green infrastructure network. This includes a new country park and wetlands along the River Nene.
- Surface water from the adopted streets is discharged into the SUDs.
- A management company has been established who are responsible for the upkeep and maintenance of unadopted public space, such as the SUDs are other areas of landscaping.
- The masterplan area was subdivided into a variety of different size development parcels, reducing reliance on a small number of housebuilders to deliver the scheme. Design competitions are run to help select developers for the different parcels. Their schemes are assessed against the masterplan and design code.

Images:

Layout and character within Upton is strongly influenced by the network of SUDS integrated within the pattern of streets

Great Kneighton, Cambridge

Key facts

- Development of 2,300 new homes to the south of Cambridge
- The planning application included a series of parameter plans establishing land use, access, landscape, density, building heights and envelope.
- The masterplan for the area has been designed as a series of distinct neighbourhoods with a central community hub. Other elements of the scheme include community uses, sports and recreation facilities, landscaped open spaces and a guided bus route.
- Abode is one of the new neighbourhoods within the Great Kneighton area. In Abode, development density is used to help create character and assist wayfinding, with higher densities in the centre, located around a central 'structured court'.
- The Abode scheme includes simple, well designed, contemporary buildings, making use of a simple palette of materials which are used across the development to help unify the scheme.

Images:

Housing designed by Proctor and Matthews within the Abode neighbourhood, Great Kneighton

Lightmoor, Telford

Key facts

- A residential-led development that will deliver more than 1,000 new homes near Telford
- The scheme was initiated by the Bournville Village Trust and English Partnerships (now the HCA). They aimed to create a 'New Bournville' at Lightmoor.
- The outline application embedded the key principles of the proposed village into the application drawings, which included land use and density, open space, access and movement.
- The planning application was supported by a detailed design guide/code which forms a brief to developers bringing forward smaller land parcels within the overall masterplan area.
- The guide is also being used to (1) evaluate the design quality of developers tender proposals, (2) by the local planning authority to assess reserved matters applications, and (3) control the long term character and appearance of Lightmoor Village.
- The masterplan for the village includes a higher density mixed use centre at its heart with densities decreasing towards its edges.

Images:

Top right: Extract from the design code showing street types for one of the smaller land parcels

Bottom right: Development in Lightmoor closely follows and is checked against the design code

Houten, Utrecht, Netherlands

Key facts

- A development of 8,000 new homes
- Development is focussed around green and blue (water) zones. These have different characters and create distinctive pockets of development
- Development focused on providing sustainable transport. A temporary tram connected Houten to the wider area before a dedicated train line was constructed.
- The design actively discourages the use of the private car. Vehicles are routed around a ring road making it quicker and easier to travel through the area on foot or by bike.
- The development was targeted at young families. To attract them a temporary new primary school was constructed at the very early stages of the development. This was built in such a way that it could be adapted to other uses over time and be replaced by a dedicated building.

Images:

Top right: Excellent provision for cyclists within the development encourages people to travel by means other than by car

Bottom right: The scheme integrates with the green and blue infrastructure, with green fingers opening out to surrounding water bodies

Vathorst, Amersfoort, Netherlands

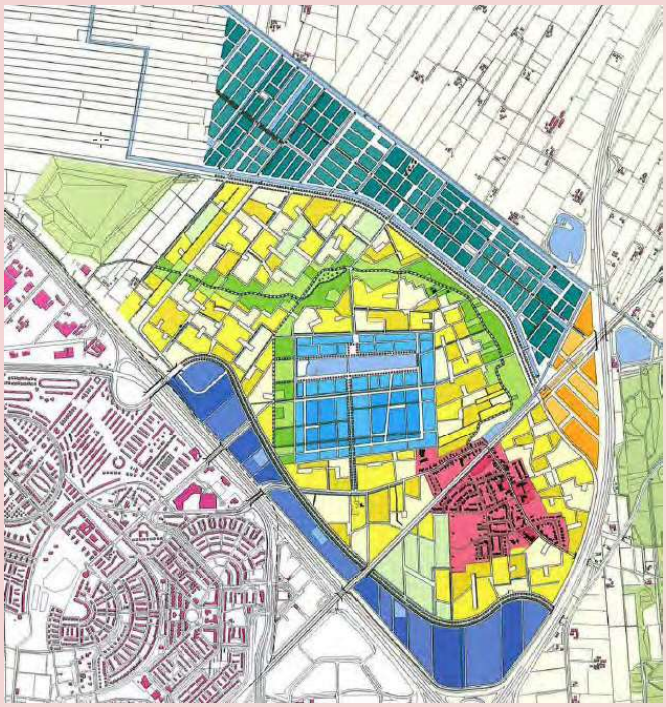
Key facts

- A new development of 11,000 homes, 90 hectares of commercial land and associated community facilities
- The masterplan is divided into four different character zones:
  - Werkstad (City of Labor): an area with concentration of industrial, commercial and office uses.
  - De Velden (The Plains): low-density urbanization respecting the existing rural landscape.
  - De Bron (The Well): high-density cluster around a water basin.
  - De Laak (The Canal City), high density housing area (65 houses p/ha) designed to reflect traditional Dutch city around canal system.
- Five different developers are building the scheme, though the local municipality controls 50% of the land. It is an example of a successful partnership between the public and private sectors.
- Transport and community facilities were planned and delivered early in the scheme. Pedestrians and cyclists take precedence over vehicles.

Images:

Top right: Town meets country

Bottom right: The masterplan has been subdivided into different areas, which the municipality are bringing forward in partnership with different developers, each with a slightly different design response



Brandevoort, Helmond, Netherlands

Key facts

- A new development of 3,000 new homes, a local centre, business park and ecological corridor
- Designed to reflect traditional settlements – scheme has a dense 'fortified centre' surrounded by a green ecological area with semi-detached and detached houses to the east.
- The eastern housing area is separated into different character areas. Each has its own green space.
- Urban design and architecture is heavily influenced by the existing context: it reflects the urban grain and structure of Helmond, the strategic green infrastructure network, and is styled upon traditional Dutch patterns.
- The are strong links to the wider area.

Images:

Top right: The growth and evolution of the town is defined by a generous network of green spaces, creating a series of separate but well connected places

Bottom right: Green infrastructure is integrated within smaller development parcels, with lower density housing at the edges of the development

This document was prepared on behalf of North Lincolnshire Council by Tibbalds Planning and Urban Design in association with Campbell Reith and The Environment Partnership. Support was provided by the ATLAS team at the Homes and Communities Agency.

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