November 2024

East of Luton
Strategic Masterplan Framework

Design Parameters & Principles

THE **CROWN** ESTATE
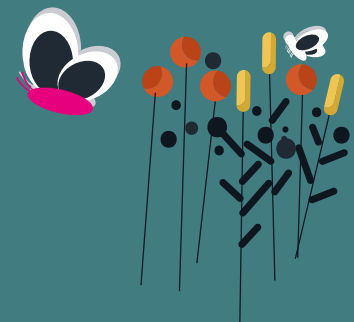
BLOOR HOMES®

Contents

Executive Summary

Policies in the **North Hertfordshire Local Plan (2011-2031)**, supported by national policy and guidance, require and encourage the preparation of this Strategic Masterplan for the allocated site known as 'East of Luton'. The Strategic Masterplan will inform and provide the framework for subsequent decisions on applications for Outline Planning Permission, and the evolution of detailed design proposals through applications for the approval of Reserved Matters.

This Strategic Masterplan demonstrates how a **new community can be sensitively designed within the existing landscape**, in a manner which respects existing local character, produces a net gain in biodiversity and delivers wider benefits in the local area, via the provision of community infrastructure that will serve both new and existing residents, together with an enhanced movement and **greenspace network that will promote healthy lifestyles and facilitates active travel.**

The Masterplan has been informed by **significant engagement** with stakeholders and the public, including workshops, consultation events and one-to-one and ad hoc meetings. The involvement of the public and local representatives in particular, such as the Parish Council and its' sub-committees, has led to material changes to the draft proposals, **improving the interface** of the new community with the existing villages and integration with the edge of Luton, as well as the definition of village character.

Strategic Design Principles

1. Identify natural features

Identify the area's natural features that have influenced how new development can be accommodated on the Site.

2. Establish Green Infrastructure network

Shows how the development can incorporate a network of Green Infrastructure that comprises natural and semi-natural features including parks, streams woodlands, green corridors, ecosystems, street trees, private gardens and green roofs.

3. Integrate Blue Infrastructure

Show how the development can incorporate Blue Infrastructure: features related to water, such as ponds, streams and drainage systems.

4. Respond to townscape and heritage

Shows how development will respond to townscape and heritage, including highlighting valued buildings and features, and views into and out of the Site.

5. Include greens corridors to mitigate impact on local communities

Show how the development will respect the existing settlements of Cockernhoe, Tea Green and Mangrove Green

6. Deliver varied but harmonious character areas

Shows how the development will respond to existing conditions, the immediate context and the role that each area plays to create varied but harmonious character areas.

Strategic Design Principles

7. Establish a clear movement network

Shows the proposed movement network, showing the routes that will connect the new development to Luton and other local destinations. How the network is designed will help to walk and cycle rather than go by car.

8. Deliver a structure of streets and spaces

Shows the proposed structure of streets and spaces, including building frontages, perimeter blocks, green spaces and various types of street.

9. Accommodate public transport

Shows how the movement network will accommodate public transport, including where the bus stops will be and how far people need to walk to them.

10. Provide a mix of uses

Shows the mix of uses. In time a greater variety of uses will be possible: the scheme allows for these to be provided as the area evolves.

11. Create a legible place

Shows proposed features of the place that will help people to find their way around, including views, vistas and notable buildings.

12. Increase density in relation to accessibility

Shows how the parts of the area closest to active travel and public transport routes will have the highest density, to encourage and increase the use of sustainable modes of travel.

GREEN INFRASTRUCTURE

- Public Open Spaces
- Food growing
- Orchards
- Village greens
- Woodland edge
- Ecological links

BLUE INFRASTRUCTURE

- Wetland Edge
- Cascade Pond
- Wet Ponds
- Bioswale

EDUCATION FACILITIES

- 2 Primary Schools
- 1 Secondary School
- Highly accessible with public transport, pedestrian and cycle routes
- Safe crossing points
- Landmarks

NEW CONNECTIONS

- Pedestrian permeability into Luton
- Primary Infrastructure
- Bus loop
- Pedestrian and cycle routes

NEW COMMUNITY

- Organic neighbourhood
- Woodland neighbourhood
- Active frontages
- High quality design
- Mix of housing typologies

LOCAL CENTRE

- Formal streets
- Formal public spaces
- Local shops
- Community Hub
- Multi-functional community spaces

EAST OF LUTON STRATEGIC MASTERPLAN

The Strategic Masterplan Site: The Strategic Masterplan site is shown edged red. It is shown for indicative purposes only and should not be relied upon to be exact. It reflects comprises land, principally that comprising Local Plan site references EL1, EL2 and EL3, together with associated land required for infrastructure provision, within the control of Bloor Homes, AT Oliver and The Crown Estate, together with areas of adopted highway land. It is referred to throughout this Strategic Masterplan as 'the Site'.

Legend

- Local Centre
- Community Hub
- Allotments
- Community Garden
- Orchard
- Housing
- Primary School
- Secondary School
- Playing Fields
- Pedestrian Link
- Woodland
- Primary Street
- Village Green

Chalk Hill

Luton Rd

Wigmore Ln

Crawley Green Rd

Colwell Rise

Hedley Rise

Stony Ln

N

0   100   200   300   400   500m

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Masterplanning, planning and design process

This flow diagram outlines the current and future stages of the masterplanning, planning and design process for the delivery of the 'East of Luton' allocation (Local Plan site references EL1, EL2 and EL3). The stages involve three main phases:

1. Strategic Masterplan:

- **Stakeholder Workshops (2022 to 2024):** Conducting workshops with a wide variety of stakeholder to reappraise the baseline and define key parameters.

- **Public and Key Stakeholder Public Consultation (2024):** Engaging with the public and stakeholders to seek feedback on the draft Strategic Masterplan proposals.

- **Strategic Masterplan (2024):** Developing a comprehensive Strategic Masterplan for the Site.

- **Strategic Masterplan: Placemaking Addendum (2024):** Adding placemaking guidelines based on an assessment of local character.

2. Outline Planning Applications:

- **Parameter Plans:** Establishing key spatial and development parameters.

- **Design and Access Statement:** Setting out design principles and access strategies.

- **Illustrative Masterplan**: Creating a more detailed and realistic visual representation of the overall masterplan.

- **Outline Applications and Statutory Consultation:** Submitting applications for Outline Planning Permission to establish the key principles and parameters and overall layout of the development.

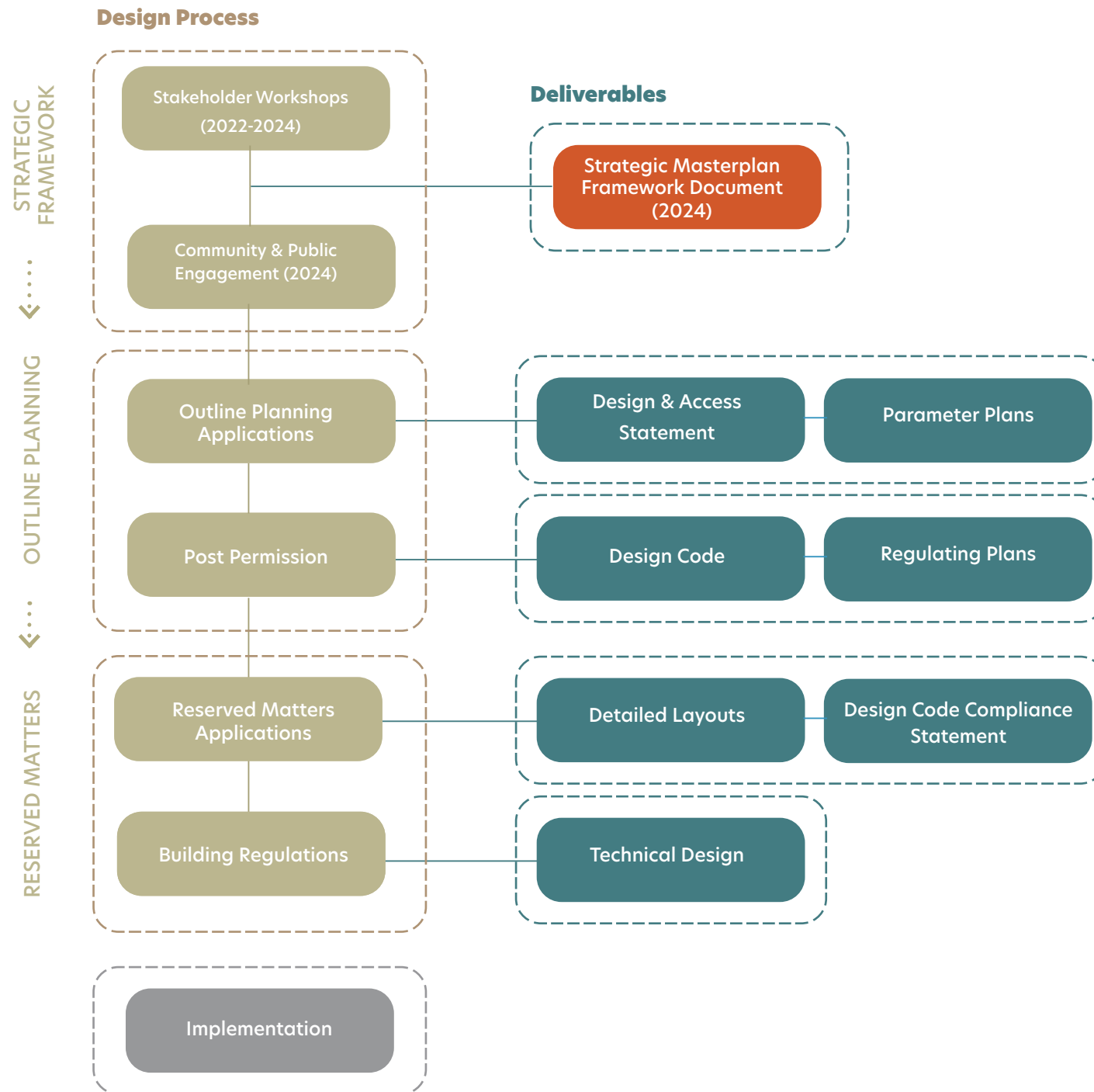### 3. Reserved Matters Application:

- **Design Code:** Defining detailed design standards.

- **Appointment of Development Partners:** Selecting partners for development.

- **Public and Stakeholder Consultation:** Continued engagement with stakeholders.

- **Preparation of Detailed Masterplans with Design Code Compliance Statements:** Creating detailed masterplans that comply with the design code.

- **Reserved Matters Submissions and Statutory Consultation:** Detailed Reserved Matters submissions (appearance, layout, scale, landscaping) for individual areas and parts of the development.

The purpose of this document:

Policy SP9 of the adopted North Hertfordshire Local Plan explains:

"Masterplans support comprehensive, integrated, well-planned and sustainable places in terms of the natural, built and historic environment. An effective masterplanning process helps to support a multi-disciplinary, integrated, inclusive and collaborative approach to securing quality design and delivery. It also assists with resolving and co-ordinating planning issues at an early stage in the process speeding up decision-making and driving forward delivery through a shared vision."

This Strategic Masterplan is the product of this objective.

Design Process

STRATEGIC FRAMEWORK

- Stakeholder Workshops (2022-2024)
- Community & Public Engagement (2024)

Deliverables

- Strategic Masterplan Framework Document (2024)

OUTLINE PLANNING

- Outline Planning Applications
  - Design & Access Statement
  - Parameter Plans
- Post Permission
  - Design Code
  - Regulating Plans

RESERVED MATTERS

- Reserved Matters Applications
  - Detailed Layouts
  - Design Code Compliance Statement
- Building Regulations
  - Technical Design

- Implementation

EAST OF LUTON | STRATEGIC MASTERPLAN FRAMEWORK

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Introduction

Figure 1. Aerial view of the site looking west

Introduction

The **North Hertfordshire Local Plan** 2011-2031 (adopted December 2022) (the Local Plan) allocates land parcels EL1, EL2 and EL3 (as identified on the Local Plan Policies Map), referred to collectively as 'East of Luton', for the development of approximately 2,100 homes, community facilities and associated infrastructure to meet the need for homes identified in North Hertfordshire and neighbouring Luton.

The allocation / Site (a total of approximately 130 ha), is controlled by three parties: to the east of Luton Road and Chalk Hill, Bloor Homes and A T Oliver (ATO Holdings Ltd) control approximately 66% and 9% of the allocation respectively (Local Plan refs. EL1 and EL2). To the west of Luton Road and the south-west of the villages of Mangrove Green and Cockernhoe, the land is owned by The Crown Estate – approximately 25% of the allocation (Local Plan ref. EL3).

The work undertaken in preparing the Masterplan has also built on over a decade of research, assessment, analysis, and discussions , and the more detailed work undertaken to support applications for planning permission.

The draft Masterplan was subject to consideration by an independent Design Review Panel in summer 2023 and then subject to an extensive and wide-ranging community and stakeholder engagement exercise in early 2024. A separate report on this engagement will be published alongside the final version of this Masterplan.

The Crown Estate

Bloor

AT Oliver

Figure 2. Ownership Plan

Key

- ✳ Site Location
- ⬚ North Hertfordshire District/ Luton Borough Boundaries
- ⬚ Other District Boundaries
- ⬚ Existing Settlement
- ▬ Motorway
- ▬ A Road
- ⬚ B Road
- ⬚ Tertiary Road
- ┅ Rail Line
- ● Train Station
- Ⓗ Hospital
- Ⓐ Luton Airport
- ⬚ London Metropolitan Green Belt

Figure 3. Context Plan

Policy context

The Strategic Masterplan is informed by the requirements of the Local Plan, particularly Policy SP19, which sets out specific requirements for development of the East of Luton Strategic Housing allocation. In addition to approximately 2,100 homes, the allocation is also required to provide:

- 4 forms of entry of both primary and secondary schools;
- Policy compliant provision of affordable homes (40%) - Policies SP8 and HS2;
- A new mixed-use Local Centre;
- Environmental enhancements such as new planting and protection and enhancement for Stubbocks Wood and Brickkiln Wood; and
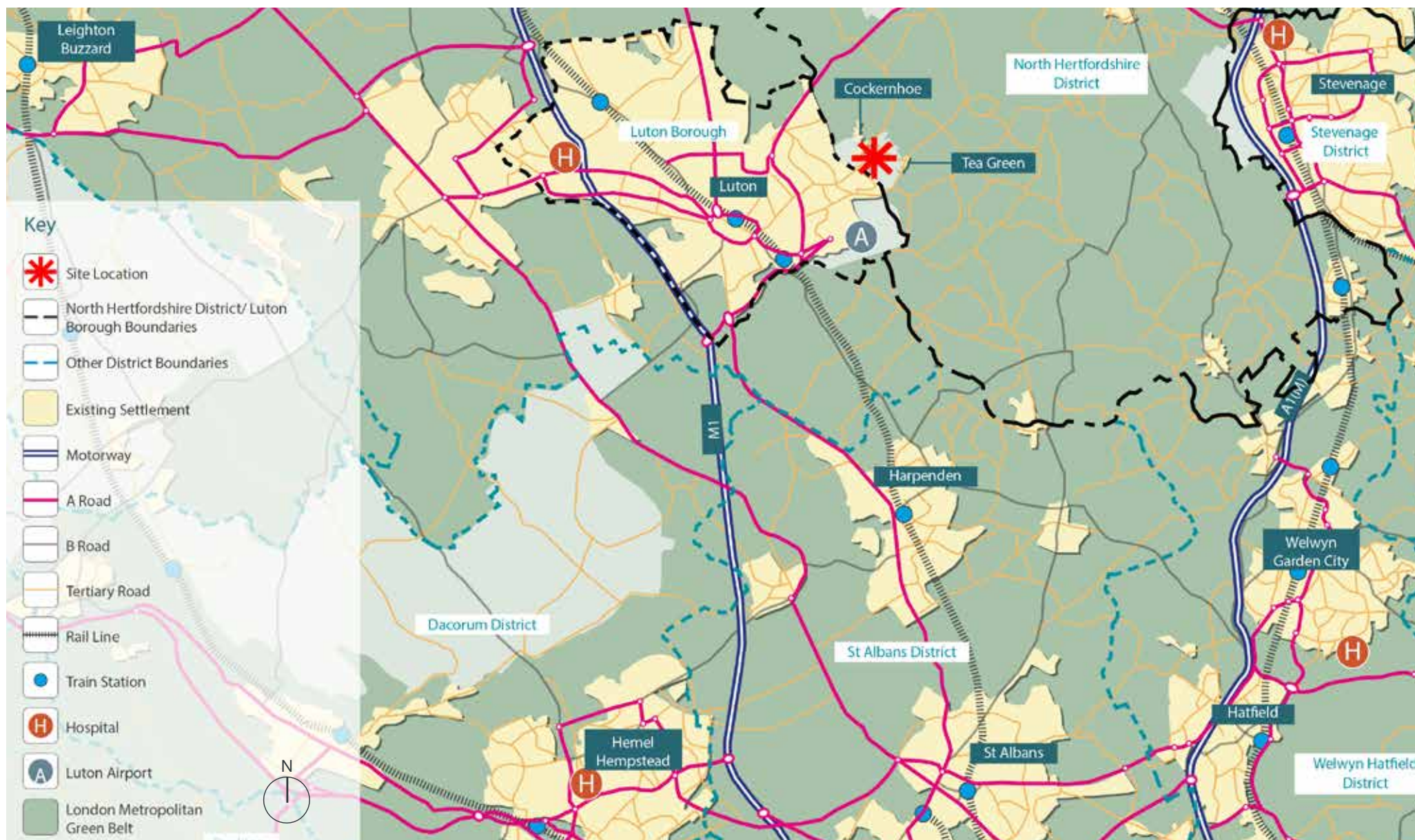- Connectivity with existing Public Rights if Way (PRoWs), including the Chilterns Way.

Development around the existing settlements of Cockernhoe, Mangrove Green and Tea Green and the historic setting of Putteridge Bury is also a key issue to be considered.

The requirements of Policy SP9 - Design and Sustainability, which sets out the District Council's approach towards masterplanning, has also been key to the preparation of the Strategic Masterplan. The suite of documents produced by the District Council to inform the masterplanning process – most notably North Hertfordshire Masterplanning Principles (March 2023) and Sustainability Principles (2023) – have also informed the preparation of the Strategic Masterplan. The former has provided a clear process by which the Strategic Masterplan has been produced, the latter guiding principles that have informed each element of the Masterplan.

As required by Policy SP9, this Strategic Masterplan:

- Is based on a multi-disciplinary integrated, inclusive and collaborative approach.
- Has been produced on a staged basis from site evaluation and technical evidence, to vision, place-making objectives, options and final masterplan.
- Sets out the quantum, scale, type, mix and distribution of land uses, housing and community facilities.
- Sets out a green and blue infrastructure framework including scale, distribution and type of spaces, habitats and sustainable drainage features.
- Sets out a movement framework including access points, street hierarchy and active travel linkages.
- Sets out an urban design framework and design principles that responds to local character.
- Sets out a sustainability and energy framework.
- Includes an illustrative masterplan, appropriate to the scale of the site.
- Proposes a delivery, phasing and management strategy that is flexible to changing circumstances.

Planning applications

Policies SP9 and SP19 set out that, where applications have already been submitted to the District Council, a Strategic Masterplan be agreed with the District Council prior to or as part of the grant of planning permission. The Strategic Masterplan will then provide certainty for subsequent planning decisions such as the approval of Reserved Matters.

This Strategic Masterplan has been produced within the context of four existing live applications: two applications for Outline Planning Permission; and two applications for full planning permission. The former two applications were submitted by Bloor Homes in relation to the land within its control (which forms parts of parcels EL1 and EL2 as identified in the Local Plan), and by The Crown Estate in relation to the within its ownership (which forms the whole of land parcel EL3). The latter two applications are for the proposed main access points into the development: one from Crawley Green Road / Luton Road (submitted by both Bloor Homes and The Crown Estate); and one from Eaton Green Road / Darley Road (submitted by Bloor Homes).

Ongoing engagement

Reflecting the work to date the Promoters will continue to work with stakeholders, public bodies, and local residents, as appropriate, through the preparation and consideration of the planning applications, and thereafter during the implementation and delivery of the development (see more on longer-term stewardship, management and maintenance in Section 6 of this Masterplan).
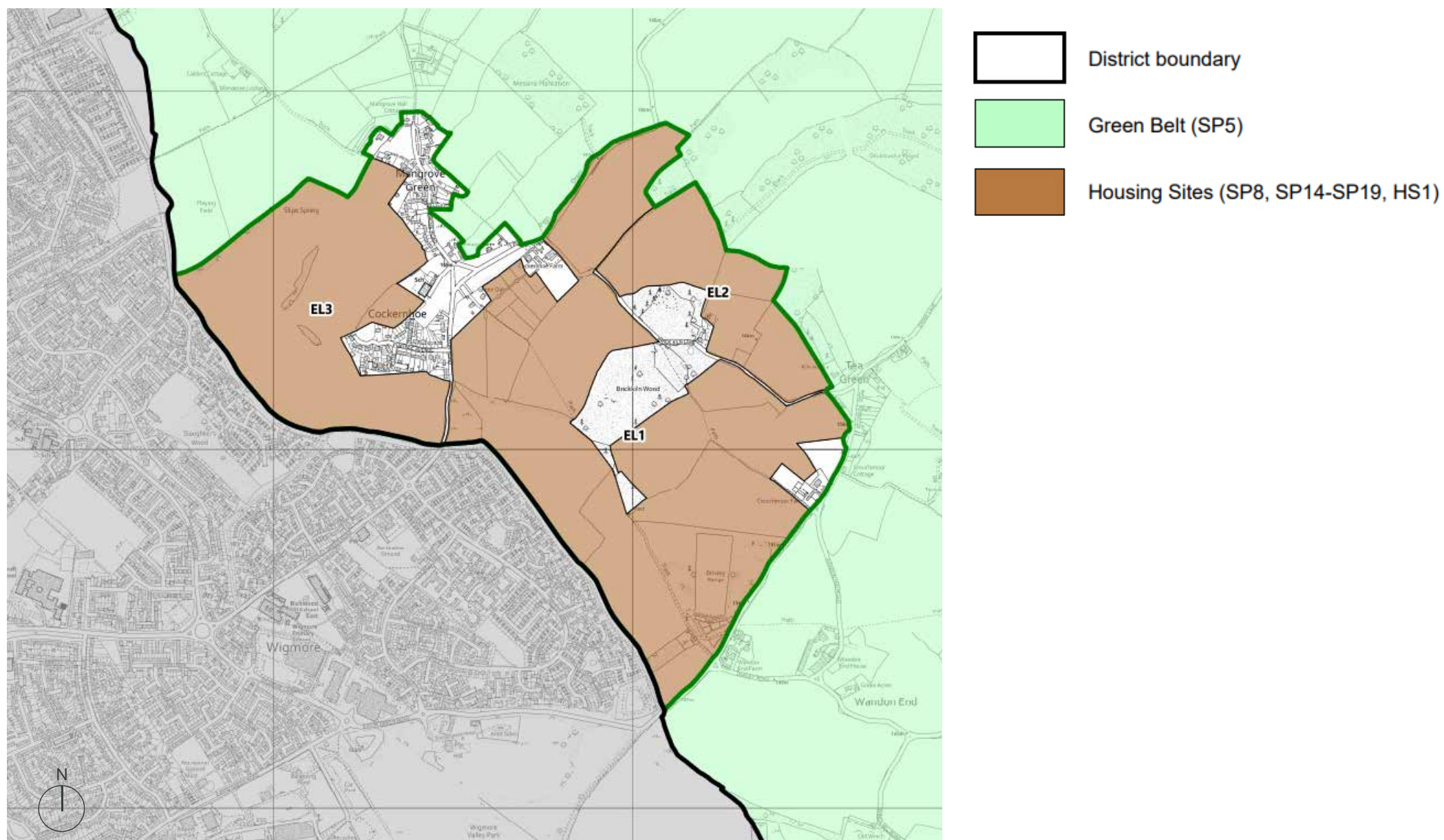
District boundary

Green Belt (SP5)

Housing Sites (SP8, SP14-SP19, HS1)

Figure 4. Local Plan extract showing the East of Luton allocation

Stakeholder and community engagement

The aim of the engagement exercise underlying the Strategic Masterplan has been twofold.

- Firstly, to raise awareness of the proposals and give all stakeholders an opportunity to be involved and influence the proposals.
- Secondly, to put the current phase of the masterplanning, planning and design process into context – showing that there is much more detail yet to come, and there will be more opportunities to engage.

To progress the Strategic Masterplan, Bloor Homes, A T Oliver, and The Crown Estate (the Promoters) entered into a Planning Performance Agreement (PPA) with the District Council and Hertfordshire County Council (the County Council / HCC). The PPA drew to the table various stakeholders, consultants, and interested parties.

An Engagement Strategy was agreed with the District Council in to identify the technical consultees (e.g. highways, education, etc), stakeholders and parts of the community who would be consulted.

A series of four stakeholder workshops were held between November 2022 and November 2023, with landscape considerations and ecology baseline providing the starting layer given the significant existing natural features:

- Workshop 1: Landscape and biodiversity
- Workshop 2: Access and drainage
- Workshop 3: Placemaking, land use and built form

- Workshop 4: Sustainability, delivery/infrastructure and engagement

Following the workshops, a broad demographic a wide range of promotion activities were carried out, from the issue of physical flyers and posters, to digital advertising and local media slots.

To encourage comment, a diverse mix of ways to engage and provide feedback including in-person events across multiple days, interactive digital engagement, and opportunities for written and verbal feedback.

Of the 218 individuals who provided feedback on the consultation, 71 feedback forms were received in hard copy or digitally, with 59 sets of feedback via email, 4 people commented by phone, and 84 people left comments on the interactive consultation map on the website.

The most frequent comments included:
- A strong preference for new GP services on site;
- A preference from residents of local villages to incorporate green 'green corridors' in the plans;
- The importance of ensuring connectivity through the site and to existing networks into Luton and the countryside;
- The need to manage demand and traffic on the local road network;
- A desire for any new development to enhance biodiversity on site including protecting existing and creating new green spaces; and
- The need to carefully manage drainage and flooding risks.

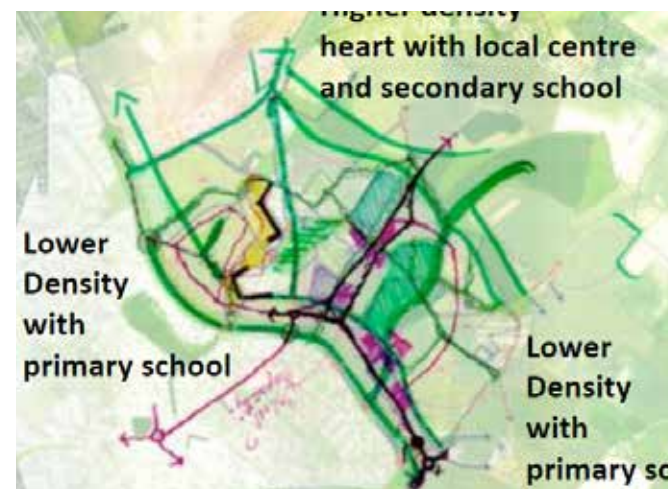
Figure 5. Stakeholder workshop

Figure 6. Workshop sketch plans

Figure 7. Engagement sessions montage

EAST OF LUTON | STRATEGIC MASTERPLAN FRAMEWORK

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Context and opportunity

Location, amenities and services

Located in North Hertfordshire but adjacent to the north-eastern edge of the town of Luton, the Site enjoys access to nearby towns and villages, beautiful open countryside and a good range of services nearby.

The Site is also adjacent to the small villages of Cockernhoe, Mangrove Green and Tea Green, which collectively include village greens, pubs, play areas and a school.

Cockernhoe and the wider area east of Luton are located within the Parish of Offley. In the south of the Parish, the Cockernhoe Ward covers the area between Luton and Lilley Bottom Road, and includes the three villages and the whole of the Site.

To the south-west of the Site, the Luton suburb of Wigmore includes a primary school, church, health centre, fitness club, supermarket, Wigmore Park and other shops and eating places.

Luton Town Centre is approximately 3.5 km from the Site and provides retail, employment, health, entertainment and leisure services and facilities. London Luton Airport is located around 3 km to the south and Luton Airport Parkway Station around 4.5 km from the Site.

Existing Green Space Audit

A desk-top audit has been carried out to identify parks, recreational areas and natural open spaces within a 5 km radius of the Site. This audit has identified a wide range of different types of open space, providing recreational, sports and community facilities, with which the proposal will be integrated.

Walking & Cycling

The Site is crossed by several PRoWs that offer the opportunity for the development to connect to the wider PRoW network. The Chiltern Way long distance walking route runs from Darley Road to the south-east, across the Site - alongside PRoW Offley 002 - through to Luton Road and Mangrove Road to the north. Two other PRoWs cross the Site – 'Offley 039' in the south-west and 'Kings Walden 010' in the south-east.

Public Transport

Several bus services operate within Wigmore and other areas of Luton close to the Site, with and one passing through the Site via Luton Road and Brick Kiln Lane. The most notable services are:
These include:

- Service 88 (Luton to Hitchin), an east – west route passing through the Site, connecting Hitchin to Luton via Darley Road, Brick Kiln Lane and Luton Road. It serves Breachwood Green, Tea Green, Cockernhoe (Green), Wigmore Local Centre and Luton Town Centre. It operates five services per day, Monday to Friday, and four on a Saturday.

1	Primary School
2	Secondary School
3	Nursery School
4	Community Centres
5	Post Office
6	Local Shop
7	Supermarket
8	Pubs/Restaraunts
9	Place of Worship
10	Medical Facilities
11	Library
12	Leisure Centre
13	Parks/Garden
14	Sports Pitches
15	Allotments
16	Luton Airport
17	Employment/Industry
18	New Century Park (proposed employment area)

Site Boundary

Chiltern Way

Public Right of Way - Footpaths

Public Right of Way - Bridleways

Existing Cycle Routes

Bus Routes

Area of Woodland

Education Facilities
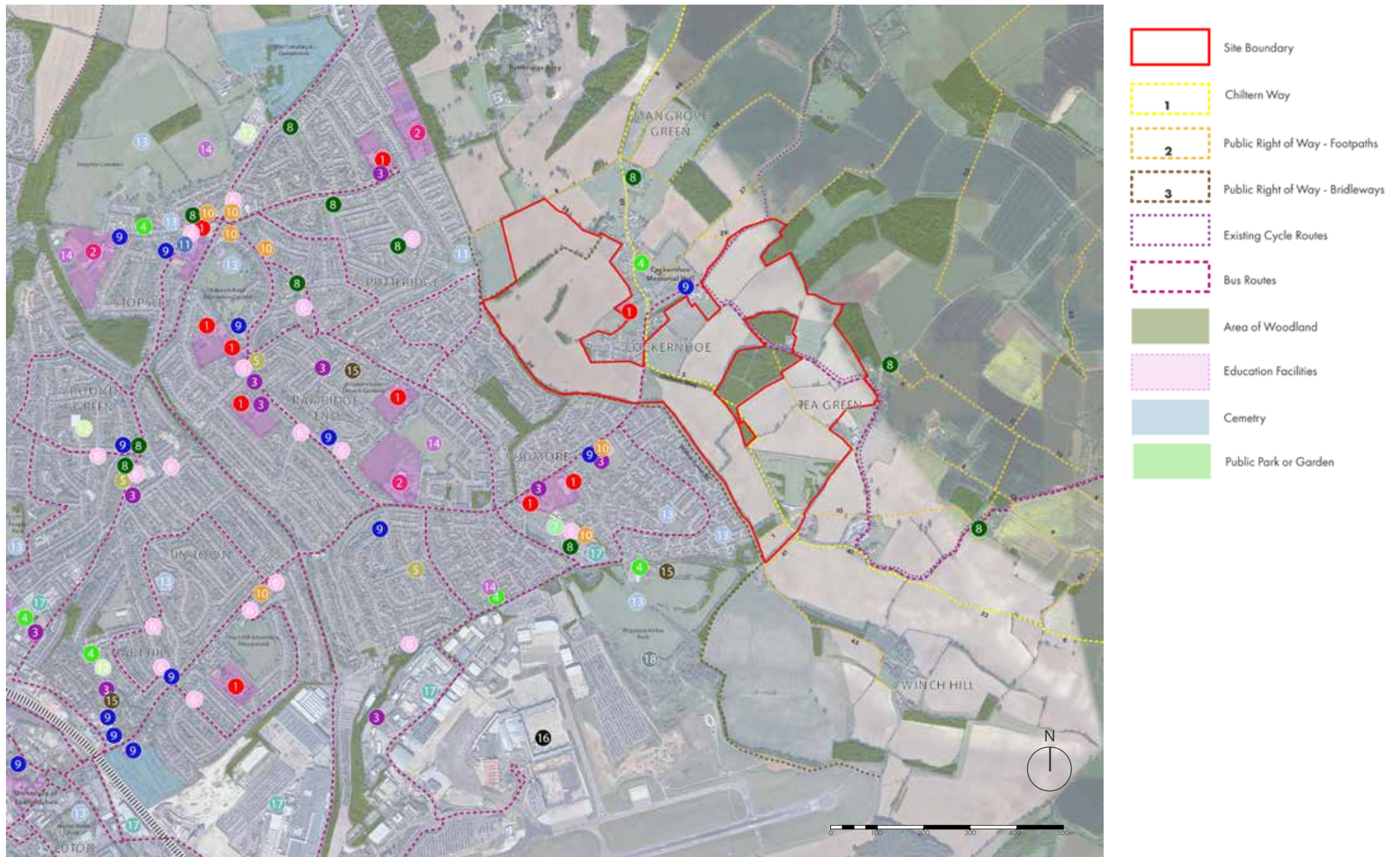
Cemetry

Public Park or Garden

Figure 8. Site context plan showing key services, facilities and public open spaces

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- Service 17/ 17A – provides a loop service from/to Luton town-centre, via Colwell Rise and Hedley Rise, coming within 200m of the boundary of the Site.

Highway Network

The Site includes / is adjacent to the following:

- Luton Road – a single carriageway road, passing through the centre of the Site connecting Crawley Green Road to the south-west to Chalk Hill to the north-east;

- Darley Road and Stony Lane – single carriageway roads adjacent to the southern edge of the Site, extending from Eaton Green Road within Luton to the south-west into the North Hertfordshire countryside.

- Chalk Hill – a single carriageway road extending north-eastwards from the Site into the countryside; the width of the road is characteristically narrow with 'passing' places;

- Brick Kiln Lane – a single carriageway road, passing through the Site and connecting Stony Lane to the south-east with Luton Road / Chalk Hill to the north-west.

The nature of these roads, including their widths and availability of other highway land, will influence the detailed design of connections between the Site and its surroundings.

Landscape and built form context

The following pages set out an assessment of the surrounding landscape, its topography, character – both more widely and with reference to more localised areas, ecological and arboricultural considerations.

Contextual analysis of the landscape within the site and surrounding area is described below and has shaped the evolution and eventual layout of the development.

The Site is also located immediately adjacent to three villages – Cockernhoe, Mangrove Green and Tea Green, as well as the urban edge of Luton. The local character of the built form within these settlements provides additional context.

Analysis of this context supports the creation of landscapes that not only meet ecological and recreational needs but also strengthen community identity and well-being through access to nature, and will provide a robust basis for a strategic landscape and open space framework.

Landscape and context

Aside from its significant natural capita, the site is located immediately adjacent to Luton, benefitting from a range of services as well as convenient access to nearby towns and villages. Contextual analysis of the site and surroundings is described below and has shaped the Masterplan Framework. A more detailed summary of the baseline material for all technical disciplines is included at Appendix A.

This section outlines the approach to strategic landscape analysis, highlighting methods for assessing ecological assets, visual quality, and functional needs. Through detailed character assessments, unique landscape attributes and opportunities for improvement are assessed, ensuring that green spaces are integrated thoughtfully and effectively into the urban fabric.

This analysis supports the creation of landscapes that not only meet ecological and recreational needs but also strengthen community identity and well-being.

The findindings inform a strategic framework for landscape planning, offering insights into how thoughtful analysis and character assessments can guide the development of vibrant, sustainable new place for Luton.
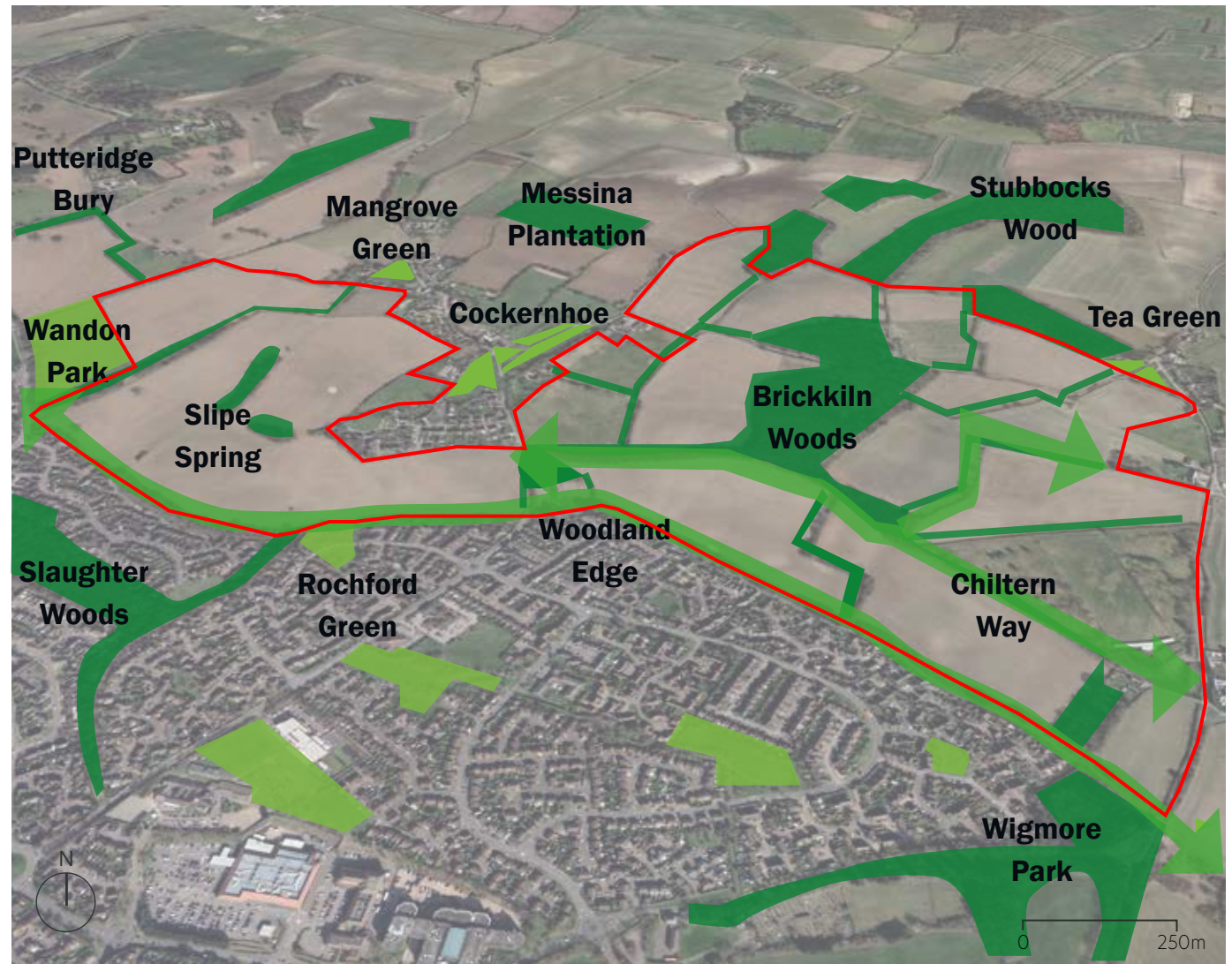
Figure 9. Landscape Context

Topography and drainage

The topography of the wider landscape is characterised by the 'Breachwood Green Ridge' located to the northeast of Luton. The Site lies on the lower southwest facing slopes of the ridge.

The Site slopes downhill from the north-eastern boundaries to the south-western boundaries along the Luton settlement edge. The 3-D terrain diagram below shows the high points located near Mangrove Green to the north-east and north of Cockernhoe at around 165m Above Ordnance Datum (AOD). This forms part of a local ridge as shown on the previous plan.

Policy SP19 requires that the proposal will need to

incorporate a Sustainable Drainage Systems (SuDS). SuDS are designed to manage surface water locally, as close to the source as possible, to mimic natural drainage and encourage its infiltration, attenuation and passive treatment.

The geology underlying the Site will affect the design of the SuDS proposed, further detail on which will be included with the planning applications that will follow this Strategic Masterplan.

The Site generally falls from the north-east to the south-west and south, meaning that the south-western periphery of the Site will likely form the most appropriate location for a major part of the SuDS.

Figure 11. Topographic context

Figure 10. Site topography

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Strategic Landscape Character

The Site and its immediate context are not located within a national or local quality landscape designation. The Site forms a very small part of the extensive Chilterns National Character Area (NCA). 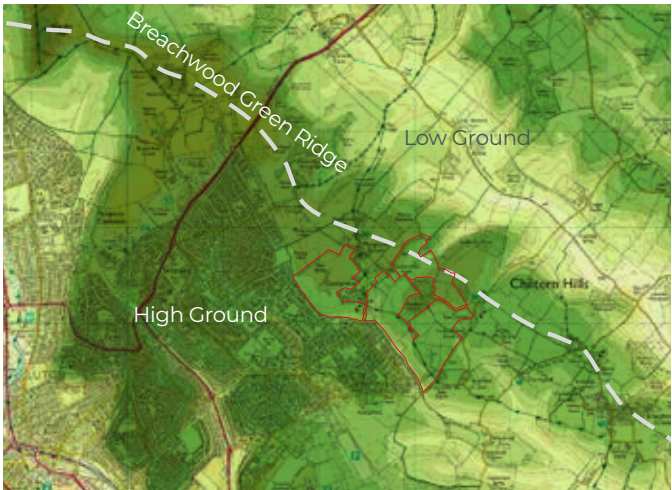A small part of the Breachwood Green Ridge Landscape Character Area (LCA) as identified within the North Herts Landscape Study.

The Site lies within the Breachwood Green Ridge LCA, which features a gently rolling plateau ridge landscape, mainly large arable fields with smaller pockets of grazing around settlements and occasional scattered dwellings, with a field pattern degraded. A strong cultural pattern remains based on the layout of lanes and older woodlands.

The Site is split into three parcels separated by Luton Road running north to south and Brick Kiln Lane running west to east. The main features defining its character are:

- Adjacent villages of Cockernhoe, Mangrove Green and Tea Green, farmsteads and individual properties
- Countryside, Stubbocks Wood and the ridgeline defining Lilley valley to the north-east
- A landscape of arable fields with native hedgerow boundaries and hedgerow trees
- Distinctive woodland blocks, such as Brickkiln Wood and Slipe Spring
- A gently rolling plateau towards Luton
- Three PRoWs, including the Chiltern Way, crossing the area , including a heavily treed walkway running along the southern side of the Site
- The urban edge of Wigmore
- Local roads and lanes – Luton Road, Darley Road, Chalk Hill, Brick Kiln Lane, Stony Lane

KEY CHARACTERISTICS

- Gently rolling plateau landform
- Large scale arable fields with scattered farmsteads and dwellings
- Mature remnant trees and remaining hedgerows of diverse species, with mixed woodland of old deciduous and established plantations
- Water tower at Tea Green
- Telecommunications mast at Hoo Park
- Parkland at Putteridge Bury

Map legend:
- Allocation Boundary
- Significant Mature Vegetation

North Herts landscape Study (Character, Sensitivity & Capacity)
- 203 Whitwell Valley
- 211 Offley St Pauls Walden
- 212 Lilley Bottom
- 202 Breachwood Green Ridge
- 201 Kimpton and Whiteway Bottom
- 200 Peters Green Plateau

Note: All mapping extent lies within National Character Area (NCA) 110: Chilterns
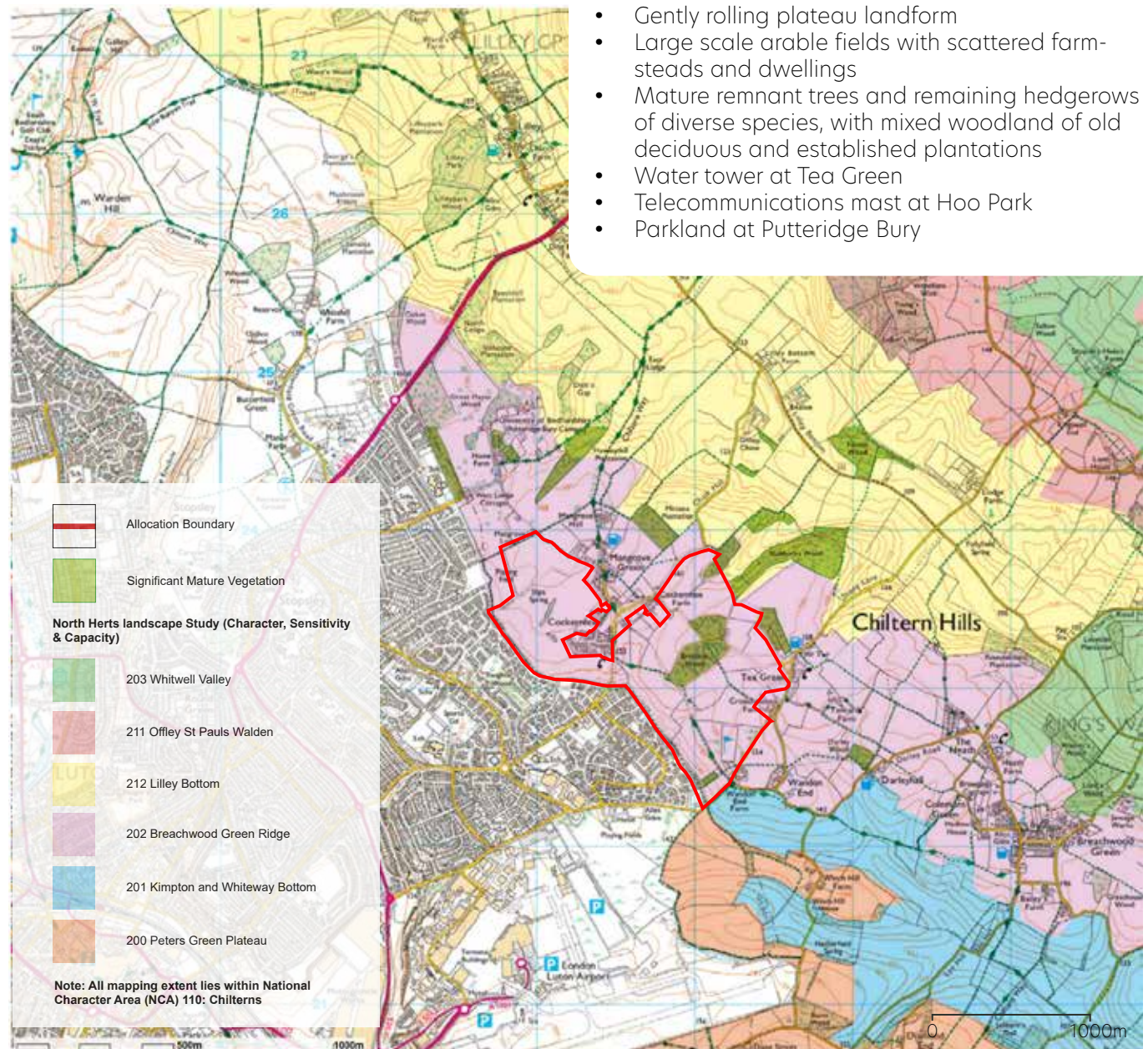
Figure 12. National and District Landscape Character

Visual Appraisal Summary

Due to the landscape form and topography, visibility of the Site is minimal overall, resulting in an inextensive visual envelope. It is not visible from the wider Lilley Valley to the north. Vews into the Site are generally limited to those from residential properties which border it; PRoWs crossing the Site – 'Offley 039' to the south-west and 'Kings Walden 010' to the south-east ; Luton Road; Brick Kiln Lane; Chalk Hill and Lower Road.

There are more distant limited view from locations to the south-east, i.e. residential properties at The Heath and Colemans Green, Public Footpath 'Kings Walden 009 013' , and Darley Road.

———	Allocation Boundary
(green)	Visually Significant Vegetation (to the Proposed Development)
·····	Public Rights Of Way (potentially affected by the Proposed Development)
– – –	Distance Radii (from assumed centre of the Site)
▬ ▬ ▬	Approximate extent of Visual Envelope

Figure 13. Visual Appraisal
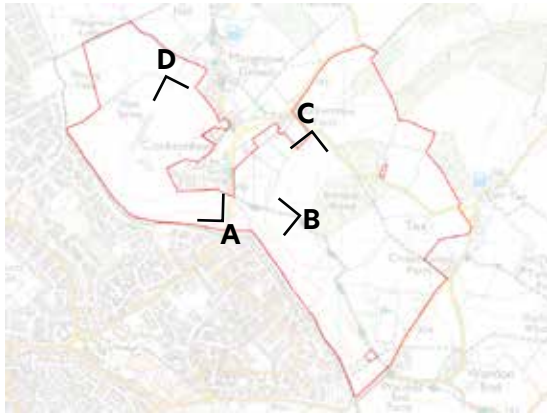
Figure 14. Photoviewpoints

Photoviewpoint A showing view from Luton Road looking north-west

Photoviewpoint B showing view from Public Right of Way

Photoviewpoint C showing view south from Brick Kiln Lane

Photoviewpoint D showing view from Public Right of Way

Local Landscape Character Areas

The local landscape character at the site-scale is varied and multi-faceted as is to be expected for a site of this scale. Landscape character is influenced to varying degrees across the site by the adjacent land use context including the Luton urban fringe, existing villages, countryside and Putteridge Bury. The site's topography, combined with the existing network of woodlands and hedgerows are the fundamental ingredients forming the site's identity.

These natural features also serve to separate different parcels of land of a similar character.

A Green Infrastructure workshop was carried out to agree how these character influences could form a cohesive network of Green Infrastructure across the Site and inform the vision for the future development. The identified landscape character areas are set out below and a set of design principles/objectives associated with each.

A: Putteridge Bury Edge

- Mangrove Green Integration and adjacency to Registered Park and Garden;
- Create attractively landscaped edges to sports fields area;

B: Cockernhoe West/Slipe Spring

- Respect amenity of neighbouring residents and character of villages;
- Provide multi-functional green corridors to village edges, to include allotment gardens, orchards, sensitive planting and
- Provide new village greens within the development influenced by Cockernhoe/ Mangrove Green;

- Opportunity for Civic/Community space
- Slipe Spring woodland will be protected and enhanced with eco-tone planting buffer; and
- Create opportunities for homes to face positively onto the woodland edge;

C: Luton Interface

- Topographically, the land slopes down towards Luton, providing a relatively consistent landscape character along the entire edge;
- Mature wooded backdrop along southern boundary creates sense of enclosure;
- Sense of arrival and gateway to development; and
- Provide a blue corridor with SuDS features set within wildflower meadow and scattered parkland.

D: Cockernhoe East/ Brickkiln Wood

- Respect amenity of neighbouring residents and character of villages;
- Provide connectivity to Chiltern Way and Brick Kiln Lane;
- Respond to topography of ridge to create sense of place at Local Centre;
- Brickkiln Wood forms central characteristic feature;
- Provide suitable stand-off's and transition planting (ecotone) to protect and enhance the woodland; and
- Create opportunities for homes to face positively onto the woodland edge.

E: Lilley View

- Plateau of land straddling ridge;
- Opportunities for views north-east from edge of Site;
- Consider views with massing and form of school.

F: Tea Green Edge

- Respect amenity of neighbouring residents and character of Tea Green;
- Consider Listed Buildings; Crouchmoor Farm;
- Views from PRoW to the east.
- Building height / form to respect existing properties.

G: Wandon End

- Relationship with open countryside;
- Semi-rural settlement edge, with proximity to Wigmore Park and Luton Airport;
- Chiltern Way interface – create connection;
- Allow for glimpsed views out of the development.

Figure 15. Local Landscape Character Areas

Legend:

- The Site
- Existing Woodland/Vegetation
- Existing Villages
- Existing Lanes
- Existing Green Open Spaces
- Putteridge Bury - Registered Park and Garden
- Landscape Character Influences
- Indicative Landscape Character Areas
- Site Character Areas
- Listed Buildings

Map labels:

LILLEY VALLEY SLOPES

HISTORIC PARK

URBAN FRINGE

VILLAGE SETTLEMENT WITH GREEN

VILLAGE SETTLEMENT WITH GREEN

0 250m

Key Landscape Character Influences

As described, there are various landscape character influences that provide opportunities and inspirations for the design of the proposed development.

Inspiration can be taken from the villages of Tea Green, Cockernhoe and Mangrove Green which lie adjacent to the Site and are mostly traditional in character. They comprise cottages and buildings clustered around village greens. There is some post-war development, some of which takes reference from the local vernacular.

The village greens have a distinctive character, with triangular geometries, large specimen trees and lanes passing around the perimeters being common characteristics to all three. Each village green has its own separate character with Cockernhoe having a more linear form, Mangrove Green being an enclosed space and Tea Green a smaller and more loosely enclosed space.

Cockernhoe　　　　**Mangrove Green**　　　　**Tea Green**
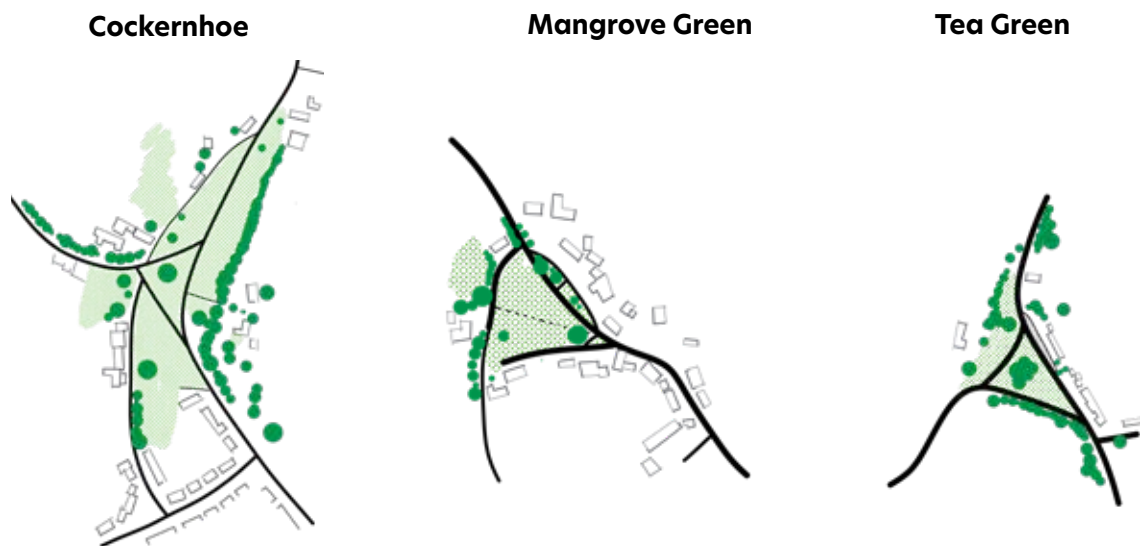
Figure 16. Village Green Character

Village Character - Village Greens

- Triangular village greens are a distinctive feature in the local area
- Cockernhoe, Mangrove Green and Tea Green each have their own character, with certain similar features

Topography - The Breachwood Green Ridge

- Informed by the topography of the Site forming a distinct ridge between Luton and the Hertfordshire countryside
- Woodland Blocks, strong hedgerows
- Chiltern Way long distance footpath

Natural Capital - Woodlands and Hedgerows

- The Site is strongly characterised by the existing network of woodlands and hedgerows
- Slipe Spring and Brickkiln Wood are old copses, forming key important ecological features

Cultural Heritage - Putteridge Bury

- Elizabethan House and formal gardens designed by Lutyens and Jekyll;
- Formal gardens and Pleasure Grounds within the core area around the house;
- Parkland encircles the house and gardens, consisting of scattered clumps of trees, single specimens and C19 blocks of woodland.

Ecology: Baseline Habitats

Surveys of the East of Luton Site have been undertaken within the land controlled by Bloor Homes Ltd and The Crown Estate. The baseline habitat survey will be updated to reflect the latest statutory metric's guidance (2024), these will take place in 2024 and these results will be available within additional supporting documents and are illustrated opposite.

- **Arable (Cereal Crop)**: The majority of the Site is dominated by arable (cereal crop) fields;

- **Modified Grassland:** Several areas of modified grassland are present across the Site, comprising fields used for continuous grazing, field margins and fields likely part of crop rotation;

- **Other Neutral Grassland**: The field margin along the western boundary of the Site comprises other neutral grassland, owing to the higher number of species present within the sward;

- **Woodland:** Blocks of mixed and broadleaved woodland are present across the Site, some of which qualify as Priority Habitats:

- **Scrub:** Small blocks of mixed scrub, hawthorn scrub and bramble scrub are present in the west of the Site;

- **Tall Forbs and Ruderal/Ephemeral:** Patches of tall forbs and ruderal/ephemeral are dispersed across the Site, indicating areas of higher nutrient inputs;

- **Pond (Non-Priority Habitat):** A pond is located within the golf course to the south, as well as a number of ephemeral ponds present in Brickkiln Wood;

- **Hedgerows:** The majority of the hedgerows on the Site contained 80% native species, making them Priority Habitats, these bound the field compartments providing ecological linkages across and around the Site; and

- **Individual Trees:** Existing rural trees are located across the Site, with several of the trees in the west being large veteran trees, and smaller specimens present within the golf course to the east.

Figure 18. On-site habitats
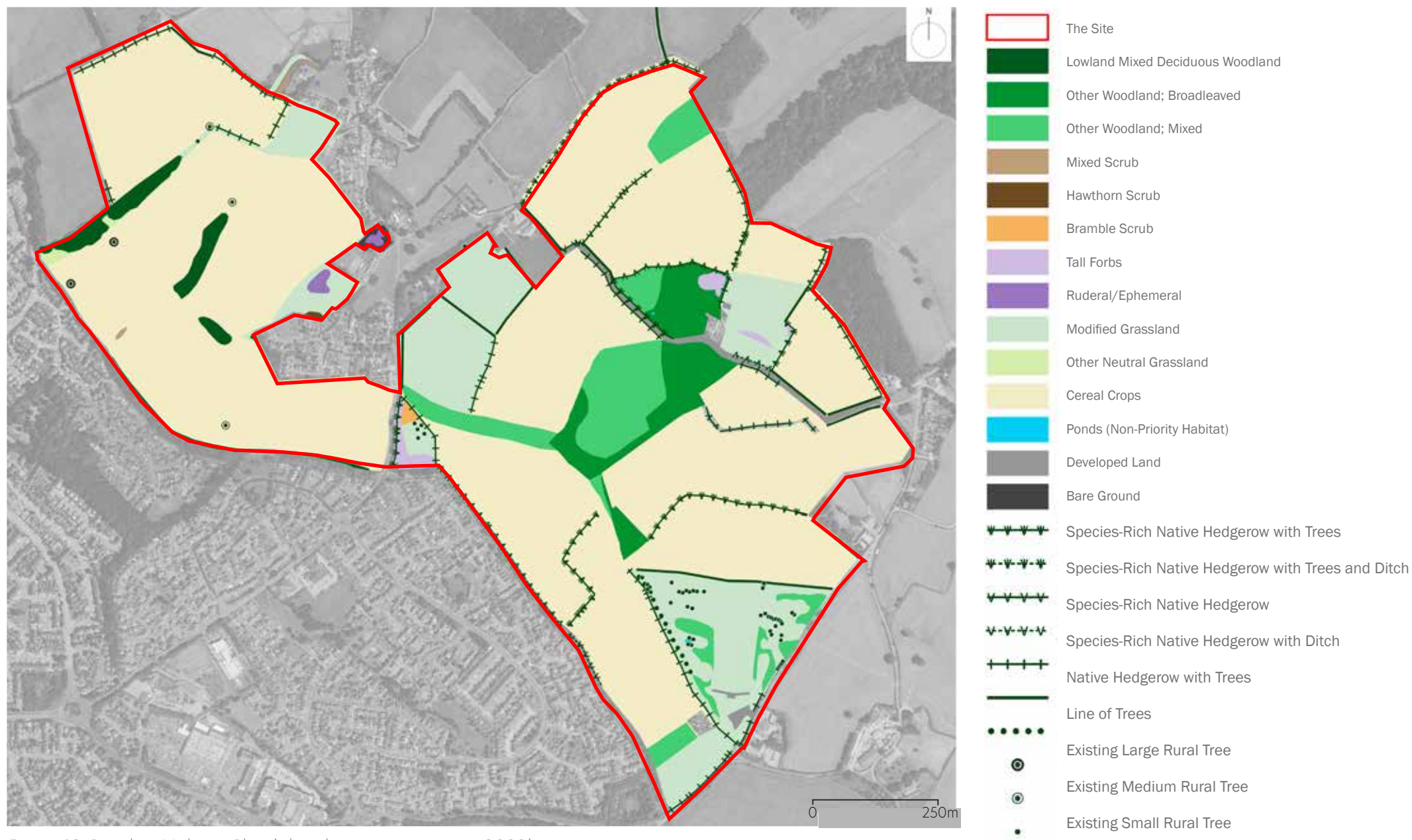
Figure 19. Baseline Habitats Plan (plan shows situation as at 2023)

Legend

- The Site
- Lowland Mixed Deciduous Woodland
- Other Woodland; Broadleaved
- Other Woodland; Mixed
- Mixed Scrub
- Hawthorn Scrub
- Bramble Scrub
- Tall Forbs
- Ruderal/Ephemeral
- Modified Grassland
- Other Neutral Grassland
- Cereal Crops
- Ponds (Non-Priority Habitat)
- Developed Land
- Bare Ground
- Species-Rich Native Hedgerow with Trees
- Species-Rich Native Hedgerow with Trees and Ditch
- Species-Rich Native Hedgerow
- Species-Rich Native Hedgerow with Ditch
- Native Hedgerow with Trees
- Line of Trees
- Existing Large Rural Tree
- Existing Medium Rural Tree
- Existing Small Rural Tree

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Ecological and Arboricultural Considerations

Much of the site is free from ecological designations and protected species. Bat activity corridors are identified, which will be protected and enhanced. A number of species are noted, the bulk of which are outside of the site bounds. Stubbocks Wood, outside the site to the north, is an Ancient Woodland and Local Wildlife Site.

The Site

Ancient Woodland

Concentration of Bat Activity

Static Locations with Barbastelle Registrations

County Wildlife Site

Local Wildlife Site

Existing Species

Common Pipistrelle

Soprano Pipistrelle

Eastern Grey Squirrel

West European Hedgehog

Common Toad

Brown Hare

Great Spotted Woodpecker

Skylark

Yellowhammer

Barn Owl

Red Kite

Marsh Tit

Fieldfare

Little Owl

Green Woodpecker

Figure 20. Ecological and arboricultural constraints

Nature Recovery Network

Local Nature Recovery Strategies are a new system of spatial strategies for protecting and improving the environment through the establishment of a Nature Recovery Network (NRN).

NRN's follow the 'Lawton Principle' of creating habitats that are 'bigger, better and more joined up'. The masterplanning approach for the Site is underpinned by the creation of an NRN that protects and enhances the existing natural capital on-site, especially priority habitats. It will then extend and connect these habitats to create ecological corridors that are rich in biodiversity.

This approach follows the 'mitigation hierarchy', that seeks first avoid harm or loss of existing important habitats, but if this is unavoidable that adequate mitigation and compensation is provided.
 .
The 'Bedfordshire Local Nature Recovery Strategy' is a policy document being developed by Bedford Borough Council, Luton Borough Council and the Bedfordshire Local Nature Partnership. To demonstrate a coherent approach at the site-level to the wider strategic ambitions across the county.

The Promoters have engaged with the preparation of the Strategy and reviewed others under preparation. The Strategic Masterplan proposals have been developed in this context and will be kept under review as the Strategy is progressed.
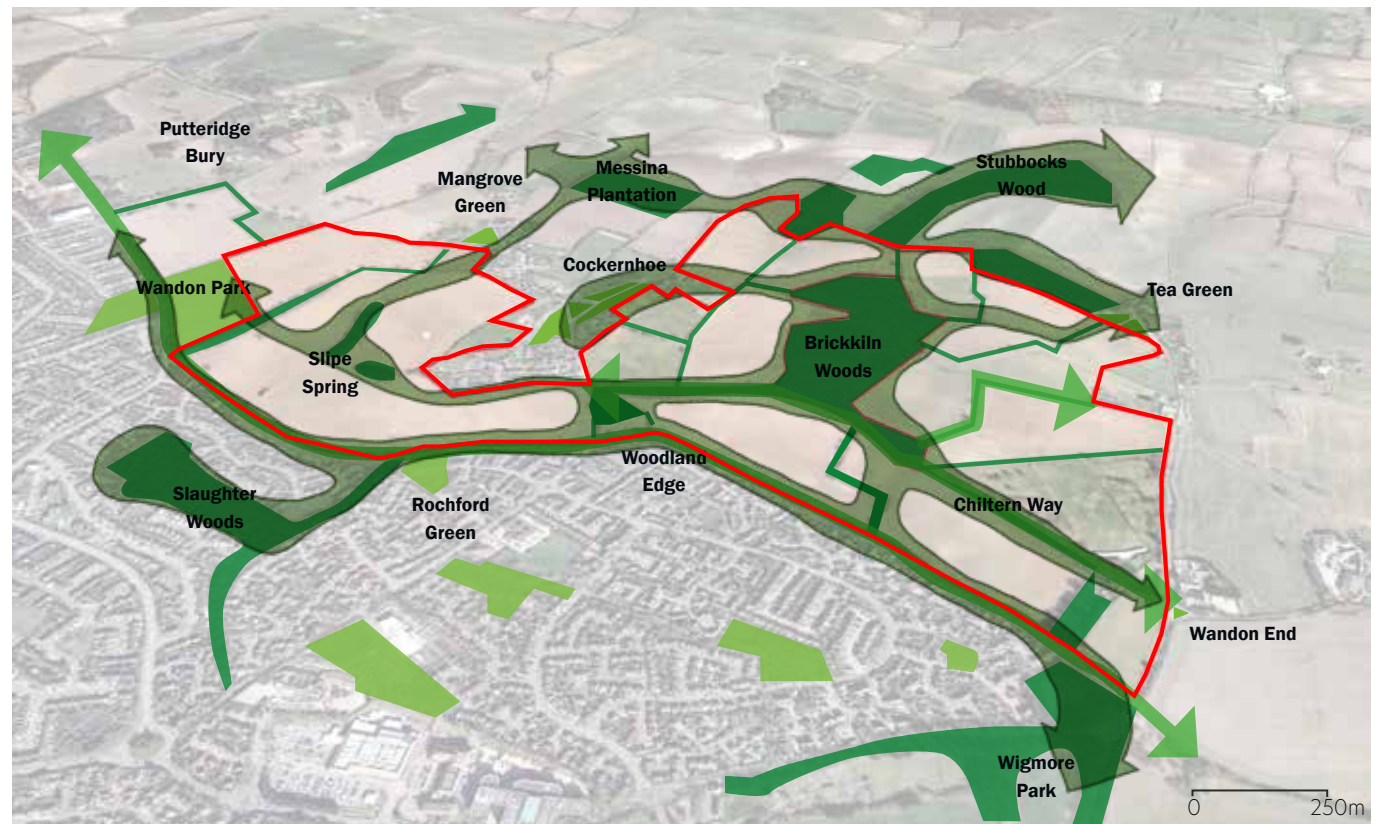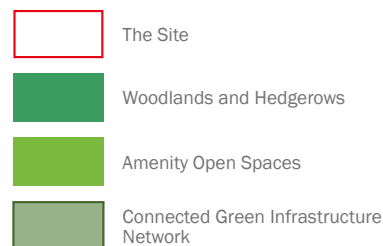

Figure 21. Existing Natural Capital and Indicative Nature Recovery Network

The Site

Woodlands and Hedgerows

Amenity Open Spaces

Connected Green Infrastructure Network

Local built form character

An appraisal of character in the area of North Hertfordshire and Luton, specifically focusing on villages the nearby villages and the best of historic development in Luton. This analysis provides valuable insights into the historical, cultural, and architectural character of the region.

By examining the architectural features, materials used, and design principles prevalent in these villages, it is possible to gain a deeper understanding of the area's identity and heritage.
The full assessment is included at Appendix A1 to this Masterplan, the following is a summary.

Traditional building styles in Hertfordshire

Pevsner's "The Buildings of England: Hertfordshire" provides a detailed examination of the county's vernacular architecture, highlighting the diversity and historical significance of local building styles. Vernacular buildings in Hertfordshire reflect a strong connection to regional materials and traditional construction methods.

Key characteristics include:

- Materials and Techniques: The prevalent use of local materials such as timber, brick, and flint is notable. Timber framing is a common feature in older buildings, with many structures showcasing elaborate carpentry and wattle-and-daub infill. Brick became more common in later periods, often with decorative brickwork.

- Rural and Urban Differences: There is a clear distinction between rural and urban architecture. In rural areas, farmhouses and cottages often feature steeply pitched roofs, thatching, and large chimneys. Villages like Ayot St Lawrence and Much Hadham are prime examples of picturesque rural settings with well-preserved vernacular buildings.

- Historical Continuity: Many vernacular buildings have medieval origins, with subsequent additions and renovations reflecting changes in architectural styles over centuries. For instance, numerous medieval timber-framed houses were updated in the Georgian and Victorian eras, blending styles harmoniously.

- Influence of Major Estates: The presence of large estates influenced local architecture, with estate villages often featuring uniform designs. For example, the Rothschild estates around Tring display a distinctive use of decorative brickwork and uniform design principles across multiple buildings.

- Adaptation and Innovation: Vernacular buildings in Hertfordshire often exhibit adaptive reuse and innovation. Barn conversions and the integration of modern amenities into historical structures are common, preserving the historical essence while ensuring contemporary functionality.

Overall, Hertfordshire's vernacular buildings encapsulate a rich architectural heritage, characterised by the use of local materials, traditional construction methods, and the seamless integration of historical styles with modern adaptations (Yale University Press London) (Yale University Press London) .

Local building character and styles

Appendix 1 of this document provides an appraisal focuses on the character of North Hertfordshire and Luton, emphasizing historical and architectural elements. Key villages like Cockernhoe, Tea Green, and Lilley are highlighted for their traditional vernacular styles, use of local materials, and unique architectural features. Cockernhoe has historic buildings like St. Hugh's Cottage, and Tea Green and Lilley feature picturesque settings and vernacular brick cottages. In Luton, the London Road area is notable for its elegant Victorian villas, spacious plots, and grand facades. This analysis aims to inform strategic development in East Luton by incorporating traditional materials, pedestrian-friendly designs, and community amenities, thereby respecting and enhancing the region's heritage and identity.

Local Density

The residential areas around the site show a variety of characters and densities, from rural building groupings to high-density tower blocks. The highest densities, up to 38 dwellings per hectare (dph), are found in mid-20th century housing areas in eastern Luton. Detached houses from the late 1980s and early 1990s have densities of 30-35dph Villages like Mangrove Green and Tea Green have lower densities, at 15dph and 12dph, respectively, while early 20th century developments like Elm Tree Avenue in Cockernhoe are higher at 28dph.

Figure 22. Cockernhoe Green

Figure 25. Listed building on Mangrove Rd

Figure 28. Villa at Mangrove Green

Figure 23. Cockernhoe Green

Figure 26. Agricultural buildings, Cockernhoe

Figure 29. Green Lane housing

Figure 24. Elmtree Avenue

Figure 27. Cottages at Lilley

Figure 30. Detached house, Lilley

Figure 31. Paddock View listed buildings

Figure 33. Mangrove Green

Figure 32. Cockernhoe Green

Figure 34. Cockernhoe Green

Cultural heritage and archaeology

Located to the north-west is the Putteridge Bury Estate, part of Bedfordshire University campus and a Registered Park and Garden. While there are no Listed Buildings within the Allocation itself, the Site is adjacent to three Listed Buildings, which have been considered as part of the visual assessment of the surrounding area:

- Cassels Cottage (list entry: 1175118)
- 79-80, The Green (list entry: 1103204)
- Crouchmoor Farmhouse (list entry: 1347106)

These designated heritage assets, and other non-designated areas of historic interest, have been carefully taken into account in the evolution of the development proposals set out in this Strategic Masterplan.

The Mangrove Green and Cockernhoe areas of archaeological significance have also informed the evolution of the proposals and in particular the location and design of the site-wide green infrastructure strategy.

The Environmental Impact Assessments that will accompany the planning applications subsequent to this Strategic Masterplan will consider the potential for impacts on both above-ground cultural heritage assets and below-ground archaeological heritage assets in further detail. Where necessary further investigations of potential areas of archaeological interest will be required through the consideration of planning applications.

Figure 35. Cultural Heritage Assets

	Interface with settlement
	Putteridge Bury Estate
	Public Open Space
	Listed Building
	Key view
	Overhead power line

Summary of key influences

The plan opposite summarises the key influences on the site that will need to be carefully considered and addressed to ensure a successful and sustainable outcome.

Retention and Enhancement of Existing Woodland Groups and Tree Belts: The presence of mature woodland groups and tree belts throughout the Site requires thoughtful planning to retain and integrate these natural features into the development while safeguarding their ecological value and visual appeal.

Valley-Like Topography: The Site's valley-like topography, alongside the existing edge of Luton, poses challenges in terms of stormwater management. This linear catchment will be carefully managed to mitigate potential flooding risks and enhance biodiversity.

Interface with Surrounding Settlements: Creating a suitable interface with neighbouring communities such as Cockernhoe, Mangrove Green, and Tea Green.. This requires r sensitive design approaches that respect the existing character of these settlements while accommodating new development.

Interface with Lilley Valley and the Putteridge Bury Estate: Along the northern edge of the Site area lies the Lilley Valley, an interface that respects the landscape will be needed.. A similar but more integrated approach will need to be implemented along the north western edge of the Site that is closest to the Putteridge Bury Estate.

Views to Luton airport

Interface with Luton

Interface with adjacent rural communities

Slope along Luton edge

Key view

Overhead power line

Putteridge Bury Estate

Public Open Space

Listed Building

Overhead power line

Topography

Woodland

Ancient Woodland

Mangrove Green

Ccockernhoe

Tea Green

Wigmore Centre
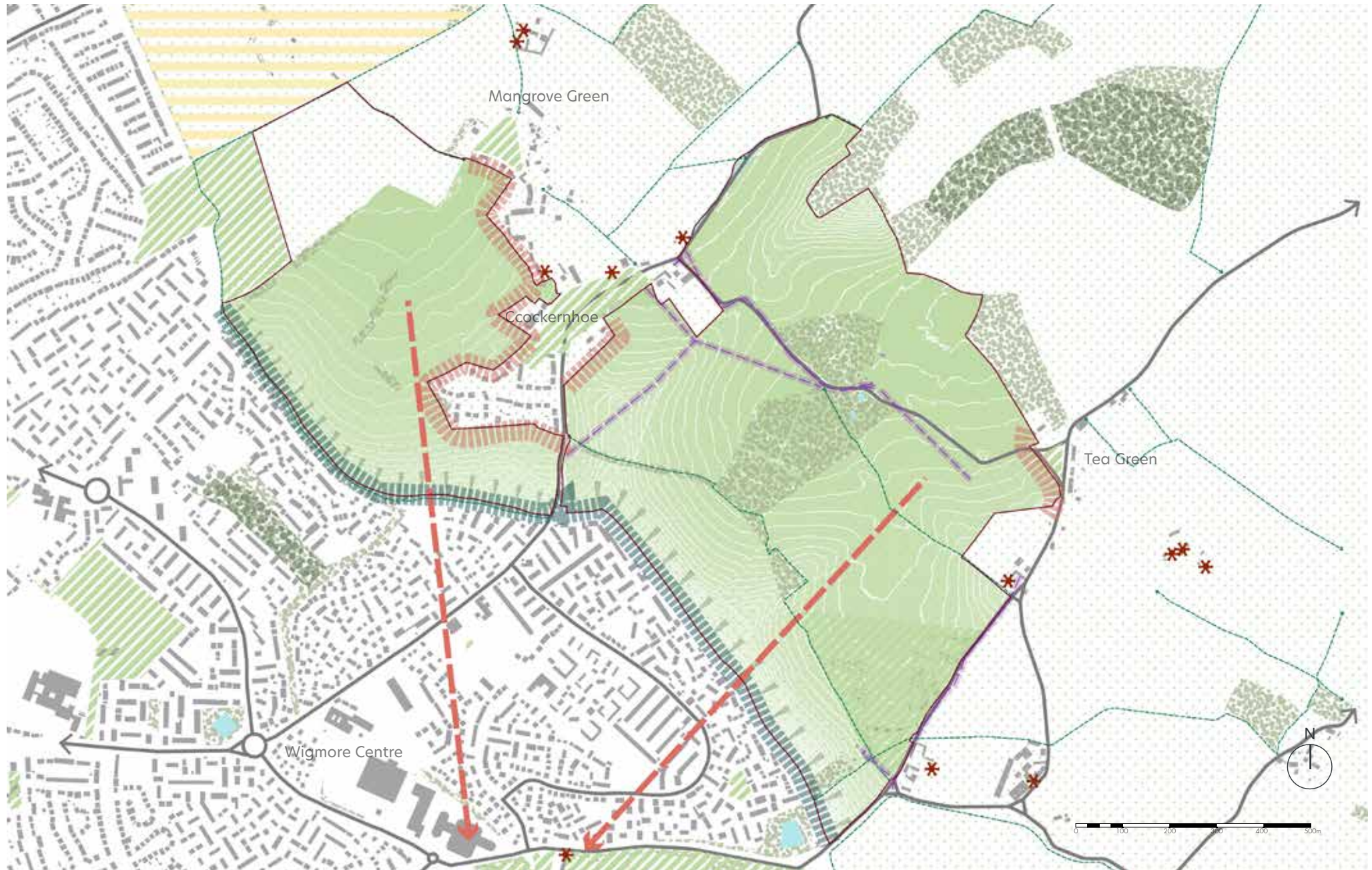
Figure 36. Strategic constraints plan

45

Figure 37. Slipe Spring woodland

Figure 38. Cockernhoe Green

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The Opportunity

The Strategic Masterplan presents an opportunity to establish a robust Green Infrastructure network that integrates key natural features into the landscape. This integration aims to enhance ecological resilience and provide recreational amenities while fostering connectivity with the wider North Hertfordshire countryside.

Woodland network

West of Cockernhoe, the presence of mature tree belts offers potential for the development of continuous green corridors. Such green corridors can serve both ecological and aesthetic purposes, enhancing biodiversity and adding visual appeal. To the south-east of Cockernhoe, Luton's edge with Brickklin Wood and Stubbocks Wood presents an opportunity to create further green linkages. These linkages would facilitate movement through the landscape while providing managed recreational access and enhancing biodiversity.

Extending green linkages

Integration with the existing footpath network is essential to maximize the accessibility and usability of green linkages. By extending these corridors into the wider North Hertfordshire countryside, opportunities for recreational activities and ecological connectivity can be further realized.

Integration of new village greens

A significant aspect of the design concept involves the integration of new "village greens" into the fabric of the community. These spaces will serve as focal points for relaxation, recreation, and social interaction, fostering a sense of belonging and community cohesion.

In most cases, these new village greens will be strategically co-located with education or community facilities. This intentional pairing aims to create a places and spaces where residents can gather for various purposes. By combining green spaces with educational and community amenities, these village greens will not only enhance the quality of life for residents but also contribute to the vitality and sustainability of the neighbourhoods.

Pedestrian integration with villages and Luton

The Masterplan encourages the establishment of pedestrian-friendly linkages between new housing areas and existing settlements such as Cockernhoe, Mangrove Green, and Tea Green, but also Luton. These linkages, primarily in the form of footpaths, but also cycleways, will facilitate access from the existing settlements to proposed facilities, including two new primary schools, a secondary school, a local centre, and playing fields in the northwest.
The Masterplan seeks to promote sustainable modes of transportation, reduce reliance on cars, and encourage active lifestyles and social interaction.

Connection with Existing Green Infrastructure Network

The layout of the development will link to and connect with the existing Green Infrastructure network of Luton. By aligning with established green corridors and open spaces, the new development will enhance the overall connectivity of the area.

Integration with footpath and road network

Every effort will be made to ensure that the footpath, cycle and road network within the new development aligns with existing network in Luton, facilitating efficient public transport access to and from the town centre. Additionally, dedicated cycle lanes and pedestrian pathways will be incorporated into the road design to prioritize non-motorized modes of transportation and promote active mobility.

Access to existing facilities

One of the priorities for the masterplan is to facilitate access to existing facilities, including those within Luton, such as The Wigmore Centre. Pedestrian and cycle routes will be strategically planned to directly connect the new development with these facilities, ensuring convenient access for residents while reducing reliance on cars.

Gateway

At the pivotal point where Crawley Green Road becomes Luton Road there is the opportunity to create a new gateway space between the existing edge of Luton and the new development. This can be achieved through the careful placement of proposed buildings, new planting, swales and pedestrian and cycle paths.

Summary

Connections to Luton is a key aspect of the masterplan, aimed at fostering connectivity, promoting sustainable transportation, and enhancing access to existing amenities. .

Figure 39. Brickkiln wood and its associated tree belts

Figure 40. The Wigmore Centre and other key services are within walking distance of the new housing

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Strategic Design Principles

1. Identify natural features

Identify the area's natural features that have influenced how new development can be accommodated on the Site.

2. Establish Green Infrastructure network

Shows how the development can incorporate a network of Green Infrastructure that comprises natural and semi-natural features including parks, streams woodlands, green corridors, ecosystems, street trees, private gardens and green roofs.

3. Integrate Blue Infrastructure

Show how the development can incorporate Blue Infrastructure: features related to water, such as ponds, streams and drainage systems.

4. Respond to townscape and heritage

Shows how development will respond to townscape and heritage, including highlighting valued buildings and features, and views into and out of the Site.

5. Include green corridors to mitigate impact on local communities

Show how the development will respect the existing settlements of Cockernhoe, Tea Green and Mangrove Green

6. Deliver varied but harmonious character areas

Shows how the development will respond to existing conditions, the immediate context and the role that each area plays to create varied but harmonious character areas.

EAST OF LUTON | STRATEGIC MASTERPLAN FRAMEWORK

3

Vision and objectives

A NEW WOODLAND NEIGHBOURHOOD

IN NORTH HERTFORDSHIRE

"Our vision for the site is a new neighbourhood set within the existing landscape framework with a distinctive identity, sensitively designed and providing much-needed housing for families. The quality of the place created will make it a great place to live"

Figure 41. Woodland neighbourhood
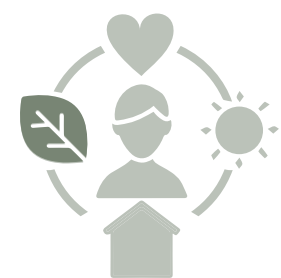
LANDSCAPE LED DESIGN

Objective 1: To create a place for people to live, which incorporates existing and new natural areas, including woodland copses, hedgerows, parklands, gardens, wetlands and wildflower meadows.

Objective 2: To respect the cultural landscape heritage of Putteridge Bury Park and the local villages.

Objective 3: To connect new areas of homes, shops, community buildings and schools by an extensive network of green corridors.

MANAGED ENVIRONMENT

HERITAGE

NEW COMMUNITY

WALKABLE & HEALTHY COMMUNITY

Objective 4: To provide outdoor space for active enjoyment and access to nature.

Objective 5: To encourage integration of health and well-being within day-to-day life, with a range of community, leisure, sport, play, allotments and other outdoor recreational opportunities, as well as active travel modes and public transport.

Objective 6: To make it easy to travel to, from, and within the development by walking, cycling and public transport via a network of safe, attractive and well-designed connections. Walking and cycling routes will give access to and from existing communities and the surrounding countryside, linking with the Chiltern Way and the Hitchin to Chilterns Cycle Route 16.

ACTIVE SPACES

RECREATIONAL OPPORTUNITIES

ACCESSIBILITY

A **DISTINCTIVE** NEIGHBOURHOOD

Objective 7: Deliver well-designed and comfortable homes, space to live and play in, with good access to new and existing amenities and facilities.

Objective 8: Create a series of character areas within the new neighbourhood to instil a sense of place, drawing inspiration from the existing mature landscape and the local area to achieve distinctiveness and quality.

Objective 9: Deliver a net gain of at least 10% in ecological habitats, including new tree planting, hedgerows, areas of grassland and wetland.

QUALITY DESIGN

WOODLAND NEIGHBOURHOOD

BIO DIVERSITY NET GAIN
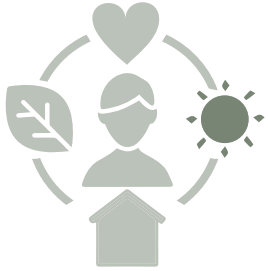
CLIMATE **RESILIENCE**

Objective 10: Ensure homes are energy efficient, incorporating renewable and low-carbon energy generation, in-step with and future-proofing to accommodate the evolution of technology and regulation change.

Objective 11: Provide infrastructure to support and encourage the use of walking and cycling, and other low or zero-carbon modes of transport.

Objective 12: Use Sustainable Drainage Systems (SuDS) to control and manage surface water and increase biodiversity.

SUSTAINABLE HOMES

SUSTAINABLE MOVEMENT

CLIMATE RESILIENCE

EAST OF LUTON | STRATEGIC MASTERPLAN FRAMEWORK

4

Masterplan

Overall Concept

In developing the Objectives and Strategic Design Principles for the new community, the primary focus of the design team has been on integrating the proposed development within the surrounding wooded landscape.

As framed in the Vision, the overall concept for the proposal is to seek to capture a thoughtful response to the local context, the existing natural elements, and the evolving needs of future residents in an era of climate change.

The new housing will be set within a network of public open spaces, educational institutions, and local amenities. At the heart of the new community, a Local Centre will serve as a nucleus for social interactions and daily conveniences.

Distinctive features of the development will be traditional village greens theme, which will take their cues from the central spaces in Cockernhoe and Tea Green, and the existing woodland blocks. This approach will help to blend the urban and the rural, creating an environment where residents can connect with both nature and each other.

Education provision includes two primary schools and a secondary school. These institutions will not only serve as centres of learning but will also contribute to the creation of a close-knit community, fostering relationships among families and neighbours. The north-western part of the Site provides recreational spaces for residents of all ages. This commitment to greenery and open spaces is essential in promoting physical well-being and fostering a sense of community. In recognition of the diverse needs of the future residents, the development will provide a wide range of housing types, spanning from apartments to larger family homes. This diversity in hous-

ing will accommodate varying lifestyles and preferences, ensuring that the community is inclusive and welcoming to all.

An integral part of the internal primary street network, planned to facilitate a high-quality active travel and public transport network. The provision of new bus services aligns with the commitment to sustainable travel, reducing reliance on private vehicles and enhancing travel choices for the community.

Recent national design guidance

The previous Government set out its proposals to raise the standards of design and quality of new development. The plan-making section of the National Planning Policy Framework (NPPF) explicitly promotes the "use of masterplans and design codes to secure a variety of well-designed and beautiful homes". The Government has also published a final version of the National Model Design Code, Chapter 12 of which: 'Achieving well-designed and beautiful places', emphasises the need for good design.

The NPPF explains (para. 139):

"Development that is not well designed should be refused, especially where it fails to reflect local design policies and government guidance on design, taking into account any local design guidance and supplementary planning documents such as design guides and codes. Conversely, significant weight should be given to: a) development which reflects

Figure 42. A vibrant community focus

Figure 43. Woodland walks

Figure 44. Strategic Masteplan

Legend

- Local Centre
- Community Hub
- Allotments
- Community Garden
- Orchard
- Housing
- Primary School
- Secondary School
- Playing Fields
- Pedestrian Link
- Woodland
- Primary Street
- Village Green

Figure 45. High quality education provision

local design policies and government guidance on design, taking into account any local design guidance and supplementary planning documents such as design guides and codes; and/or b) outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of design more generally in an area, so long as they fit in with the overall form and layout of their surroundings."

Design guidance context

The Illustrative masterplan has been developed with reference to the following national design guidance.

National Guidance

- Urban Design Compendium – English Partnerships and the Housing Corporation (2007)

- Building for a Healthy Life – Homes England (2020)

- Manual for Streets – Department for Transport, and Community and Local Government (2007)

- Manual for Streets 2 – Department of Transport (2010)

- Technical housing standards – Nationally described space standard, Department for Communities and Local Government (2015)

- Living with Beauty – Building Better Building Beautiful Commission (2020)

- National Planning Policy Framework (NPPF) – Department for Levelling Up, Housing and Communities (December 2023)

- National Design Guide – Ministry of Housing, Communities and Local Government (2021)

- National Model Design Code – Ministry of Housing, Communities and Local Government (2021)

National Design Guide

This Strategic Masterplan has been prepared has been developed with reference to the recently produced National Design Guide (NDG). The design work addresses the 10 key themes of the NDG in the following manner:

Context - consideration and response to key constraints and opportunities around the Site;

Identity - appraisal of local character features such as materials and architectural styles;

Built form - perimeter block form reflecting historic and 20th century form found in the area

Movement -permeable deformed grid with non-vehicular connections on all sides;

Nature - retained tree belts and hedgerows with enhanced woodland and wildflower planting throughout the schemee;

Public space - – new village greens, and interconnected network of green spaces and active travel routes together with pedestrian friendly streets

Uses - opportunity for a community building which can meet the needs of the public

Homes and buildings - a wide range and mix of new homes

Resources - use of sustainable building materials where required by legislation; and

Lifespan - a carefully planned community which will be loved and well maintained by its future residents.
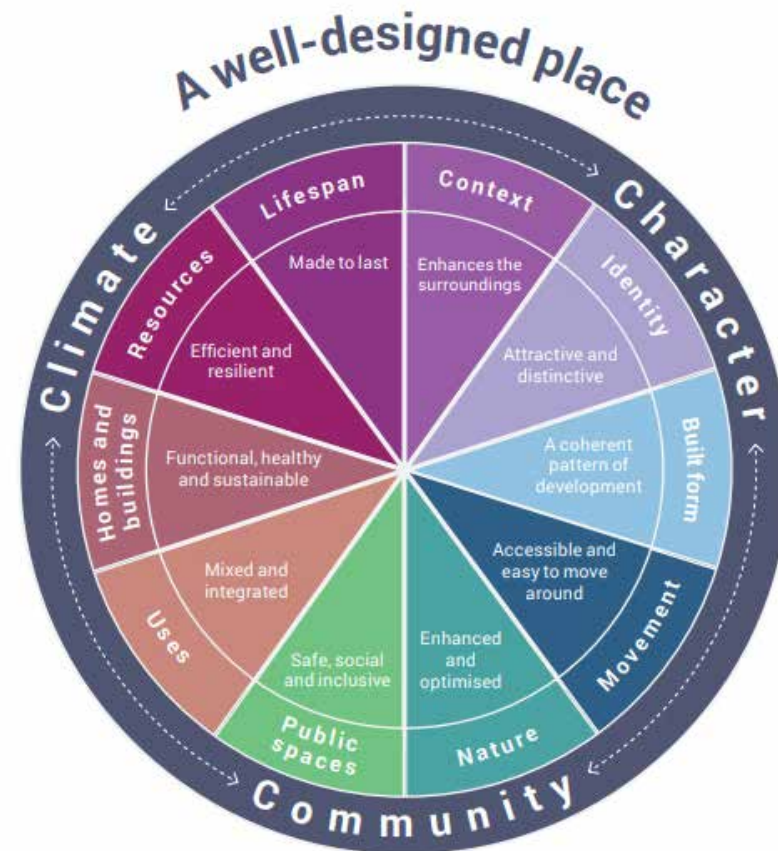

Figure 46. National Design Guide

Figure 47. NEAP play area

Figure 48. Woodland play

The twelve **Objectives** identified in Section 3 provide the foundation for a development that aspires not only to meet the immediate needs of its own community, but to stand the test of time as a beacon of thoughtful, sustainable living.

The twelve Objectives have led to the creation of a multi-layered Masterplan Framework comprising:

- A **landscape and open space framework**, covering all elements of Green and Blue Infrastructure;
- An **urban design framework**; and
- A **movement and connectivity framework.**

In support of these further detail is included in:

- **Appendix A1**: Local built form character appraisal
- **Appendix A2:** Character area outlines
- **Appendix A3**: Indicative street hierarchy

Landscape led design

Creating a strong green network of accessible, multi-functional, and connected green spaces and greenways throughout the development and to key destinations will support active design, physical activity, community cohesion, sustainable drainage, biodiversity net gain, and access to nature. Strong landscape-led design will be realized through carefully embedding the development into the landscape character, extensive tree planting, and landscaping to green spaces, streets, and plot design, providing an attractive landscape setting to new development (see further detail in Section 4b).

The strategic masterplan will be 'landscape-led', with all the key features, such as Brickkiln Wood, the established hedgerow network, hedgerow trees, and copses being utilized to subdivide individual development neighbourhoods, helping to create a unique setting. These retained features will be reinforced and interconnected by a comprehensive framework of open space with new parks, woodlands, and greenways ensuring delivery of an all-encompassing multi-functional Green Infrastructure as a focus for interaction, recreation, and biodiversity, accounting for approximately 55% of the total site area.

The Chiltern Way, together with other PRoWs, will be retained, protected, and enhanced as they pass through the Site. It will be utilized as the spine for a substantially expanded network of traffic-free footpaths, cycleways, and bridleways reinforcing and connecting with the current PRoWs, including the Chiltern Way and the Hitchin to the Chilterns cycle route, to ensure strong integration with the existing community.

A new footpath route will be provided through Brickkiln Wood, linking into existing routes across Lilley valley and up into the Chilterns and the Icknield Way. The interaction of topography and existing mature vegetation will result in the proposed development being visually self-contained.

Existing assets of acknowledged importance within the wider area include the Chilterns AONB, Putteridge Bury RPG, and the Lilley Bottom valley. These will all be protected from any potential detrimental effects by the iterative environmental master planning approach adopted.

Figure 49. A woodland setting will define the new place

Figure 50. Local centre

Figure 51. Active travel

A robust framework of existing woodland blocks (Brickkiln, Stubbocks, Furzen, and Messina) will be reinforced by new woodland planting to ensure enduring effective screening of the new development in views from the wider countryside.

At a local level, the Site will have much to offer as a canvas for the creation of the new community; Luton Road, Brickkiln Wood, Brick Kiln Lane, the Chiltern Way, and the radiating network of hedgerows and tree belts will create instantly recognizable subdividing features that help to establish new neighbourhood character zones. The existing green infrastructure network will be reinforced and expanded by new distinctive spaces and an interconnecting network of greenways and woodland belts around the development perimeter.

Distinctive Character Areas

The Masterplan will be defined by a series of character areas (see further in Section 4c and Appendix A2) that respond to the existing features. Building design will take references and design cues from the local vernacular in North Hertfordshire and Luton in the detailed development of building typologies, architectural design, materials, landscaping, boundary treatments, and integration of parking utilizing contemporary and innovative design where appropriate.

The setting of Mangrove Green, Cockernhoe, and Tea Green villages, as well as the edge of Wigmore, will be protected by the creation of new accessible open green space together with further broadleaved woodland planting and individual trees. The dispersed organic character of the adjacent villages has intrinsic appeal. The locally distinctive theme is carried through into the masterplan; discrete

residential neighbourhoods of varying scale and character are proposed, all within easy walking and cycling distance of the Community Hub and each with a high degree of accessible green space on their doorstep.

The development will combine the benefits of convenient living with a sustainable all-encompassing biodiversity framework and ensure a fully integrated Masterplan.

A community heart

A new Local Centre will provide facilities for the new community. A new neighbourhood play area and high-quality public realm in the form of a new square would anchor the Local Centre. The hub will provide a focus for community activity, be accessible by public transport, include safe routes to school, encourage linked trips, and form a focal point within the development accessible to all users. The architectural character of the non-residential buildings will focus on design grounded in locally distinctive North Hertfordshire materials and detailing to create a striking sense of arrival in the new neighbourhood.

New village greens

The western and eastern flanks of the scheme will be defined by contemporary versions of the traditional village greens. These will be signature spaces which will integrate with the villages of Cockernhoe and Tea Green and be characterised by their informal landscape design and where possible, car-free frontages.

Sustainable movement

New traffic routes will be designed as tree-lined avenues, forming the principal vehicular and public transport link through the development. The primary movement network proposed in the Masterplan will remove through traffic from Cockernhoe village.

The Chiltern Way will be crossed at only two locations to minimize disruption to walkers who will have priority crossings at these points. Each neighbourhood will then be served by a descending hierarchy of side streets, mews, and green lanes, which in turn will connect to the traffic-free footpath and cycleway network.

Each neighbourhood will then be served by a descending hierarchy of side streets, mews, and green lanes, which in turn will connect to the traffic-free footpath and cycleway network.

Public transport will be readily accessible to all, providing new bus services as well as enhancing access to facilities in Luton for existing and new residents. The setting of Mangrove Green, Cockernhoe, and Tea Green villages, as well as the edge of Wigmore, will be protected by the creation of new accessible open green space together with further broadleaved woodland planting and individual trees.

A walkable community

Creating an environment which supports active design through a network of direct, legible, and integrated pedestrian and cycle routes between key destinations and green spaces. This will encourage physical activity and pedestrian and cycle movement

within the development and to key destinations in Luton. Homes, schools, community facilities, workspace, green space, and sports facilities will be within easy reach of each other. Pedestrian and cycle movement will be prioritised over other modes of transport through 20 mph speed limits, reduced parking at local facilities, reduced road widths, and traffic management measures.

Figure 52. Streets will be pedestrian friendly

Landscape and open space strategy

A landscape-led approach to the layout for East of Luton creates a multi-functional and interconnected framework of Green and Blue Infrastructure encompassing woodland, hedgerows, grassland, wetland habitats, wildlife areas, open space and sports pitches, equipped children's play, PRoWs, walking and cycling routes as well as a series of trails, street trees and private gardens.

Objectives

- Create a landscape for people and nature
- Adopt a landscape-led masterplanning approach
- Retain, protect and enhance important existing features, i.e. Brickkiln Wood, Slipe Spring and strong hedgerows, the Chiltern Way and other PRoWs which combine to provide a unique landscape framework
- Take inspiration from existing features as well as those nearby i.e. cultural landscape heritage of Putteridge Bury and local village greens. Maximise connectivity to increase wildlife habitat and overall biodiversity
- Deliver nature recovery networks and significant tree coverage to encourage climate resilience
- Multi-functional Green Infrastructure to promote health and wellbeing; active outdoor spaces and community facilities
- Ensure sufficient provision of usable public open space for new residents

Figure 53. Green Infrastructure Matrix

Multi-functional Green and Blue Infrastructure strategy

The Green and Blue Infrastructure (G&BI) design approach taken at Luton East seeks to create a multi-functional and connected landscape. This means that it will perform several functions. For example, a play space might also be natural space that helps deliver biodiversity benefits or could also include a sustainable drainage function. In this way the provision of amenity spaces for new residents is balanced with the requirement to enhance and protect nature.

To address the crises of climate change, biodiversity decline and community wellbeing, the types of landscape proposed for the Site have a strong focus on the creation of natural character. A range of new habitats will be created to form a natural character whilst allowing for recreation and community facilities within key open spaces.

The Green Infrastructure Matrix diagram illustrates the multi-functional design approach taken. It contains a spectrum of different landscape typologies and functions to be included in the masterplan that will address the needs of new and existing residents. These landscape typologies are explored in the following sections of this document in more detail.

The Green and Blue Infrastructure will deliver the following:

- Connected strong green corridors and spaces radiating from Brickkiln Wood and Slipe Spring to create a robust framework for the built development. These woodland assets will be offset with generous open space to enable woodland ecotones to be created.

- The proposed sports pitches will provide a linear park serving as the interface with the established residential neighbourhood at Wigmore. The emphasis here is on biodiversity enhancement together with the creation of a sustainable drainage network of ponds and wetlands.

- Mangrove Fields is an active sporting focus for existing and new residents combined with new structural planting to strengthen and reinforce the localised landscape character.

- New parks of species-rich grassland, shrub planting and specimen trees provide a transition between the new development and the existing villages of Cockernhoe and Tea Green for the enjoyment of existing and new residents. These greens complement and directly link to the existing village greens as well as protecting the setting of the villages.

- Equipped children's play will likely include 2 NEAP's and 4 LEAP's. These will be located at convenient and accessible locations such as in close proximity to the Local Centre and schools.

- Pockets of allotment gardens, located near to properties as well as the Local Centre and schools for easy, walkable access, yet positioned discreetly within the overall framework.

- SuDS features will be located as necessary within parcels EL1 and EL2, their design will be ecology driven whilst being sympathetic to the local landscape to appear naturally integrated.

- An extensive network of new footways and cycleways integrated with the existing PRoWs that cross the Site will provide recreational routes, promoting active and healthy living.

- Avenue trees will be planted along the primary road network with a change in species for navigation – recognising leaving one character area and entering another.

- Attractive, appropriately landscaped gateways from both Luton Road and Darley Road.

Primary Open Space Typologies

The Primary Open Space Typologies Plan opposite illustrates the broad distribution of open space types across the site. These include:

- **Community greens** - Amenity green space is located at central areas, modelled on the character of the local village greens with large feature trees and open lawns. These greens will be well defined by development fronting onto them and designed for flexible usage eg community events and informal play/exercise.

- **Woodlands and hedgerows** - Existing woodlands and hedgerows will be managed appropriately for conservation. Enhancement planting is proposed adjacent, consisting of more native trees, scrub and meadow species to protect the existing features and to extend and connect habitats, forming a nature recovery network.

- **Wildflower meadow** - Extensive areas of wildflower meadow will be created, with nature trails running through them. Widespread tree planting will also be included in these areas, to form a naturalistic scattered parkland character.

- **Seasonally wet meadows and ponds** – The south-eastern edge of the site contains most of the sustainable drainage features, comprising a mixture of wet and dry ponds allowing for a diverse meadow mosaic to be formed of seasonally wet, permanently wet and damp areas to enhance biodiversity and create an attractive edge to the new community.

Pocket parks integrated within natural areas, making use of the topography to form pleasant relaxation spaces

Meadow grasslands

Orchards can also be community spaces for relaxation, picnics and informal recreation

Accessible and inclusive network of pathways and spaces

- **Playing fields and playgrounds** - The formal sports provision is focussed in the northern part of the site and provides the opportunity for a range of pitch sizes. Play spaces will be well integrated within the landscape fabric and have a range of different characters depending on location.

- **Allotments and community gardens** – Spaces for food growing have been well integrated within the new neighbourhoods to encourage social interaction.

Legend

☐ The Site

Multi-functional Open Space

- Community Greens
- Existing Woodland and Hedgerows
- Woodland Edge Landscape
- Wildflower Meadow
- Blue Corridor (including Seasonally Wet Meadows and Ponds)

- Outdoor Sports

✳ Indicative Locations for Allotments or Community Orchards

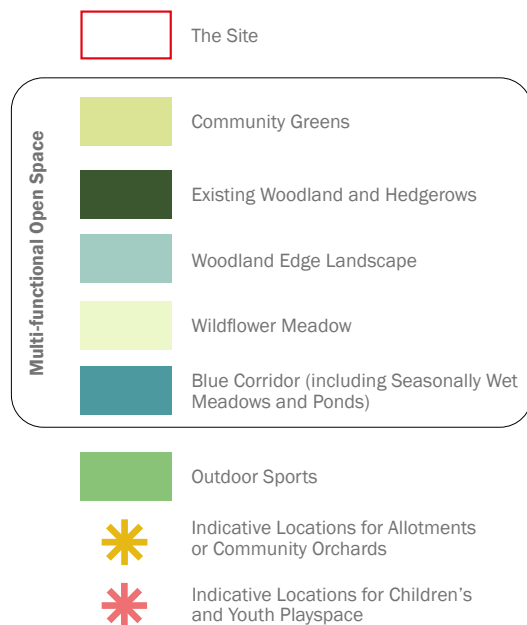✳ Indicative Locations for Children's and Youth Playspace

Figure 54. Primary Open Space Typologies

0 — 250m

71

Planting Strategy:

- **Woodland –** The existing woodlands at Stubbocks Wood, Brickkiln Wood and Slipe Spring will require a woodland restoration plan prepared and enhancement works.

- **Woodland Edge –** The primary function of such spaces is to conserve and enhance the existing woodlands by planting a mixture of deciduous trees, pockets of scrub and meadow fringes. This will form a transitional or edge habitat that provides biodiversity benefits.

- **Open Space Planting –** Along the southern edge of the Site and around the development edges, scattered tree planting will provide a more open landscape, with larger specimen trees planted to boost biodiversity and amenity value. Wildflower meadows and wetland features will be integrated within the space to create a diverse patchwork of habitats. A mixture of species will be employed to ensure climate resilience and de-risk impacts from pests and diseases.

- **Street Tree Planting** – Street planting will take a more organic and informal approach with a diversity of tree species used in streets.

- **Feature Trees** – Structural planting of large individual specimen trees will help to create a sense of place, echoing the character of village greens. In other open space areas feature trees located at key nodes or forming a visual termination feature might judiciously use ornamental, non-native species as markers to add colour or visual interest to neighbourhoods, provide climate resilience and nectar sources for local biodiversity.

Existing woodlands to be enhanced with a woodland management plan in place

Figure 55. Proposed Habitats

Ecotone edges alongside woodlands provide a natural enhancement

Existing trees to be integrated as markers in the landscape

Native structural landscaping to enhance, extend and connect existing woodlands and hedgerows

development
fronting

existing
woodland

scrub and
tree mix

wildflower
meadow
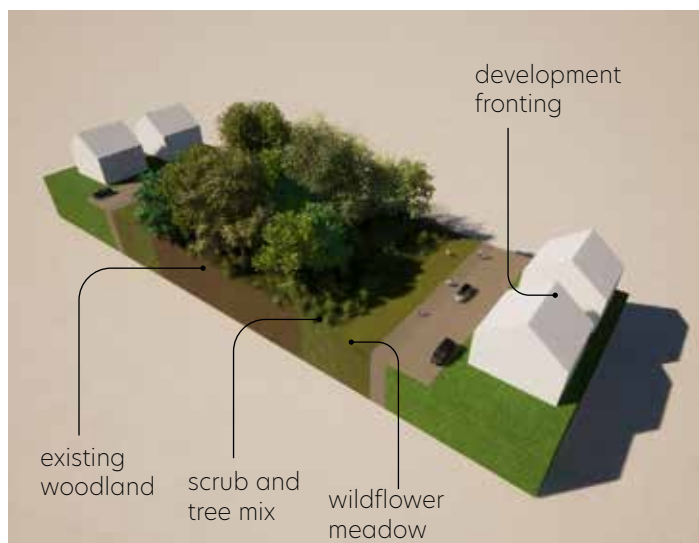
Figure 57. Indicative section showing ecotone planting approach to development edge adjacent to existing woodland

Allocation Boundary

Woodland Enhancement

Woodland Ecotone

Scattered Parkland

Primary Street Tree Planting

Indicative Locations for Feature Trees
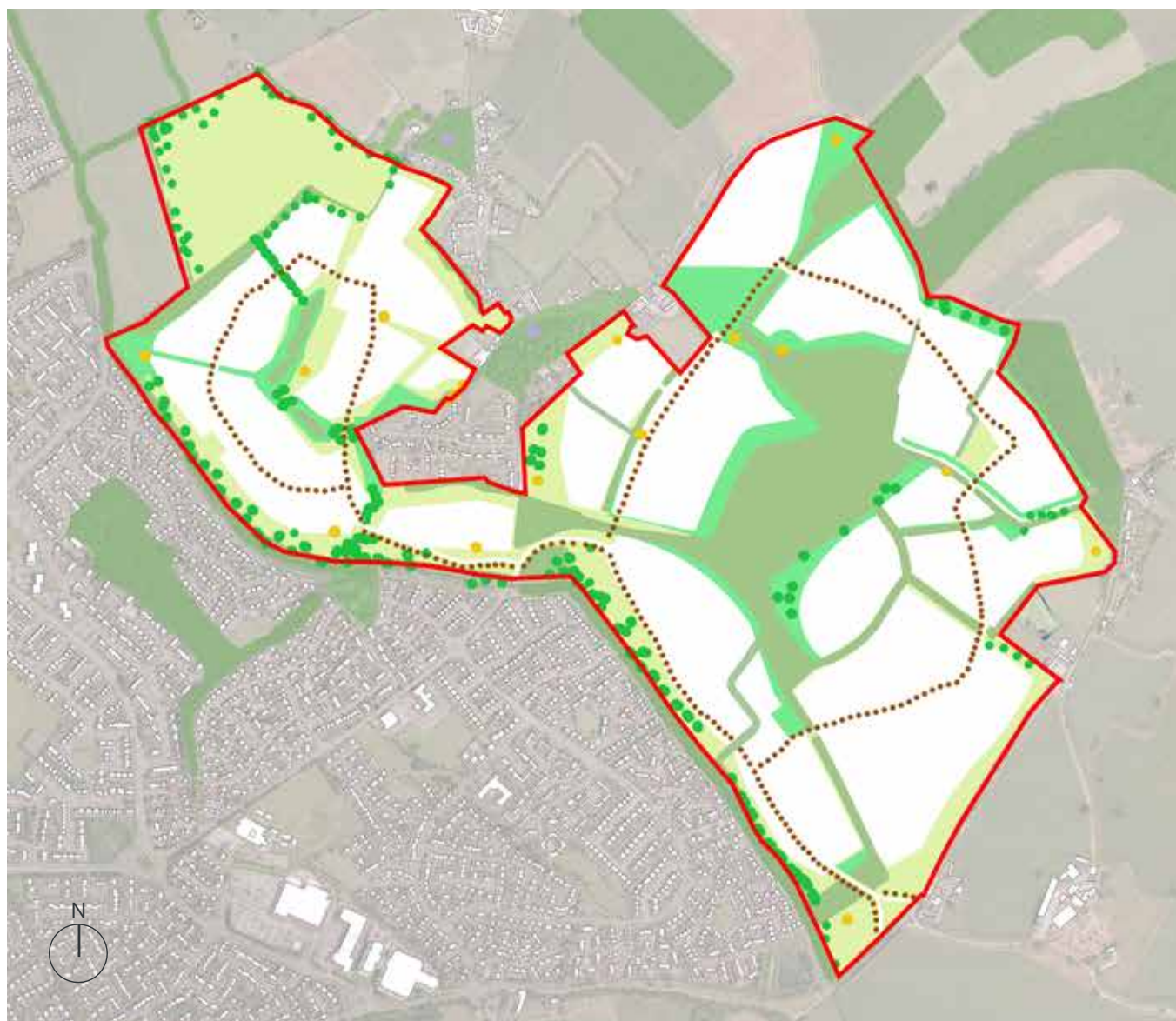
Figure 56. Planting Strategy

N

0   250m

Sports and Play Strategy:

- **Natural play, play-on-the-way and play trails** – A playable landscape will be created that makes all of the open spaces suitable and safe for children, to encourage imaginative and explorative play. This concept uses informal and natural features in the environment such as logs, boulders and mounds.
- **Equipped children's play** – is shown on the plan opposite, comprising 2 NEAPs (Neighbourhood Equipped Areas of Play) and 4 LEAPs (Local Equipped Areas of Play). These are located in central green spaces as well as more subtly integrated within natural spaces. They will be easily accessed by new footpaths and cycleways, and well overlooked;
- **Local play** – 4 LEAPs are provided and are distributed across the development. LEAPs are located generally within a 5 minute walk from the majority of the housing areas, and are located near to the schools. LEAPs typically provide for younger children, allowing easy access for families so that younger children can have somewhere safe and close by to play. These paces include up to 5 pieces of play equipment, seating and may need to be enclosed to avoid dogs accessing the active zone.

- **Destination play** – The concept of destination play is to consolidate formal play provision in a central area, with different zones within the play space providing for children of different ages. Surrounding the active zones, more passive and flexible open areas are provided for informal kick-about, seating or picnic benches for parents to relax and supervise and areas of planting and public art opportunities.
- **Hard surface play** – NEAPs will be well integrated and not impact other natural spaces or residential areas through noise or unattractive fencing.
- **Making space for girls** – Provision will be made specifically for teenage girls within destination play spaces. Recent research has shown that for teens, the facilities typically on offer (such as fenced off hard pitches, MUGAs (Multi-Use Games Areas), skate parks and BMX courses) become dominated by teenage boys which can make teenage girls feel unwelcome or unsafe. To create a more inclusive space the needs of girls will be addressed through provision of specifically designed features such as social seating and shelter, swings, outdoor gyms, and toilet facilities.

- **Natural play spaces** – The development will provide several play spaces, having different functions and levels of equipment as set out on the previous page. An overarching theme will be to provide play opportunities that are integrated within the natural spaces of the development, using natural features such as logs, boulders and mounds.
- **Trim trails** – The development offers opportunities for waymarked exercise routes with fitness stations, outdoor gym equipment and play features placed along key recreational paths. The Green Infrastructure framework allows for a 5 km route, connecting the key park spaces where more formal facilities are located with the quieter natural spaces.
- **Sports hub** – Sports pitches are consolidated in a location to the west of the development adjacent to Putteridge Bury. This location allows for the efficient management of the pitches, which could include a mixture of different sports layouts, plus a parking area and changing room facilities.

Surfaced pathways provide for active travel and recreation

NEAPs will include areas of surfaced play

Equipped play (NEAPs and LEAPs) integrated within planted areas

Informal natural play features within biodiversity areas

Trim trails or doorstep play
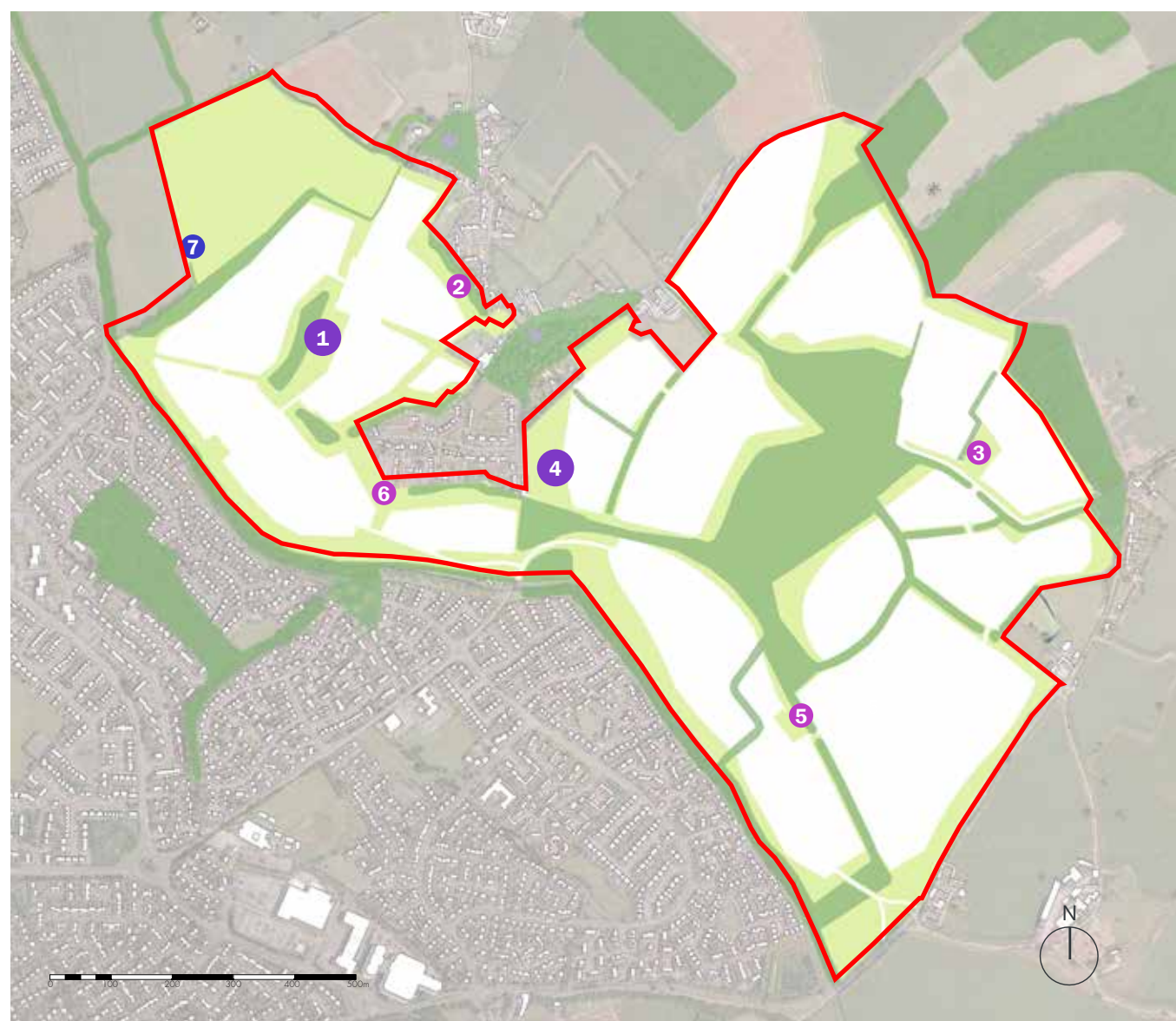
The Site

1 Village Green NEAP

2 Linear Park LEAP

3 Brickkiln Woods North LEAP

4 Local Centre NEAP

5 Chiltern Way LEAP

6 Green Edge LEAP

7 Wandon Park LEAP (Delivered by Others)

LEAP = Local Equipped Area of Play. An active zone of 400sqm with separation to development of 20m.

NEAP = Neighbourhood Equipped Area of Play. An active zone of 1000sqm with separation to development of 30m.

Play locations shown indicatively and have potential to change location subject to LPA agreement through outline planning process.

Figure 58. Play Strategy

75

Primary Open Space Typologies

The Primary Open Space Typologies Plan illustrates the broad distribution of open space types across the site. These include several types of open space that together make up the Multi-Functional Open Space and the Parks and Gardens open space categories required by the Luton Open Space Standards (2016).

Multi-Functional Open Space and Parks and Gardens comprise:

- Community greens - Amenity green space is located at central areas, modelled on the character of the local village greens with large feature trees and open lawns. These greens will be well defined by development fronting onto them and designed for flexible usage eg community events and informal play/exercise.

- Woodlands and hedgerows – Existing woodlands and hedgerows will be managed appropriately for conservation. Buffer planting is proposed adjacent, consisting of more native trees, scrub and meadow species to protect the existing features and to extend and connect habitats, forming a nature recovery network.

- Wildflower meadow - Extensive areas of wildflower meadow will be created, with nature trails running through them. Widespread tree planting will also be included in these areas, to form a naturalistic scattered parkland character.

- Seasonally wet meadows and ponds – The south-eastern edge of the site contains most of the sustainable drainage features, comprising a mixture of wet and dry ponds allowing for a diverse meadow mosaic to be formed of seasonally wet, permanently wet and damp areas to enhance biodiversity and create an attractive edge to the new community.

Children and Young People - Play spaces will be well integrated within the landscape fabric and have a range of different characters depending on location. Further detail provided on pages 72-73.

Outdoor Sports - The formal sports provision is focussed in the northern part of the site and provides the opportunity for a range of pitch sizes. Use of the secondary school pitches out of hours will be sought.

Allotments - allotments and community gardens will be distributed across the development. Spaces for food growing have been well integrated within the new neighbourhoods to encourage social interaction.

POS Category	Minimum Standard (ha / 1,000 population)	Minimum Requirement * (ha)	Area Provided (ha)	Area + / - Minimum Requirement (ha)
Multi-Functional Open Space	2	10.08	36.86 **	29.52
Children and Young People	0.57	2.87	2.98 ***	0.11
Outdoor Sports	1.6	8.06	10	1.94
Allotments	0.25	1.26	1.26	0
Parks and Gardens	****	5	5	0
Total POS:		27.27	56.1	28.83

* 2,100 homes equates to approx. 5,040 people at an average of on 2.4 people per home
** Includes existing woodland and vegetation.
*** Includes equipped play space and required buffers (4 x LEAP with 20m buffer, and 2 x NEAP with 30m buffer) – to comprise informal amenity / play space for games, picnics, etc. adjacent to and associated with the formal equipped play spaces.
**** The development would generate an additional requirement of five hectares or more open space provision of the Parks and Gardens category which only applies to strategic sites (2016 POS Standards, Para 3.2).

Figure 59. Public Open Space Provision (POS)

Biodiversity Strategy:

The Biodiversity Strategy is underpinned by the retention of existing habitats. The biodiversity value of the Site and restoration and enhancements will be part of the net gain in biodiversity that the Masterplan development will provide.

It is proposed to create extensive areas of new habitats and enhance existing Green Infrastructure features within the Site.

The Strategy illustrates an approach to delivering a biodiversity net gain of at least 10% across the Site, the proposed habitats comprising:

• The majority of existing trees, hedgerows and woodland will be retained where possible and enhanced to create green corridors across the Site for the movement of wildlife;

• All woodland parcels will be separated from the development footprint with a range of habitat types that will include woodland edge planting (scrub, shrubs and trees), modified and other neutral grassland, as appropriate;

• Mixed scrub planting will be provided in blocks to strengthen the boundaries of the Site and provide a corridor linking the east and west of the Site. Smaller pockets of scrub will also be planted along the southern boundary of the Site;

• The sustainable drainage systems (SuDS) and bioswales will be created along the southern and western boundaries of the Site (a bioswale is a dry swale (ditch) in which water is stored underground within a gravel layer and wet swale is where water is stored above ground creating a potentially permanently wet area). . Where appropriate, basins will be planted with grassland and pockets of scrub to enhance their value for biodiversity;

• As many existing ponds will be retained as possible, with additional ponds created to provide aquatic habitat for a range of biodiversity within the Site;

• Public open spaces will include village greens to reflect the local area, allotments and orchards, which will incorporate features for biodiversity;

• The provision of additional tree planting within areas of open space and along proposed streets will provide additional forage and refuge opportunities for wildlife within the Site;

• New development will maximise the usage of native species in plot boundaries, streets and spaces to ensure species and vegetation diversity.

• All new development will utilise domestic scale features to support wildlife such as integral bird and bat boxes.

• The integration of green corridors through the scheme will ensure that there are natural interactions between the habitats and new residents, which will promote better wellbeing but also an appreciation of the wildlife importance locally.

• Where hedgerow, tree and woodland losses are necessary, these have been located to limit the impacts on sensitive habitats elsewhere. New diverse native hedgerow and tree planting will provide foraging and refuge resources year-round, with differing fruiting and flowering bodies, making them a valuable resource for a range of species.

Legend

- Enhanced/Retained Habitats
- Lowland Mixed Deciduous Woodland
- Other Woodland; Broadleaved
- Traditional Orchards
- Mixed Scrub
- Modified Grassland
- Other Neutral Grassland
- Seasonally wet ponds
- Allotments
- Development Parcels & Hardstanding
- Artificial Unvegetated, Unsealed Surface
- Indicative Small Tree
- Species-Rich Native Hedgerow with Trees
- Species-Rich Native Hedgerow with Trees and Ditch
- Species-Rich Native Hedgerow
- Species-Rich Native Hedgerow with Ditch
- Line of Trees
- Retained Large Rural Tree
- Retained Medium Rural Tree
- Retained Small Rural Tree
- Enhanced Species-Rich Native Hedgerow with Trees
- Enhanced Species-Rich Native Hedgerow

Figure 60. Proposed Habitats

Sustainable Drainage Strategy

- **Meadows with seasonally wet attenuation basins** – Shallow profile basins along the southern edge of the Site will allow for seasonal inundation, and for peak rainwater storage to allow for the slower infiltration rates constrained by borehole outflow. It is intended that these areas have wildflower meadow established with wetter and dryer seed mixes creating a diverse tapestry of grassland and scattered trees be integrated throughout to form a parkland, or meadow pasture character.

- **Permanently wet attenuation basins** – can be used in key locations such as entrance green spaces and the local centre. These ponds will be designed to maximise biodiversity with terraced edges to provide diverse growing conditions for marginal and aquatic plant species.

- **Bio-Swales** – An integrated, multi-stage SuDS approach could be provided, including a variety of surface features integrated within the development zones and the green spaces. Swales will be used alongside development parcels to help filter pollutants and deal with runoff at source and convey it to larger attenuation features in the landscape, helping to avoid a 'pipe-to-pond' approach.

- **Cascading bioswale** – In sloping areas swales can form a 'cascade' where swales and ponds sequentially flow from one to the next, using check dams to control the flow and creating an attractive stepping water feature.

- **Rain gardens** – Within development parcels, street verges can be utilised as 'rain gardens', a green strip adjacent to the carriageway that acts as a bio-filtration system for rainwater runoff. Rain gardens allow for planting of shrubs, wildflower mixes or perennials as well as trees to create a rich and biodiverse natural streetscape.

The majority of the southern edge will comprise seasonally wet meadows (detention ponds) with a shallow edge profile

Permanently wet water bodies will be included at key locations such as gateways to the site.

Rain Gardens can be integrated within streets and spaces to provide water quality improvements trees

active travel route

wooded edge to Luton

wildflower meadow

scattered parkland trees

seasonal pond
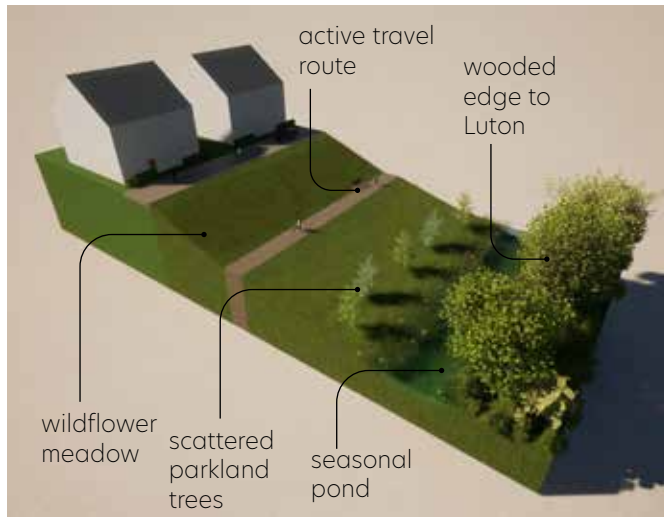
Figure 62. Indicative section showing wetland corridor edge

 The Site

 Indicative Attenuation Pond Feature

 Wetland Corridor with SuDS conveyance and/or Storage

 Potential for Swales or Cascades
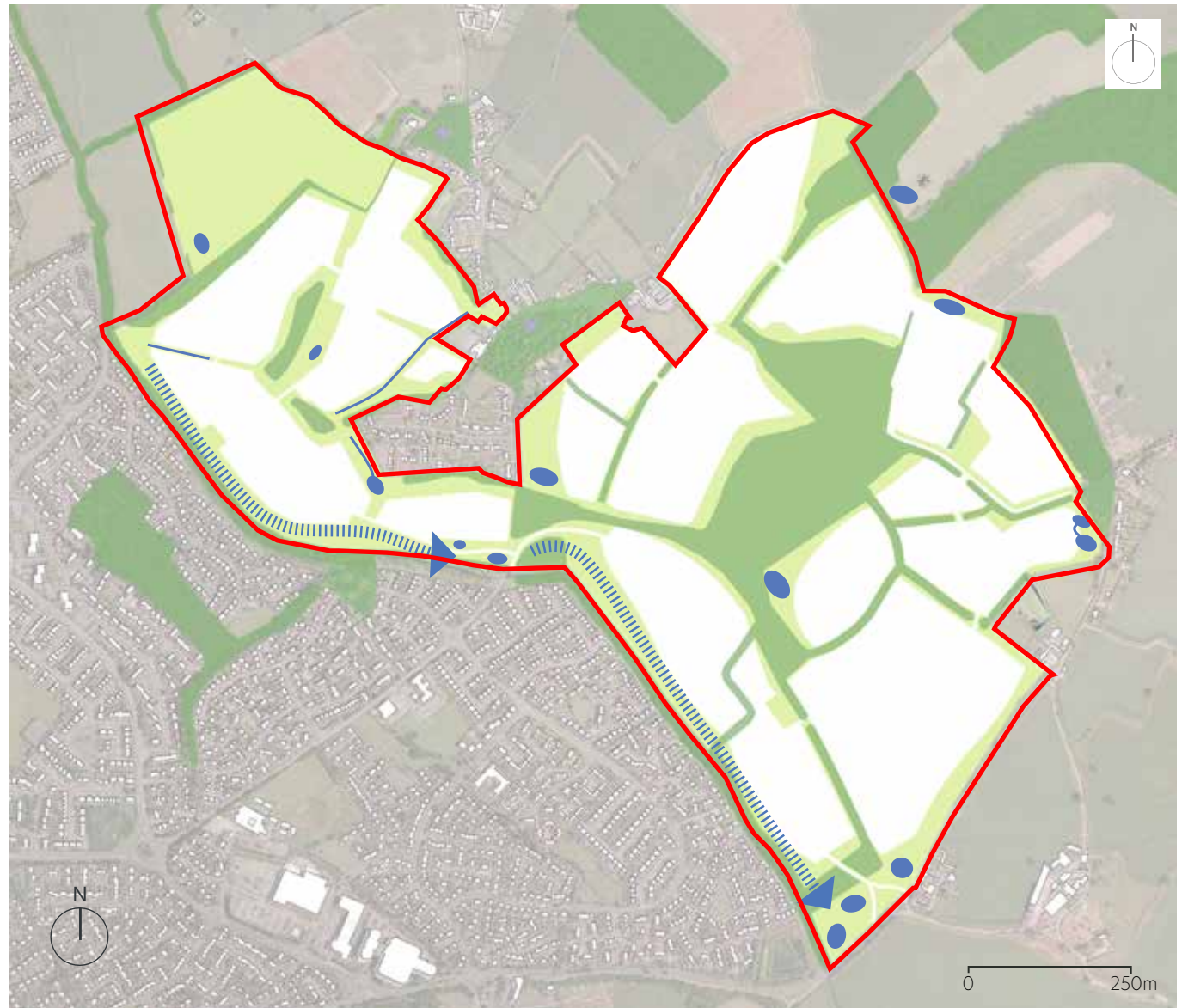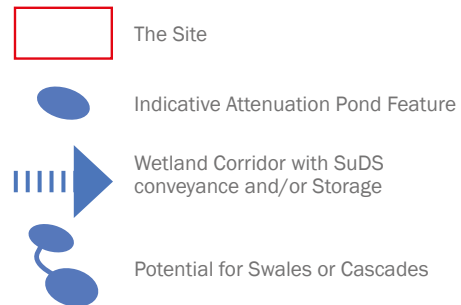
Figure 61. Sustainable Drainage Strategy

Landscape Cross-sections

The sections opposite show a range of landscape typologies addressing different edge conditions and open spaces across the site.

The section drawings shown indicate typical dimensions. These dimensions could vary depending on site-specific layout considerations.
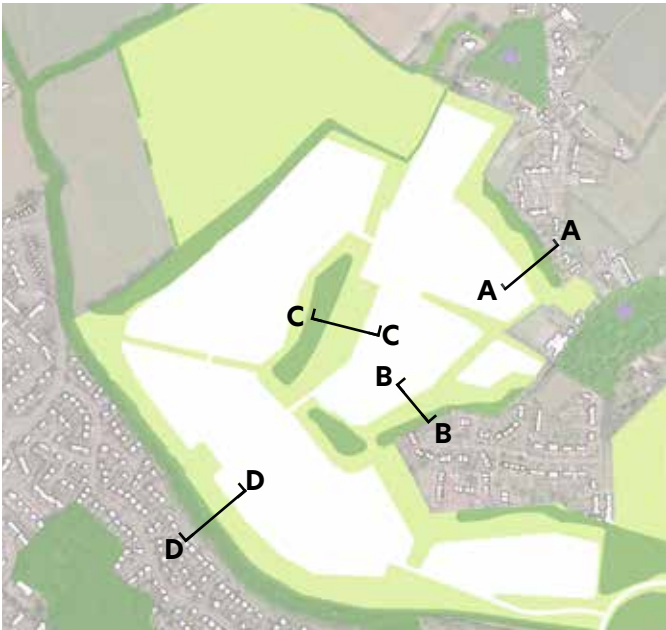
Figure 65. Section Key Plan
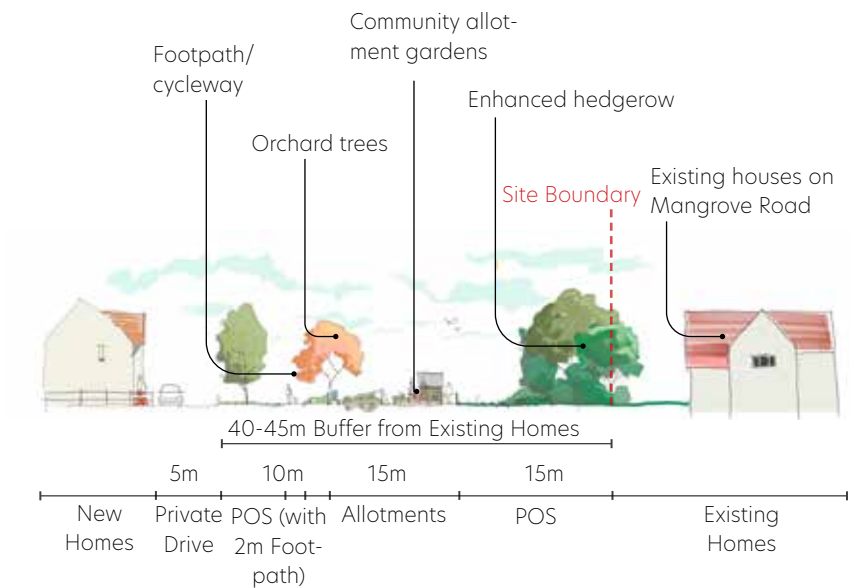
Figure 63. Section A-A - Northern Buffer - Community Gardens

Figure 64. Section B-B - Woodland Corridor

Scrub and Meadow edge

Feature trees in main lawn

Slipe Spring Woodland

Community Building looking over Village Green

Main Street

20m
2m 3m 5.5m 2m

Ancient Woodland | Woodland Buffer Planting | Village Green | Cycleway Path | Highway | Path | New Homes
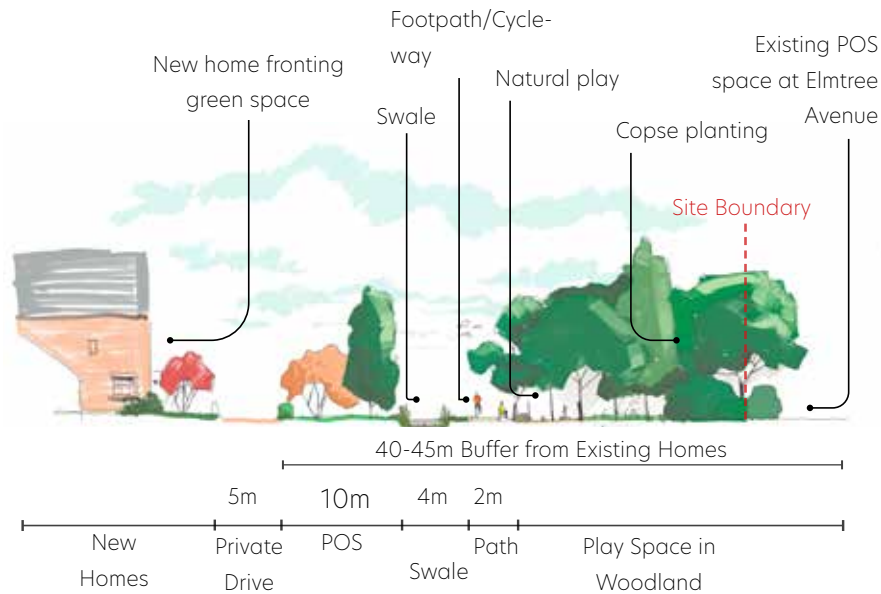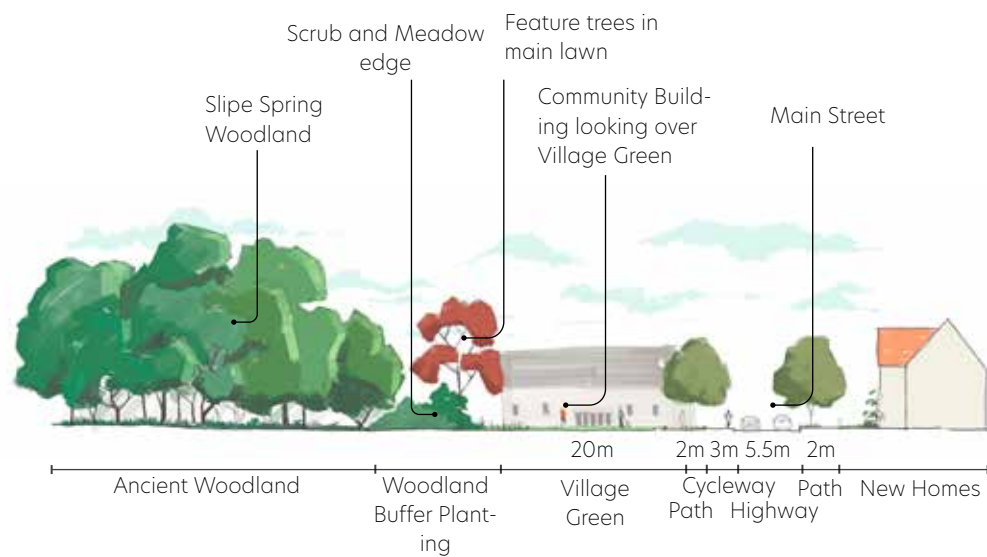
Figure 67. Section C-C - Village Green

Existing homes in Luton

Existing footpath and woodland edge to Luton

Pedestrian and cycle connection (between ponds)

Footpath/cycleway

Site Boundary

Seasonally wet pond

Green edge street

2m 8m

Existing Homes | Existing Hedgerow and Trees | Marginal Planting | Pond | Marginal Planting | Path | POS | New Homes
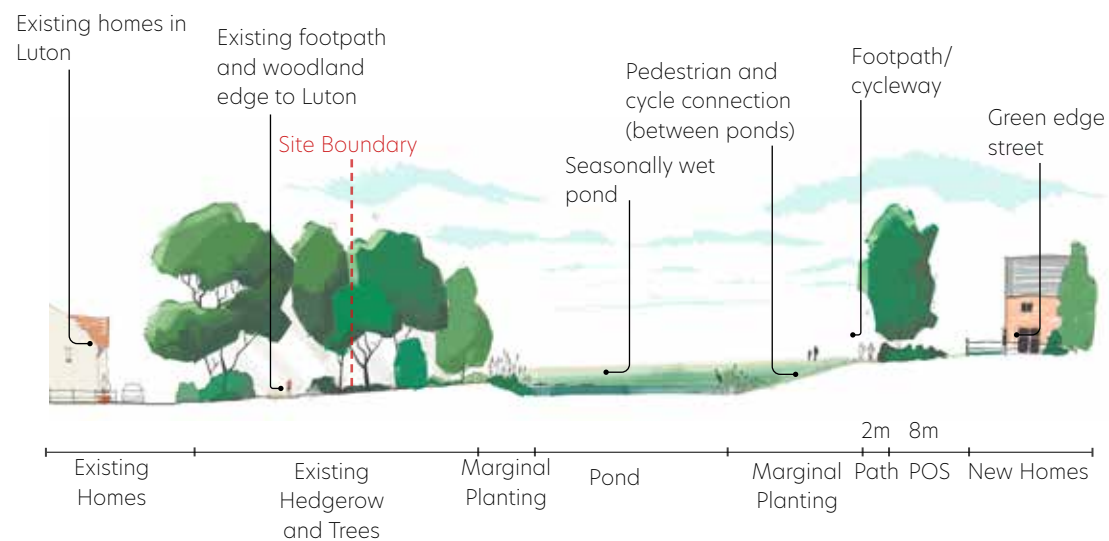
Figure 66. Section D-D - Wetland Corridor

Figure 68. Section E-E - Green Oaks Interface - North

Site boundary (Paddock fence retained)

Security mesh fence

Allotment boundary fence with hedgerow

Allotments

Site Boundary

10m

10m

Planting with evergreen species inside mesh fence*

Planting (with evergreen species to mesh fence)

Allotments

20m between site boundary and allotment boundary
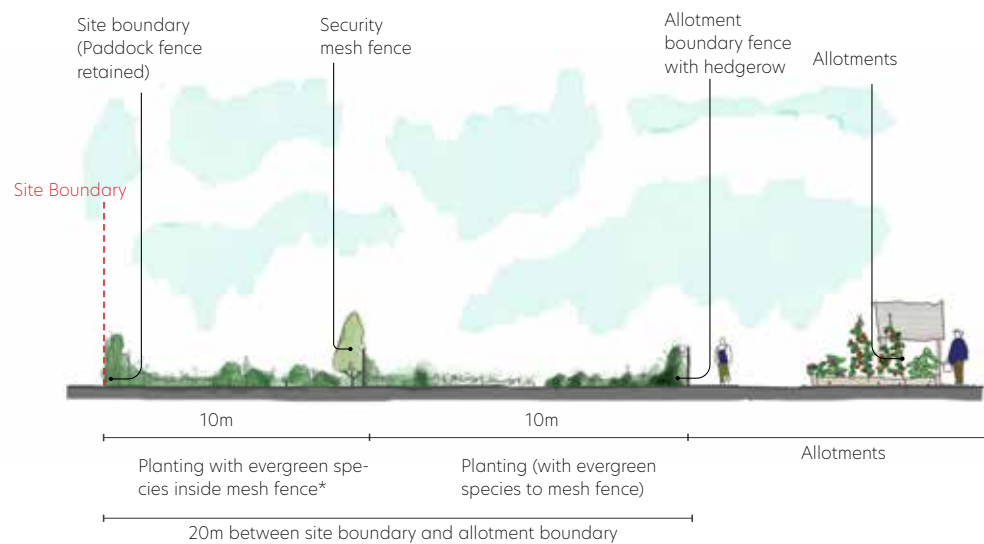
Figure 71. Section Key Plan

Figure 69. Section F-F - Green Oaks Interface - East

Site boundary (Paddock fence retained)

Security mesh fence

Footpath

Estate railing

Site Boundary

10m

10m

Planting with evergreen species inside mesh fence*

Trees/planting with footpath

Private Drive

Front Garden

New Home

20m between site boundary and residential development

Typically 9-11m
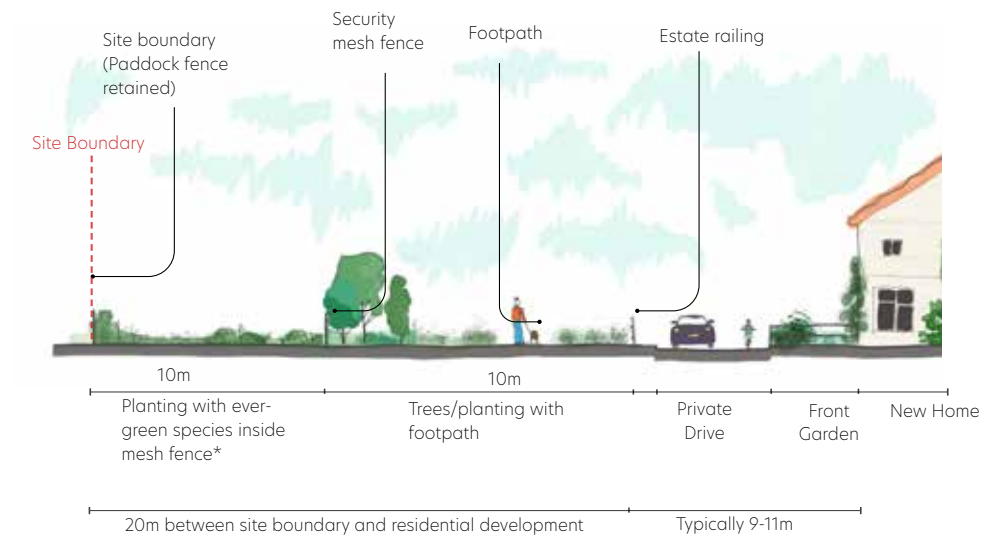
Figure 70. Section G-G - Dancote Interface - East

Site boundary (Security mesh fence)

Security mesh fence

Footpath

Estate railing

Site Boundary

10m

10m

Planting*

Trees/planting with footpath

Private Drive

Front Garden

New Home

20m between site boundary and residential development

Typically 9-11m
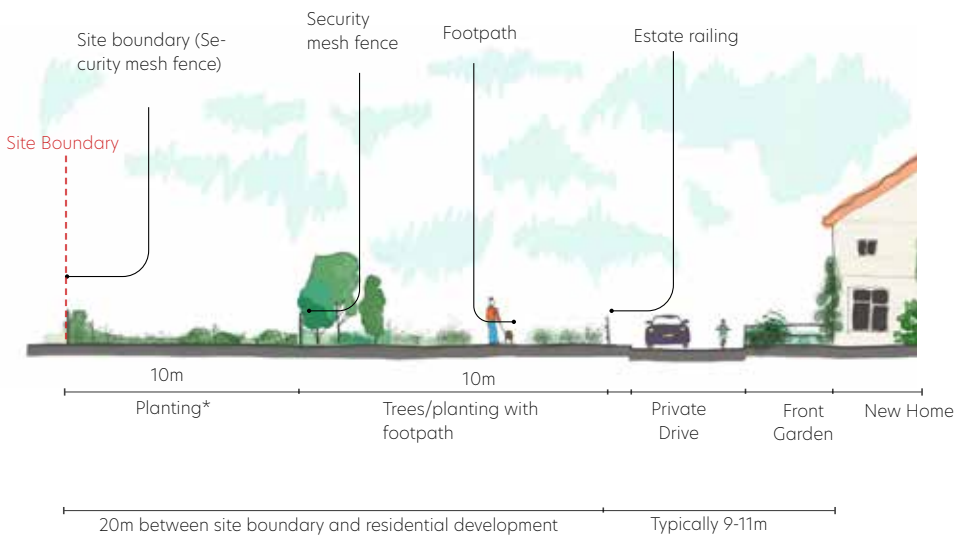
* Restricted access/suitable planting

New home fronting green space

Footpath/cy-cleway

Retained mature hedgrow with enhanced planting buffer

Figure 72. Section Key Plan

5.5m   varies   9m

New Homes | Private Drive | POS | Primary Street | New Homes
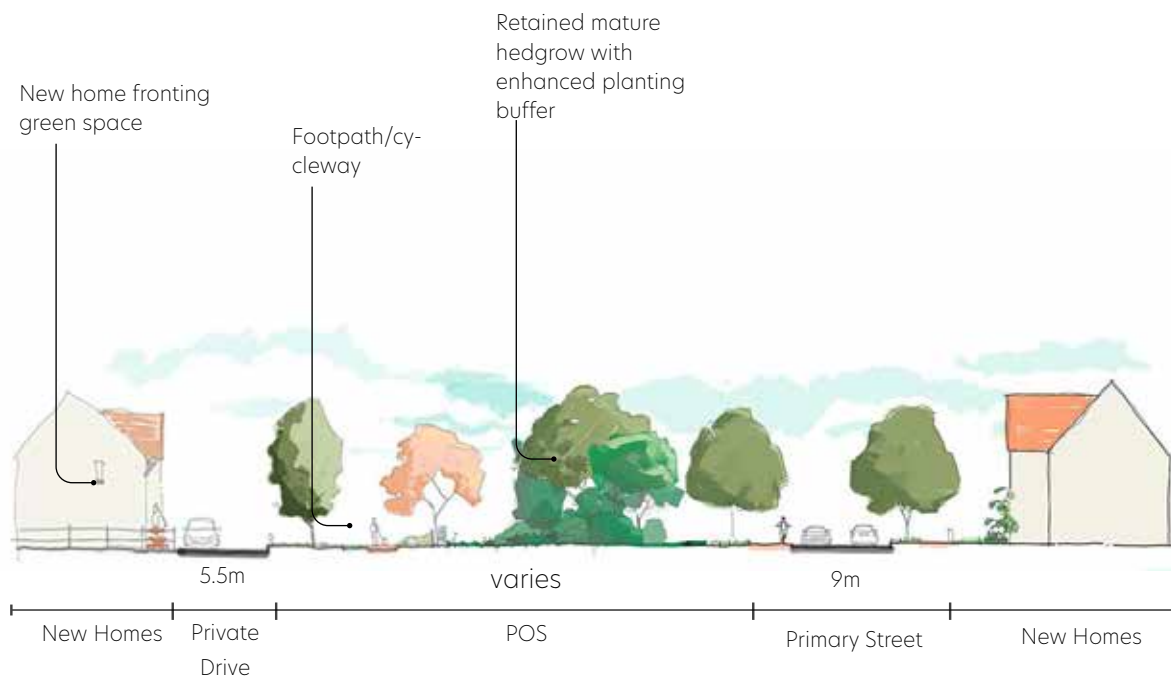
Figure 73. Section H-H -Primary Street and Green Corridor

New tree planting

Brickkiln Wood

5.5m   varies

New Homes | Private Drive | POS
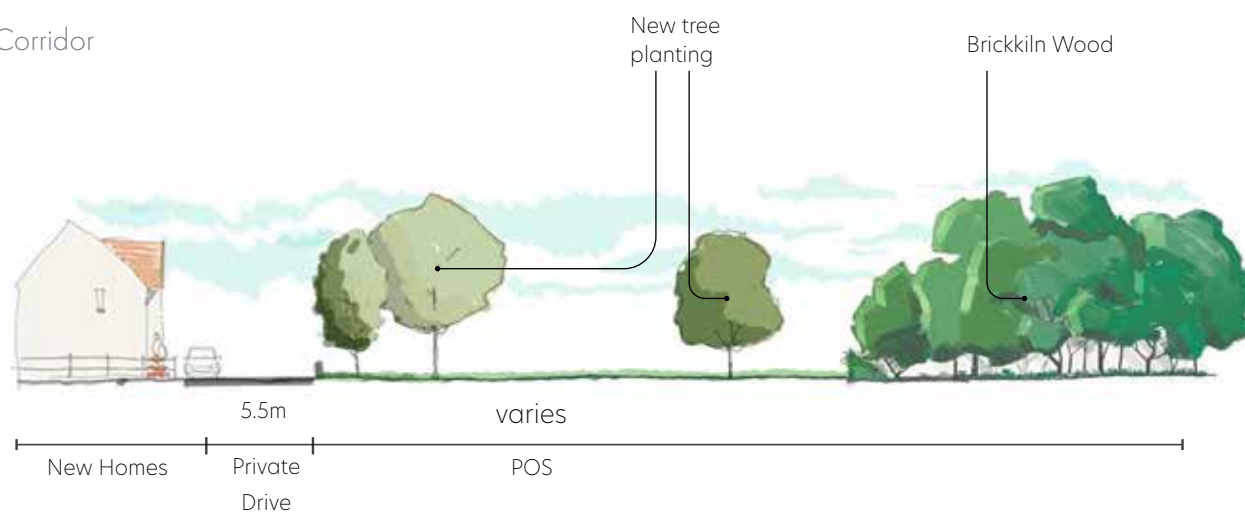
Figure 74. Section I-I - Woodland Edge

85

Figure 75. Section Key Plan

New homes with front gardens

New tree planting

Hedgerow en-hancements

5.5m	varies	5.5m	varies	5.5m

| New Homes | Private Drive | POS | Brick Kiln Lane | POS | Private Drive | New Homes |
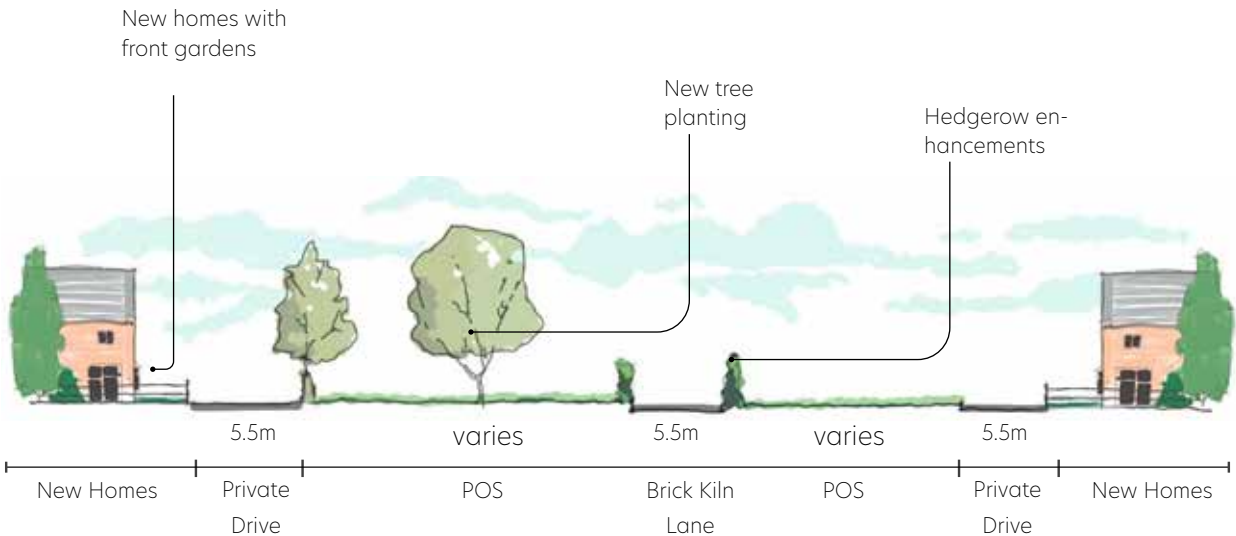
Figure 76. Section J-J - Green Corridor

5.5m	varies	5.5m

| New Homes | Private Drive | POS | Brick Kiln Lane | Brickkiln Woods |
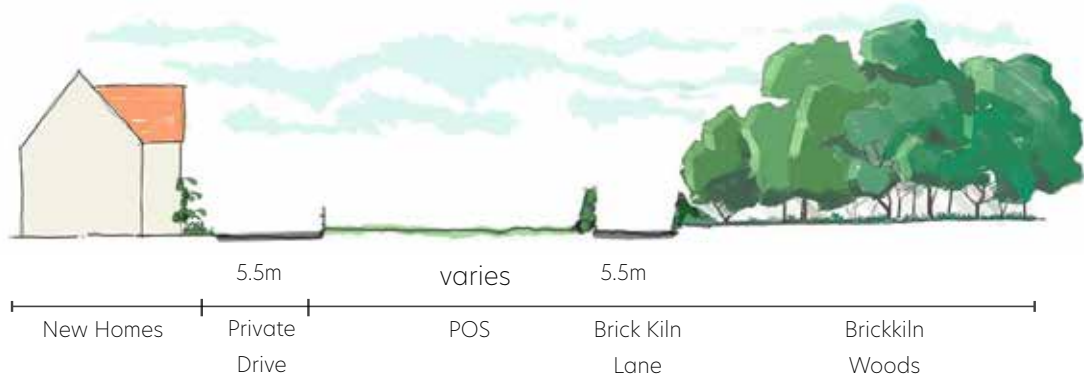
Figure 77. Section K-K - Brick Kiln Lane and Woodland Interface

Figure 78. Section Key Plan

L

L

Existing houses with gardens backing onto footpath

Existing woodland on boundary with Luton

Wildflower meadow and tree planting

Footpath and cycleway

School boundary

Site Boundary

c.20m

c.18m

c.12-18m

c.15m

Existing Homes

Existing Footpath

Existing Woodland Edge

Natural Open Space

Primary Street

Landscaping, pathway and school site
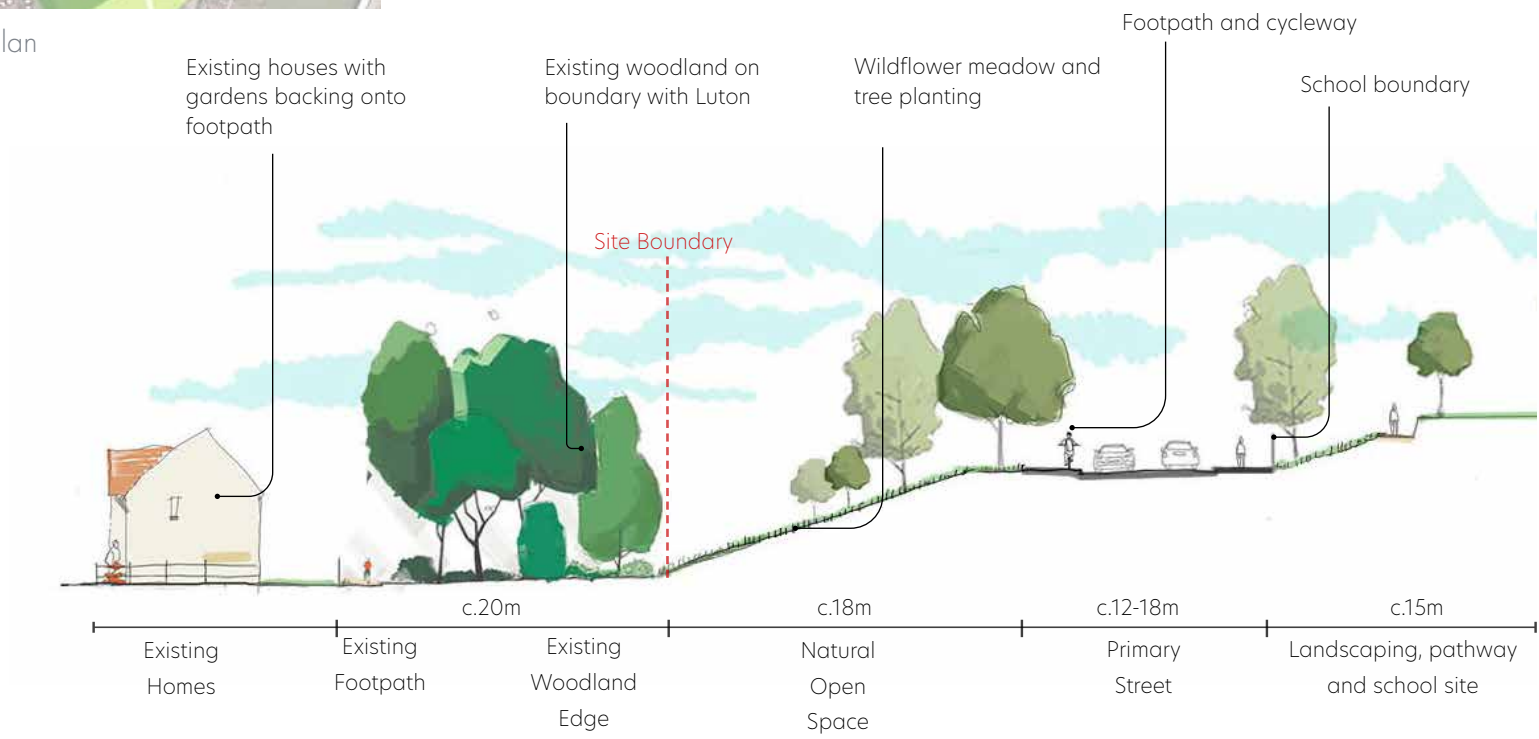
Figure 79. Section L-L - Primary School Luton Edge

The urban design framework has been developed from the detailed assessment of local built form character as included at **Appendix A1** to this Masterplan. It will:

- Build on the points of agreement established in the Workshop and during the wider engagement exercise;
- Establish a long-term vision for the Site and a design-led framework;
- Ensure overall co-ordination and consistency between development parcels;
- Provide a level of certainty for the Promoters, the District and County Councils, other stakeholders, and the local community;
- Provide a clear guide for the developer working on individual plots; and
- Set the context and baseline for subsequent more detailed design work.

The urban design framework plan provides a single drawing that Illustrates the overall design strategy. This should be read in conjunction with rest of this Masterplan.

The main elements are broken into the following detailed design principles:
- Key vistas
- Community focal spaces
- Landmark buildings
- Marker buildings
- Primary frontages
- Secondary frontages

Taken together, these elements will create a new community which is based on a layout with strong:
- Legibility
- Permeability, and
- Responsive design.

Character Areas

These will then be delivered in different ways as set out in the Character Area Outlines at **Appendix A2** to this Masterplan.

Figure 80. Character Areas Framework

Key Vista

Community Focal Space

Landmark Building

Marker Building

Primary Frontage

Secondary Frontage

Primary School

Secondary School

Playing Fields

Pedestrian Link

Woodland

Primary Street

Village Green

Figure 81. Urban Design Framework

Buildings, Streets and Spaces

- Primary building frontage will generally be aligned parallel in order to address the street or public space
- Within higher density areas, buildings will be positioned close to the footpath
- Primary entrances to buildings will be visible to promote natural surveillance and provide active frontage

Figure 82. Building line defining space

Building Line

- Building lines will be consistent along streets and within Identity Areas to aid legibility.
- Variations in building line will be limited to lower order streets and within specific Identity Areas.
- Within areas of intimate enclosure, buildings will be located at the back edge of the footpath, rear access parking in some instances

Figure 83. Consistent building line

Landmark buildings

- Landmark buildings will be used at the termination of some internal vistas.
- Landmark buildings can also be used to define key gateways.
- The placement of buildings along the vista will be considered in order to emphasise key view corridors.
- Landmark buildings will integrate into existing street scenes and address amenity of existing dwellings.
- Landmark buildings need not necessarily require a change in architectural style–– difference in height can also suffice or a change of status for example a detached form where surroundings are terraces.
- Window sizes and designs on key landmark buildings will be subject to detailed agreement with Planning officers

Marker Buildings

- Corner plots will address both streets with habitable rooms.
- Bay windows or other window detailing could be used to achieve this.
- Primary building frontage will front the highest order street.
- Corner buildings will be identifiable through increase in height or a change in form (such as roof line).
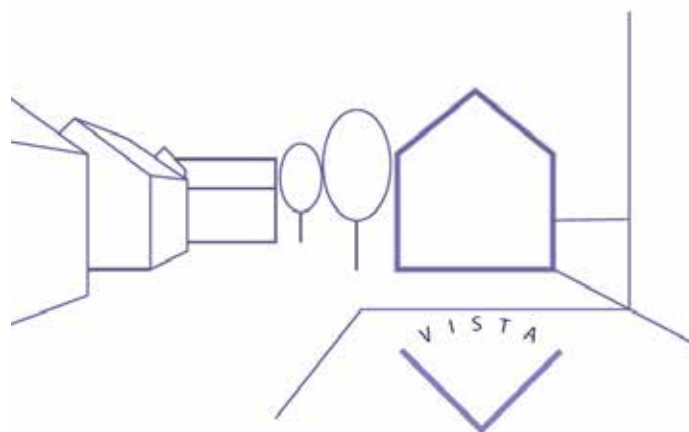
Figure 84. Landmark building terminates vista

Figure 85. Marker building

Key Building Groups

- Groupings of building types will be used to define public spaces, with their function reflecting the characteristics of the identity area they are sited within.
- Groupings can take the form of a cluster of buildings around a public space or through the formal arrangement of buildings, in order to define the street or space.

Figure 86. Building group encloses space

Permeability

- New pedestrian and cycle routes will connect through the new proposals to the existing residential streets.
- In locations where vehicular routes result in a dead end, pedestrian routes must continue to link with the nearest road or public space.
- Street arrangements will complement the Identity Area which they are sited in.

Figure 87. Permeable link between internal streets and parkland edge

Vista

- Internal street vistas will terminate at a landmark, key building or public open space;
- When a building forms the terminus of a vista, it will be directed towards the primary elevation; and
- Key buildings within the development will be used to frame key views along the vistas.

Figure 88. Vista to existing mature tree group

Enclosure

A sense of enclosure will be created by:
- Creating blocks of dwellings within terraces.
- Using covered drive-through accesses to rear parking facilities.
- Careful placement of detached units with corners that overlap at right angles.
- Downplaying the prominence of parked cars within the streetscene.
- Consistent building lines

Figure 89. Buildings enclose pedestrian street

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Primary frontage

- Building frontages at highly visible or important locations within the design will be considered as a group.
- A change in frontage design will create a focal point and aid legibility
- Massing (dependent on character area and constraints) should be used to distinguish the prominence of the frontage

Figure 90. Primary frontage

Secondary frontage

- Building frontages at moderately visible or important locations within the design will be considered as a group.
- A change in frontage design will create a focal point and aid legibility.
- Materials, boundary treatments and architectural style will be used to establish the role as secondary frontage

Figure 91. Secondary frontage

Community focal space

- Buildings arranged around a space which is designed to promote social interaction
- Within close proximity to mixed use building
- Massing (dependent on character area and constraints) should be used to create enclosure

Figure 92. Community focal space

2 storeys

2.5 storeys

3 storeys

3 storeys

Figure 93. Examples of suitable building heights

Height, Massing and Density

The urban design framework has been designed to respond to local built character. The plan opposite shows an indicative building height framework that can be used to guide the more detailed design proposals.

Predominantly 2 and 2.5 storey development to reflect surrounding residential land use within Luton, to ensure that the development knits in to the surrounding area.

The various Character Areas provide opportunities for the strategic placing of taller development to aid legibility by signposting key green spaces and destinations, provide enclosure and overlooking to key routes and green spaces, and add variety and interest.

As a result of density being a product of height, massing, housing mix (and thus population) and character (more smaller homes in an area can equate to a higher density in dwellings / hectare despite no increase in building volume, or taller buildings can equate to a greater building volume despite no increase in density in dwellings / hectare), this Masterplan does not include a 'density plan'.

There will be variations in density across the Site, responding to the nature of the Character Area and role and context of the location. Lower density development on the periphery of the Site to reflect the rural setting and proximity to Cockernhoe, Mangrove Green and Tea Green. The Local Centre provides opportunities for higher density development, to emphasise this area as the heart to the development, and to provide strong overlooking and enclosure to key routes and green spaces.
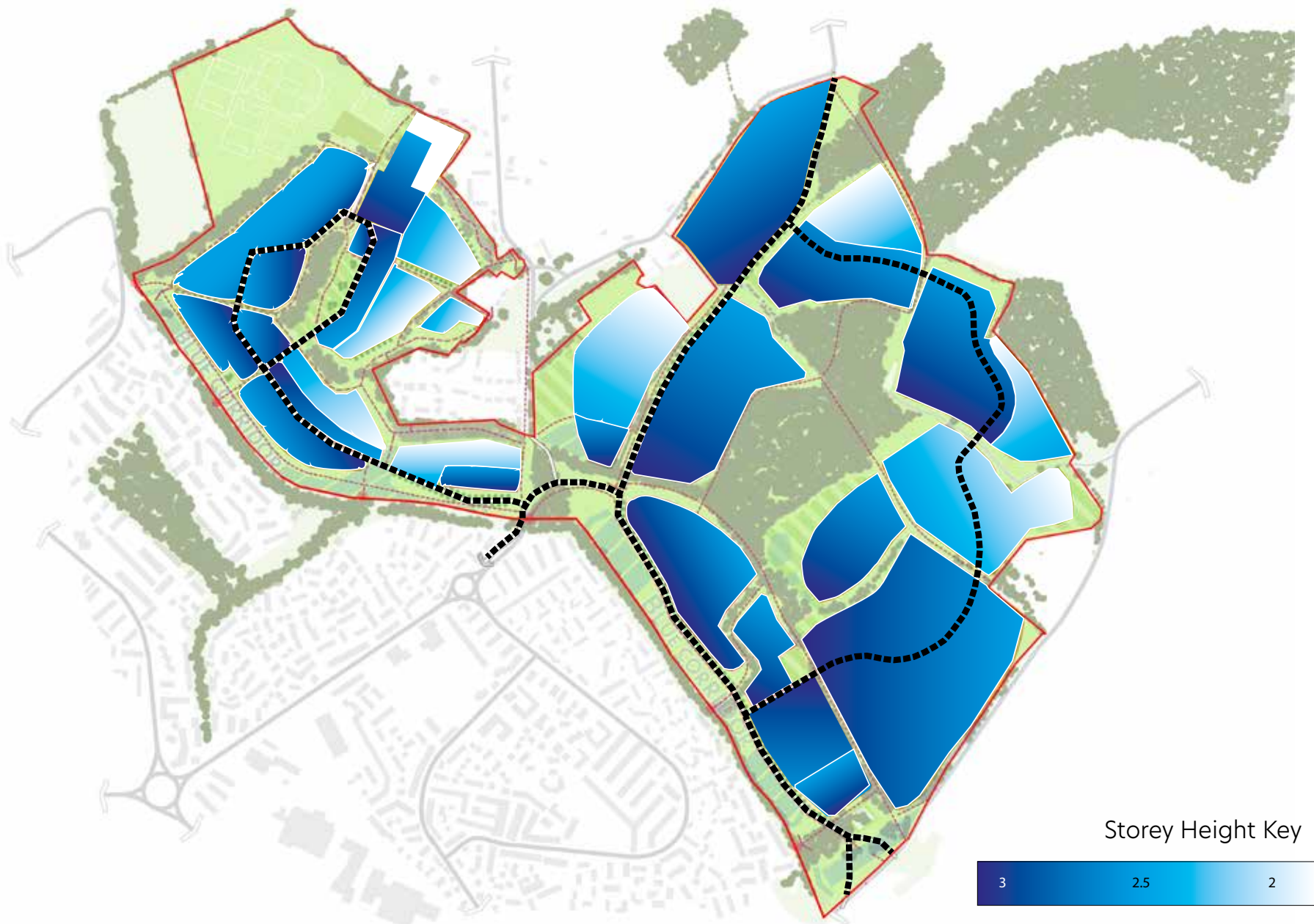
Storey Height Key

3   2.5   2

Figure 94. Indicative Building Height Framework Plan

Figure 95. Existing cycle routes

Figure 96. Proposed active travel corridors

The Site is sustainably located, close to a range of potential destinations, including:

- Luton town centre;
- Two railway stations;
- Extensive and varied employment opportunities within Luton;
- A major convenience store; and
- Various other retail, medical and recreational services and facilities.

The development will also itself provide additional services and facilities to supplement the existing in the form of a new local centre, located centrally, providing local retail and community , and primary and secondary schools that are easy to access. The key to the movement and connectivity framework will be to ensure that all of these services and facilities, whether on or off-site, are easily accessible by the most sustainable modes of travel.

Active travel priority

The primary movement and connectivity objective is to prioritise and maximise safe, direct and easy-to-use opportunities to make day-to-day journeys by Active Travel modes (walking and cycling) and public transport.

This objective applies equally to journeys being made within the Site as it does to journeys starting or ending beyond its boundary. It also equally applies to the full range of journey purposes, whether recreation, education, retail, medical or short and long-distance commuting.

Links will be provided in such a way that active travel will be prioritised, whether this is in terms of less direct vehicular routing or highway infrastructure design, so that short journeys are made more convenient leaving the car at home.

The prioritisation of active travel will be realised through:

- Creation of a legible and safe movement network / street hierarchy.
- An extensive, permeable and direct network of off-street footpaths / cyclepaths and on-street footways / cycleways across the Site supplementing the existing PRoWs both within and on the edge of the Site.
- Sufficient and convenient active travel routes and links to the on-site facilities (i.e. local centre, primary and secondary schools).
- Sufficient and convenient linkages to the wider active travel network beyond the Site boundary (i.e. into Luton and wider countryside).
- Comprehensive active travel provision at the entry points into the Site.
- Provision of an accessible, high quality bus service.
- Typical street widths being varied throughout the Site to reflect their anticipated level of use and ensure that active travel is safe and prioritised.
- Design of a low traffic speed environment with 20mph vehicular speed limits.
- Having areas around the schools will be characterised by wider footways and / or further speed reduction characteristics.

Figure 97. Active travel priority

Movement Network

The proposed movement network is illustrated opposite. Key elements of this comprise:

- The vehicular access strategy for the Site including:
  - A multi-modal   gateway (pedestrian, cyclists, bus and general traffic) access on Luton Road.
  - An general traffic access on Darley Road with active travel (pedestrian and cycle) separately provided for via additional links, avoiding topographical constraints.
  - Access via / from Brick Kiln Lane, which is very lightly trafficked and, whilst narrow, is a designated cycle route (Hitchin to Chilterns Cycle Route 16). The proposed movement network will further reduce vehicular use by design, enhancing the environment for pedestrians and cyclists.
  - A general traffic access on Chalk Hill, from a realigned road within the Site
  - If feasible, enable a bus / active travel access from Hayling Drive, crossing the existing Public Right of Way.
  - Links to the existing network of off-site active travel routes to local services and facilities within Luton.
- Connections to the enhanced Luton cycle network as proposed (at the time of writing) by Luton Borough Council (LBC) within Luton   (ref. LBC's Local Cycling and Walking Infrastructure Plan (LCWIP) 2023-2033) including segregated cycleways on Luton

Road / Crawley Green Road, Eaton Green Road, Wigmore Lane and Vauxhall Way.

- A comprehensive on-site active travel network of direct, legible, and integrated pedestrian and cycle routes providing connectivity to on-site facilities from all parts of the Site.
- The important role of the existing PRoWs retained and enhanced, and accessibility to the network improved.
- An improved bus service for the Site, the details of which will be determined through the planning application process subsequent to this Strategic Masterplan.
- A primary road network providing access to the secondary school and the local centre connecting the accesses into the site, for most of its length including wide off-carriageway footways and cycleways.
- Integration of modes, with opportunities taken to provide for crossover and interchange between means of travel such as walking, cycling, electric scooters, and ,public transport, with facilities provided to encourage and maximise sustainable travel.
- Residential, school and local centre cycle and car parking provision will comply with prevailing local standards.

Legend

- Existing Public Rights of Way
- Existing National Trail
- Existing On Road Cycle Route
- Proposed Indicative Pedestrian Route
- Proposed Indicative Cycle Route
- Indicative High Frequency Direct Bus Service Route
- Indicative Pedestrian route to Wigmore Centre
- Indicative Pedestrian route into Luton
- Potential Active Travel Connection
- Potential Active Travel Connection / Public Transport Connection
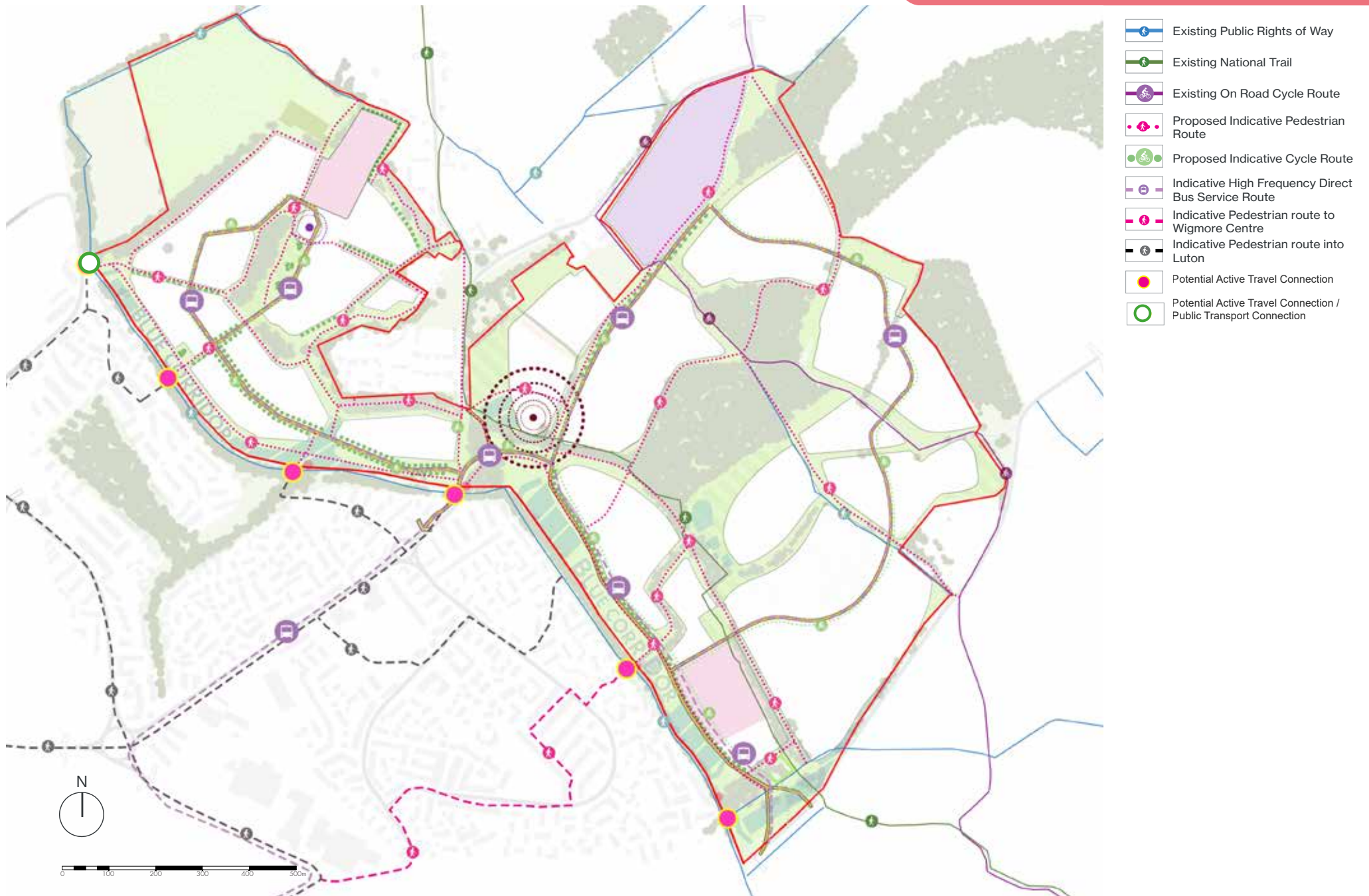
Figure 98. Active Travel and Public Transport Connectivity

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Street Hierarchy

The layout will incorporate a safe and legible street hierarchy, based on an accessible and permeable movement network. Typical street widths will vary throughout the development to reflect their anticipated level of use and the character of the area. The plan opposite indicates the key elements of the street hierarchy.
This includes:

- Primary Streets – These tree-lined avenues will be the main and most heavily trafficked elements of the movement network:

  - Junctions with secondary streets will be designed to reduce traffic speeds through material specification and raised tables designs.
  - School Areas to be designed to reduce traffic speeds and to facilitate pedestrian crossing to green space through material specification and designs.

- Secondary Streets - These will act as the main circulation routes within the development areas, have a residential character, and be designed for lower traffic speeds.

- Tertiary Streets - These will act to maximise connectivity through the new development, where traffic speeds are minimised and active travel modes and landscaping intermixed to naturally calm traffic, will be considered.

- Green Streets - These streets are less urban with continuous landscaping and trees. They will act as visual and functional connectors between key spaces and routes. The landscaping of these routes will take priority over the built form which will be set back.

- An attractive active travel - A network of direct, legible, and integrated pedestrian and cycle routes through the Site – both built areas and public open green spaces, designed and laid out to maximise active travel connectivity and encourage sustainable travel, connecting into the surrounding areas – both Luton and the wider countryside.

Included at **Appendix 3** are a series of indicative cross-sections and principles for the street hierarchy. They are not the final street configurations and are provided in this Masterplan for indicative purposes only.

These cross-sections be used to inform further development of the street typologies as the scheme progresses. This will include further consideration of the site-wide parking strategy and street-scale approaches to drainage, utilities and landscape. Detailed requirements for the different types of street will be agreed and secured in a subsequent Design Code or Codes for the site which has regard to the street characteristics and hierarchies set out in the National Model Design Code, the Hertfordshire Place & Movement Design Guide and other relevant guidance including any design guidance produced by Luton Borough Council.

The new homes and community facilities will be nestled in an extensive network of green space comprising a diversity of different and connected spaces, and supported by a mix of other uses, including additional open and green space–– for both biodiversity and public access–– retail, community, sport and recreation and primary and secondary education.

Overall, the Site measures approximately 130 hectares (ha).

Policy SP19

Local Plan policy SP19 provides the quantitative context for the proposed land uses, requiring:

- Approximately 2,100 homes, including:
    - 40% affordable homes;
- A local centre/s providing for a range of day-to-day needs, including:
    - 250 sqm (net) of convenience retail floorspace;
    - 850 sqm (net) of comparison retail and/or food / beverage retail floorspace; and
    -other social infrastructure; together with
- 4 forms of entry of both primary and secondary schools.

Housing

As required by the Local Plan, the Site will deliver approximately 2,100 homes, 40% of which (840 homes) will be affordable housing.

The mix of homes to be provided will respond to the identified need that informed the allocation within the North Herts Local Plan, and was considered during the Examination of the submission plan. A full range of homes from 1 to 5 bedrooms will be provided and it is anticipated that the highest proportion of the homes will be for families comprising of 3 to 4+ bedroom dwellings.

The exact type and size of housing (detached, semi-detached, terraced, bungalows, flats, etc.) will be determined through the Outline Planning Applications and detailed design, both subsequent to this Strategic Masterplan.

This Strategic Masterplan identifies that approximately 62.6 ha of the site will be developed for housing, this area including streets, footpaths, cycleways, local areas of green and blue infrastructure including planting, homes, gardens and parking.

Local centre and community hubs

Located at the heart of the development and easily accessible from the main access to the site and from the village of Cockernhoe and new residential areas, the Local Centre will have its own identity and space, and will include a combination of:

- Convenience and comparison retail;
- Community space;
- Employment / co-working facilities; and
- An active travel hub.

This Strategic Masterplan identifies that approximately 0.5 ha the site will be developed for the local centre, this area including streets, footpaths, cycleways, local areas of green and blue infrastructure including planting, the retail, community and other buildings, gardens, public spaces and parking.

In addition, to create a sense of place and community two Community Hubs are proposed:

- To the west of Cockernhoe, fronting the proposed village green; and
- In the south-east area of the site, in front of the proposed primary school.
- The Community Hubs will respond to the local community need and could include:
- Community space/café/workshop area;
- Additional play space;
- Market stalls; and
- Community orchard or food growing opportunities.

The size and extent of the Community Hus will be determined at detailed design stage.

Education

The development will be supported by a range of education facilities located at key points in the scheme, easily accessible by walking and cycling from the residential areas around them. These include the following:

- Primary School (Western) (2.20 ha)
- Primary School (Eastern) (2.20 ha); and
- Secondary School (5.50 ha).

Schools play an important role in the life of a development, providing life and vitality during the day when many residents are absent, and can also act as a focal point for community life outside school hours.

The location for each of the three proposed school sites has been discussed with stakeholders, representatives of the local community, and the Local

Housing

Open
Space

Secondary
School

Primary
School

Local
Centre

N

Figure 99. Land Use Framework

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Education Authority, and influenced by a range of factors including:

- Relationship and proximity to other land uses – for example:
    - The secondary school is located broadly in the centre of the development, in relative close proximity to the Local Centre;
    - The Western Primary School is located broadly in the centre of the western part of the site, close to the centre of Cockernhoe*, and adjacent to the playing fields; and
    - The Eastern Primary School is located so as to facilitate early delivery and thus education provision for new residents;

- Topography and an absence of other physical constraints;
- Landscape and visual impact considerations; and
- Long-term viability **.

Discussions on the exact location and specification of the school sites including detailed work on feasibility and deliverability will continue as part of the planning application processes and in due course serviced sites will be provided to the County for subsequent development.

* The location of the Western Primary School has also carefully considered the longer-term relationship with the existing Cockernhoe Primary School, a Church of England supported school located outside the Local Plan allocation / Strategic Masterplan boundary. A variety of future scenarios are possible and the Promoters will continue to work closely with representatives of the Diocese, school, Local Education Authority and local residents to ensure the most appropriate long-term solution.

** Pupil generation from housing is not static – it varies over time. In order for schools to remain viable entities, they need to be able to respond to varying levels of pupil generation. The Eastern Primary School is located closer to the existing urban area of Luton to maximise the collective longer-term viability of the education facilities delivered across the development.

Sports, recreation and play

This Strategic Masterplan identifies a substantial area for the provision of formal playing fields and associated facilities. The clustering of these facilities in one location responds to best practice in terms of both design, operation and maintenance. This Strategic Masterplan identifies that approximately 4.35 ha of the site will be developed for the formal sports facilities, this area including the formal pitches, surrounding informal grassed areas, play areas, footpaths, cycleways, areas of green and blue infrastructure including planting, supporting infrastructure and buildings, public spaces and parking.

In contrast, children's play areas and informal recreation provision will be delivered set out in the Masterplan across the Site, providing ease of daily access to all new residents.

Other Green and Blue Infrastructure

The landscape-led approach to the layout of spaces within the Site creates a substantial multi-functional and interconnected framework of green and blue infrastructure encompassing existing woodland and hedgerows with new habitats, including grassland, wetland habitats, wildlife areas, open space and sports pitches, equipped children's play, PRoWs, other walking and cycling routes as well as a series of trails, orchard, street trees and private gardens. This Strategic Masterplan estimates that approximately 51.6 ha of the site will be given over to the wider green and blue infrastructure network (plus 4.7 ha of sports pitches).

Strategic Design Principles

7. Establish a clear movement network

Shows the proposed movement network, showing the routes that will connect the new development to Luton and other local destinations. How the network is designed will help to walk and cycle rather than go by car.

8. Deliver a structure of streets and spaces

Shows the proposed structure of streets and spaces, including building frontages, perimeter blocks, green spaces and various types of street.

9. Accommodate public transport

Shows how the movement network will accommodate public transport, including where the bus stops will be and how far people need to walk to them.

10. Provide a mix of uses

Shows the mix of uses. In time a greater variety of uses will be possible: the scheme allows for these to be provided as the area evolves.

11. Create a legible place

Shows proposed features of the place that will help people to find their way around, including views, vistas and notable buildings.

12. Increase density in relation to accessibility

Shows how the parts of the area closest to active travel and public transport routes will have the highest density, to encourage and increase the use of sustainable modes of travel.

EAST OF LUTON | STRATEGIC MASTERPLAN FRAMEWORK

5

Sustainability, Energy, Water & Waste

Figure 100. Solar panels

Figure 101. Public EV charging

Introduction

This Sustainability and Energy Framework sets out the objectives for the development under the following topics:

- Energy Consumption;
- Energy Production;
- Carbon Emissions;
- Water; and
- Waste.

For each of these topics, this Framework outlines the measures that will could be adopted to ensure the development is sustainable, mindful that requirements and technologies will change over the life of the development, and thus the detail of how the measures will be incorporated into the development will be set out in the planning applications that will follow this Strategic Masterplan, and controlled through planning conditions and legal obligations.

In each case, future detailed design and planning applications will respond to the standards and best practice applicable at the time.
Those applications will be assessed against the eight 'themes' set out in the recently-adopted North Herts Sustainability SPD – see opposite page.

Sustainability – Achieving Higher Standards

The North Herts Sustainability Supplementary Planning Document (SPD) refers to eight built environment sustainability themes relevant to the allocation to ensure a holistic approach to sustainability. For each theme, a checklist is provided setting out three standards:

- Bronze – baseline
- Silver – enhanced
- Gold – exemplar

The SPD requires the achievement of bronze-level performance across all the relevant themes, and then higher levels of achievement on selected themes depending on site context, type and scale of development.

As a minimum, we are targeting the Silver (enhanced) standard on all themes. However, given the outline stage of the proposals and the nature of the Strategic Masterplan it is not possible at this stage to be certain as to which of these themes could achieve the higher standard.

In addition, the opportunities to achieve higher standards will vary across the allocation site due to site context.

Based on the strategic Masterplan, we expect that the following standards to be achievable in relation to the themes in the SPD:

THEMES	STANDARD
Optimising Passive Design & Fabric Performance	*Silver*
Achieving Low Carbon Energy	*Silver*
Minimising Carbon Footprint	*Silver at a minimum, but to be confirmed in detailed planning*
Healthy Placemaking	*Gold*
Promoting Biodiversity (3 elements)	*Silver at minimum, with Gold achieved on specific parts of the site*
Sustainable Travel	*Silver at minimum, with Gold achieved on specific parts of the site*
Conserving Water	*Silver at a minimum, but to be confirmed in detailed planning*
Incorporating Sustainable Drainage	*Silver at a minimum, but to be confirmed in detailed planning*

Figure 102. North Herts Sustainability SPD

Outline planning applications and Reserved Matters submissions, as well as conditions associated with construction activities will provide the appropriate details to demonstrate the standards sought are achieved.

Energy consumption

To reduce energy consumption, the energy hierarchy principles will be adhered to, which comprise the following, in order of preference:

- Reduce energy demand;
- Improve energy efficiency;
- Use renewable energy sources;
- Use low-carbon energy sources; and
- Use conventional energy sources.

A 'fabric first' approach will be taken towards reducing energy demand and associated carbon dioxide emissions.

The first stage of this approach is to increase the energy efficiency of the building fabric beyond the minimum requirements of the Building Regulations. It is considered to be a more preferable approach than the incorporation of renewable and low carbon technologies, as these only reduce energy demand from fossil fuels, rather than total energy demand. Further improvements to the energy efficiency of the buildings could be achieved through the use of technologies such as: LED lighting, smart thermostats and efficient appliances.

There are likely to be updates to Part L of the Building Regulations during the construction phase that will need to be addressed through building design and these updates were set out in the Government's response to its consultation on the Future Homes Standard.

Since 15 June 2022 Part L requires that all new homes must produce 31% less carbon emissions than previously accepted under Part L 2013. The Future Homes Standard, which is set to be delivered through an update to Part L in 2025, will result in a 75 – 80% reduction compared to Part L 2013. The Government has also stated that from 2025, gas boilers will not be allowed in the construction of new homes.

In preparation for this, it is proposed that space and water heating within the new homes will be designed to be able to be fuelled by electricity, subject to further announcements by the Government.

Energy production

In accordance with the principles of the energy hierarchy, renewable and low-carbon energy sources could be used to reduce the demand for energy from the National Grid.

Examples of renewable and low-carbon energy sources could include:

- Solar photovoltaic panels
- Air source heat pumps
- Air to water heat pumps
- Ground source heat pumps

Details of the renewable and low-carbon energy sources to be used will be set out in the planning applications that will follow this Strategic Masterplan.

Carbon emissions

The development will incorporate measures to reduce energy consumption and associated / other carbon dioxide emissions.

Transport, in particular the use of private vehicles, is a major source of carbon emissions. The development will reduce the need for residents to travel by including a new Local Centre, two Primary Schools and Secondary School on site.

The needs of pedestrians, cyclists and public transport services will be prioritised, with good levels of footpath and cycleway connectivity provided both within the Site and to nearby locations. Further details of these measures will be set out in future reserved matters applications and could include:

- Enhancements to existing PRoWs.
- New footpaths and cycleways.
- Bus stops, ideally within a 400m walk of all dwellings.
- A well-connected internal road layout to allow for bus priority measures and connect to the existing local bus network.

Further to this, the development will provide infrastructure for electric vehicle charging points and will include the implementation of a Travel Plan to encourage walking, cycling and the use of public transport.

Water

All new buildings will comply with prevailing Building Regulations Part G: Sanitation, hot water safety and water efficiency.

Water consumption will be reduced through the incorporation of the following measures as appropriate:

- Low-flow showerheads
- Dual flush toilets

- Aerators on sinks
- Water butts
- Water-efficient white goods

The Surface Water Management Strategy for the development utilises deep-bored soakaways in addition to attenuation basins. The deep-bored soakaways will replicate natural drainage patterns, including the recharge of groundwater, so that base flows are maintained. The attenuation basins will provide a level of protection to groundwater through the inclusion of a treatment train, as well as providing an opportunity to enhance biodiversity by introducing wetland and aquatic habitat.

Waste

The development will include measures to minimise the creation of waste and maximise the use of recycled materials in accordance with the DEFRA Waste Management Plan for England (2021)

- Assist the collection, separation, sorting, recycling and recovery of waste arising from the development
- Balance cut and fill on site
- Re-use all stripped topsoil appropriately within soft landscaping areas as far as practicable, any surplus topsoil will be re-used off-site with no need to consider waste disposal facilities
- Carry out a waste audit of the operational phases
- Provision of a Waste Management Strategy; minimise – re-use – recycle – encourage composting as appropriate
- Raise awareness – provision of information to educate and secure participation of both residents and commercial occupiers

- Provide adequate storage facilities for each home to ensure sufficient, discrete provision for bins to facilitate a high quality, comprehensive and frequent household waste collection service, to allow easy and convenient access by service vehicles
- Provide dedicated areas for recyclables to encourage minimal residual waste

Delivery

Approach

The overall approach to the implementation, phasing and delivery of the Site will be focussed on achieving a viable new community as soon as possible, connected to services and facilities, both those to be provided new within the development, and those already existing within Luton.

Where possible, infrastructure necessary to ensure an active, healthy and sustainable lifestyle will be delivered ahead of the new homes, including public open space and active travel routes, and new bus routes.

Outline applications

Applications for outline planning permission for the development have been revised in response to this Strategic Masterplan. Revisions will be made to the applications, and consulted upon. Associated with the determination of the outline applications, planning obligations between the Promoters and the District Council will be agreed to provide the legal framework for the delivery of infrastructure.

Design coding and detailed design

Building on the site context, the twelve **Objectives**, and twelve **Strategic Design Principles** and **Urban Design Framework** established in this Strategic Masterplan, together with the detailed **Local Built Form Character** Appraisal at Appendix A1, **Character Area Outlines** at Appendix A1, and **Indicative Street Hierarchy** at Appendix A3, the Promoters will prepare a Design Code that will guide the detailed design of the individual areas /phases of the development.

The purpose of the Design Code is to provide further detail than this Strategic Masterplan, and to ensure a consistently high level of detailed design, specification and delivery across the Site.

Infrastructure delivery & Phasing

A condition on the grant of outline planning permission will require the preparation of a detailed site-wide phasing and delivery plan for the Site. This will set out the overall approach to phasing, and details relating to the delivery of individual items of infrastructure.

Early highways and drainage infrastructure

The initial area(s) of development will be associated with the access points to the Site from Crawley Green Road / Luton Road, and/or Darley Road / Stony Lane. Early delivery of some drainage infrastructure will also be required, particularly along the south-western edge of the Site.

Education

The three schools proposed – two 2-form entry primary schools and one 4-form entry secondary school, will be delivered by way of serviced sites that are transferred to the Local Education Authority (LEA) – Hertfordshire County Council, which will then obtained Reserved Matters approval and arrange for construction.

In determining the phasing of the schools, the LEA will have due regard to any lack of or excess capacity in nearby schools, both within North Hertfordshire and neighbouring Luton, with a view to maintaining both short and long-term viability.

The phasing of these schools will be agreed between the Promoters (or their successors), the District and County Councils through the Outline Planning Application process.

Notwithstanding this, the indicative phasing plan below provides for the early delivery of a primary school in 2028/29.
Community use of school facilities

Subject to future discussions with school operators, it is hoped that the school facilities, including sports pitches, be made available for public use outside of school hours. This can arranged using a Community Use Agreement (CUA), guidance on which is provided by Sport England.

Stewardship, Management and Maintenance

Arrangements for the long-term stewardship, management and maintenance of the development will be formalised during the approval of the planning applications that will follow this Strategic Masterplan. These arrangements will be secured through a combination of planning conditions and legal obligations.

Continuing the approach to engagement adopted in the preparation of this Masterplan, the Promoters will work with stakeholders, public bodies, and local residents as appropriate.

Individual buildings and associated spaces will be managed and maintained by their respective owners. The infrastructure serving the new community will then be adopted / managed and maintained by one of several bodies / organisations that will ensure the objectives of this Strategic Masterplan and other requirements are met in the longer-term.
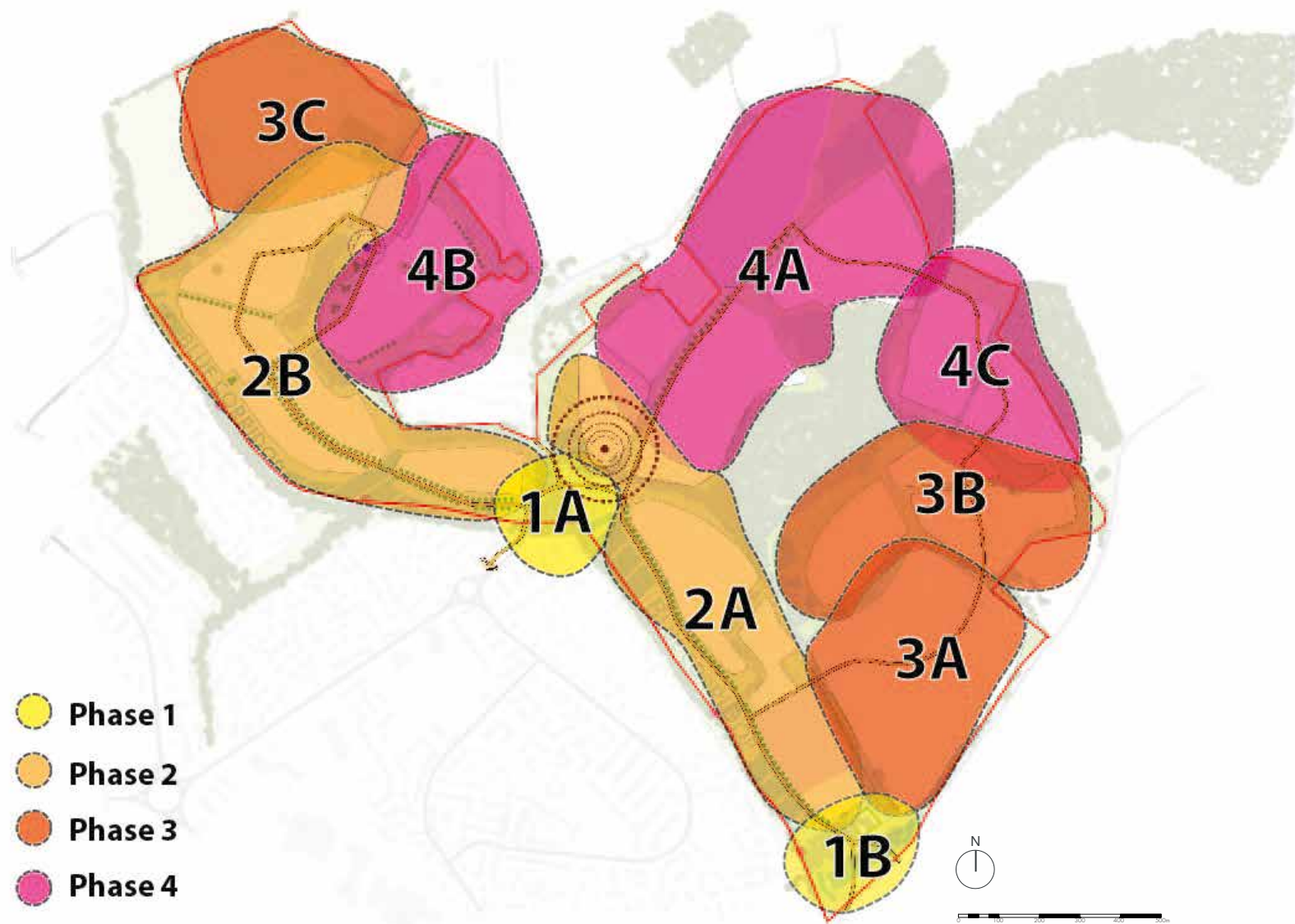
Figure 103. Indicative phasing plan

Highway and drainage infrastructure

Most streets and some footpaths / cycleways within the development will be constructed to adoptable standards and offered for adoption by the Local Highway Authority (LHA) – Hertfordshire County Council, with some elements of the Sustainable Drainage System (the SuDS), being adopted by the Lead Local Flood Authority (LLFA) – also Hertfordshire County Council. Exactly which streets, paths and elements of the SuDS will be adopted will be determined following detailed design (see below).

Streets and elements of the SuDS not adopted by the LHA or LLFA will be managed alongside the green and blue infrastructure (see below).

Community stewardship

There are several options for the ongoing steward-ship, management and maintenance of the unadopt-ed wider Green and Blue Infrastructure network, including:

• Adoption by the LPA
• nvolvement of a Management Company or Trust
• Adoption by and/ or involvement of the Wood-land/ Wildlife Trusts

Given the varied nature of the Green and Blue Infrastructure, along with local preferences, it could be that a combination of management options are taken forward, and further detail will be provided as the designs progress at the next stages.
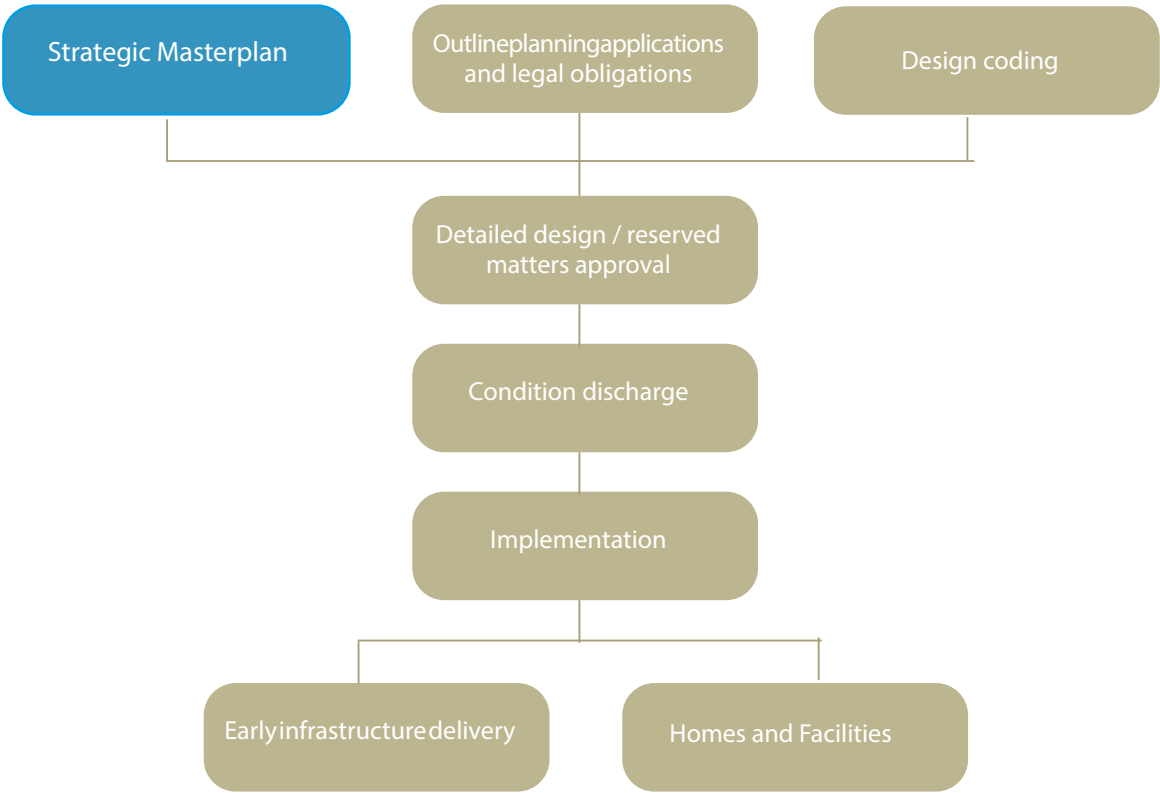

Figure 104. Planning, phasing and delivery process